

Interim Prudential sourcebook: Banks

TRANS

Transitional provisions

1 Table

(1)	(2) Material to which the transitional provision applies	(3)	(4) Transitional provision	(5) Transitional provision: dates in force	(6) Handbook provision: coming into force
1	The provisions of <i>IPRU(BANK)</i> added by the Interim Prudential Sourcebook for Banks (Market Risk) Instrument 2004 (as amended by the Interim Prudential Sourcebook for Banks (Interest Rate Position Risk Amendment) Instrument 2005)	G	<p>(A) A <i>bank</i> may treat the material in column (2) of paragraph 1:</p> <p>(a) as being in force; and</p> <p>(b) as having replaced the material in <i>IPRU(BANK)</i> that will be deleted by the Interim Prudential Sourcebook for Banks (Market Risk) Instrument 2004;</p> <p>at any time when this transitional provision is in force.</p> <p>(B) For this purpose, the following applies.</p> <p>(a)</p> <p style="text-align: center;"><i>A bank</i></p> <p>should notify the <i>FSA</i> if it takes advantage of this transitional provision.</p> <p>(b) <i>A bank's</i> choice to take advantage of this transitional provision takes effect when notified to the <i>FSA</i> under (a).</p> <p>(c) <i>A bank</i> should not revoke the choice to make use of this transitional provision.</p> <p>(d) Any choice to take advantage of this transitional provision:</p> <p>(i) applies on a consolidated basis and a solo basis; and</p> <p>(ii) applies to all the material in column (2) of paragraph 1 and not part only.</p> <p>(e) <i>A bank</i> should not take advantage of this transitional</p>	1 July 2004 – 30 June 2005	The material in the Interim Prudential Sourcebook for Banks (Market Risk) Instrument 2004 (as amended by the Interim Prudential Sourcebook for Banks (Interest Rate Position Risk Amendment) Instrument 2005) comes into force for all <i>banks</i> on 1 July 2005.

(1)	(2) Material to which the transitional provision applies	(3)	(4) Transitional provision	(5) Transitional provision: dates in force	(6) Handbook provision: coming into force
			<p>provision unless every <i>bank</i> in its consolidated group to which this transitional provision can apply does so too in accordance with (b).</p> <p>(f) The Glossary in chapter GN of <i>IPRU(BANK)</i> applies to italicised terms in this transitional provision.</p>		

THE INTERIM PRUDENTIAL SOURCEBOOK FOR BANKS: NOTES

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CD	LE	Large exposures
		Credit derivatives
	SE	Securitisation and asset transfers

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LM	Mismatch liquidity
LS	Sterling stock liquidity

Adequate records, systems and controls

AR	Accounting and Other Records and Internal - systems and controls
ST	Foreign exchange - risk-based supervision
FR	Fraud

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CL	Comfort letters
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Other

VA	Valuation
NE	Collateral and netting
CS	Consolidated supervision
OS	Outsourcing
PN	Provisioning policy statements

2 THE PRUDENTIAL SOURCEBOOK FOR BANKS: APPLICATION AND PURPOSE

APPLICATION

1. From 31 December 2004 the Financial Services Authority (the FSA) has begun the phased implementation for *banks* of its Integrated Prudential Sourcebook (*PRU*). This will eventually replace the set of sectoral prudential sourcebooks applied on an interim basis, including this one applying to *banks* (*IPRU(BANK)*). Over the transition period until all the provisions of *IPRU(BANK)* have been revoked, the FSA's detailed prudential standards (and some related notification requirements) applying to *banks* authorised under the *Act* are set out in a combination of *PRU* and *IPRU(BANK)*. Where a chapter of *IPRU(BANK)* has been substantively affected by the implementation of *PRU*, the introductory section of that chapter has been amended to indicate in broad terms how the chapter's provisions relate to those in *PRU*. *Banks* are responsible for ensuring that they meet all the prudential standards applying to them in both *PRU* and *IPRU(BANK)* during the transitional period.
2. *IPRU(BANK)* sets out material relevant to all *banks* (see definition in section 3.5 of Chapter GN). However, most of the material applies only to *UK banks*. The only parts of *IPRU(BANK)* which apply to *EEA banks* are the rules and guidance on liquidity (Rule 3.3.15 and Chapter LM) and fraud (Chapter FR).

PURPOSE

3. Banks are exposed by the nature of their business to risks including credit, market, liquidity and operational risks. Where these risks are not adequately managed, or where a bank otherwise suffers unexpected losses, a bank may be unable to meet its liabilities to depositors when they fall due or, in the case of a bank's insolvency, at all. Consumers could in such circumstances suffer loss and there could be adverse effects on market confidence.
4. The purpose of the prudential standards applying to *banks* is to ensure that banks maintain capital and other financial resources commensurate with their risks and appropriate systems and controls to enable them to manage those risks. The FSA requires in particular that banks maintain adequate capital against their risks: capital enables banks to absorb losses without endangering customer deposits; that they maintain adequate liquidity; and that they identify and control their large credit exposures - which might otherwise be a source of loss to a bank on a scale that might threaten a bank's solvency.

5. The prudential standards applying to *banks*, together with those separately applying to building societies, also implements EC directives setting out prudential standards as these apply to *credit institutions*. Where a bank is part of a financial conglomerate, it will also be subject to additional rules and guidance set out in PRU 8.4. A bank with an ultimate non-EEA parent may also be subject to some provisions in PRU 8.5. And all banks that are part of a group are subject to the general provisions in PRU 8.1.

POWERS AND GENERAL APPROACH

6. The rules in this chapter are made under section 138 of the Act and that section and section 156 are specified for the purposes of section 153.
7. The prudential standards applying to *banks* are set out in the form either of rules and evidential provisions which the FSA has made under Part X of the Act; or of guidance setting out the FSA's expectation of how *banks* should comply with these rules and with the related Principles for Businesses and how they should meet the relevant Threshold Conditions (see PRIN and COND). Where a *bank* complies with this guidance, the FSA will normally hold it to be in compliance with the relevant rules and to meet the relevant Threshold Conditions. *IPRU(BANK)*'s rules and evidential provisions are set out in Section 3 of this chapter.
8. In developing *IPRU(BANK)*, the FSA has drawn on the standards which formerly applied to *banks* authorised under the Banking Act 1987. The FSA has expressed most of the equivalent standards in *IPRU(BANK)* as guidance, identifying to which rules the guidance refers. Only the requirements set out in Section 3 of this chapter take the form of rules. Each chapter sets out in the opening paragraphs the rules, including the Principles for Businesses and Threshold Conditions, to which the guidance refers.
9. This approach has been adopted, after consultation, as appropriate for material that will apply on an interim basis only. It is the FSA's intention in developing *PRU* to make fuller use of its rule-making powers to express its detailed prudential standards.
10. *IPRU(BANK)* also sets out rules and guidance on the information related to prudential standards which *banks* should notify to the FSA. The FSA needs to be informed of certain information by *banks* if it is to monitor compliance with its requirements. The rules and guidance in *IPRU(BANK)* supplement, in respect to *banks*, the FSA's general notification requirements set out in the Supervision Manual [see SUP 13].

11. In addition to the rules and guidance applying to *banks* under the Act, certain staff of all firms are subject to obligations, referred to as Statements of Principle for Approved Persons. The FSA has issued a Code of Conduct to help determine whether an Approved Person's conduct has complied with a Statement of Principle. The Statements and the Code of Conduct are set out in the Handbook. A *bank's* failure to meet the prudential requirements set out in this sourcebook may also be relevant to the FSA's assessment of whether a particular Approved Person has complied with a Statement of Principle.

3 THE FSA'S PRUDENTIAL RULES FOR BANKS

3.1 Introduction

3.1.1 G The *rules* (except *IPRU (BANK)* 3.3.15R) in this section are made under sections 138 and 149 of the *Act*. Those sections and section 156 are specified for the purposes of section 153(2). *IPRU (BANK)* 3.3.15R (which is a designated pre-commencement provision) is treated as having effect under section 138.

3.1.2 G A word which is printed in italics in this section indicates that it is used in the defined sense (see the definitions at the end of this section).

3.2 Application

3.2.1 R The *rules (including evidential provisions)* in this section apply as follows:

<u>Rule/Evidential Provision</u>	<u>Application</u>
R 3.3.15 - adequate liquidity R 3.5.1 - definitions	All banks except EEA banks whose notification to the FSA of their intention to provide services in the UK covers only services provided on a cross-border basis and not services provided through a branch.
R 3.3.1 - two individuals to direct business R 3.3.9 - <i>initial capital</i> R 3.3.11 - <i>euro 5 million capital</i> R 3.3.13 - adequate capital R 3.3.17 - adequate provisions R 3.3.19 - large exposures: systems & controls E 3.3.23 - internal audit function R 3.4.1 - large <i>exposures</i> policy statement R 3.4.3 - liquidity policy statement R 3.4.5 - provisioning policy statement E 3.4.9 - policy statement procedures R 3.4.12 - submission of policy statements R 3.6.1 - policy statements: transitional	All banks except EEA banks
R 3.3.12 - <i>euro 5 million or relevant amount</i> R 3.3.21 - notification of large <i>exposures</i> E 3.3.25 - audit committee R 3.4.7 - trading book policy statement	UK banks only.

3.3 Prudential rules

Business to be directed by at least two individuals

- 3.3.1 R** A *UK bank* and an *overseas bank* must ensure that at least two individuals effectively direct its business.
- 3.3.2 G *IPRU (BANK)* 3.3.1R, sometimes known as the 'four eyes requirement', provides that at least two individuals must effectively direct the business of a *UK bank* and an *overseas bank*. Compliance with the *rule* would help to establish a *UK bank* and an *overseas bank's* compliance with the Principles for Businesses (as to "Management and control") and its continued meeting of the Threshold Conditions (as to "Suitability"). It also reflects the requirement in Article 6(1) of The Banking Consolidation Directive (2000/12/EC).
- 3.3.3 G In the case of a body corporate, the *FSA* expects that the individuals concerned are either executive directors or persons granted executive powers by, and reporting immediately to, the board; and, in the case of a partnership, the *FSA* looks for at least two general or active partners.
- 3.3.4 G Compliance with the *rule* is also in particular relevant to whether a *bank* complies with the *rules* covering Senior Management Arrangements, Systems and Controls (see *SYSC*).
- 3.3.5 G An individual's failure to carry out his responsibilities as part of a *bank's* four eyes is relevant to whether he meets the fit and proper requirement as an approved person under section 59 of the Act (see Principles and Code of Practice for Approved Persons).
- 3.3.6 G At least two independent minds should be applied to both the formulation and implementation of the policies of the *bank*. Where a *bank* nominates just two individuals to direct its business, the *FSA* will not regard them as both effectively directing the business where one of them makes some, albeit significant, decisions relating only to a few aspects of the business. Each should play a part in the decision-making process on all significant decisions. Both should demonstrate the qualities and application to influence strategy, day-to-day policy and their implementation. This does not require their day-to-day involvement in the execution and implementation of policy. It does, however, require involvement in strategy and general direction, as well as knowledge of, and influence on, the way in which strategy is being implemented through day-to-day policy.
- 3.3.7 G Where there are more than two individuals directing the business, the *FSA* does not regard it as necessary for all of these individuals to

be involved in all decisions relating to the determination of strategy and general direction. However, at least two individuals should be involved in all such decisions. Both individuals' judgement should be engaged so that major errors leading to difficulties for the *bank* are less likely to occur. Similarly, each individual should have sufficient experience and knowledge of the business and the necessary personal qualities and skills to detect and resist any imprudence, dishonesty or other irregularities by the other individual. Where a single individual, whether a chief executive, managing director or otherwise, is particularly dominant in a *bank* this will raise doubts about whether the four eyes requirement is met.

- 3.3.8 G The four eyes requirement applies to the *bank* as a whole. Thus, in the case of an *overseas bank* the *FSA* assesses whether at least two individuals effectively direct the business of the *bank* (and not just the business of its branch(es) in the *UK*). The *FSA* also takes into account the manner in which management decisions are taken in the *UK* branch(es) in assessing the adequacy of the *bank's* systems and controls.

Capital requirements

- 3.3.9 R** A *UK bank* and an *overseas bank* must have *initial capital amounting to not less than euro 5 million at the time it obtains its Part IV permission to include accepting deposits.*
- 3.3.10G** Where a *UK bank* and an *overseas bank* has a *Part IV permission* to undertake regulated activities but these activities do not include *accepting deposits*, it must meet *IPRU (BANK) 3.3.9R* at the time it applies for its *Part IV permission* to be varied such that it may undertake *accepting deposits*.
- 3.3.11R** Subject to *IPRU (BANK) 3.3.12R* a *UK bank* and an *overseas bank* must maintain *own funds* which amount to not less than *euro 5 million*.
- 3.3.12R** (1) This rule applies to a *UK bank* which is a *credit institution* which immediately before 1 January 1993 was authorised under the *Banking Act 1987*.
- (2) *IPRU (BANK) 3.3.11R* has effect as if the reference to *euro 5 million* were a reference to the *relevant amount*.
- 3.3.13R** (1) A *UK bank* and an *overseas bank* must maintain capital resources which are commensurate with the nature and scale of its business and the risks inherent in that business.
- (2) In the case of a *UK bank* and an *overseas bank* which is a member of a *group*, those capital resources must also be

commensurate with the risks inherent in the activities of other members of the *group* in so far as those risks affect the *bank*.

- 3.3.14G** *Guidance* on how a *UK bank* and an *overseas bank* should comply with *IPRU (BANK)* 3.3.13R is set out in chapter CO (which provides an overview of the underlying policy) and more detailed *guidance* in chapters CB, CA, BC, BO, FX, CM, DU, TI, TE, TC, TL, TU, TO, TS, and TV.

Liquidity requirement

- 3.3.15R** (1) *A bank, except an EEA bank which does not have a UK branch must maintain adequate liquidity, taking into account the nature and scale of its business so that it is able to meet its obligations as they fall due.*

(2) *In the case of an EEA bank with a UK branch, (1) applies only in relation to that branch.*

- 3.3.16 G** *Guidance* on how a *bank* should comply with *IPRU (BANK)* 3.3.15R is set out in chapters LM and LS.

Adequate provisions

- 3.3.17R** *A UK bank and an overseas bank must maintain adequate provisions for the depreciation or diminution in the value of its assets (including provisions for bad and doubtful debts), for liabilities which will or may fall to be met by it and for losses which it will or may incur.*

- 3.3.18G** *Guidance* on how a *bank* should comply with *IPRU (BANK)* 3.3.17R is set out in chapter PN.

Large exposures

- 3.3.19R** *A UK bank and an overseas bank must have adequate systems and controls to enable it (a) to monitor and control its large exposures in conformity with its large exposures policy statement adopted under IPRU (BANK) 3.4.1R; and (b) to calculate its large exposures accurately and promptly.*

- 3.3.20 G** *Guidance* on how a *bank* should comply with *IPRU (BANK)* 3.3.19R is set out in chapters LE and TL.

- 3.3.21R** (1) *A UK bank must notify the FSA if it proposes to enter into a transaction or transactions which would result in it having an exposure which exceeds 25% of its capital.*

(2) *A UK bank which consolidates one or more of its subsidiaries in its reports to the FSA for the purpose of the solo consolidated*

reporting of large exposures under rule 16.7.8 in the Supervision Manual, must, for the purposes of (1), include the transactions and capital of those subsidiaries with those of the bank.

- 3.3.22** G *Guidance* on how a *bank* should comply with *IPRU (BANK)* 3.3.21R is principally set out in chapters LE and TL.

Internal audit

- 3.3.23E** (1) A *UK bank* and an *overseas bank* should have an internal audit function (the function may either be in-house or outsourced to a third party).

(2) Contravention of (1) may be relied on as tending to establish contravention of SYSC 2.1.1R.

- 3.3.24G** SYSC 2.1.1R requires a *firm* to take reasonable care to establish and maintain a clear and appropriate apportionment of significant responsibilities among its directors and senior managers. This is so that the business and affairs of the *firm* can be adequately monitored and controlled by the senior managers and governing body of the *firm*. Further *guidance* relevant to *IPRU (BANK)* 3.3.23E is set out in chapter AR (section 3.3.9).

Audit committee

- 3.3.25E** (1) A *UK bank* should have an audit committee.

(2) The committee should either be chaired by a non-executive director of the *UK bank* or be an audit committee of non-executive directors of the *UK bank's* holding company where that committee fulfils the role of audit committee in respect of the *bank* itself.

(3) Contravention of (1) or (2) may be relied on as tending to establish contravention of SYSC 3.1.1R.

- 3.3.26G** SYSC 3.1.1R requires a *firm* to take reasonable care to establish and maintain such systems and controls as are appropriate to its business. Further *guidance* relevant to *IPRU (BANK)* 3.3.25E is set out in chapter AR (section 3.3.10).

3.4 Policy Statement Rules

Large exposures policy statement

- 3.4.1** R (1) A *UK bank* and an *overseas bank* must set out its policy on large exposures in a written statement.

(2) The policy in the statement must be such that it covers how the bank controls its *exposures* to ensure compliance with its large *exposure* limits, and the reporting to the FSA of its large *exposures*.

- 3.4.2 G** *Guidance* on how a *bank* should comply with IPRU (BANK) 3.4.1R is set out in chapters LE and TL.

Liquidity policy statement

- 3.4.3 R** (1) A *UK bank* and an *overseas bank* must set out its policy on the management of its liquidity in a written statement.

(2) The policy in the statement must be such that compliance with it would enable the *bank* to maintain adequate liquidity in conformity with IPRU (BANK) 3.3.15R.

- 3.4.4 G** *Guidance* on how a *bank* should comply with IPRU (BANK) 3.4.3R is set out in chapters LM and LS. These chapters also provide an overview of the underlying policy.

Provisioning policy statement

- 3.4.5 R** (1) A *UK bank* and an *overseas bank* must set out its policy on making provisions in a written statement.

(2) The policy in the statement must be such that compliance with it would enable the *bank* to comply with IPRU (BANK) 3.3.17R except that an *overseas bank* need only cover such provisions as are made in the accounts of its operations in the UK.

- 3.4.6 G** *Guidance* on how a *bank* should comply with IPRU (BANK) 3.4.5R is set out in chapter PN.

Trading book policy statement

- 3.4.7 R** (1) A *UK bank* must set out its policy on the matters set out in (2) in a written statement.

(2) The statement must cover:

- (a) whether or not the *UK bank* splits its business between a banking and trading book consistently with chapter CB of IPRU (BANK) for the purpose of its capital adequacy calculations;
- (b) if it does not so split its business, the reasons for that;
- (c) if the *UK bank* does split its business between a banking and trading book, the means and methodologies by which the *UK bank*:

- (i) identifies its trading book;
- (ii) assigns positions between the banking and trading books;
- (iii) controls transfers of positions between the banking and trading books;
- (iv) values its positions in the trading book; and
- (v) measures market risks in the trading book.

3.4.8 G *Guidance* on how a *bank* should comply with IPRU (BANK) 3.4.7R is set out in chapters CB, DU, TC, TS and TV. Those chapters also provide an overview of the underlying policy.

Policy statement procedures

- 3.4.9 E** (1) A *bank's* policy statements required under IPRU (BANK) 3.4.1R, 3.4.3R, 3.4.5R, and 3.4.7R should be approved by its board or, where appropriate, by a person or body of persons to whom the board has delegated this function (the "delegate").
- (2) The function in (1) should only be delegated if the *bank's* board:
- (a) is satisfied that the delegate is suitable for this purpose; and
 - (b) any such delegation is done formally and expressly by the board.
- (3) The *bank* should:
- (a) review the policy statements and, where necessary, update them at least once a year; and
 - (b) incorporate within the appropriate policy statement any change to any of its policies covered by the statement as soon as it has adopted the change.
- (4) Contravention of (1), (2) or (3) may be relied on as tending to establish contravention of SYSC 2.1.1R.
- 3.4.10 G** SYSC 2.1.1R requires a *firm* to take reasonable care to establish and maintain a clear and appropriate apportionment of significant responsibilities among its directors and senior managers. This is so that the business and affairs of the *firm* can be adequately monitored and controlled by the senior managers and governing body of the *firm*.

3.4.11 G A *bank* should notify the *FSA* of its intention to make any significant changes in such policies before the *bank* adopts those changes.

3.4.12R A *bank* must send to the *FSA*:

- (a) a copy of the policy statement it has first adopted in compliance with each of *IPRU (BANK)* 3.4.1R, 3.4.5R and 3.4.7R as soon as possible after adopting it; and
- (b) if the policy statement is subject to significant changes, a *bank* must send a copy of the amended policy statement to the *FSA* as soon as possible after adopting it. A significant change would include, for instance, new types of customers or business requiring different funding or provisioning. If there is any doubt about whether a change is significant or not, it must be treated as significant.

3.4.13 G [Deleted]

3.4.14 G A transitional *rule* applies to a *bank* which has provided the *FSA* with a written statement of its large *exposures*, liquidity, provisioning or trading book policies in the year preceding the date of the coming into force of *IPRU (BANK)* 3.4.12R (see section 3.6).

3.5 Definitions

3.5.1 R In this section the term or phrase in the first column of the following table has the meaning given to it in the second column:

accepting deposits	See definition in the <i>Glossary</i> .
Act	See definition in the <i>Glossary</i> .
associated undertaking	Has the meaning given in section 119(1) of the Building Societies Act 1986.
bank	(1) a <i>firm</i> with a <i>Part IV permission</i> which includes <i>accepting deposits</i> , and: (a) which is a <i>credit institution</i> ; or (b) whose <i>Part IV permission</i> includes a <i>requirement</i> that it comply with <i>IPRU (BANK)</i> ; but which is not a <i>building society</i> , <i>friendly society</i> or <i>credit union</i> ; and (2) an <i>EEA bank</i> .
branch	See definition in the <i>Glossary</i> .
building society	See definition in the <i>Glossary</i> .

commencement	See definition in the <i>Glossary</i> .
credit institution	An <i>undertaking</i> whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account or an electronic money institution within the meaning of article 1(3)(a) of Directive 2000/46/EC (the E-Money Directive) that has the right to benefit from the mutual recognition arrangements under Directive 2000/12/EC (the Banking Consolidation Directive).
credit union	See definition in the <i>Glossary</i> .
EEA bank	An <i>incoming EEA firm</i> which is a <i>credit institution</i> .
EEA firm	See definition in the <i>Glossary</i> .
euro 5 million	Includes a reference to an amount of equal value denominated wholly or partly in another currency.
evidential provision	See definition in the <i>Glossary</i> .
exposure	The maximum loss which a <i>bank</i> might suffer if a counterparty or a group of closely related counterparties fails to meet its obligations, or the maximum loss that might be experienced as a result of the <i>bank</i> realising assets or off-balance sheet positions.
financial holding company	A financial institution whose subsidiary undertakings are either exclusively or mainly credit institutions or financial institutions (at least one being a credit institution) and which is not a mixed financial holding company.
financial institution	(when used in chapters GN, CA and CS) See definition in <i>Glossary</i>
firm	See definition in the <i>Glossary</i> .
friendly society	See definition in the <i>Glossary</i> .
FSA	See definition in the <i>Glossary</i> .
FSMA	Financial Services and Markets Act 2000.
Glossary	The glossary of defined terms used in the Handbook.
group	In relation to a person ("A"), means A and any person who is: (a) a <i>parent undertaking</i> of A; (b) a <i>subsidiary undertaking</i> of A; (c) a <i>subsidiary undertaking</i> of a <i>parent undertaking</i> of A; (d) a <i>parent undertaking</i> of a <i>subsidiary undertaking</i> of A; (e) an <i>undertaking</i> in which A or an <i>undertaking</i> mentioned in paragraph (a), (b), (c) or (d) has a <i>participating interest</i> ; (f) if A or an <i>undertaking</i> mentioned in paragraph (a) or (d) is a <i>building society</i> , an <i>associated undertaking</i> of the society; or (g) if A or an <i>undertaking</i> mentioned in paragraph (a) or (d) is an incorporated <i>friendly society</i> , a body corporate of which the society has joint control (within the meaning of section 13(9)(c) or (cc) of the Friendly Societies Act 1992).
guidance	See definition in the <i>Glossary</i> .
Handbook	See definition in the <i>Glossary</i> .
incoming	See definition in the <i>Glossary</i> .

EEA firm	
IPRU (BANK)	The Interim Prudential Sourcebook for <i>banks</i> .
initial capital	Capital as defined in points 1 and 2 of Article 34(2) of The Banking Consolidation Directive (2000/12/EC).
mixed-activity holding company	A parent undertaking that is not a financial holding company, or a credit institution, or a mixed financial holding company, whose subsidiaries include at least one credit institution.
mixed financial holding company	See definition in the <i>Glossary</i> .
notification rules	See definition in the <i>Glossary</i> .
overseas bank	A <i>bank</i> which is a body corporate or partnership formed under the law of any country or territory outside the EEA.
own funds	Own funds as defined in The Banking Consolidation Directive (2000/12/EC).
parent undertaking	See definition in the <i>Glossary</i> .
Part IV permission	See definition in the <i>Glossary</i> .
participating interest	Has the same meaning as in Part VII of the Companies Act 1985 or Part VIII of the Companies (Northern Ireland) Order 1986; but also includes an interest held by an individual which would be a participating interest for the purposes of those provisions if he were taken to be an <i>undertaking</i> .
participation	See definition in the <i>Glossary</i> , except where the context otherwise requires (such as in the phrase "sub-participation").
PRU	See definition in the <i>Glossary</i> .
relevant amount	<p>(1) Subject to (2) to (3), the amount of <i>own funds</i> which the <i>bank</i> had on 1 January 1993.</p> <p>(2) If, at any time after 22 December 1989, the <i>bank</i> had or has <i>own funds</i> of a greater amount than the amount of its <i>own funds</i> on 1 January 1993, the relevant amount is that greater amount, or <i>euro 5 million</i>, whichever is the less.</p> <p>(3) if, at any time after 1 January 1993, there is any change in the person who is the <i>parent undertaking</i> of the <i>bank</i> (not being a <i>parent undertaking</i> which is a <i>subsidiary undertaking</i> of another <i>parent undertaking</i> of the <i>bank</i>) the relevant amount is <i>euro 5 million</i>.</p>
requirement	See definition in the <i>Glossary</i> .

rule	See definition in the <i>Glossary</i> .
subsidiary undertaking	See definition in the <i>Glossary</i> .
SUP	See definition in the <i>Glossary</i> .
SYSC	See definition in the <i>Glossary</i> .
UK	See definition in the <i>Glossary</i> .
UK bank	a <i>bank</i> which is a body corporate or partnership formed under the law of any part of the United Kingdom.
undertaking	See definition in the <i>Glossary</i> .

3.6 TRANSITIONAL RULE

- 3.6.1R** A *bank* which has provided the FSA with a written statement of its large *exposures*, liquidity, provisioning or trading book policies in the year preceding the date of the coming into force of this *rule* is taken to be in compliance, at that date, with *IPRU (BANK) 3.4.12R*.
- 3.6.2 G** GEN contains some technical transitional provisions that apply throughout the *Handbook* and which are designed to ensure a smooth transition at *commencement*. These include transitional provisions relevant to record keeping and *notification rules*.
- 3.6.3 G** *SUP* contains transitional provisions which carry forward written concessions relating to pre-commencement provisions.

4 PRESENTATION AND CONVENTIONS

4.1 Organisation within each chapter

- 1 The chapters in the remainder of the IPRU (BANK) are structured using a common approach, to help users to find their way around easily.
- 2 Chapters are divided into sections. Typically, a chapter begins with an explanation of the legal starting-point of the policy area and the chapter's internal organisation. The general rationale for the FSA's approach to the subject is then given, followed by the main components of the FSA's policy. Detail of the framework used to assess fulfilment of those policy requirements follows.
- 3 One aim, in writing the chapters, has been to separate the main from the supporting material, and to have a presentation that helps clarity here.
 - (a) The main point is often the principal policy requirement; the supporting material may be a definition of a relevant term, how exactly to interpret a requirement, or the explanation of the reasons for adopting it (which can aid its interpretation).
 - (i) If the interpretative material is itself the subject of further clarification, it is presented as exemplified here.
 - (b) Note that the other chapters of the IPRU (BANK) consist solely of guidance for the purpose of the Act. This chapter contains the rules included in the IPRU (BANK) to which the other chapters refer.

4.2 Understanding the presentation

A number of presentational features are used in the remainder of the IPRU (BANK)

Header

- Chapter identifiers: Each chapter has a two-character identifier. This is shown on the left-hand side of the header to each page. The list of chapters with their chapter identifiers is given in the first section of these Notes.
- Date of issue: This is shown on the right-hand side of each header. Users can check whether any copy of a section they hold is the latest by comparing it with the date of the latest issue.

- (a) The dates of latest issue of each section of each chapter can be checked by phoning the Policy Department of the FSA's Financial Supervision Banking Directorate[020 7676 0484/0394], or via the FSA's internet site (at www.fsa.gov.uk).

Body of text

- Paragraph numbering: The main paragraphs within sections are numbered continuously (so a main paragraph can be identified as section x [shown on each page], paragraph y). Occasionally a main paragraph is unnumbered, where basically it and the previous paragraph concern a single point.

- a) Points of interpretation are listed 'a), b) etc' below the main paragraphs to which they refer.

See s22



- Cross-references: The cross-reference column on the left-hand side of each page is used to give a number of different sorts of reference (as exemplified across), to:

(a) Other useful sources, such as the Act and EU legislation.

(a) FSM = Financial Services and Markets Act 2000

(i) Sch = Schedule

(b) Other chapters of the IPRU (BANK), or other sections of the current chapter.

(a) ch = chapter

(b) pa = paragraph

(c) s = section

(d) a = appendix

4.3 Definitions

6 The convention followed for definitions in the remaining chapters of the IPRU (BANK) is that, when a term is used and a definition is given nearby, the term is shown in both places in italics. Italics are used only for this purpose.

4.4 Terms used

7 The remaining chapters of the IPRU (BANK) use a number of conventions. The following list should help users with terms:

- (a) 'The Act', unless otherwise made clear, refers to the Financial Services and Markets Act 2000.
 - (a) Any EU Directives or secondary legislation relevant to a particular chapter are usually outlined in the first section of the chapter.
- (b) A 'bank': is generally used to refer to banks authorised for the purposes of the Financial Services and Markets Act 2000. The definitions of a UK bank, overseas bank and EEA bank are generally the same as those given in section 3 of this chapter which also apply to the rules in that section.
- (c) 'A CAD bank': is used as a shorthand for a 'bank to which the CAD trading book capital requirements apply'. Others are 'non-CAD banks'.
- (d) 'The FSA' is used to refer to the Financial Services Authority.
- (e) 'He' etc: for reasons of brevity, 'he' is used instead of saying 'he or she' throughout.
- (f) 'IPRU (BANK)' is used instead of 'Interim Prudential Sourcebook applying to banks'.
- (g) A number of paragraphs in the remainder of the IPRU (BANK) simply state "[This paragraph is intentionally blank.]" This has been done so as to avoid the need to renumber subsequent paragraphs.

CAPITAL ADEQUACY OVERVIEW

1 INTRODUCTION

1.1 Overview

See s4 & ch CA 1

The main elements of the FSA's policy on capital adequacy for banks involves:

- Applying limits to the proportions that the main types of capital should constitute within a bank's capital base.
- Calculating the capital needed using a weighting framework to quantify various kinds of risk, and agreeing a capital ratio (or ratios) banks should meet, which may be higher than the Euro 5mn minimum requirement, reflecting both a quantitative and qualitative assessment of the various risks in its business.
- Assessing the adequacy of a bank's capital using a framework which compares the bank's actual capital with the amount it calculates it should hold.
 - a) The *capital adequacy framework* is used to determine whether a bank's capital is sufficient to support its activities. It is a matter not just of the quantity of capital but also its type and the relationship to the quantity and nature of its assets.

2 This chapter provides an overview of the FSA's capital adequacy policy, covering a number of the key points, and summarises how the elements in the framework fit together. The detail of the framework is dealt with across a number of chapters.

See s3

- a) See below for an explanation as to how the chapters fit into the capital adequacy framework.

1.2 Legal sources

See COND

3 The Threshold Conditions ("Adequate resources") state that, in the opinion of the FSA, the resources of a firm must be adequate in relation to the regulated activities that it seeks to carry on or carries on. In addition the Principles (Principle 4) require a firm to maintain "adequate financial resources". A bank should have adequate capital in order to be able to meet these requirements;

See ch GN s3

A bank is also required to "maintain adequate capital resources which are commensurate with the nature and scale of its activities and the risks inherent in those activities. In the case of a

bank which is a member of a group, those capital resources must also be commensurate with the risks inherent in the activities of other members of the group in so far as capable of affecting the bank." (see rule 3.3.13 in chapter GN).

Subject to the grandfathering provisions which apply to UK banks, a bank must maintain own funds which amount to not less than Euro 5 million (see rule 3.3.9 in chapter GN)

These requirements reflect the requirements of the EU directives applying to credit institutions.

Two EC Directives between them set out the main components of the capital adequacy structure:

- Title V, Chapter 2, Section 1 of The Banking Consolidation Directive (formerly the Own Funds Directive "OFD" - 89/299/EEC) defines what is regarded as a bank's capital resources for supervisory purposes.
- Title V, Chapter 2, Section 2 of The Banking Consolidation Directive (formerly the Solvency Ratio Directive "SRD" - 89/647/EEC) assigns weightings to the various classes of assets and establishes the minimum Risk Asset Ratio.
- The Capital Adequacy Directive ("CAD", 93/6/EC) and its subsequent amendment (98/31/EC) extends the regime to cover additional aspects of market risk.

4 The CAD sets out procedures for the calculation of capital adequacy which are implemented by this chapter.

1.3 Application

5 This chapter applies to all UK banks.

- a) The FSA is a competent authority for the purposes of the CAD.
- b) Banks incorporated elsewhere in the EEA with UK branches are subject to the requirements of the Directives above as implemented by their home supervisors.
- c) Overseas banks are not subject to European Directives, but The Banking Consolidation Directive (2000/12/EC) formerly the OFD and SRD among other directives) follows closely the principles laid down in the 1988 Basel Agreement, and hence are in the main followed by most

banks overseas, particularly those in other G10 countries. In concept, these rules have become the internationally accepted standard.

See ch CS 6 The capital adequacy regime applies to banks on a consolidated basis, as well as on either a solo-consolidated basis or solo basis.

1.4 How this chapter is organised

7 Section 2 explains the FSA's approach to capital adequacy and gives an overview of the FSA's framework.

Section 3 explains how the chapters on capital adequacy fit within this framework.

Section 4 provides details of the use of individual capital ratios.

Section 5 is an annex which explains how the use of capital can be optimised in calculating capital adequacy.

2 THE FSA'S APPROACH TO CAPITAL ADEQUACY

The basic approach of a capital adequacy framework is that a bank should have sufficient capital to provide a stable resource to absorb any losses arising from the risks in its business. This section explains in more detail the purpose of a capital adequacy framework and the characteristics of capital.

2.1 The structure of the FSA's capital adequacy framework

1 The basic capital adequacy framework used by the FSA is as outlined in the Basel Accord 1988. This has been refined through subsequent developments, not least in the EU, and consists of a quantitative framework for deriving a required level of capital, consisting of three main elements:

(a) A definition of what characteristics an instrument should have to qualify as capital. Capital is divided into tiers according to the characteristics/qualities of each qualifying instrument.

See s2.3 &
ch CA

a) The definitions and limitations of the various types of capital are provided in summary below and in detail in the chapter on the definition of capital.

(b) A risk weighting framework which produces risk weighted measures of the relevant risks captured by the framework.

See s3

a) Using this framework, a bank may hold less capital backing for assets with lower risk weights than assets with higher risk weights. The weighting of assets and activities is detailed in a number of chapters as explained below.

(c) A capital ratio.

See s4

a) This is a ratio of total capital to risk-weighted assets and thus generates a level of capital for a bank's activities which it should maintain. The structure chosen - which involves individual capital ratios - is set out below.

2.2 The purposes, characteristics and types of capital

See ch CA

2 These are now set out in Chapter CA.

2.3 Limitations on the role of capital and a capital adequacy framework

- 3 The quantity of capital, however important, is not the sole consideration in assessing a bank. Capital ratios, judged in isolation, may provide a misleading guide to a bank's strength while emphasis on capital alone may distract attention from a real appreciation of the risks being undertaken by a bank.
- a) Capital is only a safety net; it is at least as important that a bank controls and manages its risks effectively.
 - b) Comparing calculated capital ratios without considering the relative quality of the assets for which specific capital charges have been allocated may also be misleading.
 - c) Specific capital charges are used by the FSA, and by regulators abroad, as a means of measuring some but not all types of risk. For example, most types of counterparty and market risk are covered, but no specific capital charge is made for, amongst others, operational and settlement risks.
 - d) The capacity of management consistently to generate profit at an acceptable level of risk is at least as important as the quantity of capital; it tends to maintain both liquidity and confidence, contain risk and preserve the capital base.

3 THE FRAMEWORK FOR CALCULATING CAPITAL REQUIREMENTS

3.1 Introduction

1 The capital adequacy regime set out in this chapter which banks should adopt provides a framework to include in a quantitative assessment of capital adequacy various risks, whether they arise in a bank's banking book or trading book. Some of the risks have a different treatment for the banking and the trading book; others are treated in the same way wherever they arise. It is therefore possible to distinguish three parts of the framework:

- that applying to risks only as they arise in the banking book;
- that applying to risks arising both in the banking book and the trading book; and
- that applying to risks only as they arise in the trading book.

This division is mirrored in the structure of the capital adequacy chapters. So those chapters relating to the first two parts of the framework are relevant to both CAD and non-CAD banks, whereas the chapters relating to the third part are relevant only to CAD banks.

See ch CB 2 The chapter on the trading book/banking book split outlines the criteria which should be used to judge when a bank has a material trading book (and so is a CAD bank); and includes guidance for assigning risks to the banking and trading books.

See s4 3 The basic principle is that the framework generates a notional weighted risk asset figure for a bank's risk, which should be multiplied by the bank's relevant *individual capital ratio* to generate the level of capital which the FSA considers a bank should maintain.

- a) The capital charges should be calculated for various individual risks and then aggregated to produce a total capital requirement for the individual bank to reflect the overall risks of the activities being undertaken.

3.2 The banking book

See ch BC 4 (a) Credit risk in the banking book should be included in the regime using a weighting approach to derive risk weighted assets and their equivalents for off balance sheet items. The

approach is given in the chapter on credit risk in the banking book.

- (b) There are at present no explicit capital requirements for interest rate risk in the banking book. A bank should nevertheless maintain adequate capital to cover interest rate risk to which it is exposed in its banking book.

See ch BO 5 Proxies for various kinds of market risk in the banking book should also be captured. The framework includes a simple approach to cover the risk of loss on the value of securities, which is unlikely to be a significant element of the risks facing a bank. This is covered in the chapter on market risk in the banking book.

3.3 Treatments common to banking and trading books

See ch DU 6 For a narrow range of instruments (principally OTC derivatives, unsettled transactions and free deliveries), *counterparty risk* should be treated in the same way whether the instrument is held in the banking or the trading book. These treatments are given in the chapter on counterparty risk treatments common to the banking and the trading book.

- a) *Counterparty risk* is the risk of loss arising through the failure by the other party to perform its obligations to an agreement.

See ch FX 7 Capital requirements for *foreign exchange risk* should be the same whether the risk arises in the trading or banking book, and should be computed on the aggregated position.

- a) *Foreign exchange risk* is the risk faced by a bank which has positions in foreign currencies (including gold), either because of currency trading positions or because of exposures caused by its overall assets and liabilities. The risk is that the relevant exchange rate(s) or prices might move against it.

See ch CM 8 *Commodity position risk* should be aggregated in the same manner as foreign exchange risk and is explained in the chapter on commodity position risk.

- a) *Commodity position risk* is the risk of price movements faced by a bank which has positions in commodities (excluding gold).

3.4 The trading book

9 The framework relating to trading books is only relevant to *CAD banks*. CAD banks generally have banking books as well and the

policy in relation to banking books is therefore also relevant to them.

- a) A *CAD bank* is a bank with a trading book above the de minimis requirements.

- | | | |
|-----------|----|---|
| See s4 | 10 | The standard treatment of trading book capital requirements for market risk should include calculations under six separate headings, as explained below. The following chapters each feed into a separate heading, as indicated: |
| See pa7 | | (a) Foreign exchange risk in the trading book should form part of the calculation for foreign exchange position risk. |
| See pa8 | | (b) Commodity position risk in the trading book should form part of the calculation for commodity position risk. |
| See ch TE | | (c) A bank may be exposed to risk through holdings of equity positions. The standard treatment of the risk is explained in the chapter on equity position risk. <ul style="list-style-type: none"> a) The resultant capital requirement, together with any relevant underwriting risk, should form the calculation for equity position risk. |
| See ch TI | | (d) A bank may be exposed to risk through movements in interest rates, arising from both holdings of interest rate instruments and as a corollary to any future cash flows. The standard treatment of the risk is explained in the chapter on interest rate position risk. <ul style="list-style-type: none"> a) The resultant capital requirement, together with any relevant underwriting risk, should form the calculation for interest rate position risk. |
| See ch TL | | (e) A bank should maintain an additional capital requirement to reflect the additional risks arising from concentration of credit exposures. The treatment of this risk is in the chapter on incremental capital for large exposures. <ul style="list-style-type: none"> a) This covers the risks undertaken by banks that have individual exposures in excess of the normal 25% limit. |
| See ch TO | | (f) Option position risk in the trading book should form part of the calculation for option position risk. |
| See ch TV | 11 | An alternative approach to calculating capital requirements for market risk in the trading book involves the use of a bank's internal VaR models. |

- a) The internal models approach may be used to calculate the capital requirements for foreign exchange risk, commodity position risk, interest rate position risk and equity position risk. A bank using the internal models approach should still calculate capital requirements for large exposures under the standard approach.

See ch TC

12

The *counterparty risk* treatment of some instruments, principally repos/reverse repos, is unique to the trading book. This treatment is explained in the chapter on counterparty risk in the trading book.

- a) Such *counterparty risk* only ever arises in respect of transactions where the positions have yet to unwind and there are therefore obligations still upon the counterparty; when a bank holds an instrument in its trading book, the market risk calculation should include (where applicable) the risk that the issuer may default.

13

Some capital requirements may feed into more than one part of the trading book capital calculation:

See ch TU

- (a) The risks in providing underwriting commitments are explained in the chapter on underwriting.

- a) The resultant capital requirement should be part of the calculation for either the interest rate and equity position risk, depending on the subject matter of the underwriting.

See ch TS

- (b) A bank may apply for recognition of a sensitivity model for calculation of market risk in the trading book. This is explained in the chapter on standard models in the trading book.

- a) The resultant capital requirements should feed into the calculations of the various components of trading book risk.

3.5 General refinements to the structure

See ch SE

14

In certain cases, balance sheet or off balance sheet items which would otherwise be included as weighted risk assets (or their notional equivalents) may be removed from the supervisory balance sheet, because the associated risks are viewed as effectively transferred or securitised. This is explained in the chapter on securitisation and loan transfers.

See ch NE

15

Items sometimes may attract a lower weighting than normally applied to the bank's counterparty in the transaction, subject to the FSA's policy in respect of netting or collateral are met. This is explained in the chapter on collateral and netting.

See ch CS

16

Further guidance applies in the case of consolidated reporting. This is given in the chapter on consolidated supervision.

4 INDIVIDUAL CAPITAL RATIOS

This section explains the FSA's policy for the setting, reviewing and monitoring of capital ratios and provides an overview of factors it takes into account in setting the level of the ratios. The first sub-section explains the procedure for the setting of the ratios. The second sub-section deals with their monitoring.

4.1 Setting and reviewing the ratios

4.1.1 *Individual capital ratios*

- See s2.1 1 The third element of the FSA's capital adequacy framework is the setting of a capital ratio for a certain quantity of risk weighted assets. This is the *individual capital ratio (ICR)*, the minimum capital ratio that the FSA considers a bank should maintain.
- See ch GN (s3) 2 Rule [3.3.13 in Chapter GN] requires a bank to maintain adequate capital resources. In order to meet this requirement the FSA considers that banks should maintain, on a continuing basis, the capital ratios set by the FSA. In the event that a ratio is not met, the bank should contact the FSA immediately.
- 3 The absolute minimum ICR the FSA considers to be appropriate is 8% as set out in the SRD (now replaced by The Banking Consolidation Directive), but in practice the FSA expects most banks to work to an ICR which is significantly above this figure.
- 4 The FSA considers that an ICR of 8% (ie the minimum) is appropriate only for a well-diversified firm whose business, management, systems and controls are strong and where the risks that it is exposed to are captured adequately by the capital model. For a bank that does not satisfy these conditions, the FSA will use the Individual Capital Ratios Framework (ICRF) to determine an ICR above the 8% minimum (see FSA Policy Statement 'Individual Capital Ratios for Banks', July 2001).

The ICRF is a structured framework which is used by the FSA to identify potential sources of risk not captured – or not captured adequately – by the 8% minimum capital ratio. FSA supervisors gather information on these potential risks, drawing on our primary risk assessment tools as well as other information sources. The ICRF is then used to build up a qualitative risk assessment for the bank and to determine an appropriate capital ratio to help mitigate these risks. The ICRF lists those risk factors where the FSA deems capital to be an appropriate mitigant.

The factors considered are:

<u>Banking Book</u> <u>Business Risk</u>	<u>Trading Book</u> <u>Business Risk</u>
<u>Section 1 – Model Fit</u>	<u>Section 1 – Model Fit</u>
<u>Interest rate risk in the banking book</u>	<u>Market risk</u>
<u>Settlement risk</u>	<u>Incremental capital for large exposures</u>
<u>Credit risk</u>	<u>Underwriting</u>
<u>Risks on the liability side</u>	<u>CADI & CAD2 models</u>
<u>Interaction between credit and market risks</u>	<u>Legal, Operational and Other business risks</u>
<u>Legal, Operational and Other business risks</u>	
<u>Section 2 – Concentration / Operating Environment</u>	<u>Section 2 – Concentration / Operating Environment</u>
<u>Concentration</u>	<u>Concentration</u>
<u>Access to capital</u>	<u>Access to capital</u>
<u>Consolidation</u>	<u>Consolidation</u>
<u>Infrastructure</u>	<u>Infrastructure</u>
<u>Banking Book</u> <u>Control Risk</u>	<u>Trading Book</u> <u>Control Risk</u>
<u>Section 3 – Control factors</u>	<u>Section 3 – Control factors</u>
<u>Internal controls</u>	<u>Internal controls</u>
<u>Organisation</u>	<u>Organisation</u>
<u>Management</u>	<u>Management</u>

- 5 The ICR is reviewed periodically to ensure that it continues to reflect the bank's risk-profile. In the event of a significant deterioration in a bank's risk profile, the FSA may consider that the ratio should be increased to reflect the increased risk; the converse applies to improvements in a bank's risk profile.

4.1.2 *Capital buffers*

- 6 SYSC 3.2.6R requires a bank to take reasonable care to maintain effective systems and controls for compliance with regulatory requirements. This includes compliance with Rule [3.3.13 in Chapter GN]. In doing so a bank should take into account the ICR(s) advised by the FSA. In order to ensure continued compliance with Rule [3.3.13 in Chapter GN], the FSA believes it is appropriate for a bank to maintain a capital buffer above the level of the ICR advised by the FSA. The size of this buffer is at the discretion of the bank. However, if the bank's capital falls below the ratio(s) advised by the FSA, this will call into question the effectiveness of the firm's risk management procedures. In such circumstances, the FSA would have to consider an appropriate regulatory response.

4.1.3 *CAD banks*

- 7 For CAD banks, separate ICRs are set for the trading and banking books.
- a) Because the banking book regime is expressed in terms of a ratio in proportion to risk weighted assets, whilst the trading book regime established by the CAD expresses its requirement as capital requirements (i.e. the level of capital required to support an associated risk), a method is needed to allow trading book ICRs to be brought into the framework. This has been achieved by multiplying the trading book aggregate capital requirement by 12.5 to produce a notional risk weighted asset equivalent which can be multiplied by the trading book ICR. This system is purely supervisory and banks should not publish their ratios in this form.

4.2 **Monitoring and breaches**

4.2.1 *Monitoring*

- 8 For normal reporting purposes, the extent to which a bank exceeds its capital requirements is expressed as a percentage of that capital requirement. So a bank's supervisory capital adequacy position should always be above 100%.
- 9 The monitoring of capital ratios by the FSA normally takes place using the quarterly (solo) and semi-annual (consolidated) BSD3 return. However, in the event of a programme of remedial action being agreed (particularly in the case of breaches of ICR) the FSA may request more frequent information.
- 10 A bank must maintain adequate capital on a continuing basis, not just on reporting dates. Where the nature of the activities is such that the capital ratio remains stable, the calculation may be on an appropriate periodic basis. It may, however, be appropriate that a bank is able to monitor its capital ratios daily.
- 11 Any fall, or anticipated fall, below the ICR by a bank should be notified to the FSA immediately it becomes known.

4.2.2 *Breaches of the ICR*

- 12 Any breach of the ICR by a bank is a serious matter since it indicates that a bank may have insufficient capital safely to support

the risks in its business and might well be unable to meet the requirements and standards under the regulatory system.

4.3 Consolidated ratios

13 The capital ratio set by the FSA on a consolidated basis is normally the same as that set on a solo basis for the principal bank in the group.

See ch CS

a) For further details, see the chapter on consolidated supervision.

5 APPENDIX: OPTIMISING THE USE OF CAPITAL IN CAPITAL ADEQUACY CALCULATIONS

- See ch CA s11 1 As the tiers of capital differ in the degree of protection that they can offer depositors, restrictions should be placed on the use and amount of each type of capital in a bank's capital base. These restrictions are detailed elsewhere. The purpose of this section is to explain how, given the restrictions, a bank should allocate its capital against its capital requirements.
- 2 It follows from these restrictions that a bank should use its capital in an optimal way. To report in a less than optimal way would mean that the capital ratios would not be maximised and a possibly misleading impression as to a bank's stability could be provided.
- a) There are fewer restrictions on the more "senior" types of capital, which are likely to be more scarce and expensive. The use of the more "junior" types should be restricted and this capital is likely to be more flexible, plentiful and cheaper. The junior capital should therefore be utilised to its maximum extent to meet the capital requirements where possible.
- 3 Optimisation of the use of capital may be achieved by carrying out the calculations in the following order (although in which steps (b), (c) and (d) are carried out is not critical):
- (a) Identify any deductions to be made from Tier 1 capital or from Tier 1 and Tier 2 capital.
- See ch CA a) This includes deductions of holdings of own paper, of the capital instruments of banks and investment firms, and of qualifying holdings.
- (b) Calculate trading book capital requirements.
- Trading book ICR = X%

	Capital requirement	Notional risk weighted assets	Capital required
FX position risk	A	12.5 x A	X% of (12.5 x A)
Equity position risk	B	12.5 x B	X% of (12.5 x B)
Interest rate position risk	C	12.5 x C	X% of (12.5 x C)
Large exposures incremental capital	D	12.5 x D	X% of (12.5 x D)
Trading book counterparty and settlement risk	E	12.5 x E	X% of (12.5 x E)
Commodity position risk	F	12.5 x F	X% of (12.5 x F)
Activities subject to internal models	G	12.5 x G	X% of (12.5 x G)
Option position risk	I	12.5 x I	X% of (12.5 x I)

See s4.1

- a) Note that multiplying by 12.5 is equivalent to dividing by 8%. See above for explanation of why this is necessary to place the elements of the capital calculation on the same basis.

See ch TV

- b) Capital requirement G for activities subject to internal models are shown in 76G in chapter TV.

- (c) Calculate banking book capital requirements.

Banking book ICR = Y%

	Risk weighted assets	Capital required
Credit risk	H	Y% of H

- (d) Identify total capital available.
- (e) Identify any Tier 2 subordinated debt in excess of 50% of total Tier 1 capital; this should not be included in the capital base.

- (f) Identify general/collective provisions in excess of 1.25% of the sum of risk weighted assets in the banking book and notional risk weighted assets in the trading book; these should not be included in Tier 2 capital.
- (g) The next step in the process depends upon the type of bank:
- (i) For CAD banks reporting on a consolidated basis, or a solo basis where the bank is not part of a group that submits prudential returns on a consolidated basis, then the sum of eligible Tiers 2 and 3 in excess of Tier 1 should not be included. The excess should be discarded from the calculation in the order:
 - Tier 3 capital;
 - Tier 2 capital.
 - (ii) For CAD banks reporting on a solo basis, where the bank is part of a group which submits prudential returns on a consolidated basis, this step should be omitted.
 - (iii) For all non-CAD banks, any Tier 2 capital in excess of total Tier 1 capital should be discarded.
- (h) Allocate capital to support the banking book capital requirements, maximising use of Tier 2 capital subject to constraint that at least half the capital supporting the banking book should be Tier 1.
- (i) Calculate eligible Tier 3 capital. Eligible Tier 3 capital is restricted to an upper limit of twice the amount of Tier 1 capital left over after step (h). Any Tier 3 capital in excess of this limit should not be included.
- (j) Allocate capital to support the trading book capital requirements, maximising use of Tier 3 capital by the following process:
- (i) Allocate Tier 1 capital to trading book counterparty risk requirements up to an amount equal to one third of the total trading book capital requirement. If the sum required to cover trading book counterparty risk is less than this one third of the total trading book capital requirement, an amount of Tier 1 capital equal to the difference should be allocated to meet trading book market risk capital requirements.

- (ii) If any trading book market risk requirements remain uncovered at this stage, capital should be allocated in the order:
- Tier 3 capital;
 - Tier 2 capital;
 - Tier 1 capital.
- (iii) Capital should be allocated to cover any remaining trading book counterparty risk requirements in the order:
- Tier 2 capital;
 - Tier 1 capital.
- (k) Identify any unused Tier 1 or Tier 2 capital.
- (l) The capital adequacy ratio should be calculated by the following equation:
- $$\frac{(\text{Tier 1} + \text{eligible Tier 2} + \text{used Tier 3} - \text{deductions}) \times 100}{X\% \text{ of } 12.5 \times (A + B + C + D + E + F + G + I) + Y\% \text{ of } H}$$
- a) This equation represents the ratio of adjusted capital base to regulatory capital requirements, expressed as a percentage. If its ratio is less than 100%, the FSA will consider that a bank has inadequate capital.
- b) Note that Tier 3 capital only contributes to a bank's adjusted capital base to the extent that it is used to support capital requirements. This is why a bank should use as much of its Tier 3 capital as possible to meet trading book market risk requirements.
- 4 If there is insufficient capital to meet the capital requirements at any stage above, a bank should immediately contact its supervisor.

THE BANKING BOOK/TRADING BOOK DIVISION

1 INTRODUCTION

1.1 How this chapter is organised

See ch CO

1 This chapter is one of a number that deals with capital adequacy; the overview of capital chapter (Chapter CO) outlines how they fit together. Banks that have a trading book over a certain size should meet the trading book capital requirements of the Capital Adequacy Directive (CAD - 93/6/EEC) and its subsequent amendment (98/31/EC) in respect of the risks - not only market-related but also credit related - arising from their trading activities. This involves splitting their business between trading and banking books. This chapter explains what should be included in a bank's trading book, outlines the FSA's policies in respect of a bank's trading book and sets out the threshold tests which banks should adopt to determine whether a bank has a trading book for CAD purposes.

2 Section 2 outlines the main elements of the FSA's policy in this area. Section 3 defines the trading book and the instruments which may be included in it. Section 4 explains how a bank should determine whether it has a trading book for CAD purposes and the implications if it does not. Section 5 covers trading book policy statements.

1.2 Legal sources

See ch CO

3 The legal sources identified in the relevant section of the Capital Adequacy Overview chapter are also relevant to this .

4 The CAD introduced a framework for capital requirements for the market and other risks associated with the trading activities of banks and *investment firms*.

- a) An *investment firm* is any legal or natural person the regular occupation or business of which is the provision of *investment services* for third parties on a professional basis.

See ISD

- (i) *Investment services* are listed in Section A of the Annex to the Investment Services Directive (ISD - 93/22/EEC).

The relevant parts of the CAD are implemented by this chapter.

5 If a bank's trading book is below a certain size, it is deemed not to have a trading book for the purposes of the CAD.

- a) So all its positions and exposures are banking book and subject to the risk weighting capital requirements based on Title V, Chapter 2, Section 2 of The Banking Consolidation Directive (formerly the Solvency Ratio Directive (SRD - 89/647/EEC)).

1.3 Application

- 6 This chapter applies to all UK banks. They do not apply to UK branches of banks incorporated overseas.
 - a) However, UK branches of banks incorporated elsewhere in the European Economic Area (EEA) are subject to the requirements of the CAD as implemented by their home supervisors.
- 7 The policy for determining the allocation between trading book and banking book applies to a bank on a solo (or solo-consolidated) basis and on a consolidated basis.
 - a) The general policy on consolidation is given in chapter CS.

See ch CS

2 THE MAIN ELEMENTS OF THE POLICY

2.1 Prudential aspects of the policy

- See s3 1 A bank should decide on the extent of its trading activities on both a solo (or solo-consolidated) basis and a consolidated basis, and whether those activities constitute a trading book for the purposes of the CAD.
- a) If its trading book is below a certain size, then the FSA may agree that a bank may not need to adopt CAD trading book capital treatment.
- See ch FX & CM i) However, a bank not adopting the CAD trading book capital treatment should still adopt the CAD capital treatment for foreign currency risk and commodities risk, which apply wherever the currency exposures are generated.
- See ch CS b) The general policy on consolidation is given in chapter CS.
- See s5 2 Under rule 3.4.12 in Chapter GN, a UK *bank* must provide the FSA with a statement of its policy on its trading book. It should agree the statement with the FSA. This statement must be reviewed and, where necessary, updated annually, with any significant changes approved by its board or a body delegated this responsibility by the board. The bank should obtain the FSA's written agreement to any significant changes made.
- See ch GN s3 a) This applies to all UK *banks* since the FSA's agreement to a trading book policy statement forms the basis for determining whether it is appropriate for a *bank* not to apply the CAD trading book treatment.
- i) The policy statement of a *bank* whose trading activities are judged minimal need only cover certain of the items normally required.
- See s3 3 A CAD bank (i.e. a bank to which the CAD trading book treatment applies) should ensure that all its trading book positions are marked to market on a daily basis for both capital adequacy and large exposures purposes.
- a) With the FSA's written agreement, cash items with a residual maturity of one month or less included in a trading book for hedging purposes may be exempted from the daily mark-to-market requirement.
- b) In the case of non-marketable instruments held in the trading book, the equivalent of marking-to-market on a daily basis should be achieved by including the instruments concerned at their net present value.

- 4 A CAD bank should have systems to:
- ensure that positions are assigned correctly between its banking book and its trading book; and
 - control transfers of positions from one book to the other, both at the inception of a deal and, if the intent changes, during the life of the deal/position.

See s4 5 A non-CAD bank should monitor its positions and notify the FSA immediately if it exceeds any of the CAD size thresholds.

2.2 The reporting obligations on banks

See Supervision Manual Chapter 16 6 Unless otherwise agreed in writing with the FSA, a CAD bank must complete the relevant sections of reporting form BSD3 in respect of its trading book and submit:

- quarterly on a solo (or solo-consolidated) basis; and
- semi-annually on a consolidated basis.
 - a) As with other reporting forms, reporting dates other than calendar end-quarters may be agreed in writing with the FSA if a bank's financial year end does not coincide with the calendar year end.

2.3 The FSA's practice

7 The FSA satisfies itself that each form BSD3 received is internally consistent and in accordance with the relevant bank's agreed trading book policy statement.

8 [This is intentionally blank.]

9 [This is intentionally blank.]

3 DETERMINATION OF A TRADING BOOK

3.1 General

1 This section provides a definition of a bank's *trading book* which a bank should adopt and the *financial instruments* which may be included in it. It then explains the circumstances in which, for hedging purposes, a *financial instrument* may be taken out of a bank's trading book and a *non-financial instrument* included in it.

See s4

2 In order to know whether its trading book is above the threshold size - and therefore whether the CAD trading book capital calculation should be adopted - a bank needs to know what to include within its trading book.

See ch TC and
ch LE

- a) In addition to the capital needed for position risk, trading book positions may also give rise to the need for capital to cover counterparty risk and for large exposures notably 'soft limits'.

3 The trading book is defined according to three broad criteria:

- is the instrument eligible for inclusion in the trading book? And
- if the instrument is eligible for inclusion, is it held for trading purposes (i.e. usually for short-term gain)? Or
- is the position hedging an exposure in the trading book?
 - a) The segregation of positions between a bank's banking book and its trading book using these criteria may not correspond exactly with the way in which the bank internally manages its exposures. In particular, in certain circumstances, non-financial instruments may be included in the trading book and *financial instruments* may be transferred out of the trading book into the banking book.
 - b) All positions and exposures which are not in a bank's trading book are deemed to be part of its banking book and should be subject to the risk weighting capital treatment based on the SRD (now replaced by The Banking Consolidation Directive).

See s4

4 If a bank's trading activities on both a solo (or solo-consolidated) basis and a consolidated basis are below the threshold size, it may be appropriate for a bank not to adopt the CAD trading book treatment.

See s5

- a) Where this is the case all its positions and exposures are banking book and should be subject to the risk weightings based on the SRD (now replaced by The Banking Consolidation Directive).
- b) However, the FSA will first need to agree with a bank a trading book policy statement about which activities the bank normally considers trading and constitute part of its trading book before deciding whether not adopting the CAD trading book treatment is appropriate.

3.2 The content of a trading book

3.2.1 *The definition of a trading book*

5 On the basis of the broad criteria given above, Article 2.6 of the CAD (as amended) provides a definition of a *trading book*. In accordance with this, a bank's *trading book* consists of:

- (a) its proprietary positions in *financial instruments, commodities and commodity derivatives* which are held for resale and/or which are taken on with the intention of benefiting from actual and/or expected short-term price or interest rate movements;
- (b) *matched principal broking positions in financial instruments commodities and commodity derivatives*;
 - a) *Matched principal broking* occurs when a bank or its affiliate acts as a principal in matched transactions in *financial instruments, commodities or commodity derivatives*. In acting as principal, the bank or its affiliate takes positions.
 - i) *Matched principal broking* takes place primarily where access to a market, for example, the London Financial Futures and Options Exchange or the Chicago Mercantile Exchange, is confined to members so that a deal has to be executed in a member's name even though it is for a client.
 - b) Wherever a bank or affiliate acts as principal (even in the context of activity described as 'broking' or 'customer business') positions should be allocated to the bank's trading book where the underlying intent is trading.
 - i) This applies even if the nature of the business means that the only risks deemed to be incurred by the bank or affiliate are counterparty risks (i.e. no market risk charges apply).

(c) positions in *financial instruments, commodities, commodity derivatives* or other non-financial instruments taken in order to hedge other elements of the trading book;

(d) exposures due to repurchase agreements ('repos') and securities and commodities lending which are based on securities or commodities included in the trading book as defined in (a)-(c) above referred to in paragraph 4 of Annex II of the CAD (as amended);

See ch TC s4

a) So for a repo, or a transaction with a similar economic effect, such as stock lending, to be considered part of a bank's trading book, the securities being re-purchased, lent or contributing collateral for such a transaction should be in the trading book.

(e) those exposures due to reverse repos and securities and commodities borrowing transactions described in paragraph 4 of Annex II of the CAD (as amended);

a) To qualify for inclusion in the trading book, exposures due to reverse repos or securities and commodities borrowing transactions should meet all the conditions below:

i) the exposures are marked-to market daily following the procedures laid down in Annex II of the CAD unless they are *cash items* as defined in paragraph 6 below;

See ch TC s2

ii) the collateral should be adjusted daily to take account of changes in the value of the securities or commodities involved and the bank's rule for collateralisation should be acceptable to the FSA;

iii) the agreement or transaction provides for the bank's claims to be automatically and immediately offset against its counterparty's claims if the latter defaults; and

iv) such agreements or transactions are confined to their accepted and appropriate use and artificial transactions, especially those not of a short-term nature, should be excluded.

See ch TC s3

b) Where a contractual relationship fails to meet condition (ii) or (iii) above, the contract may still be included in the trading book but should be treated as an undocumented reverse repo.

(f) exposures arising from unsettled transactions, free deliveries and over-the-counter ('OTC') derivatives referred to in paragraphs 1, 2, 3 and 5 of Annex II of the CAD (as amended); and

(g) exposures in the form of fees, commission, interest, dividends and margin on exchange-related derivatives directly related to the items included in the trading book referred to in paragraph 6 of Annex II of the CAD (as amended).

a) So the core elements of a trading book are items 4(a)-(e) above. 4(f) and 4(g) only apply where they relate to 4(a)-(e).

See s5

6 Whether particular items fall to be included or excluded from a bank's trading book should be decided in accordance with objective procedures including, where appropriate, accounting standards in the bank concerned. A bank should set out its procedures in its trading book policy statement.

a) The FSA reviews these procedures, including whether they are being consistently implemented.

See Supervision
Manual
Chapter 5

i) The FSA's usual method is to commission a report under section 166 of the Act.

3.2.2 *Financial instruments*

7 For the purpose of paragraph 4, *financial instruments* are as defined in Section B of the Annex to the ISD. They are:

(a) transferable securities (i.e. equities and debt securities, including CDs);

(b) units in *collective investment undertakings*;

a) A *collective investment undertaking* is an open-ended collective investment marketed solely with the objective of investing in transferable securities (e.g. a unit trust).

(c) money market instruments such as treasury bills, CDs and commercial paper;

a) Deposits and loans are not money market instruments and therefore fall outside the definition of *financial instruments*.

b) CDs and commercial paper, issued by a bank, may be considered as "short" positions in the trading book as long as they meet the criteria for inclusion in the trading book. The treatment of these instruments should be applied consistently. They need only attract capital cover for general market risk.

- (d) financial futures contracts (including equivalent *cash settled instruments*);
 - a) In the case of a *cash settled instrument*, settlement involves a cash payment replicating the advantage of the physical transaction plus the derivative rather than the physical delivery of the underlying asset.
 - i) Most derivatives are cash settled.
- (e) forward interest rate agreements;
- (f) interest-rate, currency and equity swaps; and
- (g) options to acquire or dispose of any of the above, including equivalent cash-settled instruments.

See chs TI, TO
and TE

For detailed lists of instruments within each of these categories that may be included in the trading book in their own right, see the chapters on equity position, option risk and interest rate risk.

3.2.3 *A financial instrument held with trading intent*

8 For the purpose of paragraph 4, a *position* in a financial instrument may be considered as held with trading intent if:

- (a) it is covered in the bank's trading book policy statement agreed with the FSA as a trading activity and as constituting part of the bank's trading book; and
- (b) it is marked-to-market daily, on a prudent and consistent basis, as part of the bank's internal risk management processes; and
 - a) If a market-determined price is not available, a bank may generate its own mark-to-market valuation, provided that details of the valuation process are included in its trading book policy statement.
 - b) The mark-to-market valuations do not have to meet the requirements for statutory accounts.
 - c) *Cash items* included in the trading book for hedging purposes do not need to be daily marked-to-market where they have a residual maturity of one month or less.
 - i) For this purpose, *cash items* include loans and deposits and the cash legs of repo (stock lending) and reverse repo (stock borrowing) transactions.

- (c) either the position takers in a bank have autonomy in entering into transactions within pre-determined limits or the position satisfies any other criteria which the bank applies to the composition of its trading book on a consistent basis.
- a) So a 'financial instrument' or commodity position held for long-term investment purposes should not be included in the trading book since it is not held with trading intent (i.e. for short-term gain).
 - b) A *position* includes interest, dividends or other benefits accruing where these are recognised and included in the quoted prices of an investment.
- 9 A 'financial instrument' held purely for liquidity purposes may be excluded from the trading book because it is not held with trading intent.
- a) However, in such circumstances, supervisors examine closely whether or not trading is actually occurring. The expectation is that large banks will in fact trade portfolios of more marketable assets and that such portfolios should therefore be classified as part of the trading book.

3.3 Hedging exposure

3.3.1 *General*

- 10 A trading book exposure may be hedged by an instrument that is in its own right not normally considered to be eligible to be part of a bank's trading book. And sometimes financial instruments that usually would be included in the trading book are used to hedge banking book positions or general market risk in the banking book and may therefore be taken out of the trading book.

Three main issues are covered below:

- hedging of a trading book exposure by a non-financial instrument;
- hedging of a banking book exposure by a financial instrument; and
- general market risk transfer.

3.3.2 *Hedging of a trading book exposure by a non-financial instrument*

See ch VA

- 11 A trading book exposure may be hedged, completely or partially, by an instrument that in its own right is not normally considered to

be eligible to be part of the trading book, i.e. instruments other than those listed in paragraph 6.

Any such trading book position, whether of financial or non-financial instruments, should be subject to the daily mark-to-market discipline, described in paragraph 7, and valued on a prudent and consistent basis. The trading book positions of *non-financial instruments* should attract both counterparty risk requirements (as may be adjusted for use in the trading book) and general market risk requirements on the mark-to-market valuation, but not specific risk requirements.

- a) A *non-financial instrument* is an instrument other than those listed in paragraph 6.
- b) A *non-financial instrument* might be used to hedge interest rate risk, for example an interbank deposit might be used to hedge a portfolio of traded CDs.

3.3.3 *Hedging of a banking book exposure by a financial instrument*

12 If a financial instrument is used to hedge an exposure in a bank's banking book, it should be taken out of the trading book for the period of the hedge and be included in the banking book.

- a) It should then be weighted using the weightings given by the SRD (now replaced by The Banking Consolidation Directive).

3.3.4 *General market risk transfer*

13 General market risk arising from the trading book may hedge banking book positions without reference to individual financial instruments. In such circumstances, there should nevertheless be underlying positions in the trading book. The positions in the banking book which are being hedged should remain in the banking book, although the general market risk exposure associated with them should be incorporated within the calculation of general market risk capital requirements for the trading book (i.e. the general market risk element on the banking book side of the hedge should be added to the trading book calculation, rather than that on the trading book side of the hedge being deducted from it). As no individual financial instruments are designated there should be no resultant specific risk requirement in the trading book and the risk weighted assets in the banking book should not be reduced. This arrangement for the transfer of risk should be subject to a policy statement agreed with the FSA.

- 14 The allocation or transfer of a financial instrument or the transfer of general market risk should be subject to appropriate documentation to ensure that it can be established through audit verification that the item is being treated correctly for the purposes of capital requirements. The documentation should cover, as appropriate:
- (a) the pricing of the transfer;
 - a) Arms-length prices should be used.
 - (b) whether the financial instrument or general market risk position is hedging a designated banking book exposure;
 - (c) whether the intent for having the position in the financial instrument remains for short-term gain; and
 - (d) the designated trading book exposure being hedged by the non-financial instrument in the trading book.

4 THE THRESHOLDS FOR THE CAD TRADING BOOK CAPITAL TREATMENT TO APPLY

4.1 General

1 This section set outs the threshold sizes below which the FSA considers it appropriate for a bank not to adopt the CAD trading book capital treatment.

4.2 The threshold tests

2 A bank need not adopt the CAD trading book capital requirements if its trading book activity is considered to be minimal.

See ch FX

a) However, a bank not adopting the CAD trading book capital treatments should still adopt the CAD capital treatment for foreign currency and commodities risks; the latter should apply irrespective of whether exposures are generated by trading book or banking book positions.

3 The tests used to determine if a bank need not adopt the CAD trading book capital treatments are based on the absolute size of a bank's trading book business on a solo (or solo-consolidated) or consolidated basis in Euros, and the size of its book relative to its total on and off-balance sheet positions. A bank should be subject to the CAD trading book capital treatment if either:

- (a) its trading book is normally Euro 15 million or 5% of its total positions; or
- (b) its trading book ever exceeds Euro 20 million or 6% of its total positions.
 - a) When calculating a bank's total positions, the following treatments should apply:
 - i) debt instruments are valued at their market prices or principal values, and equities and commodities at their market prices;
 - ii) where a derivative is based on an underlying security or commodity, it is valued according to the market value of that security or commodity. Otherwise the notional principal amount underlying the derivative should be used. Long and short positions are summed regardless of their signs;

- iii) underwriting positions (which should always be included in the trading book) should be valued according to the full market value of the underlying securities; and
 - iv) forward FX contracts should be (for these purposes only) treated as banking book business, although FX futures and options, unless hedging the banking book, should be treated as trading book items. This is because FX futures and options are 'financial instruments' whereas forward FX contracts are not. So a bank may have a large forward FX book but not necessarily a trading book for CAD purposes.
- 4 If the trading book of a banking group as a whole exceeds the thresholds on a consolidated basis, but includes banking subsidiaries which are individually below the thresholds, the FSA may agree that the banking subsidiaries need not adopt the CAD trading book capital treatment on a solo basis.
- 5 A banking group should demonstrate to the FSA that its business is not being deliberately split up into different subsidiaries in order not to adopt the CAD trading book capital treatment. However, in general, for a large banking group where treating a small subsidiary under the SRD (now replaced by The Banking Consolidation Directive) rather than the CAD would have a minimal impact on capital ratios, supervisors take a pragmatic approach. Factors supervisors consider are:
- (a) what position limits the subsidiary has;
 - (b) the subsidiary's control systems;
 - (c) the general quality of control systems for the bank as a whole;
 - (d) the extent and frequency of internal and external audit of the subsidiary; and
 - (e) whether there have been any problems in the past.
- 6 If a non-CAD bank exceeds either of the tests in 2(a) above, it should discuss the position with the FSA immediately. Unless the FSA regards the breach as being likely to exist only for a short period, the bank will be required to comply with the CAD trading book capital treatments.
- a) So a bank whose trading book falls between the thresholds in 2 (a) and (b) above other than for a short period should adopt the CAD trading book capital treatment.

5 TRADING BOOK POLICY STATEMENTS

5.1 General

- See ch GN (s3) 1 The FSA has made a rule under the Act requiring banks to have a trading book policy statement (see rule 3.4.7). A bank should discuss a trading book policy statement with the FSA. The statement may be devised in conjunction with the bank's internal auditors or another qualified independent group and, if necessary, with external experts such as skilled persons.
- See ch GN (s3) 2 A bank must have its policy statement approved by its board or, by a body formally delegated this responsibility by the board, for example, a treasury committee (see rule 3.4.7).
- 3 The policy statement must be reviewed and where necessary updated annually, with significant changes approved by its board or the body delegated this responsibility by the board. A *bank* should seek the FSA's written agreement to it making any significant changes.
- 4 The policy statement may be prepared on either a consolidated or a solo (or solo-consolidated) basis depending on the nature of the group concerned.
- a) Preparation should be on a consolidated basis when a group either manages its trading risk centrally or employs the same risk management techniques in each company.
 - b) Where policy statements are prepared on a consolidated basis, their application to each bank or investment services subsidiary should be made clear and should be approved by that subsidiary's directors.
- See s3.2 5 A bank whose trading book is below the relevant threshold size may seek the FSA's agreement that the CAD trading book capital treatment is not appropriate but still must prepare a policy statement. Since the FSA's agreement to the policy statement forms the basis for agreeing that the CAD trading book capital treatment need not be adopted.
- a) However, a bank seeking the FSA's agreement need only to address the points in 7(a) and (e) below in its policy statement.

5.2 The form and content of the policy statement

- 6 The policy statement should be in two parts. The first should set out the means by which the bank has identified its trading book

and valued its positions in that book; and the second should set out the methodologies that the bank uses to measure market risks.

7

The first part should include:

- (a) a list of activities the bank normally considers trading and constituting part of the trading book, a list of activities excluded from its trading book and the rationale for the proposed classification;
 - a) Details should include:
 - i) the instruments and commodities that a bank proposes to trade in, including the, currencies, maturities and issuers or quality of issues;
 - ii) any instruments to be excluded from its trading book;
 - iii) the counterparties with whom it is prepared to deal;
 - iv) the appropriate sections of the treasury manuals for the limits dealers must adhere to; and
 - v) the appropriate sections of the treasury manual for the method and responsibility for monitoring adherence to the limits and compliance with the trading book policy statement, including internal audit procedures.
- (b) the process used in valuing positions, including those positions for which market prices are not readily available;
 - a) A bank should value its positions on a prudent and consistent basis.
 - b) The FSA's policy on banks valuing trading book positions are set out elsewhere.
- (c) the procedures used for the transfer of risk or instruments between the banking and trading books;
 - a) Details should include:
 - i) the setting up of appropriate audit trails;
 - ii) the motive for transferring instruments or general market risk between the banking and the trading book; and
 - iii) procedures for monitoring adherence to the bank's policy.

- (d) the treatment of a banking subsidiary where that subsidiary's trading book is below the CAD threshold size, but the consolidated trading book is above it; and
 - a) This should include the procedures for monitoring of the size of that banking subsidiary's trading book in respect of 7(a) and 7(e).
 - b) For complex groups the statement should also include the motive for excluding a particular centre or subsidiary from the trading book and the procedures for ensuring that the exclusion is reviewed when circumstances change.
- (e) the procedures in place to monitor the size of the trading book for future breaches of the CAD threshold size, if the bank is currently below the exemption threshold.

The list above is not exhaustive; there is likely to be an overlap with dealing/treasury manuals, references to which are adequate, provided supervisors have already seen and are satisfied with the content of the manuals.

8 There are several areas where a CAD bank has a choice of method for calculating various of its position risk capital requirements.

- a) For example, when calculating its interest rate position risk, a bank may choose between simplified methods, standard methods or the use of pre-processing models. Back testing models may be used for calculating foreign exchange risk.
 - i) For further details, see the relevant sections of the chapters on foreign exchange risk, interest rate risk, commodities risk, option risk and models.
- b) Positions in the trading book can also attract a counterparty risk requirement, which a policy statement does not need to cover. The chapter on counterparty risk describes the calculation of this risk.

See chs FX, TI,
CM, TO, TS
and TV

See ch TC

9 The second part of the policy statement should spell out the methodology which the bank adopts for calculating the capital requirements for its trading book risk.

- a) Line by line consolidation of the trading book should only be adopted when the same methodology for calculating general market risk is used for all entities subject to the line-by-line consolidation.
 - i) So, for example, if the simplified method for general interest rate risk is adopted in an overseas subsidiary, but not in the parent

bank, the trading book of that subsidiary should only be consolidated through aggregation plus.

For banks which have model recognition and are using internal models to calculate certain of their capital requirements, the scope of the model should be outlined and reference made to the 'Capital Calculation Using Internal Models' section of the model recognition schedule. There is no need to duplicate the capital calculation information in the trading book policy statement.

10 The FSA reviews the procedures set out in a bank's policy statement, including whether they are being implemented consistently.

See Supervision
Manual,
Chapter 5

- a) The FSA's usual method is to commission a report under section 166 of the Act.

DEFINITION OF CAPITAL

1 INTRODUCTION

1.1 How this chapter is organised

See ch CO

1 This chapter is one of a number that deal with capital adequacy; the overview of capital chapter outlines how they fit together. This chapter sets out how the FSA defines capital for the purposes of assessing and calculating the capital adequacy of a bank. Banks should adopt the same definitions for the purpose of calculating the amount of their capital for supervisory purposes.

2 The rest of this section details the legal sources on which current policy is based and outlines the scope of the policy applying to UK banks. Section 2 gives a brief explanation of the nature and role of capital. Section 3 details the minimum initial and on-going capital requirements and related guidance applying to UK banks.

Section 4 provides a breakdown of the components of capital for easy reference, while Sections 5 to 9 give more detailed explanations of the components of Tiers 1, 2 and 3. Section 10 covers the deductions that should be made when calculating a bank's capital base, and Section 11 explains the policy on the use of the different tiers of capital and on the amount of capital that may or should be held. Section 12 covers issues relating to the repayment of capital. Section 13 is an appendix giving proformas for an auditor's opinion on interim profits.

1.2 Legal sources

3 The sources noted in the Legal Sources section of the Capital Adequacy Overview chapter are also relevant to this chapter.

4 The Banking Consolidation Directive (formerly The Directive on Own Funds, "Own Funds Directive", "OFD" - 89/299/EEC) establishes a standard EU definition of capital for prudential supervisory purposes. This follows closely the Basel Convergence Agreement on capital standards. The Directive has been amended by the Financial Groups Directive (2002/87/EC) and some of the resulting changes are given effect in this chapter.

5 The Capital Adequacy Directive ("CAD" - 93/6/EC) introduced Tier 3 capital for use in supporting trading book activities.

See s3

6 The Banking Consolidation Directive (formerly the Second Banking Co-ordination Directive, "2BCD" - 89/646/EEC) sets the minimum initial capital requirement and minimum ongoing capital

requirement for banks incorporated in the European Economic Area.

1.3 Application

7 This chapter applies to all UK banks.

8 The FSA applies the definition of own funds, as defined by The Banking Consolidation Directive (formerly the OFD), when assessing the capital adequacy of banks on a solo (or solo consolidated) and a consolidated basis.

See ch CS s2 &
s9

a) For an explanation of solo consolidation and consolidation see the chapter on consolidated supervision.

2 THE NATURE OF CAPITAL

2.1 The role of capital

- 1 From a supervisory perspective capital provides a buffer that enables a bank to absorb losses without the interests of the depositors being adversely affected.
- 2 For a bank the different forms of capital offer a flexible source of funding, since most elements include either a statutory or a contractual right to cancel or defer dividend (or interest) payments on share (or loan) capital. In difficult times, therefore, capital can be a comparatively cheap funding source; though to compensate for this, shareholders will expect a higher dividend when a bank is doing well.

2.2 The nature of capital

- 3 In order to perform this role, capital should have the following characteristics:
 - (a) It should be able to absorb losses before, or instead of, general creditors. Where the bank has ceased to be a going concern, the holders of capital are the last to be paid out in a liquidation.
 - (b) Good quality capital should have no fixed costs, i.e. there should be no contractual obligation to pay dividends on equity, and there should be a contractual right to defer interest payments.
 - a) The FSA does not generally allow banks to count as supervisory capital issues where the interest rate paid on subordinated debt increases when a bank becomes less creditworthy, e.g. after a credit rating downgrade.
 - (c) Capital should be fully paid up, i.e. the bank should be in possession of the funds. Guarantees and other forms of contingent liabilities should not be included in capital.
 - (d) A bank should not normally purchase and hold its own capital, or subsidise its capital holders (e.g. through soft loans or swaps).
 - a) In certain circumstances a bank may purchase its own capital, e.g. through trading activities, or through buy-back schemes sanctioned by the FSA. Such holdings should be deducted from capital, except where a trading book concession has been granted.

2.3 Types of capital

4 For supervisory purposes capital is split into three categories: Tier 1 (core and innovative), Tier 2 (upper and lower) and Tier 3. These categories represent different instruments' quality as capital, i.e. the degree to which each type of capital fulfils the characteristics stated above.

See s5

5 Tier 1 capital is a bank's highest quality capital. It is divided into Core Tier 1 and Innovative Tier 1 capital. Instruments that meet all of the characteristics set out in paragraph 1 of Section 4.2 will normally be classified as Core Tier 1. Features that weaken these characteristics in any way would usually lead to classification as Innovative Tier 1 (or Tier 2).

- (a) Examples of features that may lead to classification as Innovative, rather than Core Tier 1 include: indirect issuance, step-ups (increases in the coupon paid) and stock settlement of principal.

6 Tier 1 may be issued or internally generated capital.

- (a) Issued capital includes ordinary share capital and preference share capital.
- (b) Internally generated capital arising from accruing profit to reserves, or by capitalising dividends.

7 Tier 2 capital is split into upper and lower tiers.

- a) Tier 2 capital is split into upper and lower tiers to accommodate the restriction placed on holdings of subordinated term debt by the OFD. All dated subordinated debt should be included in Lower Tier 2 capital, while perpetual debt instruments may be eligible for inclusion in Upper Tier 2.

See s6

8 Like Tier 1, Upper Tier 2 can be split between issued and internally generated capital.

- (a) Issued Upper Tier 2 capital includes hybrid capital instruments (e.g. perpetual subordinated debt that is able to absorb losses and cumulative preference shares). Like Tier 1, issued Upper Tier 2 capital is perpetual. However it is generally cumulative - dividend or interest payments may not be cancelled, but may be deferred.
- a) Upper Tier 2 capital subordinated debt can be included in capital because it can be structured so as to bring it close to core (tier 1) capital

in terms of the protection that it offers depositors. The principal features of this are:

- i) it can absorb losses while the bank continues to trade;
- ii) it has no fixed servicing costs (i.e. there are circumstances where the borrower can defer the interest payment without bringing itself into default); and
- iii) the proceeds of the debt issue are permanently made available to the borrower.

(b) Internally generated Upper Tier 2 capital includes general/collective provisions and certain revaluation reserves.

See s7

(c) Lower Tier 2 capital is typically dated (i.e. it has a maturity date, but should have a minimum maturity of over five years) and interest should be paid as it falls due. It takes the form of term subordinated debt. Such debt is classed as a lower form of capital because its loss absorbency features only come into effect in the event of insolvency, and in general there is less funding flexibility, since a deferral of an interest payment can be an event of default.

See s9

9 Tier 3 capital is more short term than Lower Tier 2 capital (Tier 3 subordinated debt has a minimum maturity of two years). It may only be used to support market risk in the trading book, and is therefore only applicable to CAD banks.

See s11

10 In order to ensure that banks maintain a strong capital base the FSA considers that certain restrictions should be placed on the amount of capital in Tiers 2 and 3 that may be included in a bank's capital base in proportion to Tier 1 capital, and on the types of activity that each tier of capital may be used to support. These are covered below.

See s8.4

11 In order to avoid a sudden diminution in the amount of capital available to a bank, Tier 2 dated capital should be amortised on a straight-line basis in its final five years to maturity. Where a bank has an option to repay subordinated loan capital early, the FSA does not normally assume early repayment for the purposes of amortisation, unless failure to exercise the option incurs a significant increase in the interest paid on the debt (a "step-up"). Amortisation is also covered below.

3 INITIAL AND ON-GOING MINIMUM CAPITAL REQUIREMENTS

3.1 Minimum initial capital requirement

1 Article 5 of The Banking Consolidation Directive (formerly Article 4 of 2BCD) requires that the minimum initial capital requirement for authorised deposit-taking *credit institutions* (that is, a “full credit institution” within the meaning of the Glossary) on an unconsolidated basis be Euro 5mn.

a) A *credit institution* for the purposes of The Banking Consolidation Directive (formerly 2BCD) is an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account. A credit institution that is an electronic money institution within the meaning of article 1(3)(a) of the E-Money Directive that has the right to benefit from the mutual recognition arrangements under the Banking Consolidation Directive is subject to the lower minimum initial capital requirements specified in the E-Money Directive.

See GN(s3)

b) This requirement is implemented in the United Kingdom for banks by rules made by the FSA under the Act. See Rule 3.3.9

2 The minimum initial capital requirement relates only to the types of capital as defined under Article 34, paragraph 1 (1) and (2) of The Banking Consolidation Directive (formerly Article 2, paragraph 1 (1) and (2) of the OFD), and does not allow other types of capital as detailed elsewhere in The Banking Consolidation Directive (formerly the OFD) and elsewhere in this chapter.

a) Capital that can be used for the minimum initial capital requirement is:

- Fully paid-up share capital, plus share premium accounts, but excluding cumulative preferential shares;

- Disclosed reserves in the form of general and other reserves created by the appropriations of retained earnings, share premia and other surpluses.

3.2 Minimum on-going capital requirement

See GN (s3)

3 Rule 3.3.9 made by the FSA under the Act requires a bank’s capital to remain above Euro 5mn on an on-going basis. This requirement applies to banks on an unconsolidated basis.

- 4 At the time of implementation of 2BCD (now replaced by The Banking Consolidation Directive), banks with capital of less than Euro 5mn were “grandfathered” across.

Such banks are required to maintain minimum capital of the level held on 22 December 1989 (the date the Directive was adopted). The minimum on-going capital requirement for these institutions is however increased with any increase in the *capital base*, until the minimum capital threshold of Euro 5mn is reached. The rules made by the FSA under the Act replicate these requirements.

- a) *Grandfathering* is the system by which banks which are unable to meet the provisions of a new legal requirement may be permitted to continue under the provisions of the former requirement, often for a transitional period.
- b) With regard to The Banking Consolidation Directive (formerly 2BCD) banks with own funds of less than Euro 5mn are eligible for grandfathering at the date of implementation of 2BCD replaced by The Banking Consolidation Directive) on 1 January 1993, provided that their own funds do not fall below the highest level reached with effect from 22 December 1989 (Article 5 of The Banking Consolidation Directive, formerly Article 10 of 2BCD).
- c) For the definition of *capital base* see the following section.
- d) Note that any losses the grandfathered institution makes while its capital base is still under Euro 5mn should be covered by the shareholders. This is because no reduction in the capital base is permissible for grandfathered institutions until the minimum capital requirement of Euro 5mn is reached and the grandfathering arrangements cease.

See s4.1

- 5 Any change in the parent undertaking of a grandfathered institution is treated as a new authorisation, and such institutions are therefore required to have a minimum capital requirement of Euro 5mn. If two grandfathered institutions merge, in certain cases the new minimum capital requirement may be the sum of the aggregate own funds of the merged institutions on the date of the change, or Euro 5mn, whichever is the less.

See GN (s3)

- a) These requirements are implemented in the United Kingdom for banks by the rules made by the FSA under the Act.

4 ELEMENTS OF A BANK'S CAPITAL BASE

4.1 Introduction

This section summarises the constituent elements of the various tiers of capital which a bank may include in its *capital base* for supervisory purposes. Explanations and details of the constituent elements are given in the following sections.

See ch LE s4

The information below relates to the calculation of a bank's *capital base* for capital adequacy purposes. The differences in the calculation of the large exposures capital base are covered in the chapter on large exposures.

- a) A bank's *capital base* is the total of Tiers 1, 2 and 3 capital available for fulfilling capital requirements after all necessary deductions have been made, subject to the various limits that apply to the different tiers.

See ch CO

- b) The calculation of a bank's capital adequacy is covered in the overview chapter.

4.2 Tier 1 capital

1 Principles underlying Tier 1 capital

Tier 1 capital should be able to absorb losses to allow a bank to continue trading, despite suffering losses up to the value of that capital and the capital should be permanently available for that purpose. In order to meet these principles Tier 1 capital should have the following characteristics:

- (a) it should be subordinated
 - a) Subordination should be effective not only so that the holders of the capital are repaid after ordinary creditors on a winding up, but also so that there are no obligations that could result in the bank ceasing to trade normally and no obligations the breach of which could have that effect or provide grounds for the taking of winding up, administration or other insolvency proceedings against the bank.
- (b) it should be perpetual (e.g., it should be undated); and
 - a) The *perpetual* (i.e. undated) nature of Tier 1 capital ensures that it can provide an on-going source of funding to the bank until the point where the bank becomes insolvent, or ceases trading.

- (c) it should be non-cumulative (e.g., there should be no obligation to make coupon payments).
- a) *Non-cumulative* means that should the bank decide not to make a dividend payment, the dividend is not deferred, but cancelled. This ensures that the capital has no fixed costs.

See s5 2 Core Tier 1 capital consists of:

See s5.1 (a) Permanent share capital:

(i) Allotted, called up and fully paid ordinary share capital

See s10.1 a) This should be net of any own shares held.

b) "Fully paid" means that the proceeds of the issue have been received by the bank and are available to absorb losses. This is stricter than the Companies Act definition of fully paid, which only requires an undertaking to pay.

(ii) Perpetual non-cumulative preference shares, including such shares redeemable at the option of the issuer but with the FSA's prior consent, and such shares convertible into ordinary shares.

See s5.2 (b) Reserves in the form of general and other reserves created by appropriations of retained earnings, share premia and other surpluses.

See s5.3 (c) Retained profit and loss arising during the course of the current year where verified by a bank's external auditors.

a) This should be net of tax, declared dividends and other appropriations.

See s5.4 (d) Minority interests arising from consolidation in permanent shareholders' equity subject to sections 5.4(10) and (11).

a) This applies, where there are minority interests, in the calculation of the solo-consolidated and consolidated capital base only.

3 Innovative Tier 1 capital consists of instruments which incorporate certain features, the effect of which is to weaken (but only marginally) the principles of Tier 1 capital. Innovative Tier 1 capital is subject to a limit of 15% of total Tier 1 capital after Tier 1 deductions.

- See s10.1 4 In calculating a bank's capital base, a number of deductions should be made from Tier 1:
- (a) All holdings of own shares.
 - (b) Goodwill and other intangible assets.
 - (c) Current year's unpublished net losses on the banking and trading books when taken together.

a) For non-CAD banks the deduction is current year's unpublished net losses.

- (d) Fully paid up share capital issued after 1 January 1992 by the capitalisation of property revaluation reserves.

4.3 Tier 2 - supplementary capital

- See s6-8 5 Tier 2 (or supplementary) capital consists of:
- See s6.1 (a) Reserves arising from the revaluation of tangible fixed assets and fixed asset investments, including any net unrealised gains for the fair valuation of equities held in the available-for-sale financial assets category.
 - See s6.4 (b) Fully paid up share capital issued after 1 January 1992 by the capitalisation of property reserves.
 - See s6.2 (c) General/collective provisions.
 - See s6.3 (d) Minority interests in Tier 2 preferred shares.
 - See s6.5 (e) Hybrid capital instruments:
 - (i) Perpetual cumulative preferred shares, including such shares redeemable at the option of the issuer but with the prior consent of the FSA, and such shares convertible into ordinary shares.
 - See s6 & 8 (ii) Perpetual subordinated debt which meets the conditions for primary perpetual subordinated debt set out below including such debt which is convertible into equity.
 - See s7.1 (f) Subordinated term debt:
 - (i) Dated preferred shares.
 - (ii) Convertible subordinated bonds not included under hybrid capital instruments.

- See s8 & s7.2 (iii) Subordinated loan capital with a minimum original term to maturity of five years and one day, and otherwise meeting the qualifying conditions, subject to a straight line amortisation during the last five years leaving no more than 20% of the original outstanding in the final year before redemption.
- See s8.4 a) Note that all Tier 2 dated instruments should be amortised in the final five years to maturity.
- See s9.1 **4.4 Tier 3 - ancillary capital**
- 6 Tier 3 (or ancillary) capital should only be used to support trading book activities, and is therefore applicable to CAD banks only. Tier 3 capital consists of:
- See s8.2 & s9.2 (a) Short-term subordinated debt meeting the qualifying conditions and subject to the following restrictions:
- (i) The debt should have a minimum original maturity of two years.
- (ii) The terms of the debt should provide that if the bank's allowable capital falls below its individual capital ratio the FSA must be notified and the debt repayments must be suspended.
- (b) Minority interests in Tier 3 capital.
- 4.5 Deductions**
- See s10.2 7 Certain deductions should be made from the sum of Tier 1 and Tier 2 capital:
- (a) Investments in unconsolidated subsidiaries and associates.
- (b) Connected lending of a capital nature, including guarantees of a capital nature.
- (c) All holdings of capital instruments issued by credit institutions and financial institutions.
- See s10.3 a) Holdings of bank and financial institution capital instruments need not be deducted where a trading book concession has been granted.
- (d) Others to be agreed on a case by case basis.
- (e) Qualifying holdings in non-financial companies.

5 TIER 1 CAPITAL

This section provides detail on the constituent elements of Tier 1 capital other than accumulated profit and loss reserves.

5.1 Core and Innovative Tier 1 capital

1 There are three types of capital instruments eligible for Tier 1 capital: ordinary shares, preference shares, and other capital instruments. The only capital instruments that may be eligible for Core Tier 1 are those described in paragraphs (a) and (b) below. Other capital instruments may be eligible as Innovative Tier 1.

(a) Ordinary shares, i.e. allotted, called up and fully paid share capital.

See s10.1

a) This should be net of any of its own shares that a bank holds.

b) "Fully paid" means that the proceeds of the issue have been received by the bank and are available to absorb losses. . This is stricter than the Companies Act definition of fully paid, which only requires an undertaking to pay.

(b) Perpetual non-cumulative preference shares, including such shares redeemable at the option of the issuer and with the FSA's prior consent; and such shares convertible into ordinary shares.

2 Ordinary share capital is the strongest form of capital in terms of insulating depositors from credit risk. This is because:

(a) There is statutory subordination through the Companies Act and the Insolvency Act. Shareholders are the last to be paid in the event of the liquidation of a bank.

(b) Dividends are discretionary and non-cumulative - they can only be paid when the bank has sufficient distributable reserves.

(c) Ordinary share capital absorbs losses while the bank is still trading as a bank can have negative reserves, as long as these do not exceed the book value of the shares issued.

(d) It is undated.

- 3 Tier 1 capital should be predominantly in the form of ordinary shares and retained earnings.
- (a) Predominantly will normally be interpreted as 50% or more of total Tier 1 capital after Tier 1 deductions.
- 4 Preference shares and Innovative Tier 1 instruments are subordinated to ordinary creditors and rank before ordinary shareholders in claims on a bank in a liquidation, but typically carry no (or limited) voting rights.

5.1 (4) only applies to directly issued Tier 1. Indirect issued Tier 1 is dealt with in 5.4.

In order to be eligible for inclusion in Tier 1 capital, the shares and instruments should have the following characteristics:

- (a) the bank should be able to eliminate the interest or dividend on the shares;
- a) Where a tier 1 instrument includes a step-up in interest or dividends, it is regarded as 'innovative' provided no step-up occurs before the tenth anniversary of the date of issue. If the step-up occurs before the tenth anniversary of the date of issue, then the instrument is not eligible for Tier 1 capital. A one-off step-up in dividend from the tenth anniversary of issue associated with a call is permissible as long as the whole dividend can be waived. The dividend step up should be no greater than either (i) 100bp, less the swap spread between the initial index basis and the stepped up index basis or (ii) 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis. A bank wishing to include such an option should consult its line supervisor ahead of issue.
- (b) the interest or dividend should be non-cumulative, i.e. if the interest payment or dividend is missed it cannot be rolled up;
- a) It is acceptable to pay the interest or dividend in *scrip* if a cash dividend is withheld, as this is merely the conversion of one type of capital into another and provided this does not result in issuing lower quality capital. However, to qualify for Tier 1 an obligation to pay in cash should not accumulate.
- i) *Scrip dividends* are dividends that convert reserves into shares via a balance-sheet change. Shareholders are often given the option to receive a scrip as opposed to a cash dividend. The benefit of scrip dividends is that they preserve the capital base of the bank,

through the conversion of one type of capital into another, as opposed to paying out the dividend.

- b) Where coupon stock settlement features are included in Tier 1 capital, banks should ensure that they have an appropriate buffer of authorised capital to fulfil their potential obligations under such issues.
- (c) the shares and instruments should not be redeemable at the option of the holder;
- a) Call options subject to supervisory consent are permissible; these should be at the option of the issuer and are subject to a five-year minimum for the first call. Thereafter, the issuer may have more frequent calls for market access purposes.
 - b) Where the call is accompanied by any feature, the effect of which is to increase investor expectations that the call will be exercised, the instrument would normally be classified as Innovative Tier 1 capital.
 - i) An example is where there is an issuer call accompanied by a principal stock settlement feature allowing holders to elect to redeem Tier 1 instruments in exchange for ordinary shares in the event the call is not exercised.
- (d) the shares and instruments have no other provisions which require future redemption of the issue;
- (e) the shares and instruments should be perpetual, i.e. they have no maturity date;
- (f) the marketing of Tier 1 instruments should be in line with their prudential treatment. Therefore if an instrument that would otherwise qualify as Core Tier 1 is marketed as if it were an instrument that would only qualify for a lower level of capital (e.g. if marketed as dated) or on the basis that investing in it is like investing in a lower level instrument, it should be treated as an instrument falling into that lower level of capital for prudential purposes as well;
- (g) in deciding whether an instrument is eligible as Tier 1 capital or Core Tier 1 capital, its economic substance should also be taken into account. Therefore, any feature of an instrument that results in the economic substance of the instrument being inconsistent with the features of Tier 1 capital or Core Tier 1 capital will result in its being ineligible as Tier 1 capital or, as the case may be, Core Tier 1 capital. Any feature of a Tier 1

- instrument that creates or increases market expectations of or pressure for redemption makes the instrument innovative;
- (h) the shares and instruments should be available to absorb losses on a going concern basis;
- (i) to count as Core Tier 1, there should be no doubt that the instrument is available to absorb losses to allow an issuer to continue trading, despite suffering losses up to the value of that capital. The FSA considers that only directly issued ordinary shares, and directly issued non-cumulative undated preference shares meet these criteria. Any other instrument, if it is eligible Tier 1 capital, should be classified as Innovative.

An instrument may only be included in Innovative Tier 1 capital if it meets the criteria on loss absorbency in paragraph (ii);

- (ii) the bank's obligations under the capital instrument should either not constitute a liability (actual, contingent or prospective) under section 123(2) of the Insolvency Act 1986 or, if they do, the conditions in paragraph (iii) should be met;
- (iii) if the bank's obligations do constitute liabilities under paragraph (ii), the terms of the capital instrument should be such that:
- those liabilities should not be relevant for the purposes of deciding whether the bank is unable to pay its debts, whether it is likely to become unable to pay its debts or whether its liabilities exceed its assets;
 - no creditor (including but not limited to holders of the instrument) should be able to petition for the winding up or administration of the bank on the grounds that the bank is or may become unable to pay any liabilities under the capital instrument;
 - the bank should not have to take into account those liabilities for the purposes of deciding whether or not the bank is or may become insolvent for the purposes of section 214 of the Insolvency Act 1986 (wrongful trading);
- (iv) therefore, if the capital instrument does constitute a liability, this should only be the case when the bank is

perfectly able to pay that liability but chooses not to do so. As Tier 1 capital should be undated, this will generally only be relevant on a solvent winding up of the bank;

- a) A bank wishing to issue a capital instrument should obtain an opinion from Queen's Counsel, or where the opinion relates to the law of a jurisdiction outside the UK, from a lawyer in that jurisdiction of equivalent status, confirming that these criteria are met.
 - b) For the purpose of (iii) above, the holder should agree that the bank has no liability (including any contingent or prospective liability) to pay any amount to the extent to which that liability would cause the bank to become insolvent if it made the payment or to the extent that its liabilities exceed its assets or would do if the payment were made. The terms of the instrument should be such that the directors can continue to trade in the best interests of the senior creditors even if this prejudices the interests of the holders of the instrument.
- (i) where an issuer call is accompanied by principal stock settlement, the instrument is classified as Innovative Tier 1
- (i) limited principal stock settlement will be allowed in Innovative Tier 1 subject to a redemption limit of an increase of 200% in the redemption ratio (alternative Tier 1 instrument to preference shares) set at the time of issue. The redemption value of the alternative Tier 1 instrument should not exceed the issue price of the original preference share or capital instrument;
 - (ii) where principal stock settlement features are included in Innovative Tier 1 capital, banks should ensure that they hold an appropriate buffer of authorised share capital to fulfil their potential obligations under such issues.
- a) The redemption ratio is calculated as follows. The issue price of the original preference shares or capital instruments is compared with the market price (as at the date of issue of the preference share or capital instrument) of the Tier 1 instruments that will be issued on their redemption. The ratio between those two prices is calculated. Then the original issue price of the original preference shares or capital instruments is compared with the market price (as at the date of the redemption) of the Tier 1 instruments issued on their redemption. The ratio between those two prices is calculated. Those two ratios are then compared.
 - b) If the alternative Tier 1 instrument is not outstanding at the time of issue of the preference share or capital instrument, the redemption value of the alternative

Tier 1 instrument should not be greater than the issue price of the original preference share or capital instrument being redeemed.

- i) Assuming the following prices at the time of issue, and the maximum allowable increase in the redemption ratio of 200%, this is how limited principal stock settlement would apply:

Value of original preference share or capital instrument: £10

Value of the alternative Tier 1 instruments at time of issue: £5

Redemption ratio set at time of issue: 2:1

- c) If the value of the alternative Tier 1 instrument at the time of redemption was £5.00, the redemption ratio would remain at 2:1. If the value of the alternative Tier 1 instrument fell to £2.50, holders of the original preference share or capital instrument would receive the cash equivalent of the value of the original preference share or capital instrument on redemption using the maximum allowable increase in the redemption ratio of 200%. The redemption ratio would rise to 4:1.
- d) If the value of the alternative Tier 1 instrument fell below £2.50, or a decrease of greater than 50%, holders of the original preference share or capital instrument would not recoup the full value of the original preference share or capital instrument.
- e) If the value of the alternative Tier 1 instrument increased above £5.00 holders of the original preference share or capital instrument would only recoup the value of the original preference share or capital instrument. For example, if the alternative Tier 1 instrument was £6.00 at the time of redemption, holders of the original preference share or capital instrument would only receive the cash equivalent of 83% of the value of the alternative Tier 1 instrument.

See s6.5

Preference shares and other instruments which do not fulfil all these conditions should be classed as Tier 2.

5

In addition the following provisions apply where innovative instruments are included in the calculation of the Tier 1 ratio:

- (a) The issuer should be able to meet the requirement at all times for a capital ratio of 8% while excluding from Tier 1 anything other than Core Tier 1;
- (b) Only Core Tier 1 capital can count towards the €5mn minimum capital requirement.
- (c) Paragraph (a) applies at both the solo and consolidated level. Therefore, even if the capital were being raised for the solo

entity, it would not be acceptable for those requirements to be met at the solo level but not at the consolidated level; and

- (d) The sum of Innovative Tier 1 capital should not exceed 15% of total Tier 1.
 - (i) Total Tier 1 comprises Core Tier 1 plus Innovative Tier 1 less Tier 1 deductions.
- (e) For the purpose of calculating the capital available to meet the Individual Capital Ratio, a breach of the 8% ratio in (a) does not result in an exclusion of the amount of Innovative Tier 1 capital already issued, or a reduction in the amount of allowable Tier 2 capital.
 - a) The 8% capital requirement in paragraph 5.1(5)(a) above includes all the requirements in the Banking Consolidation Directive about how to calculate capital. One of those requirements is the limit on Tier 2 capital to 100% of Tier 1 capital. Given that anything other than Core Tier 1 must be excluded from Tier 1 to meet the 8%, this means that a bank should have a minimum Core Tier 1 ratio of 4%.
 - b) The FSA considers that the breach of the 4% Core Tier 1 ratio, like the breach of the Individual Capital Ratio is a breach of the obligation to have adequate capital as set out in, for example, rule 3.3.13 of Chapter GN. In that situation, a bank should promptly submit to the FSA an appropriate remedial plan, addressing the breaches.
 - c) If a bank considers a breach of its 4% ratio or its Individual Capital Ratio is likely, it should submit a remedial plan well before the breach occurs.

Any bank wishing to undertake Innovative Tier 1 issues should consult their supervisor ahead of making an issue.

5.2 Reserves

6 *Reserves* are accumulated profits retained by the bank after the payment of all dividends and tax, and other reserves created by appropriations of share premia and other surpluses.

- a) Dividends should be deducted from reserves as soon as they are declared.
- (a) For the purposes of calculating prudential capital a bank should:
- (i) deduct unrealised gains or, where applicable, add back in unrealised losses, on cash flow hedges of financial instruments measured at cost or amortised cost;

- (ii) deduct unrealised gains or, where applicable, add back in unrealised losses, on debt instruments held in the available-for-sale financial assets category;
 - (iii) deduct unrealised gains or, where applicable, add back in unrealised losses, which are not attributable to changes in a benchmark interest rate, arising when a bank, upon initial recognition, designates its financial liabilities as at fair value through profit or loss;
- (b) A *defined benefit asset* should not be considered part of reserves.
- a) a *defined benefit asset* is the excess of the value of the assets in a *defined benefit occupational pension scheme* over the present value of the scheme liabilities, to the extent that a bank, as employer, in accordance with the accounting principles applicable to it, should recognise that excess as an asset in its balance sheet;
 - b) a *defined business occupational pension scheme* is an *occupational pension scheme* which is not a *defined contribution occupational pension scheme*;
 - c) a *defined contribution occupational pension scheme* is an *occupational pension scheme* into which a bank, as employer, pays regular fixed contributions and will have no legal or constructive obligation to pay further contributions if the scheme does not have sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.
- (c) A bank may, for the purposes of calculating prudential capital, substitute for a *defined benefit liability* its *deficit reduction amount*. The election should be applied consistently in respect of any one financial year. A bank should keep a record of and be ready to explain to its supervisory contacts in the FSA the reasons for any difference between the *deficit reduction amount* and any commitment the bank has made in any public document to provide funding in respect of a *defined benefit occupational pension scheme*.
- a) a *defined benefit liability* is the shortfall of the value of the assets in a *defined benefit occupational pension scheme* below the present value of the scheme liabilities, to the extent that a bank, as employer, in accordance with the accounting principles

applicable to it, should recognise that shortfall as a liability in its balance sheet.

- b) the bank's *deficit reduction amount* is, in respect of a *defined benefit occupational pension scheme*, the sum, determined by the bank in conjunction with the *defined benefit occupational scheme's* actuaries or trustees (or both), of the additional funding (net of tax) that will be required to be paid into that scheme by the bank over the following five year period for the purpose of reducing the bank's *defined benefit liability*.

5.3 Retained profit and loss

7 Current year interim profits, net of any tax, declared dividends and other appropriations, may be included in Tier 1 capital where they have been verified by the bank's external auditors.

8 Verification by the external auditors should, in normal circumstances, include at least the following:

- (a) the auditors should satisfy themselves that the figures forming the basis of the interim profits have been properly extracted from the underlying accounting records;
- (b) the auditors should review the accounting policies used in calculating the interim profits so as to obtain comfort that they are consistent with those normally adopted by the bank in drawing up its annual financial statements and are in accordance with the principles set out in the Bank Accounts Directive;
- (c) the auditors should perform analytical procedures on the results to date, including comparisons of the actual performance to date with budget and with the results of the prior period(s);
- (d) the auditors should discuss with management the overall performance and financial position of the bank;
- (e) the auditors should obtain adequate comfort that the implications of current and prospective litigation, all known claims and commitments, changes in business activities and provisioning for bad and doubtful debts have been properly taken into account in arriving at the interim profits; and

- (f) the auditors should follow up problem areas of which they are already aware in the course of auditing the financial statements.

9 A full scope audit is not required. However, the auditors should indicate in their report where the scope of work differs materially from that set out above.

10 The auditors should submit an opinion to the bank on whether the interim profits are fairly stated. This should be submitted to the FSA. Banks that report electronically should submit a hard copy of the auditors' report to the FSA.

See s13

a) Proformas for an auditor's opinion on the verification of interim profits are included in the Appendix. Proforma 1 is for banks where the external auditor is submitting an opinion on the interim profits in the year in which the bank is publishing its first financial statements under *international accounting standards* (see definition in the main *Glossary*). Proforma 2 is for all other years.

b) A bank should report its capital adequacy position as at the reporting date. Therefore, with regard to profits to be included in Tier 1, profits may be included for which auditors' verification has been completed before the reporting date. In some cases verification of the profits may be completed after the reporting date for the capital adequacy returns, but before submission of the forms. In these cases the capital position reported should include the audited profit but a note should be attached which allows the analyst to calculate the position net of those profits.

See s9.3

c) For the treatment of Tier 3 trading profits, see below.

5.4 Indirectly issued Tier 1 capital and Minority interests

11 *Minority interests* arising from consolidation may be included in Tier 1 capital.

a) *Minority interests* arise when a company has a subsidiary which it does not wholly own. The company's consolidated accounts usually include all of the assets of the subsidiary so it would be misleading to include only that part of its share capital and reserves that is owned by the company. The capital subscribed by the minority shareholders is therefore included in the consolidated capital base.

b) Where a Tier 1 instrument is indirectly issued via a special purpose vehicle, it would be classified as Innovative Tier 1 capital.

- c) To minimise the risk that the capital may not be available to absorb losses, a bank should have an obligation to substitute the indirectly issued capital with directly issued Core Tier 1 capital upon a breach of the 8% capital ratio and the bank should take all reasonable steps to ensure it has, at all times, sufficient headroom and corporate authorisations to be able to directly issue Core Tier 1 capital if necessary.
- d) If a bank considers raising capital through a subsidiary that the bank wants to treat as Tier 1 capital, it should seek individual guidance on whether the capital qualifies as Core or Innovative Tier 1.

See s6.3 & s9.4 12 Minority interests arising from preference shares classified as Tier 2 and 3 for the issuing bank's solo requirements may be included in consolidated Tier 2 and 3 capital for the group's capital requirement.

5.5 Deductions from Tier 1 capital

See s10.1 13 Details of the items that should be deducted from Tier 1 capital are given below.

6 UPPER TIER 2 CAPITAL

This section provides detail on the constituent elements of Upper Tier 2 capital.

6.1 Reserves arising from the revaluation of tangible fixed assets and fixed asset investments

1 *Reserves arising from the revaluation of tangible fixed assets, or fixed asset investments, are reserves created when such assets are revalued to bring them in line with replacement costs. These are eligible for inclusion in Upper Tier 2 capital.*

- a) *Fixed assets* are assets such as land, buildings, plant, equipment and other assets acquired for carrying on the business of a company.
- b) Where *negative goodwill* is required to be identified under the adopted accounting framework it will be included in reserves. *Negative goodwill* arises when a company/ portfolio is purchased below the value of its assets. The difference is called negative goodwill.
- c) For the definition of *goodwill* see the section on deductions from capital.

See s10.1

6.2 General/collective provisions

2 *General/collective provisions* - funds that the company holds in reserve against losses which have not yet been individually identified - should be included in Tier 2 capital up to a maximum of 1.25% of the sum of *risk weighted assets*.

- a) For CAD banks this should be 1.25% of the sum of risk weighted assets in the banking book and notional risk weighted assets in the trading book.
- b) For a definition of *risk weighted assets* see the overview of capital adequacy chapter.
- c) *Specific/individual provisions* - funds held in reserve against individually identified losses - are not included in capital.

See ch CO

6.3 Minority interests arising upon consolidation from interests in Tier 2 capital items

3 Minority interests in Tier 2 preference shares arising from consolidation may be included in Tier 2 capital. For the definition of minority interests see the section on Tier 1 capital.

See s5.4

6.4 Fully paid up share capital issued after 1 January 1992 by the capitalisation of property revaluation reserves

4 Shares issued by the capitalisation of property revaluation reserves, if issued before 1 January 1992, may be included in Tier 1. All shares issued after that date should be included in Upper Tier 2.

- a) *Property revaluation reserves* are reserves created when property is revalued to bring it in line with replacement costs.
- b) Prior to 1992 a number of banks issued fully paid bonus shares through the capitalisation of property revaluation reserves. The inclusion of such shares in Tier 1 capital was not permitted by any other signatory of the Basel Agreement and has been prohibited in the United Kingdom since 1992.
- c) See also the section on deductions from Tier 1 capital.

See s10.1

6.5 Hybrid capital instruments

5 *Hybrid capital instruments* can be included in Upper Tier 2 where they are perpetual, and provided certain conditions are met. The amounts raised by such issues should be verified by independent auditors. Dated capital instruments are included in Lower Tier 2 capital.

- a) *Hybrid capital instruments* are instruments that combine the features of debt and equity in that they are structured like debt, but exhibit some of the loss absorption and funding flexibility features of equity.

6 Upper Tier 2 capital instruments therefore include:

- (a) Perpetual cumulative preferred shares, including:
 - (i) such shares redeemable at the option of the issuer and with the prior consent of the FSA; and
 - (ii) such shares convertible into ordinary shares. The shares should not be included within Tier 1 capital until the conversion has taken effect.

See s5.1

- a) These shares are included in Tier 2 capital because they are cumulative. Non-cumulative perpetual preference shares may be included in Tier 1.
- (b) Perpetual subordinated debt, including such debt which is convertible into shares. The converted debt should not be

included within Tier 1 capital until the conversion has taken effect.

See s6.6 & s8.2

- a) For any form of subordinated debt to qualify for inclusion in a bank's capital base, in either Upper or Lower Tier 2, a number of conditions should be met. These are given below.

6.6 Criteria for subordinated debt to be included in Upper Tier 2

See s8.2

7

In order to qualify as a hybrid capital instrument, and to therefore be eligible for inclusion in Upper Tier 2 capital, subordinated debt should satisfy the conditions listed below, as well as the general conditions for subordinated debt detailed under the section on subordinated debt below:

- (a) The debt should be perpetual, i.e. undated.
 - a) This is not a requirement under the Banking Consolidation Directive.
- (b) Repayment: No repayment should be made without the prior consent of the FSA. The FSA would not normally expect to give such consent within five years and one day from the date of draw-down, and consent is only given when the FSA is satisfied that the bank's capital is likely to remain adequate after repayment.
 - a) In the first five years of an issue consent would normally only be given where the bank makes a simultaneous issue of new capital which is neither smaller in size, nor of a lower quality than the original issue.

In some cases the FSA will consider requests for the repayment of an issue within the initial five year period, without a simultaneous re-issue, where there is a compelling business case, unless the debt has been issued on artificial terms in anticipation of repayment being allowed within the first five years.

See s12.2

- b) After five years consent to a net redemption can be given where the FSA is satisfied that the bank will remain above its individual capital ratio without resort to new capital issues for at least two years. Banks should produce a capital plan showing that they will remain above their individual capital ratio for at least two years after repayment. For details of what should be included in a capital plan see the section on the repayment of capital.

See s8.2

- c) See also what is said on repayment in the section on general conditions for subordinated debt.

- (c) Deferral of interest: The debt agreement should provide for the institution to have the option to defer any interest payment on the debt.
- a) It is acceptable for deferred interest to bear interest, provided that it is not at a penal rate, i.e. provided that it is not materially different from the market rate.
- (d) The debt agreement should provide for the debt and unpaid interest to be able to absorb losses, whilst leaving a bank able to continue trading. For that purpose, a debt agreement should meet the criteria on loss absorbency set out in 5.1(4)(h).
- (e) Amortisation: Debt that would otherwise qualify for inclusion in Upper Tier 2 capital but which contains a *step-up* (in excess of the limits on step-ups given in section 8.3) should be treated as a dated Lower Tier 2 instrument. It should be amortised on a straight-line basis over the five years to the date of the call option.

See s8.3

- a) For the definition of a *step-up* see section on general conditions for subordinated debt.

See s8.4

- b) The policy on amortisation is covered in the section on general conditions for subordinated debt.

6.7 Convertible loanstock

8 *Convertible loanstock* is loanstock which may be converted into another form of capital. Conversions may be mandatory, or at the investors' or issuers' option. In addition to the criteria listed in 6.6, a convertible loanstock can be included in Upper Tier 2 providing it also meets the following criteria:

- (a) the perpetual nature of the original capital issue should be preserved;
- (b) any conversion should substitute a higher or equal form of capital (e.g. Tier 1 equity or irredeemable preference shares);
- (c) the converted loanstock should not be included within the higher form of capital until the conversion has taken effect; and
- (d) any perpetuals exchanged for shares should be cancelled, and not held by the issuing bank for possible future re-issue.

7 LOWER TIER 2 CAPITAL

This section provides detail on the constituent elements of Lower Tier 2 capital.

7.1 Subordinated term debt

1 Subordinated debt that is eligible for inclusion in Lower Tier 2 capital includes:

- (a) dated cumulative preference shares;
- (b) perpetual subordinated debt which does not qualify as a hybrid capital instrument (e.g. an undated bond with no loss absorbency features and no interest deferral provision); and
- (c) subordinated term debt with a minimum original term to maturity of five years and one day.
 - a) Where a bank issues subordinated debt denominated in a foreign currency, this should be revalued periodically in terms of the base currency at prevailing exchange rates. Where a bank swaps the proceeds from such issues into another currency through a conventional swap, this should not be taken into account in measuring Lower Tier 2 capital, as standard swap obligations count as senior, rather than subordinated claims, i.e. a swap counterparty could demand payment of any swap related obligations and have these enforced pari passu in a winding up with claims of depositors and other senior creditors.

To overcome this it may be possible to utilise a subordinated swap as a hedge. Any bank wishing to hedge its position in this or some other way should contact its line supervisor.

7.2 Criteria which should be met for subordinated debt to be included in Lower Tier 2

See s8.2

2 In order to be eligible for inclusion in Lower Tier 2 capital subordinated debt should fulfil the following conditions, as well as satisfying the conditions listed in the section on subordinated debt below:

- (a) Minimum maturity: The debt should have a minimum maturity of five years and one day from the date of draw-down. Where the debt agreement provides for the loan to be drawn down in a series of tranches, the minimum original maturity of each tranche should be five years and one day from the date of its draw-down.

- (i) Where a bank wishes all tranches of the same issue to have identical terms it should give an undertaking that no part of the issue will be repaid until five years and one day from the date of the issue of a new tranche.
- (b) Repayment: No early repayment of the debt should be made without the FSA's prior consent. Where a debt agreement provides for the lender to have the right to demand repayment (lender/borrower has a put option back to the bank), the FSA will regard the first possible repayment date as the maturity date of the loan. Consequently this repayment date should be five years and one day from the date of draw-down for the loan to be eligible for inclusion in Lower Tier 2 capital.

See s8.2 & s12.2

- a) See also what is said on repayment in the section on general conditions for subordinated debt, and the conditions given in the section on repayment of capital.

7.3 Convertible loanstock

- 3 Lower Tier 2 capital may be converted into another form of capital providing that the conversion substitutes a higher or equal form of capital. The shares should not be included within the higher form of capital until the conversion has taken effect.

Conversions may be mandatory, or at the investors' or issuers' option.

8 GENERAL CONDITIONS FOR SUBORDINATED DEBT

8.1 Introduction

See s6.6, 7.2 & 9

In order to be eligible for inclusion in Tier 2 capital, all forms of subordinated debt should satisfy various conditions. These are detailed below. Further conditions apply to subordinated debt eligible for inclusion in Upper and Lower Tier 2 and in Tier 3 capital. These are given in the sections on those types of capital.

8.2 General conditions

1 The following general conditions should be met if subordinated debt is to be included in Tier 2 capital:

- (a) The subordinated debt should be fully paid up, i.e. the bank should be in possession of the funds.
- (b) Subordination: The terms of any agreement governing the raising of subordinated loan capital should ensure that the claims of the lender are fully subordinated to those of the unsubordinated creditors.

The FSA is more concerned that the subordination provisions should be effective than that they should follow a particular form. Subordination provisions should ensure the following:

- (i) The claims of the subordinated creditors rank behind those of all unsubordinated creditors.
 - a) In the event of the liquidation of the bank, subordinated creditors should not be able to receive and retain any amounts until all unsubordinated creditors have been paid, or provided for, in full.
- (ii) Waiver of set-off: To the fullest extent possible creditors should waive their right to set off any amounts they owe the bank against subordinated amounts owed to them by the bank.
 - a) This is to ensure that all the bank's assets are available to depositors ahead of subordinated creditors. The waiver should apply both prior to and during a liquidation.
 - b) It is legally impossible to contract out of the statutory right of set-off in Rule 4.90 of the Insolvency Rules 1986 which applies during a liquidation. A possible way around this problem is for subordinated creditors to commit to return any amounts they receive to the liquidator

of the bank on trust for unsubordinated creditors. This commitment would normally be included in the terms of the debt agreement.

(iii) Default: The only events of default should be:

- non-payment of any amount due and payable under the debt agreement (or guarantee);
 - a) In this instance “amount due and payable” refers to principal and interest only.
- the winding-up of the institution (or borrower where this is not the same).

(iv) Remedies: The only remedies available to the subordinated creditor in the event of default in respect of the subordinated debt should normally be limited to:

- petitioning for the winding up of the institution (and the borrower where this is not the same, i.e. in circumstances where the borrower is a subsidiary of the institution or some other related company but the institution is acting as guarantor of the debt);
- proving for its debt and claiming in the liquidation of the institution (and the borrower where this is not the same).
 - a) The FSA does not consider that there should be the right to sue for unpaid amounts because this might enable subordinated creditors to obtain full repayment through the courts shortly before the bank goes into liquidation, thus reducing the cash available to depositors.
 - b) However, the FSA recognises that in some jurisdictions (e.g. in the United States when an issue is SEC registered and subject to the provisions of the Trust Indenture Act) it may be legally impossible to limit the remedies available to lenders to those stated above. In such jurisdictions, the lender may have the right to sue for unpaid principal which is due and payable under the debt agreement, provided the institution has an option to defer repayment for at least six months after the contractual repayment date. The institution should also have the option to defer interest payments until a dividend is paid.
 - c) An event of default should not accelerate the debt in the sense of weakening the subordination provisions or permitting repayment outside a winding-up.
- the debt agreement should expressly exclude all other remedies.

A bank should always provide the FSA with written confirmation that it has received a written legal opinion from its legal adviser stating that these subordination requirements have been met.

- (c) English Law: The debt agreement should normally be subject to English Law. Other law (including Scottish law) is acceptable, but only where it is necessary for the success of the issue (e.g. where an overseas operating subsidiary issues capital in its own market).
- a) In cases where the debt is issued under overseas law, the FSA prefers the subordination provisions at least to be subject to English law. Where this is impossible, the FSA should be satisfied that an equivalent degree of subordination can be achieved under the overseas law as in English law.
 - b) In cases where the debt is issued under the provisions of foreign law the issuing bank should obtain an opinion confirming that an equivalent degree of subordination can be achieved as under English Law. This should be obtained from lawyers with a demonstrable track record, and a high level of expertise in this area of law, in the country concerned.
- (d) Trigger clauses: The debt agreement should not contain any clause which might require early repayment of the debt (e.g. *cross default clauses*, *negative pledges* and *restrictive covenants*), or which might make the debt more expensive (e.g. a clause which leads to an increase in the interest paid on the debt under a given circumstance). This should not however prejudice any right to petition for the winding-up of the borrower, for example, in the event of non-payment of interest on the debt.
- a) A *cross default clause* is a clause which says that the loan goes into default if any of the borrower's other loans go into default. It is intended to prevent one creditor getting an advantage over other creditors, e.g. obtaining full repayment through the courts.
 - b) A *negative pledge* is a clause which puts the loan into default if the borrower gives any further charge over its assets.
 - c) A *restrictive covenant* is a term of contract that directly, or indirectly, could lead to early repayment of the debt.
 - d) Some covenants, e.g. relating to the provision of management information or ownership restrictions, have been allowed where line

management is content. In the past, where covenants have been allowed, the FSA has asked either for monetary redress to be ruled out, or for any payments to be covered by the subordination and limitation of remedies clauses (i.e. if damages are unpaid, the only remedy is to petition for a winding up).

(e) Repayment: No early repayments should be made without the FSA's prior written agreement. This includes purchases of capital notes by the bank or its subsidiaries for cancellation. The FSA will only agree where it is satisfied that the bank's capital is adequate after repayment, and that it is likely to remain so for at least two years.

a) The FSA considers it essential that note-holders should be made aware of the restriction on early repayment, either through the loan agreement, or in the offer documents, or through other information sources commonly used in the markets.

See s12.2

b) Prior to agreeing to early repayment the bank should provide the FSA with a capital plan showing that its capital will remain adequate (above its individual capital ratio) after repayment, and that it is likely to remain so for at least two years. For details of capital plans see section on repayment of capital.

See s6.6, s7.2
and s12.2

c) See also the additional policy on Upper and Lower Tier 2 in the section on repayment of capital.

8.3 Step-ups

2 Issues of subordinated debt can contain options for the bank to repay the debt (in the case of perpetual debt), or prepay the debt prior to its maturity date (in the case of term debt). Failure to exercise the option sometimes leads to an increase in the interest rate paid on the debt. This is called a *step-up*.

3 There are two methods of treating debt which includes a step-up, depending on the size of the step-up involved, which a bank should adopt.

(a) Where the sum of all possible step-ups is no more than 50 basis points in the first ten years of the issue and no more than 100 basis points over the whole life of the issue, the debt may be treated as at its original maturity.

(b) Issues with step-ups of more than 50 basis points in the first ten years of an issue, or more than 100 basis points over the life of an issue should be treated as term debt which matures at the date the step-up is triggered (i.e. at the date of the call option).

- 4 The limits on step-ups are cumulative and apply to the all-in cost of the debt to the bank.
- a) The FSA considers that the inclusion of a step-up in a debt agreement signals the intention to repay the debt, as the inclusion of a large step-up will make the repayment of the debt preferable to paying a penal interest rate.
 - b) The FSA objects to high step-ups, as they can make a bank's capital expensive at a time when the reason that the issue has not been called is that alternative sources of finance are not readily available.
 - c) Where a step-up arises through a change from paying a coupon on a debt instrument to paying a dividend on a share issued in settlement of the coupon, then any cost to the bank arising from the tax treatment of the dividend may be excluded.
- 5 Subordinated debt issues with step-ups in the first five years should not be included in the capital base.
- 6 Banks should discuss proposed step-ups with the FSA in advance to establish whether they are acceptable in this context.
- 7 On occasion a floating-rate debt issue may contain a provision that the benchmark interest rate changes from one standard to another (e.g. from a Treasury bill rate to a LIBOR rate). The change in benchmark typically occurs following the failure to exercise a call. The FSA will wish to consider issues where the step-up involves changes in the reference rate to see whether this together with any margin change implies a step-up in excess of its rules.
- 8 The FSA will also wish to consider issues containing embedded options, e.g. issues containing options for the interest rate after the step-up to be at a margin over the higher of two (or more) reference rates, or for the interest rate in the previous period to act as a floor. The inclusion of such options may affect the funding costs of the borrower and imply a step-up.

8.4 Amortisation

- 9 Tier 2 term subordinated loan capital in its final four years to maturity should not count in full as part of the bank's capital, but should be *amortised* on a straight line basis by 20% per annum.

- a) *Amortisation* is the system whereby a payment is spread over a period in the bank's accounts even though it is actually made on one date. This is to avoid a sudden deduction in the capital base.
- b) Tier 3 term subordinated debt does not need to be amortised.

10 The debt should be included in the capital base according to the following schedule:

Years to maturity	Amortised amount
more than 4	100% of nominal
less than and including 4 but more than 3	80% of nominal
less than and including 3 but more than 2	60% of nominal
less than and including 2 but more than 1	40% of nominal
less than and including 1	20% of nominal

11 In the case of loans which are repayable in separate tranches, each tranche should be amortised individually, as if it were a separate loan. However, where the bank has only the option (not the obligation) to repay in separate tranches, the tranches need not be amortised individually provided its limits on step-ups are not exceeded.

See s8.3

12 Where a bank has an option to repay early the FSA does not normally assume early repayment for amortisation purposes. However, where the decision not to exercise the option leads to a "step-up" in the interest rate paid on the loan (of more than 50 basis points in the first ten years of the issue, or more than 100 basis points over the life of the issue), the loan should be amortised over the five years preceding the exercise date of the option.

See s6.6

- a) Perpetual debt, containing a call option to repay at a particular date with a step-up in place where the option is not exercised, should therefore be amortised over the five years preceding the date of the option.

8.5 Issuing debt

8.5.1 *Procedures for issuing subordinated loan capital*

See s8.2

13 An issuing bank should confirm to the FSA that it has received a written legal opinion stating that the FSA's subordination policy has been followed.

- a) The legal opinion should confirm that all of the subordination conditions listed under section 8.2 paragraph (b), i.e. the conditions on subordination, waiver of set-off, default, and remedies, have been met.

- See s8.2 14 Where the debt is issued under the provisions of law other than English law the issuing bank should obtain a written legal opinion from lawyers with relevant experience in the country concerned, confirming that an equivalent degree of subordination can be achieved as under English law.
- See s8.2 15 The issuing bank should give written confirmation that no early repayment of the debt will be made without the FSA's prior written consent, and undertaking to seek the FSA's prior consent to any material variation in the terms and conditions of the issue.
- See s8.2 16 The issuing bank should make lenders fully aware of the restrictions on early repayment either through the debt agreement, or through other sources of market information.
- See s6.6 17 For Upper Tier 2 subordinated debt the debt agreement should contain an explicit warning to lenders of the condition for the automatic or deemed conversion of the debt into shares in the event of the liquidation of the bank, or of any provisions for the debt to be treated as if it had been converted into shares immediately preceding the winding-up of a bank, i.e. a deemed conversion.
- See s9.2 18 The debt agreement for issues of Tier 3 subordinated debt should contain a warning to investors that the FSA may require payments of principal or interest to be suspended if the bank's total eligible capital falls below its individual capital ratio. A bank using subordinated debt under an agreement entered into before 1 February 2003 should consider whether the removal of the concept of the target ratio that took effect on that date prejudices the operation of that agreement in such a way that the debt no longer satisfies the conditions in this chapter. However, the FSA expects that most such documents would have been drafted sufficiently widely to accommodate that change.
- a) The individual capital ratio means the individual capital ratio as calculated on the Form BSD3, and does not refer only to the trading book individual capital ratio.

8.5.2 *Loanstock issues by a bank holding company or a special purpose vehicle*

- 19 Where a holding company or a special-purpose vehicle raises capital for a bank, the issue should be subordinated to other creditors of the holding company.
- 20 If the issue is made through an issuing vehicle subsidiary, the holding company guarantee for the issue should be subordinated to the creditors of the holding company. This should apply even if the holding company has no senior creditors, since subordination will protect any future creditors.
- a) In general the FSA prefers issues through subsidiaries or holding companies to be fully passed on to the bank via a back-to-back loan on the same terms.
 - b) See also the section on issues of preference shares by vehicle subsidiaries.

See s5.1

8.5.3 *Subordinated debt issued at a large premium or discount to its redemption value.*

- 21 Banks may try to circumvent the policy on the early repayment of Tier 2 debt by disguising repayments as interest, and paying interest at rates significantly higher than market rates.

In such cases it is necessary to look at the total amount the bank would expect to pay per period for interest servicing costs for a conventional bond given the sum of capital raised (including the premium) and to treat any amount paid in excess of this amount as a capital repayment.

- 22 The converse case is where a bank issues debt at a discount and attaches a lower coupon or no coupon. In such cases the bank may be allowed to treat the difference between the total value of coupons paid, and that which would be payable on a conventional bond as a series of mini capital issues.

9 TIER 3 CAPITAL

This section provides detail on the constituent elements of Tier 3 capital.

9.1 Use of Tier 3 capital

1 Tier 3 capital was introduced with the implementation of the CAD, which allows a lower tier of capital to be used to support trading book activities. Specifically, Tier 3 capital may only be used to support market risk (including foreign exchange risk) arising from trading book activities.

- a) A bank which does not have a trading book for CAD purposes should not include Tier 3 capital in its capital base.
- b) Tier 3 capital should not be used for capital requirements arising out of counterparty risk and settlement risk, even where these are a result of trading book activities.
- c) Banks may use Tier 3 capital in other cases at a consolidated level where the aggregation plus method of consolidation is applied. The Bank should seek the FSA's agreement to this. This is to accommodate the CAD regimes of other supervisors. This would normally happen in the case of the consolidation of a bank within a large group of securities firms. This is because securities firms are not restricted from using Tier 3 capital against counterparty and settlement risk arising out of trading activities.

9.2 Short-term subordinated debt

See s8.2

2 Term subordinated debt may be eligible for inclusion in Tier 3 capital provided it meets the conditions for subordinated debt listed in the previous section. In addition the following conditions should be met:

- (a) The debt should have a minimum initial maturity of two years.
- (b) The terms of the debt should provide a *lock-in clause* that if the bank's total eligible capital falls below its individual capital ratio then the FSA should be notified and the FSA may require that interest and principal payments be deferred on Tier 3 debt until the bank's capital position returns above its individual capital ratio. A firm using Tier 3 debt under an agreement entered into before 1 February 2003 should consider whether the removal of the concept of the target

ratio that took effect on that date, prejudices the operation of that agreement in such a way that the debt no longer satisfies the conditions in this chapter. However, the FSA expects that most such documents would have been drafted sufficiently widely to accommodate that change.

a) The individual capital ratio means the bank's individual capital ratio as calculated on the Form BSD3, and does not refer only to the trading book capital requirement.

(c) The FSA would not normally expect to give consent to any repayment within two years from the date of issuance or drawdown. Repayment is only considered acceptable where the FSA is satisfied that the bank's capital will be adequate after repayment. A bank should in any case inform the FSA of any scheduled Tier 3 repayments once its own funds have fallen below 120% of overall requirements.

3 The contribution that Tier 3 subordinated debt can make to the capital base does not have to be amortised over its life.

See s8.4

a) For the definition of amortisation see the section on general conditions for subordinated debt.

4 Subordinated debt which includes a step-up in the first five years should not be included in Tier 3 capital.

See s8.3

a) The detail on step-ups is given in the section on general conditions for subordinated debt.

9.3 Daily net trading book profits

5 Daily net trading book profits should not be included in Tier 3 capital.

a) This option was removed with the implementation of CAD2 on 30 September 1998.

9.4 Minority interests in Tier 3 capital

6 Minority interests arising from consolidation in Tier 3 capital instruments may be included in Tier 3 capital.

See s5.4

a) For the definition of minority interests see the section on Tier 1 capital.

10 DEDUCTIONS FROM CAPITAL

This section details the deductions that should be made from capital at various stages of the calculation of the capital base.

10.1 Deductions from Tier 1 capital

1 The following items should be deducted from Tier 1 capital:

See s10.3

(a) At a solo level, all holdings of a bank's own Tier 1 paper should be deducted. At a consolidated level, all holdings of own consolidated Tier 1 should be deducted from consolidated Tier 1 capital; however, Tier 1 instruments held at a consolidated level as a result of designated equity index arbitrage trades may be exempted but the FSA's written agreement to this should be obtained;

(b) *Goodwill, adjustments for uncertain valuation* and other intangible assets;

a) *Goodwill* arises when a company (A) buys another company (B) for a price exceeding the fair value of B's assets. A is allowed to show the difference in its published accounts as an asset called "goodwill". Goodwill may also cover the purchase of other assets or portfolios at above fair value and adjustments for an uncertain valuation of B. The FSA may, however, exceptionally agree to the non-deduction of intangible items where there is an active, liquid market in which these can be traded.

See s6.1

b) For the definition of *negative goodwill* see above.

c) *Intangible assets* are assets such as goodwill, brand names or patents.

(c) A bank's current year's unpublished losses: interim unpublished cumulative net losses should be deducted from Tier 1 capital;

a) For a CAD bank, interim cumulative net losses on the banking and trading books, when taken together, should be deducted.

(d) Fully paid up share capital issued after 1 January 1992 arising from the capitalisation of *property revaluation reserves*.

See s 6.4

a) *Property revaluation reserves* are eligible for inclusion in upper Tier 2 capital.

i) For the definition of *property revaluation reserves* see above.

ii) Shares issued in this manner prior to January 1992 do not need to be deducted from Tier 1 capital.

(e) Net unrealised losses on equities held in the available-for-sale financial assets category.

10.2 Deductions from the total of Tier 1 capital and Tier 2 capital

2 Certain deductions should be made from the total of Tier 1 (after Tier 1 deductions) and Tier 2 capital:

- (a) Investments in subsidiaries and associates which fall outside the scope of a bank's capital adequacy return (including all *material insurance holdings*);
- a) For example, when calculating a solo-consolidated capital base any investments in subsidiaries or associates that are not included in the solo-consolidation scope should be deducted. For a consolidated return, the deduction should be of all investments in subsidiaries and associates outside the consolidated scope.
- b) Where a bank is at the top of the group and is acquiring a new subsidiary, which will sit outside of the scope of the capital adequacy return, the "goodwill" element or adjustment for uncertain valuation should be deducted from tier 1 capital. The remaining investment should be deducted from the total of tier 1 and 2 capital
- c) The rationale for this deduction is that the capital invested in the subsidiary is being used to support the business of that subsidiary and is not available to support the business of the parent bank.
- d) The amount of any material insurance holding should (subject to (i) below) be deducted from the total of Tier 1 and Tier 2 capital. A material insurance holding means the higher of:
- (1) the book value of an *investment* held in an insurance undertaking, reinsurance undertaking, or insurance holding company (*investment* for this purpose is either a participation, or the investment in a subsidiary undertaking); or
- (2) the bank's proportionate share of that undertaking's local or notional regulatory capital requirement.

Where the undertaking is a subsidiary and it has a solvency deficit, the subsidiary's local or notional regulatory requirement should be deducted in full. A description of how a notional capital requirement is to be calculated is set out in paragraphs 6.7 and 6.8 in Part 6 of PRU 8 Annex 1. A notional requirement should be calculated in all cases where the undertaking is not regulated to EEA or equivalent standards: this is also explained in paragraphs 6.7 and 6.8 in Part 6 of PRU 8 Annex 1.

- i) Where an insurance undertaking is accounted for using the *embedded value* method, this treatment should be modified as follows (unless the

regulatory capital requirement is the higher figure):

- On acquisition, any “goodwill” element, i.e. the difference between the acquisition value according to the *embedded value* method and the actual investment, should be deducted from Tier 1 capital.

- The *embedded value* should be deducted from the total of Tier 1 & 2 capital.

- Post-acquisition, where the embedded value of the undertaking increases, the increase should be added to reserves, while the new embedded value is deducted from total capital. This means that the net impact on the level of capital is zero, although Tier 2 headroom will increase with any increase in Tier 1 reserves.

ii) *Embedded value* is the value of the company taking into account the present value of the expected future inflows from existing life assurance business.

See ch CS s2 &
s9

e) For details of consolidation and solo consolidation, see the chapter on consolidated supervision.

(b) Connected lending of a capital nature;

a) *Connected lending of a capital nature* is, for example, lending to a group company for activities which that company would find hard to finance from another source, and is typically on a long term basis. Unless there is a genuine ability for the funds to be repaid within a short time it is generally considered that the loan is of a capital nature.

(c) All holdings of capital instruments issued by other *credit institutions* and *financial institutions* unless these are covered by a *trading book concession*;

a) This deduction applies to:

- All long, physical positions in instruments which are included in the capital of the issuing *credit or financial institution* (including such instruments sold under sale and repurchase agreements, instruments carrying third party guarantees (including central government guarantees), depository receipts, and net commitments to underwrite issues of such instruments (from working day zero));
- In the case of net commitments to underwrite (see indent above), the scaling factors set out in the chapter on underwriting may be applied before deduction;
- All indirect holdings of *credit or financial institutions’* capital taken via instruments issued by their holding companies on behalf of such

See ch TU s3

institutions. Also indirect holdings taken via instruments issued by vehicles whose business is exclusively or mainly to hold or repackage *credit* and/or *financial institutions'* capital instruments;

- Investments in investment trusts, unit trusts, mutual funds or other investment vehicles established exclusively or mainly to hold *credit* or *financial institutions'* capital instruments;
- Guarantees of other *credit* and *financial institutions'* capital instruments given by a bank;
- Guarantees given by the bank which are included in the supervisory capital of another *credit* or *financial institution* (i.e. where a regulatory body allows an institution to gear up on such guarantees); and
- Any other holdings of instruments of a capital nature relating to *credit* or *financial institutions*.

See s3.1

- b) The definition of *credit institution* is given in rule 3.5.IR.
- c) The definition of a *financial institution* is given in the glossary.
- i) The FSA assumes that parent companies which are primarily engaged in commercial activities but which have a financial subsidiary do not fall within the definition of a financial institution.

See ch EU

- d) Long and short positions in any of the above should only be netted if they are in identical instruments (i.e. fungible/generally deliverable against each other).
- e) Banks need not deduct:
- i) short positions in capital instruments (long and short spot positions should not be netted for the purposes of this section unless they are in identical instruments (i.e. fungible/generally deliverable against each other)); and
- ii) exposures to capital instruments taken through forward purchases, futures, options or other derivative instruments.
- f) The FSA may agree that a bank need not deduct holdings of credit and financial institutions' capital instruments when they are held temporarily for the purposes of a financial assistance operation on behalf of the issuing credit or financial institution.
- g) Where vehicle companies controlled by banks have entered into arrangements to purchase the capital instruments of other banks but have managed to insulate themselves fully from issuer risk, they may consult with their supervisor as to whether it is reasonable not to make the deductions outlined in this section.

- (d) Banks that have a captive mortgage indemnity insurance company should have a methodology, which includes professional actuarial advice, for ensuring that the captive is adequately capitalised.
- a) A captive mortgage indemnity insurance company is a wholly owned subsidiary of a bank set up to provide mortgage indemnity insurance on the parent's mortgage lending. This means that the risks associated with a high loan to value lending stay within the group, rather than being transferred to an external insurer.
- (e) Holdings of capital issued by own bank or own group (and eligible as capital at a consolidated level) not deducted from Tier 1 capital. Certain forms of own group paper held at a solo level may, however, be eligible for an own group *trading book concession*;
- (f) Certain positions in respect of *qualifying holdings* defined under Article 51 of The Banking Consolidation Directive (formerly Article 12 of 2BCD); and
- (g) Others to be determined on a case-by-case basis (e.g. a bank's provision of the credit enhancement element of an asset securitisation).
- a) Note that the deduction of the above capital instruments does not preclude the recognition of any hedging benefits gained against other market exposure, i.e. such capital instruments can be used to reduce risk elsewhere, but should nevertheless be deducted from capital.

See s10.4

10.3 Exemptions from the deduction policy

The FSA considers that there are two cases where the deduction of holdings of bank and financial institution capital instruments need not be made:

- trading book concessions; and
- deductions of a bank's holdings of its own paper from its surplus capital.

10.3.1 *Trading book "concessions"*

- 3 Instruments which are in the trading book need not be deducted if they are covered by a specific concession agreed with the FSA in advance, although reciprocal cross-holdings of credit and financial institutions' capital instruments should always be deducted.
- 4 Previously, some banks have been allowed concessions from making deductions in respect of holdings of other credit or financial institutions' capital instruments on grounds that they are active primary or secondary

market-makers in these instruments. These concessions now apply with respect to general trading book activity.

- 5 Before agreeing a concession the FSA needs to be satisfied that:
- (a) The bank has adequate systems and controls surrounding the trading of credit and financial institutions' capital instruments to ensure that it has the ability to stay within the limits of the FSA's concession (or deduct when necessary); and
 - (b) The holdings qualify for inclusion in the trading book;
 - a) The bank's trading book policy statement should be amended where necessary to outline the scope of the concession.
 - b) Holdings which are not deducted should be included in the trading book risk calculations in the normal way. Trading book positions which are deducted may nevertheless be included in the bank's trading book general market risk calculation, where there are hedging benefits from doing so (i.e. where to do so would result in a reduced general market risk charge.)
- 6 A concession for holding capital instruments is specific to each bank and is agreed by the relevant line supervisor. It may be reviewed periodically by the FSA.
- a) The FSA considers a bank's existing and prospective level of trading business when deciding the extent of any concession. The amount by which holdings exceed this level should be deducted.
- 7 There is a maximum limit on the size of the concession which may be agreed: a bank should always deduct the excess of all holdings which in aggregate exceeds 10% of the total of its own eligible Tier 1 and Tier 2 capital (calculated before deductions of holdings of capital instruments in credit and financial institutions). To anchor the calculations, the eligible capital base for these purposes should generally be based on the capital position at the end of the last reporting period. A bank should also deduct the excess of any direct or indirect holdings which exceed an amount equal to 10% of the paid up share capital of the credit or financial institution in which the holding is made.
- 8 The limits on the trading book should apply on a solo and a consolidated basis; all holdings taken by subsidiaries within the concession of the consolidated group should therefore either fall within a concession or be deducted. Solo and group concessions need not be set at the same percentage of capital base.
- 9 The FSA, however, distinguishes between subsidiaries' holdings which are consolidated using the aggregation-plus method and those which are consolidated on a line-by-line basis. When agreeing to a consolidated

concession and when calculating consolidated holdings for the purposes of determining whether a deduction should be made, the FSA may disregard subsidiaries' holdings consolidated using the aggregation-plus method.

- a) However, when holdings are disregarded for the purposes of these calculations, any capital located in those subsidiaries should be excluded from the measure of consolidated group capital used to calculate whether deductions are needed.

10 Wherever own group paper (which has not already been deducted from Tier 1) is held within a consolidated group its book value should be deducted in full for the purposes of calculating the consolidated group capital ratio, irrespective of the existence of any trading book concessions.

- a) This also applies to holdings of own group paper by subsidiaries which are consolidated using the aggregation-plus method.

11 Where a bank has a solo trading book concession, holdings of capital instruments issued by parent or sister credit or financial institutions may be included within the scope of its concession.

- a) However, a separate sub limit of the concession is normally applied to such holdings (own group paper eligible for a concession).

12 A bank's holdings of its own capital instruments are not eligible for inclusion in a trading book concession and should be deducted in full from its solo capital. Similarly, holdings of capital instruments are not eligible for inclusion in a solo trading book concession when they are issued by a bank's subsidiary or companies in which it has a participating interest (as defined by the Companies Act 1985).

13 Holdings of paper issued by entities in the consolidated group held by a bank's subsidiaries consolidated using the aggregation-plus method are, at a solo level, subject to the local or host supervisor's rules.

14 Where paper issued by entities within the consolidated group is held within a consolidated group solely as a result of equity index arbitrage trading, it may be treated in the same way as holdings in a credit or financial institution which is not included in the bank's consolidated group (i.e. it may fall within the scope of an existing consolidated concession). The FSA's prior written agreement to this should be obtained.

10.3.2 Reporting form for trading book concession

15 The FSA will confirm in writing to a bank the trading book concession that it is prepared to agree.

16 A bank which has been agreed the concession should complete the form M1.

10.3.3 *Deductions of holdings of own paper from "surplus" capital*

See s11

- 17 In some cases a bank may have 'surplus' capital (e.g. if its total Tier 2 capital is greater than Tier 1 capital, or its subordinated term debt is greater than 50% of Tier 1) .
- 18 In the following circumstances, a bank may deduct holdings of its own paper from this 'surplus' rather than from qualifying capital (so the deduction will have no immediate impact on its RAR):
- (a) Where a bank has excess Tier 2 and holds part of its own capital issue: the deduction should be on a like-for-like basis (i.e. holdings of hybrid capital instruments should only be deducted from surplus hybrid capital and not from surplus term debt); or
 - (b) Where a bank can cancel issued capital it holds provided that such cancellation does not trigger a repurchase of the whole issue, and that there is no likelihood of the bank having to call on its excess capital in the near future. The FSA will only agree to cancellation in exceptional circumstances only, generally where an issue has not been made within the last five years.
- 19 Holdings of the issued capital of another bank should be deducted from qualifying rather than 'surplus' capital.

10.4 **Deductions of qualifying holdings from Tiers 1 and 2 capital**

- 20 Article 51 of The Banking Consolidation Directive (formerly Article 12 of 2BCD) requires deductions in respect of *qualifying holdings* in non-financial undertakings, which exceed certain limits. These deductions are made from Tier 1 and Tier 2 capital combined.
- 21 A bank's holding in a non-financial undertaking constitutes a *qualifying holding* if the bank:
- (a) Directly or *indirectly* holds 10% or more of the shares in the undertaking; or
 - (b) Is directly or indirectly entitled to exercise, or to control the exercise of, 10% or more of the voting power at any general meeting of the undertaking; or
 - (c) Is able to exercise a significant influence over the management of the undertaking, by virtue of:
 - (i) A direct or indirect holding of shares in the undertaking; or

- (ii) A direct or indirect entitlement to exercise, or control the exercise of, the voting power at any general meeting of the undertaking.

An *indirect* holding (or entitlement) refers both to single holdings (or entitlements) with third parties or nominees through which the bank exercises control and to holdings (and entitlements) located with subsidiaries of the bank which may collectively represent a qualifying holding. Deductions need not be made where the bank is holding instruments or providing custodial services on behalf of others.

22 For the purposes of qualifying holding deductions, non-financial undertakings are defined as all undertakings other than:

- (a) *Credit and certain financial institutions;*
 - a) The capital instruments of institutions which meet the definition of financial and credit institutions in section 10.2 therefore fall outside the scope of qualifying holdings. (The full definition of *financial institution* is in the Glossary.)
- (b) Institutions whose exclusive or main activities are a direct extension of banking, or concern services ancillary to banking, such as leasing, factoring, the management of unit trusts, the management of data processing services supporting banking services or any other similar activity; and
 - a) These activities are set out in Article 43(2)(f) of the Bank Accounts Directive (86/635/EEC).
- (c) Insurance and reinsurance companies, and insurance holding companies.
 - a) The definition of an insurance undertaking is contained in the First Non-Life Insurance Directive (73/239/EC) and article 4 of the Life Assurance Directive (2002/83/EC). The definition of reinsurance undertaking is contained in the Insurance Groups Directive (98/78/EC).

See ch EU

23 Banks should deduct from the total of Tier 1 and Tier 2 capital the greater of the total values of the following two items:

- (a) The total by which individual qualifying holdings exceed 15% of the total Tier 1 and Tier 2 capital, adjusted for the deduction of other credit and financial institutions' capital instruments but not for other deductions from Tiers 1 and 2 combined; or
- (b) The amount by which the aggregate of qualifying holdings exceeds 60% of the total Tier 1 and Tier 2 capital, adjusted for the deduction

of credit and financial institutions' capital instruments but not for other deductions from Tiers 1 and 2 combined.

In both cases, banks should normally use the adjusted Tier 1 and Tier 2 figure from the previous reporting period.

24

Deductions need not be made in respect of holdings when:

- (a) The shares held are not *financial fixed assets*;
 - a) Generally, a financial fixed asset is taken to mean participating interests, shares in affiliated undertakings and securities intended for use on a continuing basis in the normal course of an undertaking's activities. Financial fixed assets should not be included in the trading book.
- (b) The FSA has given its prior written agreement to non-deduction on the basis that the shares are held temporarily during a financial reconstruction or rescue operation;
- (c) The shares are held during the normal course of underwriting;
- (d) The shares are held in the bank's name on behalf of others; or
- (e) The shares are held in exceptional circumstances and the FSA has given its prior written agreement to non-deduction on the basis that the bank has increased its capital or taken other equivalent measures, or has agreed to do so.

25

Under the terms of The Banking Consolidation Directive (formerly 2BCD), where qualifying holdings were already in existence on 1 January 1993, banks have ten years (until 1 January 2003) in which to comply with the requirements of the Directive. The FSA is prepared if approached by a bank to discuss proposals aimed at reducing these exposures, or to introduce these deductions, over a period of time.

26

The FSA requires all banks which either on a solo or consolidated basis have qualifying holdings to report their positions to the FSA, on form M1, at the same time as the reporting dates for the BSD3.

11 APPLICATION AND LIMITS OF CAPITAL

11.1 Application of capital

Banks may use the different tiers of capital to support different types of activity.

11.1.1 Tier 1 & 2 capital

1 Tiers 1 and 2 may be used to support both banking book and trading book capital requirements.

11.1.2 Tier 3 capital

2 Tier 3 capital should only be used to support trading book activities and foreign currency risk.

3 Tier 3 capital should not be applied to those trading book capital requirements arising out of counterparty and settlement risk.

See s9.1

- a) Tier 3 capital may however be used in such cases but only at a consolidated level where the aggregation plus method of consolidation is applied. The FSA's prior written agreement to a bank using Tier 3 capital for this purpose should however be obtained. This is to accommodate the Own Funds regimes of other supervisors.

11.2 Limits on the use of different forms of capital

4 As each tier of capital differs in the degree of protection that it can offer depositors, restrictions should be placed on the amount of each type of capital that is held in the capital base.

5 Banks should meet the limits at both a solo (or solo-consolidated) and consolidated level.

11.3 Limits on capital for non-CAD banks

6 The limits non-CAD banks should apply are that:

- (a) Total Tier 2 capital should not exceed total Tier 1 capital.
- (b) Tier 2 subordinated term debt should not exceed 50% of Tier 1 capital.
- a) Where a bank has any subordinated debt surplus to this ratio, this debt should be disregarded in the calculation of a bank's own funds and treated as part of the long-term funding of the bank.

- (c) General/collective provisions should not be more than 1.25% of risk weighted assets.
 - a) This determines the maximum level of general/collective provisions that a bank should include in its capital base. Clearly, a bank can make more general/collective provisions if it chooses.

11.4 Limits on capital for CAD banks

7 CAD banks should apply the following limits:

- (a) Tier 2 subordinated term debt should not exceed 50% of Tier 1 capital.
- (b) General/collective provisions should not exceed 1.25% of the sum of risk weighted assets in the banking book and notional risk weighted assets in the trading book.
- (c) Tier 2 capital used to meet banking book requirements should not exceed 100% of the Tier 1 capital used to meet those requirements.
- (d) Tier 3 capital may cover trading book requirements only, including those arising from foreign currency risk, but should not be used to cover counterparty risk or settlement risk capital charges in the trading book.
- (e) Tier 2 capital and Tier 3 subordinated debt used to meet the trading book capital requirements should not exceed 200% of the Tier 1 capital used to meet those requirements.
- (f) Tier 2 and 3 capital in total should not exceed Tier 1 overall. This applies at the consolidated level only (or at the solo level when a bank is not part of a consolidated group).
 - a) This last limit should not be exceeded without the FSA's express agreement, which will normally only be given where a bank's trading book accounts for most of its business.
 - b) The calculation of capital adequacy for banks subject to these limits is complex, since banks will wish to maximise the use of Tiers 2 and 3 within the constraints imposed. An example of a capital adequacy calculation for CAD banks is included in the overview of capital chapter.

See ch CO

8 Amounts exceeding any of the ratios above should not be included in the calculation of a bank's own funds

12 REPAYMENT OF CAPITAL

12.1 Repayment of Tier 1 capital

1 No repayment of Tier 1 capital should be made without the FSA's prior agreement. Any repayment should be part of a bank's capital plan that should:

- (a) demonstrate that the bank will remain in excess of its (group and solo) individual capital ratios for two years without relying on new capital issues;
- (b) be consistent with the bank's strategic and operating plans; and
- (c) take account of any possible acquisitions, locked-in capital in subsidiaries and the possibility of exceptional losses.
 - a) The degree to which a worst case view will need to be included in the plan will depend on :
 - i) the size of the institution;
 - ii) the historic volatility of profitability and asset growth;
 - iii) confidence in the calculation of assets; and
 - iv) the quality of management and systems.

12.2 Repayment of Tier 2 capital

See s12.1

2 No early repayment of Tier 2 capital should be made without the FSA's prior agreement. The FSA will only agree to early repayment where a bank produces a capital plan, as described in the section on repayment of Tier 1 capital that shows that the bank will remain above its individual capital ratio for at least two years after the repayment.

- a) For repayment of intra-group capital it is normally sufficient for a bank to be above its individual capital ratio immediately after repayment, i.e. the need to remain above the individual capital ratio for at least two years does not apply.

See s8.2

3 Conditions which should be met for the repayment of Tier 2 subordinated debt are given under the section on general conditions for subordinated debt.

See s6.6 & s7.2

4

Specific conditions which should be met for the repayment of Upper and Lower Tier 2 subordinated debt are given under the sections on Upper and Lower Tier 2 capital.

12.3 Repayment of Tier 3 capital

See s9.2

5

Conditions which should be met for the repayment of Tier 3 capital are given under the section on Tier 3 capital.

See s5.3

13 APPENDIX – PROFORMA 1 - FOR EXTERNAL AUDITOR'S REPORT ON INTERIM PROFITS IN YEAR OF TRANSITION TO ANOTHER ACCOUNTING FRAMEWORK (EG FROM UK GAAP TO IFRS)**THE BOARD OF DIRECTORS, XYZ BANK LIMITED**

Dear Sirs

In accordance with your letter of instruction dated [], a copy of which is attached, we have reviewed XYZ Bank Ltd's current year interim profits for the period [] as reported on Form BSD3 [or successor form] dated [] a copy of which is attached for identification. Our review, which did not constitute an audit, has been carried out having regard to the conditions set out in Section 5 of the chapter on the "Definition of Capital" in the Prudential Sourcebook applying to banks.

On the basis of the results of our review, nothing came to our attention to indicate that :

- (a) the interim profits as reported on Form BSD3 have not been calculated on the basis of the accounting policies adopted by the bank to report under international accounting standards for the year to []. These accounting policies are not necessarily consistent with those used in preparing the bank's latest statutory accounts for the year to [];
- (b) the accounting policies adopted by the bank to report under international accounting standards differ in any material respects from those required by the international accounting standards adopted from time to time by the European Commission in accordance with EC Regulation No 1606/2002, [except for...];
- (c) the interim profits amounting to £[] as so reported are not reasonably stated.

Yours faithfully

Chartered Accountants

PROFORMA 2 - FOR EXTERNAL AUDITOR'S REPORT ON INTERIM PROFITS (WHERE THERE IS NO CHANGE IN ACCOUNTING FRAMEWORK)

THE BOARD OF DIRECTORS, XYZ BANK LIMITED

Dear Sirs

- (a) the interim profits as reported on Form BSD3 have not been calculated on the basis of accounting policies adopted by the bank to report under international accounting standards for the year to [] [except for ...];
- (b) those accounting policies differ in any material respects from those required by [the Banks Accounts Directive as implemented in the UK *or, where relevant*, the international accounting standards adopted from time to time by the European Commission in accordance with EC Regulation No 1606/2002], [except for];
- (c) the interim profits amounting to £[] as so reported are not reasonably stated.

Yours faithfully,

Chartered Accountants

CREDIT RISK IN THE BANKING BOOK

1 INTRODUCTION

1.1 Legal sources

See chs CO,DU
and TC

1 The legal sources identified in the equivalent section of the Capital Adequacy Overview chapter are also relevant for this chapter. Within the set of chapters outlining the assessment of capital adequacy, this chapter covers the basic framework which banks should adopt for including credit (or counterparty) risk in the banking book in the capital adequacy calculation. For non-CAD banks, together with the chapter on counterparty risk on OTC derivatives and unsettled trades - the treatment of which is the same for banking and trading books - it covers all the relevant details on credit risk. For CAD banks, the treatment of other counterparty risk in the trading book is covered in a separate chapter.

2 The Banking Consolidation Directive (formerly the Solvency Ratio Directive - 89/647/EEC) establishes the framework within the European Union for bringing credit risk into the assessment of capital adequacy. The framework it provides is along similar lines to that given by the 1988 Basel Convergence Agreement on capital standards. The Capital Adequacy Directive ('CAD' - 93/6/EEC) established a 20% weighting for certain investment firms, clearing houses and exchanges (which are recognised for the purposes of Chapter BC of IPRU (BANK)).

- a) The capital requirements of The Banking Consolidation Directive (formerly the SRD) are implemented mainly by this chapter.

1.2 Application

See ch CO

3 This chapter applies to all UK banks.

4 The requirements of The Banking Consolidation Directive (formerly the SRD) apply on a consolidated basis where there is a relevant EU group, and only on a solo basis otherwise. The FSA considers that the weightings should be applied on both a solo (or solo-consolidated) and a consolidated basis.

1.3 How this chapter is organised

5 Section 2 defines credit risk in the banking book and outlines the rationale for the framework. Section 3 covers the framework for on balance sheet credit risk, including counterparty risk weights,

country zone definitions, public sector entities and multilateral development banks. Section 4 deals with off balance sheet credit risk including credit conversion factors and credit equivalent amounts.

3 RISK WEIGHTING FRAMEWORK: ON BALANCE SHEET

3.1 Introduction

- 1 The framework gives types of asset in the banking book a risk weighting depending on the counterparty and taking account of different country risks, by classifying countries in two zones.
- 2 Weightings should not be regarded as a substitute for commercial judgment for the purposes of market pricing of the different instruments.

3.2 Counterparty weights

3.2.1 Overview

- 3 The following list identifies the counterparty weights, which reflect their relative riskiness. Definitions of highlighted terms relevant to more than one weighting band are given following the list.

- a) Generally, unless it can be shown that an exposure merits a reduced risk weighting under the weighting bands set out below it should receive a 100% risk weighting.
- b) Guarantees received from a banking subsidiary should not be taken into account when determining the appropriate risk weight, unless they are collateralised by a cash deposit placed with that subsidiary. However, in reporting on a solo or unconsolidated basis reporting banks may accept a guarantee from a subsidiary and reduce the risk weight of an asset if the following applies:
 - i) the guarantee is direct, explicit, unconditional and irrevocable;
 - ii) the reporting bank is adequately capitalised on a consolidated basis;
 - iii) the guarantee is not being given to circumvent regulatory rules; and
 - iv) the guarantee should have sound commercial rationale and should be made on proper commercial terms.

3.2.2 Zero weighting

- 4 The following types of asset may attract a zero weighting:

- (a) cash and claims collateralised by cash deposits placed with the lending institution (or CDs and similar instruments issued by

and lodged with the bank) and meeting the conditions set out in the chapter on collateral and netting;

- (b) gold and other bullion held in vaults or on an allocated basis;
- (c) claims on, other than holdings of bills or securities issued by, *Zone A* central governments and central banks;
 - a) Securities that are issued by *Zone A* central governments may attract a 0% risk weighting in certain cases. Full details are contained in the chapter on collateral and netting.
- (d) claims carrying the explicit guarantees of *Zone A* central governments and central banks;
- (e) claims on, other than holdings of bills and securities issued by, *Zone B* central governments and central banks denominated in local currency and funded by liabilities in the same currency; and
- (f) claims guaranteed by *Zone B* central governments or central banks, where denominated in local currency and funded in that currency;
- (g) certificates of tax deposit; and
- (h) items in suspense where they represent position risk.

See ch NE s4

3.2.3 *10% weighting*

See ch BO s1

5 Certain holdings of government securities should attract a 10% weighting as a proxy for market risk. The nature of the security (ie fixed rate or floating rate) and the residual maturity of the security should determine the risk weight.

- a) Full details are contained in the chapter on proxies for market risk in the banking book.

3.2.4 *20% weighting*

6 The following types of asset should attract a 20% weighting:

- (a) asset items constituting claims on multilateral development banks as defined in the Handbook Glossary and claims guaranteed by or collateralised by the securities issued by these institutions;
 - a) [deleted]

- See ch NE s4
- (b) claims on credit institutions incorporated in *Zone A* countries, claims guaranteed (or accepted or endorsed) by *Zone A* incorporated credit institutions and cash collateral placed in the form of deposits with a third party *Zone A* credit institution;
 - (c) claims on credit institutions incorporated in *Zone B* countries with a residual maturity of 1 year or less and claims of the same maturity guaranteed by *Zone B* credit institutions;
- See s3.2.1 and ch CA s10
- a) As explained elsewhere certain claims on credit institutions should be deducted from the capital base, rather than being weighted.
 - (d) cash items in the course of collection. The total amount of cheques, etc drawn on and in the course of collection on other banks, and debit items in transit between domestic offices of the reporting institution in each country;
 - (e) claims on *Zone A public sector entities* and claims guaranteed by such entities. In the United Kingdom, these comprise of local authorities and certain non-commercial public bodies;
 - (f) claims on *investment firms* (but not their unregulated affiliates), subject to the CAD or incorporated in a non-EEA state but subject to an *equivalent regime*;
- See ch CS s10
- a) The investment firm regimes deemed broadly equivalent to the CAD regime are given in the appendices to the chapter on consolidated supervision.
- See ch CB s1
- b) An '*investment firm*' is defined in the trading book/banking book chapter.
 - (g) claims on *clearing houses* and *exchanges* recognised for the purposes of Chapter BC of IPRU (BANK), including initial cash margins and surplus variation margins at futures exchanges or clearing houses;
- See s5
- a) For the list of clearing houses and exchanges recognised for the purposes of Chapter BC of IPRU (BANK), refer to the appendix at the end of this chapter.
 - (h) claims which are directly, explicitly, unconditionally and irrevocably guaranteed by those investment firms, exchanges and clearing houses recognised for the purposes of Chapter BC of IPRU (BANK), should attract the weighting given to a direct non-tradable security claim on the guarantor. Indirect

guarantees are not recognised for the purposes of reduced risk weights.

See ch BO
s1

- (i) certain holdings of government securities should attract a 20% weighting as a proxy for market risk. The nature of the security (ie fixed rate or floating rate) and the residual maturity of the security determine the risk weight. Full details are contained in the chapter on proxies for market risk in the banking book.

3.2.5 50% weighting:

7 The following types of asset should attract a 50% weighting:

- (a) loans to individuals *fully secured* by a first priority charge on residential property that is (or is to be) occupied by the borrower or is rented;

“Fully secured” means the value of property should be greater than or equal to the value of the loan (ie maximum loan to value of 100%). There is no requirement to revalue properties on a regular basis, but where such a valuation has found that the loan to value ratio exceeds 100% such loans should be weighted at 100%. (However, if the shortfall in the security value is fully covered by a specific or individual provision, the net amount of the exposure may continue to be weighted at 50%.) Conversely, where revaluation indicates that the loan to value ratio has fallen to 100% the loan may be weighted at 50%.

- (b) Loans to registered social landlords, registered with the Housing Corporation or Communities Scotland or the National Assembly for Wales, *fully secured* by a mortgage on residential property that is:
 - (i) already let; or
 - (ii) under development and will be let, on condition that the development attracts Social Housing Grant (SHG) and/or other public subsidy on equivalent terms, of an amount equal to or greater than, 50% of the approved total scheme cost, the security for which is subordinated to the loan, where the funding body has legally committed itself to the full payment of the subsidy.
- (c) Loans to public universities, *fully secured* by a mortgage on residential property that is:
 - (i) already let; or

- (ii) under development and will be let, on condition that the lender is in possession of a certificate, issued by a quantity surveyor or architect appointed by the bank, showing work to the value of 20% of the projected finished end value of the product (excluding cost of land) has been completed, prior to any draw down under the loan;

and can readily be sold or let in the non-student market.

- (d) mortgage sub-participations, where the risk to the sub-participating bank is *fully* and specifically *secured* against residential mortgage loans which would themselves qualify for the 50% weight;
- (e) mortgage-backed securities (MBS), issued by special purpose mortgage finance vehicles, where the following conditions are met:
 - (i) the notes embody an express promise to repay the noteholder;
 - (ii) the issue documentation contains provisions which would ultimately enable noteholders to initiate legal proceedings directly against the issuer of the MBS. As an example such provisions would allow noteholders to proceed against the issuer where the trustee, having become bound to take steps and/or to proceed against the issuer, fails to do so within a reasonable time and such failing is continuing;
 - (iii) the documentation contains provisions which would ultimately enable noteholders to acquire the legal title to the security (i.e. the mortgagee's interest in it) and to realise the security in the event of a default by the mortgagor;
 - (iv) under the issue:
 - a) the mortgage loans themselves qualify for the 50% weight (see Chapter 3.2.5.7(a), (b) and (c) above); and
 - b) the mortgage loans are not in default at the time at which they are transferred to the vehicle.
 - (v) the vehicle's activities are restricted by its articles of association to mortgage business. The vehicle may hold assets qualifying for a risk weighting of 50% or less.

3.2.6 *100% weighting*

- 8 The following types of asset should attract a 100% weighting:
- (a) claims on the non-bank private sector;
 - (b) claims on banks incorporated in *Zone B* countries with a residual maturity over 1 year;
 - (c) claims on *Zone B* central governments and central banks (unless denominated in the national currency and funded by liabilities in the same currency);
 - (d) claims on *Zone B* regional governments or local authorities;
 - (e) claims guaranteed by *Zone B* central governments or central banks, which are not denominated and funded in the national currency common to the guarantor and borrower;
 - (f) claims on commercial entities owned by the public sector;
 - (g) claims on *Zone B public sector entities*;
 - (h) premises, plant, equipment and other fixed assets;
 - (i) real estate, trade investments and other assets not otherwise specified.

3.2.7 *Variations from normal weighting*

- 9 There are a number of circumstances where a variation in treatment of assets for calculating risk weighted assets is considered to be appropriate:

See ch SE

- (a) Loan transfers and securitisation

Assets which otherwise would normally be weighted may be removed from the supervisory balance sheet where the policy, outlined in the chapter on loan transfers and securitisation, is met.

See ch NE

- (b) Collateral and netting

Where an exposure to a counterparty is collateralised, a lower risk weight may apply. The FSA considers that only certain types of collateral justify reduced risk weightings. The policy on this is set out in the chapter on netting and collateral.

In addition, the use of netting agreements may reduce exposure to a counterparty. Banks wishing to report on a net basis for capital

adequacy purposes should meet the criteria set out in the chapter on netting and collateral.

See ch CA s10

(c) Deductions

Some on and off balance sheet assets should be deducted from total capital rather than being risk weighted.

- a) For an explanation of those items which should be deducted from capital base, see the chapter on the definition of capital.

3.2.8 Zone A/Zone B countries

10 For the definition of *Zone A country* see the *Glossary*

“*Zone B*” comprises all countries not in *Zone A*.

- a) The Channel Islands, Gibraltar, Bermuda and the Isle of Man should also be regarded as being within *Zone A*. A bank should discuss with the FSA the appropriate treatment of dependencies of *Zone A* countries.
 - i) Gibraltar and Bermuda are included as territories within the UK’s membership of the OECD. Consequently, a claim on either government should be treated as a claim on a *Zone A* public sector entity and a claim on a bank incorporated in Gibraltar or Bermuda should be treated as a claim on a *Zone A* bank.
- b) For the purpose of determining whether a bank is in *Zone A* or *B*, the place of incorporation is the relevant factor to be considered rather than the location of the branch.

3.2.9 Public Sector Entities (PSEs)

11 PSEs are principally regional governments and local authorities. Bodies which carry out non-commercial functions on behalf of, and are responsible to, regional governments or local authorities may also be classified as PSEs.

In addition, bodies owned by the central or regional government or local authorities which perform regulatory or other non-commercial functions are classified as PSEs. Commercial entities or companies (other than banks) owned by the public sector, including public utilities, carry a weighting of 100%. This is to avoid giving them an unfair advantage over private sector companies.

- a) Examples of UK public bodies eligible for classification as PSEs include:

- i) Local authorities: London borough councils, county and district councils in England, Northern Ireland, and Wales, and district, island and regional councils in Scotland together with their departments. The state government in the Channel Islands and the Isle of Man government are included in this category.
 - ii) Non-commercial public corporations: The Audit Commission, United Kingdom Atomic Energy Agency and the Welsh Development Agency.
- b) Examples of UK public bodies not eligible for classification as PSEs include: British Broadcasting Corporation, British Coal Corporation, Civil Aviation Authority, Channel Four Television Company Limited, NHS Trusts, Post Office Corporation.

NHS Trusts for example, are engaged in economic activity. As public corporations NHS Trusts cannot be described as agencies or departments of the government, which would be a factor in weighting them at 10%. Therefore the weighting should be consistent with a claim on other commercial entities owned by the public sector.

4 RISK WEIGHTING FRAMEWORK: OFF BALANCE SHEET RISK

4.1 Introduction

1 In assessing the contribution of off balance sheet items to risk-weighted assets, a distinction is made between OTC derivative contracts and other off-balance sheet items.

2 For *OTC derivative contracts*, the risk lies in having to replace any positive cash flows following the failure of the counterparty (*pre-settlement counterparty risk*). Therefore, the amount at risk, which is less than the nominal exposure, should be measured by calculating the proportion of the nominal exposure to be considered at risk - the *credit equivalent amount*.

See ch VA s4

3 The off balance sheet credit risk in the case of the *other items* should be measured by multiplying the notional principal amounts by a *credit conversion factor* of 0%, 20%, 50% or 100% and weighting the resultant figure by the counterparty risk weight.

- a) The *credit conversion factor* should be used to convert off balance sheet nominal exposures into a level which allows for comparison with on balance sheet exposures for risk weighting purposes.

4 Section 4.2 details the credit conversion factors for the other off balance sheet items, and section 4.3 covers OTC derivative contracts.

4.2 Credit conversion factors for off balance sheet credit risk

4.2.1 General

5 Credit conversion factors (CCFs) should be applied to the amount of the off balance sheet exposure multiplied by the weights applicable to the category of the counterparty for an on balance sheet transaction.

6 The calculation is: nominal principal x credit conversion factor x counterparty weighting.

- a) For example, if a bank extends a £200,000 ten-year revolving credit to a company, the calculation is: £200,000 x 50% CCF x 100% credit risk weighting, which results in a risk-weighted amount of £100,000.

7 The following list gives the CCFs for the respective instruments. Details about how commitments should be captured in the framework are given following the list.

4.2.2 **100% credit conversion factor**

- (a) direct credit substitutes, including general guarantees of indebtedness, standby letters of credit serving as financial guarantees, acceptances and endorsements.
- (b) sale and repurchase agreements and asset sales with recourse where the credit risk remains with the bank.
 - a) Sale and repurchase agreements should be weighted according to the category of the issuer of the security (or the borrower in the underlying loan agreement) and not according to the counterparty with whom the transaction has been entered into.
 - b) The treatment of *reverse repos* (i.e. purchase and resale agreements where the bank is the receiver of the asset) should be different to that of repos. Reverse repos should be treated as collateralised loans, with the risk being measured as an exposure to the counterparty. Where the security temporarily acquired attracts a preferential risk weighting (e.g. a Zone A government security) this is recognised as collateral and the risk weighting of the loan may accordingly be reduced.
- (c) forward asset purchases, forward deposits placed and the unpaid part of partly-paid shares and securities, and any other commitments with a certain draw-down.
 - a) For these instruments the risk of loss depends on the credit-worthiness of the counterparty.

4.2.3 **50% credit conversion factor**

- (a) transaction-related contingent items not having the character of direct credit substitutes (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions);
- (b) note issuance facilities and revolving underwriting facilities;
- (c) Other *commitments* (e.g. formal standby facilities and credit lines) with an original *maturity* of over 1 year.
 - a) These instruments are essentially guarantees which support particular non-financial obligations.
 - b) For an explanation of the *maturity* of commitments, see below.

4.2.4 20% credit conversion factor

- (a) short-term self liquidating trade-related contingent items (such as documentary credits collateralised by the underlying shipments).

4.2.5 0% credit conversion factor

- (a) endorsements of bills (including per aval endorsements) which have previously been accepted by a bank;
- (b) other *commitments* (e.g. formal standby facilities and credit lines) with an original *maturity* of up to 1 year, or which can be unconditionally cancelled at any time.

4.2.6 Commitments

8 The *maturity* of a *commitment* should be measured from the earlier of:

- (a) thirty days or in the case of syndicated facilities, sixty days following the date of '*firm offer*'; and
- (b) the date at which the facility becomes available to be drawn down.
 - a) The 'window' given in (a) above is intended to provide a reasonable period after the date of '*firm offer*' to allow the practicalities of arranging a facility to be completed. It also enables the borrower to organise funding more efficiently and look elsewhere if a request for a credit line is declined.
 - b) The date of '*firm offer*' is often earlier than the date of signature of the facility agreement. For example, an offer should be regarded as firm even if it is still subject to documentation and no material adverse change. However, an offer made prior to the credit assessment of the customer and/or where the bank reserves the right to withdraw the offer at its discretion, should not be regarded as firm.

In the case of a non-underwritten (or best efforts) syndicated facility, the date of firm offer is deemed to be that on which the arranger(s) confirms that the facility is fully subscribed.

Where a bank underwrites a facility which is subsequently to be syndicated, it should measure its commitment from the date of its firm offer. If the subsequent syndication is successful, the underwriter(s) may then measure its commitment afresh from the same date as the syndicate banks, i.e. the earlier of 60 days after the date on which the

underwriter(s) confirms to the borrower the results of general syndication and the date at which the facility becomes available for draw-down. If the facility is unsuccessful and the underwriting bank is left with a commitment then the underwriting period should be added to the term of the facility. If this results in a commitment in excess of one year then a capital charge should result.

- 9 Even if the formal agreement to provide the facility indicates an original maturity of one year or under, a commitment should be regarded as having an original maturity of over one year if the bank assumes additional legal or moral obligations which imply a maturity of over one year. Banks should satisfy themselves that no such additional obligations exist.
- 10 Where the terms of a commitment have been renegotiated and/or the maturity of a commitment extended, the original maturity should be measured from the start of the initial commitment until the expiry date of the renegotiated/extended facility. The only exceptions should be where either:
- (a) the 'firm offer' to extend the commitment is given in the final thirty days (or sixty days in the case of syndicated facilities) of the initial commitment period, following a full credit assessment of the customer; or
 - (b) the renegotiation/extension involves a full credit assessment of the customer and the bank has the right, without notice, to withdraw the existing commitment at the time when the renegotiation/extension is requested and to refuse the request for the renegotiated/extended commitment.
- In these two cases, the extended/renegotiated facility may be reported as a new commitment.
- 11 Where a commitment provides for a customer to have a facility limit which varies during the commitment period, the amount of the commitment should at all times be taken as the maximum amount that can be drawn for the remaining period of the commitment.
- 12 A commitment to provide a loan (or purchase an asset) which has a maturity of over one year, but which must be drawn down within a year, should be treated as having a maturity of one year or under provided any undrawn portion of the facility is automatically cancelled at the end of the draw-down period.
- 13 A commitment to provide a loan (or purchase an asset) to be drawn down in a number of tranches, some where the availability

of the commitment is one year or under, some where it is over one year, should be considered as having a maturity of over one year.

- 14 Where a bank enters a *forward commitment*, that provides a commitment to make a facility available at a future date, the original maturity of the commitment should be measured from the earlier of:

- (a) thirty days following the date of 'firm offer'; or
- (b) the date at which the facility is available to be drawn down.

- 15 A distinction is drawn between a commitment to provide an off balance sheet facility which may or may not be drawn by the customer, and a commitment to provide an off balance sheet instrument with certain draw-down.

- a) For example, a commitment of over one year to provide a trade related contingent facility at a future date which may or may not be drawn down should be given a credit conversion factor of 50% (the CCF for long-term commitments) multiplied by 20% (the CCF for trade related contingents) giving an effective CCF of 10%.

A commitment (short-term or long-term) to provide a trade related contingent item where it is certain that the draw-down will occur at some date, or range of dates, in the future should be given a CCF of 20% (i.e. without multiplying by the relevant CCF for a commitment). Similarly, a commitment to issue a guarantee with certain draw-down at a particular date, or range of dates, in the future should receive a CCF of 100%.

- 16 When a bank enters into two or more commitments which are arranged simultaneously for the same or connected customer(s) they are said to be *linked*. Where a bank enters into one or more commitment(s) of over one year and one or more commitment(s) of one year and under, these should be treated as 'linked' (i.e. aggregated and reported according to the maturity of the longest of the commitments) where either:

- (a) the facilities cannot be drawn down, negotiated or cancelled separately; or
- (b) the customer is seeking two or more commitment(s) for the same purpose and has no legitimate commercial reason for doing so.

Where a bank enters into 'linked' commitments which begin or mature at different dates, the maturity of the combined

commitment should be measured from the commencement of the first commitment to the expiry date of the last commitment.

4.3 OTC derivative contracts

See ch DU s3

17 When entering into over the counter (OTC derivative) *interest rate, foreign exchange rate, equity, precious metals (excluding gold) and other commodities contracts*, banks are exposed to counterparty risk in the form of the potential cost of replacing any positive cash flows. The risk varies depending on the maturity of the contract and on the volatility of the underlying rate or price.

- a) *Interest rate related contracts* include single-currency interest rate swaps, basis swaps, forward rate agreements and products with similar characteristics, interest rate options purchased (including caps, collars and floors purchased as stand alone contracts) and similar instruments. Contracts of a similar nature concerning bonds should also be included in this category.
- b) *Foreign exchange rate related contracts* include cross currency swaps, cross currency interest rate swaps, forward foreign exchange contracts, currency options purchased and similar instruments. Contracts of a similar nature concerning gold should also be included in this category.
- c) *Equity, precious metals (excluding gold) and commodities contracts* include equity options purchased, swaps and similar contracts, commodity options purchased, swaps and similar instruments involving commodities.

18 Exposures from OTC derivatives should be treated in the same broad framework as other off balance sheet contracts. The contract's CEA should be multiplied by the risk weight appropriate to the counterparty to determine the risk weighted amount for the contract. The difference with the treatment of other derivatives lies in the way that the CEA is calculated. The calculation for OTC derivatives, which is the same in banking book and the trading book, is explained in the chapter on derivatives and unsettled trades.

5 APPENDIX

5.1 Clearing houses and exchanges recognised for the purposes of Chapter BC of IPRU (BANK). (Counterparty exposures to Clearstream and Euroclear continue to attract a 20% weighting).

5.1.1 Exchanges

1 Any of the following:

- (a) any “recognised investment exchange”;
- (b) any “designated investment exchange”;
- (c) any “regulated market”

in each case, as defined in the central Handbook Glossary (“the Glossary”, amended from time to time).

5.1.2 Clearing Houses

2 Any of the following:

- (a) any “recognised clearing house” as defined in the Glossary;
- (b) any of the following clearing houses:

ASX Settlement and Transfer Corporation Pty Ltd (ASTC)
 Austrian Kontroll Bank (OKB)
 Board of Trade Clearing Corporation
 Cassa di Compensazione e Garanzia S.p.A (CCG)
 Commodity Clearing Corporation
 Emerging Markets Clearing Corporation
 FUTOP Clearing Centre (FUTOP Clearing Centralen A/S)
 Hong Kong Futures Exchange Clearing Corporation Ltd
 Hong Kong Securities Clearing Company Ltd
 Kansas City Board of Trade Clearing Corporation
 Norwegian Futures & Options Clearing House (Norsk
 Opsjonsentral A.S. (NOS))
 N.V. Nederlandse Liquidatiekas (NLKKAS)
 OM Stockholm Exchange
 Options Clearing Corporation
 Options Clearing House Pty Ltd (OCH)
 Sydney Futures Exchanges Clearing House (SFECH Ltd)
 TNS Clearing Pty Ltd (TNSC)

- (i) nil risk weighted holdings of Zone A central government and central bank fixed-interest rate paper with a residual maturity of one year or less;
 - (ii) nil risk weighted Zone A central government and central bank floating-rate or index linked paper of any maturity; and
 - (iii) holdings of Zone B central government and central bank nil risk weighted paper with a residual maturity of 1 year or less (irrespective of whether such paper is fixed or floating rate), denominated in the local currency and funded in the local currency.
- (b) 20% weight should be applied to:
- (i) Zone A central government and central bank fixed rate paper with a remaining term to maturity of over one year; and
 - (ii) holdings of Zone B central government and central bank nil risk weighted paper with a residual maturity of over one year, (irrespective of whether such paper is fixed or floating rate), denominated in the local currency and funded in the local currency.

Holdings of Zone B central government and central bank securities not denominated in the local currency or funded in the local currency should be weighted at 100%.

Foreign exchange PRR

General

- 1 G Every bank should apply this chapter and calculate its foreign exchange *PRR* by:
- (1) identifying which *foreign currency* and gold positions to include in the *PRR* calculation;
 - (2) calculating the *open currency position* and net gold position; and
 - (3) multiplying the sum (ignoring the sign) of the *open currency position* and the net gold position by 8%.
- G For example, a bank has an *open currency position* of -£100 and a net gold position of £50. The sum (ignoring the sign) is £150, and so the foreign exchange *PRR* is £12.

Scope of the foreign exchange PRR calculation

- 2 G A bank's foreign exchange *PRR* calculation should include the following items regardless of whether they are *trading book* or *non-trading book* positions:
- (1) all gold positions;
 - (2) all instruments which are denominated in a *foreign currency*, except:
 - (a) *foreign currency* assets which have been deducted in full from the bank's capital;
 - (b) instruments hedging (a);
 - (c) instruments hedging the bank's capital; or
 - (d) instruments hedging a future *foreign currency* income or expense which is known but not yet accrued; and
 - (3) notional positions arising from the instruments listed in table 4G:
- 3 G A bank should notify the FSA in writing if it uses the exclusions in 2G(2)(a)-(d).
- 4 G Table: instruments which result in notional *foreign currency* positions (see 2G)

Instrument	See
Foreign exchange <i>futures, forwards, CFDs</i> or <i>synthetic futures</i>	10G
Foreign exchange <i>swaps</i>	12G
Foreign exchange <i>options</i> (unless the bank calculates a <i>PRR</i> on the <i>option</i> under chapter TO)	14G
Gold <i>futures, forwards, synthetic futures</i> and <i>CFDs</i>	15G

Gold <i>options</i> (unless the bank calculates a <i>PRR</i> on the <i>option</i> under chapter TO)	16G
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- 5 G Banks are reminded that table 5G in chapter TO divides foreign exchange *options* into:
- (1) those which should be treated under chapter TO; and
 - (2) those which should be treated under either chapter FX or chapter TO, but banks can choose whether chapter FX or TO is used.
- 6 G When determining the currency of denomination banks should:
- (1) use the currency in which the bank accounts for the instrument where an instrument is quoted in more than one currency; and
 - (2) treat depository receipts as positions in the underlying security.
- 7 G Instruments denominated in a foreign currency include, amongst other things, assets and liabilities (including accrued interest); non-foreign exchange *derivatives*; net *underwriting* positions; reduced net *underwriting* positions; and irrevocable guarantees (or similar instruments) that are certain to be called.
- 8 G Where a contract is based on a basket of currencies, the bank can choose either to derive notional positions in each of constituent currencies, or treat it as a single notional position in a separate hypothetical currency.

Derivation of notional positions

- 9 G This section derives notional currency positions for the instruments listed in table 4G.

FOREIGN EXCHANGE FORWARDS, FUTURES, CFDS AND SYNTHETIC FUTURES

- 10 G A bank should treat a foreign exchange *forward*, *future* or *CFD* as two notional currency positions as follows:
- (1) a long notional position in the currency which the bank has contracted to buy; and
 - (2) a short notional position in the currency which the bank has contracted to sell;
- where the notional positions have a value equal to either:
- (a) the contracted amount of each currency to be exchanged in the case of a *forward* or *future* held in the *non-trading book*; or
 - (b) the present value of the amount of each currency to be exchanged in the case of a *forward* or *future* held in the *trading book*.

11 G	<u>Today</u>	<u>1 year's time</u>
<p>For example, a bank contracts to sell \$106 for €108 in one year's time.</p> <p>The present values of each cash flow are \$100 and €100 respectively.</p>	<p>PV of €100</p> <p>PV of \$100</p>	<p>Buy €108</p> <p>and</p> <p>Sell \$106</p>
	←	←
		Currently discounted @ 8%
		Currently discounted @ 6%

- In the *non-trading book*, this *forward* would be treated as a combination of a €108 long position and a \$106 short position.
- In the *trading book*, this *forward* would be treated as a combination of a €100 long position and a \$100 short position.

Banks are reminded that foreign exchange *forwards* held in the *trading book* should also be included in the bank's interest rate *PRR* calculation (see 4G of chapter II).

FOREIGN EXCHANGE SWAPS

- 12 G A bank should treat a foreign exchange *swap* as:
- (1) a long notional position in the currency which the bank has contracted to receive interest and principal;
 - (2) a short notional position in the currency which the bank has contracted to pay interest and principal; and
 - (3) where the notional positions have a value equal to either:
 - (a) the nominal amount of each currency underlying the *swap* if it is held in the *non-trading book*; or
 - (b) the present value amount of all cash flows in the relevant currency in the case of a *swap* held in the *trading book*.
- 13 G For example, a bank enters into a five year foreign exchange *swap* where it contracts to pay six month US\$ Libor on \$100 in return for receiving 6% fixed on €100. The present values of each leg are \$100 and €98 respectively.
- In the *non-trading book*, this *swap* would be treated as a combination of a €100 long position and a \$100 short position.
 - In the *trading book*, this *swap* would be treated as a combination of a €98 long position and a \$100 short position.

Banks are reminded that foreign exchange *swaps* held in the *trading book* should also be included in the bank's interest rate *PRR* calculation (see table 4G of chapter II).

FOREIGN EXCHANGE OPTIONS AND WARRANTS

- 14 G Where included in this chapter's *PRR* calculation (see table 4G), a foreign exchange *option* or *warrant* should be treated as a foreign exchange *forward*.

GOLD FORWARDS, FUTURES AND CFDS

- 15 G A *forward*, *future* or *CFD* on gold must be treated as a notional position in gold with a value equal to the amount of gold underlying the contract multiplied by the current spot price for gold.

GOLD OPTIONS

- 16 G If included in the *PRR* calculation under this chapter (see table 4G), a gold *option* must be treated as a gold *forward*.

Open currency position

- 17 G A bank should calculate its *open currency position* by:
- (1) calculating the net position in each *foreign currency*;
 - (2) converting each net position into its *base currency* equivalent at current spot rates;
 - (3) summing all short net positions and summing all long net positions; and
 - (4) selecting the larger sum (ignoring the sign) from (3).

Net gold position

- 18 G A bank should calculate its net gold position by:
- (1) valuing all gold positions using the prevailing spot price for gold (regardless of the maturity of the positions);
 - (2) offsetting long and short positions; and
 - (3) converting the resulting net position into the *base currency* equivalent using the current spot foreign exchange rate.

Definitions used in chapter FX

- 19 G This chapter uses the following definitions:

Defined term	Definition
<i>Base currency</i>	The currency currently used by a firm to calculate its financial resource requirement.
<i>CFDs</i>	Means contract for differences.
<i>Derivative</i>	<i>Options</i> , <i>futures</i> and contracts for differences.
<i>Foreign currency</i>	A currency other than the bank's <i>base currency</i> .
<i>Forward</i>	A contract to buy or sell where the date of settlement has been agreed as a particular date in the future.
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures)

<i>Non trading book</i>	Items not in the <i>trading book</i> .
<i>Open currency position</i>	The position calculated under 17G.
<i>Option</i>	A contract which confers the right to buy or sell a <i>security</i> , contractually based investment, currency, gold or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>PRR</i>	Position risk requirement.
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.
<i>Synthetic future</i>	A combination of a long (short) call <i>option</i> and a short (long) put <i>option</i> which are based on the same underlying and have the same notional amount, strike and maturity.
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.
<i>Underwriting</i>	Means an arrangement made before the relevant securities are issued under which a party agrees to buy a specified quantity of those securities on a given date and at a given price, if no other has purchased or acquired them.
<i>Warrant</i>	The investment specified in article 79 of the Regulated Activities Order (instruments giving entitlement to investments).

CM

Commodity PRR

General

- 1 G Every bank should apply this chapter and calculate its *commodity PRR* by:
- (1) identifying which *commodity* positions should be included within the *PRR* calculation (see 2G);
 - (2) calculating an individual *PRR* for each *commodity* (see 20G);
 - (3) converting each *PRR* to the bank's *base currency* at current spot foreign exchange rates; and
 - (4) summing the resulting individual *PRRs*.

Scope of the PRR calculation

- 2 G A bank's *commodity PRR* calculation should, regardless of whether the positions are *trading book* or *non-trading book* positions:
- (1) include *physical commodity* positions;
 - (2) include the notional positions derived from positions in the instruments listed in table 4G; and
 - (3) exclude positions constituting a *stock financing* transaction.
- 3 G Gold positions are excluded from the scope of the *commodity PRR*. Instead, they are included within the scope of the foreign exchange *PRR*.
- 4 G Table: Instruments which result in notional positions (see 2G(2))

Instrument	see
<i>Forwards, futures, CFDs, synthetic futures and options</i> on a single <i>commodity</i> (unless the bank calculates an <i>PRR</i> on the <i>option</i> under chapter TO)	8G
A commitment to buy or sell a single <i>commodity</i> at an average of spot prices prevailing over some future period	10G
<i>Forwards, futures, CFDs, synthetic futures and options</i> on a <i>commodity index</i> (unless the bank calculates an <i>PRR</i> on the <i>option</i> under chapter TO)	13G – 14G
<i>Commodity swaps</i>	16G – 17G

-
- 5 G 2G includes a *trading book* position in an *commodity* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *commodity* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *commodity* would not have been included in the *trading book* in the first place.
- 6 G Banks are reminded that table 5G in chapter TO divides *commodity options* into:
- (1) those which should be treated under chapter TO; and
 - (2) those which should be treated under either chapter CM or chapter TO, but banks can choose whether chapter CM or TO is used.

Derivation of notional positions

- 7 G This section converts the instruments listed in table 4G into notional positions in the relevant *commodities*. These notional positions are expressed in terms of quantity (tonnes, barrels, etc), not value. The maturity of the position is only relevant where the bank is using the maturity ladder approach.

FUTURES, FORWARDS, CFDs AND OPTIONS ON A SINGLE COMMODITY

- 8 G Where a *forward, future, CFD, synthetic future* or *option* (unless already included in the bank's *option PRR* calculation) settles according to:
- (1) the difference between the price set on trade date and that prevailing at contract expiry, the notional position:
 - (a) equals the total quantity underlying the contract; and
 - (b) has a maturity equal to the expiry date of the contract
 - (2) the difference between the price set on trade date and the average of prices prevailing over a certain period up to contract expiry, there is a notional position for each of the reference dates used in the averaging period to calculate the average price, which:
 - (a) equals a fractional share of the total quantity underlying the contract; and
 - (b) has a maturity equal to the relevant reference date.
- 9 G The following example illustrates 8G(2). A bank buys a Traded Average Price Option (TAPO - a type of Asian option) allowing it to deliver 100 tonnes of Grade A copper and receive \$1,750 in June. If there were twenty *business days* in June the short notional positions will each:
- (1) equal 5 tonnes per day (1/20 of 100 tonnes); and
 - (2) have a maturity equal to one of the *business days* in June (one for each day).

In this example as each *business day* in June goes by the quantity per day for the remaining days does not change (5 tonnes per day) only the days remaining changes. Therefore, halfway through June there are 10, 5 tonne short notional positions remaining each for the ten remaining *business days* in June.

BUYING OR SELLING A SINGLE COMMODITY AT AN AVERAGE OF SPOT PRICES PREVAILING IN THE FUTURE

- 10 G Commitments to buy or sell at the average spot price of the *commodity* prevailing over some period between trade date and maturity should be treated as a combination of:
- (1) a position equal to the full amount underlying the contract with a maturity equal to the maturity date of the contract which is:
 - (a) long, where the bank will buy at the average price; or
 - (b) short, where the bank will sell at the average price
 - (2) a series of notional positions, one for each of the reference dates where the contract price remains unfixed, each of which:
 - (a) is long if the position under (1) is short, or short if the position under (1) is long;
 - (b) equals a fractional share of the total quantity underlying the contract; and
 - (c) has a maturity date of the relevant reference date.
- 11 G The following guidance provides an example of 10G.
- In January, a bank agrees to buy 100 tonnes of copper for the average spot price prevailing during the 20 *business days* in February, and will settle on 30 June. After entering into this agreement, the bank faces the risk that the average price for February increases relative to that for 30 June. Therefore, as highlighted in the table below:
- (1) the short positions reflect the fact that this could occur because any one of the remaining forward prices for February increase; and
 - (2) the long position reflects the fact that this loss could occur because the forward price for 30 June falls.
- 12 G Table: Example of buying at the average spot price prevailing in the future (see 11G)

	Application of 10G(1)	Application of 10G(2)
From trade date to start of averaging period	Long position in 100 tonnes of copper with a maturity of 30 June.	A series of 20 notional short positions each equal to 5 tonnes of copper. Each position is allocated a maturity equal to one of the <i>business days</i> in February (one for each day).

During averaging period	Long position in 100 tonnes of copper with a maturity of 30 June.	As each <i>business day</i> goes by in February the price for 5 tonnes of copper is fixed and so there will be one less notional short position.
After averaging period	Long position in 100 tonnes of copper with a maturity of 30 June.	No short positions.

FUTURES, CFDS AND OPTIONS ON A COMMODITY INDEX

- 13 G *Commodity index futures or CFDs, and commodity index options* (unless the *option* is included in the bank's *option PRR* calculation), should be treated as follows:
- (1) Step 1: The total quantity underlying the contract should be either:
 - (a) treated as a single notional *commodity* position (separate from all other *commodities*); or
 - (b) divided into notional positions, one for each of the constituent *commodities* in the index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant *commodity* in the index.
 - (2) Step 2: Each notional position determined in step 1 should then be included:
 - (a) when using the simplified approach (24G); or
 - (b) when using the maturity ladder approach (25G).
- 14 G Table: Treatment of *commodity index futures* and *commodity index options* (see 13G(2)(b)).

Construction of index	Notional position (or positions) and maturity
Spot level of index is based on the spot price of each constituent <i>commodity</i>	Each quantity determined in step 1 is assigned a maturity equal to the expiry date of the contract.

Spot level of index is based on an average of the forward prices of each constituent <i>commodity</i>	Each quantity determined in step 1 is divided (on a pro-rata basis) into a series of forward positions to reflect the impact of each forward price on the level of the index. The maturity of each forward position equals the maturity of the relevant forward price determining the level of the index when the contract expires.
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- 15 G An example of using 13G and table 14G is as follows. A bank is long a three-month *commodity index future* where the spot level of the index is based on the one, two and three month forward prices of aluminium, copper, tin, lead, zinc and nickel (18 prices in total).

Step 1: the bank should decide whether to treat the full quantity underlying the contract as a single notional *commodity* position, or disaggregate it into notional positions in aluminium, copper, tin, lead, zinc and nickel. In this case the bank decides to disaggregate the contract into notional positions in aluminium, copper, tin, lead, zinc and nickel.

Step 2: if the bank uses the simplified method, nothing more need be done to arrive at the notional position. In this case the bank uses the maturity ladder approach and so subdivides each position in each metal into three because the level of the index is based on the prevailing one, two and three month forward prices. Since the *future* will be settled in three months' time at the prevailing level of the index, the three positions for each metal will have maturities of four, five and six months respectively.

COMMODITY SWAPS

- 16 G A bank should treat a *commodity swap* as a series of notional positions, one position for each payment under the *swap*, each of which:
- (1) equals the total quantity underlying the contract;
 - (2) has a maturity corresponding to the payment date; and
 - (3) is long or short according to 17G
- 17 G Table: Treatment of *commodity swaps* (see 16G)

	Receiving amounts which are unrelated to any <i>commodity's</i> price	Receiving the price of <i>commodity 'b'</i>
Paying amounts which are unrelated to any <i>commodity's</i> price	N/A	Long positions in <i>commodity 'b'</i>

Paying the price of <i>commodity</i> 'a'	Short positions in <i>commodity</i> 'a'	Short positions in <i>commodity</i> 'a' and long positions in <i>commodity</i> 'b'
18	G	Table 17G shows that where the legs of the swap are in different commodities, a series of forward positions are created for each commodity (that is, a series of short positions in commodity 'a' and a series of long positions in commodity 'b').
19	G	Table 17G also covers the case where one leg is unrelated to any commodity's price. This leg may be subject to a PRR under another chapter; for example, an interest rate based leg would have to be included in a bank's interest rate PRR calculation.

Calculating the PRR for each *commodity*

- 20 G A bank should calculate a *PRR* for each *commodity* separately using either the simplified approach (24G) or the maturity ladder approach (25G).
- 21 G A bank need not use the same approach for all *commodities*.
- 22 G A bank should treat positions in different grades or brands of the same *commodity*-class as different *commodities* unless they:
- (1) can be delivered against each other; or
 - (2) have price movements which have exhibited a stable correlation coefficient of at least 0.9 over the last 12 months. The bank should then monitor the correlation on a continuing basis
- 23 G If a bank intends to rely on the approach in 22G(2) it should:
- (1) notify the FSA in writing at least twenty *business days* prior to the date the bank starts relying on it.
 - (2) when it notifies the FSA under (1) the bank should also provide to the FSA the analysis of price movements on which it relies.

SIMPLIFIED APPROACH

- 24 G A bank which calculates PRR using the simplified approach should do so by summing:
- (1) 15% of the net position multiplied by the spot price for the *commodity*; and
 - (2) 3% of the gross position (long plus short, ignoring the sign) multiplied by the spot price for the *commodity*.

MATURITY LADDER APPROACH

- 25 G A bank using the maturity ladder approach should calculate the *PRR* following the steps in 26G and then sum all the spread charges, carry charges and outright charge that result.
- 26 G The bank should calculate the charges referred to in 25G as follows:
- (1) Step 1: Offset long and short positions maturing:
 - (a) on the same day; or
 - (b) (in the case of positions arising under contracts traded in markets with daily delivery dates) within 10 *business days* of each other.
 - (2) Step 2: Allocate the positions remaining after step 1 to the appropriate maturity band in table 28G (*physical commodity* positions are allocated to band 1).
 - (3) Step 3: Match long and short positions within each band. In each instance, calculate a spread charge equal to the matched amount multiplied first by the spot price for the *commodity* and then by the spread rate of 3%.
 - (4) Step 4: Carry unmatched positions remaining after step 3 to another band where they can be matched, then match them. Do this until all matching possibilities are exhausted. In each instance, calculate:
 - (a) a carry charge equal to the carried position multiplied by the spot price for the *commodity*, the carry rate of 0.6% and the number of bands by which the position is carried; and
 - (b) a spread charge equal to the matched amount multiplied by the spot price for the *commodity* and the spread rate of 3%.
 - (5) Step 5: Calculate the outright charge on the remaining positions (which will either be all long positions or all short positions). The outright charge equals the remaining position (ignoring the sign) multiplied by the spot price for the *commodity* and the outright rate of 15%.
- 27 G The matched amount in 26G is the lesser (ignoring the sign) of either the total long position or the total short position. For example, a band with 1000 long and 700 short results in a matched amount of 700. The unmatched amount would be 300.

28 G Table: Maturity bands for the maturity ladder approach (see 26G))

Band	Maturity of position
Band 1	$0 \leq 1$ month
Band 2	> 1 month ≤ 3 months
Band 3	> 3 months ≤ 6 months
Band 4	> 6 months ≤ 1 year
Band 5	> 1 year ≤ 2 years
Band 6	> 2 years ≤ 3 years
Band 7	> 3 years

29 G Figure: An example illustrating the calculation of the PRR on an individual commodity using the maturity ladder approach (26G).

Figure 29G: After a bank has carried out the pre-processing required by 26G(1) (that is, step 1), it follows steps 2 to 5 as shown below. Because the bank is using the maturity ladder approach the spread rate is 3%, the carry rate is 0.6% and the outright rate is 15%. The example assumes that the spot price for the commodity is £25.

Band	Step 2	Step 3	Step 4a	Step 4b	Step 6
	Allocate remaining positions to appropriate maturity bands	Match within bands. Each matched amount incurs a spread charge.	Carry across bands. Each carried amount incurs a carry charge.	Match within band. Each matched amount incurs a spread charge.	Remaining position(s) incur an outright charge.
$0 \leq 1$ month					
>1 month ≤ 3 months	1000 long 700 short	700 matched	300 carried		
>3 months ≤ 6 months					
>6 months ≤ 1 year					
>1 year ≤ 2 years	600 short	Nothing matched		400 matched	200 short remains
>2 years ≤ 3 years			100 carried		
> 3 years	100 long	Nothing matched			
Spread charges		$700 * £25 * 3\% + 400 * £25 * 3\%$		=	£825
Carry charges		$300 * £25 * 0.6\% * 3 + 100 * £25 * 0.6\% * 2$		=	£165
Outright charge		$200 * £25 * 15\%$		=	£750
					£1740

Definitions used in chapter CM

30 G This chapter uses the following definitions:

Defined term	Definition
<i>Base currency</i>	The currency currently used by a firm to calculate its financial resource requirements.
<i>Business days</i>	Any day except Saturday, Sunday, bank holidays and public holidays (not being bank holidays).
<i>CFDs</i>	Means contract for differences.
<i>Commodity</i>	Any physical or energy product (except gold) which is, or can be traded on a secondary market. (NB the definition of commodity used in CM deliberately differs from that in the main Handbook Glossary).
<i>Forward</i>	A contract to buy or sell where the date of settlement has been agreed as a particular date in the future.
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>Non trading book</i>	Items not in the <i>trading book</i> .
<i>Option</i>	A contract which confers the right to buy or sell a <i>security</i> , contractually based investment, currency, gold or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>Physical commodity</i>	The actual <i>commodity</i> , documents of title to actual <i>commodities</i> , or shipping documents conveying actual title to <i>commodities</i> .
<i>PRR</i>	Position risk requirement.
<i>Repurchase agreement</i>	See section 3.2, and 2(b)a) of chapter TC.
<i>Reverse repurchase agreement</i>	See section 3.2, and 2(b)a) of chapter TC.
<i>Stock financing</i>	A transaction where a <i>physical commodity</i> is sold forward and the cost of funding is locked in until the date of the forward sale.
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.
<i>Synthetic future</i>	A combination of a long (short) call <i>option</i> and a short (long) put <i>option</i> which are based on the same underlying and have the same notional amount, strike and maturity.
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.

COUNTERPARTY RISK TREATMENTS COMMON TO THE BANKING AND THE TRADING BOOK

1 INTRODUCTION

1.1 Context

1 This chapter is one of a number that deal with capital adequacy and one of several within those that explain how banks should include counterparty risk within the capital adequacy framework.

See ch BC

The chapter on credit risk in the banking book explains the bulk of the banking book regime and the counterparty risk weights which should be used for both banking and trading book exposures. For a few instruments, the treatment of counterparty risk is the same whether the instruments are held in the banking book or the trading book. These are treated here. Together the two chapters provide an explanation of the whole framework for counterparty risk which is of relevance to non-CAD banks.

See ch TC

Finally, there is guidance which applies only for assets held in the trading book (or where the treatment is different to that applying to such assets when held in the banking book); these are in a separate chapter.

1.2 Legal sources

See ch CO

2 The sources covered in the Legal Sources section of the Capital Adequacy Overview chapter are also relevant to this chapter.

The Capital Adequacy Directive ('CAD' - 93/6/EEC), as amended, is largely concerned with the capital requirements relating to banks' trading books. However, it also amended the treatment of settlement and delivery risk in the banking book, in order to ensure consistent treatment in the banking book and the trading book.

See ch BC s3

3 The risk weightings applying in the trading book are the same as in the banking book, as set down by The Banking Consolidation Directive (formerly the Solvency Ratio Directive). The CAD amended the weightings applying in both banking and trading books to cover investment firms and recognised clearing houses and exchanges.

4 The treatment of OTC derivatives for both trading and banking books is set out in The Banking consolidation Directive (formerly the Solvency Ratio Directive, as amended).

1.3 Application

- 5 This chapter applies to all UK banks.
- a) Banks incorporated elsewhere in the EEA with UK branches are subject to the requirements of the CAD regime as implemented by their home supervisors.
 - b) Overseas banks fall outside the CAD regime.

1.4 How this chapter is organised

- 6 Section 2 states the underlying principles of the FSA's approach.
- Section 3 deals with the calculation and treatment of counterparty risk for OTC derivatives; section 4 deals with that for unsettled transactions and free deliveries.

2 GENERAL PRINCIPLES OF COUNTERPARTY RISK

2.1 Definition

1 In the case of OTC derivatives, unsettled trades and free deliveries, counterparty risk is the risk that at some future date some party, other than the issuer of the security, fails to complete a contract, resulting in a loss to the bank.

2 By their nature, derivative contracts involve a delay between the transaction date and some future date when the contract matures. The time delay creates two types of risk for a bank:

- (a) that the market price will move against the bank, so that when the position matures it will make a loss - *market risk*; and
- (b) that the price will move in the bank's favour, so that it makes a book profit, but that at maturity, it cannot realise that profit because the other party defaults - *counterparty risk*.

See s4

3 For a wider range of contracts than derivatives, a bank may be at risk from a further movement in price if the contract has not settled. Further, if one leg of the contract has been delivered before receipt of the other leg, the bank may be at risk for the whole amount of the contract as well as for any further movement in price.

2.2 General principles

See chs TI, TE,
CM, FX, TO &
TV

4 The bank should hold capital in respect of both market and counterparty risk. This chapter deals with counterparty risk; the treatment of market risk in the trading book is given in the relevant chapters on equity position risk, interest rate position risk, commodity position risk, foreign exchange position risk, option position risk and internal models.

- a) The Banking Consolidation Directive (formerly SRD) and CAD, and the latter's amending Directives, express capital charges in different terms. This difference should not be allowed to confuse the common treatment in this chapter; the underlying method of calculating capital requirements is the same.

5 The counterparty risk is incurred with respect to the trading counterparty, rather than the issuer of the security.

- a) So the counterparty risk weights in this chapter used are those for the trading counterparty.

See ch BC s3

- b) The counterparty weights used throughout this chapter are the same as those used in the banking book, with one exception in the treatment of OTC derivatives.

See ch VA s3 6

All trading book exposures (securities and, if appropriate, collateral) should be marked to market at least once a day.

- a) An exception to this is that cash items which have a residual maturity of one month or less may be exempted. A bank should seek the FSA's agreement to it adopting this practice.
 - i) For these purposes, cash items should be taken to include loans and deposits and also the cash legs of repo and reverse repo transactions.
- b) Banks should not generally enter into contracts at off market prices. If any contracts are undertaken at off market prices banks should contact their line supervisor to discuss the background and agree a reporting treatment. If any contracts are undertaken at off market prices, they should be approved by a bank's credit division or equivalent so that the real credit exposure of a transaction is captured, and the FSA should be contacted to discuss the background and to agree a reporting treatment.

2.3 Collateral

7 When exposures covered by this chapter are collateralised by securities, the risk weight considered to be appropriate is that applicable to the security.

See ch NE

- a) Collateral that may reduce the risk weight applicable to a counterparty exposure is defined in the chapter on netting and collateral.
- b) The collateral should be marked to market daily and an "add-on" (equal to the market value of the collateral multiplied by the relevant risk cushion factor) deducted from the value collateralised

See ch TC s3

- c) The risk cushion factor ("RCF") is as set out in the chapter on trading book counterparty risk.

8 When collateral is received in the form of a guarantee, letter of credit or similar instrument provided by a Zone A bank, but only if that bank would not be considered to be a connected lender if it was making a loan to the recipient of the securities, the appropriate risk weight is that applying to the provider of the collateral.

9 In the event that the guarantor is not a Zone A bank or is a connected bank:

- (a) the trading book capital requirement for the securities lender should be calculated as:

Market value of securities lent x Counterparty risk weight x 8%.

- (b) the banking book risk weighted amount for the securities lender should be calculated as:

Market value of securities lent x Counterparty risk weight.

3 OTC DERIVATIVES

3.1 Scope

1 Banks should apply the treatment of counterparty risk for OTC derivatives set out in this section to all OTC derivatives in the trading book and in the banking book.

a) OTC derivatives are interest rate, foreign exchange rate, equity, precious metals (excluding gold) and other commodities contracts which are not exchange traded.

See ch TC s2

b) The treatment should not apply to written options in either trading or banking book. This is because there is, by definition, no counterparty risk with a written option, the continuing liability being one-way and an asset only for the option holder. If there is an uncollected premium, this should be assessed as a debt; see the relevant chapter.

3.2 General treatment

2 The contribution to risk weighted assets arising from an off-balance sheet contract should be calculated by multiplying its credit equivalent amount ("CEA") by the risk weight attaching to the counterparty to the contract.

See s3.3

a) The replacement cost method - explained below - should be used for calculating the CEA.

b) No CEA is reportable either for contracts traded on exchanges where they are subject to daily margining requirements; or for OTC contracts cleared by a clearing house where the latter acts as the legal counterparty and all participants collateralise on a daily basis; or for OTC foreign exchange contracts (except contracts concerning gold) with an original maturity of 14 calendar days or less.

See ch BC s3

c) The counterparty weights that should be used are the same as those used in the banking book. The sole exception to this is that for OTC derivatives, in both the trading and the banking books, a 50% risk weight should be applied to counterparties which would otherwise attract a 100% weight.

i) This should not apply to repos/reverse repos.

3.3 Replacement cost method

3 The credit equivalent amount of OTC contracts is the sum of:

- (a) the total *replacement cost* of all contracts with a positive value (obtained by 'marking to market'); and
- (b) an amount to capture the potential future credit exposure on all contracts, the add-on.

The add-ons which should be used are shown in the following table:

Type of contract	Residual Maturity of contract		
	<1 Year	>1 & < 5 Years	>5 Years
Interest Rate	0.0%	0.5%	1.5%
Foreign exchange (including Gold)	1.0%	5.0%	7.5%
Equities	6.0%	8.0%	10.0%
Precious Metals (except Gold)	7.0%	7.0%	8.0%
Commodities	10.0%	12.0%	15.0%

- a) These *add-ons* should be calculated by taking a percentage of the notional principal amount of each contract (according to the residual maturity of each contract) and summing the results.
- b) Contracts which do not fall within one of the five categories indicated in the table above should be treated in the same way as contracts concerning commodities. For use of the categories, see next paragraph.
- c) No potential future credit exposure should be calculated for single currency interest rate basis swaps: the credit exposure on these contracts should be evaluated solely on the basis of the replacement cost.
- d) For contracts with multiple exchanges of principal the potential future exposure should be multiplied by the number of payments still to be made under the contract.
- e) When using the replacement cost approach, competent authorities try to ensure that the notional amount to be taken into account is an

appropriate yardstick for the risk inherent in the contract. For example, where the contract provides for the multiplication of cash flows (eg leveraged derivatives), the notional amount should be adjusted to take account of the effect this has on the risk structure.

- f) For contracts that are structured to settle an outstanding exposure following specified payment dates and where the terms are reset such that the mark to market value of the contract is zero on these specified dates, the residual maturity should be set equal to the time until the next reset date. However, in the case of interest rate contracts with a residual maturity of more than one year, the potential future exposure matrix multiplier should be subject to a floor of 0.5% even if there are reset dates of a shorter duration.
- g) Contracts with a negative replacement cost should still be subject to an add-on if there is a possibility of the replacement cost becoming positive before maturity. Written options should therefore be exempt from add-ons.

4 The risk varies with the maturity of the contract and the volatility of the underlying rate or price. When calculating the appropriate add-on for the replacement cost method, contracts should therefore be split into different categories as set out in the following list:

- (a) Interest-rate contracts
 - Single-currency interest rate swaps*
 - Basis swaps*
 - Forward-rate agreements*
 - Interest-rate futures*
 - Interest-rate options purchased*
 - Other contracts of a similar nature.
- (b) Foreign-exchange contracts and contracts concerning gold
 - Cross-currency interest-rate swaps*
 - Forward foreign-exchange contracts*
 - Currency futures*
 - Currency options purchased*
 - Other contracts of a similar nature
 - Contracts concerning gold of a nature similar to those above.

(c) Contracts of a nature similar to those marked '*' above concerning other reference items or indices including:

- Equities
- Precious metals except gold
- Commodities other than precious metals

5 Note that this list is not exhaustive and banks should seek clarification where they are uncertain which category is appropriate for a given contract.

4 UNSETTLED TRANSACTIONS AND FREE DELIVERIES

4.1 Unsettled transactions

4.1.1 *General principles*

1 Whether or not a transaction involving the delivery of an instrument against the receipt of cash attracts a counterparty risk charge during its life, a capital charge should apply in cases of *unsettled transactions* as defined below.

- a) An *unsettled transaction* is one where delivery of the instrument is due to take place against the receipt of cash, but which remains unsettled five business days after the due settlement date.
- b) This section does not apply to repos, reverse repos, stock borrowing and stock lending agreements.
 - i) See the relevant chapters, dependent on whether banking or trading book.
- c) As an example of where this is applicable, if Bank A sells shares in Company C to Bank B and Bank A fails to deliver on time, Bank B should hold capital for counterparty risk on Bank A in addition to capital for specific risk on Company C. This is because if the price moves in Bank B's favour, its profit can only be realised once Bank A has delivered the instruments to Bank B.

See chs BC s4 &
TC s4

2 In principle, banks' systems should be set up in such a manner that, where a deal attracts a counterparty risk charge, this charge continues to apply when settlement is due but has not been completed. Banks are expected to move towards this for all transactions.

3 No capital charges in respect of settlement risk on spot and forward foreign exchange transactions are considered necessary.

4.1.2 *Normal treatment*

4 For both the banking and trading books, *unsettled transactions* should attract a capital cost based upon the difference between the amount due and the current market value of the instrument, if this has a potential loss.

The capital requirement should be this potential loss multiplied by the relevant factor in column 1 of the table below.

- a) This applies only to trades where a loss may arise for the bank if the trade fails to settle.
- b) Note that the capital requirement for such transactions is not multiplied by the counterparty risk weight.

4.1.3 *Alternative treatment*

- 5 With the explicit approval of the FSA, a bank may calculate the capital requirement for the counterparty risk on trading book *unsettled transactions* using column 2 of the table below.

The capital requirement under this treatment is the settlement price multiplied by the relevant factor shown in the table.

- a) Unless a bank accounts for such positions in this way in its own accounts and management information, the FSA would expect the normal treatment to be adopted.
- b) Note that the capital requirement for such transactions is not multiplied by the counterparty risk weight.

Number of working days after due settlement date.	Column 1	Column 2
0 - 4	Nil	Nil
5 - 15	8%	0.5%
16 - 30	50%	4%
31 - 45	75%	9%
46 or more	100%	100%

4.2 **Free deliveries**

- 6 For *free deliveries* in both the banking and trading books, an immediate exposure arises where a bank has settled its side of the transaction but has yet to receive the countervalue.

- a) A *free delivery* occurs when a bank has paid away (or received) its side of a transaction and has yet to receive (or pay away) the securities/cash concerned.

- b) The bank having made the delivery will be deemed to have a claim on the other party of the amount of the cash or equivalent to the current market value of the securities, whichever is still outstanding.
- c) For example, if Bank A sells shares in Company C to Bank B and if Bank B pays for the shares immediately and Bank A is to deliver at some future date, Bank B should hold capital for counterparty risk on Bank A in addition to capital for specific risk on Company C. This is because Bank B is exposed for the whole amount of the value of the shares to Bank A until delivery takes place.

7 The capital requirement for free deliveries should be calculated as follows:

- in the trading book, it should be the counterparty claim multiplied by the counterparty risk weight multiplied by 8%;
- in the banking book, the risk weighted amount should be the counterparty claim multiplied by the counterparty risk weight.
 - a) This treatment should be applied to exchange traded contracts involving physical delivery.
 - b) No capital charges in respect of delivery risk on spot and forward foreign exchange transactions are considered necessary.
 - c) Where the transaction is effected across a national border, the FSA considers that there is a window of one working day before the exposure should be included.

Interest rate PRR

General

- 1 G A UK bank to which CAD applies should apply this chapter and calculate its interest rate *PRR* by:
 - (1) identifying which positions should be included within the *PRR* calculation;
 - (2) deriving the net position in each debt *security* in accordance with 37G - 41G;
 - (3) including these net positions in the *PRR* calculation for general market risk and the *PRR* calculation for specific risk; and
 - (4) summing all *PRRs* calculated for general market risk and specific risk.

- 2 G The interest rate *PRR* calculation divides the interest rate risk into the risk of loss from a general move in market interest rates, and the risk of loss from an individual debt *security's* price changing for reasons other than a general move in market interest rates. These are called general market risk and specific risk respectively.

Scope of the Interest rate PRR calculation

- 3 G A bank's interest rate *PRR* calculation should:
 - (1) include all *trading book* positions in debt *securities*, *preference securities* and *convertibles*, except:
 - (a) positions in *convertibles* which have been included in the bank's *PRR* calculation for *equities* under chapter TE;
 - (b) positions fully deducted from capital under 2(c) of section 10.2 of chapter CA, in which case the bank may exclude them; or
 - (c) positions hedging an *option* which is being treated under 26G of chapter TO; and
 - (2) include notional positions arising from *trading book* positions in the instruments listed in table 4G.

- 4 G Table: Instruments which result in notional positions (see 3G(2))

Instrument	See
<i>Futures, forwards</i> or <i>synthetic futures</i> on debt <i>securities</i>	13G
<i>Futures, forwards</i> or <i>synthetic futures</i> on debt indices or baskets	14G
Interest rate <i>futures</i> or <i>forward rate agreements (FRAs)</i>	18G
Interest rate <i>swaps</i> or foreign exchange <i>swaps</i>	21G

Deferred start interest rate <i>swaps</i> or foreign exchange <i>swaps</i>	24G
The interest rate leg of an <i>equity swap</i> (unless the bank calculates a <i>PRR</i> on the instrument using the basic interest rate <i>PRR</i> calculation in chapter TE)	27G
The cash leg of a <i>repurchase agreement</i> or a <i>reverse repurchase agreement</i>	30G
Cash borrowings or deposits	31G
<i>Options</i> or <i>warrants</i> on a debt <i>security</i> , interest rate or interest rate <i>future</i> or <i>swap</i> or on a <i>future</i> on a debt <i>security</i> (unless the bank calculates a <i>PRR</i> on the <i>option</i> under chapter TO)	32G
Dual currency bonds	33G
Foreign exchange <i>futures</i> or <i>forwards</i>	34G
Gold <i>futures</i> or <i>forwards</i>	34G
<i>Forwards</i> , <i>futures</i> or <i>options</i> (except cliquets) on an <i>equity</i> , basket of <i>equities</i> or <i>equity</i> index (unless the bank calculates a <i>PRR</i> on the instrument using the basic interest rate <i>PRR</i> calculation in chapter TE)	34G
Credit derivatives	Chapter CD

- 5 G 3G(1) includes a *trading book* position in debt *security*, *preference security* or *convertible* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *security* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *security* would not have been included in the *PRR* calculation in the first place.
- 6 G 3G(1) includes net *underwriting* positions or reduced net *underwriting* positions in debt *securities*.
- 7 G Banks are reminded that table 5G in chapter TO divides *options* or *warrants* on interest rates, debt *securities*, interest rate *futures* and *swaps* into:
- (1) those which should be treated under chapter TO; and
 - (2) those which should be treated under either chapter TI or chapter TO, but banks can choose whether chapter TI or TO is used.
- 8 G Cliquets on *equities*, baskets of *equities* or *equity* indices do not attract an interest rate *PRR*. Table 4G excludes them from the scope of the interest rate *PRR* calculation in this chapter, and 42G of chapter TE excludes them from the basic interest rate *PRR* calculation in that chapter.

- 9 G Table 4G shows that *equity derivatives* are excluded from this chapter's *PRR* calculation if they have been included in the basic interest rate *PRR* calculation in chapter TE (see 42G of chapter TE).

Derivation of notional positions

GENERAL APPROACH

- 10 G This section converts the instruments listed in table 4G into notional positions in:
- (1) the underlying debt *security*, where the instrument depends on the price (or yield) of a specific debt *security*; and/or
 - (2) hypothetical debt *securities* to capture the pure interest rate risk arising from future payments and receipts of cash (including notional payments and receipts). Because they are designed to represent pure general market risk (and not specific risk) they are called *zero-specific-risk securities*.
- 11 G For the purposes of calculating *PRR*, unless specified otherwise, a bank should derive the value of notional positions as follows:
- (1) notional positions in actual debt *securities* should be valued as the nominal amount underlying the contract at the current market price of the debt *security*; and
 - (2) positions in *zero-specific-risk securities* should be valued using one of the two following methods. A bank should use the same method for all positions denominated in the same currency:
 - (a) Present value approach: The *zero-specific-risk security* is assigned a value equal to the present value of all the future cash flows that it represents.
 - (b) Alternative approach: The *zero-specific-risk security* is assigned a value equal to:
 - (i) the market value of the underlying notional *equity* position in the case of an *equity derivative*;
 - (ii) the notional principal amount in the case of an interest rate or foreign exchange *swap*; or
 - (iii) the notional amount of the future receipt or payment that it represents in the case of any other instrument.
- 12 G A bank should use 11G(2)(a) in respect of any positions that it includes in the duration method calculation of general market risk (see 60G).

FUTURES OR FORWARDS ON A DEBT SECURITY

- 13 G *Futures* or *forwards* on a single debt *security* should be treated as follows:

- (1) A purchased *future* or *forward* is treated as:
 - (a) a notional long position in the underlying debt *security* (or the cheapest to deliver (taking into account the conversion factor) where the contract can be satisfied by delivery of one from a range of *securities*); and
 - (b) a notional short position in a zero coupon *zero-specific-risk security* with a maturity equal to the expiry date of the *future* or *forward*.
- (2) A sold *future* or *forward* is treated as:
 - (a) a notional short position in the underlying *security* (or the cheapest to deliver (taking into account the conversion factor) where the contract can be satisfied by delivery of one from a range of *securities*); and
 - (b) a notional long position in a zero coupon *zero-specific-risk security* with a maturity equal to the expiry date of the *future* or *forward*.

FUTURES OR FORWARDS ON A BASKET OR INDEX OF DEBT SECURITIES

- 14 G *Futures* or *forwards* on a basket or index of debt *securities* should be converted into *forwards* on single debt *securities* as follows (and then the resulting positions are treated under 13G).
 - (1) *Futures* or *forwards* on a single currency basket or index of debt *securities* should be treated as either:
 - (a) a series of *forwards*, one for each of the constituent debt *securities* in the basket or index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant debt *security* in the basket; or
 - (b) a single *forward* on a hypothetical debt *security*.
 - (2) *Futures* or *forwards* on multiple currency baskets or indices of debt *securities* should be treated as either:
 - (a) a series of *forwards* (using the method described in (1)(a)); or
 - (b) a series of *forwards*, each one on a hypothetical debt *security* to represent one of the currencies in the basket or index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant currency in the basket.
- 15 G Under 14G(2)(b), a *forward* on basket of 3 Euro denominated debt *securities* and 2 Dollar denominated debt *securities* would be treated as a *forward* on a single hypothetical Euro denominated debt *security* and a *forward* on a single hypothetical Dollar denominated debt *security*.

- 16 G The hypothetical debt *securities* in 14G are assigned a specific risk *PRA* and a general market risk *PRA* equal to the highest that would apply to the debt *securities* in the basket or index.
- 17 G The debt *security* with the highest specific risk *PRA* within the basket might be a different debt *security* to that with the highest general market risk *PRA*. When following 16G, a bank would select the highest percentages even where they relate to different debt *securities* in the basket or index, and regardless of the proportion of those debt *securities* in the basket or index.

INTEREST RATES FUTURES AND FORWARD RATE AGREEMENTS (FRAS)

- 18 G Interest rate *futures* or *FRAs* should be treated as the two notional positions (one long, one short) shown in table 19G.
- 19 G Table: Interest rate *futures* and *FRAs* (see 18G)

	1	2
	A short position in a zero coupon <i>zero-specific-risk-security</i>	A long position in a zero coupon <i>zero-specific-risk-security</i>
Where the bank buys an interest rate <i>future</i> or sells an <i>FRA</i>	Maturity equals the expiry date of the <i>future</i> (or settlement date of the <i>FRA</i>)	Maturity equals the expiry date of the <i>future</i> (or settlement date of the <i>FRA</i>) plus the maturity of the borrowing/deposit
Where the bank sells an interest rate <i>future</i> or buys an <i>FRA</i>	Maturity equals the expiry date of the <i>future</i> (or settlement date of the <i>FRA</i>) plus the maturity of the borrowing/deposit	Maturity equals the expiry date of the <i>future</i> (or settlement date of the <i>FRA</i>)
20	G	The following example illustrates 18G and table 19G in conjunction with 11G (the latter guidance determines the value of notional positions). A bank sells £1mn notional of a 3v6 <i>FRA</i> at 6%. This results in:

- (1) a short position in a *zero-specific-risk-security* with a zero coupon, three month maturity, and a nominal amount of £1mn; and
- (2) a long position in a *zero-specific-risk-security* with a zero coupon, six month maturity, and nominal amount of £1,015,000 (i.e. notional plus interest at 6% over 90 days)

If a bank were to apply the approach in 11G(2)(a), the two nominal amounts would have to be present valued.

INTEREST RATE SWAPS OR FOREIGN EXCHANGE SWAPS

- 21 G Interest rate *swaps* or foreign exchange *swaps* without deferred starts should be treated as the two notional positions (one long, one short) shown in table 22G:
- 22 G Table: Interest rate and foreign exchange *swaps* (see 21G)

	1. Paying leg A short position in a zero-specific-risk security	2. Receiving leg A long position in a zero-specific-risk security
Receiving fixed and paying floating	coupon equals the floating rate and maturity equals the reset date	Coupon equals the fixed rate of the <i>swap</i> and maturity equals the maturity of the <i>swap</i>
Paying fixed and receiving floating	coupon equals the fixed rate of the <i>swap</i> and maturity equals the maturity of the <i>swap</i>	Coupon equals the floating rate and maturity equals the reset date
Paying floating and receiving floating	coupon equals the floating rate and maturity equals the reset date	Coupon equals the floating rate and maturity equals the reset date
23	G	For a foreign exchange swap, the two notional zero-specific-risk securities would be denominated in different currencies. A foreign exchange swap is also included in the foreign exchange PRR calculation.

DEFERRED START INTEREST RATE SWAPS OR FOREIGN EXCHANGE SWAPS

- 24 G Interest rate *swaps* or foreign exchange *swaps* with a deferred start should be treated as the two notional positions (one long, one short) shown in table 25G.
- 25 G Table: Deferred start interest rate and foreign exchange *swaps* (see 24G)

	1. Paying leg A short position in a zero-specific-risk security with a coupon equal to the fixed rate of the swap	2. Receiving leg A long position in a zero-specific-risk security with a coupon equal to the fixed rate of the swap
Receiving fixed and paying floating	maturity equals the start date of the <i>swap</i>	maturity equals the maturity of the <i>swap</i>

Paying fixed and receiving floating	maturity equals the maturity of the <i>swap</i>	maturity equals the start date of the <i>swap</i>
26	G	For example, a bank enters into a five year swap which starts in two year's time. The bank has contracted to receive 6% and pay six month Libor on a principal amount of £1mn. This results in a long position in a 7 year debt security and a short position in a 2 year debt security. Both have a coupon of 6%.

SWAPS WHERE ONLY ONE LEG IS AN INTEREST RATE LEG (E.G. EQUITY SWAPS)

- 27 G A bank should treat a *swap* with only one interest rate leg as a notional position in a *zero-specific-risk security*:
- (1) with a coupon equal to that on the interest rate leg;
 - (2) with a maturity equal to the date that the interest rate will be reset; and
 - (3) which is a long position if the bank is receiving interest payments and short if making interest payments.
- 28 G 27G includes *equity swaps*, *commodity swaps* and any other *swap* where only one leg is an interest rate leg.

CASH LEGS OF REPURCHASE AGREEMENTS AND REVERSE REPURCHASE AGREEMENTS

- 29 G Bank's are reminded that for the purposes of 30G, a *repurchase agreement* includes a sell/buy back or stock lending; and a *reverse repurchase agreement* includes a buy/sell back or a stock borrowing.
- 30 G The forward cash leg of a *repurchase agreement*; or *reverse repurchase agreement* should be treated as a notional position in a *zero-specific-risk security* which:
- (1) is a short notional position in the case of a *repurchase agreement*; and a long notional position in the case of a *reverse repurchase agreement*;
 - (2) has a value equal to the market value of the cash leg;
 - (3) has a maturity equal to that of the *repurchase agreement* or *reverse repurchase agreement*; and
 - (4) has a coupon equal to:
 - (a) zero, if the next interest payment date coincides with the maturity date; or

- (b) the interest rate on the contract, if any interest is due to be paid before the maturity date.

CASH BORROWINGS AND DEPOSITS

- 31 G A cash borrowing or deposit should be treated as a notional position in a zero coupon *zero-specific-risk security* which:
- (1) is a short position in the case of a borrowing and a long position in the case of a deposit;
 - (2) has a value equal to the market value of the borrowing or deposit;
 - (3) has a maturity equal to that of the borrowing or deposit, or the next date the interest rate is reset (if earlier); and
 - (4) has a coupon equal to:
 - (a) zero, if the next interest payment date coincides with the maturity date; or
 - (b) the interest rate on the borrowing or deposit, if any interest is due to be paid before the maturity date.

OPTIONS AND WARRANTS

- 32 G Where included in this chapter's *PRR* calculation (see table 4G), *options* and *warrants* should be treated as follows:
- (1) An *option* or *warrant* on a debt *security* should be treated as a position in that debt *security*.
 - (2) An *option* on an interest rate should be treated as a position in a zero coupon *zero-specific-risk security* with a maturity equal to the sum of the time to expiry of the *option* and the length of the period for which the interest rate is fixed.
 - (3) An *option* on an *future* – where the *future* is based on an interest rate or debt *security* – should be treated as:
 - (a) a long position in that *future* for purchased call *options* and written put *options*; and
 - (b) a short position in that *future* for purchased put *options* and written call *options*.
 - (4) An *option* on a *swap* should be treated as a deferred starting *swap*.

BONDS WHERE THE COUPONS AND PRINCIPAL ARE PAID IN DIFFERENT CURRENCIES

- 33 G Where a debt *security* pays coupons in one currency, but will be redeemed in a different currency, it should be treated as:

- (1) a debt *security* denominated in the coupon's currency; and
- (2) a foreign exchange *forward* to capture the fact that the debt *security's* principal will be repaid in a different currency from that in which it pays coupons, specifically:
 - (a) a notional forward sale of the coupon currency and purchase of the redemption currency, in the case of a long position in the debt *security*; or
 - (b) a notional forward purchase of the coupon currency and sale of the redemption currency, in the case of a short position in the debt *security*.

INTEREST RATE RISK ON OTHER FUTURES, FORWARDS AND OPTIONS

- 34 G Other *futures, forwards, options* and *swaps* should be treated as positions in *zero-specific-risk securities*, each of which:
- (1) has a zero coupon;
 - (2) has a maturity equal to that of the relevant contract; and
 - (3) is long or short according to table 35G.

- 35 G Table: Interest rate risk on other *futures, forwards, options* and *swaps* (see 34G).

Instrument	Notional positions	
Foreign exchange <i>forward</i> or <i>future</i>	a long position denominated in the currency purchased	and a short position denominated in the currency sold

<p>Gold <i>forward</i> or <i>future</i></p>	<p>a long position if the <i>forward</i> or <i>future</i> involves an actual (or notional) sale of gold</p>	<p>or</p>	<p>a short position if the <i>forward</i> or <i>future</i> involves an actual (or notional) purchase of gold</p>
<p><i>Equity forward</i> or <i>future</i>, or <i>option</i> (unless a <i>PRR</i> is calculated under the basic interest rate calculation in chapter TE)</p>	<p>A long position if the contract involves an actual (or notional) sale of the underlying <i>equity</i></p>	<p>or</p>	<p>A short position if the contract involves an actual (or notional) purchase of the underlying <i>equity</i></p>

Deriving the net position in each debt security

- 36 G The net position is the difference between the value of the bank’s long positions (including notional positions) and the value of its short positions (including notional positions) in the same debt *security*.

NETTING POSITIONS IN THE SAME DEBT SECURITY

- 37 G A bank should not net positions (including notional positions) unless:
- (1) long and short positions are in the same debt *security*, and a debt *security* is the same as another if and only if:
 - (a) they enjoy the same rights in all respects; and
 - (b) are fungible with each other; or
 - (2) long and short positions are in different tranches of the same debt *security*, where the tranches:
 - (a) enjoy the same rights in all respects; and
 - (b) become fungible within 180 days, and thereafter the debt *security* of one tranche can be delivered in settlement of the other tranche.

NETTING THE CHEAPEST TO DELIVER SECURITY WITH OTHER DELIVERABLE SECURITIES

- 38 G A bank may net a short notional position in the cheapest to deliver *security* arising from a short *future* or *forward* (see 13G(2)(a)) against a long position in any deliverable *security* up to a maximum of 90% of the common nominal amounts. The residual long and short nominal amounts should be treated as separate long and short positions.
- 39 G The netting permitted by 38G only relates to where the bank has sold the *future* or *forward*. It does not relate to where the bank has bought a *future* or *forward*.

NETTING ZERO-SPECIFIC-RISK SECURITIES WITH DIFFERENT MATURITIES

- 40 G A bank may net a notional long position in a *zero-specific-risk security* against a notional short position in a *zero-specific-risk security* if:
- (1) they are denominated in the same currency;
 - (2) their coupons do not differ by more than 15 basis points; and
 - (3) they mature:
 - (a) on the same day, if they have residual maturities of less than one month;
 - (b) within seven days of each other, if they have residual maturities of between one month to one year; and
 - (c) within thirty days of each other, if they have residual maturities in excess of one year.

REDUCED NET UNDERWRITING POSITIONS IN DEBT SECURITIES

- 41 G A bank should not net a reduced net *underwriting* position in a debt *security* with any other debt *security* position.
- 42 G 41G only relates to reduced net *underwriting* positions.

Specific risk calculation

- 43 G A bank should calculate the specific risk *PRR* for each debt *security* by:
- (1) multiplying the market value of the individual net position (ignoring the sign) by the appropriate *PRA* from table 44G; and
 - (2) converting this amount into the bank's *base currency* at prevailing spot foreign exchange rates.
- 44 G Table: specific risk *PRAs* (see 43G).

Issuer	Residual maturity	<i>PRA</i>
An issue of, or fully guaranteed by, or fully collateralised by a <i>Zone A</i> central government or central bank or the European Communities	Any	0%
An issue of, or fully guaranteed by, a <i>Zone B</i> central government or central bank denominated in the local currency	Zero to 12 months	0%

Other <i>qualifying debt securities</i> (see 46G)	Zero to 6 months	0.25%
	6 to 24 months	1%
	Over 24 months	1.6%
Non- <i>qualifying debt securities</i>	Any	8%
45	G	43G includes both actual and notional positions. However, notional positions in zero-specific-risk securities do not attract specific risk. For example:

- (1) Interest rate *swaps*, foreign exchange *swaps*, *FRAs*, interest rate *futures*, foreign exchange *forwards*, foreign exchange *futures*, and the cash leg of *repurchase agreements* and *reverse repurchase agreements* create notional positions which will not attract specific risk; whilst
- (2) *Futures*, *forwards* and *swaps* which are based on the price (or yield) of one or more debt *securities* will create at least one notional position that attracts specific risk.

DEFINITION OF A QUALIFYING DEBT SECURITY

46 G A debt *security* is a *qualifying debt security* if:

- (1) it attracts zero specific risk under table 44G; or
- (2) it is issued by, or fully guaranteed by:
 - (a) a *Zone B* central government or central bank and the *security* is denominated in the local currency of the issuer;
 - (b) a multilateral development bank listed in 3.2.4 of chapter BC
 - (c) a *Zone A* public sector entity;
 - (d) a company whose *equity* is a constituent of one of the indices making up the FTSE All-World Index; or

- (e) an issue of, or fully guaranteed by an *investment firm* or *recognised third-country investment firm*.
- (3) it is issued by, fully guaranteed by, endorsed or accepted by:
 - (a) a credit institution incorporated in a *Zone A* country; or
 - (b) a credit institution incorporated in a *Zone B* country and the debt *security* has a residual maturity of one year or less.
- (4) it is a mortgage backed security which meets the criteria in 7e of section 3.2.5 of chapter BC.
- (5) it is rated by at least one of the agencies shown in table 47G, and every such rating equals or exceeds the corresponding minimum shown in that table.

47 G Table: minimum ratings for *qualifying debt securities* (see 46G(5)).

Issuer	Rating agency	Minimum Rating	
		<i>Securities</i>	Money Market Obligations
Any	Moody's Investors Service	Baa3	P3
	Standard & Poor's Corporation	BBB-	A3
	FITCH Ratings Ltd	BBB-	F-3
Canadian	Canadian Bond Rating Service	B++low	A-3
	Dominion Bond Rating Service	BBB low	R-2
Japanese	Japan Credit Rating Agency, Ltd	BBB-	J-2
	Mikuno & Co	BBB	M-3
	Japan Rating & Investment Information Inc	BBB-	a-2

General market risk calculation

- 48 G A bank should calculate the general market risk *PRR* for each currency using either:
 - (1) the simplified maturity method;
 - (2) the maturity method; or
 - (3) the duration method (subject to 50G).
- 49 G A bank should convert all general market risk *PRRs* into its *base currency* using prevailing foreign exchange spot rates.
- 50 G A bank should not use the duration method for index-linked *securities*. Instead, these *securities* should:

- (1) be attributed a coupon of 3%; and
- (2) treated separately under either the simplified maturity method or the maturity method.

SIMPLIFIED MATURITY METHOD

- 51 G The simplified maturity method weights individual net positions to reflect their price sensitivity to changes in interest rates. The weights are related to the coupon and the residual maturity of the instrument (or the next interest rate re-fix date for floating rate items).
- 52 G Under the simplified maturity method, the *PRR* for general market risk equals the sum of each individual net position (long or short) multiplied by the appropriate *PRA* in table 53G.
- 53 G Table: general market risk *PRAs* (see 52G).

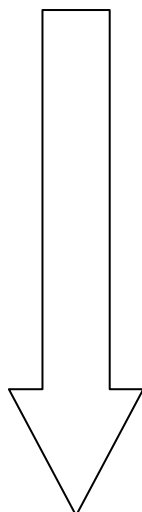
Zone	Maturity band		<i>PRA</i>
	Coupon of 3% or more	Coupon of less than 3%	
One	0 ≤ 1month	0 ≤ 1month	0.00%
	> 1 ≤ 3months	> 1 ≤ 3months	0.20%
	> 3 ≤ 6 months	> 3 ≤ 6 months	0.40%
	> 6 ≤ 12 months	> 6 ≤ 12 months	0.70%
Two	> 1 ≤ 2 years	> 1.0 ≤ 1.9 years	1.25%
	> 2 ≤ 3 years	> 1.9 ≤ 2.8 years	1.75%
	> 3 ≤ 4 years	> 2.8 ≤ 3.6 years	2.25%
Three	> 4 ≤ 5 years	> 3.6 ≤ 4.3 years	2.75%
	> 5 ≤ 7 years	> 4.3 ≤ 5.7 years	3.25%
	> 7 ≤ 10 years	> 5.7 ≤ 7.3 years	3.75%
	> 10 ≤ 15 years	> 7.3 ≤ 9.3 years	4.50%
	> 15 ≤ 20 years	> 9.3 ≤ 10.6 years	5.25%
	> 20 years	> 10.6 ≤ 12.0 years	6.00%
		> 12.0 ≤ 20.0 years	8.00%
		> 20 years	12.50%

THE MATURITY METHOD

- 54 G The maturity method builds on the simplified maturity method by partially recognising offsetting positions. 57G provides an illustration of the maturity method.
- 55 G Under the maturity method, the *PRR* for general market risk is calculated as follows:
 - (1) Step 1: each net position is allocated to the appropriate maturity band in table 53G and multiplied by the corresponding *PRA*.
 - (2) Step 2: weighted long and short positions are matched within:
 - (a) the same maturity band;

- (b) the same zone (using unmatched positions from (a)); and
 - (c) different zones (using unmatched positions from (b)).
- (3) Step 3: the *PRR* for general market risk is the sum of:
- (a) 10% of the total amount matched within maturity bands;
 - (b) 40% of the amount matched within zone 1 under (2)(b);
 - (c) 30% of the amount matched within zones 2 & 3 under (2)(b);
 - (d) 40% of the amounts matched between zones 1 and 2, and between zones 2 and 3;
 - (e) 150% of the amount matched between zones 1 and 3; and
 - (f) 100% of the weighted positions remaining unmatched after (2)(c);
- 56 G Table 53G distinguishes between debt *securities* with a coupon of less than 3% and those with coupon in excess of 3%. However, this doesn't mean that the bank has to do a separate general market risk calculation for each, it merely ensures that when allocating debt *securities* to a particular band, their coupons are taken into account as well as their maturities. So for example, a 21 year 6% debt *security* falls into the same band as an 11 year 2% debt *security*. They are both weighted at 6%, and can be matched under the first part of step two because they fall within the same band.
- 57 G An example of the maturity method calculation. In this example, a bank with a £ sterling base currency is processing its euro denominated positions.

Weight each position



Zone	Totals of:		PRA		Weighted longs within each band	Weighted shorts within each band
	net longs within the band	net shorts within the band				
1	€100	€50	0.00%		0	0
	€250	€0	0.20%		0.50	0
	€200	€0	0.40%		0.80	0
	€0	€0	0.70%		0	0
2	€140	€0	1.25%		1.75	0
	€200	€300	1.75%		3.50	5.25
	€0	€400	2.25%		0	9
3	€0	€0	2.75%		0	0
	€200	€200	3.25%		6.50	6.50
	€300	€0	3.75%		11.25	0
	€200	€300	4.50%		9	13.50
	€0	€14.30	5.25%		0	0.75
	€300	€0	6.00%		18.00	0
	€0	€0	8.00%		0	0
€0	€0	12.50%		0	0	
same band			same zones		different zones	
Long	Short		Long	Short	Long	Short
0.50			0.50		1.30	
0.80			0.80			
15						

Match weighted positions

Calculate the general market risk

1.75			1.75				
3.50	←→	5.25		←→	1.75		
		9					9.00
6.50	←→	6.50					
11.25			11.25				
9	←→	13.50		←→	4.50		
		0.75			←→	0.75	
18.00			18.00				

	19 matched		7 matched		9 matched		
Matched within bands		19	@	10%	=	1.9	
Matched within zone 1		0	@	40%	=	0	
Matched within zones 2&3		7	@	30%	=	2.1	
Matched between zones 1&2 and 2&3		9	@	40%	=	3.6	
Matched between zones 1&3		0	@	150%	=	0	
Unmatched after 2(c)		16.30	@	100%	=	16.30	
total = € 23.90							
general market risk PRR (if €1=£0.60) = £14.34							

DURATION METHOD

- 58 G The duration method produces a more accurate measure of interest rate risk than the maturity methods but it is also more complex to calculate.
- 59 G Banks should use the following formula to calculate modified duration:

$$\text{Modified Duration} = \frac{D}{(1+r)}$$

$$D = \frac{\sum_{t=1}^m \frac{tC_t}{(1+r)^t}}{\sum_{t=1}^m \frac{C_t}{(1+r)^t}}$$

Where: C_t = cash payment at time t
 m = total maturity
 r = yield to maturity, based on the current mark to market of the debt *security*. In the case of a floating rate instrument, this is calculated on the assumption that the principal is due on the date that the interest rate can next be changed
 t = time

- 60 G Under the duration method, the PRR for general market risk is calculated as follows:
 - (1) Step 1: allocate each net position to the appropriate duration zone in table 61G and multiply it by:
 - (a) its modified duration (using the formula in 59G); and
 - (b) the appropriate assumed interest rate change in table 61G.
 - (2) Step 2: match weighted long and short positions:

- (a) within timebands;
 - (b) within zones (using unmatched positions from (2)(a)); and
 - (c) across zones (using unmatched positions from (2)(b));
- (3) Step 3: calculate the general market risk as the sum of:
- (a) 100% of the weighted positions remaining unmatched after (2)(c);
 - (b) 5% of the matched weighted position in each timeband;
 - (c) 40% of the matched weighted position in zone 1;
 - (d) 30% of the matched weighted position in zones 2 and 3;
 - (e) 40% of the matched weighted position between zones 1 and 2, and between zones 2 and 3; and
 - (f) 150% of the matched weighted position between zones 1 and 3.

61 G Table: Assumed interest rate change in the duration method (see 60G).

Zone	Modified Duration	Assumed interest rate change (percentage points)
1	$0 \leq 1$ months	1.00
	$> 1 \leq 3$ months	1.00
	$> 3 \leq 6$ months	1.00
	$> 6 \leq 12$ months	1.00
2	$> 1.0 \leq 1.9$ years	0.90
	$> 1.9 \leq 2.8$ years	0.85
	$> 2.8 \leq 3.6$ years	0.85
3	$> 3.6 \leq 4.3$ years	0.75
	$> 4.3 \leq 5.7$ years	0.70
	$> 5.7 \leq 7.3$ years	0.70
	$> 7.3 \leq 9.3$ years	0.70
	$> 9.3 \leq 10.6$ years	0.70
	$> 10.6 \leq 12$ years	0.70
	$> 12.0 \leq 20$ years	0.70
	> 20 years	0.70

Definitions used in chapter TI

62 G This chapter uses the following definitions:

Defined term	Definition
<i>Base currency</i>	The currency in which the bank's accounts are prepared.
<i>Commodity</i>	Any physical or energy product (except gold) which is, or can be traded on a secondary market. (NB the definition of commodity used in TI deliberately differs from that in the main Handbook Glossary).
<i>Convertible</i>	A <i>security</i> which gives the investor the right to convert the <i>security</i>

	into <i>equity</i> at an agreed price or on an agreed basis.
<i>Derivative</i>	<i>Options, futures</i> and contracts for differences.
<i>Equity</i>	See <i>share</i> .
<i>Forward</i>	A contract to buy or sell where the date of settlement has been agreed as a particular date in the future.
<i>Forward rate agreement</i>	An agreement in which two parties agree on the payment by one party to another of an amount of interest based on an agreed interest rate for a specified period from a specified settlement date applied to an agreed principal amount; no commitment is made by either party to lend or borrow the principal amount; their exposure is only the interest difference between the agreed and actual rates at settlement.
<i>FRA</i>	<i>Forward rate agreement</i> .
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>Investment firm</i>	As defined in section 1 of chapter CB.
<i>Option</i>	A contract which confers the right to buy a <i>security</i> , contractually based investment or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>Preference securities</i>	A share with rights, in respect of capital and dividends, superior to those of ordinary <i>equity</i> .
<i>PRA</i>	Percentage risk addition.
<i>PRR</i>	Position risk requirement.
<i>Qualifying debt security</i>	As defined in 46G.
<i>Recognised third country investment firm</i>	An <i>investment firm</i> which is subject to the prudential rules of one of the regulators listed in appendix C to chapter CS.
<i>Repurchase agreement</i>	See section 3.2, 2(b)a) of chapter TC.
<i>Reverse repurchase agreement</i>	See section 3.2, 2(b)a) of chapter TC.
<i>Security</i>	As defined in article 3(1) of the Regulated Activities Order.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.
<i>Synthetic future</i>	A combination of a long (short) call <i>option</i> and a short (long) put <i>option</i> which are based on the same underlying and have the same notional amount, strike and maturity.
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.
<i>Underwriting</i>	The arrangement under which a party agrees to buy, before issue, a specified quantity of securities in an issue of securities on a given date and at a given price, if no other has purchased or acquired them.
<i>Zero-specific-risk securities</i>	A hypothetical debt <i>security</i> used to represent the general interest rate risk arising from certain <i>derivative</i> and <i>forward</i> transactions.
<i>Warrant</i>	The investment specified in article 79 of the Regulated Activities Order (Instruments giving entitlement to investments).
<i>Zone A</i>	As defined in section 3.2.8 of chapter BC.

<i>Zone B</i>	As defined in section 3.2.8 of chapter BC.
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TE

Equity PRR

General

- 1 G A UK bank to which CAD applies should apply this chapter and calculate its *equity PRR* by:
- (1) identifying which *equity* positions should be included within the scope of the *PRR* calculation (see 2G);
 - (2) deriving the net position in each *equity* in accordance with 22G -25G;
 - (3) including each of those net positions in either the simplified equity method (see 29G) or, subject to 27G, the standard equity method (see 32G); and
 - (4) summing the *PRR* on each net position as calculated under the simplified and standard equity methods.

Scope of the Equity PRR calculation

- 2 G A bank's *equity PRR* calculation should:
- (1) include all *trading book* positions in *equities*, unless:
 - (a) the position is fully deducted from capital under 2(c) of section 10.2 of chapter CA, in which case the bank may exclude it;
 - (b) the position is hedging an *option* or *warrant* which is being treated under 26G of chapter TO; and
 - (2) include notional positions arising from *trading book* positions in the instruments listed in table 3G.
- 3 G Table: Instruments which result in notional positions (see 2G(2))

Instrument	See
Depository receipts	12G
<i>Convertibles</i> where:(a) the <i>convertible</i> is trading at a market price of less than 110% of the underlying <i>equity</i> ; and the first date at which conversion can take place is less than three months ahead, or the next such date (where the first has passed) is less than a year ahead; or (b) the conditions in (a) are not met but the bank includes the <i>convertible</i> in its <i>equity PRR</i> calculation rather than including it in its interest rate <i>PRR</i> calculation set out in chapter TI.	13G
<i>Futures, forwards, CFDs</i> and <i>synthetic futures</i> on a single <i>equity</i>	14G
<i>Futures, forwards, CFDs</i> and <i>synthetic futures</i> on a basket of <i>equities</i> or an <i>equity</i> index	15G

<i>Equity legs of an equity swap</i>	19G
<i>Options or warrants on a single equity, an equity future, a basket of equities or an equity index (unless the bank calculates a PRR on the option or warrant under chapter TO).</i>	21G

- 4 G 2G(1) includes a *trading book* position in an *equity* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *equity* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *equity* would not have been included in the *trading book* in the first place.
- 5 G 2G(1) includes net *underwriting* positions, or reduced net *underwriting* positions in *equities*. 27G requires banks to use the simplified equity method in the case of reduced net *underwriting* positions. In the case of net *underwriting* positions that haven't been reduced according to 24G of chapter TU, there is no such restriction; a bank can choose which of the two equity methods to use.
- 6 G Banks are reminded that table 5G in chapter TO divides *equity options* and *warrants* into:
- (1) those which should be treated under chapter TO; and
 - (2) those which should be treated under either chapter TE or chapter TO, but banks can choose whether chapter TE or TO is used.
- 7 G Under table 3G, not every *convertible* need be included in this chapter's *PRR* calculation. Where a *convertible* is not included in this chapter's *PRR* calculation, 3G(1)(a) of chapter TI states that it should be included in the chapter TI *PRR* calculation.
- 8 G Some of the instruments listed in table 3G are also included in a bank's interest rate *PRR* calculation. For simplicity, a bank may use the interest rate *PRR* calculation at the end of this chapter rather than the calculation in chapter TI. 41G explains this in more detail.

Derivation of notional positions

- 9 G This section converts the instruments listed in table 3G into notional positions in individual *equities*, *equity* baskets, or *equity* indices.
- GENERAL
- 10 G Unless specified otherwise, the value of each notional *equity* position equals the quantity of that *equity* underlying the instrument multiplied by the current market value of the *equity*.
- 11 G For example, the current market value of a particular *equity* is £2.50. If a bank contracts to sell this *equity* in five years' time for £3 it would treat the notional short *equity* position as having a value of £2.50 when calculating the *equity PRR*.

In effect, the forward position has been treated as being equivalent to a spot position for the purposes of calculating *equity PRR*. To capture the risk that the forward price changes relative to the spot price, forward *equity* positions are included in the bank's interest rate *PRR* calculation (see 42G of this chapter or 4G of chapter TI).

DEPOSITORY RECEIPTS

- 12 G A depository receipt should be treated as a notional position in the underlying *equity*.

CONVERTIBLES

- 13 G Where a *convertible* is included in this chapter's *PRR* calculation (see table 3G):
- (1) it should be treated as a position in the *equity* into which it converts; and
 - (2) the bank's *equity PRR* should be adjusted by making:
 - (a) an addition equal to the current value of any loss which the bank would make if it did convert to *equity*; or
 - (b) a deduction equal to the current value of any profit which the bank would make if it did convert to *equity* (subject to a maximum reduction equal to the *PRR* on the notional position underlying the *convertible*).

FUTURES, FORWARDS AND CFDS ON A SINGLE EQUITY

- 14 G A *future, forward* or *CFD* on a single *equity* should be treated as a notional position in that *equity*.

FUTURES, FORWARDS AND CFDS ON EQUITY INDICES OR BASKETS

- 15 G A *future, forward* or *CFD* on an *equity* index or basket should be treated as either:
- (1) a position in each of the underlying *equities*; or
 - (2) the positions shown in table 16G.
- 16 G Table: equity index or basket contracts (see 15G(2))

	Under the simplified equity method (29G)	Under the standard equity method (32G)
Only one country in the index or basket (see 32G)	One position in the index or basket	One position in the index or basket
More than one country in the	One position in the index or	Several notional basket positions, one for each Or One notional basket position in a separate,

	index or basket	basket	country	hypothetical country	
17	G	For example, a bank decides to treat a FTSE Eurotop 300 <i>future</i> under the standard equity method, and furthermore, chooses to treat it as one notional position. Under table 16G a bank should treat this notional position as if it were from a separate hypothetical “country” rather than any of the countries to which the underlying <i>equities</i> are from.			
18	G	The notional positions created under 15G have the following values:			
		(1) where only one notional position is created, it has a value equal to the total market value of the <i>equities</i> underlying the contract; or			
		(2) where more than one notional position is created, each one has a value which reflects that relevant <i>equity's</i> or country's contribution to the total market value of the <i>equities</i> underlying the contract.			

EQUITY LEGS OF EQUITY SWAPS

- 19 G The *equity* leg of an *equity swap* should be treated as a position in the underlying *equity*, basket of *equities* or *equity* index, which is:
- (1) long, if the bank has contracted to receive any increase and pay any decrease in the value of the underlying *equities* or *equity* index; and
 - (2) short, if the bank has contracted to receive any decrease and pay any increase in the value of the underlying *equities* or *equity* index.
- 20 G The interest rate leg of an *equity swap* is included in a bank’s interest rate *PRR* calculation (see table 4G of chapter TI).

OPTIONS

- 21 G If included in this chapter’s *PRR* calculation (see table 3G), *options* should be treated as follows:
- (1) an *option* on a single *equity* should be treated as a notional position in that *equity*;
 - (2) an *option* on a basket of *equities* or *equity* index should be treated as a *future* on that basket or index; and
 - (3) an *option* on an *equity future* should be treated as:
 - (a) a long position in that *future*, for purchased call *options* and written put *options*; and
 - (b) a short position in that *future*, for purchased put *options* and written call *options*.

Deriving the net position in each equity

- 22 G The net position is the difference between the value of the bank's long positions (including notional positions) and the value of its short positions (including notional positions) in the same *equity*.
- 23 G When deriving the net position in each *equity*, a bank should not net long and short positions unless:
- (1) they are positions in the same *equity*. Two *equities* are the same if:
 - (a) they enjoy the same rights in all respects; and
 - (b) are fungible with each other; or
 - (2) they are positions in different tranches of the same *equity* and the tranches:
 - (a) enjoy the same rights in all respects; and
 - (b) become fungible for each other within 180 days, and thereafter the *equity* of one tranche can be delivered in settlement of the other tranche.
- 24 G A bank should not net a reduced net *underwriting* position with any other *equity* position.
- 25 G 24G only relates to reduced net *underwriting* positions.

Simplified and standard equity methods

- 26 G 1G(3) states that the net position in each *equity* should be included in either the simplified equity method or the standard equity method, though indicates that this choice should be subject to the restrictions in 27G. A bank does not have to use the same method for all *equities*.
- 27 G A bank should use the simplified equity method for reduced net *underwriting* positions.
- 28 G A bank may use either method for a net *underwriting* position; 27G only relates to reduced net *underwriting* positions.

SIMPLIFIED EQUITY METHOD

- 29 G Under the simplified method, the *PRR* for each *equity*, *equity* index or *equity* basket equals the market value of the net position (ignoring the sign) multiplied by the appropriate *PRA* from table 30G. The result should be converted into the bank's *base currency* at current spot foreign exchange rates.
- 30 G Table: simplified equity method *PRAs* (see 29G)

	PRA
Single <i>equities</i>	16%
<i>Qualifying equity indices</i> (see 38G)	8%
All other <i>equity</i> indices or baskets	16%
	Standard equity method

- 31 G The standard equity method divides the risk of loss from a bank's *equity* positions into the risk of loss from a general move in that country's *equity* market and the risk of loss from an individual *equity*'s price changing relative to that country's *equity* market. These are called general market risk and specific risk respectively.
- 32 G Under the standard equity method, a bank should:
- (1) Group *equity* positions into country portfolios as follows:
 - (a) A position in an individual *equity* belongs to:
 - (i) the country it is listed in;
 - (ii) any of the countries it is listed in, if more than one; or
 - (iii) the country it was issued from, if unlisted.
 - (b) A position in *equity* basket or index that is treated under 15G(2), is allocated to one or more country portfolios based on the countries to which the underlying *equities* belong to under (a) above.
 - (2) Sum:
 - (a) the *PRRs* for specific risk calculated under 33G; and
 - (b) the *PRRs* for general market risk for each country portfolio as calculated under 40G.

SPECIFIC RISK

- 33 G Under the standard equity method, a bank should calculate a *PRR* for specific risk based on the net position in each *equity*, *equity index* or *equity index* by:
- (1) multiplying its market value (ignoring the sign) by the appropriate *PRA* from table 34G; and
 - (2) converting it into the bank's *base currency* using current spot foreign exchange rates.
- 34 G Table: *PRAs* for specific risk under the standard approach (see 33G(1))

	PRA
Qualifying <i>equities</i> (see 35G)	4%
Qualifying <i>equity indices</i> (see 38G)	0%
All other <i>equities</i> and <i>equity indices</i>	8%

- 35 G For the purposes of table 34G, a qualifying *equity* is one which:
- (1) belongs to a country portfolio where:
 - (a) no individual position exceeds 10% of the portfolio's gross value; and

- (b) the sum of positions (ignoring the sign) which individually represent between 5% and 10% of the portfolio's gross value, does not exceed 50% of the portfolio's gross value; and

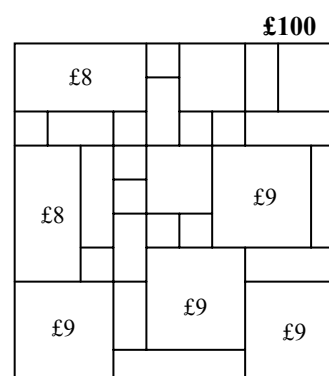
(2) is a constituent of an index in table 39G.

- 36 G The following example illustrates 35G(1). A country portfolio has a gross value of £100 and is made up of positions in 29 different *equities* (some are long positions, others are short positions). Not all the *equities* are constituents of an index used to create the FT All-World Index (this criteria only becomes relevant once a bank has determined whether the country portfolio meets the test in 35G(1)).

Six positions exceed the 5% threshold. The diagram below shows the composition of the portfolio.

Part (a): the portfolio meets the first part of the test because no individual position is worth more than 10% of the portfolio's value.

Part (b): the portfolio fails the second part of the test because the sum (ignoring the sign) of the six relevant positions is £52; this exceeds 50% of the portfolio's value.

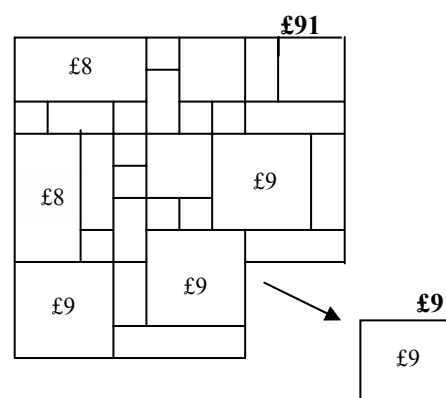


- 37 G A country portfolio can be split into two sub-portfolios if this enables one sub-portfolio to meet the conditions in 35G. Individual positions may be sub-divided between sub-portfolios.

Continuing the example above, one of the largest positions is taken out of the portfolio and put into a new portfolio. The new portfolio fails the two tests, but the amended portfolio meets both tests:

Part (a): no single remaining position exceeds £9.10.

Part (b): the sum of the five relevant positions is £43, this is less than 50% of the new portfolio's value of £91.



- 38 G A *qualifying equity index* is one which:

- (1) is listed in table 39G; or
- (2) is not listed in table 39G, but is constructed such that:
 - (a) it contains at least 20 *equities*;
 - (b) no single *equity* represents more than 20% of the total index; and
 - (c) no five *equities* combined represent more than 60% of the total index.

39 G Table: *Qualifying equity indices* (see 38G)

Qualifying equity indices	
Australia	All Ordinaries
Austria	Austrian Traded Index
Belgium	BEL 20
Canada	TSE 35, TSE 100, TSE 300
France	CAC 40, SBF 250
Germany	DAX
European	Dow Jones Stoxx 50 Index, FTSE Eurotop 300, MSCI Euro Index
Hong Kong	Hang Seng 33
Italy	MIB 30
Japan	Nikkei 225, Nikkei 300, TOPIX
Korea	Kospi
Netherlands	AEX
Singapore	Straits Times Index
Spain	IBEX 35
Sweden	OMX
Switzerland	SMI
UK	FTSE 100, FTSE Mid 250, FTSE All Share
US	S&P 500, Dow Jones Industrial Average, NASDAQ Composite, Russell 2000
	general market risk

- 40 G The *PRR* for general market risk equals the net value (ignoring the sign) of the country portfolio multiplied by 8%. It should be converted into the bank's *base currency* using current spot foreign exchange rates.

Basic interest rate *PRR* calculation for equity instruments

- 41 G A basic *PRR* calculation is included in this chapter for those banks that do not wish to use the calculation in chapter TI. However, it tends to result in higher charges than the methods in chapter TI, largely because the interest rate *PRR* is calculated on each notional equity position separately and then summed without offsetting long and short positions.
- 42 G Where a bank does not include a *forward*, *future*, or *option* (except cliques) or *swap* on an *equity*, basket of *equities* or *equity* index in its chapter TI *PRR* calculation, it should calculate an interest rate *PRR* as follows:

- (1) multiplying the market value of the notional *equity* position underlying the instrument by the appropriate percentage from table 44G; and
- (2) summing the results from (1), ignoring the sign.
- 43 G Cliquets on *equities*, baskets of *equities* or *equity* indices do not attract an interest rate *PRR*. 42G excludes them from the basic interest rate *PRR* calculation and table 4G excludes them from the scope of the interest rate *PRR* calculation in chapter TI.
- 44 G Table: Percentages used in the basic interest rate *PRR* calculation for *equity* instruments (see 42G(1))

Time to expiration	Percentage
$0 \leq 3$ months	0.20
$> 3 \leq 6$ months	0.40
$> 6 \leq 12$ months	0.70
$> 1 \leq 2$ years	1.25
$> 2 \leq 3$ years	1.75
$> 3 \leq 4$ years	2.25
$> 4 \leq 5$ years	2.75
$> 5 \leq 7$ years	3.25
$> 7 \leq 10$ years	3.75
$> 10 \leq 15$ years	4.50
$> 15 \leq 20$ years	5.25
> 20 years	6.00

Definitions used in chapter TE

- 45 G This chapter uses the following definitions:

Defined term	Definition
<i>Base currency</i>	The currency in which the bank's accounts are prepared.
<i>CFDs</i>	Means contract for differences.
<i>Convertible</i>	A <i>security</i> which gives the investor the right to convert the <i>security</i> into <i>equity</i> at an agreed price or on an agreed basis.
<i>Derivative</i>	<i>Options</i> , <i>futures</i> and contracts for differences.
<i>Equity</i>	See <i>share</i> .
<i>Forward</i>	A contract to buy or sell where the date of settlement has been agreed as a particular date in the future.
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>Option</i>	A contract which confers the right to buy a <i>security</i> , contractually based investment or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>PRA</i>	Percentage risk addition.
<i>PRR</i>	Position risk requirement.
<i>Qualifying equity index</i>	As defined in 38G.

<i>Repurchase agreement</i>	See section 3.2, and 2(b)a) of chapter TC.
<i>Reverse repurchase agreement</i>	See section 3.2, and 2(b)a) of chapter TC.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.
<i>Synthetic future</i>	A combination of a long (short) call <i>option</i> and a short (long) put <i>option</i> which are based on the same underlying and have the same notional amount, strike and maturity.
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.
<i>Underwriting</i>	The arrangement under which a party agrees to buy, before issue, a specified quantity of securities in an issue of securities on a given date and at a given price, if no other has purchased or acquired them.
<i>Warrant</i>	The investment specified in article 79 of the Regulated Activities Order (Instruments giving entitlement to investments).

COUNTERPARTY RISK IN THE TRADING BOOK

1 INTRODUCTION

1.1 Context

1 This chapter is one of a number that deal with capital adequacy and one of several within those that explain how banks should include counterparty risk within the capital adequacy framework.

See chs BC &
DU

The chapter on credit risk in the banking book explains the bulk of the banking book regime and the counterparty risk weights which should be used for both banking and trading book exposures. For a few instruments (see the relevant chapter), the treatment of counterparty risk should be the same whether the instruments are held in the banking book or the trading book. In some cases a particular treatment should be adopted only for assets held in the trading book (or a treatment which is different to that applying to such assets when held in the banking book); these are dealt with in this chapter.

1.2 Legal sources

2 The sources identified in the Legal Sources section of the Capital Adequacy Overview chapter are also relevant to this chapter.

The Capital Adequacy Directive ('CAD' - 93/6/EEC), as amended by the CAD Amending Directive ('CAD2' - 98/31/EC), introduced the concept of the trading book.

See ch BC s3

3 The counterparty risk weightings applying to the trading book are the same as in the banking book, as set down by The Banking Consolidation Directive (formerly the Solvency Ratio Directive). The CAD amended the weightings applying (for both banking and trading books) to investment firms and recognised clearing houses and exchanges.

1.3 Application

4 This chapter applies to all UK banks .

- a) Banks incorporated elsewhere in the European Economic Area with UK branches are subject to the requirements of the CAD regime as implemented by their home supervisors.
- b) Overseas banks fall outside the CAD regime.

1.4 How this chapter is organised

5 Section 2 sets out the general principles behind the treatment of counterparty risk in the trading book.

Section 3 details the framework for treating counterparty risk for repos/reverse repos, both documented and undocumented.

Section 4 is an appendix providing worked examples as illustration.

2 GENERAL PRINCIPLES FOR COUNTERPARTY RISK IN THE TRADING BOOK

2.1 Definition and illustrations

1 In general, counterparty risk is only present in the trading book on deals that are not finally settled.

By their nature, derivative contracts involve a delay between the transaction date and some future maturity date. The time delay creates two types of risk for a bank:

- (a) that the market price will move against the bank, so that when the position matures it will make a loss - *market risk*; and
- (b) that the price will move in the bank's favour, so that it makes a book profit, but that at maturity it cannot realise that profit because the other party defaults - *counterparty risk*.

See ch DU s4

- a) Note that the settlement risks for free deliveries and unsettled trades are dealt with elsewhere.

So the *counterparty risk in the trading book* is the risk that at some future date some party, other than the issuer of the underlying security, fails to complete a contract, resulting in a loss to the bank.

- b) Three examples illustrate the different types of risk:
 - i) Bank A sells shares issued by Company C to Bank B, which places them in its trading book. Once the transaction has settled, Bank B has specific market risk on Company C but no counterparty risk on Bank A.
 - ii) Bank A enters into a forward contract to sell shares issued by Company C to Bank B. Bank B acquires specific market risk on Company C, but also acquires counterparty risk on Bank A, as there is a risk that Bank A may fail to deliver the shares to Bank B on the future delivery date. Similarly, Bank A acquires counterparty risk on Bank B because Bank B may fail to deliver the cash on the future settlement date.
 - iii) Bank A enters into an interest rate swap with Bank B. As there is no underlying instrument, there is no specific risk, but Bank B acquires counterparty risk on Bank A for the duration of the swap. Bank A acquires a similar counterparty risk on Bank B.

2.2 General principles

- See chs TL, TE, CM, FX, TO & TV
- 2 A bank should hold capital in respect of both market and counterparty risks in the trading book; the treatment of market risk which should be adopted is given in the relevant chapters on equity position risk, interest rate position risk, commodity position risk, foreign exchange position risk, option position risk and internal models.
- 3 The counterparty risk is incurred with respect to the trading counterparty, rather than the issuer of the underlying security.
- a) So the counterparty risk weights used should be those for the trading counterparties.
- See ch BC s3
- b) The counterparty weights used should be the same as those used in the banking book.
- 4 With the following exceptions, capital should be assigned to counterparty risk on any trade that is not yet due for final settlement or is overdue (e.g. OTC derivative exposures, margins and fees payable):
- (a) contracts traded on exchanges where they are subject to daily margining requirements;
- (b) OTC foreign exchange contracts (except contracts concerning gold) with an original maturity of 14 calendar days or less;
- (c) overdue transactions involving the delivery of an instrument against the receipt of cash that are less than five days beyond the due date.
- a) The potentiality of loss should be assessed using a *credit equivalent amount* (CEA), which assesses the present exposure, and an assessment of the counterparty involved.
- See ch DU s4
- b) The capital charge on trades where settlement is overdue (*unsettled transactions*) is detailed elsewhere.
- See ch DU s3
- c) The capital charge for counterparty risk on OTC derivative contracts is detailed elsewhere.
- See ch BC
- d) Where a counterparty exposure arises in the trading book and is not otherwise covered by this chapter or the rules for unsettled transactions, the capital charge should be calculated in accordance with the treatment for banking book exposure.

- 5 All trading book exposures (securities and, if appropriate, collateral) should be marked to market at least once a day.
- a) This is because the credit equivalent amount will vary with the mark-to-market value of the contract.
 - b) A bank may seek the FSA's agreement that it is appropriate to exempt cash items which have a residual maturity of one month or less.
 - i) For these purposes, cash items should be taken to include loans and deposits and also the cash legs of repo and reverse repo transactions.
 - c) Banks should not generally enter into contracts at off market prices. If any contracts are undertaken at off market prices banks should contact their line supervisor to discuss the background and to agree a reporting treatment. If any contracts are undertaken at off market prices, they should be approved by a bank's credit division or equivalent so that the real credit exposure of a transaction is captured, and the FSA should be contacted to discuss the background and agree a reporting treatment.

2.3 Collateral

- 6 When exposures covered by this chapter are collateralised by securities, the risk weight should be that applicable to the security.

See ch NE

- a) Collateral that may reduce the risk weight applicable to a counterparty exposure is defined in the chapter on netting and collateral.
- b) The collateral should be marked to market daily and an "add-on" (equal to the market value of the collateral multiplied by the relevant risk cushion factor) deducted from the value collateralised.

See s3.2

- i) This does not apply to documented repos/reverse repos, for which see below.

See s3.3

- c) The risk cushion factor ("RCF") is as set out below.

- 7 When collateral is received in the form of a guarantee, letter of credit or similar instrument provided by a Zone A bank, but only if that bank would not be considered to be a connected lender if it was making a loan to the recipient of the securities, the risk weight should be that applying to the provider of the collateral.

- 8 In the event that the guarantor is not a Zone A bank or is a connected bank, the capital requirement for the securities lender should be:

Market value of securities lent x Counterparty risk weight x 8%.

2.4 Deferred settlement

- 9 Deferred settlement transactions occur where compensation is due to be paid in the future in exchange for an immediately active option contract.

a) For example, contingent premium options, where the option writer receives the premium at exercise of the option.

See Ch DU

b) The treatment set out below should not apply to conventional OTC derivatives, the treatment for which is set out elsewhere.

- 10 In such cases, the capital requirement for counterparty risk on the deferred compensation should be calculated as:

Current market value of the payment due x counterparty risk weight x 8%.

a) This applies to the option writer, and is therefore an exception to the general principle set out in chapter DU that there is no counterparty risk on written options.

3 REPOS/REVERSE REPOS

3.1 Introduction

1 This section deals with counterparty risk on repos/reverse repos and stock lending/stock borrowing in the trading book. Section 3.2 sets out how the capital requirement for documented repos should be calculated and section 3.3 sets out the risk cushion factor for undocumented repos which should be applied.

3.2 Documented repos/reverse repos

2 Special treatment should be given to counterparty risk as it applies to *repos* or *reverse repos* in the trading book, provided that the documentation (which, whether a master agreement or documentation used on specific occasions, should be written and legally enforceable) includes both :

(a) a *netting agreement*. (A *netting agreement* provides for the claims of the bank to be set off automatically and immediately against the claims of the counterparty in the event of the latter's default); and

(b) *variation margin* provision. (The provision for *variation margin* exists where the bank has the right to call for variation margin daily when there is a material adverse move against the counterparty).

a) A *repo* or *reverse repo* is used as a generic term to describe a contract where:

i) a bank has sold (or lent) trading book securities or commodities to a counterparty subject to buyback (or a return clause); or

ii) a bank has bought (or borrowed) trading book securities or commodities from a counterparty subject to buyback (or a return clause).

See s3.3

b) If (a) and/or (b) are not met, the forward leg of the contract should be treated as an undocumented repo/reverse repo for capital adequacy purposes.

c) If (a) and (b) are met, the capital charge for counterparty risk may be calculated in the manner set out below regardless of the terminology used - i.e. the arrangements may be called repo/reverse repo or stock lending/ stock borrowing or sell-buy/buy-sell. Arrangements where the bank has lent a third party's securities at the bank's own risk are also included.

- See ch NE d) For the detailed treatment of netting agreements, see the relevant chapter.
- See chs TI, TE & CM e) The transactions covered by this section should attract capital charges for market risk (see chapters on interest rate position risk, equity position risk and commodity position risk) in addition to the counterparty risk treatment set out here.
- See ch BC s4 f) This chapter covers trading book exposure only. The treatment of exposures arising from repos/reverse repos in the banking book is detailed elsewhere.
- If it seems to the FSA that the nature of a bank's repo/reverse repo business is such that risks are significant, the FSA may insist on a higher capital requirement, which may take the form of treating all such transactions as undocumented repos/reverse repos.
- 3 The capital charge for repos' counterparty risk is the higher of zero and (the market value of securities sold or lent minus the market value of collateral taken) x the counterparty risk weight x 8%.
- See s4 a) Examples of the calculations are to be found in the appendix to this chapter.
- See ch DU s3 b) Note that the 50% ceiling on counterparty risk weightings does not apply to repos or reverse repos.
- 4 The capital charge for reverse repos' counterparty risk is the higher of zero and (the market value of collateral given minus the market value of securities bought or borrowed) x the counterparty risk weight x 8%.
- See ch DU s3 a) Note that the 50% ceiling on counterparty risk weightings does not apply to repos or reverse repos.
- See ch NE 5 Where there is a series of transactions with a single counterparty, the counterparty risk requirements may be calculated on a portfolio basis as long as the bank complies with the guidance on netting of counterparty risk.
- 6 The amounts to be received or given should include all cashflows relating to the securities and the transactions, including dividends interest and fees.
- a) The amounts to be included as receivables in the calculation should include all cashflows relating to the securities and the transactions, including dividends, interest and fees. They include payments due from the counterparty which are late and have not yet been received.

Receivables need not be included on the day they are due, but they should be included if not received the following business day.

- b) The value of the securities to be given should include all cashflows relating to the securities and the transactions, including dividends, interest and fees. It includes payments to the counterparty which are late and have not yet been paid.

3.3 Undocumented repos/reverse repos

For repos or reverse repos which do not meet the netting and variation margin conditions set out above, risk cushion factors (RCFs) should be applied (see below). RCFs should also be applied if the nature of a bank's repo/reverse repo business is such that risks are significant. RCFs reflect the typical volatility of securities prices.

3.3.1 *Receipt of securities*

- 7 Where the bank is receiving securities in exchange for cash (or collateral), the capital requirement for the *counterparty risk* should be calculated as:

(the *replacement cost* of the contract plus the *potential future credit exposure*) x counterparty risk weight x 8%

- a) The *replacement cost* for the receipt of securities should be the higher of zero and the difference between:
- the market value of the securities to be received; and
 - the market value of collateral.
- b) The *potential future credit exposure* should be the RCF applicable to the securities (or to the collateral if its RCF is higher) multiplied by the contracted value for forward delivery - see table below.
- c) The amounts to be included as receivables in the calculation should include all cashflows relating to the securities and the transactions, including dividends, interest and fees. They include payments due from the counterparty which are late and have not yet been received. Receivables need not be included on the day they are due, but they should be included if not received the following business day.
- d) Note that the 50% ceiling on counterparty risk weightings does not apply to repos or reverse repos.

3.3.2 *Receipt of cash*

8 Where the bank is receiving cash (or collateral) in exchange for securities, the capital requirement for the counterparty risk should be calculated as:

(the *replacement cost* of the contract plus the *potential future credit exposure*) x counterparty risk weight multiplied by x 8%.

- a) The *replacement cost* for the receipt of cash should equal the higher of zero and the difference between:
 - the market value of collateral and
 - the market value of the securities to be delivered.
- b) The *potential future credit exposure* should equal the RCF applicable to the securities (or to the collateral if its RCF is higher) multiplied by the contracted value for forward delivery - see table below.
- c) The value of the securities to be given should include all cashflows relating to the securities and the transactions, including dividends, interest and fees. It includes payments to the counterparty which are late and have not yet been paid.
- d) Note that the 50% ceiling on counterparty risk weightings does not apply to repos or reverse repos.

See ch DU s3

3.3.3 Risk cushion factors

9 The RCFs are as follows:

Product	Residual maturity of securities	RCF
Interest rate products	Less than one year	0.25%
	One to five years	0.50%
	Five years or over	1.50%
Equity products	Not applicable	6.00%

- a) In determining the size of the RCF on a leg of a transaction, reference should be made to the maturity of the securities and of the collateral, rather than to the maturity of the transaction.
- b) The RCF which should be applied to an undocumented repo/reverse repo is the greater of the RCFs on each of the two legs.
- c) Where the two sides of a transaction are denominated in different currencies, and an RCF applies, the risk cushion factors should each be increased by one percentage point.
- d) Where collateral is provided in the form of cash or a guarantee, a letter of credit, or an instrument performing a similar function issued by a Zone A bank, an RCF of 0% may be applied to that leg of the transaction.

4 APPENDIX - EXAMPLES OF CALCULATIONS FOR REPOS/ REVERSE REPOS IN THE TRADING BOOK

4.1 Case 1: properly documented transaction

A lends £100 cash to B, and receives a five-year bond (current mark to market value: £102) from B.

A and B each have a 20% counterparty risk weight.

Counterparty risk requirement for each bank to include in its capital adequacy calculation:

$$A \quad \max [0, (\pounds100 - \pounds102) \times 20\% \times 8\%] = \text{nil}$$

$$B \quad \max [0, (\pounds102 - \pounds100) \times 20\% \times 8\%] = \pounds0.032$$

4.2 Case 2: properly documented transactions calculated on portfolio basis

A lends five-year bonds (current mark to market valuation: £100) and US equities (current mark to market valuation: £100) to B and receives UK equities (current mark to market valuation: £97) and two-year bonds (current mark to market valuation: £105) from B.

A and B each have a 20% counterparty risk weight.

Counterparty risk requirement:

A Securities and collateral paid away

$$\pounds100 + \pounds100 = \pounds200$$

Securities and collateral received

$$\pounds97 + \pounds105 = \pounds202$$

Received > paid away

Therefore no counterparty risk requirement applies.

B Securities and collateral paid away

$$£97 + £105 = £202$$

Securities and collateral received

$$£100 + £100 = £200$$

Received < paid away

Therefore a counterparty risk requirement applies of

$$(£202 - £200) \times 20\% \times 8\% = £0.032$$

4.3 Case 3: inadequate documentation (or business of a type or volume which leads the FSA to insist on this treatment).

A lends a five-year bond (current mark to market value: £102) to B and receives £100 cash from B.

A and B each have a 20% counterparty risk weight.

Risk Cushion Factors for bond = 1.5%

for cash = 0%

Contracted value for forward delivery = £100

Counterparty risk requirement:

A Replacement cost $\max [0, (£102 - £100)]$

Potential future exposure $£100 \times 1.5\%$

Capital charge $= (£2 + £1.50) \times 20\% \times 8\% = £0.056$

B Replacement cost $\max [0, (£100 - £102)]$

Potential future exposure $£100 \times 1.5\%$

Capital charge $= £1.50 \times 20\% \times 8\% = £0.024$

4.4 Case 4: as case 3, except collateral and securities in differing currencies

A lends a five-year US government bond (current mark to market value: £102) to B and receives £100 cash from B.

A and B each have a 20% counterparty risk weight.

Risk Cushion Factors for bond = 2.5%

for cash = 1.0%

Contracted value for forward delivery = £100

Counterparty risk requirement:

A Replacement cost $\max [0, (£102 - £100)]$

Potential future exposure $£100 \times 2.5\%$

Capital charge $= (£2 + £2.50) \times 20\% \times 8\% = £0.078$

B Replacement cost $\max [0, (£100 - £102)]$

Potential future exposure $£100 \times 2.5\%$

Capital charge $= £2.50 \times 20\% \times 8\% = £0.040$

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5 APPENDIX - EXAMPLES OF CALCULATIONS FOR REPOS/ REVERSE REPOS IN THE TRADING BOOK

5.1 Case 1: properly documented transaction

A lends £100 cash to B, and receives a five-year bond (current mark to market value: £102) from B.

A and B each have a 20% counterparty risk weight.

Counterparty risk requirement for each bank to include in its capital adequacy calculation:

$$A \quad \max [0, (£100-£102) \times 20\% \times 8\%] = \text{nil}$$

$$B \quad \max [0, (£102-£100) \times 20\% \times 8\%] = £0.032$$

5.2 Case 2: properly documented transactions calculated on portfolio basis

A lends five-year bonds (current mark to market valuation: £100) and US equities (current mark to market valuation: £100) to B and receives UK equities (current mark to market valuation: £97) and two-year bonds (current mark to market valuation: £105) from B.

A and B each have a 20% counterparty risk weight.

Counterparty risk requirement:

A Securities and collateral paid away

$$£100 + £100 = £200$$

Securities and collateral received

$$£97 + £105 = £202$$

Received > paid away

Therefore no counterparty risk requirement applies.

B Securities and collateral paid away

$$£97 + £105 = £202$$

Securities and collateral received

$$£100 + £100 = £200$$

Received < paid away

Therefore a counterparty risk requirement applies of

$$(£202 - £200) \times 20\% \times 8\% = £0.032$$

5.3 Case 3: inadequate documentation (or business of a type or volume which leads the FSA to insist on this treatment).

A lends a five-year bond (current mark to market value: £102) to B and receives £100 cash from B.

A and B each have a 20% counterparty risk weight.

Risk Cushion Factors for bond = 1.5%

for cash = 0%

Contracted value for forward delivery = £100

Counterparty risk requirement:

A Replacement cost $\max [0, (£102 - £100)]$

Potential future exposure $£100 \times 1.5\%$

Capital charge $= (£2 + £1.50) \times 20\% \times 8\% = £0.056$

B Replacement cost $\max [0, (£100 - £102)]$

Potential future exposure $£100 \times 1.5\%$

Capital charge $= £1.50 \times 20\% \times 8\% = £0.024$

5.4 Case 4: as case 3, except collateral and securities in differing currencies

A lends a five-year US government bond (current mark to market value: £102) to B and receives £100 cash from B.

A and B each have a 20% counterparty risk weight.

Risk Cushion Factors for bond = 2.5%

for cash = 1.0%

Contracted value for forward delivery = £100

Counterparty risk requirement:

A Replacement cost $\max [0, (£102 - £100)]$

Potential future exposure $£100 \times 2.5\%$

Capital charge $= (£2 + £2.50) \times 20\% \times 8\% = £0.078$

B Replacement cost $\max [0, (£100 - £102)]$

Potential future exposure $£100 \times 2.5\%$

Capital charge $= £2.50 \times 20\% \times 8\% = £0.040$

INCREMENTAL CAPITAL FOR LARGE EXPOSURES

1 INTRODUCTION

1.1 How this chapter is organised

- See ch LE s7 1 This chapter is one of a number that cover the risks in a bank's trading book within the overall capital adequacy framework. It outlines the policy covering the need for extra capital ("incremental capital") where a bank has certain kinds of large exposures. The chapter on large exposures sets out the remaining elements of the FSA's policy on banks' large exposures.
- See ch CA s9 2 If an exposure exceeds 25% of a bank's large exposures capital base (LECB) but only as a result of long securities positions in its trading book, a regime of 'soft limits' may be agreed in writing with the FSA. In that case, the bank's LECB may be amended to include any tier 3 capital eligible to support the trading book.
- See ch LE s9
- a) Unless it is the result of either an exempt exposure or of holdings of tradable securities in its trading book, the undertaking of an exposure in excess of 25% of its LECB other than in the most exceptional circumstances calls into question whether a bank meets the requirements for authorisation under the Act.
- 3 If an exposure then exceeds 25% of the amended LECB, incremental capital should be included in the banks' capital adequacy calculation for that excess over 25%. This chapter sets out how much incremental capital the FSA considers to be appropriate.
- a) So an exposure which exceeds 25% of LECB but not 25% of the amended LECB does not need incremental capital cover.
- 4 Section 2 explains how to calculate the incremental capital which is considered to be appropriate. Section 3 is an appendix giving an example of the calculation.
- #### 1.2 Application
- 5 This chapter applies only to all UK CAD banks.
- 6 The policy applies to banks on a solo (or solo consolidated) basis and on a consolidated basis.
- See ch LE s9
- a) However, the FSA considers that a UK-incorporated subsidiary bank within a larger UK banking group may not need to have incremental

capital in certain cases. Such banks should discuss with the FSA whether it should have incremental capital.

1.3 Legal sources

See ch CO s1

This chapter is relevant to a number of requirements under the Act and the banking directives. The requirements are set out in the Legal Sources sections of the chapter on the Capital Adequacy Overview.

2 INCREMENTAL CAPITAL

2.1 General

- See ch LE s7 1 If a CAD bank has an exposure to an issuer arising from the inclusion of holdings of tradable securities in its trading book which exceeds 25% of its LECB, the use of *soft limits* should be agreed in writing with the FSA.
- See ch LE s4 a) A bank's LECB is defined in the chapter on large exposures.
- b) The *soft limit* agreed with the FSA for an individual counterparty/issuer is an overall limit on the total exposure to that counterparty/issuer.
- See ch CA s9 2 When soft limits have been agreed, the bank's LECB may be amended to include any tier 3 capital eligible to support risks in the bank's trading book other than counterparty and settlement risk.
- See ch LE s4 a) For the definition of a bank's amended LECB see the chapter on large exposures.
- See ch LE s9 3 Any exposure, other than an exempt exposure, in excess of 25% of the bank's LECB should only be as a result of holdings of tradable securities in the bank's trading book, so that the exposure is in respect of issuer risk.
- See ch LE s9 4 Incremental capital in respect of the exposure's excess over 25% of the amended LECB should be calculated.
- See ch CO a) The capital amount calculated should be included in the calculation for determining how much trading book capital a bank should have.
- i) For the other components of a bank's trading book capital, see the Capital Adequacy Overview chapter.
- b) A bank's incremental capital should be reported on the form BSD3.
- 5 However, an exposure which is subject to incremental capital need not be further pre-notified to the FSA if it is within an agreed soft limit.
- i) Post-notification is still required.

2.2 The incremental capital calculation

6 Calculating incremental capital involves the following steps:

See s3

a) An example of the calculation is given in the appendix.

(a) Net any short securities positions against long securities positions, netting the short items against the highest specific risk weighted long items.

See chs II and
TE

a) The specific risk weights of netted items need not be identical; for a definition of specific risk weights, see the chapters on interest rate position and equity position risk.

(b) Rank the remaining net long securities positions in order according to specific risk weighting factors.

(c) Taking the lowest weighted items first, apply these exposures to the difference between the non-securities exposure to the counterparty and 25% of the amended LECB.

a) So the 'headroom' up to 25% of the amended LECB is used to cover the lowest weighted exposures first.

(d) Incremental capital should be calculated for remaining net long securities exposures as follows:

(i) if the excess exposure has been outstanding for 10 days or less, the specific risk weighting for the exposures in excess of 25% of the amended LECB should be multiplied by 200%.

(ii) if the excess exposure has been outstanding for more than 10 days, the specific risk weightings for the exposures in excess of 25% of the amended LECB should be multiplied by the factors shown in the table below.

a) The period that an exposure has been outstanding is calculated in relation to the time that the total has been above a particular threshold even though the components of the exposure may have changed within that time.

When an exposure is over 25% of amended LECB, the portions of the excess should be treated as follows:	Factor applied to specific risk weighting
Portion up to 40% of amended LECB	200%
Portion from 40% - 60% of amended LECB	300%
Portion from 60% - 80% of amended LECB	400%
Portion from 80% - 100% of amended LECB	500%
Portion from 100% - 250% of amended LECB	600%
Portion over 250% of amended LECB	900%

In any event, the FSA considers that the following limits on excess exposures should not be exceeded:

- 500% of the bank’s amended LECB on the trading book exposure to the counterparty, where the excess exposure has been extant for 10 days or less; and
- 600% of the bank’s amended LECB on the aggregate of any trading book excess exposures which have persisted for more than 10 days.

3 AN EXAMPLE OF THE CAPITAL CALCULATIONLarge exposures position

See s2

1 A bank's large exposures capital base comprises:

	£
Capital base (tier 1 and tier 2)	1000
Eligible tier 3 capital	<u>100</u>
Amended capital base	<u>1100</u>

2 The components of the large exposure comprise:

		£
(i) Counterparty exposure:		200
(ii) Mark to market value of trading book securities:		
	% Specific risk weight	
Short: Qualifying bond	1.00	(20)
Long: Qualifying commercial paper	0.25	100
Long: Equity	4.00	150
Long: Qualifying convertible	1.60	<u>30</u>
Total net long securities position:		<u>260</u>
Total net large exposures position [(i)+(ii)]:		460

Calculating the exposure for which incremental capital is needed

3 The short position in the qualifying bond is offset against the highest specific risk weight items - in this case equities:

	£
Net long equity position (£150 - £20)	130

- 4 The remaining items are ranked according to specific risk weight.
- | % Specific risk | Security | £ |
|-----------------|-----------------------------|-----|
| 0.25 | Qualifying commercial paper | 100 |
| 1.60 | Qualifying convertible | 30 |
| 4.00 | Equity (net) | 130 |
- 5 The "headroom" between the non securities exposure and 25% of the amended capital base is calculated.
- | | |
|------------------------------------|------------|
| | £ |
| 25% of amended capital base (1100) | 275 |
| Non securities exposures | <u>200</u> |
| Headroom | <u>75</u> |
- 6 Applying the securities positions in ascending order of specific risk weight, £75 of the £100 qualifying commercial paper may be counted before 25% of the amended capital base is reached.
- The remaining £25 of qualifying commercial paper, along with £30 qualifying convertible and £130 equity (net) are traded securities exposures in excess of the limit and should therefore be covered by incremental capital.
- See s2.1
- a) The amount of incremental capital should be included in the calculation for determining how much trading book capital a bank should have.
- 7 If the excess exposure has been outstanding for 10 days or less, the specific risk weights for the elements over 25% of amended LECB should be doubled:
- a) The 25% limit (£275) is taken up by **£200** counterparty exposure and **£75** securities exposure within the limit.
- i) The two items in bold above , when added to the items in bold below, total £460. £460 is the total net large exposures position, as set out in paragraph 2 above.

Qualifying commercial paper	£
£25 x 0.25% x 200% =	0.125
Qualifying convertible	
£30 x 1.60% x 200% =	0.960
Equity	
£130 x 4% x 200% =	<u>10.400</u>
Additional capital requirement	<u>11.485</u>

8 If the excess exposure has been outstanding for more than 10 days:

- a) The 25% limit (£275) is taken up by **£200** counterparty exposure and **£75** securities exposure within the limit.
- i) The two items in bold above, when added to the items in bold below, total £460. £460 is the total net large exposures position, as set out in paragraph 2 above.

Over 25% and up to 40% of amended capital base at 200% (40% of £1100 = £440)	£
£25 x 0.25% x 200% =	0.125
£30 x 1.60% x 200% =	0.960
£110 x 4.00% x 200% =	8.800
Excess exposure 40% - 60% of amended capital base at 300%	
£20 x 4.00% x 300% =	<u>2.400</u>
Additional capital requirement	<u>12.285</u>

TU

Securities Underwriting

General

- 1 G A UK bank to which CAD applies should apply this chapter. This chapter sets out the method for calculating a net *underwriting* position or reduced net *underwriting* position, which is then included in the *PRR* calculation in other chapters, or chapter BC if the bank does not have a *trading book*.
- 2 G A bank which *underwrites* or sub-*underwrites* an issue of *securities* should:
 - (1) identify commitments to *underwrite* or sub-*underwrite* which give rise to an *underwriting* position (see 8G);
 - (2) identify the time of initial commitment (see 14G);
 - (3) calculate the net *underwriting* position (set out in 18G) or reduced net *underwriting* position (in the circumstances set out in 24G);
- 3 G A bank should include the net *underwriting* position or reduced net *underwriting* position in:
 - (1) 3G(1) of chapter TI, where debt *securities* are being underwritten;
 - (2) 2G(1) of chapter TE, where *equities* are being underwritten;
 - (3) 22G of chapter TO, where *warrants* are being underwritten; or
 - (4) chapter BC, where the bank does not have a *trading book*; and
 - (5) 2G of chapter FX, where the *equities*, debt *securities* or *warrants* being underwritten are denominated in a *foreign currency*.
- 4 G A bank should comply with 2G from initial commitment (as determined under 8G) until the end of the fifth *business day* after *working day 0* (as determined under 23G).
- 5 G Sub-*underwriting* is a commitment given by one bank to someone other than the issuer or seller of the *securities*, to *underwrite* all or part of an issue of *securities*.
- 6 G The net *underwriting* position calculated in 18G will also be used in calculating the net *underwriting exposure* set out in 32G.
- 7 G The net *underwriting* position or reduced net *underwriting* position arising from *underwriting* or sub-*underwriting* a rights or *warrants* issue should be calculated using the current market price of the underlying *security* for the purposes of the *equity PRR* or *option PRR*. However, the *PRR* will be limited to the value of the net *underwriting* position calculated using the initial issue price of the rights or *warrants*.

Commitments to underwrite securities

- 8 G For the purpose of 2G(1), a bank has a commitment to *underwrite* or sub-*underwrite* an issue of *securities* where:
- (1) it gives a commitment to an issuer of *securities* to *underwrite* an issue of *securities*;
 - (2) it gives a commitment to a person, other than the issuer of *securities*, to sub-*underwrite* an issue of *securities*; or
 - (3) it is a member of a syndicate or group that gives a commitment to an issuer to *underwrite* an issue of *securities* or a commitment to a person other than the issuer of *securities*, to sub-*underwrite* an issue of *securities*.
- 9 G Block trades including bought deals, private placements, revolving *underwriting* facilities and *underwriting* syndicated loans are not within the scope of this chapter.
- 10 G For the purpose of this chapter, *securities* include debt and *equity* instruments and instruments which are convertible into *securities* but excludes loans.
- 11 G A bank that buys and sells *securities* before issue is dealing in the grey market. This chapter does not apply to a bank dealing in the grey market unless the bank:
- (1) has an *underwriting* commitment to the issuer in respect of those *securities*; or
 - (2) has a sub-*underwriting* commitment in respect of those *securities* and is using the grey market solely for the purpose of reducing that sub-*underwriting* commitment.
- 12 G In this chapter the grey market is the market in which dealers "buy" and "sell" *securities* ahead of issue. In reality the dealers are buying and selling promises to deliver the *securities* when issued.
- 13 G Where a single bank is involved in both *underwriting* or sub-*underwriting* an issue of *securities* as well as dealing in that issue for proprietary trading purposes this chapter will not apply to grey market transactions undertaken by the proprietary trading part of the bank.

Time of initial commitment

- 14 G Subject to 15G, the time of initial commitment is the earlier of:
- (1) the time the bank signs an agreement with the issuer of *securities* to *underwrite* those *securities*; or
 - (2) the time the price and allocation of the issue are set.
- 15 G If a bank has an irrevocable and unfettered right to withdraw from an *underwriting* commitment, exercisable within a certain period, the commitment commences when that right expires.
- 16 G Subject to the existence of a right described in 15G an *underwriting* commitment commences even if it is subject to formal, legal or other conditions that would normally be expected to be satisfied.

- 17 G A force majeure or material adverse change clause would not be a right of the sort referred to in 15G.

Calculating the net underwriting position

- 18 G A bank should calculate a net *underwriting* position by adjusting the gross amount it has committed to *underwrite* for:
- (1) any sales or sub-*underwriting* commitments received that have been confirmed in writing at the time of initial commitment;
 - (2) any *underwriting* or sub-*underwriting* commitments obtained from others since the time of initial commitment;
 - (3) any purchases or sales of the *securities* since the time of initial commitment, (other than those referred to in 13G); and
 - (4) any allocation of *securities* granted or received, arising from the commitment to *underwrite* the *securities*, since the time of initial commitment.
- 19 G A bank signing an *underwriting* agreement with an issuer of *securities* where the exact issue price or allocation of *securities* has not been fixed should calculate the gross amount, for the purposes of 18G, as the amount it has formally committed to under that agreement until the time the exact issue price and/or allocation is set.
- 20 G Allocations may arise, after date of initial commitment, from the agreement to *underwrite*. For example obligations or rights to or from the issuer, the *underwriting* group or syndicate.

GREY MARKET TRANSACTIONS

- 21 G Subject to 11G and 13G a bank can include grey market transactions when calculating the net *underwriting* position.

OVER-ALLOTMENT OPTIONS

- 22 G When calculating the net *underwriting* position, a bank should exclude an over-allotment option granted to it by the issuer, except to the extent it reduces:
- (1) from *working day 0* an over-allotment made by the bank; or
 - (2) from *working day 0* an over-allotment made by the bank on behalf of another member of the underwriting syndicate who has been granted the over-allotment option.
- 23 G For the purposes of this chapter *working day 0* is the *business day* on which the bank becomes unconditionally committed to accepting a known quantity of *securities* at a specified price, as follows:

- (1) For debt issues and *securities* which are issued in a similar manner, *working day 0* is the later of the date on which the *securities* are allotted, and the date on which payment for them is due.
- (2) For *equity* issues and *securities* which are issued in a similar manner, *working day 0* is the later of the date on which the offer becomes closed for subscriptions and the date on which the allocations are made public.
- (3) For rights issues, *working day 0* is first day after the date on which the offer becomes closed to acceptances for subscription.

Calculating the reduced net underwriting position

- 24 G A bank may apply the relevant reduction factors in table 27G to its net *underwriting* position if the *securities* it is *underwriting* or sub-*underwriting* are new *securities*.
- 25 G For the purposes of this chapter, a bank may treat as new *securities*:
- (1) *securities* that have not previously been offered for sale or subscription by an issuer; or
 - (2) *securities* that have not previously been traded on a *recognised investment exchange*, *designated investment exchange* or a *regulated market*.
- 26 G To calculate the reduced net *underwriting* position a bank should apply table 27G to the net *underwriting* position (calculated under 18G) as follows:
- (1) In respect of debt *securities*, a bank should calculate two reduced net *underwriting* positions; one for inclusion in the bank's specific risk calculation (see 43G of chapter TI), the other for inclusion in its general market risk calculation (see 48G of chapter TI).
 - (2) In respect of *equities*, a bank should calculate only one reduced net *underwriting* position and then include it in the simplified equity method (see 27G of chapter TE).
- 27 G Table: Net *underwriting* position reduction factors (see 26G)

Underwriting timeline	Debt		Equity
	General market risk	Specific risk	
Time of initial commitment until <i>working day 0</i>	0%	100%	90%
Working day 1	0%	90%	90%
Working day 2	0%	75%	75%
Working day 3	0%	75%	75%

Working day 4	0%	50%	50%
Working day 5	0%	25%	25%
Working day 6 and onwards	0%	0%	0%

- 28 G Figure: An example of the reduced net *underwriting* position calculation. The example is based on the bank starting with a commitment to underwrite £100 million of a new *equity* issue.

Time	Net underwriting position (see 18G)	Percentage reduction (see 27G)	Reduced net underwriting position ¹
At initial commitment 9.00am Monday	£100m gross amount is reduced by £20m due to sales/ sub- <i>underwriting</i> commitments confirmed in writing at the time of initial commitment (see 12R(1)). = £80m	90%	£8m
Post initial commitment 9.02am Monday	Remaining £80m is reduced by £40m due to further sales, sub- <i>underwriting</i> commitments obtained and allocations granted (see 12R (2) – (4)). = £40m	90%	£4m
At the end of working day 1	Remaining £40m is reduced to £20m due to further sales. = £20m	90%	£2m
End of working day 3	Remaining £20m is reduced to £5m due to further sales. = £5m	75%	£1.25 m
End of working day 4	Remaining £5m is reduced to £2m due to further sales. = £2m	50%	£1m
End of working day 5	Remaining £2m is reduced to £1m due to further sales. = £1m	25%	£0.75 m
Start of working day 6	£1m remaining = £1m	0%	£1m
Note: ¹ Banks are reminded that in the case of an <i>equity</i> , the reduced net <i>underwriting</i> position should be treated under the simplified equity method (see 27G of chapter TE)			
(1) Large exposure risk from underwriting securities			

CALCULATING THE NET UNDERWRITING EXPOSURE

- 29 G The net *underwriting exposure* should be included as an *exposure* to the issuer for the purposes of determining the bank's total *exposure* to that issuer when applying chapters LE and TL.
- 30 G A bank should include counterparty exposures to any sub-underwriters for the purposes of determining the bank's total *exposure* to that counterparty when applying chapter LE.
- 31 G A bank, before entering into a new *underwriting* commitment should be able to recalculate its large *exposure* to the level of detail necessary for it to follow the guidance in chapters LE and TL.

- 32 G A bank should calculate the net *underwriting exposure* by applying the relevant reduction factors in table 33G to its net *underwriting* position calculated under 18G.
- 33 G Table: Calculation of net *underwriting exposure* (see 29G)

Time	Reduction factor to be applied to net underwriting position
Initial commitment to <i>working day 0</i>	100%
<i>Working day 0</i>	100%
Working day 1	90%
Working day 2	75%
Working day 3	75%
Working day 4	50%
Working day 5	25%
Working day 6 onwards	0%

- 34 G There is no large exposure limit (chapter LE) or incremental capital (chapter TL) for net *underwriting exposures* between initial commitment and *working day 0*, except where specified by a requirement on a bank's *Part IV permission*.

MONITORING AND REPORTING LARGE EXPOSURES

- 35 G For the purposes of large exposures monitoring only, a bank should report its net *underwriting exposure* from the date of initial commitment rather than *working day 0*.

RISK MANAGEMENT

- 36 G A bank should take reasonable steps to establish and maintain such systems and controls to monitor and manage its *underwriting* and sub-*underwriting* business as are appropriate to the nature, scale and complexity of its *underwriting* and sub-*underwriting* business.
- 37 G The general requirements for systems and controls are set out in SYSC. 36G is specific to a bank's *underwriting* and sub-*underwriting* business.
- 38 G A bank should take reasonable steps to:
- (1) allocate responsibility for the management of its *underwriting* and sub-*underwriting* business;
 - (2) allocate adequate resources to monitor and control its *underwriting* and sub-*underwriting* business;

- (3) satisfy itself that its systems to monitor *exposure* to counterparties will calculate, revise and update its *exposure* to each counterparty arising from its *underwriting* or sub-*underwriting* business;
- (4) satisfy itself of the suitability of each person who performs functions for it in connection with the bank's *underwriting* business having regard for the person's skill and experience; and
- (5) satisfy itself that its procedures and controls to monitor and manage its *underwriting* business address, on an on-going basis, the capacity of sub-*underwriters* to meet sub-*underwriting* commitments.

Definitions used in chapter TU

39 G This chapter uses the following definitions:

Defined term	Definition
<i>Base currency</i>	The currency in which the bank's accounts are prepared.
<i>Business day</i>	Any day except Saturday, Sunday, bank holidays and public holidays (not being bank holidays).
<i>Designated investment exchange</i>	See Handbook Glossary.
<i>Equity</i>	See <i>share</i> .
<i>Foreign currency</i>	A currency other than the bank's <i>base currency</i> .
<i>Option</i>	A contract which confers the right to buy a <i>security</i> , contractually based investment or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>PRR</i>	Position risk requirement.
<i>Regulated investment exchange</i>	See Handbook Glossary.
<i>Regulated market</i>	See Handbook Glossary.
<i>Security</i>	See 10G.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.
<i>Underwriting</i>	The arrangement under which a party agrees to buy, before issue, a specified quantity of securities in an issue of securities on a given date and at a given price, if no other has purchased or acquired them.
<i>Warrant</i>	The investment specified in article 79 of the Regulated Activities Order (instruments giving entitlement to investments).
<i>Working day 0</i>	As defined in 23G.

Option PRR

General

- 1 G A UK bank to which CAD applies should apply this chapter and calculate its *option PRR* by:
- (1) identifying which *option* positions must be included within the scope of the *option PRR* calculation under 3G to 5G;
 - (2) calculating the derived position in each *option* in accordance with 9G to 15G;
 - (3) calculating the *PRR* for each derived position in accordance with 16G to 32G;
 - (4) summing all of the *PRRs* calculated in accordance with (3).
- 2 G Banks are reminded that table 4G of chapter TI and table 3G of chapter TE also state that an interest rate *PRR* should be calculated for *options* on *equities*, baskets of *equities* or *equity* indices. The interaction between this chapter and others is illustrated in 33G.

Scope of the option PRR calculation

- 3 G Except as permitted under 5G, a bank's *option PRR* calculation must include:
- (1) each *trading book* position in an *option* on an *equity*, interest rate or debt;
 - (2) each *trading book* position in a *warrant* on an *equity* or debt *security*; and
 - (3) each *trading book* and *non-trading book* position in an *option* on a *commodity*, currency or gold.
- 4 G 3G(2) includes net *underwriting* positions or reduced net *underwriting* positions in *warrants*.
- 5 G Table: Appropriate *PRR* calculation for *options* and *warrants* (see 3G)

<i>Option type (see 18G) or Warrant</i>	<i>PRR calculation</i>
American <i>option</i> , European <i>option</i> , Bermudan <i>option</i> , Asian <i>option</i> or <i>warrant</i> for which the <i>in the money</i> percentage (see 6G) is equal to or greater than the appropriate <i>PRA</i> (see 7G and 8G)	Calculate either an <i>option PRR</i> , or the most appropriate to the underlying position of: <ol style="list-style-type: none"> (a) an <i>equity PRR</i> (b) an interest rate <i>PRR</i> (c) a <i>commodity PRR</i> (d) a foreign exchange <i>PRR</i>

<p>American <i>option</i>, European <i>option</i>, Bermudan <i>option</i>, Asian <i>option</i> or <i>warrant</i>: (a) for which the <i>in the money</i> percentage (see 6G) is less than the appropriate <i>PRA</i> (see 7G and 8G); or (b) that is <i>at the money</i>; or (c) that is <i>out of the money</i>.</p>	<p>Calculate an <i>option PRR</i></p>
<p>All other types of <i>option</i> included in 18G (regardless of whether <i>in the money</i>, <i>at the money</i> or <i>out of the money</i>)</p>	
	<p>THE IN THE MONEY PERCENTAGE</p>

- 6 G The *in the money* percentage is calculated as follows:

For a call *option*:

$$\frac{\text{Current market price of the underlying} - \text{Strike price of the option}}{\text{Strike price of the option}} * 100$$

For a put *option*:

$$\frac{\text{Strike price of the option} - \text{Current market price of the underlying}}{\text{Strike price of the option}} * 100$$

THE APPROPRIATE PRA

- 7 G The appropriate *PRA* for a position is that listed in table 8G against the relevant underlying position.
- 8 G Table: Appropriate *PRA* (see 7G)

Underlying	Appropriate PRA
<i>Equity</i>	The <i>PRA</i> applicable to the underlying <i>equity</i> or <i>equity</i> index in table 30G of chapter TE (simplified equity method)
Interest rate	The sum of the specific risk <i>PRA</i> (table 44G of chapter TI) and the general market risk <i>PRA</i> (table 53G of chapter TI) applicable to the underlying position
Debt <i>securities</i>	The sum of the specific risk <i>PRA</i> (table 44G of chapter TI) and the general market risk <i>PRA</i> (table 53G of chapter TI) applicable to the underlying position
<i>Commodity</i>	15%
Gold	8%
Currency	8%

Calculating derived positions

- 9 G A bank must calculate the derived position specified in the table in 13G for each position included in its *option PRR* calculation.

NETTING POSITIONS

- 10 G A bank may calculate a derived position for its net position in an *option* or a *warrant*, if the relevant *options* or *warrants* are identical or may be treated as identical under 11G or 12G.
- 11 G A bank may treat *options* or *warrants* as identical if they have the same strike price, maturity (except for an interest rate cap or floor – see 12G) and underlying.
- 12 G A firm may treat as identical a purchased interest rate cap (or floor) and a written interest rate cap (or floor) only if they mature within 30 days of each other and all other terms are identical (a cap may not be netted against a floor).

Derived positions

- 13 G Table: Derived positions (see 9G)

	OPTION (OR WARRANT)	Underlying position
Equity	OPTION (WARRANT) ON A SINGLE EQUITY OR OPTION ON A FUTURE/FORWARD ON A SINGLE EQUITY	A notional position in the actual equity underlying the contract valued at the current market price of the equity.
	OPTION (WARRANT) ON A BASKET OF EQUITIES OR OPTION ON A FUTURE/FORWARD ON A BASKET OF EQUITIES	A notional position in the actual equities underlying the contract valued at the current market price of the equities.
	OPTION (WARRANT) ON AN EQUITY INDEX OR OPTION ON A FUTURE/FORWARD ON AN EQUITY INDEX	A notional position in the index underlying the contract valued at the current market price of the index.
Interest rate	OPTION ON AN INTEREST RATE OR AN INTEREST RATE FUTURE/FRA	A zero coupon zero-specific-risk security in the currency concerned with a maturity equal to the sum of the time to expiry of the contract and the length of the period on which the settlement amount of the contract is calculated valued at the notional amount of the contract.
	OPTION ON AN INTEREST RATE SWAP	A zero coupon zero-specific-risk security in the currency concerned with a maturity equal to the length of the swap valued at the notional principal amount.

	INTEREST RATE CAP OR FLOOR	A zero coupon zero-specific-risk security in the currency concerned with a maturity equal to the remaining period of the cap or floor valued at the notional amount of the contract.
Debt securities	OPTION (WARRANT) ON A DEBT SECURITY OR OPTION ON A FUTURE/FORWARD ON A DEBT SECURITY	The underlying debt security with a maturity equal to the time to expiry of the option valued as the nominal amount underlying the contract at the current market price of the debt security.
Commodity	OPTION ON A COMMODITY OR OPTION ON A FUTURE/FORWARD ON A COMMODITY	An amount equal to the tonnage, barrels or kilos underlying the option with a maturity equal to the expiry date of the spot, forward or futures contract underlying the option.
Gold	OPTION ON GOLD OR OPTION ON A FUTURE/FORWARD ON GOLD	An amount equal to the troy ounces underlying the option with a maturity equal to the expiry date of the contract underlying the option.
Currency	CURRENCY OPTION	The amount of the underlying currency that the bank will receive if the option is exercised converted at the spot rate into the currency that the bank will sell if the option is exercised.

Combinations of options which can be treated as one option

- 14 G A bank may treat (for the purpose of calculating option *PRR* under this chapter) an *option* strategy in table 15G as a single position in a notional *option* specified against that strategy in table 15G, if:
- (1) each element of the strategy is transacted with the same counterparty;
 - (2) the strategy is documented as a single structure;
 - (3) each *option* in the structure has the same maturity and underlying; and
 - (4) the constituent parts of the structure form an indivisible single contract, so that neither counterparty can unwind or default on one part of the structure without doing so for the contract as a whole.
- 15 G Table: *Option* strategies (see 14G)

<i>Option</i> strategy (and an example)	Notional <i>option</i> position (and how it should be treated)
Bull Spread (e.g. buy 100 call and sell 101 call)	One purchased <i>option</i> (treat under 20G)
Bear Spread (e.g. sell 100 put and buy 101 put)	One written <i>option</i> (treat under 21G)
Synthetic Long Call (e.g. long underlying and buy 100 put)	One purchased <i>option</i> (treat under 20G or 24G)

Synthetic Short Call (e.g. short underlying and sell 100 put)	One written <i>option</i> (treat under 21G or 24G)
Synthetic Long Put (e.g. short underlying and buy 100 call)	One purchased <i>option</i> (treat under 20G or 24G)
Synthetic Short Put (e.g. buy underlying and sell 100 call)	One written <i>option</i> (treat under 21G or 24G)
Long Straddle (e.g. buy 100 call and buy 100 put)	One purchased <i>option</i> (treat under 20G)
Short Straddle (e.g. sell 100 call and sell 100 put)	One written <i>option</i> (treat under 21G but with no reduction for the amount the <i>option</i> is <i>out of the money</i>)
Long Strangle (e.g. buy 101 call and buy 99 put)	One purchased <i>option</i> (treat under 20G)
Short Strangle (e.g. sell 99 call and sell 101 put)	One written <i>option</i> (treat under 21G but with no reduction for the amount the <i>option</i> is <i>out of the money</i>)
Long Butterfly (e.g. buy one 100 call, sell two 101 calls, and buy one 102 call)	One purchased <i>option</i> (treat under 20G)
Short Butterfly (e.g. sell one 100 put, buy two 101 puts, and sell one 102 put)	One written <i>option</i> (treat under 21G but with no reduction for the amount the <i>option</i> is <i>out of the money</i>)

The option PRR for an individual position

- 16 G A bank must calculate the *PRR* for each individual derived *option* position using the method specified in table 18G, or, if more than one method is permitted, using one of those methods.
- 17 G The resulting *PRRs* must be converted to the bank's *base currency* using spot foreign exchange rates.
- 18 G Table: Option PRR methods applied to different types of option (see 16G)

Option	DESCRIPTION	Method
American option	AN OPTION THAT MAY BE EXERCISED AT ANY TIME OVER AN EXTENDED PERIOD UP TO ITS EXPIRY DATE.	Standard method or hedging method if appropriate
European option	AN OPTION THAT CAN ONLY BE EXERCISED AT EXPIRY.	

Bermudan option	A CROSS BETWEEN AN AMERICAN OPTION AND EUROPEAN OPTION. THE BERMUDAN OPTION CAN ONLY BE EXERCISED AT SPECIFIC DATES DURING ITS LIFE.
Asian option	THE BUYER HAS THE RIGHT TO EXERCISE AT THE AVERAGE RATE OR PRICE OF THE UNDERLYING OVER THE PERIOD (OR PART OF THE PERIOD) OF THE OPTION. ONE VARIANT IS WHERE THE PAYOUT IS BASED ON THE AVERAGE OF THE UNDERLYING AGAINST A FIXED STRIKE PRICE; ANOTHER VARIANT IS WHERE THE PAYOUT GIVES AT EXPIRY THE PRICE OF THE UNDERLYING AGAINST THE AVERAGE PRICE OVER THE OPTION PERIOD.
Barrier option	AN OPTION WHICH IS EITHER CANCELLED OR ACTIVATED IF THE PRICE OF THE UNDERLYING REACHES A PRE-SET LEVEL REGARDLESS OF THE PRICE AT WHICH THE UNDERLYING MAY BE TRADING AT THE EXPIRY OF THE OPTION. THE KNOCK-OUT TYPE IS CANCELLED IF THE UNDERLYING PRICE OR RATE TRADES THROUGH THE TRIGGER; WHILE THE KNOCK-IN BECOMES ACTIVATED IF THE PRICE MOVES THROUGH THE TRIGGER.
Corridor option	PROVIDES THE HOLDER WITH A PAY-OUT FOR EACH DAY THAT THE UNDERLYING STAYS WITHIN A DEFINED RANGE CHOSEN BY THE INVESTOR.
Ladder option	PROVIDES THE HOLDER WITH GUARANTEED PAY-OUTS IF THE UNDERLYING TRADES THROUGH A PRE-AGREED PRICE(S) OR RATE(S) AT A CERTAIN POINT(S) IN TIME, REGARDLESS OF FUTURE PERFORMANCE.

Lock-in option	AN OPTION WHERE THE PAY-OUT TO THE HOLDER IS LOCKED IN AT THE MAXIMUM (OR MINIMUM) VALUE OF THE UNDERLYING THAT OCCURRED DURING THE LIFE OF THE OPTION.	
Look-back option	AN EUROPEAN STYLE OPTION WHERE THE STRIKE PRICE IS FIXED IN RETROSPECT, THAT IS AT THE MOST FAVOURABLE PRICE (I.E. THE LOWEST (HIGHEST) PRICE OF THE UNDERLYING IN THE CASE OF A CALL (PUT)) DURING THE LIFE OF THE OPTION.	
Forward starting option	AN OPTION THAT STARTS AT A FUTURE DATE.	
Compound option	AN OPTION WHERE THE UNDERLYING IS ITSELF AN OPTION (I.E. AN OPTION ON AN OPTION).	
Interest rate cap	AN INTEREST RATE OPTION OR SERIES OF OPTIONS UNDER WHICH A COUNTERPARTY CONTRACTS TO PAY ANY INTEREST COSTS ARISING AS A RESULT OF AN INCREASE IN RATES ABOVE AN AGREED RATE: THE EFFECT BEING TO PROVIDE PROTECTION TO THE HOLDER AGAINST A RISE ABOVE THAT AGREED INTEREST RATE.	Standard but with no reduction for the amount the option is out of the money
Interest rate floor	AN INTEREST RATE OPTION OR SERIES OF OPTIONS UNDER WHICH A COUNTERPARTY CONTRACTS TO PAY ANY LOST INCOME ARISING AS A RESULT OF AN FALL IN RATES BELOW AN AGREED RATE: THE EFFECT BEING TO PROVIDE PROTECTION TO THE HOLDER AGAINST A FALL BELOW THAT AGREED INTEREST RATE.	

Performance option	AN OPTION BASED ON A REFERENCE BASKET COMPRISED OF ANY NUMBER OF ASSETS, WHERE THE PAY-OUT TO THE HOLDER COULD BE ONE OF THE FOLLOWING: THE MAXIMUM OF THE WORST PERFORMING ASSET, OR 0; THE MAXIMUM OF THE BEST PERFORMING ASSET, OR 0; THE MAXIMUM OF THE SPREADS BETWEEN SEVERAL PAIRS OF THE ASSETS, OR 0.	Standard or hedging, but use the highest PRA of the individual assets in the basket.
Quanto	QUANTO STANDS FOR “QUANTITY ADJUSTED OPTION”. A QUANTO IS AN INSTRUMENT WHERE TWO CURRENCIES ARE INVOLVED. THE PAYOFF IS DEFINED IN TERMS OF A VARIABLE THAT IS MEASURED IN ONE OF THE CURRENCIES AND THE PAYOFF IS MADE THE OTHER CURRENCY.	Subject to 31G, the standard method
Cliquet option	A CLIQUET OPTION CONSISTS OF A SERIES OF FORWARD STARTING OPTIONS WHERE THE STRIKE PRICE FOR THE NEXT EXERCISE DATE IS SET EQUAL TO A POSITIVE CONSTANT TIMES THE UNDERLYING PRICE AS OF THE PREVIOUS EXERCISE DATE. THEY INITIALLY ACT LIKE A VANILLA OPTION WITH A FIXED PRICE BUT AS TIME MOVES ON, THE STRIKE IS RESET AND THE INTRINSIC VALUE AUTOMATICALLY LOCKED IN AT PRE-SET DATES. IF THE UNDERLYING PRICE IS BELOW THE PREVIOUS LEVEL AT THE RESET DATE NO INTRINSIC VALUE IS LOCKED IN BUT THE STRIKE PRICE WILL BE RESET TO THE CURRENT PRICE ATTAINED BY THE UNDERLYING. IF THE UNDERLYING PRICE EXCEEDS THE CURRENT LEVEL AT THE NEXT RESET THE INTRINSIC VALUE WILL AGAIN BE LOCKED IN.	Standard method for a purchased cliquet or the method specified in 30G for a written cliquet

Digital option	A TYPE OF OPTION WHERE THE PAYOUT TO THE HOLDER IS FIXED. THE MOST COMMON TYPES: ALL-OR-NOTHING AND ONE-TOUCH OPTIONS. ALL-OR-NOTHING WILL PAY OUT THE FIXED AMOUNT IF THE UNDERLYING IS ABOVE (CALL) OR BELOW (PUT) A SET VALUE AT EXPIRY. THE ONE-TOUCH WILL PAY THE FIXED AMOUNT IF THE UNDERLYING REACHES A FIXED POINT ANY TIME BEFORE EXPIRY.	The method specified in 29G
Any other option or warrant		The method specified for the type of instrument whose description it most closely resembles.

Calculating option PRR

19 G In the table 18G:

- (1) "standard method" refers to the method specified in 20G to 22G; and
- (2) "hedging method" refers to the method specified in 23G to 28G.

The standard method

PURCHASED OPTIONS AND WARRANTS

20 G Under the standard method, the *PRR* for a purchased *option* or *warrant* is the lesser of:

- (1) the market value of the derived position (see 9G) multiplied by the appropriate *PRA* (see 8G); and
- (2) the market value of the *option* or *warrant*.

WRITTEN OPTIONS AND WARRANTS

21 G Under the standard method, the *PRR* for a written *option* or *warrant* is the market value of the underlying position (see 9G) multiplied by the appropriate *PRA* (see 8G). This result may be reduced by the amount the *option* or *warrant* is *out of the money* (subject to a maximum reduction to zero).

UNDERWRITING OR SUB-UNDERWRITING AN ISSUE OF WARRANTS

22 G Under the standard method, the *PRR* for *underwriting* or *sub-underwriting* an issue of *warrants* is the net *underwriting* position (or reduced net *underwriting* position) multiplied by the current market price of the underlying *securities* multiplied by the appropriate *PRA*, but the result can be limited to the value of the net *underwriting* position (or reduced net *underwriting* position) calculated using the issue price of the *warrant*.

The hedging method

- 23 G The hedging method involves *option PRR* being calculated on a combination of the *option* and its hedge.
- 24 G Under the hedging method a bank must calculate *PRR* individual positions as follows:
- (1) for an *option* or *warrant* on an *equity*, basket of *equities* or *equity* index and its *equity* hedge(s), to the extent specified or permitted in table 26G, using the calculation in table 27G;
 - (2) for an *option* or *warrant* on a *debt security*, basket of *debt securities* or *debt security* index and its *debt security* hedge(s), to the extent specified or permitted in table 26G, using the calculation in table 27G;
 - (3) for an *option* on gold and its gold hedge, to the extent specified or permitted in table 26G, using the calculation in table 27G; and
 - (4) for an *option* on a currency and its currency hedge, to the extent specified or permitted in table 26G, using the calculation in table 28G.
- 25 G A firm may not use the hedging method for:
- (1) an interest rate *option* and its hedge; or
 - (2) a *commodity option* and its hedge.
- 26 G Table: Appropriate treatment for *equities*, *debt securities* or currencies hedging *options* (see 24G)

Hedge	<i>PRR</i> calculation for the hedge	Limits (if the hedging method is used)	Naked positions
An <i>equity</i> (hedging an <i>option</i> or <i>warrant</i>)	The <i>equity</i> should be treated in either chapter TE (<i>equity PRR</i>) or the hedging method (table 27G)	The hedging method should only be used up to the amount of the hedge that matches the notional	To the extent that the amount of the hedge (or <i>option</i>) exceeds the notional amount underlying the <i>option</i> or <i>warrant</i> (or
A <i>debt security</i> (hedging an <i>option</i> or <i>warrant</i>)	The <i>debt security</i> should be treated in chapter TI (interest rate <i>PRR</i>) or the hedging method (table 27G)		
Gold (hedging a gold <i>option</i>)	The gold should be treated in either chapter FX (foreign exchange <i>PRR</i>) or the hedging method (table 27G)		

A currency or currencies (hedging a currency <i>option</i>)	The currency should be treated in either chapter FX (foreign exchange <i>PRR</i>) or the hedging method (table 28G)	amount underlying the <i>option</i> or <i>warrant</i>	hedge), a bank should apply an <i>equity PRR</i> , interest rate <i>PRR</i> or foreign exchange <i>PRR</i> (or <i>option PRR</i>)
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- 27 G Table: The hedging method of calculating the *PRR* (*equities*, *debt securities* and gold) (see 24G(1) to (3))

	<i>Option or warrant position</i>	<i>PRR</i>		
		<i>In the money by more than the PRA</i>	<i>In the money by less than the PRA</i>	<i>Out of the money</i>
Long in <i>security</i>	Long put	Zero	Wp	X
	Short call	Y	Y	Z
Short in <i>security</i>	Long call	Zero	Wc	X
	Short put	Y	Y	Z
Where:				
Wp	$[(PRA - 100\%) \times \text{The underlying position valued at strike price}] + \text{The market value of the underlying position}$			
Wc	$[(100\% + PRA) \times \text{The underlying position valued at strike price}] - \text{The market value of the underlying position}$			
X	The market value of the underlying position multiplied by the appropriate <i>PRA</i>			
Y	The market value of the underlying position multiplied by the appropriate <i>PRA</i> . This result may be reduced by the market value of the <i>option</i> or <i>warrant</i> , subject to a maximum reduction to zero.			
Z	The standard method should be used.			

- 28 G Table: The hedging method of calculating the *PRR* (*currencies*) (see 24G(4))

<i>Option position</i>	<i>PRR</i>		
	<i>In the money by more than 8%</i>	<i>In the money by less than 8%</i>	<i>Out of the money</i>
Long calls & long puts	Zero	WL	X
Short calls & short puts	Zero	Y	X
Where:			

W_L	[1.08 x	The amount of the underlying currency that the bank will receive if the <i>option</i> is exercised, converted at the strike price into the currency that the bank will sell if the <i>option</i> is exercised]	-	The market value of the underlying position
X	The market value of the underlying position multiplied by 8%.					
Y	The market value of the underlying position multiplied by 8%. This result may be reduced by the market value of the <i>option</i> , subject to a maximum reduction to zero.					

Specific methods and treatments

DIGITAL OPTIONS

- 29 G The *PRR* for a digital *option* is the maximum loss of the *option*.

WRITTEN CLIQUET OPTIONS

- 30 G The *PRR* for a written cliquet *option* is the market value of the derived position (see 8G) multiplied by the appropriate *PRA* (see 8G) multiplied by $F+1$ (see below). This result may be reduced by the amount the *option* is *out of the money* (subject to a maximum reduction to zero).

$$\text{i.e. } [PRA * \text{underlying} * (F + 1)] - OTM$$

$$\text{where } F = \min \left[FR, \max \left(\frac{FR}{2}, Y \right) \right]$$

FR: Number of forward re-sets

Y: Years to maturity

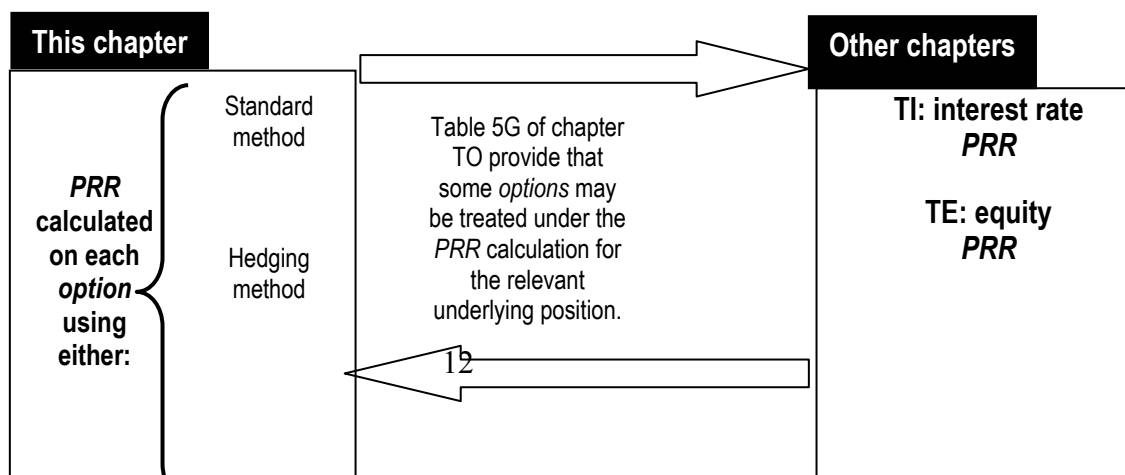
OTM: *out of the money* amount

QUANTOS

- 31 G If the pay-out to the holder of a quanto *option* is fixed at the inception of the transaction a bank must add 8% to the *PRA* when applying the standard method.
- 32 G The additional *PRA* is to account for the forward foreign currency exchange risk.

Interaction with other chapters

- 33 G Figure: Diagram illustrating the relationship between this chapter and other chapters.



**CM:
commodity
PRR****FX: Foreign
exchange PRR**Method in
29G - 32GTable 26G of chapter
TO provides that
some positions in the
underlying *equity* or
debt *security* may be
treated under the
hedging method

Definitions used in chapter TO

34 G This chapter uses the following definitions:

<i>At the money</i>	Where the strike price of the <i>option</i> or <i>warrant</i> is the same as the current market value of the underlying instrument.
<i>Base currency</i>	The currency in which the bank's accounts are prepared.
<i>Cap</i>	Means an agreement in respect of a borrowing under which a counterparty contracts to pay any interest costs arising as a result of an increase in rates above an agreed rate: the effect being to provide protection to the holder against a rise above that agreed rate.
<i>Commodity</i>	Any physical or energy product (except gold) which is, or can be traded on a secondary market. (NB the definition of commodity used in chapter TO deliberately differs from that in the main Handbook Glossary).
<i>Equity</i>	See <i>share</i> .
<i>Floor</i>	Means an agreement in respect to a deposit under which a counterparty contracts to pay any lost income arising as a result of a fall in rates below an agreed rate: the effect being to provide protection to the holder against a fall below that agreed interest rate.
<i>Foreign currency</i>	A currency other than the bank's <i>base currency</i> .
<i>Forward</i>	A contract to buy or sell where the date of settlement has been agreed as a particular date in the future.
<i>Forward rate agreement</i>	An agreement in which two parties agree on the payment by one party to another of an amount of interest based on an agreed interest rate for a specified period from a specified settlement date applied to an agreed principal amount; no commitment is made by either party to lend or borrow the principal amount; their exposure is only the interest difference between the agreed and actual rates at settlement.
<i>FRA</i>	<i>Forward rate agreement</i> .
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>In the money</i>	Where the strike of a call <i>option</i> or <i>warrant</i> is less than the current market value of the underlying instrument, or vice versa for put <i>options</i> .
<i>Option</i>	A contract which confers the right to buy or sell a <i>security</i> , contractually based investment, currency, gold or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from

	that in the main Handbook Glossary).
<i>Out of the money</i>	Where the strike price a call <i>option</i> or <i>warrant</i> is more than the current market value of the underling instrument, or vice versa for a put <i>option</i> .
<i>PRA</i>	Percentage risk addition.
<i>PRR</i>	Position risk requirement.
<i>Security</i>	As defined in article 3(1) of the Regulated Activities Order.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.
<i>Trading book</i>	As defined in section 3.2.1 of chapter CB.
<i>Underwriting</i>	The arrangement under which a party agrees to buy, before issue, a specified quantity of securities in an issue of securities on a given date and at a given price, if no other has purchased or acquired them.
<i>Warrant</i>	The investment specified in article 79 of the Regulated Activities Order (instruments giving entitlement to investments).
<i>Zero-specific-risk security</i>	A hypothetical debt <i>security</i> used to represent the general interest rate risk arising from certain <i>derivative</i> and <i>forward</i> transactions.

TS

Use of a CAD1 Model

Introduction

- 1 G A bank should, under Section 3.4 of chapter TO, calculate *PRR* using the guidance in chapters TI, TE, CM, FX and TO. However, at the bank's request, the FSA may give individual *guidance*, and thereby allow the bank to calculate all or part of its *PRR* using a Capital Adequacy Directive "CAD1" (for options risk aggregation and/or interest rate pre-processing) or "VaR" (value at risk) model instead. Chapter TV deals with the VaR model recognition process.
- 2 G The purpose of this chapter is to provide guidance on the FSA's policy for giving individual *guidance* on the use of CAD1 models. The policy recognises that CAD1 models may vary across banks but, as a minimum, the FSA will need to be satisfied about:
- (1) the quality of the internal controls and risk management surrounding the model model (see 17G to 21G for further details); and
 - (2) the quality of the model standards and that the CAD1 model captures and produces an accurate measure of the risks inherent in the portfolio covered by the CAD1 model (see 22G to 51G for further details).
- 3 G It also explains how the output from the model is fed into the CO: Section 5 *PRR* calculation.
- 4 G If individual *guidance* to use a CAD1 model is given by the FSA, the individual *guidance* will contain certain conditions. In order to adequately address individual circumstances, these conditions may differ from the requirements set out in this chapter. The individual *guidance* will also confirm the scope of the CAD1 model recognition given to a bank.
- 5 G Individual *guidance* permitting the use of models in the calculation of *PRR* will not be given if that would be contrary to the CAD or Basel Accord, and any individual *guidance* which is given will only be given on terms that are compatible with the CAD and Basel Accord. The FSA considers it unlikely that it will deviate from this approach. Accordingly, the only individual *guidance* permitting the use of models that the FSA is likely to give are CAD1 and VaR models.
- 6 G If a bank ceases to meet any of these standards, the FSA's policy is that the individual *guidance* should cease to have effect.

Scope of CAD1 models

- 7 G The FSA recognises two types of CAD1 model. The table below sets out :

Options risk aggregation models		Interest rate pre-processing models
Brief description and eligible	Analyse and aggregate <i>options</i> risks for	May be used to calculate duration weighted positions for:

instruments	<ul style="list-style-type: none"> • interest rate <i>options</i>; • <i>equity options</i>; • foreign exchange <i>options</i>; and • <i>commodity options</i>. 	<ul style="list-style-type: none"> • <i>swaps</i> (<i>swaps</i> include <i>swaps</i> and their economic equivalent).
The output and how it is used in the <i>PRR</i> calculation	Depending on the type of model and the conditions contained in any CAD1 model individual <i>guidance</i> given, the outputs from an <i>options</i> risk aggregation model may be used as an input to the <i>PRR</i> calculation set out in IPRU(Bank) chapters CO, TI, TE, CM, FX and TO).	Depending on the type of model and the conditions contained in any CAD1 model individual <i>guidance</i> given, the individual sensitivity figures produced by this type of CAD1 model may be either input into a bank's standard duration method <i>PRR</i> calculation (see 60G of Chapter TI) or be converted into notional positions and input into a bank's maturity method <i>PRR</i> (see 55G of Chapter TI).

The CAD1 model application and review process

- 8 G In order to consider a CAD1 model recognition individual *guidance* request, the FSA may undertake a review to ensure that it is adequate and appropriate for the *PRR* calculation.
- 9 G The model review process may be conducted through a series of visits covering various aspects of the bank's control and IT environment. Before these visits the FSA may ask the bank to provide some information relating to its individual *guidance* request accompanied by some specified background material. The model review visits are organised on a timetable that allows a bank being visited sufficient time to arrange the visit and provide the appropriate pre-visit information.
- 10 G As part of the model review process, the following may be reviewed: organisational structure and personnel; details of the bank's market position in the relevant products; profit and risk information; valuation and reserving policies; operational controls; IT systems; model release and control procedures; risk management and control framework; risk appetite and limit structure and future developments relevant to model recognition.
- 11 G The FSA will normally require meetings with senior management and staff from the front office, financial control, risk management, operations, systems development, information technology and audit areas.
- 12 G A review by a *skilled person* may be used before CAD1 model individual *guidance* is given to supplement the model review process, or after the individual *guidance* has been given to review the CAD1 model.
- 13 G If the FSA gives individual *guidance* to allow the use of a CAD 1 model, the individual *guidance* will set out the conditions on which the individual *guidance* has been given. Conditions may include:

- (1) the details of the calculation of *PRR*;
 - (2) the CAD1 model methodology to be employed;
 - (3) the products covered by the model (e.g. *option* type, maturity, currency);
 - (4) any notification requirements relating to the CAD1 model individual *guidance*; and
 - (5) any other conditions attached to the CAD1 model individual *guidance*.
- 14 G Where a bank operates any part of its CAD1 model outside the United Kingdom, the FSA may take into account the results of any home state supervisor's model review. The FSA may wish to receive information directly from the home state supervisor.

Maintenance of model recognition

- 15 G No changes should be made to a CAD1 model unless the change is not material. Material changes to a CAD1 model will require further individual *guidance* to be issued. Materiality is measured from the time that the individual *guidance* or further individual *guidance* has been given. If a bank is considering making material changes to its CAD1 model, then it should notify the FSA at once. A bank must request further individual *guidance* if the products covered by the model change.
- 16 G If the CAD1 model ceases to meet the conditions of the individual *guidance*, the bank should notify the FSA at once. The FSA may then withdraw the individual *guidance*, unless further individual *guidance* is given.

Risk management standards

- 17 G A bank with a complex portfolio is expected to demonstrate more sophistication in its modelling and risk management than a bank with a simple portfolio.
- 18 G A bank should be able to demonstrate that it meets the risk management standards set out in this appendix for each legal entity that will have the benefit of the CAD1 model individual *guidance*. This is particularly important for subsidiaries in groups subject to matrix management where the business lines cut across legal entity boundaries.
- 19 G A bank should have a conceptually sound risk management system which is implemented with integrity and should meet the following minimum standards:
- (1) A bank should have a risk control unit that is independent of business trading units and reports directly to senior management. The unit should be responsible for designing and implementing the bank's risk management system. It should produce and analyse daily reports on the risks run by the business and on the appropriate measures to be taken in terms of the trading limits.
 - (2) A bank's senior management should be actively involved in the risk control process, and the daily reports produced by the risk control unit should be reviewed by a level of management with sufficient authority to enforce reductions of positions taken by individual traders as well as in the bank's overall risk exposure.

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- (3) The risk control group should have a sufficient number of staff with appropriate skills in the use of models.
 - (4) A bank should have established procedures for monitoring and ensuring compliance with a documented set of appropriate internal policies and controls concerning the overall operation of the risk measurement and control framework. This should take into account the front, middle and back office functions.
 - (5) A bank should conduct, as part of its internal audit process, a review of the systems and controls surrounding its CAD1 model. This review should include the valuation process, compliance with the CAD1 model scope and the activities of the business trading units and the risk control units. This review should be undertaken by staff independent of the areas being reviewed.
- 20 G In assessing whether the risk management and control framework is implemented with integrity, the FSA will consider the IT systems used to run the CAD1 model and associated calculations. The assessment will include, where appropriate:
- (1) feeder systems; risk aggregation systems; the integrity of the data (i.e. it is complete, coherent and correct); reconciliations and checks on completeness of capture; and
 - (2) system development, change control and documentation; security and audit trails; system availability and contingency procedures; network adequacy.
- 21 G A bank should take appropriate steps to ensure that it has adequate controls surrounding:
- (1) the derivation of the *PRR* from the CAD1 model output;
 - (2) CAD1 model development, including independent validation;
 - (3) reserving;
 - (4) valuation (see IPRU(Bank), chapter VA) including independent validation; and
 - (5) the adequacy of the IT infrastructure.

Model standards

- 22 G A bank should take appropriate steps to ensure that its CAD1 model captures and produces an accurate measure of the risks inherent in the portfolio covered by the CAD1 model. These risks may include, but are not limited to, gamma, vega and rho.

OPTIONS RISK AGGREGATION MODELS

- 23 G For a bank to obtain CAD1 model individual *guidance* for its *options* risk aggregation model, it should have in place an appropriate *options* valuation model.

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- 24 G The FSA does not specify the methodology that a bank should employ in order to produce the appropriate outputs from its CAD1 model. However, 25G to 41G provide conditions of how a bank could meet the requirements to capture gamma, vega and rho risks using a scenario matrix approach. Where a bank adopts the scenario matrix approach then the standards set out in 25G to 41G should be followed. The bank should also take into account other risks not captured by the scenario matrix approach. Otherwise, a bank may use an equivalent methodology. If a bank uses an equivalent methodology, then it will need to demonstrate that the approach used meets the requirements of this chapter.
- 25 G A scenario matrix is an approach by which an *options* portfolio is revalued given a number of simultaneous shifts in both the spot level of the underlying and the implied volatility.
- 26 G The scenario matrix approach may be employed for all types of *options* on all types of underlying asset.
- 27 G The following provides an outline of the initial steps to be taken when using the scenario matrix approach:
- (1) A value for an *option* should be obtained using the bank's *options* valuation model.
 - (2) The inputs into the *options* valuation model for implied volatility of the underlying asset and the price of the underlying asset should then be altered so that a new value for the *option* is obtained (details of the amount by which the implied volatility and the price of the underlying should be amended are set out in 28G-34G).
 - (3) The difference between the original value of the *option* and the new value obtained following the alterations should be input into the appropriate cell in the matrix, the value in the central cell where there is no change in implied volatility or price of the underlying should therefore be zero.
 - (4) The process of obtaining a new price for the *option* should be repeated until the matrix is completed.
- 28 G The alteration to the implied volatility (known as the implied volatility shift) referred to in 27(2) G may be a proportional shift, the size of which depends on the remaining life of the *option* and the asset class of the underlying. Table 30G sets out the shifts that should be applied where a proportional shift is used. Alternatively, a bank may use a single shift across all maturities or use an absolute rather than a proportional implied volatility shift. Where a single shift or an absolute shift is used it should be at least as conservative as the proportional shifts. This should be reviewed and, if necessary updated, on a regular basis.
- 29 G A bank may choose to use a less detailed term structure than that in Table 30G, but the shifts used should be no less conservative than those set out. For example, a bank that uses one <3 month band, rather than the two bands (<1 month, and 1-3 months) set out in the table, should use the most conservative shift set out in the table for the bands covered that is, 30% for the <3 month band.

30 G TABLE: PROPORTIONAL IMPLIED VOLATILITY SHIFTS (SEE 28G)

REMAINING LIFE OF OPTION	PROPORTIONAL SHIFT	
	EQUITIES & FX & COMMODITIES	INTEREST RATES
≤ 1 month	30%	30%
$>1 \leq 3$ months	20%	20%
$>3 \leq 6$ months	15%	15%
$>6 \leq 9$ months	12%	12%
$>9 \leq 12$ months	9%	9%
$>1 \leq 2$ years	6%	9%
$>2 \leq 4$ years	4.5%	9%
>4 years	3%	9%

31 G The size of the underlying price/rate shift depends on the asset class of the underlying, and is set out in 32G:

32 G TABLE: UNDERLYING PRICE/RATE SHIFTS (SEE 31G)

UNDERLYING ASSET CLASS	SHIFT
Equities	$\pm 8\%$
Foreign Exchange	$\pm 8\%$

Commodities	±15%, (but a bank may use the percentages applicable under the extended maturity ladder approach, where permitted by the requirements of Chapter CM).
Interest Rates	±100bp (but a bank may use the sliding scale of shifts by maturity as outlined in Chapter TI).

- 33 G The shifts outlined above are the maximum shifts required; in addition there will be a number of intermediate shifts as a result of the minimum matrix size criteria set out in 34G.
- 34 G The minimum size of the scenario matrix should be 3x7, that is, three observations for implied volatility (including the actual implied volatility) and seven observations for the price of the underlying (including the actual price of the underlying). A bank should be able to justify its choice of granularity. Greater granularity may be required where the portfolio contains, for example, a large proportion of barrier *options*.
- 35 G A different scenario matrix should be set up for each underlying asset type:
- (1) for *equities* (including single *equities*, baskets and indices) this means a separate matrix for each national market or non-decomposed basket or non-decomposed multi-national index;
 - (2) for foreign-exchange products this means a separate matrix for each currency pair where appropriate;
 - (3) for *commodity* products this means a separate matrix for each underlying as defined in Chapter CM; and
 - (4) for interest rate products this means a separate matrix for each currency; in addition, a bank should not offset the gamma and vega exposures (except in the circumstances set out in 36G) arising from any one of the following types of products with the gamma and vega exposures arising from any of the other products in the list:
 - (a) Swaptions (options on interest rate *swaps*);
 - (b) interest rate *options* (including *options* on exchange-traded *deposit* or bill *futures*);
 - (c) bond *options* (including *options* on exchange-traded bond *futures*);
 - (d) other types of exotic *option* which do not fall easily into one of the other three categories and are required by the FSA to form their own separate underlying asset.

- 36 G A bank may offset gamma and vega exposures arising from the products listed in 35(4) G where it can demonstrate that it trades different types of interest rate-related *options* as a portfolio and takes steps to control the basis risk between different types of implied volatility. If this is the case, then an individual matrix is not required for each of the products listed in 35(4) G and a combined scenario matrix may be used.
- 37 G Where it is imprudent to fully offset long-dated and short-dated vega exposure due to non-parallel shifts in the yield curve, a bank should use an appropriate number of scenario matrices to take account of non-parallel shifts in the yield curve according to the maturity of the *option* or underlying.
- 38 G Following the steps outlined in 27G, a bank then removes the portion of the values in the matrix that can be attributed to the effect that delta has had on the change in the value of the *option* (a process known as delta-stripping).
- 39 G Once the effect of delta has been removed from the matrix, the values left in the matrix relate to gamma and vega risk. A bank's market risk requirement in relation to gamma and vega risk on the individual *option* is the absolute of the most negative cell in the scenario matrix produced. Where all cells are positive the *PRR* is zero. The total *PRR* for the gamma and vega risk on the portfolio of *options* is a simple sum of the individual requirements. This amount should then be fed into a bank's *PRR* calculation.
- 40 G The values that have been obtained for the delta-equivalent positions of instruments included in the scenario matrix should then be treated in the same way as positions in the underlying. Where the delta obtained relates to interest rate position risk, the delta equivalent positions may be fed into a bank's interest rate pre-processing model providing that the positions fall within the scope of the interest rate pre-processing model set out in 7G, and that the bank has the appropriate CAD1 model individual *guidance*. Alternatively, the delta obtained should be fed into the standard *PRR* calculation in Chapter TI, TE, CM or FX as appropriate.
- 41 G In using the scenario matrix approach, none of the steps followed will take specific account of a bank's exposure to rho risk. Where a bank can demonstrate that for interest rate-related *options* the rho sensitivity is effectively included in the delta sensitivities produced, there is no separate capital requirement relating to rho. For all other *options* except commodity *options*, a bank should calculate a rho sensitivity ladder by currency as part of its CAD1 model and feed this either into the maturity or duration method *PRR* calculation set out in Chapter TI or, where a bank has the appropriate individual *guidance*, into an interest rate pre-processing model.

INTEREST RATE PRE-PROCESSING MODELS

- 42 G A bank that has been given individual *guidance* to use an interest rate pre-processing model is permitted to use it for the pre-processing of the instruments set out in 7G, from which the residual positions are fed into the maturity or duration method *PRR* calculation as set out in Chapter TI.
- 43 G There are a number of different methods of constructing pre-processing models. All pre-processing models should generate positions that have the same sensitivity to defined interest rate changes as the underlying cash flows.

- 44 G In an interest rate pre-processing model each transaction is converted into its constituent cash flows. The cash flows are discounted using zero coupon rates derived from the bank's own yield curves.
- 45 G The cash flows are then calculated again using the bank's own yield curve shifted by the amount set out in 47G.
- 46 G The difference between the present values calculated using the bank's own yield curve and those calculated using the bank's curve shifted by the amount specified are known as the sensitivity figures. Alternatively, banks may shift the yield curve by one basis point and multiply the sensitivity figures up by the appropriate amount in order to achieve the shifts set out in 47G. These sensitivity figures are then allocated to each of the 15 maturity bands set out in 47G.
- 47 G TABLE: YIELD CURVE SHIFTS (SEE 45G)

Zone	Modified Duration	Assumed interest rate change (percentage points)
1	0 ≤ 1 months	1.00
	> 1 ≤ 3 months	1.00
	> 3 ≤ 6 months	1.00
	> 6 ≤ 12 months	1.00
2	> 1.0 ≤ 1.9 years	0.90
	> 1.9 ≤ 2.8 years	0.80
	> 2.8 ≤ 3.6 years	0.75
3	> 3.6 ≤ 4.3 years	0.75
	> 4.3 ≤ 5.7 years	0.70
	> 5.7 ≤ 9.3 years	0.65
	> 7.3 ≤ 9.3 years	0.60
	> 9.3 ≤ 10.6 years	0.60
	> 10.6 ≤ 12 years	0.60
	> 12.0 ≤ 20 years	0.60
	> 20 years	0.60

- 48 G Sensitivity figures calculated by a bank using an interest rate pre-processing model are usually produced in the format of a net sensitivity by maturity bucket or by discrete gridpoint. These maturity buckets or gridpoints should then be allocated to the 15 bands set out in 47G. The number of maturity buckets or gridpoints used to represent a yield curve can be referred to as granularity. It is not a requirement that each of 15 bands for banks have one or more maturity buckets or gridpoints allocated; however, for all banks the granularity should be adequate to capture the material curve risk in the portfolio. Curve risk can be defined as the risk associated with holding long and short positions at different points along the yield curve.
- 49 G Positive and negative amounts in each of the different maturity bands of the sensitivity calculation should then be netted off to produce one figure for each of the bands. There is no capital requirement for this netting process.

- 50 G The individual sensitivity figures produced should then be input into a bank's duration method *PRR* calculation as set out in Chapter TI. The individual sensitivity figures for each band should be included with the other positions in the weighted net positions column used in the duration method.
- 51 G Alternatively, firms may choose to use an approach based on the maturity method set out in Chapter TI, making appropriate adjustments to the sensitivity figures.

Definitions used in Chapter TS

- 52 G This chapter uses the following definitions:

Defined term	Definition
<i>Commodity</i>	Any physical or energy product (except gold) which is, or can be traded on a secondary market. (NB the definition of commodity used in TV deliberately differs from that in the main Handbook Glossary).
<i>Deposit</i>	See definition in the Glossary.
<i>Equity</i>	See <i>share</i> .
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>Guidance</i>	Guidance given by the FSA under the Act.
<i>Option</i>	A contract which confers the right to buy or sell a <i>security</i> , contractually based investment, currency, gold or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>PRR</i>	Position risk requirement.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Skilled person</i>	A person reported to make a report required by section 166 of the Act (Reports by skilled persons) for provision to the FSA and who must be a person: (a) nominated or approved by FSA; and (b) appearing to the FSA to have the skills necessary to make a report on the matter concerned.
<i>Swap</i>	A transaction in which two counterparties agree to exchange streams of payments over time according to a predetermined basis.

TV

Use of a Value at Risk Model

Introduction

- 1 G This chapter provides details of when the FSA expects to allow a bank to use its own Value at Risk (VaR) model for the purpose of calculating part or all of its *PRR*, and explains how the model will relate to the standard rules.
- 2 G The models described in this chapter are described as VaR models in order to distinguish them from the kinds of model originally contemplated by the Capital Adequacy Directive (CAD). (These are covered in Chapter TS and referred to as "CAD 1 models".) A VaR model is a risk management model which uses a statistical measure to predict profit and loss movement ranges with a confidence interval. The standards described in this chapter, and which will be applied by the FSA, are based on and implement Annex VIII of the CAD and the Basel Accord.
- 3 G The aim of the VaR model approach is to enable a bank with adequate risk management systems to benefit from more accurate capital requirements than those generated by standard requirements, and to provide a bank with an incentive to measure market risks as accurately and comprehensively as possible. It is crucial that those responsible for managing market risk at a bank should be aware of the assumptions and limitations of the bank's VaR model.
- 4 G A VaR measure provides an estimate of the worst expected loss on a portfolio resulting from market movements over a period of time with a given confidence level. The *PRR* relating to the risks covered by the VaR model is based on the value produced by the VaR model. In undertaking the *PRR* calculation, a bank should apply a multiplication factor to the value produced by the VaR model (details of how the multiplication factor will affect a *PRR* are set out in 75G). The multiplication factor that should be applied is set by the FSA. The multiplication factor may be increased by a plus factor, which relates to the results of a bank's back-testing process (for further details on the plus factor see 63G).
- 5 G There are a number of methodologies for calculating *PRR* using a VaR model. These include variance-covariance, historical simulation, Monte Carlo or a hybrid of these. Although the section on model standards in this appendix sets out some general model standards that should be met, the FSA does not prescribe any one method of computing *PRR* using a VaR model. Moreover, it does not wish to discourage any bank from developing alternative risk measurement techniques. A bank should discuss the use of any alternative techniques used to calculate *PRR* with the FSA.

Overview

[LINK TO STANDARD PRR RULES](#)

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- 6 G Under section 3.4 of chapter CO a bank should use the rules in chapters TI, TE, CM FX and TO to calculate *PRR*. Therefore, a bank needs to apply for individual *guidance* in order to calculate its *PRR* using a VaR model instead of (or in combination with) the standard approaches required under section 3.4 of chapter CO.
- 7 G The VaR Model based *PRR* produced in accordance with this appendix should be included in the bank's *PRR* calculation set out in section 3.4 of chapter CO. The VaR model *PRR* should be used in place of the appropriate *PRR* for the risks covered by the VaR model.

BASIC REQUIREMENTS / SUMMARY OF CHAPTER

- 8 G The FSA will not normally give individual *guidance* for the use of a VaR model unless it is satisfied about the quality of:
- (1) the internal controls and risk management surrounding the VaR model (see 28G to 35G);
 - (2) the VaR Model Standards (see 36G to 44G);
 - (3) risk management standards including stress testing and backtesting procedures surrounding a VaR model; (see 45G to 73G); and
 - (4) the procedures in place at a bank to calculate its VaR model based *PRR*.
- 9 G The FSA recognises that the nature of VaR models will vary across banks. The scope of and the conditions set out in VaR model individual *guidance* may therefore differ in substance or detail from the matters described in this chapter in order to address individual circumstances adequately. For example, a VaR model individual *guidance* may also include additional conditions to meet the particular circumstances of the bank or the model.
- 10 G If the bank ceases to meet any of these standards, the FSA's policy is that the individual *guidance* should cease to apply. In many cases the ongoing need to meet these standards will be included in the individual *guidance* direction by imposing certain conditions. Even if they are not formally included as conditions, the FSA is likely to consider withdrawing the individual *guidance* if the standards are not met.
- 11 G The VaR Model Waiver Application and Review section of this chapter sets out the FSA's general policy on the VaR model application and review process and the conditions that the FSA may impose relating to alterations of the model.
- 12 G Individual *guidance* permitting the use of models in the calculation of *PRR* will not be given if that would be contrary to the CAD or Basel Accord, and any individual *guidance* which is given will only be given on terms that are compatible with the CAD. The FSA considers it unlikely that it will deviate from this approach even where the bank making the individual *guidance* application is not subject to CAD and Basel Accord. Accordingly, the FSA is likely to give only individual *guidance* permitting the use of models that are of the same nature as CAD1 and VaR models.

SCOPE OF VAR MODELS

- 13 G This chapter sets out the FSA's policy on the scope of VaR model individual *guidance* and the manner in which the outputs of the model will be incorporated in the calculation set out in section 5 of chapter CO. Some of the standards described in this chapter may also be reflected in conditions attached to VaR model individual *guidance*.
- 14 G A VaR model will be expected to cover one or more of the following types of risk category:
- (1) interest rate general market risk;
 - (2) interest rate specific risk (in conjunction with interest rate general market risk);
 - (3) *equity* general market risk;
 - (4) *equity* specific risk (in conjunction with equity general market risk);
 - (5) foreign-exchange risk; and
 - (6) *commodity* risk.
- 15 G It is the FSA's view that, where a bank uses a VaR model for one risk category, it is good practice to extend its model over time to calculate all of its *PRR* risk categories.
- 16 G For the purposes of CO: Section 5, where a combination of the standard *PRR* rules, CAD1 model and VaR model approaches is used the *PRR* from each method should be added together. A bank should take appropriate steps to ensure that all of the approaches mentioned are applied in a consistent manner. For example, where the *PRR* for a particular portfolio is normally calculated using a VaR model, it should not switch between the standard market risk rules and a VaR model approach purely to achieve a more attractive *PRR*.
- 17 G A bank will not be required to capture immaterial risk or the market risk inherent in new products in a VaR model. If a bank does not capture immaterial risks or the market risk inherent in a new product in a VaR model, then the appropriate standard *PRR* rules to these risks will apply.

The VaR model application and review process

- 18 G In order for VaR model recognition individual *guidance* to be given, the FSA is likely to undertake a review to ensure that it is adequate and appropriate for the *PRR* calculation.
- 19 G The VaR model review process may be conducted through a series of visits covering various aspects of a bank's control and IT environment. Before these visits the FSA may ask that the bank provides some information relating to the bank's individual *guidance* request accompanied by some specified background material. The VaR model review visits are organised on a timetable that allows the bank being visited sufficient time to arrange the visit and provide the appropriate pre-visit information.

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- 20 G As part of the of the VaR model review process the following may be reviewed: organisational structure and personnel; details of the bank's market position in the relevant products; profit and risk information; valuation and reserving policies; operational controls; IT systems; model release and control procedures; risk management and control framework; risk appetite and limit structure and future developments relevant to model recognition.
- 21 G A visit will usually involve the FSA wishing to meet senior management and staff from the front office, financial control, risk management, operations, systems development, information technology and internal audit areas.
- 22 G The FSA may complement its own review of a VaR model individual *guidance* request with one or more reviews by a *skilled person* under section 166 of the *Act*. Such a review may also be used where VaR model individual *guidance* has been given to ensure that the standards on which the VaR model individual *guidance* was based continue to be met.
- 23 G As set out in 9G the FSA will issue individual *guidance* containing certain conditions. These conditions are likely to cover the standards described in this chapter to the extent that they are relevant to the circumstances, and may set out:
- (1) the details of the calculation of VaR model based *PRR*, which will contain the multiplication factor to be applied;
 - (2) the method of separating out specific risk if appropriate;
 - (3) the method agreed of calculating profit and loss accounts for backtesting purposes;
 - (4) the circumstances in which model refinements, new products, new markets and new locations should be notified to the FSA;
 - (5) any notification requirements relating to the VaR model individual *guidance*;
 - (6) any additional reporting requirements (e.g. electronic reporting of backtesting results);
 - (7) details of the changes to the VaR model which would be considered material by the FSA; and
 - (8) any other conditions attached to the VaR model individual *guidance*.
- 24 G Where a VaR model used outside of the United Kingdom differs from that used in the United Kingdom a bank the FSA may request details on the reasons for using different models.
- 25 G Where a bank operates any part of its VaR model outside of the United Kingdom, the FSA may take into account the results of the home supervisor's VaR model review. The FSA may wish to receive information directly from the home supervisor.

Maintenance of VaR model

- 26 G No changes may be made to a VaR model which is the subject of individual *guidance* unless the change is not material. Material changes to a VaR model will require further individual *guidance* to be issued. Materiality is measured against the VaR model as it was at the time that the individual *guidance* was originally given. If a bank is considering making material changes to its VaR model then it should notify the FSA at once.
- 27 G If the VaR model ceases to meet the conditions of individual *guidance*, a bank should notify the FSA at once.

Risk management standards

- 28 G A bank with a complex portfolio is expected to demonstrate more sophistication in its modelling and risk management than a bank with a simple portfolio. For example, a bank will be expected to consider, where necessary, varying degrees of liquidity for different risk factors, the complexity of risk modelling across time zones, product categories and risk factors. Some trade-off is permissible between the sophistication and accuracy of the model and the conservatism of underlying assumptions or simplifications.
- 29 G A bank should be able to demonstrate that it meets the risk management standards set out in this section on a legal entity basis. This is particularly important for subsidiaries of *groups* subject to matrix management where the business lines cut across legal entity boundaries.
- 30 G A bank should have a conceptually sound risk management system surrounding the use of a VaR model which is implemented with integrity and should meet the following minimum standards:
- (1) the VaR model should be fully integrated into the daily risk management process of the bank, and serve as the basis for reporting risk exposures to senior management of the bank;
 - (2) a bank should have a risk control unit which is independent from business trading units, and which reports directly to senior management. The unit should be responsible for designing and implementing the bank's risk management system. It should produce and analyse daily reports on the output of the model and on the appropriate measures to be taken in terms of the trading limits;
 - (3) a bank's directors and senior management should be actively involved in the risk control process, and the daily reports produced by the risk control unit should be reviewed by a level of management with sufficient authority to enforce both reductions of positions taken by individual traders as well as in the bank's overall risk exposure;
 - (4) a bank should have sufficient numbers of staff skilled in the use of sophisticated models in the trading, risk control, audit and back office areas;

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- (5) a bank should have established procedures for monitoring and ensuring compliance with a documented set of appropriate internal policies and controls concerning the overall operation of the risk measurement system;
 - (6) a bank's VaR model should have a proven track record of acceptable accuracy in measuring risk;
 - (7) a bank should conduct a programme of stress testing frequently, and the results of these tests should be reviewed by senior management and reflected in the policies and limits set;
 - (8) a bank should have procedures to ensure that the valuation of assets and liabilities is appropriate, and that valuation uncertainty is identified and appropriate reserving is undertaken where necessary; and
 - (9) at least once a year, a bank should conduct, as part of its regular internal audit process, a review of its risk management process. This review should include both the activities of the business trading units and of the independent risk control unit, and should be undertaken by suitably qualified staff independent of the areas being reviewed. This review should consider, at a minimum:
 - (a) the adequacy of the documentation of the risk management system and process;
 - (b) the organisation of the risk control unit;
 - (c) the integration of market risk measures into daily risk management and the integrity of the management information system;
 - (d) the process for approving risk pricing models and valuation systems used in front and back offices;
 - (e) the validation of any significant changes in the risk management process;
 - (f) the scope of risks and products captured by the VaR model;
 - (g) the accuracy and completeness of position data;
 - (h) the process used to ensure the consistency, timeliness, independence and reliability of data sources;
 - (i) the accuracy and appropriateness of volatility and correlation assumptions;
 - (j) reserving policies, the accuracy of the valuation procedures, and risk sensitivity calculations;
 - (k) the process employed to evaluate the VaR model's accuracy, including the programme of backtesting;
 - (l) the controls surrounding VaR model development; and

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- (m) the process employed to produce the VaR model based *PRR*.
- 31 G A bank's VaR model output should be an integral part of the process of planning, monitoring and controlling a bank's market risk profile. The VaR model should be used in conjunction with internal trading and exposure limits. The links between these limits and the model should be consistent over time and understood by senior management.
- 32 G A bank should have adequate VaR model validation procedures to assess its model, and should have procedures in place to ensure that both the assumptions and approximations underlying the model and the limits of the model are appropriate. It should undertake testing of the accuracy of parts of the VaR models as well as the whole model. The FSA will require a period of initial monitoring or live testing before a VaR model can be recognised. Backtesting should be regarded as an additional safeguard rather than the primary model validation tool. A bank should therefore ensure that it has appropriate methods of assessing model validity and does not rely purely on the results of backtesting.
- 33 G In assessing whether the VaR model is implemented with integrity, the FSA will consider the IT systems used to run the model and associated calculations. The assessment may include:
- (1) feeder systems; risk aggregation systems; time series databases; the VaR model system; stress testing system; the backtesting system including profit & loss cleaning systems where appropriate; data quality; reconciliations and checks on completeness of capture;
 - (2) system development, change control and documentation; security and audit trails; system availability and contingency procedures; network adequacy; and
 - (3) operational statistics relating to VaR model production process; examples of these statistics are timeliness, number of re-runs required and the reliability of data feeds.
- 34 G It is the responsibility of a bank's own management to ensure the accuracy and integrity of its VaR model. This responsibility includes obtaining appropriate independent validation of the VaR model.
- 35 G A bank should ensure that it has adequate controls surrounding:
- (1) the derivation of the VaR model based *PRR*;
 - (2) the integrity of the backtesting programme, including the calculation of the profit and loss account;
 - (3) the integrity and appropriateness of the VaR model, including the model's geographic coverage and the completeness of data sources;
 - (4) the VaR model's initial and on going development, including independent validation;
 - (5) the valuation models, including independent validation; and

- (6) the adequacy and security/integrity of the IT infrastructure.

Model standards

- 36 G A bank should base its *PRR* calculation on the output of the VaR model which is used for its internal risk management rather than one developed specifically to calculate its *PRR*.
- 37 G The FSA accepts that the scope and nature of VaR models varies across banks. This means that different banks are likely to calculate different estimates of market risk for the same portfolio. Systematic differences are due to length of data series, choice of methodology (historical or Monte Carlo simulation or variance-covariance method or a hybrid of these), differences in aggregating risks within and across broad risk factors, the treatment of *options* and other non-linear products and the specification of risk factors.
- 38 G A bank that chooses to request individual *guidance* to use a VaR model for the calculation of its *PRR* should calculate its market risk using the appropriate model parameters as set out in 39G.
- 39 G A bank should calculate its market risk by adopting the following minimum standards:
- (1) VaR should be calculated at least daily, using a 99% one-tailed confidence limit.
 - (2) VaR should be calculated using a holding period equivalent to ten *business days*.
 - (3) VaR measures should be based on an effective historical observation period of at least one-year, except where a shorter observation period is justified by a significant change in price volatility. If a weighting scheme or other method is used, then the effective observation period should be at least one year. The weighted average time lag of the individual observations should not be less than six months.
 - (4) Data sets should be updated no less frequently than quarterly and more frequently whenever market prices are subject to material change.
- 40 G A bank may meet the appropriate model parameter requirement by using different model parameters and employing a suitable adjustment mechanism to produce a VaR figure which is equivalent to the figure produced using the parameters set out in 39G. For example, a bank's own model may use a 95% one-tailed confidence limit, but a mechanism to convert the output of the model to reflect a 99% one-tailed confidence limit should be employed.

RISK FACTORS

- 41 G A VaR model should capture and accurately reflect, on a continuing basis, all material general market risks and, where VaR model individual *guidance* has been granted in relation to specific risk, specific risks arising on the underlying portfolio, and should ensure that sufficient risk factors are properly specified.

GENERAL MARKET RISK

- 42 G A bank's VaR model should capture a sufficient number of risk factors in relation to the level of activity of the bank, in particular the following:
- (1) For interest rate risk, the VaR model should incorporate a set of risk factors corresponding to the interest rate curves in each currency in which the bank has interest rate sensitive positions. A bank should ensure that it captures the variations of volatility of rates along the yield curve. In order to achieve this, a bank should divide the yield curves of, at a minimum, the major currencies and markets where it has material interest rate exposures into a minimum of six maturity segments. The risk measurement system should also capture the risk of less than perfectly correlated movements between different yield curves.
 - (2) For foreign exchange risk, the VaR model should incorporate risk factors corresponding to the individual foreign currencies, including gold, in which the bank's positions are denominated.
 - (3) For *equity* risk, the VaR model should use a separate risk factor at least for each of the *equity* markets in which the bank has material exposures.
 - (4) For *commodity* risk, the VaR model should use a separate risk factor at least for each *commodity* in which the bank has material exposures. The VaR model should capture the risk of less than perfectly correlated movements between similar, but not identical, *commodities* and the exposure to changes in forward prices arising from maturity mismatches. It should also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions.
 - (5) A bank that deals in *options*, or products with *option*-like characteristics, should ensure that their VaR model captures non-linear risk. Steps should also be taken to ensure that adequate capital is set aside for any other risks not captured by the model. Banks are reminded that, under 41G, the standard *PRR* rules may instead be applied to these risks.
 - (6) Correlations within and between the risk factors in (1) to (4) may be used provided the system for measuring these correlations is sound and implemented with integrity.

SPECIFIC RISK

- 43 G Where a bank wishes to use a VaR model in relation to specific risk it should meet the following additional standards:
- (1) The model on which the VaR estimate is based should explain the price variation in the portfolio. For example, the VaR model may be based on a factor model or on a historical simulation model. The ability of the model to explain price variation could be demonstrated by a statistical comparison over the same period of time between actual price changes on the portfolio and the profit and loss impact of risk factors included within the model. A bank may wish to include an estimate of residual variation not explained by the model.

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- (2) The VaR model should be sensitive to changes in the level of concentration risk in the portfolio.
 - (3) The VaR model should be robust to an adverse environment.
 - (4) Where a bank calculates its specific risk surcharge under 77G(2) it should conduct specific risk backtesting for the traded debt portfolio and the *equity* portfolio separately. Specific risk backtesting is a comparison of the specific risk VaR measures against the corresponding actual P&L for sub-portfolios that contain material specific risk.
 - (5) The VaR model should be validated through empirical testing appropriate to the level of complexity and the assumptions made in the VaR model, which should be aimed at assessing whether specific risk is being adequately captured. Where specific risk is identified by examining relevant sub-portfolios, then these should be chosen in a consistent manner.
- 44 G A bank should have means to assess and, if necessary, mitigate or control event risk. For example, possible means include stress-testing procedures, or reserving policies. It is not however necessary to include factors to model event risk within a specific risk model unless warranted by the nature of the portfolio.

Stress testing and backtesting

STRESS TESTING

- 45 G Stress testing should involve identifying market scenarios or other low probability events in all types of risks that generate the greatest losses on a bank's portfolio.
- 46 G A bank should periodically and actively identify all the worst case scenarios that are relevant to its portfolio. Scenarios used should be appropriate to test the effect of adverse movements in market volatilities and correlations and the effect of any change in the assumptions underlying the VaR model. Scenarios involving low probability market events should nevertheless be plausible.
- 47 G A bank should have procedures to assess and respond to the results produced from stress testing. In particular, stress testing results should be:
- (1) used to evaluate its capacity to absorb such losses or identify steps to be taken to reduce risk.
 - (2) communicated routinely to senior management and periodically to the directors.
- 48 G Stress testing should capture non-linear effects.
- 49 G A bank should have the capacity to run daily stress tests. A bank may want to conduct the more complex stress tests at longer intervals or on an ad hoc basis.

BACKTESTING

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- 50 G Backtesting is the process of comparing VaR risk measures to portfolio performance. It is intended to act as one of the mechanisms for the ongoing validation of a bank's VaR model and to provide incentives for banks to improve their VaR measures.
- 51 G Backtesting is only one method of assessing the performance of a VaR model and, although banks are required to carry out a backtesting programme, they should adopt other methods of measuring performance as well.
- 52 G Before individual *guidance* will be given to use a VaR model, a bank should have a backtesting programme in place and should provide three months of backtesting history.
- 53 G A *bank* should have the capacity to analyse its daily profit and loss account and compare the results to the VaR measure used for backtesting, both at the level of the whole portfolio covered by the VaR model and at the level of individual books that contribute material amounts to risk or the profit and loss account.
- 54 G VaR models are likely to undergo almost continuous refinements. This may make it difficult to backtest using 250 days' data if it is based upon a previous version of the model. If a refinement is not regarded as material, then a bank may use the last 250 days' data for backtesting purposes.
- 55 G A bank should compare each of its 250 most recent *business days*' profit and loss account figures with the corresponding one-day VaR measures. This comparison should be made daily using a rolling 250-day period.
- 56 G The VaR measure used for backtesting for these purposes should be calibrated to a one-day holding period and a 99% one-tailed confidence level, but otherwise the VaR model should be the same as that used to calculate the VaR model based *PRR*.
- 57 G The positions underlying the profit and loss account and VaR measures should not be materially different.
- 58 G If a bank uses a combination of the standard rules (and, where appropriate, CAD1 model) and VaR model approaches or does not model specific risk it should take appropriate steps periodically to ensure that this is taken into account in its backtesting procedures.
- 59 G An exception occurs each time a day's loss exceeds the corresponding VaR measure (at bank level). When an exception occurs, a bank should notify its supervisor by close of business two *business days* after the exception occurs (oral notification is acceptable).
- 60 G On a monthly basis, a bank should submit to the FSA a written account of the previous month's exceptions. The written account should include the cause of the exceptions and the bank's planned response. Nil returns will not be required.

61 G Where multiple exceptions occur, the multiplication factor used by a bank in its VaR model based *PRR* calculation should be increased by the appropriate plus factor set out in Table 62G (details of how the multiplication factor affects a bank's VaR model based *PRR* are set out in the Calculation of a VaR model based *PRR* section of this chapter). The table sets out the plus factor to be applied given the number of exceptions over the most recent 250 *business days*.

62 G Table: backtesting plus factors (see 61G)

Zone	Number of Exceptions	Plus Factor
Green	Fewer than 5	0.00
Yellow	5	0.40
	6	0.50
	7	0.65
	8	0.75
	9	0.85
Red	10	1.00

63 G The addition of a plus factor for VaR models that appear to be under-performing is designed to act as an incentive to ensure that the VaR model continues to perform well, and where it does not, that a bank takes prompt action to remedy the situation.

64 G If ten or more exceptions are recorded in a 250 day period, the bank should take immediate corrective action. In these circumstances, the FSA may apply a plus factor greater than one, or the FSA may consider withdrawing a bank's VaR model individual *guidance*.

65 G If ten or more exceptions are recorded in a 250 day period due to the specific risk backtesting required in 43(4) G then the bank should take immediate corrective action on the specific risk part of the model or set aside additional capital.

66 G If a bank believes an exception should be disregarded it should submit to the FSA a written explanation of why the exception occurred and why it would be appropriate to disregard it. An exception may be disregarded only in exceptional situations. One example of an exception might properly be disregarded is when it has arisen as a result of a risk that is not captured in its VaR model but against which regulatory capital is already held.

67 G The FSA may also consider disregarding a backtesting exception where, in a period of high volatility, multiple backtesting exceptions occur before the data set is updated.

- 68 G During the first 250 days after a bank starts to use its VaR model to calculate its VaR model based *PRR*, the policy in 61G relating to plus factors only applies to the period from the date that VaR model recognition is granted.

DEFINITION OF PROFIT AND LOSS ACCOUNT FOR BACKTESTING PURPOSES

- 69 G Backtesting should be performed using a measure of actual profit and loss.
- 70 G Actual profit and loss means the day's profit and loss account arising from the trading activities within the scope of the VaR model. This should exclude material non-market elements which might mask a loss. Such elements include *fees* and *commissions*, reserving which is not directly related market risk and one-off marketing profits from new deals.
- 71 G Actual profit and loss should reflect any price adjustments arising from position reconciliation in accordance with a bank's written policies and procedures. These policies and procedures should include a documented method of assigning valuation adjustments to backtesting data, such that the amount and the date of adjustment is unambiguous.
- 72 G A bank should have the capacity to perform backtesting against hypothetical profit and loss. The FSA may require banks to produce this information upon request. Hypothetical profit and loss means profit and loss that would have occurred had the portfolio remained unchanged.
- 73 G VaR models are likely to undergo almost continuous refinements. This may make it difficult to backtest using 250 days' data if it is based upon a previous version of the model. If a refinement is regarded as material then new individual *guidance* may be required to use a VaR model and the original individual *guidance* may be withdrawn (as set out in 27G). If a refinement is not material then a bank may use the last 250 days' data for backtesting purposes.

Calculation of VaR model based *PRR*

- 74 G The calculation of a *PRR* under the VaR model approach is set out in this section. As noted in section 5 of chapter CO the individual *guidance* will confirm that a bank should add its VaR model based to its other *PRRs* calculated under section 3.4 of chapter CO.
- 75 G A bank's VaR model based *PRR* on a daily basis is equal to the higher of:
- (1) its previous day's VaR number; and
 - (2) the average of its daily VaR measures on each of the preceding sixty *business days* multiplied by a multiplication factor (increased by the appropriate plus factor referred to in 62G).

76 G The multiplication factor to be used is specified by the FSA in the formal VaR model individual *guidance* direction as a condition of its use. The minimum multiplication factor that the FSA will set is 3, although a higher multiplication factor may be applied. This multiplication factor is the factor that should be used, unless individual *guidance* has been given.

G The following equation expresses 75G and 76G mathematically

$$PRR_{VaR} = \text{Max} \left(VaR_t, f \times \frac{1}{60} \sum_{i=0}^{59} VaR_{t-i} \right) + SR$$

PRR_{VaR} is a bank's VaR model based PRR ;

VaR_t represents the previous day's VaR figure;

VaR_{t-i} represents the VaR calculated for i business days earlier;

f is the multiplication factor referred to in 75(2)G and 76G;

SR is the specific risk surcharge which is only included in the calculation set out 79G where a bank has been given VaR model individual *guidance* in relation to specific risk. Details on the specific risk surcharge can be found in 18G to 19G.

77 G If the VaR model individual *guidance* granted enables a bank to calculate a specific risk PRR by the use of its VaR model then it should calculate its specific risk surcharge as either:

- (1) an amount equal to the specific risk portion of the VaR measure; or
- (2) an amount equal to the VaR measure of sub- portfolios that are subject to specific risk.

In both cases, the specific risk surcharge should be calculated as an average over the previous 60 business days.

78 G Where the bank calculates its specific risk surcharge using 77(1)G, then it should calculate specific risk for the purposes of calculating the surcharge as the difference between total value at risk and a measure of general market risk. In calculating general market risk for this purpose, positions that give rise to specific risk should be mapped to equivalent positions that bear general market risk only. In doing so, the following minimum standards should be adopted:

- (1) For *equities*, each position should be mapped to a factor that is representative of the national or international market to which they belong. For example, a stock may be mapped to a widely accepted broadly based stock market index for the country concerned.
- (2) For bonds, each position should be mapped using a reference interest rate curve for the currency concerned. The interest rate curves should be generally accepted by the market as broadly based reference curves for the currency concerned, for example, a government bond curve or a swap curve.

- 79 G Where a bank calculates its specific risk surcharge using 77(2) G, then the sub-portfolio structure should be identified in advance and any changes to the structure should be pre-notified to FSA. The sub-portfolios chosen should be those which contain positions that would produce a specific risk *PRR* under the standard rules approach.

Definitions used in Chapter TV

This chapter uses the following definitions:

Defined term	Definition
<i>Act</i>	The Financial Services and Markets Act 2000.
<i>Business days</i>	(1) in relation to anything done or to be done in any part of the United Kingdom): (a) (except in REC) any day which is not a Saturday or Sunday, Christmas Day, Good Friday or a bank holiday in that part of the United Kingdom; (b) (in REC) (as defined in section 167 of the Companies Act 1988) any day which is not a Saturday or Sunday, Christmas Day, good Friday or a bank holiday in any part of the United Kingdom. (2) (in relation to anything done or to be done by reference to a market outside the United Kingdom) any day on which that market is normally open for business.
<i>Commission</i>	Any form of commission, including a benefit of any kind, offered or given in connection with designated investment business.
<i>Commodity</i>	Any physical or energy product (except gold) which is, or can be traded on a secondary market. (NB the definition of commodity used in TV deliberately differs from that in the main Handbook Glossary).
<i>Equity</i>	See <i>share</i> .
<i>Fee</i>	Any payment offered or made by a client to a firm in connection with designated investment business or with any other business of the firm, including (where applicable) any mark-up or mark-down.
<i>Future</i>	As specified in article 78 of the Regulated Activities Order (Futures).
<i>Guidance</i>	Guidance given by the FSA under the Act.
<i>Option</i>	A contract which confers the right to buy or sell a <i>security</i> , contractually based investment, currency, gold or <i>commodity</i> at a given price on or before a given date. (NB: the definition of an option used for the purposes of this chapter deliberately differs from that in the main Handbook Glossary).
<i>PRR</i>	Position risk requirement.
<i>Share</i>	As specified in article 76 of the Regulated Activities Order (Shares etc).
<i>Skilled person</i>	A person reported to make a report required by section 166 of the Act (Reports by skilled persons) for provision to the FSA and who must be a person: (a) nominated or approved by FSA; and (b) appearing to the FSA to have the skills necessary to make a

	report on the matter concerned.
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**Interim Prudential
sourcebook: Banks**

Volume 2

LARGE EXPOSURES

1 INTRODUCTION

1.1 Legal sources

See ch GN s3

- 1 This chapter which sets out the FSA's policy on a bank's large exposures is relevant to the rules it has made under the Act dealing with a bank's large exposures which are set out in chapter GN (section 3) and in the reporting requirements section of the Supervision Manual.

See Supervision Manual ch 16

In summary these require:

- i) a bank to set out its policy on large exposures and provide the FSA with a copy of that statement;
- ii) a bank to have adequate systems and controls to monitor and control its large exposures in conformity with its large exposures policy statement; and
- iii) a UK bank to notify the FSA in cases where it.

- a) has entered into an exposure which equals or exceeds 10% of its capital

- b) proposes to enter into an exposure which exceeds 25% of its capital.

Compliance with the policy will also help establish that a bank meets the Threshold Conditions (in respect of "Adequate resources" and "Suitability") and the Principles (in particular in respect of "Financial prudence" and "Management and control") as well as the large exposures rules.

See COND

- 2 The Banking Consolidation Directive (formerly The Large Exposures Directive, 'LED' - 92/121/EEC), applying to deposit-taking credit institutions (that is "full credit institutions" within the meaning of the Glossary) places an explicit ('hard') limit of 25% of capital on exposures to an individual counterparty (or a group of related counterparties) and an explicit limit of 800% of capital on the aggregate of non-exempt exposures which equal or exceed 10% of capital. Certain exposures are exempt from these limits.

- a) The Banking Consolidation Directive is implemented by this chapter..

- b) For details of exempt exposures, see below.

See s9

- 3 Following the implementation of the LED (now replaced by The Banking Consolidation Directive) the Capital Adequacy Directive ('CAD' - 93/6/EEC) introduced a new feature - 'soft limits' - whereby group large exposures attributable to positions held in the trading book are permitted to exceed 25% of capital base, but, if they do, generate extra capital requirements.

- a) A bank to which the CAD regime does not apply is not eligible for 'soft limits'.

See ch CB

- i) For an explanation of which banks are subject to the CAD regime, see the chapter on the banking book/trading book split.

4 [This paragraph is intentionally blank.]

5 The Banking Consolidation Directive (formerly the LED) sets limits and reporting requirements at a consolidated level; in implementing it, the FSA has decided also to apply it on a solo (or solo-consolidated) basis. For consistency and clarity, in its supervision of solo (or solo-consolidated) banks, the FSA uses the same definitions of 'capital' and 'exposures' as are used for The Banking Consolidation Directive.

6 The FSA's large exposures policy applies to banks on a solo (or solo-consolidated) and consolidated basis. Throughout this chapter, therefore, the policy that applies to a 'bank' or 'banks' should also be understood to apply to a 'consolidated banking group' or 'groups' unless stated otherwise.

1.2 Application

See Supervision Manual ch 16

7 The policy on limits and the notification of large exposures outlined in this chapter applies to all UK banks. The FSA's large exposures policy does not apply to UK branches of banks incorporated overseas. However UK branches of banks incorporated outside the European Economic Area (EEA) have reporting requirements for large exposures; the definitions given in this chapter are relevant to that reporting.

- a) The very limited host country supervisory responsibilities in respect of branches of banks incorporated elsewhere in the EEA under the Second Banking Co-ordination Directive (now replaced by The Banking Consolidation Directive) do not include the monitoring of large exposures.
- b) The FSA's large exposures policy does not apply to UK branches of banks incorporated outside the EEA. Instead the FSA takes into account the home regulatory authority's supervision of large exposures undertaken by these banks.
- c) UK branches of banks incorporated outside the EEA are required to report their 20 largest exposures on the Form B7.

The FSA's large exposures policy applies to banks on both a solo and consolidated basis.

See ch CS

- a) For details of consolidation, see the chapter on consolidated supervision.

1.3 How this chapter is organised

- 8 Section 2 explains the rationale for the policy on large exposures. Section 3 summarises the main features of the policy. Sections 4-7 define key items, notably 'large exposure', the 'large exposures capital base', 'exposure', and 'counterparty', covering the measurement of exposures in the trading book arising from securities positions and derivatives contracts. Section 8 covers large exposures policy statements and clustering; and Section 9 details the 25% limit policy, exemptions and variations in the policy, and the need for increased capital in some circumstances when large exposures limits are breached. Notification and reporting requirements and policy associated with large exposures are described in Section 10. Section 11 covers the transitional arrangements agreed when the LED (now replaced by The Banking Consolidation Directive) was implemented. Sections 12 and 13 contains Appendices, including dealing with undisclosed principals through fund managers.

2 THE RATIONALE FOR A LARGE EXPOSURES POLICY

- 1 Excessive exposure, however defined, to a single customer or to a group of customers operating in the same economic sector, is a significant risk incurred by banks. This risk cannot be eliminated; concentrations will arise through the specialisation of banks for reasons of competitive advantage and expertise.
- 2 However, the risk can and should be contained by ensuring that a bank's exposure is diversified, e.g. by customer, geographical spread or economic sector. For this reason, safeguarding against excessive concentration is one of the most important components in any system of supervision for banks.
- 3 The extent of concentration of risk is one factor in the FSA's analysis of the quality of a bank's balance sheet, which forms part of its risk assessment for capital adequacy assessment purposes. In considering whether a bank has an undue concentration of risk, the FSA takes into account not only its exposure arising from its lending and other commitments, but also its exposure arising from securities and derivatives positions.
- 4 The need to control risk concentration was the main reason for the minimum standards for a limits-based approach towards large exposures brought in by the LED (now replaced by The Banking Consolidation Directive). Where appropriate, the FSA's policy goes further, to reflect its own view of what constitutes a prudent approach in this key area of banks' internal management controls. (Following the amendments to the Banking Consolidation Directive resulting from the Financial Groups Directive, the FSA is also required to supervise transactions between a bank and a mixed activity holding company (MAHC), to have significant transactions with the MAHC reported to the FSA; and to take appropriate action if these intra-group transactions pose a threat to the bank's financial position.)

These requirements are set out below.

- (i) The FSA's existing requirements for the control and monitoring of exposures to connected counterparties, set out in this chapter LE (particularly section 9.2.2) and the large exposures reporting forms in SUP 16 Ann 1R.
- (ii) A specific new requirement in SUP 16.7 to report significant transactions with an MAHC that do not constitute exposures; and

- (iii) The requirements (Rule 3.3.19 and PRU 8.1) for a bank to have the systems to enable the control and monitoring described above, and provide the necessary information for reporting to the FSA.

3 MAIN FEATURES OF THE POLICY

This section summarises the main features of the policy applying in relation to large exposures. It does not cover the policy in detail and should be read in conjunction with the sections that follow.

3.1 Main features of the policy

3.1.1 *Limits and notification requirements*

- See s9
- 1 A bank should be able to monitor its exposures on a daily basis. It should not incur an exposure to an individual counterparty or group of closely related counterparties that exceeds 25% of its large exposures capital base, unless:
- the exposure falls into the category of ‘exempt exposures’;
 - the bank is a bank to which the CAD regime applies and the breach of the 25% limit is due only to holdings of securities in the trading book, against which the appropriate amount of incremental capital is held;
 - in the case of the consolidated reporting of a bank to which the CAD regime applies, the exposure relates to a short-term counterparty exposure in the trading book of a subsidiary, for which the written consent of the supervisor of that subsidiary has been given; or
 - the bank incurs the exposure at solo, solo-consolidated or consolidated sub-group level, and the FSA has agreed in writing that the 25% limit need not apply to it. The exposure should not exceed the consolidated group’s 25% limit.
- See s9.1
- 2 The FSA has made a rule under the Act requiring a UK bank to notify the FSA if it proposes to enter into an exposure exceeding 25% of its capital. A bank should use its large exposures capital base for determining its capital for this purpose. The rule is set out in chapter GN.
- See ch GN s3
- a) Internal limits agreed with the FSA are sufficient for this pre-notification.
- See s10.4
- 3 A bank should notify the FSA immediately of any breach of the 25% limit, the 800% limit or of any other counterparty limits agreed with the FSA for large exposures purposes.
- 4 A bank should post-notify the FSA of all exposures which equal or exceed 10% of its large exposures capital base on a quarterly basis using either the LE2 or LE3 return.

See s10.1 5 A bank should limit the total of its exposures, other than its exempt exposures, to individual counterparties or groups of closely related counterparties equalling or exceeding 10% of its large exposures capital base to a maximum of 800% of its large exposures capital base. Should a bank wish to exceed 300% of its large exposures capital base, it should obtain the FSA's written approval.

- a) The 300% and the 800% limits should apply whether the exposures arise in the banking or the trading book. Exposures in both books should be aggregated for clustering purposes.

See s10.1 6 A bank should meet these limits and notification requirements on both a solo (or solo-consolidated) basis and on a consolidated basis, as appropriate.

- See ch CS a) The general policy on consolidation is given in chapter CS. Only variations in that policy applying for large exposures purposes are given in this chapter.

3.1.2 *Large exposures policy statement*

See s8.1 7 Banks are required to provide the FSA with a statement of their large exposures policy. They should agree the statement with the FSA.

See ch GN s3 This must be reviewed and, where necessary, updated annually (see evidential provision 3.4.9 in chapter GN s3).

3.2 **Reporting**

See s10.1 8 A bank must submit the large exposures reporting form LE2 or LE3, as appropriate, on a solo (or solo-consolidated) and consolidated basis, at least quarterly (see SUP 16.7.8R). The basis of reporting should be agreed with the FSA.

See s10.1 9 A bank should inform the FSA of the senior director it has nominated to sign the LE2.

- a) The senior director nominated has personal responsibility for the accuracy of the information the form LE2 contains.

3.3 **The FSA's Practice**

See s10.1 10 [This is intentionally blank.]

See s4.1 11 The FSA normally confirms in writing, after agreement has been reached, a UK bank's large exposures capital base annually, and any subsequent amendments to it.

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[Deleted]

4 KEY DEFINITIONS: LARGE EXPOSURES CAPITAL BASE, LARGE EXPOSURES AND EXPOSURES

The various limits that a bank should observe are set out for *large exposures*, significant exposures in relation to a bank's *large exposures capital base* to a *counterparty* or *group of closely related counterparties*. This section defines the large exposures capital base, and what is meant by 'exposure' and 'large exposure'. Banks should adopt these definitions for the purpose of reporting and controlling their exposures in conformity with the policy set out in this chapter.

Section 5 covers 'counterparty' and a 'group of closely related counterparties' and 'connected counterparties'. Sections 6 and 7 explain exposures arising from securities positions and derivatives contracts in the trading book of a bank to which the CAD regime applies.

4.1 Large exposures capital base

1 Unless paragraph 2 below applies, the *large exposures capital base* (LECB) used as the basis for monitoring and controlling large exposures should be calculated as the sum of allowable Tier 1 and Tier 2 capital, less any deductions.

a) The LECB is usually a figure agreed with the FSA based on the previous period's capital adequacy returns.

See ch CA s4

b) The definitions of the elements of a capital base are given in the chapter on the definition of capital.

See s9.3

2 An amended LECB, including any eligible tier 3 capital available to support non-counterparty risk in the trading book, should be used if and only if soft limits have been agreed to enable a non-exempt exposure to a single counterparty or to a group of closely related counterparties to exceed the 25% limit as a result of long securities positions in the trading book.

a) The amended LECB is, therefore, of relevance only to banks to which the CAD regime applies.

See ch CA s10

3 The LECB of a bank that has a trading book concession in relation to the trading of other banks' capital instruments may vary regularly, because holdings in excess of the concession should be deducted from the LECB as they arise. Such a bank should make the necessary adjustments and ensure at all times that all exposures are within limits on the basis of the current LECB. Significant movements, however temporary, should be advised to the FSA.

Apart from adjustments to the LECB arising as a result of holdings of other banks' capital instruments in excess of a bank's trading book concession, changes to the LECB should be agreed at the start of a reporting period wherever possible. Where it is not, the revised figure should be used for pre-notification as soon as it is agreed. It should be used for post-notification from the date that the underlying event took place (e.g. the date new capital was issued).

A bank with a trading book concession should report its LECB at the reporting date [as 'capital base for the period of this report']. It should also be asked to provide its minimum LECB for the reporting period so that potential breaches within that period can be identified. Any potential breaches should be taken up to establish whether the LECB was at a higher level on the relevant date.

4.2 Large exposure

4 A *large exposure* is an exposure to a counterparty or group of closely related counterparties which is greater than or equal to 10% of LECB.

4.3 Exposure

5 An *exposure* is the maximum loss a bank might suffer if a counterparty or a group of closely related counterparties fails to meet its obligations, or the maximum loss that might be experienced as a result of the bank realising assets or off-balance sheet positions.

Banks should calculate an exposure as the gross amount at risk arising from:

- (a) **claims on a counterparty or group of closely related counterparties including actual claims, and potential claims which would arise from the drawing down in full of undrawn advised facilities (whether revocable or irrevocable, conditional or unconditional) which the bank has committed itself to provide, and claims which the bank has committed itself to purchase or underwrite. Typically these will be in the form of:**
- (i) all loans and advances (including overdrafts), however denominated;
 - (ii) the net book value of finance leases, less deferred tax;
 - (iii) discounted bills held outright;

- (iv) bonds, acceptances, promissory notes, loan stocks and other paper held outright;
- (v) margin held with investment exchanges, clearing houses or other counterparties;
- (vi) OTC futures (including forwards), options, swaps and similar contracts on interest rates, foreign currencies, equities, securities and commodities;
- (vii) claims arising in the course of settlement of securities or other transactions;
- (viii) claims arising in the case of forward sales and purchases of instruments in both the trading and banking books that either settle on a date beyond the market norm for that instrument or where the payment due is deferred until some future date;
- (ix) any commitment with a certain or uncertain drawdown entered into by the bank. This includes amounts outstanding under:
 - sale and repurchase agreements (which may be reported net if the conditions of the FSA's policy on netting are met);
 - forward asset purchase agreements;
 - buy back agreements;
 - forward deposits placed (i.e. where a bank contracts to make a deposit with another party at a future date at a pre-determined rate); and
 - the unpaid part of partly-paid shares; and
- (x) any other claims arising from similar transactions entered into by the bank.

See ch NE

It should be noted that the following should be excluded:

- (i) claims and other assets deducted from the bank's capital base for capital adequacy and large exposures purposes;
- (ii) claims on group companies which the FSA has agreed in writing may be solo-consolidated;
- (iii) claims where the bank has paid its side of an FX transaction and the countervalue is not received from the

counterparty until up to two working days following payment;

- a) After two working days, the claim will be an exposure.
- (iv) where an asset is traded, claims on a counterparty arising during settlement where both the bank and the counterparty are up to five working days overdue in settling;
- a) Amounts outstanding after five working days are exposures.
 - b) The amount at risk is calculated as the difference between the amount due and the current market value of the instrument.
 - c) This covers failure to settle and a *delivery versus payment* transaction, on which neither side has parted with their asset and the risk is on market movements of the net value.
 - i) A *delivery versus payment* transaction is a delivery of securities to a designated recipient only upon receipt of payment.
 - (v) counterparty risk on futures and options where the contracts are traded on an exchange and are subject to daily margining requirements. However, except where contracts relate to a broadly based cash settled index, issuer risk on any underlying bonds/equities should be included.
 - a) The issuer risk is included where the contract is not related to a broadly based cash settled index because the value of the contracts depends on the issuer's financial soundness.

While the measure of large exposure does not take account of all exposures arising in the course of settlement, a bank should nevertheless pay particular attention as to how to control such risks.

(b) contingent liabilities arising in the normal course of business, and those contingent liabilities which would arise from the drawing down in full of undrawn advised facilities (whether revocable or irrevocable, conditional or unconditional) which the bank has committed itself to provide. These include:

- (i) direct credit substitutes (including guarantees, standby letters of credit serving as financial guarantees, bills accepted but not held by the bank, 'per aval' and equivalent endorsements);

- (ii) claims sold with recourse, where the credit remains with the bank;
- (iii) transaction-related contingent items not having the character of direct credit substitutes (including tender and performance bonds, bid bonds, warranties, standby letters of credit relating to particular transactions, retention money guarantees, import and export excise duty bonds, VAT bonds);
- (iv) undrawn documentary letters of credit issued or confirmed; and
- (v) those arising from similar transactions entered into by the bank.

It should be noted that the following should be excluded:

- (i) indemnities for lost share certificates and export/import carnets;
- (ii) bill endorsements on bills already endorsed by another bank; and
- (iii) contingent liabilities resulting from injuries, damage or loss suffered by third parties and caused by the goods where the bank acts as lessor, mortgagee or owner of goods under a hire-purchase agreement.
 - a) For the purpose of the definitions in (a) and (b), *facilities* include overdraft, standby, revolving underwriting, and multiple option facilities and similar facilities provided by a bank. Where a bank or banking group's sub-limits exceed the overall facility limit, the exposure should be taken as the overall facility limit rather than the aggregate of the sub-limits.
- (c) **assets, and assets which the bank has committed itself to purchase or underwrite, whose value depends wholly or mainly on a counterparty performing its obligations, or whose value otherwise depends on that counterparty's financial soundness but which do not represent a claim on the counterparty. This includes equities, equity warrants and options which do not represent a claim on the issuer but whose value depends, principally, on the issuer's financial soundness.**

6 The amount at risk should include accrued interest. For banks to which the CAD regime applies, trading book exposures should be marked to market daily and the accrued interest element should be

included in the mark-to-market valuation. However, in the banking book, given the systems difficulties of including accrued interest in the total amount of an exposure, the FSA accepts the following reporting treatment for exposures:

- (a) for an exposure well below 25% of a bank's LECB, the accrued interest element need not be reported; and
- (b) for an exposure close to 25% of a bank's LECB, the bank should be able to demonstrate that the exposure, including the accrued interest element, is below the 25% limit and that the 25% limit has not been breached.

4.4 Reducing an exposure

4.4.1 *Netting*

See ch NE

7 Subject to meeting certain criteria, a bank may calculate the size of its exposure to a counterparty by *netting* its various claims and obligations relating to that counterparty. These criteria are set out in the chapter on netting.

8 The policy for measuring and reporting on a net basis are the same for large exposures as for capital adequacy.

4.4.2 *Syndicated loans and sub-participations*

See ch SE

9 If the terms and conditions of the FSA's policy on loan transfers and securitisation have been met:

- (a) a bank acting as manager or co-manager of a loan financed by more than one bank should not report the other participating banks' share of the loan as an exposure to the counterparty.
 - a) If a managing bank has a commitment to lend further funds to the counterparty, it should include the amount committed in its reported exposure.
- (b) a participating bank should report its exposure as an exposure to the ultimate borrower.
 - a) The participating bank has made a deposit with the managing bank covering its full share of the loan, and should not have recourse to the managing bank should the borrower fail to repay.

4.4.3 *Eligible collateral*

See s9.2

10 Eligible collateral can also be used to reduce an exposure. This is covered later in this chapter.

4.4.4 *Bad debt provisions*

11 An exposure reported at book value should be gross of specific/individual provisions for bad and doubtful debts. Similarly, where an exposure is marked to market the valuation is typically gross of any provisions. However, for monitoring against limits, a specific/individual provision made against a loan should be set off against the gross amount of the exposure.

- a) So the net amount is measured against a limit.

5 KEY DEFINITIONS: COUNTERPARTY

This section defines *counterparty*, a *group of closely related counterparties* and *connected counterparties* for large exposures purposes.

5.1 Counterparty

- 1 A *counterparty* is any party on which a bank, directly or indirectly, has a claim.
- 2 An *individual counterparty* comprises natural and legal persons and includes governments, local authorities, public sector entities, individual trusts, corporations, unincorporated businesses (whether as sole traders or partnerships) and non profit making bodies.
- 3 The *identity of a counterparty* will generally be one of the following:
 - (a) the borrower (customer);
 - (b) the person whose obligations the bank is guaranteeing (where the bank is providing such a guarantee);
 - (c) in the case of a derivatives contract, the party with whom the contract was made; or
 - (d) in the case of a security held, the issuer of a security.
 - a) There are a number of non-straightforward cases:
 - i) Where bills held by a bank which have been accepted by another bank, the claim should be reported as on that other bank;
 - ii) Where per aval endorsements on bills are held by a bank, the claim should be reported as a claim of over one year maturity on the avalising bank;
 - iii) Where a bank is funding the activities of a company that trades on an exchange (whether for that company's own account or on behalf of clients), the full amount of such funding should be reported as an exposure to that company unless an alternative reporting method has been agreed with the FSA in writing; and
 - iv) If a third party has provided an explicit unconditional irrevocable guarantee, a bank may report the exposure as being to the guarantor if its large exposures policy statement includes a section on guaranteed exposures.

5.2 A group of closely related counterparties

4 A group of closely related counterparties exists either where:

- (a) unless it can be shown otherwise, two or more individual counterparties constitute a single risk because one of them has, directly or indirectly, control over the other(s); or
 - a) 'Control' is defined as the relationship between a parent undertaking and a subsidiary, as defined in Article 1 of the Consolidated Accounts Directive (83/349/EEC), or a similar relationship between any natural or legal person and an undertaking.
- (b) individual counterparties are connected in such a way that the financial soundness of any of them may affect the financial soundness of the other(s) or the same factors may affect the financial soundness of both or all of them.
 - a) Relationships between individual counterparties which might give rise to common risks include:
 - i) group undertakings as defined in the Companies Act;
 - ii) companies whose ultimate owner (whether wholly or significantly) is the same individual or individuals, and which do not have a formal group structure;
 - iii) companies having common directors or management; and
 - iv) counterparties linked by cross guarantees.

5 Where there is doubt as to whether a number of individual persons constitute a group of closely related counterparties or - even if a relationship as identified above exists - it is considered that the counterparties do not share a 'common risk', the bank should discuss the circumstances with the FSA to determine how the exposure(s) should be reported.

5.3 Connected counterparties

6 Because of possible contagion and the risk that the risk assessment of proposed loans to counterparties connected to the bank may be obscured by subjective considerations, the FSA pays particular attention to lending to *connected counterparties*. The FSA does not expect lending to connected counterparties to form a significant proportion of a bank's assets unless the FSA has agreed in writing a connected exposures concession, as set out in section 9.

7 A bank should take special care to ensure that a proper objective credit assessment is undertaken for proposed exposures to companies or persons connected with the bank, its managers, directors or controllers. Such an exposure may be justified only if:

- (a) it is undertaken for the clear commercial advantage of the bank; and
- (b) it is negotiated and agreed on an arm's length basis.
 - a) Factors to take into account in (b) are:
 - i) the extent to which e.g. shareholders can influence a bank's operations, e.g. through voting rights;
 - ii) the management role of shareholders where they are also e.g. directors; and
 - iii) whether the loan would be subject to the bank's usual monitoring and recovery procedures if repayment difficulties emerged.
 - b) Staff loans other than to managers, controllers or directors are not normally treated as connected.

See s9.2

8 Where the link with the connected company is fairly remote, for example, where a non-executive director of a large bank is a director of the borrowing company, the exposure may be considered as acceptable up to the normal level for that bank. However, if there is a particularly close connection, the exposure should be aggregated within the 25% limit for connected lending.

9 *Parties connected to a bank* comprise:

- (a) 'parent undertakings', 'subsidiary undertakings' and 'related companies'.

'Parent undertakings' and 'subsidiary undertakings' have, for the purposes of consolidated supervision and large exposures, the meanings given in Articles 1(12) and (13) of the BCD, by reference to the Seventh Company Law Directive 83/349/EEC. Those provisions are implemented in s258 of the Companies Act 1985.

A 'related company', in relation to an institution or the parent undertaking of an institution, means a body corporate (other than a subsidiary undertaking) in which the institution or parent undertaking holds a qualifying capital interest.

A qualifying capital interest means an interest in relevant shares of the body corporate which the institution or parent undertaking holds on a long-term basis for the purpose of securing a contribution to its own activities by the exercise of control or influence arising from that interest.

Relevant shares means shares comprised in the equity share capital of the body corporate of a class carrying rights to vote in all circumstances at general meetings of the body.

A holding of 20 per cent or more of the nominal value of the relevant shares of a body corporate should be presumed to be a qualifying capital interest unless the contrary is shown.

Equity share capital has the same meaning as in the Companies Act 1985 and the Companies (Northern Ireland) Order 1986.

- (b) associates as defined by Financial Reporting Standard 9 or by International Accounting Standard 28;
- (c) directors, controllers and their *associates* (a controller and an associate is defined in section 422 of the Act); and
- (d) non-group companies with which the bank's directors and controllers are *associated*.
 - a) A director (including an alternate director) and controller of a bank is deemed to be *associated* with another company, whether registered or domiciled in the United Kingdom or overseas, if:
 - i) if he holds the position of director in his own right; or
 - ii) as a result of a loan granted by the bank to that company; or
 - iii) as a result of a financial interest taken by the bank in that company; or
 - iv) by virtue of a professional interest unconnected with the bank; or
 - v) he and/or his associates, as defined above, together hold 10% or more of the equity share capital of that company.
 - b) For the purposes of (a) above, any employee appointed by the bank to be a director of another company should be treated as a director/controller.

For consortium banks with no definable parent, the reporting of connected exposures should be discussed with the FSA.

- 10 The FSA examines particularly closely all exposures to companies or persons connected to a bank and deducts them from the bank's capital base if they are of the nature of a capital investment or are made on very concessionary terms.
- 11 A bank's exposure to a connected counterparty other than parent, subsidiary or sister companies will not be considered to be connected if the bank can demonstrate to the FSA's satisfaction that the bank's relationship with that counterparty is at arm's length, and the connection between it and the borrower is remote. But a bank should still monitor these exposures in line with its usual procedures.
- 12 A bank's exposure to a connected company should include only those transactions where the company in question is the contractual counterparty. Where a connected company merely acts as the bank's agent, the bank's exposure is to the connected company's client and should be reported as such.
- 13 At a solo level, exposures to solo-consolidated subsidiaries should be excluded from the consideration of connected exposures. At a consolidated level, exposures to *consolidated group companies* should also be excluded from the consideration of connected exposures.

See s9.2

a) *Consolidated group companies are defined elsewhere.*

5.4 Lending to investment trusts, unit trusts, OEICs and venture funds managed within banking groups

- 14 This sub-section sets out the factors which should be taken into account when considering:
- (a) whether lending to an investment fund within the same banking group should be treated as 'connected' lending; or
 - (b) whether lending to several investment funds within the same third party group should be deemed to be 'related' (and therefore aggregated).
- 15 The starting point is that exposures to funds managed within the same banking group need not be treated as connected exposures. Similarly exposures to several different funds managed within the same third party group need not be treated as related to each other or to the bank within the group.
- 16 However, it is important that a bank does not take this presumption for granted; the onus remains on a bank which undertakes such exposures to examine closely each case on its merits. When doing so, a bank should consider:

- (a) whether the beneficial owners of the fund, i.e. the shareholders, are connected to the bank, and/or related to other funds managed within the its group;
- (b) the degree of independence of control of the fund;
 - a) Factors include the composition of the fund's board and its senior management and their relation (if any) to the bank and/or other funds;
 - i) The purpose is to consider whether, for example, incompetence and/or fraud by common directors might impact on the lending bank and/or other funds.
- (c) whether the fund is subject to any other relevant statutory or regulatory requirements controlling independence and quality of management, and systems and controls, and whether, as far as can reasonably be ascertained from publicly available information, it is meeting these requirements to the satisfaction of the relevant regulatory bodies;
 - a) For example, the requirements under the Insurance Companies Act and the Financial Services and Markets Act or similar legislation in other jurisdictions.,
- (d) whether the fund has an audit committee and is subject to internal and external audit;
- (e) whether the loan is made on an arm's length basis; and
 - a) Considerations include whether the exposure is of clear commercial advantage to the bank , and whether the bank has conducted the usual level of credit assessment.
- (f) whether the bank has the necessary systems and controls to monitor the above criteria on an ongoing basis.
 - a) This should be assessed on a regular basis by the bank's internal audit function. In addition, any causes for concern should be included within wider assessments of systems and controls by the bank's external auditors.

17 Even where a bank can satisfy itself that the criteria above are met, and notwithstanding the FSA's acceptance that such funds may be treated as unconnected/unrelated, there remains some aggregate risk.

- a) For example, where a bank lends to a fund within its group, and that fund fails, in order to limit reputational damage, the bank may be prepared to contemplate waiving its legal right to repayment ahead of

investors in the fund, thereby suffering a loss. Where a bank lends to several funds within its own, or a third party group, there remains the risk that a run on fund A will prompt runs on funds B and C where all three are managed within the same group, thereby conceivably precipitating problems for the bank.

See s8.1

18

A bank should therefore include within its large exposures policy statement its limits for:

- (a) the aggregate of lending to funds within the same banking group;
- (b) the aggregate of lending to two or more funds within a third party group.

6 KEY DEFINITIONS: COUNTERPARTY RISK - SECURITIES AND DERIVATIVES

See chs TC s4 &
DU s3

This section expands on the definition of exposure contained in Section 4 by explaining how a bank's exposure arising from securities and derivatives contracts positions should be calculated in order to determine its total exposure to a particular counterparty; Section 7 covers the equivalent determination of issuer risk. The measurement of counterparty risk should be the same for large exposures as for capital adequacy purposes.

Soft limits and the trading book treatments described in Sections 6 and 7 only apply to positions in the trading book of banks to which the CAD regime applies. They represent a concession under the CAD, which recognises that there is sufficient volume in the securities markets to allow a bank to trade out positions in its trading book quickly. For other banks, only the banking book treatments apply.

6.1 Forward transactions of securities

- 1 Forward sales and purchases of securities in both the banking and trading books give rise to a counterparty exposure.
- 2 When securities are to be received in exchange for cash or securities, a bank should include as an exposure the higher of:
 - (a) zero plus an *add-on* for potential future exposure; and
 - (b) the difference between the market value of the securities to be received and the contracted value for forward delivery, plus an *add-on* for potential future exposure.
- 3 When cash or securities are to be received in exchange for securities, a bank should include as an exposure the higher of:
 - (a) zero plus an *add-on* for potential future exposure; and
 - (b) the difference between the contracted value for forward delivery and the market value of the securities to be delivered, plus an *add-on*.
 - a) The amounts to be received or given should include all cash flows related to the securities and the transactions.
 - b) The add-on should be calculated in accordance with the risk cushion factors set out in the policy on counterparty risk for capital adequacy purposes.

See ch TC s3

- c) In addition, where compensation is due to be paid in the future in exchange for a contract, the current market value of the payment due should be reported.

6.2 Settlement of transactions

6.2.1 *Free deliveries*

- 4 For *free deliveries*, an immediate exposure arises where a bank has settled its side of the transaction but has yet to receive the countervalue.
- a) Where the countervalue is payment, it may be the final funds or an undertaking to effect transfer of funds by close of business on the same business day.
 - b) A *free delivery* occurs when a bank has paid away (or received) its side of a transaction and has yet to receive (or pay away) the securities/cash concerned.
- 5 Where a bank has provided cash and is awaiting the asset, the current market value of the asset being purchased should be included for trading book exposures; the book value should be included for banking book exposures.
- 6 Where a bank has sold the asset, the cash due should be included for both banking and trading book exposures.
- 7 Where the transaction is effected across a national border, there is a window of one working day before the exposure should be included.

6.2.2 *Unsettled securities transactions*

- 8 For both the banking and trading books, claims on a counterparty arising in the course of settlement of a securities transaction where neither the bank nor its counterparty have settled their side of the transaction should be reported once settlement is five days overdue. The exposure is the difference between the amount due and the current market value of the instrument.

6.3 Repos and reverse repos

See ch TC s4

- 9 For repos and reverse repos in the trading book, the counterparty exposure should be calculated as the mark-to-market differential between the collateral provided by the bank and that received from its counterparty.

- a) In the case of undocumented repos, an add-on for potential future exposure should be included in accordance with the risk cushion factors set out in the rules for counterparty risk for capital adequacy purposes.

6.4 Interest rate, foreign exchange rate, equity, precious metals (excluding gold) and other commodity related derivative contracts

6.4.1 General

See ch VA s4

10

For counterparty exposures relating to over-the-counter (OTC) *interest rate, foreign exchange rate, equity, precious metals (excluding gold) and other commodities contracts*, the amount at risk for large exposures purposes is likely to be less than the nominal exposure. So rather than the full nominal exposure the amount at risk is more reasonably measured by calculating the proportion of the nominal exposure considered to be at risk - the *credit equivalent amount* ('CEA'). The CEA for these exposures should be reported and aggregated with other exposures to the same counterparty.

- a) *Interest rate related contracts* includes single-currency interest rate swaps, basis swaps, forward rate agreements ('FRAs') and products with similar characteristics, interest rate options purchased (including caps, collars and floors purchased as stand-alone contracts) and similar instruments. Contracts of a similar nature concerning bonds should also be included in this category.
- b) *Foreign exchange rate related contracts* includes cross currency swaps, cross currency interest rate swaps, forward foreign exchange contracts, currency options purchased and similar instruments. Contracts of a similar nature concerning gold should also be included in this category.
- c) *Equity and commodities contracts* include equity options purchased, swaps and similar contracts, commodity options purchased, swaps and similar instruments involving commodities (but not gold).

See ch VA s4

11

The CEA for these items is arrived at using the *replacement cost* method.

- a) No CEA should be reported for either contracts traded on exchanges where they are subject to daily margining requirements, or for OTC foreign exchange contracts (except contracts concerning gold) with an original maturity of 14 calendar days or less.
 - i) When trading on an exchange with daily margining requirements, credit exposure only arises in respect of initial margin and excess variation margin payments. Such an exposure should be reported as

an on balance sheet exposure to that exchange (or its associated clearing house).

6.4.2 *Replacement cost method*

12 To calculate the credit equivalent amount of the instruments using the *replacement cost* method, a bank should add together:

(a) the total replacement cost (obtained by 'marking to market') of all its contracts with a positive value; and

See ch VA s4

a) Valuations for counterparty risk relevant to this method are set out elsewhere.

(b) an amount added on for potential future credit exposure. This *add-on* should be calculated by taking a percentage of the notional principal amount of each contract (according to the remaining contract duration of each contract as set out in the matrix below) and summing the results:

Type of Contract	Residual Maturity		
	≤ 1 Year	> 1 & ≤ 5 Years	> 5 Years
Interest rate	0.0%	0.5%	1.5%
Foreign exchange (including gold)	1.0%	5.0%	7.5%
Equities	6.0%	8.0%	10.0%
Precious metals (except gold)	7.0%	7.0%	8.0%
Commodities	10.0%	12.0%	15.0%

a) To calculate the CEA for an unfunded credit derivative in the trading book, the add-on should be determined by whether the reference asset is a qualifying debt item or not. If the reference asset is a qualifying debt item, the interest rate add-ons should be used; otherwise the equity add-ons should be used. (Unfunded credit derivatives in the banking book should be treated as guarantees and therefore no credit equivalent calculation is therefore necessary.)

b) Otherwise contracts which do not fall in one of the five categories above should be treated as commodities (unless otherwise agreed in writing with the FSA).

c) No potential exposure should be calculated for single-currency floating/floating interest rate basis swaps; the credit equivalent amount on these contracts should be determined solely on the basis of mark-to-market value.

6.4.3 *Remaining maturity*

13 For the following instruments, the *remaining maturity* should be taken as follows:

- (a) for FRAs and similar products, the time from the reporting date until the end of the period to which the interest rate underlying the contract relates.
 - a) So an FRA with three months until settlement, based on a one year rate, would have a remaining maturity of fifteen months.
 - i) Where settlement of an FRA takes place at the start of the period to which the interest rate underlying the contract relates, no account should be taken of the FRA following settlement.
 - ii) Where settlement takes place at the end of the period to which the interest rate underlying the contract relates, the FRA should continue to be included until settlement takes place given that, even after the settlement amount is fixed, the contract will continue to have a mark-to-market value which will be subject to fluctuation.
 - (b) for contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the mark to market value of the contract is zero on these specified dates, the residual maturity should be set equal to the time until the next reset date.
 - a) For interest rate contracts with a residual maturity of more than one year, the potential future exposure matrix multiplier is subject to a floor of 0.5% even if there are reset dates of a shorter duration.
 - b) For interest rate options, the remaining maturity should be taken as the time from the reporting date until the end of the period to which the interest rate underlying the option relates, i.e. in a similar way to FRAs.

6.5 **One to three year derivative concession**

14 If a bank has obtained prior written agreement from the FSA, derivative exposures to banks, building societies and investment firms that are subject to the CAD, or are subject to a regime that the FSA deems to be equivalent to the CAD, with a maturity of over one year but under three years, may be weighted at 20% for the calculation of exposures against counterparty limits. This treatment may apply to derivative exposures in both the banking and the trading books, though normally such exposures would be expected to be found in the trading book.

See s9.2 15 This treatment should not apply to counterparties connected to the bank; however the central risk management concession policy may be available.

7 KEY DEFINITIONS: ISSUER RISK - SECURITIES AND DERIVATIVES

1 This section explains how a bank should calculate its exposure arising from securities and derivative contracts positions in order to determine its total exposure to a particular issuer.

For banks to which the CAD regime does not apply, only the banking book treatments should apply.

7.1 General

2 For the purposes of form LE2 (and LE3), where a bank deals in securities, the exposure to the issuer of the security should be calculated as follows:

- (a) for the banking book, the sum of the excess, where positive, of the book value of all long positions over all short positions (i.e. the *net long position*), for each identical instrument issued by the issuer.
 - a) For non-identical instruments, a long position in one security should not be offset against a short position in a non-identical security issued by the same issuer unless the securities are issued by a central government or a central bank and the following criteria are met:
 - i) the securities are denominated in the same currency; and
 - ii) if the securities are fixed-rate, they are within the same maturity time band, i.e. one year or less, or over one year;
 - iii) if the securities are index-linked, they are within the same maturity time band;
 - iv) there is no netting of floating-rate securities against fixed-rate or index-linked securities is permitted; floating-rate securities of any maturity can be offset against each other.
- (b) for the trading book, first the excess of the current market value of all long positions over all short positions should be calculated for each instrument issued by the issuer. The exposure is then the excess, where positive, of the current market value of all long positions over all short positions in all the financial instruments issued by the counterparty.
 - a) When netting long positions against short positions in different instruments, the short positions should be netted against the long positions in instruments with the highest specific risk charges. Specific

See
Supervision
Manual, ch 16

See chs TI, TO
and TE

risk charges are covered in the chapters on interest rate, equity and option position risk.

- b) Positions should not be offset within groups of closely related counterparties since different issues, and the issuers themselves, even if they are firms which are part of the same group, may perform differently.

3 Positions should not be offset between banking and trading books.

7.2 Forward transactions

4 For both banking and trading book calculations, commitments to buy securities at a future date (including futures contracts) should be included as long positions and forward sales as short positions.

5 Where a bank has made a commitment to an issuer under a *note issuance facility* to purchase, at the request of the issuer, securities which are unsold on the issue date, these should be added to the long positions.

- a) Note issuance facilities include revolving underwriting facilities, euronote facilities and any similar arrangements.

6 A net short position does not give rise to an exposure for large exposures purposes.

7.3 Option positions

7.3.1 Options on securities

7 The following treatments should be applied for both banking and trading book calculations:

- (a) for a written put: count as a long position in the underlying security valued at the strike price;
- (b) for a purchased put: count as a short position in the underlying security valued at the strike price; and
- (c) for a purchased call: count as a long position in the underlying security equal to the book value of the option but only if the contract has been given a book value in the bank's accounts.
 - a) Written calls do not give rise to an exposure.

7.3.2 *Options on an index*

8 The following treatments should be applied for both banking and trading book calculations:

(a) Broadly based and cash settled indices are not required to be broken down into their constituent elements and will not give rise to issuer risk.

See s12.1

a) The highly liquid equity indices listed in the Appendix count as broadly based.

(b) Narrowly based/non cash settled indices should be decomposed into their component stocks in order to calculate the issuer risk on the underlying security.

The notional principal valued at the strike price should be used when determining the amount to be included in the issuer risk calculation. For a purchased call, it is the book value that should be included as an exposure.

7.4 **Repos and reverse repos; stock lending and borrowing**

See
Supervision
Manual
chapter 16

9 For repos in the banking book, the security sold to a counterparty should be included as a long position in form LE2 (and LE3), unless the security sold was itself received as ineligible collateral and did not give rise to issuer risk.

10 Reverse repos in the banking book should be treated as loans unless eligible collateral is held. If eligible collateral is held, they should be regarded as collateralised loans and the collateral held included as a long position.

a) Zone A government securities and cash are eligible collateral.

b) The forward (i.e. second) leg should not be included as a short position.

11 Where collateral for a reverse repo is ineligible, the counterparty risk on the cash loan should be reported in full.

See s6.3

12 For repos and reverse repos in the trading book, issuer risk should be reported on the bank's asset in the transaction (in a repo this is the security sold during the first leg, in a reverse repo this is the collateral provided during the first leg, if this is a security). In addition, the counterparty risk on both repos and reverse repos should be reported as set out above.

13 For stock lending transactions the same reporting requirements apply as for repos; those for reverse repos apply for stock borrowing.

7.5 Underwriting

7.5.1 *General*

This sub-section applies to offerings of *discrete* issues of securities (equities and bonds) only.

- a) *Discrete* means one-off. So the treatment for underwriting set out below should be applied to new securities or existing securities which are new to the market. The treatment does not extend to any commitment of a continuing or revolving nature, such as note issuance facilities. The exposure arising from other underwriting commitments should be taken to be the full amount of the sum underwritten.
 - i) So reductions in large exposures and position risk capital requirements should not be made by banks which make trades of equities or bonds on the secondary market, or make purchases on the grey market and are neither underwriters, nor members of the syndicate for underwriting or distributing the particular securities.

There are two types of underwriting status: experts and non-experts. However, in either case, the exposure should be calculated on the basis of the CEA set out below.

7.5.2 *'Expert' status*

14 A bank wishing to be considered as an 'expert' underwriter needs to demonstrate that it has the necessary experience, skills and the systems in place to be able to monitor (on an intra-day basis) its aggregate exposure (from all sources) to the counterparty before a commitment is entered into and for the life of the underwriting commitment.

15 A bank may be considered an 'expert' in some market segments and not others; for example, it may be considered an 'expert' for debt but not equity, or only for issuers from particular countries.

16 When 'expert' status has been established, the FSA will agree in writing with each bank guidelines setting out the levels of underwriting exposure for which a bank may expect prompt prior approval from the FSA.

17 Where such an exposure, as measured by the CEA, is over 25% of LECB, pre-notification should still be made.

- 18 The maximum pre-agreed guidelines are the lower of the following:
- (a) The CEA plus any other exposures to the same counterparty, not exceeding three times the pre-notification trigger (i.e. 25% of LECB). This means that the maximum guideline in CEA terms is 75% of LECB; or
 - (b) The nominal amount (after taking into account any other exposures to the same counterparty) of exposure, not exceeding 400% of LECB.
 - a) The minimum guideline which can be set in nominal terms is equal to 100% of LECB - i.e. there is a 100% collar in addition to the 400% cap.

7.5.3 *'Non-expert' status*

- 19 For non-experts, underwriting exposures are generally treated in a similar way to other forms of exposures, namely that the CEA - see below - should not usually exceed 10% of capital and should exceed 25% of capital only in the most exceptional circumstances.

7.5.4 *Underwriting and other forms of exposure to the same counterparty*

- 20 Exposures in the form of underwriting commitments should be aggregated and reported with other forms of exposure to the same counterparty. The latter will reduce pro-rata the size of the underwriting exposure the FSA will consider to be prudent.
- a) For example, where a bank has a loan equivalent to 12.5% of LECB to a counterparty and the agreed limit is 25%, the size of the underwriting exposure to the same counterparty is halved.

7.5.5 *Calculating the CEA*

- 21 For the purposes of calculating the CEA, the underwriting is divided into two distinct phases:
- (a) from the date of initial commitment until working day zero; and
 - (b) working day zero onwards.

See ch TU

- a) The date of initial commitment and working day zero are defined in the chapter on underwriting.

- 22 From the date of initial commitment until working day zero. The CEA should be calculated using the credit conversion factors set out in the table below.
- 23 When calculating the CEA, amounts sub-underwritten or sold forward should be offset against an underwriting commitment only where a bank received a written commitment to that effect from the other institutions concerned before it gave an underwriting commitment to its client.

	Implied Conversion Factor	Post-notify (10%)(1)	Pre-notify (25%)(2)	Maximum "expert" guideline (3)
All debt instruments	18.75%	53%	133%	400%
Preference share, constituents of the FT-SE 100 index, and related convertibles, US S&P 500, Japan Nikkei 225	23%	44%	108%	325%
Constituents of FT All-share index & related convertibles; other major non-UK equities	30%	34%	83%	250%
Other equities with a normal market size and other second tier non-equities	43%	24%	58%	175%
Other UK and non-UK equities and related convertibles	75%	14%	33%	100%
<p>(1) The nominal amount (expressed as a percentage of capital) which corresponds to the post-notification threshold when converted into credit equivalent terms.</p> <p>(2) The nominal amount (expressed as a percentage of capital) which corresponds to the pre-notification threshold when converted into credit equivalent terms.</p> <p>(3) The lower of 400% nominal or three times the pre-notification trigger. (The latter applies in all cases other than debt underwriting).</p>				

- 24 From working day zero onwards. The measure of exposure should be the net underwriting position multiplied by (100%

minus a discount factor). This net exposure should be aggregated with other exposures to the issuer.

- a) The net underwriting position is defined as: a bank's gross underwriting commitment + purchases - sales - sub-underwritings.
- b) The discount factors to be applied are as follows:

Working Day 0:	100%
Working Day 1:	90%
Working Day 2:	75%
Working Day 3:	75%
Working Day 4:	50%
Working Day 5:	25%
After Working Day 5:	0%

7.6 'Soft' limits on issuer risk

25 For a bank to which the CAD regime applies, if an exposure to an issuer arising as a result of inclusion of holdings of tradable securities in the trading book exceeds 25% of LECB, the use of *soft limits* may be agreed in writing with the FSA.

- a) The FSA considers that there should be a deep and liquid market for the securities being traded, i.e. there is sufficient volume to allow a bank to trade out of a position quickly.

See s9.3 & ch 26
TL s2

Where the FSA has been pre-notified of and agreed soft limits with a bank, exposures within these agreed limits need not be further pre-notified. However, they are subject to the incremental capital policy and should be post-notified.

- a) Inclusion on the form LE2 or LE3 is sufficient for post-reporting of exposures. The form BSD3 is used for reporting the incremental capital charges.

8 LARGE EXPOSURES POLICY STATEMENTS AND CLUSTERING

8.1 Large exposures policy statements

See ch GN s3

1 The FSA has made a rule under the Act requiring banks to have a large exposures policy statement (see rule 3.4.1). Banks are required to provide the FSA with a copy of this statement. The rules dealing with large exposures are set out in chapter GN. The FSA takes into account the statement when considering, for pre-notification purposes, limits proposed by a bank.

See ch GN s3

2 The rules require a *bank* to have its policy statement approved by its board and to review it at least annually. Significant changes to policies should not be incorporated in a policy statement without prior discussion with the FSA.

3 The detail of a policy statement depends on the type of bank and the nature of its business. The statement should, however, cover the bank's policy on large exposures consistent with the definitions set out elsewhere in this chapter. The areas to be considered should include:

- (a) limits for exposures to types of counterparties up to one year and over one year, to be considered separately; and to Zone A governments;
- (b) how to determine individual counterparty limits within the overall constraints set out in (a) above;
- (c) the policy toward connected exposures, including intra-group exposures;
- (d) the circumstances in which the limits in (a), (b) and (c) above may be exceeded and who is authorised to approve such excesses;

a) The authorising body might be a bank's board or credit committee.

See s8.2

- (e) *clustering* (i.e. the number and value of non-exempt large exposures which may exist at any one time);
- (f) any differentiation between secured and unsecured exposures, together with any definitions necessary on permissible forms of security;
- (g) the bank's approach to top slicing;

- a) The FSA still does not condone the practice of top slicing. Top slicing is the practice by which a bank systematically collateralises only the element of its exposure that exceeds the 25% limit to bring it within the limit or collateralises just more than the element of an exposure that equals or exceeds 10% of the bank's large exposures capital base in order to bring the sum below the clustering limit. The FSA takes such activity into account when assessing a bank's individual capital ratio(s) accordingly.
 - (h) the procedures for guarantees including credit approval for exposure to a guarantor;
 - (i) the procedures for reviewing, monitoring and controlling exposures;
 - a) Details of these procedures include:
 - i) the composition and terms of reference of the main credit committee;
 - ii) delegated authority; and
 - iii) the nature and frequency of the bank's review and monitoring procedures, including exception reports.
 - (j) the allocation of responsibility for reporting large exposures to the FSA, and for the completion and signing of forms;
 - (k) the bank's approach to lending to individual economic sectors and to lending to borrowers in the same country; and
 - (l) the bank's approach to (i) sovereign lending and (ii) country exposures limits.
- 4 When considering the acceptability of particular exposures, the FSA expects a bank to consider:
- (a) the standing of the counterparty;
 - (b) the nature of the bank's relationship with the counterparty;
 - (c) the nature and extent of security taken against the exposure;
 - (d) the maturity of the exposure; and
 - (e) the bank's expertise in the type of transaction.
- 5 The necessary control systems to give effect to a bank's policy on large exposures should be clearly specified and monitored by its board. Banks should detail how they intend to monitor the size of

their large exposures relative to their LECB to ensure that the limits are not exceeded.

8.2 Clustering

- 6 If a UK bank has a number of large exposures and, in particular, if their aggregate, excluding exempt exposures, exceeds 100% of LECB, the FSA considers whether that bank's capital ratios should be increased.
- 7 The factors that the FSA considers are :
- (a) consistency with the bank's large exposures policy statement;
 - (b) the number of exposures, their individual size and nature; and
 - (c) the characteristics of the bank, including
 - (i) the nature of its business; and
 - (ii) the experience of its management.

9 THE 25% LIMIT

See ch GN
s3

The rules made by the FSA under the Act require a UK bank to notify the FSA in cases where it proposes to enter into an exposure in excess of 25% of its capital. Generally a bank should not have individual exposures of more than 25% of its LECB. However, as set out below, exceptions to the 25% limit are considered acceptable. All proposed exposures over 25% of its LECB should be agreed in writing with the FSA.

9.1 General

1 A bank should have a total exposure which exceeds 25% of capital only if the exposure or those parts of the exposure that exceed the 25% limit:

- are exempt from the limit (see below); or
- arise from holdings of securities in the trading book, against which the appropriate amount of incremental capital is held (if the bank is a CAD bank); or
- for the consolidated reporting of a CAD bank, relate to short-term counterparties in the trading book of a subsidiary, and specific written consent of the supervisor of that subsidiary has been given; or
- the bank may also incur the exposure at solo, solo-consolidated or consolidated sub-group level, where the FSA has agreed in writing that applying the 25% limit is not necessary provided that the exposure does not exceed the 25% limit at the consolidated group level.

2 A bank must notify the FSA when it proposes to enter into a transaction which would cause that bank to have an exposure that will exceed 25% of capital (see rule 3.3.21 in Chapter GN).

See ch GN s3

- a) Pre-notification may take the form of notifying named counterparty limits. Provided exposures do not exceed pre-notified limits agreed with the FSA, no further pre-notification is considered necessary.
- b) An exposure includes those assets, claims and contingent liabilities which are exempt and securities held in the trading book.

See s5.3 3 Issuer risk exposures arising from traded securities in excess of an agreed limit may occur in the trading book and exposures in excess of this trigger point should generate incremental capital requirements.

9.2 **Exempt exposures**

9.2.1 *Summary*

4 Exempt exposures do not need to be included in calculating whether the aggregate of a bank's exposures to a particular counterparty is within the 25% limit. But they should be reported. They fall into the following categories:

See ch BC s3

(a) exposures of one year or less to banks (excluding multilateral development banks as listed in the chapter on Credit Risk in the Banking Book), to investment firms subject to the CAD or an analogous regime, to exchanges and clearing houses recognised for the purposes of Chapter BC of IPRU (BANK), unless they are to a counterparty connected to the bank.

a) The FSA aims to review annually with each bank its policy on, and limits for, such lending to these institutions and expects banks to take account of the different risks involved when setting limits for them. The risks arising from some forms of exposure may, however, be significantly different in degree from the risks involved in traditional short-term interbank lending.

(b) exposures to, or guaranteed by, central governments and central banks from Zone A countries.

See s12.2

a) The list of Zone A countries is given in the appendix.

b) In addition, for large exposures purposes, Zone A countries include the EEA, the European Coal and Steel Community, and Euratom.

c) An exposure guaranteed by a Zone A country's export credit agency (or equivalent) should not exceed the 25% limit unless the FSA has notified the bank that it is satisfied that the bank has sufficient expertise and systems in place to ensure that the terms of the guarantee are met fully.

(c) exposures to Zone B central governments if they are denominated in local currency and funded by liabilities in the same currency, or they arise from activities

which are principally subject to market risk (i.e. trading of country debt).

See s9.3 & ch
TL

- a) For the latter to apply, the usual criteria for agreeing soft limits should be met.
- b) Currency swaps are not considered as local funding.

See ch CS s3

(d) exposures secured either by cash (including CDs issued by the lending bank) held by the lender (or by a bank which is the parent or subsidiary of the lender where the parties are members of the same consolidated group and the requirements for zero weighting of inter-group exposures have been met) or by Zone A central government or central bank securities.

- a) While the FSA takes security into account when considering the acceptability of a bank's exposure up to 25% of its LECB, the presence of security on its own generally is not considered by the FSA to be an acceptable reason for an exposure to exceed 25%.

See ch NE s4

- b) In both cases, the exposure may be fully or partially collateralised and the lender's legal title should be fully protected. There should also be an appropriate margin to cover possible currency fluctuation if the collateral is in a different currency to the exposure; in the case of securities, the margin should also cover any fall in their market value from the start of the loan.
- c) In both cases, banks should take legal advice in all relevant jurisdictions, generally from an external legal advisor. Banks should discuss with the FSA whether internal legal advice is satisfactory.

See ch NE s4

- d) A similar treatment may be applied in the case of certain exposures which are partially guaranteed (e.g. by ECGD), where the element of the exposure that is guaranteed can be viewed as an exposure to the guarantor.

See s7.5

(e) exposures arising from underwriting, provided certain criteria are met.

See s9.2.2

(f) exposures covered by a connected exposure concession.

- a) For (f) above, all parts of the group which the treatment covers should be subject to consolidated supervision.

9.2.2 *Connected exposures*

- See s9.2 5 The aggregate of exposures to counterparties connected to a bank should normally be limited to 25%. In certain circumstances the FSA may agree that a limit above 25% is appropriate (see the treasury, reverse treasury, central risk management and/or a parental guarantee policies, as set out below).
- a) Article 49(2) of The Banking Consolidation Directive (formerly Article 4(2) of the LED) specifies a limit of 20% for exposures to a parent undertaking, subsidiary or sister company of a bank. However, the FSA is allowed under The Banking Consolidation Directive (formerly the LED) not to apply this lower limit and has chosen not to, since it requires banks to provide a detailed breakdown of their exposures to counterparties connected to them and subjects them to close scrutiny.

To be eligible, the bank's group should be subject to consolidated supervision in accordance with The Banking Consolidation Directive (formerly the Second Consolidated Supervision Directive) or with equivalent standards in force in a non-EU country.

- See s5.3 6 In certain circumstances, exposures to connected counterparties other than to a bank's parent, subsidiary or sister company, may be treated as not connected to the bank.
- See ch CS s3 7 Limits on connected exposures may not apply if the bank forms part of an integrated banking group and 0% weighting of connected exposures is appropriate - for details, see the chapter on consolidated supervision. Exposures to a bank's parent, the parent's subsidiaries or to its own subsidiaries can be exempt under The Banking Consolidation Directive (formerly the LED) if these undertakings are covered by the supervision on a consolidated basis to which the bank itself is subject.

9.2.3 *"Group treasury concession" policy*

- 8 The FSA may consider it appropriate for a bank to take on a treasury role on behalf of its group. In such a case (the "group treasury concession" policy) the FSA considers that the aggregate exposures of up to one year's maturity to any

connected counterparty may be subject to a limit exceeding 25% of LECB.

- 9 To be eligible, the bank's group should be subject to consolidated supervision in accordance with The Banking Consolidation Directive (formerly the Second Consolidated Supervision Directive) or with equivalent standards in force in a non-EU country; the bank should satisfy the FSA that it has a compelling business case for fulfilling such a treasury role and that it has appropriate management and other group control systems.

- a) This is to ensure that risk-taking in those group companies is properly monitored and controlled.

9.2.4 *"Reverse treasury concession" policy*

- 10 In certain cases the FSA may agree that exposures over 25% of capital to a bank controlling the lending bank may be adopted, even where the lending bank does not perform a treasury role. The FSA envisages that this would be the case where liquidity surplus to requirements is passed to the parent bank or the bank performing the treasury role, and where the group concerned is subject to consolidated supervision (the "reverse treasury concession" policy).

- 11 The FSA may agree to such a limit over 25% where:

- (a) the bank's group is subject to consolidated supervision in accordance with The Banking Consolidation Directive (formerly the Second Consolidated Supervision Directive) or with equivalent standards in force in a non-EU country;
- (b) there is a genuine need; and
- (c) it is only used for temporary surpluses and not long-term funding of the parent. The FSA expects these balances to fluctuate regularly.

9.2.5 *"Central risk management concession" policy*

- 12 If a bank is used for the central risk management of a derivatives portfolio or if it backs transactions into another group member for this purpose, the FSA considers that the bank may have connected exposures over 25% of LECB for exposures of any maturity (the "central risk management concession" policy).

- 13 For this to apply, the bank's group should be subject to consolidated supervision in accordance with The Banking Consolidation Directive (formerly the Second Consolidated Supervision Directive) or equivalent standards in force in a non-EU country.

9.2.6 *Parental guarantees*

- 14 A *subsidiary* bank may undertake exposures of any maturity in excess of 25% of LECB to unconnected counterparties provided:
- (a) the bank's group is subject to consolidated supervision in accordance with The Banking Consolidation Directive (formerly the Second Consolidated Supervision Directive) or with equivalent standards in force in a non-EU country;
 - (b) its parent bank provides a suitable guarantee; and
 - (c) the exposures are entered into within the terms of a policy agreed by the parent bank.
 - a) The FSA will request written confirmation from the parent bank that the exposure is retained in the subsidiary's balance sheet at the parent bank's request in order to meet group objectives.
 - b) The definition of '*subsidiary*' should normally be that used in the Companies Act 1985.
 - c) This policy recognises there can often be a sound reason for certain commercial business to be booked in one part of a banking group, e.g. an ongoing client relationship.
 - d) For the purposes of (c) above, a suitable guarantee is either a *parental guarantee* or a *capital maintenance agreement*.
 - i) A *parental guarantee* is a legally enforceable undertaking from the parent bank. An exposure covered by a parental guarantee should be pre-notified. Where a parental guarantee is in place, the FSA recognises the risk transfer to the parent bank.
 - ii) A *capital maintenance agreement* is an undertaking by the parent bank to provide a sufficient amount of capital of the appropriate kind to restore the subsidiary bank's capital to above its supervisory capital requirement (ie the

amount of capital it should have in order to comply with Rule 3.3.13 in Chapter GN).

- iii) The subsidiary should pre-notify an exposure which is (even partially) covered by a capital maintenance agreement, but only the portion of the exposure which is covered by the capital maintenance agreement may be treated as an exposure to the parent bank.
- iv) The parent bank should report the amount covered by the capital maintenance agreement as an exposure to the underlying counterparty.
- v) Only those capital maintenance agreements in which the parent bank gives an undertaking to ensure that the subsidiary will not be in breach of its large exposures requirements will be acceptable (i.e. the maximum at risk should an exposure to a third party become non-performing is 25% of LECB).
- e) Any guarantee arrangement should be legally enforceable by the subsidiary, since its purpose is to prevent the subsidiary bank's capital from becoming deficient if a loss is incurred on the exposure.
- f) The FSA seeks written confirmation from the parent bank that the exposure is retained in the subsidiary's balance sheet at the parent bank's request in order to meet group objectives and needs to be satisfied as to the nature of the exposure concerned.

It may be necessary to ask for evidence that the guarantee is enforceable e.g. an opinion from external legal advisors and have confirmation that the specific transactions were covered.

15

It is considered that a UK bank subsidiary of another UK bank may accept an exposure over 25% of capital with a parental guarantee if:

- (a) the parent bank can at all times take over the exposure itself without exceeding its own 25% limit;
- (b) the overall group exposure to the customer is within 25% of the group's LECB; and
- (c) the FSA is satisfied that adequate control systems are in place to ensure that credit risks taken in the group as a whole are properly monitored and controlled; and

(d) the FSA has given specific consent in writing.

- 16 Such exposures are considered to be to the subsidiary bank's parent, except where there is a capital maintenance agreement; exposures to a parent bank may be exempt from the usual limits if the group is subject to consolidated supervision.
- 17 Such exposures over 25% should be pre-notified by the subsidiary to the FSA even where there is a 'blanket' parental guarantee, and the guarantor should confirm to the FSA that an exposure over 25% is covered by the guarantee at the time of pre-notification.
- 18 Where a parental guarantee is given for exposures subject to soft limits in a UK bank subsidiary, any additional capital which is considered necessary may be held in the parent bank, wherever it is incorporated. The size of the additional capital should be determined by the size of the exposure (together with any other exposures the parent has to the same counterparty) in relation to the parent's LECB.
- 19 A UK subsidiary of an overseas bank should discuss parental guaranteed exposures with its parent bank's home supervisors to ensure that, as supervisors of that consolidated banking group, they are aware of, and content with, what is proposed. The FSA requests written assurance from the home supervisors to this effect.
- a) Overseas bank subsidiaries of UK-incorporated banks are expected to conform to the regulatory requirements of the country in which they are located.

9.2.7 *Exposures to overseas countries and economic sectors*

- 20 Exposures to overseas countries and economic sectors which exceed 25% of capital are not covered by the pre-notification requirements. However, where a proposed transaction will result in an exposure which represents a significant departure from the bank's large exposures policy statement, the FSA expects the proposed transaction to be notified in advance and discussed with it.
- 21 The FSA will continue to obtain information on country, sectoral and regional exposures from banks' internal monitoring systems and discuss them with banks' management in the context of their large exposures policies.

9.3 Incremental capital for exposures subject to soft limits

22 An exposure within agreed soft limits need not be further pre-notified to the FSA. However, if such an exposure exceeds 25% of amended LECB, the bank should have incremental capital to cover the exposures.

a) The exposure should be included in the post-notification reporting to the FSA

See ch TL s2

b) Details of the incremental capital policy are set out elsewhere.

10 THE NOTIFICATION POLICY

10.1 General

- See s3.3 and s8.2
- 1 A bank should limit the total of its exposures, other than its exempt exposures, to individual counterparties or groups of closely related counterparties equalling or exceeding 10% of its LECB to a maximum of 800% of its LECB. This applies whether the exposures arise in the banking or the trading book.
- See Supervision Manual, ch 16
- 2 A bank must report all exposures equalling or exceeding 10% of capital on a quarterly basis. The LECB should be adopted for determining which exposures need to be reported. The more an exposure exceeds 10%, the more rigorous the FSA is in requiring a bank's management to justify that exposure. A bank should adopt policies which will not lead to 10% being exceeded as a matter of course.
- a) The FSA recognises that it may be difficult to obtain information on large exposures from some overseas branches or overseas companies within a group and that in certain cases there may be legal obstacles to branches and companies providing the information. The FSA wishes to discuss such difficulties with individual banking groups.
- b) Exposures to be reported should include exempt exposures.
- See Supervision Manual, ch 16
- c) The quarterly LE2 return (or LE3 as appropriate) must be used for reporting large exposures of 10% or more of capital (see SUP 16.7.8R).
- 3 A bank should inform the FSA of the senior director it has nominated to sign the LE2.
- a) The senior director nominated will have personal responsibility for the accuracy of the information the form contains.
- See ch GN s3
- 4 A bank must pre-notify the FSA (under rule 3.3.21) of any proposed exposure exceeding 25% of capital before becoming committed. The LECB should be adopted for determining which exposures need to be reported. The FSA normally expects to be advised of a bank's plans at least 48 hours in advance to allow time for a discussion of the issues involved; longer notice should be given if a bank believes a case is likely to raise complex or difficult issues.
- 5 A bank should notify the FSA immediately of any breach of the 25% limit and of other counterparty limits agreed with the FSA for large exposures purposes.

6 A bank should follow this policy on both a solo (or solo consolidated) and a consolidated basis, as appropriate.

10.2 Post-notification of exposures

7 Although 10% of capital is the normal trigger level for reporting purposes, the FSA may set reporting thresholds below 10% if it appears to the FSA necessary for effective supervision.

8 The FSA may agree a modified reporting process for those banks with an extensive branch network or group structure that renders the collation of information for large exposures reporting at all times impractical.

- a) Before agreeing this, the FSA needs to be satisfied that the bank's control systems enable it to control the overall size of these exposures and prevent the actual exposure exceeding the bank's adopted limit for each counterparty.
- b) In addition, the bank should notify the FSA in advance of its internal limits where they exceed 10% of capital.

9 Where the FSA agrees that modified reporting is appropriate, the bank need not report the maximum exposure to a counterparty during a reporting period. However, it should report the actual exposures at the reporting date and the sum of internal limits applying to the particular counterparty plus any excesses where those limits were exceeded during the period.

- a) The latter applies even if the individual exposures occurred on different dates within the period.

10.3 Pre-notification of exposures

See s9

10 The limited circumstances in which banks may exceed the 25% limit have been set out above.

11 The FSA accepts agreed lists of internal counterparty limits as pre-notification. Any subsequent lending within these limits does not need to be further pre-notified to the FSA.

12 Exposures over 25% of LECB to the aggregate of all counterparties in a particular overseas country and to an economic sector are not separately subject to the pre-notification requirement; however, if the exposures are contrary to the bank's large exposures policy statement agreed with the FSA, the FSA normally expects to be pre-notified at least 48 hours in advance in order to discuss the matter.

10.4 Access to information

13 The FSA recognises that it may be difficult to obtain information on large exposures from some overseas branches or overseas companies within a group and that in certain cases there may be legal obstacles to branches and companies providing the information. The FSA will wish to discuss such difficulties with individual banking groups.

10.5 Breaches

14 Unless due to exempt exposures or to risk in the trading book other than counterparty risk, a bank should notify the FSA immediately of any breach of the 25% limit, the 800% limit or of any other counterparty limits agreed with the FSA for large exposures purposes.

- a) The FSA would regard as accidental a breach caused by circumstances outside a bank's control, such as two counterparties merging or exceptional foreign exchange or other market volatility. In such circumstances, the FSA would have to satisfy itself that the bank's systems and controls were strengthened to prevent a recurrence.

15 When a breach occurs, a bank should agree a timetable with the FSA to bring the exposure quickly back below 25% or any other agreed limit.

16 The bank should maintain additional capital cover while the breach remains. Such additional capital cover should be significantly higher than that for an exposure of 25% or less.

- a) This applies whether or not the FSA agrees that the exposure has been incurred in the most exceptional circumstances.

11 TRANSITIONAL ARRANGEMENTS

The FSA has not used the transitional provisions provided by the LED (now replaced by The Banking Consolidated Directive) to their fullest extent because the regime which the directive implemented for monitoring and reporting large exposures was not a major change for most banks.

Because the LED (now replaced by The Banking Consolidated Directive) introduced some new reporting requirements, the FSA has been willing to discuss transitional arrangements individually with the banks affected. Transitional arrangements remain in one area.

11.1 Reducing counterparty exposures exceeding LED limits

11.1.1 *The transitional period*

- 1 The transitional period expires on 31 December 2001. By this date, all exposures entered into before and outstanding on 5 February 1993 (the date the LED was published) should be brought within the limits of The Banking Consolidation Directive (formerly the LED).
- 2 The only exception to the above is for an exposure which a bank is legally obliged to maintain beyond the date, e.g. term loans maturing after 31 December 2001.
 - a) The Banking Consolidation Directive (formerly the LED) grandfathers such exposures.

11.1.2 *Increases in exposure during the transitional period*

- 3 Increases in an exposure exceeding the LED (now replaced by The Banking Consolidated Directive) limits are allowed provided they do not take the exposure above its level as at 5 February 1993.

12 APPENDICES

12.1 Highly Liquid Equity Indices

See ch II

Individual equities included in the following indices are automatically considered to be liquid:

Australia	All Ords	Japan	Nikkei225
Austria	ATX	Netherlands	EOE25
Belgium	BEL20	Spain	IBEX35
Canada	TSE35	Sweden	OMX
France	CAC40	Switzerland	SMI
Germany	DAX	UK	FTSE 100
Hong Kong	Hang Seng	UK	FTSE mid-250
Italy	MIB-30	USA	S&P 500

12.2 Zone A and Zone B countries

The term 'Zone A' covers full members of the OECD and those countries which have concluded special lending arrangements with the IMF associated with the IMF's General Arrangements to Borrow, provided they have not rescheduled their external sovereign debt to official or commercial bank creditors in the previous five years.

This group of countries is extended automatically to include any new countries which join the OECD, provided they meet the rescheduling criterion, from their date of admission. Zone A countries now comprise:

Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany (including any pre-reunification claims on East Germany), Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland (with effect from 21.4.1999), Portugal, Saudi Arabia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom and USA.

The Channel Islands, Gibraltar, Bermuda and the Isle of Man should also be regarded as being within Zone A. A bank should discuss with the FSA the appropriate treatment of particular dependencies of Zone A countries.

'Zone B' countries comprise all countries not in Zone A.

13 APPENDIX 2: DEALING WITH UNDISCLOSED PRINCIPALS THROUGH FUND MANAGERS

This section sets out the FSA's policy for a bank dealing through fund managers without knowing the identity of the underlying counterparty.

13.1 Introduction

1 While the FSA does not encourage the practice of dealing on an undisclosed basis, it would be inappropriate to ban it; however, any UK bank wishing to deal on an undisclosed basis should satisfy the FSA that the Large Exposures Directive (now replaced by The Banking Consolidation Directive) can be complied with as well as all other supervisory requirements.

2 **A bank which transacts business on an undisclosed basis should demonstrate that it has the additional systems and controls to reflect the greater risks involved when dealing on this basis.**

13.2 The policy

As a minimum a bank's systems and controls should include the items set out below.

13.2.1 *Regulated fund managers*

3 A bank may deal on an undisclosed basis with UK regulated fund managers or fund managers which are regulated under a CAD equivalent regime; any transactions with unregulated fund managers should be conducted on a fully disclosed basis.

4 A bank should give its banking supervisor a list of the fund managers that are already engaged, or will be engaged, in acting as an agent on an undisclosed basis.

13.2.2 *Adequate documentation*

5 Documentation should be drawn up with reference to the Financial Law Panel framework, Fund Management and Market Transactions - A Practice Recommendation. Documentation should cover at least the following areas:

- (a) clear stipulation of the capacity (i.e. whether the fund manager is acting on its own behalf or on behalf of a client) and circumstances (i.e. where the fund manager is acting on behalf of a client, whether it is on a disclosed or undisclosed basis) of the parties concerned;

- (b) vires (the fund manager should 'accept responsibility' or 'warrant its reasonable belief'); this should cover:
 - whether the client has the legal capacity to enter into the transaction(s);
 - if it has, whether it has the legal capacity to authorise the fund manager to act as its agent;
 - if it has, whether the fund manager has in fact been authorised to act.
- (c) settlement arrangements;
- (d) money laundering obligations;
- (e) default clause - this should require full and prompt disclosure by the fund manager on default of the client;
- (f) legal/operational risk - this should cover, for example, different legal jurisdictions;
- (g) sufficient funds - the fund manager should be in possession of sufficient client assets;
- (h) types of products;
- (i) treatment of unallocated trades - where unallocated trades are not allowed, this should be clearly stated;
- (j) agreed approach to credit lines, unacceptable names, monitoring etc; and
- (k) an obligation on the fund manager to inform the bank immediately if any of the above circumstances change; and the right for the bank to close out any trades immediately in the event of default or material adverse change.

13.2.3 *Oversight at board level*

- 6 The Board of Directors of a bank should be fully informed of the nature of the business proposed and appreciate the resulting additional risks that arise.
- 7 A bank should:
 - (a) agree a policy statement to be formally adopted by its board; and
 - (b) review the activity on a regular basis (at least quarterly).

13.2.4 *Credit monitoring processes*

8 In addition to its usual credit monitoring procedures, a bank should pay particular attention to the following issues:

- (a) with respect to a fund manager:
 - status and size of funds under management - size, strength of ownership, parental backing, place of incorporation, regulation, track record;
 - quality and nature of customer base;
 - the fund manager's due diligence process; and
 - controls over funds under management;
- (b) control procedures within the bank:
 - whether transactions are on an undisclosed basis;
 - process for setting and monitoring credit limits - individual counterparties/groups of related counterparties, country breakdown, sectoral breakdown; and
 - implications for existing relationships with counterparties (including related companies).

13.2.5 *Arrangements to comply with the large exposures policy*

9 A bank should receive sufficient information from a fund manager to ensure that it is in daily compliance with the large exposure policy. In particular, it should focus on:

- (a) accurate measurement of credit exposures;
 - a) The FSA's aim here is to ensure that banks are complying with The Banking Consolidation Directive (formerly the Large Exposures Directive) and are following the FSA's policy on large exposures.
 - i) If a bank undertaking undisclosed principal business can demonstrate that it can comply with the FSA's large exposures policy (including reporting policy) without knowing the identity of the counterparty, this may be acceptable.
- (b) single counterparty and clustering limits are met on a day-to-day basis;
- (c) procedures to ensure any related/connected exposures are identified and aggregated appropriately;

- See ch GN s3
- (d) the requirement to pre-notify exposures over 25% of capital (see rule3.3.21); and
- See Supervision Manual ch 16
- (e) the requirement to post-notify large exposures equal to or greater than 10% of capital to include both end-period and maximum within the reporting period.
- 10 Although exempt exposures do not need to be included in calculating whether the aggregate of a bank's exposures to a particular counterparty is within its 25% large exposures limit, they may nevertheless need to be reported to the FSA.
- See s4.3
- a) However, a bank doing business which is specifically excluded from the calculation of a counterparty exposure, as set out above, need not include such exposures in their large exposures returns sent to the FSA, or take them in to account when calculating the amount of its large exposures.

13.2.6 *Arrangements to comply with supervisory capital requirements*

- 11 Maximum risk weights should be applied unless a bank's monitoring process is such that positions attracting a lower risk weight can be identified.
- 12 The FSA accepts that the risks involved in entering into securities transactions on an undisclosed basis are significantly reduced where the transactions are settled via delivery versus payment systems within standard market settlement periods. The FSA will take this into account when considering whether a bank has the necessary systems in place to meet the criteria set out above.

CREDIT DERIVATIVES

1 INTRODUCTION

1.1 Legal Sources

1 The FSA's supervisory approach has been developed through consultation with market practitioners and other regulators internationally, and policy will be reviewed as the market continues to develop. There are no internationally agreed regulations explicitly covering credit derivatives under the Basel Accord and EU directives though the treatment of credit derivatives is relevant to the assessment of capital adequacy, and large exposures. The FSA aims to achieve consistency where possible with the capital and large exposures treatment of other similar instruments. The sources identified in the Legal Sources sections of the Capital Overview and Large Exposures chapters are relevant to this chapter.

2 The policy is set out in a separate chapter because it results from the application of a few general principles. Where these principles feed into the mechanism for calculating capital and large exposures, there are cross references to the relevant chapter of the IPRU (BANK).

1.2 Application

3 These obligations apply to all UK banks which use credit derivatives as either protection buyer or protection seller.

See s2.1

a) Protection buyer and credit risk seller are used interchangeably, as are protection seller/credit risk buyer. These terms are defined below.

4 The policy set out in this chapter does not apply to overseas and EEA banks.

1.3 How this chapter is organised

5 Section 2 outlines basic types of credit derivative and the rationale for their use by banks.

Section 3 highlights risk management issues raised by credit derivatives.

Section 4 covers the trading book/banking book division and valuation.

Sections 5 and 6 cover factors determining the capital treatment of credit derivatives in the banking book for the protection buyer and protection seller, respectively. This section does not cover credit spread options.

Section 7 covers the capital treatment of credit derivatives in the trading book, excluding credit spread options.

Section 8 covers the capital treatment of credit spread options.

Section 9 covers risk transfer requirements.

Section 10 covers factors determining exposures recorded for large exposures purposes.

2 DEFINITIONS, RATIONALE AND TYPES OF PRODUCT

2.1 Definitions and rationale

1 *Credit derivatives* is a general term used to describe various swap and option contracts designed to transfer credit risk on loans or other assets from one party, the *protection buyer*, to another party, the *protection seller*. The protection seller receives premium or interest-related payments in return for contracting to make payments to the protection buyer, which are linked to the credit standing of a *reference asset* or assets. The term credit derivative may also be used to describe cash instruments where repayment of principal is linked to the credit standing of a reference asset.

- a) *Protection buyer* and *credit risk seller* are used interchangeably in this chapter, as are *protection seller* and *credit risk buyer*.
- b) A *reference asset* is an asset to which payments under the credit derivative contract or instrument are linked; it is usually a security, but could also be a loan or another form of obligation (such as a counterparty exposure under an off balance sheet transaction).

2 Transfer of credit risk may be for the whole life of the reference asset or for a shorter period, and it may be for the full amount of the asset or part of it. A credit derivative may be referenced to a single asset or to a basket of obligations of a single *borrower* or several borrowers.

- a) *Borrower* and *obligor* are used interchangeably to describe the entity generating the reference asset.

3 Banks may use credit derivatives for a number of reasons. These include:

- reducing capital required to support assets on the balance sheet;
 - reducing *credit risk concentrations*;
 - freeing up credit lines;
 - creating *new assets and synthetic assets* to meet wider investor demand; and
 - managing assets on a portfolio basis.
- a) Credit derivatives may be used to reduce *credit risk concentrations* without damaging an existing relationship with the borrower, since there is no transfer of title of the asset.

- b) *New assets and synthetic assets* may widen investment opportunities by, for example, filling gaps in the maturity and credit quality spectrum and providing investment opportunities which some investors would otherwise be unable to access.

2.2 Types of credit derivative

2.2.1 General

4 There are four common types of credit derivative:

- credit default products;
- total return swaps;
- credit linked notes;
- credit spread options.

5 The following examples illustrate how A can assume credit risk on a bond issued by X using various types of credit derivative. B, the counterparty in these transactions, is assumed to own bond X, and is hedging (or laying off) the risk on it. B might, alternatively, have no existing exposure to bond X, in which case it would be taking an unhedged short position in bond X; or B might have an asset similar to bond X, in which case it would be partially hedging that *underlying asset*, but could be exposed to basis risk between the *underlying asset* and bond X (the *reference asset*).

- a) *An underlying asset* is the asset that a protection buyer is seeking to hedge, which is not necessarily identical to the reference asset of the credit derivative used.

See s2.1

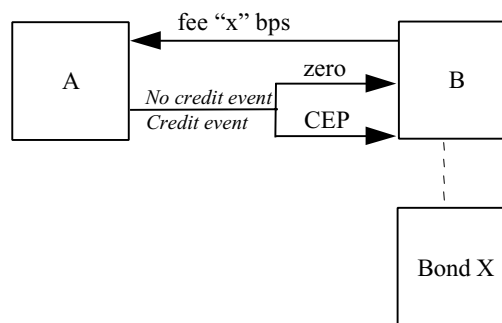
- b) *Reference asset* is defined in section 2.1 above.

6 These examples assume that risk is transferred directly from the risk seller to the risk buyer. In practice, there is often an intermediate transfer to an *SPV*, which then issues notes to risk buyers.

- a) *SPV* - special purpose vehicle.
- b) Where the risk transfer is made through an unfunded credit derivative (credit default product or a total return swap), the vehicle often invests the funds received from the note issue in a *collateral security* in order to achieve a return on the cash; this return can be paid to investors in addition to the risk seller's payment for the protection.
- i) *Collateral securities* are usually government or other bonds.

2.2.2 Credit default product

7 A sells credit protection to B for five years on \$50 million nominal of bond X. B pays A a fee of x basis points. Under the terms of the contract, if a defined *credit event* occurs on bond X, A will pay B the *credit event payment* 90 days after the event. If no credit event occurs, the contract will expire after 5 years without any payment from A to B.

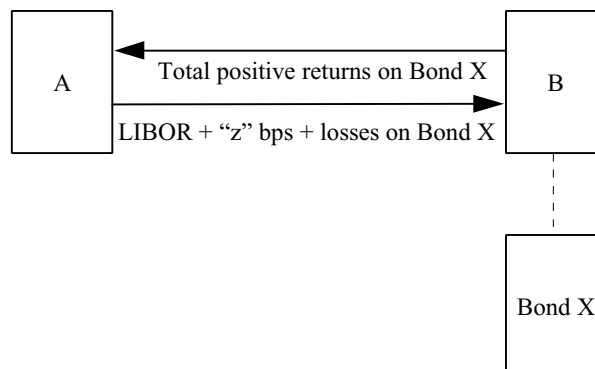


- a) Credit default products (CDPs) are structured so that a payout occurs only when a contractually defined *credit event* (or one of several events) occurs. Credit events normally include bankruptcy, and any payment default on the reference asset and reschedulings, but may also include lesser events such as ratings downgrades. In some contracts a pre-determined materiality (or loss) threshold must also be exceeded for the payment to be triggered.
- b) The *credit event payment* (CEP) is the amount that is paid following a credit event. This is defined in the contract, and is normally one of three types:
 - payment of par value in exchange for physical delivery of the reference asset; some contracts may allow delivery of a variety of assets of the reference name;
 - payment of a fixed amount (sometimes known as a *binary payout*);
 - or
 - payment of par less recovery value. (The reference asset will normally retain some value after a credit event has triggered settlement of the contract. The recovery value is normally determined at a date up to three months after the credit event, by means of a dealer poll or auction.)
- c) Although CDPs may have some of the characteristics of an option, they are often documented as a swap and are treated as a swap by the FSA for capital purposes.

- 8 In the above example, A has assumed the default risk on bond X from B without funding the position. B has hedged its default risk on bond X, but has acquired a credit exposure to A, since B depends on A to make the credit event payment.

2.2.3 *Total return swap*

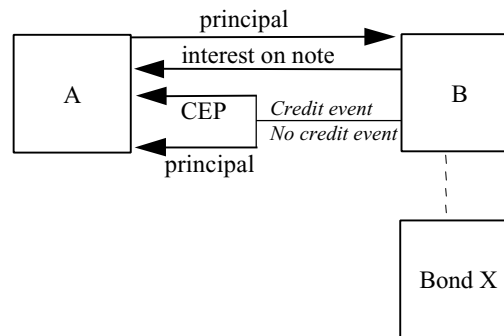
- 9 A and B enter into a total return swap (TRS) for five years referenced to a notional amount of \$50 million nominal of bond X. B makes periodic payments to A of all cashflows arising from bond X plus any increase in the market value of bond X since the last payment date. On the same dates, A makes payments to B of an interest rate related flow (e.g. LIBOR + z basis points) plus any decrease in the market value of bond X. (Payments may be exchanged on a net basis). If there is a defined credit event, the TRS will usually terminate and the credit event payment will be calculated as though the next normal payment date had been brought forward.



- 10 B has transferred to A the total performance of bond X (including market risk and default risk) for the duration of the contract, or until there is a credit event. A has assumed this risk without having to fund its position. A and B have acquired credit exposure to each other, since each depends on the other to make payments due under the swap.

2.2.4 *Credit linked note*

- 11 B issues \$50 million nominal of a five-year note referenced to bond X, and the note pays a fixed or floating rate interest. If no credit event occurs on bond X, the note will mature at par in five years. If a defined credit event occurs on bond X, the note will be redeemed for the credit event payment, 90 days after the credit event.



- 12 A has assumed the credit risk on bond X, and has to fund the position (in contrast to the credit default swap illustrated above). It has also acquired exposure to B of the full amount of the funding it has provided. B has hedged its risk on bond X without acquiring any credit exposure to A, as it has received full cash funding from A.

2.2.5 *Credit spread product*

- 13 Credit spread products are diverse. A typical example might be as follows: A sells to B a put option on \$50 million nominal of an asset swap on bond X, exercisable at any time in the next year, in exchange for a payment of premium. The option gives B the right to put the asset swap on bond X to A at a strike spread over a pre-determined benchmark rate.

- a) A credit spread option may include further features, for example, relating to a ratings downgrade of bond X.

- 14 A and B have acquired exposure to changes in the credit spread of bond X relative to the benchmark rate which are characteristic of a barrier option. B has also acquired credit exposure to A, since B depends on A to pay amounts due on exercise of the option.

3 RISK MANAGEMENT ISSUES

3.1 Introduction

1 Credit derivatives raise many of the same risk management issues as other new products, credit products, and derivatives. This section highlights areas that are of particular relevance to credit derivatives. Additional conditions to be met before risk transfer is recognised for capital adequacy purposes are set out in section 9.

3.2 Systems

2 Banks using credit derivatives should have adequate systems in place to manage the associated risks.

3 These are likely include:

- adequate management information systems to make senior management aware of the risks being undertaken. This might include information on the level of activity in each of the different products; the ability of the bank (if it is the risk buying organisation) to pursue the underlying borrower when a credit event payment has been triggered; and contractual characteristics of the products (such as fall-back provisions should a dealer poll fail to determine a recovery value following a credit event, and tailoring of standard documentation for particular transactions).
- procedures for ensuring that the credit risk of a reference asset acquired through a credit derivative transaction and any counterparty credit risk arising from an unfunded OTC credit derivative is captured within the bank's normal credit approval and monitoring regime. Banks should be able assess the initial credit risk involved in undertaking the transaction and also to monitor the credit risk on an on-going basis. Information asymmetry (between the buyer and seller of credit risk) may be a significant issue if there is no widely-traded asset of the reference obligor.
- systems to assess and take account of the possibility of default correlation between the reference asset and the protection provider.
- valuation procedures (including assessment and monitoring of the liquidity of the credit derivative and the reference asset) and procedures to determine an appropriate liquidity reserve

to be held against uncertainty in valuation. This is particularly important for credit derivatives where the reference asset is illiquid (e.g., a loan), or if the derivative has multiple reference obligors.

3.3 Other operational risks

- 4 The FSA takes into account significant operational risks when setting a bank's minimum (or "individual") capital ratio, and may in exceptional cases set an explicit capital requirement against such risk.
- 5 Banks should consider how to limit and monitor any legal and reputational risk associated with credit derivatives.
 - a) Banks should consider, amongst other things, whether credit derivatives require regulation as insurance business in any of the relevant jurisdictions.
 - b) Banks should consider whether conflicts of interest might arise within the institution in respect of privileged information if there is no widely traded asset of the reference obligor.
 - c) Banks should ensure that transfer of credit risk through a credit derivative does not contravene any terms and conditions relating to the reference asset, and where necessary all consents have been obtained
 - d) Where credit risk to many obligors has been transferred as a package, the bank should consider whether the reputation of the bank might be damaged by subsequent deterioration in the quality of these assets

3.4 Liquidity

- 6 Where a bank has transferred significant credit risk using funded credit derivatives it should be able to demonstrate capability to refinance the exposures that have been transferred.
 - a) For example, where the bank has bought protection of shorter maturity than the assets being protected, it should consider how it would obtain funding if a replacement contract were not to be found on maturity of the protection.
- 7 Where a bank has hedged significant credit risk using unfunded credit derivatives of shorter maturity than the underlying exposures, it should consider whether it would have sufficient capital to support the risk in the event of a replacement contract being unavailable immediately on maturity of the credit risk

protection, or how such “rollover” risk could otherwise be avoided or limited.

3.5 Remaining asset base

See ch SE

8

As with securitisation, the extensive use of credit derivatives to facilitate risk transfer may lead to a change in the profile of the assets remaining on a bank’s supervisory balance sheet, in terms of both quality and spread. The FSA will consider these implications in assessing the bank’s overall capital requirements.

4 TRADING BOOK/BANKING BOOK DIVISION

4.1 Introduction

4.1.1 *General principles*

1 Credit derivatives should meet the standard criteria applied to other financial instruments in order to be eligible to be held in a bank's trading book. The standard criteria include ability of the bank to mark to market positions daily on a prudent and consistent basis, and demonstration of trading intent. As with other financial instruments, inclusion of credit derivatives should be within each bank's trading book policy statement agreed with the FSA.

See s5, 6, 7 and 8

2 Credit derivatives not included in the trading book should be included in the banking book. Capital treatment of credit derivatives in the banking book is covered in sections 5, 6 and 8 and in the trading book in sections 7 and 8.

See ch CB

a) The criteria for the trading book are set out in the chapter on the trading book/banking book division.

See s9

b) The activity of issuing credit linked notes with trading intent is eligible to be included in the trading book subject to the risk transfer requirements set out in section 9.

c) Credit derivatives referenced to relatively illiquid reference assets (such as loans) are eligible to be included in the trading book, but an appropriate reserve against uncertainty in valuation should be agreed for illiquid credit risky positions in the trading book policy statement.

4.1.2 *Marking to market*

3 Where credit derivatives referenced to relatively illiquid assets are included in the trading book, the FSA may require significant extra capital to be held against uncertainty in valuation.

4.1.3 *Trading intent*

4 In assessing whether a bank has demonstrated trading intent in relation to credit derivatives business; the FSA may take into account the market structure available to support the business.

a) Factors taken into consideration could include how the positions are managed, the use of standard documentation and market conventions, the number of market makers in the product and in instruments hedging it, and the availability of screen prices.

5 BANKING BOOK - PROTECTION BUYER

5.1 Introduction

1 This section sets out the factors that determine the banking book capital treatment for a protection buyer. Capital needed will depend on the particular structure of the contract/instrument.

See s9 2 The following section assumes that the risk transfer conditions set out in section 9 of this chapter have been met.

See s8 3 This section does not apply to credit spread options. The capital treatment for credit spread options is set out in section 8.

5.2 Funded or unfunded

4 Where an asset is protected in full or in part by a *funded credit derivative*, the FSA recognises the transfer of credit risk by reducing the risk weighted exposure to the reference/underlying asset. The extent to which the risk weighted exposure can be reduced depends on the amount of the funding received and the other factors set out below.

- a) A *funded credit derivative* usually refers to a credit linked note. However, both total return swaps and credit default products may also be structured so that exposure to the reference/underlying is funded at inception.
- b) This treatment is parallel to that of a loan sub-participation.

See ch BC s3 5 Where an asset is protected in full or in part by an *unfunded credit derivative*, banks may choose to replace the risk weighting of the protected asset with the risk weighting of the counterparty to the credit derivative contract. The extent to which the risk weightings can be replaced depends on the amount of protection received under the contract and the other factors set out below.

- a) An *unfunded credit derivative* usually refers to a total return swap or a credit default product.
- b) This treatment is parallel to that of a guarantee.
- c) If the risk weighting of the counterparty selling protection is higher than that of the protected asset, the risk weighting does not have to be increased.

- 6 *Materiality thresholds* may affect the amount of protection that is recognised. All credit derivatives involving materiality thresholds should be referred to the FSA.
- a) A *materiality threshold* may either determine the level of loss that must be reached before a credit event is triggered, or may reduce the amount of the payout.

5.3 **Payout structure**

- 7 Where the credit event payment is a fixed amount (or binary payout), exposure to the underlying is recognised as guaranteed/reduced by the amount that the bank will receive/retain if the credit event occurs.
- 8 Where the credit event payment is defined as par less a recovery amount or there is payment of par in exchange for physical delivery of the reference asset, exposure to the underlying asset can be recognised as guaranteed/reduced to zero for the amount protected under the contract.

5.4 **Asset mismatch**

- 9 Where the reference asset and the underlying are the same, protection will be recognised subject to the other factors listed in this section.
- 10 Where the reference asset and the underlying asset being hedged are different, protection can still be recognised if the following criteria are met:
- reference and underlying asset are of the same obligor; and
 - reference asset ranks pari passu with, or is more junior in a liquidation than the asset being hedged; and
 - there are cross default clauses between the reference asset and the underlying asset.
- a) The FSA may be prepared to accept asset mismatches where there are not cross default clauses if the bank can demonstrate, to the FSA's satisfaction that there are other structural features which eliminate the basis risk between the reference asset and the underlying asset.

5.5 Currency mismatch

- 11 Where the credit derivative is denominated in a different currency from the reference/underlying asset, the amount of credit protection recognised is reduced by 8% to take account of the contingent foreign currency risk.
- a) For example, a bank has a £1million asset which is protected by a \$ denominated, recovery based, single asset, maturity matched credit derivative, of, say, \$1.5million. If the exchange rate at the outset is \$1.5: £1, the amount of protection recognised would be £920k. If the amount of protection purchased were \$1.62million, the asset would be recognised as fully protected.
 - b) The FSA may consider disapplying the 8% reduction in protection where a bank can demonstrate to the FSA's satisfaction that it has hedged the contingent foreign currency risk.
- 12 Foreign currency positions created by credit derivatives should also be recorded when measuring the bank's foreign exchange exposure. Funded credit derivatives should be treated like all other cash positions. Unfunded credit derivatives should be treated like guarantees.
- See ch FX
- a) Further guidance on the calculation of a bank's foreign exchange exposure is contained in the chapter on foreign exchange risk.

5.6 Maturity of the credit derivative compared with the reference/underlying asset

- 13 Where the maturity of the credit derivative matches that of the underlying asset, the exposure is recognised as guaranteed/reduced and no additional capital is considered to be needed.
- 14 Where the maturity of the credit derivative is less than that of the underlying asset, recognition of the protection depends on the residual maturity of the credit derivative.
- a) The maturity of credit derivatives with a *step up* and call option is assumed to be the date of the call.
 - b) If the protection seller has the option to terminate the credit derivative, the maturity is deemed to be the date at which the option is first exercisable.

i) A *step up* is an increase in the protection payment.

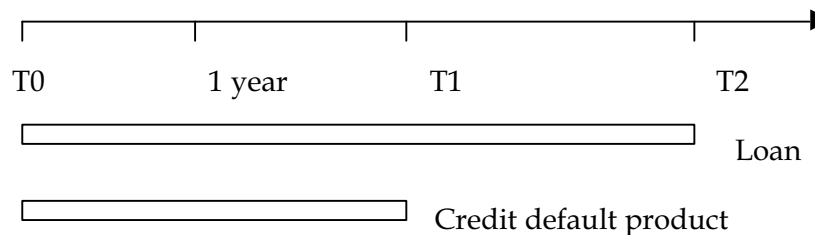
15 If the residual maturity of the credit derivative is less than one year, no protection is recognised.

See ch BC s4

16 If the residual maturity of the credit derivative is one year or over, protection is recognised, but an additional capital charge is made for forward credit exposure to the underlying asset when the credit derivative contract matures. This forward exposure is treated like a commitment with uncertain drawdown, i.e. it attracts a 50% credit conversion factor ('CCF') against the risk weight of the underlying asset.

Example :

time scale:



Suppose that the underlying asset is a loan to a corporate of a tenor equal to T2, risk weighted at 100%, and credit risk protection is bought from a Zone A bank in the form of a credit default product maturing at T1:

At T0, the risk weight on the loan is reduced to 20% (guaranteed portion of the exposure) with an additional capital charge for the forward exposure of 50% (CCF) x 100%. So the total capital charge is 20% + 50%, = 70%.

Once the residual maturity to T1 reaches one year, protection ceases to be recognised and the risk weight of the loan reverts to 100%.

If the underlying position is an undrawn commitment, the capital treatment resulting from the acquisition of maturity mismatched unfunded protection at T0 is: 20% [risk weight for a Zone A bank] x 50% (CCF) + 50% (original risk weight of corporate x CCF) x 50% (CCF). So the total capital charge is 10% + 25%, = 35%.

- 17 If the sum of the capital needed for the underlying asset (after protection has been recognised) plus the forward exposure exceeds the original capital requirement for the underlying asset, the credit derivative can be ignored and the underlying asset weighted as normal.

5.7 Multiple names

See s9

- 18 Where the credit derivative is referenced to more than one obligor (sometimes known as a basket or multiple name product) the nature of the credit protection provided depends on the structure of the contract. Additional conditions would need to be met to ensure transfer of credit risk is not jeopardised by reputational risk, as set out in section 9 of this chapter.
- 19 If the contract terminates and pays out on the first asset to default in the basket, then protection is only recognised against one asset in the basket. Banks may choose which asset in the basket attracts protection.
- 20 If the contract allocates protection proportionately amongst assets in the basket (sometimes known as a *green bottle structure*) protection is recognised in setting capital requirements against all the assets in the basket according to the proportions in the contract.
- 21 If a bank provides credit enhancement to a special purpose vehicle to which it has transferred credit risk through credit derivatives, the credit enhancement is treated as a deduction from capital in accordance with the FSA's policy on securitisation.

See s9

5.8 Open short positions and unrecognised protection

- 22 Where a bank buys protection in the absence of an underlying exposure (i.e., it has an open short position), or where bought protection is not recognised in calculating the capital needed for an underlying exposure, the credit derivative is ignored for capital adequacy purposes.

6 BANKING BOOK - PROTECTION SELLER

6.1 Introduction

1 This section sets out the factors that determine the banking book capital treatment of a protection seller.

See s8

2 This section does not apply to credit spread options. The capital treatment of credit spread options is set out in section 8.

6.2 Funded or unfunded

3 Through a funded credit derivative, a bank acquires exposure to the reference asset (since performance of the credit derivative depends on that of the reference asset), and also to the credit derivative counterparty (since the bank relies on the counterparty to pass on funds during the life of the contract, and on maturity or following a credit event). Where the counterparty is an SPV, a bank may also have exposure to the collateral securities purchased with the money received from the issuance of securities.

4 The amount at risk is limited to the funding provided, however, and this on-balance-sheet exposure is recorded at the higher of the risk weights of the reference obligor and the counterparty holding the funds and, where applicable, the collateral security.

See ch BC

5 Where a bank has sold protection through an unfunded credit derivative, it acquires exposure to the reference asset only. This *exposure* is recorded as a direct credit substitute weighted according to the risk weight of the reference asset.

a) The *exposure* will be the maximum payout under the contract.

6.3 Multiple names

See s6.2

6 Credit derivatives referenced to single names are treated as set out above.

7 Where credit derivatives are referenced to more than one obligor (a basket or multiple name product), the nature of the credit risk acquired depends on the structure of the contract.

8 If the contract terminates and pays out on the first asset to default in the basket, the bank should hold capital against all the names in the basket. Where it pays out upon the second asset to default, the bank should hold capital against all the names in the basket except one. The bank can choose which one to exclude.

- a) The FSA may consider that this is not needed where a bank can demonstrate, to the FSA's satisfaction, a very strong correlation between the assets in the basket.

9 This means that risk weightings are applied to the maximum payout under the contract for all (or all but one, in the case of second to default) of the names in the basket, capped at an equivalent of a deduction from capital. However, in the case of a first or second to default credit linked note which is rated such as to meet the conditions for recognition as a qualifying debt item, the bank may choose to hold capital against one name in the basket. However, the bank should choose the one with the highest risk weight.

- a) Chapter TI defines qualifying debt item.

10 A structure which is referenced to the assets in the basket proportionately should be risk weighted according to the assets in the basket in the proportions set out in the contract.

6.4 Payout structure

11 Where the amount of the protection is fixed in the contract, the risk weighted exposure to the reference asset(s) is the amount of the payout.

12 Where the credit amount payment is based on par less recovery value or where there is physical delivery in exchange for par value, the risk weighted exposure to the reference asset(s) is the maximum payout under the contract.

7 TRADING BOOK TREATMENT

7.1 Introduction

1 This section sets out the capital treatment considered to be applicable to credit derivatives in the trading book.

See s8 2 This section does not apply to credit spread options. The capital treatment for credit spread options is set out in section 8.

7.2 Models

See chs TS and TV 3 Banks may apply to the FSA to include credit derivatives in recognised models under CAD1 and also VaR models. Banks may apply for recognition of VaR models which quantify partial offsets of specific risk positions where there is a maturity or asset mismatch.

See chs TS and ch TV 4 For details of the benchmarking approach to such models see elsewhere.

See s7.3 5 Banks which do not have recognised models covering credit derivatives should follow the standard approach set out below.

7.3 Standard approach

7.3.1 Introduction

See ch TI 6 This section describes the positions to be recorded for credit derivatives for the purposes of calculating specific risk and general market risk charges under the standard approach. The calculation of specific and general market risk charges is described in the chapter on interest rate position risk.

7.3.2 General principles

7 Total return swaps are represented as two legs: one is a notional position in the reference asset with general and specific risk of the reference asset; the other, representing interest payments under the swap, is a notional position in a Zone A government bond with the appropriate fixed or floating rate.

8 Credit default products are represented as a notional position in the specific risk of the reference asset only (i.e., no general risk position is created in the reference asset). If premium or interest payments are due under the swap, these cashflows are represented as a notional position in a Zone A government bond with the appropriate fixed or floating rate.

9 Credit linked notes are treated as a position in the note itself, with an embedded credit default product. The credit linked note has specific risk of the issuer and general market risk according to the coupon or interest rate of the note. The embedded credit default product creates a notional position in the specific risk of the reference asset (with no additional general market risk position created).

7.3.3 *Specific risk - single reference asset*

See s5.2 10 As noted above, total return swaps, credit default products and credit-linked notes create a specific risk position in the reference asset; the credit risk seller has a short position and the credit risk buyer has a long position.

See ch II 46G a) For the specific risk position to be treated as a qualifying debt item, the reference asset should meet the standard conditions for a qualifying debt item as defined in the chapter on interest rate position risk.

11 The buyer of a funded credit derivative should also record a long position in the specific risk of the note issuer.

7.3.4 *Specific risk - multiple reference assets*

12 Where a total return swap is referenced to multiple names, and the returns on assets are exchanged according to their proportions in the basket, the bank should record long or short positions in all the reference assets according to the proportions underlying the swap.

See s5.2 13 Where credit default products and credit linked notes are referenced to multiple names the positions recorded depend on the structure of the contract.

14 The credit risk seller of a first to default product or note should record a short position in one reference asset in the basket only. Banks may choose which asset in the basket to record as a short position.

15 The credit risk buyer in a first to default product or note should record long positions in each of the assets in the basket, with the total capital charge for the product capped at the equivalent of deduction from capital, with the exception noted below.

- a) The amount of the position recorded will be the value of the note.
- b) The FSA may consider disapplying the additive treatment where a bank can demonstrate, to the FSA's satisfaction, that there is a very strong correlation between the reference assets in the basket.

16 Where the credit default product or credit linked note is a proportionate structure, positions should be recorded in the reference assets according to the proportions in the contract.

17 Where a multiple-name credit-linked note is rated such as to meet the conditions for recognition as a qualifying debt item, the buyer of credit risk may record the specific risk position in the reference assets as a single long specific risk position with specific risk of the note issuer.

See ch TI 46G

a) Qualifying debt items are defined in the chapter on interest rate position risk.

18 The credit risk buyer of a funded credit derivative should also record a long position in the specific risk of the note issuer, whether the credit derivative meets the definition of qualifying or not.

7.3.5 *Specific risk offset*

19 Banks may net notional positions in reference assets created by credit derivatives with positions in underlying assets or other notional positions created by other credit derivatives if the following conditions are met:

(a) the underlying and reference assets are issued by the same obligor;

See ch TI 37G

(b) the underlying and reference asset specific risk positions meet the matching criteria set out in the chapter on interest rate position risk; and

See s9

(c) the conditions set out below are met.

See s7.2

Where the reference asset and the underlying asset do not meet the criteria for netting, no offset is considered to be justified under the standard approach.

20 Materiality thresholds may reduce the amount of the specific risk offset. All credit derivatives involving materiality thresholds should be referred to the FSA.

See s5.2

a) The definition of a materiality threshold is given elsewhere.

7.3.6 *Maturity mismatch*

21 Where a credit default product or credit linked note is of shorter maturity than the reference asset, a specific risk offset is allowed between long and short specific risk positions, but a forward position in specific risk of the reference asset is recorded. The net result is a single specific risk charge for the longer maturity position in the reference asset.

a) The maturity of a credit derivative with a *step up* and call option is assumed to be the date of the call.

i) A *step up* is an increase in the protection payment.

22 This treatment does not apply to total return swaps, where no forward position in specific risk of the reference asset is recorded in cases of maturity mismatch.

7.3.7 *General market risk*

23 Credit default products do not normally create a general market risk position.

24 Total return swaps create a long or short position in the reference asset and a short or long position in the notional bond representing the interest rate related leg of the contract.

25 Credit linked notes create a long position in the note itself for the credit risk buyer.

7.4 **Counterparty risk**

7.4.1 *General principles*

26 Each party to a total return swap relies on the other for payment, therefore each party records a counterparty risk charge.

See ch DU and
TC

a) The counterparty risk charge is calculated as set out in chapters DU and
TC

27 The credit risk seller in credit default product relies on the credit risk buyer to pay the credit event payment if a credit event occurs, and therefore records a counterparty risk charge. The credit risk buyer is exposed to the credit risk seller only if there are future premiums or interest rate related payments outstanding, and these are recorded as a sundry debtor and risk weighted in the normal way.

See chs DU and
TC

- a) The counterparty risk charge is calculated as set out in the chapters on counterparty risk treatments common to the banking and the trading book and counterparty risk in the trading book.

28 There is no counterparty risk charge for credit linked notes.

7.4.2 *Potential future credit exposure (add-on)*

29 The add-on used when calculating the counterparty exposure for an unfunded OTC credit derivative is determined by whether the reference asset is recognised as a qualifying debt item. If the reference asset is a qualifying debt item, the counterparty risk charge is calculated using interest rate add-ons. Otherwise, equity add-ons should be used.

See ch TI 46G

- a) Qualifying debt items are defined in the chapter on interest rate position risk.

7.5 **Foreign exchange risk**

See ch FX

30 Where the credit derivative is denominated in a currency other than the reporting bank's base currency, it will feed into the bank's monitoring of its foreign exchange position in the normal way.

8 CREDIT SPREAD OPTIONS

8.1 General

1 The capital needed for credit spread options are analogous to those of other options on credit risk assets.

8.2 Banking book

8.2.1 Protection buyer

2 The capital reduction/guarantee treatment set out in section 5 in respect of the underlying asset is not considered to be available to the purchaser of a credit spread option.

- a) The amount of protection provided by a credit spread option depends on its mark to market value. However the assumption underlying the banking book framework is accrual accounting.

See ch DU

3 Protection bought using a credit spread option is ignored for capital purposes.

8.2.2 Protection seller

4 Protection sold using a credit spread option is recorded as a direct credit substitute. The amount of exposure will be the par value of the nominal amount of the reference asset.

8.3 Trading book

5 The option standard method should be used for credit spread options only after prior consultation with the FSA. Banks should normally apply for recognition of option models covering credit spread options.

9 RISK TRANSFER CRITERIA

9.1 Scope

- 1 This section sets out conditions to be met before risk transfer (i.e. protection)/short position is recognised in setting capital requirements for banks which buy protection using credit derivatives in the banking book (see section 6) or selling credit risk in the trading book (see section 7). This section does not apply to credit spread options (see section 8).
- 2 Where these criteria are not met, protection bought should be ignored in the banking book (and the bank should continue to weight the underlying asset as normal) and a short credit risk position recorded in the trading book should not be offset against another specific risk position.
- 3 Sections 9.2 to 9.4 apply to both the banking book and the trading book.
- 4 Section 9.2 applies to all credit derivatives, whether funded or unfunded, single name or multiple names.
- 5 Section 9.3 applies to funded credit derivatives referenced to single names or multiple names.
 - a) For the purposes of section 9, first to default structures referenced to multiple names are considered to be referenced to a *single* name. This is because protection is only recognised against one asset in the basket for capital purposes.
- 6 Section 9.4 applies to packaged credit derivative transactions, which are funded.
 - a) For the purposes of section 9, *packaged* transactions include proportionate credit derivatives referenced to multiple names, and structures which bundle together a series of single name credit derivatives.

9.2 General criteria

- 7 In order for the protection bought/short position to be recognised the following criteria should be met for all credit derivatives:
 - (a) The credit risk transfer should not contravene any terms and conditions relating to the reference asset and where necessary all consents should have been obtained;

- a) This relates mainly to reference assets which are loans.
- (b) At a minimum, the credit events in a credit default product or credit-linked note should cover credit events in the reference asset itself; and
- (c) The credit risk buyer should have no formal recourse to the credit risk seller for losses.

9.3 Criteria for funded single name credit derivatives

8 In order for protection/offsetting short position to be recognised, the following criteria should be met:

- (a) the protection buyer should have no obligation to repay any funding received under the credit derivative except at termination or as a result of a defined credit event (in accordance with the terms of payment defined in the contract); and
 - a) The protection buyer may retain the option to repay funding, provided that the reference asset remains fully performing.
 - b) In proportionate transactions involving baskets of assets, the protection seller may retain the option to refinance where the pool of assets has been reduced by repayment to less than 10% of its maximum value but only where the reference assets are fully performing.
 - c) An exception to this restriction is where the obligation arises from warranties given in respect of the asset at the time of the transaction, provided that these are not in respect of the future creditworthiness of the reference asset.
- (b) the protection buyer should have given notice to the protection seller that it is under no obligation to repay the funding (except as defined in (a) above), nor to support any losses suffered by the protection seller, and that the protection seller acknowledges the absence of that obligation.
 - a) Notice and acknowledgement also applies to the ultimate investors, where the initial protection seller is an SPV.
 - b) This criterion may be met by a highly visible and unequivocal statement that the protection buyer does not stand behind the asset(s) and will not make good any losses suffered in the offering circular (or other analogous documentation).

See ch NE

- 9 For those unfunded transactions where collateral has been taken, the conditions in chapter NE in respect of collateral should also be met for the collateral to reduce/remove the exposure to the reference asset in the banking book or to offset the counterparty exposure in the trading book.

9.4 Criteria for funded packaged transactions

- 10 This section applies to funded credit derivatives referenced to multiple names which have a proportionate payout structure, or where a series of funded single name credit derivatives are packaged together. This section does not apply to unfunded structures or to multiple-name credit derivatives with a first to default structure.
- 11 Packaging of the credit risk of multiple assets for transfer may create operational risks which would be negligible for a single asset. For example, the commercial reputation of a protection buyer could be committed by association with a package of assets, and clean transfer of the risk could be jeopardised by pressure on the protection buyer subsequently to provide support to reduce losses of the credit risk buyer. Such reputational risk is less if the assets concerned are disclosed and they are freely tradable assets.
- 12 The following criteria should be met for protection/offsetting short position to be recognised. Some of these criteria may not need to be met if all the reference obligors are disclosed and all the reference assets are freely tradable assets.
- (a) The bank selling credit risk should be satisfied that the transaction protects it from any liability to the credit risk buyer and ultimate investors, except where the bank has been negligent.
 - a) Banks can achieve this by ensuring that their auditors and legal advisers are satisfied that the terms of the scheme protect them from liability to the credit risk buyer and ultimate investors and that the scheme meets the FSA's policy.
 - (b) The credit risk should initially be transferred to a special purpose vehicle (SPV). The protection buyer should not own any share capital or other form of proprietary interest in or control over the SPV, either directly or indirectly.
 - a) This applies also to any other group entity within the protection buyer's group that is covered by the FSA's consolidated supervision.

- b) Share capital includes for this purpose all classes of ordinary and preference share capital.
 - c) Control, for these purposes means that the Board of the company used as a vehicle should be independent of the credit risk seller, although the credit risk seller may have one director representing it.
- (c) The name of the SPV should not include the name of the protection buyer nor imply any connection with it.
- (d) The protection buyer should not directly reimburse the vehicle for any of the recurring expenses of the scheme. Although the credit risk seller may make a one off contribution at the initiation of the scheme to enhance the credit-worthiness of the vehicle. Any credit enhancement provided will be treated as a deduction from capital.
- a) Any such credit enhancement should be disclosed in the offering circular (or analogous documentation).
- (e) The credit risk seller should not fund the vehicle (other than the initial credit enhancement described above); in particular it should not provide temporary finance to a scheme to cover cash shortfalls.
- a) The credit risk seller may enter into interest rate and currency swaps with the SPV as long as they do not provide support for losses in the vehicle.

For those unfunded transactions where collateral has been taken, the criteria in chapter NE in respect of collateral should also be met for the collateral to reduce/remove the exposure to the reference asset in the banking book or to offset the counterparty exposure in the trading book.

10 LARGE EXPOSURES

10.1 Introduction

See ch LE

1 The factors that should be considered in determining large exposures recorded for credit derivatives are the same as those for determining capital adequacy, with the exception of the factors noted in this section. Large exposures are covered fully in the chapter on large exposures.

- a) The amount of protection recognised will normally be the same for large exposures as for capital adequacy purposes.

2 Sections 10.2 to 10.5 apply to credit default products, credit linked notes and total return swaps. Section 10.6 applies to credit spread options.

10.2 Banking book and trading book – protection buyer

10.2.1 *Maturity mismatch*

3 For capital adequacy purposes forward credit exposure left by a maturity mismatched credit derivative is treated as an undrawn commitment. Undrawn commitments are treated as an exposure for large exposures purposes, and hence maturity mismatched credit derivatives do not reduce exposure to the underlying.

10.2.2 *Currency*

4 Where the base currency of a funded credit derivative is different from that of the underlying asset, no protection is recognised for large exposures purposes.

10.2.3 *Multiple names*

5 Protection bought/short position created through a credit derivative referenced to multiple names in a first to default structure is recognised for one asset in the basket only for both large exposures and capital adequacy. The same asset should be chosen in each case.

10.3 Banking book - protection buyer

10.3.1 *Unfunded*

6 Where an unfunded credit derivative is treated as a guarantee for capital purposes, banks may choose to record their exposure either to the underlying or to the counterparty in the credit derivative

transaction, provided that the treatment adopted is in line with the bank's large exposures policy statement.

10.4 Banking book - protection seller

10.4.1 Funded

7 Where a credit derivative is funded, banks should report exposure to both the reference asset(s) and the credit derivative counterparty/issuer for large exposures purposes.

- a) First to default multiple name credit derivatives result in exposures to more than one reference asset.

10.5 Trading book

10.5.1 Asset mismatch

See ch LE

8 Offsetting of long and short positions should be calculated in accordance with the chapter on large exposures. Long and short positions may be offset provided the policy in that chapter is followed.

10.6 Credit spread options

This section applies to both the banking book and the trading book.

10.6.1 Protection buyer/credit risk seller

9 No protection/offset is recognised for the purchaser of a credit spread option for LE purposes

10.6.2 Protection seller/credit risk buyer

10 A credit spread option creates an exposure to the reference asset for LE purposes. The exposure is the par value of the nominal amount of the reference asset.

SECURITISATION AND ASSET TRANSFERS

1 INTRODUCTION

1.1 Application

1 This chapter applies to a UK banks acting in a *primary role* in respect of a transfer of a single asset, pool of assets or securitised portfolio. Where a bank does not meet the terms of this policy, it should regard the assets as remaining on the solo and consolidated balance sheet.

See s3.2

- a) Further details on *primary roles* are set out below.
- b) The FSA's policy does not apply to banks incorporated outside the United Kingdom, even if the special purpose vehicle (SPV) is UK-incorporated.

2 Where a UK bank acts in a *secondary role* in respect of a transfer of a single asset, pool of assets or securitised portfolio, this policy only applies in the following circumstances:

- (a) Where the bank also acts in a primary role. If the bank fails to follow this policy, the FSA will regard the assets as being on the solo and consolidated balance sheet; or
- (b) Where the performer of the primary role is a member of the consolidated group. If the bank fails to follow this policy, the FSA will regard the assets as being on the consolidated balance sheet.

See s3.3

- a) Further details on *secondary roles* are set out below.

See ch CS

- b) The details regarding *consolidated groups* are explained in chapter CS.

3 Where a member of the consolidated group acts in a secondary role in respect of a transfer of a single asset, pool of assets or securitised portfolio, this policy will only apply when the UK bank acts in a primary role. Failure to follow the policy would result in the assets being on the consolidated balance sheet.

4 Where the role policy is followed, the capital consequences are explained below.

1.2 Legal Sources

5 For relevant legal sources see the Legal Sources section of the Capital Overview chapter.

1.3 [deleted]

6 [deleted]

1.4 Grandfathering

7 All securitisation transactions completed prior to the 30th December 1999 will be grandfathered.

8 A bank should satisfy itself that a new pool of assets securitised through a grandfathered structure complies with this policy.

1.5 How this chapter is organised

9 Section 2 outlines the principles and objectives that lie behind the FSA's approach to securitisation and asset transfers. Section 3 then explains the various roles that a bank may take within a securitisation. Section 4 highlights the wider implications of the risks to banks that result from securitisation and loan transfers.

Sections 5, 6, 7 & 8 explain the FSA's general policy applicable to a bank acting in a primary role. Section 5 details the methods of transferring risk effectively and the FSA's policy in each case. Section 6 outlines the FSA's policy for all basic asset transfers or securitisations other than on effective transfers. Section 7 details the policy specifically applying to revolving credit securitisations. Section 8 deals with other specialist schemes.

- Sections 9, 10 & 11 outline the policy applying to banks acting in specific secondary roles. Section 9 outlines the policy on the provision of credit enhancement. Section 10 outlines the policy on the provision of liquidity facilities. Section 11 outlines the policy on dealing and underwriting of asset backed securities.

2 SECURITISATION, ASSET TRANSFERS AND THE FSA'S APPROACH

2.1 Background

2.1.1 *General*

1 An *asset transfer* occurs where an asset owned by a bank is *sold* to another legal entity. In doing so, a bank may remove the asset from its supervisory balance sheet, where the conditions of this chapter are met.

See s5

a) *Sold* means the legal and economic methods of transfer discussed in more detail below.

2 *Securitisation* is generally a process by which assets are sold to a *bankruptcy remote special purpose vehicle* (SPV) in return for an immediate cash payment. The cash payment is raised by the SPV issuing debt securities, usually in the form of tradable notes or commercial paper. A bank performing such a transaction may remove the assets from its supervisory balance sheet, where the conditions of this chapter are met.

a) In a securitisation, the assets are usually transferred to a vehicle existing specifically for the purpose of securitisation called a *special purpose vehicle* (SPV).

b) A *bankruptcy remote* SPV is an entity that is considered by the rating agencies to be unlikely to be subject to voluntary or involuntary bankruptcy proceedings.

c) Although securitisable assets may take other forms, they are generally those with associated streams of principal and interest e.g. mortgages, credit cards and corporate loans.

3 Although this policy is primarily concerned with the sale of loans, the policy also applies to the transfer of other forms of assets.

2.1.2 *Rationale for Securitisation*

4 A bank may undertake a securitisation for a number of reasons. These include:

- portfolio management;
- reducing the need for capital to support assets on the balance sheet;

- risk management;
- enhancing equity return by allowing the redeployment of capital;
- restructuring the balance sheet for reasons connected with large exposures or sectoral concentrations;
- issuing securities as a means of funding with benefits for both cost and diversification of sources; and
- to provide funding of assets when the originator cannot obtain funding on its own part, for example to fund an acquisition.

2.1.3 *The risks involved*

- 5 In the process of transfer, the functions normally carried out by a lending bank are unbundled. Normally, the various risks in a bank's banking book other than credit risk do not warrant special treatment, as the capital needed to cover credit risk helps to protect a bank against these other risks as well. This is no longer the case, however, where the credit risk lies with a third party and a bank solely carries the risks associated with asset administration or promotion.
- 6 Banks should be aware that although this policy is primarily concerned with capital adequacy, operational and reputational risk may also be incurred. For example, in the transfer of a single asset, the originating bank may have difficulty in avoiding close association with the asset; for a pool of assets, the level of association depends upon the structure used and the number of roles performed. The FSA believes that the risks from close association, which may take a variety of forms with a securitisation scheme, can assume material proportions.
- 7 The solution for the FSA has been to implement the policy of "clean break". A bank, once it has securitised assets, should not have any further involvement with those assets except in accordance with the policy in this chapter. This should be the case both explicitly and implicitly i.e. any reputational linkage between the assets of the originator/sponsor should be broken so far as is possible.

2.2 Objectives

- 7 The framework of the FSA's rules is designed to achieve the following objectives, in that:
- (a) asset sales and packaging achieve their intended effect of passing rights and obligations from the seller to the buyer. Ideally, a completely clean break should be achieved;
 - (b) all the parties to the transaction fully understand the responsibilities and risks they have assumed or retained; and
 - (c) any material risks to buyers or sellers are properly treated in the FSA's supervision of banks.
- 8 The FSA believes that these objectives are best achieved by ensuring that a transfer achieves the following:
- (a) the immediate legal separation of the seller from the assets and their new owner (or the effective economic separation in the case of a transfer by sub-participation);
 - (b) as far as possible, the complete economic separation of the seller from the assets and their new owner;
 - (c) presentational or "moral" separation of the seller from the assets and their new owner; and
 - (d) the identification of the retained risks for capital or other coverage purposes.

3 PRIMARY & SECONDARY ROLES

3.1 General

1 This section outlines the various roles that fall within the scope of this policy.

3.2 Primary roles

3.2.1 Bank as originator

See s3.2.2(b) 2 A bank acts as an *originator* when it transfers from its balance sheet a single asset, an asset package or assets that are not investment grade third party financial instruments.

- a) The terms *seller* and *originator* are used interchangeably to mean the bank that is seeking to move assets off its own balance sheet. Note that the terms *seller* and *buyer*, for the party taking on the risk, are used throughout this chapter although in a strict legal sense they may be inaccurate where transfer is by way of sub-participation.

3 Where a bank lends to an SPV in order for that SPV to grant a loan to a borrower as though it were the bank, the bank will be regarded as an originator.

- a) This method of lending is known as *remote origination*.
- b) The bank is regarded as the originator as the SPV is creating an asset that is branded by the bank. The bank will incur reputational risk through the association with the product.

3.2.2 Bank as sponsor or repackager

4 A bank acts as a *sponsor* or *repackager* when:

(a) As a sponsor, it repackages *third party* assets *directly* into a *conduit scheme* that funds the purchase by an issue of securities.

- See s1.1
- a) *Third Party* means parties other than the members of the bank's wider accounting group.
 - b) *Directly* means that the assets have never appeared on the bank's balance sheet.
 - c) In a *conduit scheme*, the term sponsor is used to describe the bank promoting the securitisation scheme. A sponsor may be connected to the scheme in ways that may open it to "moral" pressures in the same way as an originator.

- d) Where there is more than one originator in the securitisation the SPV is known as a *multi-seller vehicle*.
 - e) The various sellers usually continue to service the assets, carrying out the functions of collection, administration and the pursuit of arrears.
- (b) As a repackager, it sells *investment grade third party financial instruments* via its balance sheet to an SPV that then rebundles them and resells them to investors.
- a) In a *repackaging scheme*, the repackager is *not* the original lender and is therefore subject to fewer limitations than an originator.
 - b) Where the assets are influenced in credit quality by reference to the repackaging bank, the bank will be regarded as an originator.
- See ch TI 47G
- c) For a definition of *investment grade* see the Interest Rate position risk chapter. Where the securities to be repackaged are not rated, the bank should be able to demonstrate that the assets are of a comparable quality.
- See ch CB s3.2.2
- d) For the purposes of this paragraph, *financial instruments* are as defined in Section B of the Annex to the ISD.

5 Where a bank repackages assets that are not investment grade third party financial instruments via its balance sheet the bank will be treated as an originator and should comply with the policy relating to that role except where:

- (a) the bank acts as sponsor and originates up to 10% of the total assets into the scheme; or
- (b) the bank acts as repackager and repackages up to 10% of the total assets in the scheme that are either sub-investment grade securities or securities where it has acted as originator.

Banks should apply the originator treatment for assets falling within this exception, albeit without jeopardising the overall treatment for the scheme.

- a) The rule will be applied at the level of the conduit irrespective of any prior SPVs.

3.3 Secondary Roles

3.3.1 *General*

6 A bank acting in a primary role may also carry out one or more of the secondary roles associated with a securitisation or asset transfer. The number and scope of roles carried out by a bank under a securitised structure affect its treatment under the FSA's policy.

7 If a bank is carrying out only one role, it may be acceptable for it to have greater latitude in that role than if it was carrying out several roles, as the FSA considers the totality of a bank's involvement when assessing the completeness of the clean break and any residual risks.

3.3.2 *Servicing agents*

8 A bank acts in the secondary role of *servicing agent* when it administers or services the securitised assets.

- a) The terms *servicer*, *servicing agent* and *administrator* are used interchangeably to describe a bank which carries out an administrative function with regard to a securitisation scheme.

9 Where a bank acts as servicing agent, it should satisfy itself that it does not have a reputational obligation to support any losses incurred by the scheme. If a bank is unable to do so, it should comply with the policy applying to an originator.

- a) A bank acting as servicing agent can run explicit operational and reputational risks as its identification with the assets can mean that its commercial reputation is committed. The extent of the association depends upon the extent of involvement and the sophistication of the underlying borrowers. The FSA is concerned that a bank in this position may give in to pressure to support losses incurred by the investors/buyers to protect its name.

10 Where a bank acts as serving agent, the bank should be able to demonstrate to investors that it has no reputational obligations to support losses by a clear and unambiguous statement in the offering circular in respect of any implied support.

3.3.3 *Other secondary roles*

11 A bank acts in a secondary role when it carries out any of the following functions:

- (a) the provider of *credit enhancement*;

- a) A *credit enhancement* is provided to an SPV to cover the losses associated with the pool of assets. The level of the enhancement is reflected in the rating given to the notes by a rating agency.

See s10

(b) the provider of *liquidity facilities*;

- a) *Liquidity facilities* enable SPVs to assure investors of timely payments. These include smoothing timing differences in the payment of interest and principal on pooled assets and ensuring payments to investors in the event of market disruptions.

See s11

(c) the *underwriter* and *dealer* in securities issued by the SPV;

- a) *Underwriting* is the arrangement under which a bank agrees to buy, before issue, a specified quantity of securities in a new issue on a given date and at a given price if no other purchaser has come forward.
- b) *Dealing* is acting as principal in both the sale and purchase of notes, in the secondary market of an issued security.

See s10.4.3

(d) the provider of *bridging loans* to the SPV;

- a) A *bridging loan* is a loan made to an SPV, before the issuance of the notes, to cover a mismatch in time between the date of purchase of the underlying assets and the date of issue of the securities.

See s6.2.2 (i)

(e) the counterparty in swap transactions.

4 IMPLICATIONS OF SCHEMES FOR A BANK'S GENERAL RISKS

4.1 Introduction

- 1 The following sections of this chapter cover banks acting in a primary and secondary role.
- 2 No consideration of a securitisation or asset transfer can be concerned solely with the technical rules regarding its structure. It also has wider implications for a bank's risks.
- 3 The extent of the risks for a bank involved in a securitisation or asset transfer vary according to the comparative size of the bank and the assets involved, as well as the complexity of the structure of transfer.

4.2 Systems & Controls

- 4 The FSA needs to be satisfied that a bank acting in a primary role has adequate systems and controls in place to deal with all aspects of the securitisation taking place.
 - a) Some of the systems implications may be significant. The arrangements for controlling the securitisation should be carefully assessed and monitored, and be subject to internal audit.
 - b) Where appropriate, the FSA may use section 166 reports as part of the monitoring of these systems.

4.3 Operational risks

See ch CO

- 5 The FSA takes into account any significant operational risks not related to balance sheet items when setting a bank's minimum ("individual") capital ratio. In exceptional cases it may wish to apply an explicit capital requirement against this sort of risk.

4.4 Liquidity

- 6 Where assets may eventually return to the bank's balance sheet, there are particular issues for banks' management of their liquidity.
- 7 Before the FSA allows assets to be treated as off balance sheet, it needs to be satisfied that the bank can deal with the liquidity implications. These should be handled within a bank's normal liquidity management and assessed using the standard maturity

mismatch approach or, in those cases where it is relevant, the sterling stock liquidity approach.

See s7 a) The liquidity treatment of revolving-credit securitisations is dealt with in more detail below.

See s10.4.2 (d) 8 The FSA may require sponsors or repackagers that report on a mismatch basis to meet mismatch guidelines out to six months. Similarly the FSA may require sponsors or repackagers reporting on a sterling stock basis to submit additional information (on a mismatch basis) covering the bank's liquidity out to six months.

See ch LM 9 A bank may be required to arrange committed facilities to be drawn down to the extent necessary to fund assets returning to its balance sheet. The requirements governing these committed facilities will generally be consistent with the FSA's liquidity approach.

- a) Likewise the FSA follows its normal approach on the question of the weighting of such committed facilities by the lending bank for capital adequacy purposes.
- b) Since such commitments need to be available in circumstances where a replacement securitisation does not prove possible, they should not include a "material adverse change" condition in relation to the bank.

4.5 Capital planning

10 Where assets may eventually return to the bank's balance sheet - such as in a liquidity asset repurchase agreement - there are particular issues for banks' management of its capital. Returning assets could affect the capital adequacy of the bank.

See s10.4.2 (e) 11 Where assets could return to the balance sheet the FSA may request a bank to submit a plan to take account of the possible return of the assets to the balance sheet.

- a) A plan should detail how the bank intends *either* to sell the assets, sell other assets or to raise the requisite capital.

4.6 Remaining asset base

12 The process of securitising a significant portion of a bank's assets may lead to a change in the profile of the assets on its supervisory balance sheet, in terms of both quality and spread. These implications are considered when assessing any securitisation scheme and may need to be discussed with the bank.

- 13 The FSA may impose limits on the extent to which assets may be securitised in terms of total volume and/or the types of assets securitised in comparison to the total asset base.
- a) The FSA may regard assets removed from a bank's balance sheet through securitisation, even where the bank complies with the policy in this chapter, as carrying some residual risk to the originator.

5 BASIS OF THE POLICY: METHODS OF TRANSFER

5.1 Introduction

1 The FSA considers that the method of transfer of an asset can have an important bearing on the risks assumed by buyer and seller since different methods achieve the desired 'clean break' to varying extents.

2 Each of the four methods set out below may be used to make an effective transfer of a loan off the supervisory balance sheet. The considerations raised in each case apply in all forms of securitisation or asset transfer; the policies set out in section 6 and elsewhere are additional to the policy for identifying adequate forms of transfer.

Sections 5.2 to 5.4 give the FSA's position on transfer methods for on-balance sheet items; section 5.6 for assets which are undrawn.

3 Methods of transfer, other than the four described below may be valid, especially with reference to transfers carried out in other jurisdictions. If a bank proposes to rely upon any other method, it should be supported by legal opinion and the prior approval of the FSA should be obtained.

5.2 Novation

4 A transfer of an asset through *novation* is regarded as a clean transfer and the asset may be therefore excluded from the selling bank's capital ratio and added to the buying bank's.

a) In a *novation*, the existing agreement between the originator and the borrower is cancelled and a new agreement between the investor and borrower is substituted. This effectively transfers all the seller's rights and obligations to the buyer.

b) In the FSA's view, the cleanest transfer of risk is achieved by novation.

5.3 Assignment

5 A legal or equitable *assignment*, if properly structured, can also achieve an effective transfer of the seller's rights - but not his obligations - and the remedies available to him to enforce those rights.

a) An *assignment* transfers from seller to buyer all rights to principal and interest. A loan agreement may impose restrictions on assignability and these bind the buyer. Thus if assignment is prohibited without the

consent of the borrower, the borrower's consent should be obtained. In any case, there may be difficulties in assigning the benefit of rights other than the right to principal and interest. The buyer's rights may be impaired by any rights of set-off that exist between the borrower and the seller.

- b) The seller retains any outstanding obligations (for example, to advance further funds).

- 6 A transfer through an *assignment duly notified* to the borrower is regarded as a clean transfer, provided that the buyer has taken reasonable precautions to ensure that his rights under the transfer are not impaired by an intervening right; for example, a right of set-off between seller and borrower.
- a) At a minimum there should be a warranty from the seller that no such right of set-off exists.

- 7 A *silent assignment* (i.e. where the borrower is not notified) is usually regarded as a clean transfer. This is subject to the following:
- (a) the volume of assets to individual borrowers sold on a silent assignment basis should be subject to appropriate internal controls;
 - (b) the seller should keep under careful review the risks that follow on from this position as it remains the lender of record and therefore will be the focal point for pressure from the borrower.
 - a) The additional risks for the seller as lender of record are that he remains subject to requests to reschedule or renegotiate or advance further funds.
 - b) The buyer also faces additional risks because the absence of notice to the borrower removes some legal protection he would otherwise have had. These need to be kept under careful review.

If it is not satisfied on these points, the FSA may disregard a transfer of an asset through a silent assignment in calculating the capital ratio of the seller.

5.4 Declaration of trust

- 8 A declaration of trust is regarded as a clean transfer of the assets that is equivalent to a silent assignment, subject to the following:

- (a) The policy on silent assignments detailed above is fulfilled in relation to the trust.
- (b) The bank receives a legal opinion confirming that the trust is effective to transfer the beneficial interest.

If it is not satisfied on these points, the FSA may disregard a transfer of an asset through a declaration of trust in calculating the capital ratio of the seller.

5.5 Sub-participation

9 Where an asset is funded in whole or in part via a *sub-participation*, the FSA recognises the transfer of credit risk by excluding it (or the relevant part) from the original lender's capital ratio, and including it in the sub-participant's as a claim on the underlying borrower.

- a) Sub-participation does not transfer any of the seller's rights, remedies or obligations against the borrower to the buyer, but is an entirely separate, back-to-back, non-recourse funding arrangement, under which the buyer places funds with the seller in exchange for acquiring a covenant from the latter under which he passes on to the buyer payments under the underlying asset which the borrower makes to him, but the asset itself is not transferred.
- b) Sub-participation is accepted as meeting the FSA's criteria for effective transfer as, although not transferring in a legal sense the rights of the original lender, an asset sub-participation aims to have the same economic effect.
- c) The sub-participant may, but is not required to, obtain a charge over the underlying assets. Such a charge would, among other things, allow the sub-participant to report on the basis of the capital charge on the underlying assets.
- d) The sub-participant also faces additional risks since it assumes an exposure to the borrower, but is also at risk to the seller, because it relies on the seller to pass through funds received from the borrower.

5.6 Undrawn commitments

10 Where banks transfer an *undrawn commitment* to lend (or part thereof), the commitment (or part thereof) is excluded from the selling bank's capital ratio only when:

- (a) the transfer is by novation; or

- (b) the transfer is by an assignment accompanied by a release by the borrower of the seller from its obligations, an assumption by the buyer of the seller's obligations and a formal acknowledgement from the borrower of a transfer of obligations from the seller to the buyer.
 - a) An acknowledged assignment is regarded as amounting to, in substance, a novation and therefore effectively transfers this obligation.

11 A transfer by means of silent assignment, declaration of trust or sub-participation does not lead to the exclusion of the commitment from the selling bank's capital ratio. Instead the commitment is regarded as being to the buyer rather than to the potential borrower.

- a) This treatment is adopted because an undrawn commitment is an obligation on the part of a lender, whilst an assignment is a transfer of rights only. As explained further below, the seller will face a credit risk in the event of the failure of the buyer.

See chs BC s4 &
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- b) Note that undrawn advised facilities are not extinguished through sub-participation.

12 The buyer's assumption of a commitment (or part) is included in its capital ratio as a claim on the borrower, irrespective of the method of transfer used.

- a) In the case of an effective transfer of the obligation, this is clearly the necessary corollary, as the risk is no longer being taken into account against the seller.
- b) A form of transfer which does not transfer an undrawn commitment, i.e. under silent assignment or sub-participation, gives the appearance of a double counting of the credit risk since it is taken into account for both the seller and the buyer. This is because there are two, legally separate transactions, even if the intention in entering into them is to achieve a combined effect. There are, therefore, two credit risks.

6 BASIS OF THE POLICY: LIMITING THE ASSOCIATION WITH THE ASSETS

6.1 Scope

1 This section covers the general policy applying to banks acting in a primary role. It covers single assets, parts of assets and the packaging, securitisation and sale of asset pools as well as the transfer of risk under sub-participation agreements.

See s7 & 8

a) This chapter includes guidance applying to specialist schemes for particular asset types, additional to that set out in this section.

See s5

b) This section should be read in conjunction with the sections covering effective forms of transfer; the policy in this section should be met in addition to that in section 5.

2 There are a number of general policies applying to both single asset and asset packages, set out in s6.2, and further general policies for asset package schemes only, set out in s6.3.

3 References to assets in the singular are for convenience only, unless specifically stated.

6.2 Policy relating to all types of assets

4 The following conditions for the transfer of a single asset, part of an asset or package of assets should be met:

(a) The transfer should not contravene the terms and conditions of the underlying asset agreement and all the necessary consents have been obtained;

(b) The performer of the primary role has no residual economic interest in the principal amount of the asset (or that part which has been transferred) and the buyer has no formal recourse to the seller for losses;

a) When a secured asset is transferred and further advances are made by the originator, if these additional advances are to be secured there should be a separate formal agreement with the borrower. A side letter is insufficient for these purposes.

(c) The performer of the primary role has no legal or moral obligation to purchase or repurchase the asset (or fund the repayment of a sub-participation), or any part of it, at any time;

See s6.4

- a) The performer of the primary role may not retain an option to repurchase the assets, except where the loan portfolio has reduced to less than 10% of its maximum value and the option extends only to fully performing assets.
 - b) The inclusion of a 'step up' will only be permitted for mortgage securitisations and will be considered on a case by case basis pending a fuller review of the policy. Where a bank can demonstrate that the economic characteristics for the assets that it proposes to securitise are the same as for mortgages, the inclusion of a step up may be considered.
 - c) The details regarding the repurchase or purchase of assets are explained below.
 - d) An exception to the conditions in this paragraph is where the obligation arises from warranties given in respect of the asset at the time of its transfer, provided that these are not in respect of the future credit-worthiness of the borrower.
 - i) The FSA would not regard this condition as met if warranties were provided by the originator on matters outside its control.
 - ii) Environmental warranties should restrict liability to legislation in force at the time of sale, not at any time in the future otherwise they may be regarded as constituting a warranty on matters outside the originator's control.
- (d) The performer of the primary role can demonstrate, to the satisfaction of the FSA, that it has given notice to the buyer that it is under no legal obligation to repurchase the asset (or fund the repayment of a sub-participation), nor support any losses suffered by the buyer, and that the buyer has acknowledged the absence of obligation;
- a) Penalty interest imposed at the administrator's option does not constitute a loss caused by borrower default and may therefore be met by the performer of the primary role.
 - b) An SPV has an ongoing credit exposure to the performer of the primary role, because it is dependent on it passing on payments it receives in respect of the securitised assets. A bank may provide a guarantee to the SPV in respect of such an obligation by its subsidiary (if all or part of the assets are originated by the subsidiary) if the effect is only to bring the credit rating of the subsidiary up to that of the parent bank. The commitment by the parent may go no further than commitments the subsidiary could have given itself within the limitations of the FSA's policy.

- (e) The documented terms of the transfer are such that, if the asset is rescheduled or renegotiated, the buyer and not the performer of the primary role would be subject to the rescheduled or renegotiated terms; and
- (f) Where payments are routed through it, the performer of the primary role is under no obligation to remit funds to the buyer unless and until they are received from the borrower.
 - a) Payments voluntarily made by the performer of the primary role to the buyer in anticipation of payments from the borrower should be made on terms under which they can be recovered from the buyer if the borrower fails to perform.

6.3 Additional policy relating to asset packages

- 5 The process of packaging assets together and selling them as a block or pool can compound risks that are often negligible when a single asset is transferred. The commercial reputation of the performer of the primary role is committed because of its close association with the scheme; such a commitment may jeopardise the existence of a clean break and there may be pressure to support any losses of investors.
- 6 When performing a primary role for a package of assets, a bank should meet the following additional conditions, in order to ensure that its role is not seen as being more than acting as an agent, whether or not it retains the servicing role:
 - (a) The FSA expects the performer of the primary role to have evidence available in its records that its legal advisers are satisfied that the terms of the scheme protect it from any liability to investors in the scheme, other than liability for breach of express contractual performance obligations as servicing agent or originator or for breach of warranty made with respect to the assets in conformity with the policy in this chapter, or liability for any other matter wholly within the control of the originator.
 - (b) The FSA expects the performer of the primary role to have evidence available in its records that the terms of scheme satisfy the conditions for non-consolidation of an SPE, derecognition or linked presentation set out in FRS5.
 - (c) The FSA expects the performer of the primary role to confirm in writing to the FSA that it has evidence available in its records that its auditors and legal advisers are satisfied, so far

- as it is within their professional competence, that the terms of the scheme comply with the FSA's policy.
- a) Regardless of the bank having obtained opinions from professional advisors and its auditors under the sub-paragraph above, the responsibility for ensuring that the scheme meets these provisions rests with the bank.
 - b) The FSA may request sight of the opinions of the auditors and legal advisers.
 - c) The evidence in the bank's records may be included in a section 166 report.
- (d) The performer of the primary role should be able to demonstrate that it has taken all reasonable precautions to ensure that it is not obliged, nor will feel impelled, to support any losses suffered by the scheme or investors in it.
- a) This may be met by any offering circular (or other analogous documentation) containing a highly visible, unequivocal statement that the performer of the primary role does not stand behind the issue or the vehicle and will not make good any losses in the portfolio.
 - b) Where an existing funding is part of a proposed securitisation scheme, the FSA may consider that the statement need not be made retrospectively, although it should be inserted in subsequent funding issues.
 - c) The provision of insurance cover by a bank or a subsidiary of the bank against loss, e.g. mortgage indemnity insurance, will be considered on a case by case basis.
- (e) The performer of the primary role may not own any *share capital* or other form of proprietary interest in or control over, either directly or indirectly, any company used as a vehicle for the scheme.
- a) Where the bank acts in a primary role, this also applies to members of the consolidated group.
 - b) *Share capital* includes for this purpose all classes of ordinary and preference share capital.
- (f) The Board of a company used as vehicle for a scheme should be independent of the performer of the primary role, although may have one director representing it.

- a) Where the bank acts in a primary role, this also applies to members of the consolidated group.
- (g) [deleted]
- (h) The performer of the primary role should not bear any of the recurring expenses of the scheme.

See s9

- a) Credit enhancements are considered below.
- b) The failure of the performer of the primary role to charge appropriate fees or other compensation may amount to funding. The agreement should specify fees and, if costs are not covered, should be subject to the approval of the FSA as being at an acceptable level.
- c) If a bank wishes to securitise a mortgage book which includes staff mortgages which are subsidised, such a subsidy will not count as funding the vehicle if paid to the employee; it may do if paid directly to the buyer. The different treatment arises due to the likely events upon default.
- (i) The performer of a primary role may not enter into swap agreements with the SPV that intentionally bear losses.
 - a) However, the bank may enter into interest or exchange rate swap at market prices with the vehicle, either directly or through a third party.
 - b) There should be provision for unintended temporary losses arising from normal administrative procedures, for example delays in changing mortgage rates, to be recovered by the servicing agent as soon as possible;
- (j) The performer of a primary role may not fund a vehicle or scheme (except within the terms of condition (h) above) and in particular may not provide temporary finance to cover cash shortfalls arising from delayed payments or non-performance of loans which it administers.
 - a) This section does not apply to sponsors or repackagers.

6.3.1 *Asset replenishment*

7 An originating bank may structure a securitisation scheme to allow for further tranches of assets to be placed into the scheme. It should be able to demonstrate to the FSA that at the time of subsequent transfer:

- (a) the asset quality of the pool is not materially altered by the addition;
- (b) any change to the quality of the assets remaining with the originating bank is either not material or is acceptable to the FSA;
- (c) (for revolving credit securitisation only) there is no change in the liquidity implications of the securitisation resulting from the addition; or
- (d) there are no unacceptable changes to the “moral” risks to the originator signalled by the addition.
 - a) The test of material alteration of the quality of asset pool is to be applied to the pool at the time of the proposed addition, not to the quality of the pool at the original securitisation.
 - b) A bank may discuss and receive non objection from the FSA for asset replenishment either at the time of each replenishment or once only to establish a framework to apply for several replenishments.

6.4 Repurchasing the assets

6.4.1 *Repurchasing by an originator*

8 An originator should not repurchase the asset securitised from the SPV unless one of the following circumstances apply:

See 6.2.(c)

- (a) The repurchase is for a breach of warranty;
- (b) The repurchase is of fully performing or defaulted assets when the loan portfolio has sunk to less than 10% of the maximum face value of the assets;
 - a) The total size of the pool for these purposes is equal to the maximum total face value of the assets during the life of scheme, prior to the calculation.
 - b) Defaulted assets may be bought back for nominal consideration.
 - c) Repurchases for further advances or product switches from a mortgage pool will be agreed on a case by case basis pending a fuller review of the policy.

Any repurchase should be performed at market prices with no preference of any kind being shown in the terms and is subject to the bank’s normal credit approval and review process;

- 9 A bank may restructure or refinance a securitisation only if the assets remain, at all times, off the balance sheet.
- a) A bank should notify the FSA when wishing to restructure or refinance a securitisation. The restructuring or refinancing will be considered on a case by case basis.

6.4.2 *Repurchasing by a sponsor or repackager*

- 10 A sponsor may purchase or a repackager may repurchase or purchase the assets from a scheme. At the time of (re)purchase the following conditions should apply:
- (a) The assets are either investment grade or defaulted, in the case of financial instruments, or fully performing or defaulted, for non-financial instruments;
- See 6.2.(c)
- a) If the repurchase occurs due to a breach of warranty, the policy in this section need not be followed.
- b) Defaulted assets may be bought back for nominal consideration.
- (b) The repurchase is performed at market prices with no preference of any kind being shown in the terms and is subject to the bank's normal credit approval and review process.

7 SPECIAL STRUCTURES: REVOLVING CREDITS

7.1 Introduction

1 Compared with other types of securitisation, schemes to securitise *revolving credits* introduce the possibility of increased legal and moral risk. This arises from the complexity of the arrangements, the shared interest of the originating bank and investors, and the eventual reversion in full to the originating bank of the pool of accounts. Additionally, the speed at which assets return to the balance sheet of the originating bank may cause liquidity problems.

2 Although most securitisations to which this policy applies are of credit cards, it is not limited to any particular type of assets but applies whenever the structure has the characteristics described in the above paragraph.

3 If carefully constructed, however, such schemes can result in the originating bank successfully transferring the risk on the share of the pool assets to the investors. This section outlines the conditions that should be met in respect of revolving credit securitisations in order for the assets to be given off-balance sheet treatment for supervisory purposes.

The policy in this section is additional to the general policy set out in section 6 and the conditions for effective transfer in section 5.

- a) The term *revolving credits* refers to loan facilities which permit borrowers to vary the drawn amount within an agreed limit. Repayment may be at the borrower's discretion, subject in some cases to a minimum amount per payment period, or by fixed schedule.
- b) *Securitisation* of such receivables is especially complex because of the nature of the assets as fluctuating and of indefinite maturity.
- c) Typically, schemes insulate investors in the notes from the effects of fluctuating balances by assigning shares in the receivables that are the subject of the securitisation both to the investors (the *investor interest*) and to the originating bank (the *seller interest*). The amount of the investor interest in the outstanding balances normally stays fixed at the amount of their funding (until the notes start to amortise) whereas the amount assigned to the selling bank goes up or down as borrowers make net drawings or repayments.
- d) Schemes are given a fixed maturity by dividing their life into a revolving (or interest-only) period and an amortisation period.

- i) During the *revolving period*, the investors receive their share of interest payments, but their share of principal repayments by borrowers is reinvested in the pool.
- ii) During the *amortisation period*, the investors' share of principal repayments is used to redeem the securities, with the result that at the end of the scheme the full interest in the outstanding balances has reverted to the originating bank.

7.2 Principles

4 In setting the conditions for off balance sheet treatment of the share of the balances funded by investors, the FSA considers it a fundamental principle that the arrangements for the securitisation should ensure the full sharing of interest, principal, expenses, losses and recoveries on a clear and consistent basis.

- a) This principle implies, among other things, the need for full loss-sharing on the stock of receivables in the pool throughout the revolving period of the securitisation, since the investors' share of the receivables is removed in full from the originating bank's balance sheet for the whole of that period.

5 There is no specific limit on the total volume of outstanding revolving credits that a bank may remove from its balance sheet using securitisations. It is therefore important to ensure:

- (a) that adequate standards apply to the structure of securitisation schemes; and
- (b) that the implications of securitisation for the bank's risks generally are adequately handled.

7.3 Features and treatments

7.3.1 Pooling

6 Schemes typically involve the transfer of a pool of receivables into a trust.

- a) The trust directs the flows on the accounts to the originating bank and to a special purpose vehicle (SPV) according to the proportion of the funding that they are providing.
- b) The SPV in turn directs the flows to the investors who hold the securities.

- c) Schemes usually contain provisions concerning the selection of the original pool of receivables from the assets on the originating bank's balance sheet and the subsequent replenishment, as necessary, of the pool of accounts.
- 7 These arrangements form the basis of an acceptable structure to allow the share of the balances funded by the SPV to be removed from the originating bank's balance sheet for supervisory purposes.
- 8 A bank may take back the full financing of a pool at the end of the scheme if there is no reason to assume that its performance will have deteriorated in the meantime.
- a) For a scheme to be acceptable, therefore, the FSA needs to be convinced that it contains no features - for example for the substitution of higher-quality accounts into the scheme - as a result of which the performance of the pool systematically favours the investor interest.
- b) Adequate seasoning of the accounts transferred into the pool - so that they are likely to display the characteristics of fully operational accounts - is usually required; together with the random selection of the assets transferred into the pool, this should normally ensure that investors are not systematically advantaged.
- c) In addition, the scheme's documentation should ensure that servicing practices are applied consistently to securitised and unsecuritised loans.

7.3.2 *Aggregated and disaggregated*

- 9 Schemes may incorporate one of two main approaches concerning the payments received by the SPV in respect of the pool of accounts transferred:
- Under the *aggregated* approach, the payments received during a period are aggregated and in distributing them shares are applied to that aggregate, treating the receivables as a homogeneous pool.
 - a) The pool of assets is looked upon as though it were one and receipts/advances apportioned between originator and investor.
 - Under the *disaggregated* approach, the amounts paid to investors and the originating bank are linked to particular receivables that they have financed.
 - b) Each advance/receipt is allocated to either the originator or the investor.

Schemes using either approach may be eligible for off balance sheet treatment by the FSA.

7.3.3 *Scheduled amortisation*

10 Under the *scheduled amortisation* of the securities, the outstanding balance of receivables reverts to the originating bank after a scheduled date fixed in the terms of the securitisation, in a controlled manner.

The FSA considers that the following conditions should be met by the provision for scheduled amortisation in a scheme:

- (a) There is a need to ensure full loss-sharing on the stock of receivables throughout the revolving period of a securitisation, which has implications for the rate at which schemes may be amortised at the end of that period.
 - a) If an SPV is able to a large extent to derive repayment flows from borrowers who turn over their balances quickly, and relatively little reliance on borrowers who pay only the minimum amount each month, it might be able to make a very rapid exit from the scheme.
 - b) If the borrowers who paid their debts slowly had different risk characteristics from those repaying and renewing credit at a fast rate, this might allow the investors to avoid their full share of losses on the pool at the end of the revolving period.
 - c) The pace of repayment during any set amortisation period should not in normal circumstances be more rapid than would be allowed by straight-line amortisation over the period.
- (b) Amortisations providing for a *clean-up call* - by which an originating bank has the option to buy back the remaining securitised assets - are considered to be acceptable so long as the clean-up can occur only when 10% or less of the receivables at the start of amortisation remain outstanding.
- (c) If the scheme is based on the disaggregated approach, this is an acceptable structure (as long as any assumption that it includes about the length of the amortisation period is reasonable).
 - a) The investor interest is not eliminated until each borrower in whose debts the SPV shares has made sufficient principal payments to cover the balances outstanding at the end of the revolving period - or these have been recognised as in default.

- (d) If the scheme is based on the aggregated approach, this is more complex but may still be acceptable. There is a need to allay the concern that the SPV may be able to exit from the scheme while a substantial proportion of the total amount outstanding at the start of the scheduled amortisation period remains outstanding.
- a) This may be the result of a scheme in which, after the start of the amortisation period, investors are repaid from a fixed share of the repayments arising from the aggregate gross flows on the accounts, including repayments of new borrowings incurred during the amortisation period.
- (e) For aggregated structures, the originating bank should be able to demonstrate (either on a theoretical basis or on the basis of historical statistics) to the FSA that, by the end of the scheduled amortisation period, borrowers in the pool should have made sufficient payments to ensure that in aggregate at least 90% of the total debt outstanding at the beginning of the amortisation period will have been repaid or recognised as in default.
- a) Payments are taken to include both principal and interest.

7.3.4 *Early amortisation*

- 11 *Early amortisation* of the securities provides for the repayment of the investor interest to be brought forward on the occurrence of certain circumstances defined in the terms of the securitisation. Such an occurrence is called a *trigger event*.
- 12 Various early amortisation triggers have been included in past securitisations, in the United Kingdom and elsewhere. They may be divided into two main kinds: *economic* and *non-economic* triggers.
- (a) *Economic* triggers activate early amortisation because of a deterioration in the performance of the pool of receivables: for example, a fall below a certain level in the yield of the pool net of provisions, interest and other expenses. The FSA considers that *economic* triggers may, therefore, be included only if:
- (i) there is full sharing of interest, principal, expenses, losses and recoveries on the balances outstanding at the start of the amortisation period, using either the disaggregated approach or the aggregated approach applying the same conditions as outlined in paragraph 10 above; and
- (ii) that at the point that early amortisation is triggered losses on the pool will have reached a level where the bank will

feel able, if necessary and without putting its reputation at risk, to reduce its new lending broadly in line with the amortisation of the investor interest. The bank should be able to demonstrate to the FSA that this is the case.

- a) In some cases, such triggers allow investors to reduce their participation once they begin to experience losses and commit the originating bank to taking back the full financing in these circumstances. Because the FSA is seeking to ensure full loss-sharing, it considers that certain conditions should be met on the inclusion of *economic* triggers if the assets securitised are to be given off balance sheet treatment. The conditions are intended to prevent the inclusion of such triggers providing, in effect, implicit credit support. The aim is to ensure that investors share in losses for as long as these remain unusually high or until the originating bank decides, and feels able, to run down its portfolio in line with the amortisation of the investor interest.
- (b) *Non-economic* early amortisation triggers relate to changes, other than in the performance of the securitised assets, which have significant implications for the securitisation.
 - a) Past examples include tax-event and legal-change triggers, triggers relating to the originating bank's material non-performance in its role as servicing agent to the SPV, and triggers relating to the insolvency of the originating bank or SPV.
 - b) In the FSA's view, the presence of these particular types of trigger does not amount to credit support. It therefore considers that such early amortisation triggers may be included in acceptable schemes, and in these limited cases a form of *rapid amortisation* - by which the investor interest may be repaid as fast as is allowed by its share of the inflow of principal payments - may be included.
 - c) The FSA needs to be convinced of the case for allowing any other forms of *non-economic* early amortisation trigger.

7.4 Implications of schemes for a bank's general risks

7.4.1 Context

13 This subsection explains the particular concerns relating to banks involved in revolving credit securitisations. It should be read in conjunction with Section 4 which discusses the implications for securitisations generally; the policy in this section is in addition to that set out in Section 4.

7.4.2 *Systems*

14 Systems needs are more complex than in other securitisations, because of the active nature of the assets, the consequent need for the identification of loans and payments, and the monitoring of the portfolio's performance.

7.4.3 *Liquidity*

15 The eventual return in full of the revolving-credit balances to the bank's balance sheet - as a result of either their scheduled or early amortisation - means that such securitisations raise particular issues for originating banks' management of their liquidity.

- a) These liquidity implications should be handled within a bank's normal liquidity management and assessed as under Section 4.4.
- b) In the case of securitisations of credit-card (and similar) receivables, this approach is combined with the FSA's normal liquidity approach for credit cards.
- c) Before the FSA is able to assess whether it is appropriate to treat such assets as off balance sheet, it needs to be satisfied that the bank can deal with these liquidity implications.

16 Each scheme should be included in a bank's liquidity management assuming, in normal circumstances, that during its amortisation the bank may be required to find replacement funding for the full amounts previously provided by the investor interest.

- a) This is because it may not be possible to arrange a replacement securitisation, and an across the board withdrawal or reduction of borrowers' facilities would put its reputation at risk.
- b) In each case, the FSA will consider whether an extra margin based on the likely maximum net growth in lending should be added to the funding requirement, and will, if necessary, set this margin in consultation with the bank including whether to include in the funding requirement an estimate based on the likely maximum net growth in lending.

17 For scheduled amortisations, before off balance sheet treatment is adopted, a bank should outline how it expects to manage its liquidity. A bank should satisfy the FSA that its liquidity arrangements could cope with the additional need for funding and, where appropriate, that it would build up additional liquid assets for the periods covering amortisation payments.

- a) This should include, at the appropriate maturities, the cash outflows resulting from the scheduled repayments to investors plus any additional growth margin decided on.
- b) The FSA examines banks' proposals to ensure that schemes do not unwind at times and in amounts that would pose difficulties for the bank concerned.

18 For early amortisation triggers in a securitisation scheme there are additional complications, since they render uncertain the timing of the potential need for replacement funding.

- (a) For a bank originating a scheme incorporating an early amortisation trigger or triggers, and having it treated as off balance sheet the bank should be able to demonstrate to the FSA that it has adequate funding plans in place to cope with their implications.
- (b) Where schemes include early amortisation triggers, the FSA wherever possible agrees with the originating bank 'warning indicators' that early amortisation might be triggered.
 - a) For example, if the scheme allows early amortisation to be triggered after three successive months of negative net yield on the portfolio, a warning indicator might be one month of negative net yield. Following a signal from one of these warning indicators, the maturity of the scheme will be advanced in the bank's liquidity reporting; in this example, its presumed maturity immediately after the warning indicator would be two months.
 - b) For those banks operating using the stock liquidity approach, the FSA where appropriate will seek to agree with the bank the additional liquidity that should be maintained in the event of a signal from a warning indicator.
- (c) Where a scheme includes an early amortisation trigger that does not permit any warning indicator, the originating bank should likewise explain how it would cope with the liquidity implications of its being triggered.

19 There is additional liquidity risk in the case of originators of more than one securitisation with the same early amortisation trigger(s) (whether 'economic' or 'non-economic').

- a) Because the potential liquidity demand on such banks is multiplied if the early amortisation triggers in each can be triggered at the same time, in such cases the FSA needs further reassurance as to the liquidity

implications before being able to agree the appropriate off balance sheet treatment of subsequent issues.

20 In order for a bank to satisfy the FSA that it can deal with the liquidity implications of the amortisation of schemes, it may need to arrange committed facilities to be drawn down to the extent necessary to fund receivables returning to its balance sheet.

- a) The policy governing these committed facilities generally is that used elsewhere in the FSA's liquidity approach. Likewise the FSA follows its normal approach on the question of the weighting of such committed facilities for capital adequacy purposes. Since such commitments need to be available in circumstances where a replacement securitisation does not prove possible, they should not include a material adverse change condition in relation to the bank.

7.4.4 *Capital*

21 For a bank carrying out revolving-credit securitisations amounting to a high percentage of its solo capital base, the FSA monitors and where appropriate discusses with its management the potential capital implications of its involvement in the securitisation market. Consideration here takes account of the size and development of that market.

- a) This is a particular issue where the presence of common early amortisation triggers makes it possible that a significant volume of assets could revert to the bank at the same time, thereby threatening to cause problems both for the bank's liquidity and its capital requirements.

8 OTHER SPECIAL STRUCTURES

8.1 Transfers of receivables arising from the finance of equipment or consumer goods

8.1.1 *Introduction*

See s2

- 1 The FSA's principal policy objective is to ensure that in any securitisation, all parties fully understand the responsibilities and risks which they assume or retain, and that any material risks to buyers or sellers are properly treated in the supervision of banks.
- 2 The financing of the purchase of equipment or consumer goods (including hire-purchase) can involve particular risks, which it is difficult legally to transfer to a buyer of the receivables, which may adversely affect this objective.
- 3 The policy in this section is additional to the general policy set out in section 5 and 6.

8.1.2 *Concerns*

- 4 The following concerns are particular to a securitisation of this type of loan:
 - (a) This type of lending can involve lenders in continuing liabilities for the "merchantability" of goods or equipment.
 - (b) If defective goods were to cause personal injury, very substantial costs could arise.
 - (c) In addition to liabilities for the quality of equipment, institutions involved in the finance of equipment hire or leasing may have contractual obligations towards the borrower - for instance to arrange for the servicing or taxation of vehicles.
 - (d) It is difficult legally to transfer these obligations, unless the transfer is done through novation.

8.1.3 *The FSA's policy*

- 5 The FSA views the following as the necessary steps to address these concerns:
 - (a) The FSA believes that for assets to be viewed as off-balance sheet, sellers should either receive an indemnity from the buyer to cover any liability, or otherwise take steps to

minimise the risk of loss (such as taking out insurance to cover the risk).

- a) Lenders against whom claims are made as a result of their liability for the quality of goods or equipment usually have recourse to the manufacturer which, provided the manufacturer has appropriate liability insurance, may limit the risk to the lender. In addition, the FSA has been given to understand that the loss experience of lenders under such claims is historically very small. Nevertheless, the FSA does not view the risk retained by the seller as unimportant.
- (b) In situations where the seller is left with responsibilities of the kind outlined in paragraph 4 above, the FSA has some concern over the position of the buyer (if the buyer is a bank). The FSA reminds buying banks that risks of this nature need careful evaluation. Buyers should satisfy themselves of the seller's competence to fulfil its obligations towards the borrower in a timely manner.
 - a) There is a clear possibility that the borrower will exercise a right to reduce or withhold payments on the loan to reflect his costs - for instance, the cost of repairing the vehicle - if the original lender fails to meet his obligations under the loan agreement.

8.2 Securitisation of a reverse repo

See s6

6 Where the benefits of a reverse repo are transferred, the transaction is considered to be the securitisation of a single loan. The originator therefore should comply with the policy above for standard schemes.

- a) A reverse repo is where a bank has bought (or borrowed) trading book securities from a counterparty subject to buyback (or a return clause);

7 Whether the securitised loan is considered to be secured or unsecured depends on the structure of the transaction.

- a) A sub-participation is deemed to be unsecured.
- b) Where the transactions are through a trust structure (the trust having legal title) it will usually be secured.

See s7

8 Where the transaction is through a trust structure and the originator retains an interest in the reverse repo, the concerns raised in respect of sharing of interest, principal and losses for revolving schemes should also be addressed by the bank.

9 SECONDARY ROLES: CREDIT ENHANCEMENTS

9.1 Background

See s6.3 (h)

1 The policy on credit enhancements is part of the wider policy on securitisation published by the FSA, and therefore feature in a previous section. Because of their importance and the variety of possible constructions, this section expands upon the basic rules.

9.2 Overview

2 A credit enhancement is an arrangement provided for the SPV that, in form or substance, covers the losses and risks associated with the pool of assets. The level of the enhancement is reflected in the rating given to the notes by a rating agency.

- a) Where a bank demonstrates a pattern of providing (implicit) support, it will be deemed to have provided credit enhancement.
- b) An enhancement can be an integral part of the structure used to manage funds or securitise assets (i.e. driven by cash flow) or may be provided from outside the structure (i.e. provided by the originator or another third party).
- c) Ratings agencies require banks to provide credit enhancement in order to make the paper issued in securitisations more attractive to investors.

3 A bank acting in a primary role may provide credit enhancement to support an SPV (and its investors). The capital charges against the credit risk that should be made are detailed below.

9.3 Structure of credit enhancements

4 A credit enhancement may be structured in a number of forms, examples include:

- (a) A subordinated loan or note facility issued by a bank equal to a maximum amount of credit support being provided.
- (b) Over-collateralisation, where the face value of the assets is greater than the securities issued. The securitisation will amortise more quickly and a buffer is created against losses. On maturity, any residual assets revert to the originator.
 - a) The credit enhancement, for calculating capital requirements, is the over-collateralisation.

- (c) Spread accounts. The interest rate on the assets is usually higher than the coupon on the securities issued, with the difference being used to cover costs and provide for losses. Utilising all or part of this for credit enhancement purposes means leaving it in the SPV rather than returning it to the originator.
- a) If the funds are to be returned to the originator, the FSA considers that the SPV should not have recourse to the monies thereafter.
- b) The conditions detailed in 9.4 do not apply to credit enhancement in the form of a spread account retained by the SPV.

See ch TI 47G 5

Securities issued that are deemed to be investment grade by relevant rating agencies, as defined, are deemed not to constitute credit enhancement if there is already sufficient credit enhancement within the terms of this section.

See 9.6.1

- a) The limitations on the ability to hold such securities are detailed below.

See s11

- b) The limitations on the ability to trade such securities are detailed below.

9.4 Detailed policy

6 Any bank providing credit enhancement should ensure that:

- (a) the facility is limited in amount and duration;
- (b) there is no recourse to the bank beyond the fixed contractual obligations provided for in the facility;
- (c) the SPV and/or investors in a bond issue have the clear right to select an alternative party to provide the facility;
- (d) the facility is documented separately from any other facility provided by the bank;
- (e) the transaction should be undertaken at the initiation of the scheme;
- a) However, in the event of a scheme having subsequent tranches of assets being placed in to the SPV, within the terms set out above, the credit enhancement can increase at that time, if detailed in the offering circular. The new credit enhancement should not be used to provide, in a disguised way, enhancement for earlier tranches of assets and schemes seeking to be structured in this way should be discussed in advance with the FSA.

- (f) the details of the facility should be disclosed in any offering circular or other appropriate documentation; and
- (g) payment of any fee or other income for the facility is not further subordinated, or subject to deferral or waiver, beyond what is already explicitly provided for in the applicable order of priority and other payment entitlement provisions.

See s9.6 & 9.7

7

If the above conditions are met, the relevant capital treatment that should be applied is detailed below.

9.5 Definitions of first loss & second loss credit enhancement

9.5.1 General

8

The distinction between the types, *first loss* and *second loss*, is drawn to allow for an understanding of the underlying structure, and for the other implications resulting from this.

9.5.2 Definition of first loss credit enhancement

9

A *first loss facility* represents the first level of financial support to a SPV.

- a) A first loss facility bears, in effect, all of or the bulk of the risk associated with the assets held by a SPV, as part of the process in bringing the paper issued by the SPV to investment grade. Hence the high capital cost.
- b) A payment by a bank to provide cover against losses incurred by an SPV (e.g. to fund a reserve account) or the sale of assets to an SPV for below their book value in the bank's books (where not written down or off against profits) is regarded as a *first-loss facility*.
- c) Capital is not required for *spread accounts* where the funds are held in the SPV.
- d) Additional capital is not required for *over collateralisation* beyond the assets that are effectively written off in providing the margin of assets.

9.5.3 Definition of second loss credit enhancement

10

A *second-loss facility* represents a credit enhancement providing a second (or subsequent) tier of protection to an SPV against potential loss. The share of risk of a second loss facility depends on the coverage provided by any first loss facility. In order to limit the possibility of the second loss facility carrying a disproportionate

level of risk, a credit enhancement facility is deemed a second loss facility only if:

- (a) it enjoys the benefit of protection from a substantial first loss facility; and
- (b) it can only be drawn after the first loss facility has been exhausted.
 - a) For the purposes of this section, a first-loss facility will be considered substantial where it covers some multiple of historic losses or worst case losses estimated by simulation or other techniques.
 - b) A bank providing a second loss facility needs to assess the adequacy of the first loss facility on an arm's length basis in accordance with its normal credit policies. A review of first loss facilities might refer to such factors as:
 - i) the class and quality of the assets held in the SPV;
 - ii) the history of default rates on the assets;
 - iii) the output of any statistical models used by banks to assess expected default rates on the assets; the types of activity permitted the SPV (i.e. whether the risk underlying the credit enhancement facilities extends beyond the asset held);
 - iv) the quality of the parties providing the first loss facility; and
 - v) the opinions or rating letters provided by reputable third parties, such as rating agencies, regarding the adequacy of the first loss protection.
 - c) Where a second loss facility provided by a bank would substitute for a first loss facility provided by another party, in the event of that party failing to meet its obligations, the bank should treat the facility it provides as equivalent to a first loss facility.

9.6 Credit enhancements supplied by an originator

9.6.1 *Restrictions upon an originator*

11 An originator should only make a one-off contribution to enhance the credit-worthiness of a vehicle. Any transactions should be funded at the initiation of the scheme and disclosed in the offering circular.

- a) The agent or originator may lend on a long-term subordinated basis to the vehicle only if the loan is made at the outset of the scheme and is repayable only following winding up of the scheme.

See s11

12 An originator may not hold any of the securities issued by the SPV unless it has received a waiver to deal, as detailed below.

- a) Any holdings in excess of the agreed dealing limits will be deducted from capital.

9.6.2 *Treatment for first loss*

13 The originating bank may make a choice of either deducting the amount of the credit enhancement from capital or including the assets within their risk weighted asset ratio under normal rules as if there had been no securitisation. The choice should be made at the outset and maintained for the duration of the credit enhancement. Where the credit enhancement is permanently reduced through the remittance of funds to the originator, and without recourse to the originator thereafter, the amount deducted from capital can be reduced accordingly.

9.6.3 *Treatment for second loss*

14 An originator providing a second loss facility (in an acceptable form) should deduct the amount of the facility from capital. Where the credit enhancement is permanently reduced through the remittance of funds to the originator, and without recourse to the originator thereafter, the amount deducted from capital can be reduced accordingly.

9.7 **Credit enhancements supplied by a sponsor or repackager**

9.7.1 *General*

15 Due to the complexity of conduit and repackaging schemes, the definitions of first and second loss facilities may be difficult to apply. In such circumstances, the FSA should be consulted.

- a) For the purposes of this section, the holding of sub-investment grade paper will be deemed to constitute credit enhancement unless there is already sufficient enhancement within the scheme.

9.7.2 *Treatment for first loss*

16 First loss credit enhancement facilities provided by a sponsor or repackager should be deducted from capital. Where the credit enhancement is permanently reduced through the remittance of

funds to the sponsor or repackager, and without recourse to the sponsor or repackager thereafter, the amount deducted from capital can be reduced accordingly.

9.7.3 *Treatment for second loss*

17 A bank acting as sponsor or repackager which provides a second loss facility, as defined above, may weight the facility as normal, provided that the extent of the bank's involvement is fully and properly explained in any offering circular for the scheme, or is otherwise notified to investors, and it is made unequivocally clear to investors:

- (a) that the bank's responsibilities do not go beyond that which is provided for in the second loss facility in question (as explained in the offering circular); and
- (b) the bank will not support losses beyond the requirements of the second loss facility or generally stand behind the scheme.

10 SECONDARY ROLES: LIQUIDITY FACILITIES

10.1 General

1 *Liquidity facilities* enable SPVs to assure investors of timely payments. These include smoothing timing differences in the payment of interest and principal on pooled assets and ensuring payments to investors in the event of market disruptions. Such facilities can be particularly important where SPVs hold long term assets funded by the issuance of short-term securities.

- a) Ratings agencies require banks to provide liquidity facilities in order to make the paper issued in securitisations more attractive to investors.
- b) The Commercial Paper (CP) markets display some degree of volatility. For example, in the United States, this may cause the \$CP rates to diverge from \$LIBOR from time to time, particularly over the year-end, quarter ends and US tax payment days. SPVs are sometimes therefore set up in such a way that they are not tied to an obligation to fund assets for a full quarter on specific days each quarter so as to avoid such difficult days. A liquidity facility may be key to the flexibility an SPV needs in such circumstances.

10.2 Detailed Policy

2 To guard against the possibility of a facility functioning as a form of credit enhancement, a liquidity facility when provided should satisfy the following conditions:

- (a) the facility is provided on an arm's length basis and is subject to the bank's normal credit review and approval processes;
- (b) the facility may be reduced or terminated should a specified event relating to a deterioration in asset quality occur, e.g. the facility should not be available to be utilised if the assets of the SPV have deteriorated in quality to the extent there is no longer a sufficient level of credit enhancement to cover the amount of any new or existing drawdowns under the facility.
- (c) the facility should be conducted on market terms and conditions;
- (d) the facility is limited in amount and duration;
- (e) there is no recourse to the bank beyond the fixed contractual obligations provided for in the facility;

- (f) the SPV and/or the note trustee representing the investors have the clear right to select an alternative party to provide the facility;
- (g) the facility is documented separately from any other facility provided by the bank;
- (h) payment of any fee or other income for the facility is not further subordinated, or subject to deferral or waiver, beyond what is already explicitly provided for in the applicable order of priority and other payment entitlement provisions;
- (i) the facility may not be drawn for the purposes of credit support;
- (j) the documentation clearly defines the circumstances under which the facility may be drawn and prohibits drawing in any other circumstances;
- (k) the facility will provide for repayment of advances within a reasonable time period;
- (l) funding is provided to (or via) the SPV and not directly to investors;
- (m) proceeds of drawings under the facility cannot be used to provide permanent revolving funding, or be for the express purpose of purchasing underlying assets held by an SPV (although it is permissible for a liquidity facility to be structured as an arrangement in which underlying assets held by the SPV are purchased by the liquidity provider, provided that the assets in question are investment grade);
- (n) funding cannot be used to cover losses recorded by the SPV; and
- (o) drawings under the facility are not subordinated to the interests of investors, except that drawings may be subordinated to other liquidity facilities if a tiered liquidity facilities are used in a scheme. Such subordination should be clearly set out in the offering circular or other appropriate documentation.

3 Failure to satisfy these conditions will cause the facility to be deemed to be serving the economic purpose of a credit enhancement facility and therefore be treated in the same way as a credit enhancement for capital purposes.

- a) The facility may be deemed to be a first or a second loss facility, as appropriate.

10.3 Restrictions on originators

See s6.3

4 An originator should not provide a liquidity facility as it is deemed to be funding. If it does, it is deemed not to have achieved a clean break with the assets, which will then be considered by the FSA as being on its balance sheet.

- a) The provision of a liquidity facility to cover very short-term timing differences may be considered acceptable. However, there should be no obligation on the bank to make the payment, the vehicle should have sufficient funding to meet any clawback claims and the structure should be covered in the scheme's documentation.
- b) Although originators may not provide a liquidity facility, the workings of the securitisation vehicle may still require one which may, therefore, be provided by a third party bank.

10.4 Restrictions upon sponsors and repackagers

10.4.1 *General*

See ch BC s4

5 A sponsor or repackager may provide a liquidity facility to a scheme. The facility will be calculated as 100% weighted asset drawn and 0% or 50% undrawn (in the normal way), provided that the extent of the bank's involvement is fully and properly explained in any offering circular for the scheme, or is otherwise notified to investors, and it is made unequivocally clear to investors:

- (a) that the bank's responsibilities do not go beyond that which is provided for in the liquidity facility in question (as explained in the offering circular); and
- (b) the bank will not support losses beyond the requirements of the liquidity facility or generally stand behind the scheme.

6 If these conditions are not met, the bank should treat the scheme as a fully consolidated subsidiary for capital adequacy purposes.

- a) If a bank acting as sponsor is seeking to use the concessionary treatment of section 3.2.2 paragraph 5, (as a partial originator in a multi-seller vehicle, providing a part of the liquidity facility) and fails the tests in this section, then any assets it originates will be considered as remaining on its balance sheet.

10.4.2 *Large Exposures*

7 Conduits can grow to considerable sizes and consequently a liquidity facility provided by a sponsor or repackager to such a conduit could potentially exceed the bank's large exposures capital base. A bank should only disaggregate facilities where the following general conditions are fulfilled:

- (a) The facilities are provided to separate legal entities;
- (b) The legal entities are not closely related counterparties for large exposure purposes;
 - a) The details regarding large exposures are explained in chapter LE.
- (c) The bank has systems and controls in place to monitor the assets within the conduit;
 - a) The need to aggregate the underlying assets involves the use of complex systems and controls. A bank should be able to satisfy the FSA that it is able to control the securitisation properly primarily at notification and through the section 166 process.
- (d) There are internal systems in place, that have undergone stress testing on mismatch limits, to monitor and/or manage the bank's liquidity out to at least six months; and
 - a) It is possible for CP conduits to grow to a significant size. Should there be a disruption to the CP market that requires the drawing of a facility, sizeable funds will be needed to meet the demand. The drawing of these funds may accelerate as each CP fund matures. The sponsor should be able to monitor its liquidity to ensure that it is able to cope with such an effect.
 - b) Conduits should manage their CP maturities so that they do not have significant amounts of CP maturing during any one day or week. If the liquidity lines' renewal dates are not concentrated the bank may be less exposed to market disruption as drawing will take place over a longer period of time.
- (e) The sponsor's capital planning takes account of possible drawings under the facilities i.e. that they are either able to sell the assets, sell other assets or raise the requisite capital. A sponsor should pre-notify the FSA as to how it will provide capital in the event of possible drawings.
 - a) If a CP disruption occurs it may result in the sponsor making a large loan or taking a large quantity of assets onto the balance sheet over a

See Ch LE s5.2

See s4.2

See s4.4

See s4.5

short period of time. A sponsor should plan how it will provide capital in the event that this occurs.

- 8 The FSA considers that it is appropriate for a bank to disaggregate facilities where the following specific conditions are fulfilled:
- (a) For an asset repurchase facility, the exposure to the obligor for each underlying asset held by each special purpose vehicle is aggregated for large exposures purposes with the bank's own exposures to that obligor; or
 - (b) For a liquidity backstop facility, a bank takes reasonable steps to aggregate, for large exposure purposes, exposures to the obligor of the underlying assets, that represents a significant proportion of the pool, with the bank's own exposure to that obligor.

See ch LE s9.2.7

- a) A bank should also take into account any originator, sectoral, country or regional concentrations when providing liquidity to an SPV.

See Ch LE s5.2

- b) A bank should not only aggregate the exposure to the obligors of the underlying assets across the SPVs but also any exposures to closely related counterparties across the SPVs.

10.4.3 *Bridging Loans*

- 9 A *bridging loan* is a loan made to a vehicle, prior to the issuance of the notes, to cover a mismatch in time between the date of purchase of the underlying assets and the date of issue of the securities.

See s3.2.1

- a) A sponsor or repackager should not use the practice in this section to establish a remote origination scheme.

- 10 The FSA considers that it is acceptable for a sponsor or repackager to provide a bridging loan to an SPV subject to usual capital and large exposures requirements where the following conditions are met:

- (a) The loan is provided at market prices with no preference of any kind being shown in the terms and conditions;
- (b) The sponsor or repackager has the senior secured status; and
- (c) The term of the loan is limited to three months or less.
 - a) The maturity of the underlying assets should extend considerably beyond this period.

11 A sponsor or repackager providing a bridging loan for greater than three months should treat the assets as on the balance sheet until the transaction is completed.

See s3.2.1

- a) Assets that are regarded as being on balance sheet for the purposes of this section will be regarded as originated when securitised.

11 SECONDARY ROLES: DEALING & UNDERWRITING

11.1 Dealing & underwriting by an originator

1 An originator may underwrite the securities issued by the SPV. The assets will not be regarded as being off balance sheet until 90% of the total issue has been sold to a third party.

- a) The FSA may vary the minimum level of assets that have to be sold to a third party before off balance sheet treatment is considered appropriate.

See s9.6.1

2 Once the assets have been removed from the balance sheet, any holdings in excess of agreed dealing limits should be deducted from capital. The bank should fully comply with the policy on holding the assets, as detailed above, within one month.

3 An originator should not deal in the securities issued by the SPV unless it has discussed its intention with the FSA. The FSA considers that a bank's deals should be limited. Appropriate limits are likely to represent only a small fraction of the total securities issued.

- a) Limit structures should generally be subject to limits specific to individual tiers of securities issued. Limits are likely to be more constraining for trading in securities other than the most senior debt.

See s6.2

- b) It is an accepted role of an originating bank to promote an orderly market in the securities issued by the SPV, but not to the extent that that originator is or appears to be able to support the issue, which would be in contravention of the policy above.

See s9 and Ch
TI 47G

- c) The ability to deal in securities is limited to securities deemed to be of investment grade by a relevant rating agency as defined. Securities below investment grade fall within the definition of as credit enhancement as described below.

- d) The policy is not intended to restrict the ability of an SPV to buy back securities it has issued at or below par.

11.2 Dealing & underwriting by a sponsor or repackager

See ch TU

4 A sponsor or repackager may act as underwriter for the securities issued by the SPV subject to the policy in chapter TU.

See s9

- a) At the end of the underwriting concession period any holdings of sub-investment grade paper will be deemed to constitute credit enhancement unless there is already sufficient enhancement within the scheme.

- b) Securities issued that are deemed to be investment grade by relevant rating agencies are deemed not to constitute credit enhancement, provided that there is already sufficient credit enhancement.

5 A sponsor or repackager may act as dealer in the secondary market in the securities issued by the SPV, provided that there is always at least two other third party dealers.

- a) This may be waived where a scheme is small and having multiple dealers is not practicable. However, given that in such schemes, there may more reason for concerns as to liquidity, the sponsor should be able to demonstrate that it is creating an orderly market and not supporting the issue. Banks wishing to follow this approach should obtain the prior approval of the FSA.

MISMATCH LIQUIDITY

1 INTRODUCTION

1.1 Legal sources

1 There are a number of legal requirements arising out of the Act relating to the need to maintain adequate liquidity. These are:

See COND

- (a) The Threshold Conditions require a firm to have adequate resources (which covers inter alia adequate liquidity).
- (b) Principle 3 of the Principles for Businesses requires that a firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems. Principle 4 requires a firm to maintain adequate financial resources, including liquidity; and

See ch GN
s3

The rules requiring a bank to maintain adequate liquidity appropriate to the nature and scale of its business, and to set out its policy on liquidity risk management in a written statement.

See ch GN s3

- (c) All banks authorised for the purposes of the Act are required to meet these requirements except EEA banks. An EEA bank with a branch in the UK is subject to rule 3.3.15 which requires its UK branch to maintain adequate liquidity.

2 As part of the phased implementation of the Integrated Prudential Sourcebook (*PRU*), provisions in *PRU* 1.2 and *PRU* 5.1 relating to a firm's systems and controls for liquidity risk have been introduced, superseding – and leading to the revocation or amendment of – material formerly in this chapter. This chapter and chapter LS sets out the FSA's framework for monitoring the liquidity of banks authorised for the purposes of the Act to determine whether the above requirements are met.

See ch LS

- a) Certain banks are subject to a different, stock liquidity, approach. For details of this approach see the chapter on stock liquidity.

3 The Banking Consolidation Directive (formerly the Second Banking Co-ordination Directive) requires the FSA as host supervisor to monitor, in co-operation with the relevant home supervisor, the liquidity of UK branches of credit institutions incorporated in other EEA countries.

1.2 Application

- 4 This chapter applies to all banks authorised for the purposes of the Act except EEA banks that do not have a branch in the UK. In respect to EEA banks with a branch in the UK the chapter only applies in relation to the liquidity of those branches and not the bank as a whole.
- a) The present reporting form (LR), is completed on a solo basis, including any overseas branches. Where a bank already reports for capital and large exposures purposes on a solo-consolidated basis with the agreement of the supervisor, the Form LR should be submitted on a solo-consolidated basis rather than a solo basis.
 - i) Definitions of solo supervision and solo-consolidated supervision can be found elsewhere in the IPRU (BANK).

1.3 How this chapter is organised

- 5 Section 2 outlines the rationale for monitoring liquidity, and for the FSA's approach to it. Section 3 summarises the main features of the liquidity policy which banks must or should follow.

Section 4 describes the framework by which the FSA monitors banks' liquidity, while Section 5 details the components of the time bands in the mismatch ladder. Section 6 details the treatment of marketable assets and Section 7 covers the materiality treatment and behavioural adjustments. Section 8 outlines the factors considered when setting mismatch guidelines and Section 9 details how the FSA monitors liquidity using the mismatch approach. Section 10 covers liquidity policy statements. Section 11 is an appendix detailing settlement periods for securities in different countries.

2 RATIONALE

2.1 What is liquidity?

1 An important element of banking is maturity transformation, e.g. taking short-term deposits to make comparatively long-term loans. As a result of this, a bank is exposed to the risk that depositors' demands for repayment might outstrip its ability to transform assets into cash.

2 A bank should be able to meet its obligations as they fall due. A bank should hold sufficient liquidity to ensure that it can be considered to be conducting its business in a prudent manner. A bank may have various kinds of obligations, including:

- (a) requirements to repay deposits;
- (b) requirements to provide committed funds; and
- (c) requirements to make other payments such as cash flows in respect of off balance sheet instruments, interest payments and other expenses.

3 A bank can meet such obligations in a number of ways:

- (a) by holding sufficient immediately available cash or marketable assets;
 - a) However the marketability of the assets, and the speed with and quantity in which they can be sold at close to prevailing market values, varies. Furthermore, there is typically a settlement delay between the sale (or repo) of an asset and the receipt of cash, and there may also be a currency mismatch.
 - b) For details on marketable assets, see below.
- (b) by securing an appropriate matching future profile of cash flows from maturing assets and liabilities; and
 - a) The effectiveness of this method may be restricted if there are shortfalls in practice if borrowers are unable (or unwilling) to repay or if depositors look for early repayment.
- (c) by further borrowing.

- a) A bank's ability to raise deposits (or other funding), and the cost at which these deposits can be raised, depends on its standing in the market and on the general liquidity situation at the time.

4 Banks are reluctant to hold a large stock of immediately available cash or marketable assets, as these generate no return (in the case of cash) or a comparatively low yield (in the case of easily marketable assets, e.g. government bonds). They therefore seek to depend on future cash flows and their ability to raise funds in the market as the need arises.

- a) However this is not always a guarantee of liquidity as the interbank market can be volatile and is highly sensitive to an individual bank's reputation.
- b) A distinction should be drawn between such "crisis funding" and banks' use of agreed lines with other banks to fund the majority of their business. In the second case, banks draw on their agreed lines as and when required on a day to day basis. Wholesale counterparties may be unwilling to provide funds committed under standby arrangements in a crisis.
- c) For details of the treatment of standby lines in the maturity ladder, see the section on the components of the maturity ladder.

See s5.1

5 It is therefore essential that a bank has ample funding capacity, which depends on a variety of factors including strong liquidity management, market perception, earnings, and asset quality.

- a) It is also prudent for a bank to maintain a mix of sources of liquidity. Some of these should be immediately available so that the bank is not exposed to suddenly rising costs from liquifying assets or bidding for deposits.

2.2 How the FSA monitors liquidity

6 The responsibility for ensuring a bank can meet its obligations as they fall due rests with the bank's own management. The bank should take account of its characteristics and position within the banking system in determining a prudent liquidity policy.

7 A bank should be able to satisfy the FSA on an on-going basis that it has a prudent liquidity policy, and adequate management systems in place to ensure that the policy is adhered to.

- a) This is checked during the course of normal supervision through prudential discussions and the Form LR. These mechanisms are

supplemented by review team visits, treasury visits and reports by accountants or other persons with relevant professional skills commissioned under the Act.

8 In the majority of cases the FSA monitors a bank's liquidity position through the maturity mismatch approach.

See ch LS

- a) The sterling liquidity of some banks, principally those with large retail deposits in the form of current accounts is monitored by a stock approach.

3 MAIN FEATURES OF THE LIQUIDITY POLICY

This section summarises the main features of the liquidity policy. It does not cover every feature and should be read in conjunction with the sections that follow.

3.1 Main prudential policies applying to banks

- See ch GN s3 1 A bank must maintain adequate liquidity at all times.
- See s10 2 A bank must formulate a statement of its liquidity management policy. It should agree with the FSA standards for adherence to this policy, i.e. mismatch guidelines and the procedures for the notification of breaches of those guidelines.
- See s9 3 A bank should have adequate systems for monitoring liquidity on a daily basis.
- See s9.3 4 A bank should notify the FSA of any breaches of its liquidity mismatch guidelines as soon as they occur.

3.2 A bank's reporting obligations

- See s9.2
See Supervision
Manual,
Chapter 16 5 A bank must report its liquidity position quarterly on the Form LR or more frequently as required by the FSA.

4 THE FRAMEWORK FOR MEASURING LIQUIDITY

For those banks using the mismatch approach, the FSA agrees guidelines for the maximum size of liquidity mismatches it considers appropriate. This section and the following two outline the framework within which mismatches are measured and guidelines agreed. This section explains the overall framework and how it is applied to overseas banks. Section 5 gives detail on how assets and liabilities are placed into a ladder. Section 6 details the treatment of marketable assets and Section 7 covers the policy on materiality concessions and behavioural adjustments. Section 8 outlines the factors considered in setting guidelines.

4.1 The maturity mismatch approach

- 1 The FSA's mismatch approach measures a bank's liquidity by assessing the *mismatch* between its inflows (assets) and outflows (liabilities) within different time bands on a *maturity ladder*.
 - a) The extent of the difference between the maturities of inflows (assets) and outflows (liabilities) is termed a *mismatch*.
 - b) In the *maturity ladder*, inflows (assets) and outflows (liabilities) are slotted into time bands. Maturity is determined on a worst-case view, i.e. inflows (assets) are put in at their latest maturity and outflows (liabilities) at their earliest maturity.
 - i) This approach is adopted to assess a bank's liquidity when its funding sources are unwilling to lend and its depositors withdraw their money.
 - c) The information provided in the maturity ladder is assessed in the cumulative time bands of sight - 8 days, sight - 1 month, sight - 3 months, etc..
 - d) The components of the time bands are covered below.
- 2 A net mismatch figure is obtained by subtracting outflows (liabilities) from inflows (assets) in each time band. Mismatches are then measured on a net cumulative basis.
 - a) A net overall cumulative mismatch figure is derived by accumulating the net positions in each successive time band.
- 3 The FSA normally assesses a bank's liquidity position by means of the net cumulative mismatch position expressed as a percentage of total deposit liabilities.

See s5

- a) Total deposit liabilities (the total of the deposits held by the bank) are used because they represent a relatively stable approximation of the total external (or withdrawable) funding of the bank.

4 The FSA sets recommended guidelines for the maximum percentage for net cumulative mismatches as a percentage of total deposits. These are known as the *mismatch guidelines*.

- a) These are intended to prevent banks operating with too large a negative mismatch, and therefore running an excessive risk of not being able to raise sufficient funds to cover the mismatch at short notice.

5 The FSA normally sets guidelines for maximum mismatches only for the time bands of sight - 8 days and sight - 1 month.

- a) Mismatch guidelines are not usually set for the longer time bands, except in exceptional circumstances, as over a longer time period, in most cases, banks will have a greater opportunity to raise funds, and therefore a larger negative mismatch is not such a concern.

4.2 'Global concession' policy

See s1

6 The FSA is required to supervise the liquidity of all banks operating in the United Kingdom except in the case of EEA banks it is only required to supervise the liquidity of their UK branches.

7 UK banks are expected to be able to stand alone, and therefore should normally monitor and manage their own liquidity separately from the liquidity of other institutions in the group. However, UK branches of overseas banks cannot be treated independently of their head offices: they are part of a wider legal entity and their liquidity inevitably reflects this fact.

As a result, the liquidity of the UK branch of an overseas banks sometimes managed from its head office on an integrated basis. Where this is the case, and providing certain safeguards are met, the FSA is willing to agree to a *global concession*.

- a) A global policy may be agreed for an EEA or an overseas incorporated bank which has a UK branch.

8 The following conditions should be met before the FSA will agree that a global policy is appropriate for a UK branch of an overseas bank:

- (a) The FSA should be provided with a description of the arrangements for supervision of liquidity implemented by the home supervisor;
 - a) The FSA will need to be satisfied, in particular, that the scope of liquidity supervision of the home supervisor encompasses the whole bank (i.e. including overseas branches); and focuses on that bank's short-term liquidity position.
- (b) The branch should be fully integrated with its head office for liquidity management purposes;
 - a) There should be daily provision of information to head office, and the branch should have only limited autonomy: it should not be able to deliver a 'surprise' to its head office.
- (c) The head office should assure the FSA in writing that liquidity is available at all times to the branch if needed, and that information on whole bank liquidity will be made available to the FSA in the event of a crisis;
- (d) There should be no known constraints on the provision of liquidity by head office to the UK branch;
 - a) The FSA monitors this condition on an on-going basis, taking into consideration, among others, the following factors:
 - i) the ability and willingness of the head office to support the branch;
 - ii) the question (where relevant) of differing time zones; and
 - iii) the likelihood of a country imposing a moratorium on payments abroad.
- (e) The home supervisor should be aware of, and have no objection to, both the dependence of the branch on the head office for liquidity and the assurance given that liquidity will be available;
- (f) The home supervisor should undertake to inform the FSA of any material or persistent breaches by the bank of its liquidity rules, or risks that such breaches are imminent; and
- (g) The FSA should gain annual confirmation from the home supervisor that it remains satisfied with the arrangements for liquidity supervision and their operation.

- 9 Where a global policy is agreed the FSA does not normally require a bank to complete the Form LR. However, the FSA will request information on a branch's liquidity position in an appropriate format should the need arise.

5 INCLUDING ASSETS AND LIABILITIES IN THE TIME BANDS

This section details how inflows (assets) and outflows (liabilities) are included in the various time bands of the maturity ladder.

5.1 Components of the cashflow and maturity analysis ladder

5.1.1 *General*

- 1 The timebands in the maturity ladder are divided into two sections. The time periods out to 6 months are to be reported on the Form LR on a cashflow basis and those over 6 months to 5 years should be reported on the basis of residual maturities of assets and liabilities.
- 2 For a transitional period between 31 May 1999 and 30 September 2001, a bank should report on a cashflow basis for the time periods out to at least 1 month. At the end of this transitional period a bank should report on a cashflow basis out to 6 months. Periods over 6 months should always be reported on a maturity analysis basis. During the transitional period a bank may decide which periods they report on a cashflow basis, subject to the one month minimum and inform the FSA via its reporting on the Form LR.
- 3 The decision a bank takes at the start of the transitional period on which periods it reports on a cashflow basis is not binding for the rest of the transitional period. A bank may extend the time periods it reports on a cashflow basis throughout the transitional period; no separate notification is required. However, once a bank has reported a time period on a cashflow basis it should not change back to reporting that time period on a maturity analysis basis.
 - a) Timebands reported on a maturity analysis basis should only include payments or receipts of principal amounts. Certain transactions, for example interest rate swaps, are based on notional amounts. Where this is the case the flows associated with the transaction should only be reported in the cashflow timebands.
 - b) Cashflow reporting refers to the movement of money in or out of the banks. A bank should report the cashflows which assets or liabilities give rise to and not the size of the assets or liabilities themselves. Items such as salaries, fees and interest payments should be included in cashflow reporting.

5.1.2 *Outflows (liabilities)*

4 Outflows (liabilities) should be included in the maturity ladder according to their earliest contractual maturity.

See s7.2

- a) Some transactions do not behave according to their contractual maturity. Where this is the case, the FSA is willing, in principle, to agree to a bank reporting the cashflows including certain behavioural adjustments.

5 Specific points to note are:

- (a) client money accounts: a bank is required specifically to report information on client accounts. Under the Act the FSA may require client money to be returned if a bank is perceived to be in difficulties. Therefore the FSA will assume and a bank should assume that in adverse circumstances money in the client accounts of FSA authorised firms may be withdrawn with minimum notice; and
- (b) Known firm commitments to make funds available on a particular date are to be included in the appropriate time band at their full value.
 - a) Commitments which are not due to be met on a particular date, e.g. undrawn overdraft and other facilities, are unlikely to have to be met in full and cannot be treated precisely. The FSA requires the inclusion of only a proportion of such outstanding commitments in the sight to eight day timeband, and the remainder are excluded. Where possible, the proportion for each bank is determined taking into account past and forecast draw-down trends.
 - i) Where such an analysis is not possible the FSA allows the inclusion of 15% of outstanding commitments.

6 *Contingent liabilities* are not included in the maturity ladder, unless there is a likelihood that the conditions necessary to trigger them will be fulfilled.

- a) A *contingent liability* is a liability only triggered by the occurrence of an uncertain event, e.g. the liability of a guarantor should the principal debtor not repay.

5.1.3 *Inflows (Assets)*

7 Apart from the exceptions set out below, inflows (assets) are generally included in the maturity ladder according to their latest contractual maturity. The exceptions are:

(a) inflows (assets) only nominally repayable on demand (e.g. overdrafts);

See s7.2

a) Although these inflows may generate some regular cashflow the cashflow cannot be measured precisely. These inflows may therefore be more appropriately treated by reporting a behaviourally adjusted figure which may require the bank to report these inflows according to their historical maturity pattern.

(b) undrawn committed standby facilities provided by other banks; and

a) These are treated as a sight asset (giving due regard to their remaining term and the possibility that they may not be renewed).

b) Stand-by facilities with an unknown draw-down date received by a bank from other banks are treated in the same way as commitments to lend at some uncertain future date, i.e. a percentage (100%) are included at sight.

(c) marketable assets.

a) A bank should show these assets as a sight asset (at a discount) rather than according to final maturity.

See s6

b) For the detail on the treatment of marketable assets see below.

8 Assets known to be of doubtful value are excluded from the maturity ladder and treated on a case by case basis.

9 Assets which have been pledged as *collateral* and are therefore no longer available to a bank to meet obligations, should be excluded from the maturity ladder as they are no longer available to provide the bank with liquidity.

a) *Collateral* is an asset that a borrower leaves with a lender as security for a loan.

5.1.4 *Retail/wholesale split*

10 For liquidity monitoring purposes only, a bank should classify its cashflows as being either retail or wholesale. A bank should

decide how it is going to split its cashflows between retail and wholesale to achieve this split and agree its proposed split with its supervisor before entering the detail in its liquidity policy statement.

- a) The FSA wishes to ensure that the split proposed by a bank is reasonable and appropriate to the nature and size of the business of that bank.

11 A bank may decide that it does not wish to agree a retail/wholesale split with its supervisor, because the systems work required outweighs the advantages. In this case, all the cashflows should be entered as wholesale.

- a) The FSA takes the balance of the retail/wholesale split into account when setting a bank's mismatch guidelines. A bank whose cashflows are heavily dependent on the wholesale markets may be set a tighter mismatch than one with cashflows from the retail sector. A bank which is heavily dependant on retail business may be set less tight mismatch guidelines, since these cashflows tend to be more "sticky" in nature.
- b) Where a bank is uncertain how to classify a cashflow, the FSA takes a worst case view and assumes that all a bank's cashflows are wholesale. In this way all the cashflows are entered at their contractual maturity and the bank is set the most conservative mismatch. A bank wishing to enter these cashflows as retail should discuss this with its supervisor and provide relevant data to support its case.
- c) Cashflows which are reported as wholesale transactions will not normally be eligible for a behavioural adjustment.

12 Depending on the nature and size of their business, different banks may choose to classify the same transaction differently.

13 A bank will have its own means of classifying cashflows, but may also wish to consider the following (which should be considered together):

- Size, both in absolute terms and in relation to the business as a whole; larger amounts are more likely to be classified as wholesale; small amounts will probably be retail.
- Volatility. Wholesale cashflows are likely to be highly volatile whereas retail cashflows have a low volatility.

- Type of business relationship. Retail customers tend to develop long term relationships with their bank and use one bank for all their banking needs. Wholesale counterparties will generally tend to work on a transactional basis with a number of banks.

14 The detail of the retail/wholesale split should be entered in a bank's liquidity policy statement. The split should be reviewed by the bank and the FSA as part of the annual review of the liquidity policy statement.

6 STOCK OF MARKETABLE ASSETS

This section details the treatment of marketable assets.

6.1 General

See ch LS

1 Except for a sterling stock liquidity bank, the FSA does not consider that a bank needs to hold a stock of liquid (or marketable) assets. It is, however, prudent for a bank which has substantial uncovered liabilities to hold some of its assets in a liquid or near-liquid form.

- a) Such assets may be held both as part of the day-to-day liquidity management and to “buy time” in the event of a disruption to normal cash flows.

See s10

2 A bank’s liquidity policy statement should make clear the contribution which a stock of liquid assets is expected to make to a bank’s management of its liquidity.

6.2 Assessing the role of a bank’s stock of marketable assets

3 In assessing whether marketable assets may be included as such for liquidity reporting to the FSA, a bank should consider the following:

- (a) access to central bank encashment facilities (i.e. whether a bank’s central bank will trade such assets in its open market operations);
 - a) The highest quality liquid assets are those which can be offered for discount at a central bank although even here issues of potential marketability and volatility may be relevant. Liquid assets need to be composed mainly of this type of instrument, although in some circumstances other, less high quality instruments, may also be discounted (e.g. high-grade corporate bonds, and in some circumstances Brady bonds).
- (b) depth of market;
 - a) It is essential that a bank can find a ready buyer when it seeks to realise an asset for cash. Therefore tradable securities for which only a limited market exists are of little value as liquid assets, and should be included at maturity and not discounted to sight.

See s11

- b) Allowance should also be made for factors such as settlement delay.

- (c) likelihood and extent of forced-sale loss;
 - a) Generally, the higher the quality of the asset, the lower is likely to be the loss faced by a bank in the event of a forced sale.
- (d) the proportion of a debt issue that a bank holds; and
 - a) A bank that holds all, or the greater part, of a debt issue will find it difficult to sell its holding without causing the price of the debt to fall.
- (e) Exchange rate risk.
 - a) A bank which holds liquid assets denominated in currencies which differ from those of its liabilities may be faced with foreign exchange risk when seeking to realise these assets (i.e. the value of the asset may diminish, leaving the liabilities only partly covered).

6.3 Inclusion of marketable assets in the maturity ladder

6.3.1 General

- 4 Assets considered to be readily marketable are included in the maturity ladder in the sight - 8 days time band, generally at a discount to their recorded value.
- a) Such assets may be included in the 8 days - 1 month time band in the light of the settlement period.
- 5 The minimum criteria which should be fulfilled if an asset is to be considered *marketable* are that:
- prices are regularly quoted for the asset;
 - the asset is regularly traded;
 - the asset may be readily sold, including by repo, either on an exchange, or in a deep and liquid market for payment in cash; and
 - settlement is according to a prescribed timetable, rather than a negotiated timetable.
- a) The treatment of marketable assets takes account of the extent to which they can be sold for cash quickly (or used as security for borrowing), incurring little or no cost penalty; and of any credit or investment risks which may make their potential value less predictable.

- b) It is important that the market for the asset is sufficiently deep to ensure a stable demand for it. A key factor in this is the willingness of the central bank to use the asset in its normal market operations.
- c) The FSA may vary the discounts to reflect the conditions of a particular market or institution.

6 Securities held as a result of reverse repos, or securities which form part of a hedged transaction or synthetic asset (e.g. bonds attached to an interest rate swap), may be included in a portfolio of discountable assets if such assets are marketable (whether in isolation of their attached swap or as a package).

- a) Marketable assets should be reported at a discount in the sight - 8 days time band. Banks should note that the marketability of some assets may change both significantly and quickly. It is therefore important that banks review the marketability of assets and the risk to that marketability regularly.
- b) Although a bank selling such holdings may face market risk (e.g. where they sell an asset in isolation of its attached swap), the liquidity framework is not designed to take this into account and, in calculating mismatches, the FSA does not treat such securities in a distinctive way unless there is a restriction on sale.

7 In general, a discount should be applied to an asset's market value. Assets should only be classified as marketable where an institution can readily obtain a market value and where it is marking assets to market on a regular basis.

- a) The latter is necessary because a bank is expected to assess its liquidity position using the FSA's methodology daily and the FSA reserves the right to request daily liquidity reporting.
- b) The need for regular marking to market varies according to the nature of the bank's portfolio of marketable assets.
 - i) Where the portfolio is primarily comprised of *Zone A* government stock, it is less crucial. But where a bank wishes to discount a portfolio containing a material proportion of other assets, it should mark to market at least weekly and preferably daily, or be moving towards the capacity to do so.
- c) In particular, equities and *Zone B* debt should not be included in a portfolio of marketable assets where the bank is unable to mark to market regularly.

See ch BC s3

- d) The definition of *Zone A/Zone B* countries is given in the chapter on credit risk in the banking book.

6.3.2 *The standard “matrix” approach*

- 8 The discount factors applied to different types of marketable assets in the FSA’s mismatch calculations are given in the table below:

Central government debt, local authority paper and eligible bank bills (and comparable assets from other Zone A countries)	Benchmark discount
Central government and central government guaranteed marketable securities with twelve or fewer months residual maturity, including treasury bills; and eligible local authority paper and eligible bank bills.	0%
Other central government, central government guaranteed and local authority marketable debt with five or fewer years residual maturity or at variable rates.	5%
Other central government, central government guaranteed and local authority marketable debt with over five years residual maturity.	10%
Other securities denominated in freely tradable currencies (usually Zone A)	
Non-government debt securities which are classified as <i>qualifying</i> by the FSA in its implementation of the CAD, and which have six or fewer months to residual maturity.	5%
Non-government debt securities which are classified as <i>qualifying</i> by the FSA in its implementation of the CAD, and which have five or fewer years residual maturity.	10%
Non-government debt securities which are classified as <i>qualifying</i> by the FSA in its implementation of the CAD, and which have more than five years residual maturity.	15%
Equities which (in the FSA’s implementation of the CAD) qualify for a specific risk weight no higher than 4%.	20%
Zone B central government debt	
Where such debt is actively traded. (However where such debt is denominated in local currency, it is usually deemed to be available to provide liquidity only in that currency).	20-40%

- See ch BCs3
- See ch BC s3
- a) *Eligible* means that the paper is accepted as discountable by the Bank of England in its open market operations.
 - b) *Qualifying* means qualifying for inclusion in the capital adequacy calculation at specific risk weightings.
 - c) The definition of *Zone A/Zone B* countries is given in the chapter on credit risk in the banking book.
 - d) The discount applied by the FSA to Zone B government debt varies between 20% and 40%, depending on the residual maturity of the asset.
 - e) Debt securities issued by Zone B central governments in Brady-bond swaps can be considered marketable in cases where they are actively traded in secondary markets and are marked to market on a regular basis.
 - i) The discount factor applied to Zone B Brady bonds is 40% when they are denominated in a Zone B currency and 20% when denominated in a Zone A currency.
 - ii) Brady bonds issued by Zone A governments are treated for liquidity purposes as Zone A government debt, and discounted as such.
 - f) Zone B non-government debt may also be considered to be marketable. Discounts should not be more favourable than those applied to Zone B government debt.
 - g) Zone B equities, which (in the FSA's implementation of the CAD) qualify for a specific risk weight (no higher than 4%), can be considered to be marketable and are discounted at 40%.

9 Where a bank holds securities issued by Zone B entities in local currency, the liquidity position of the bank in individual currencies should be considered.

- a) It should not be assumed that the proceeds of a sale of these assets can be readily and quickly converted into other currencies. As a result these assets are generally considered to provide liquidity only against liabilities in the same currency.
 - i) A bank's liquidity policy statement should comment on how liquidity in less freely convertible currencies is managed.

6.3.3 *Procedures for discounting assets*

10 In deciding whether a bank should enter assets on Part 1 of the Form LR the FSA takes account of the following factors:

- (a) the frequency of *marking to market* of assets;
 - a) *Marking to market* is the practice of re-valuing tradable assets according to current market prices. Assets should be marked to market at the bid price.
- (b) whether the proportion of a debt issue held by a bank is large enough that rapid disposal of it might significantly move the price against the bank;
- (c) the marketability of the assets;
- (d) the settlement periods pertaining to the assets being classed as marketable; and
 - a) Where a bank will be unable to receive cash for a significant proportion of assets within the sight - 8-day band, the FSA allows an offset against the 8-day - 1 month band only.
 - i) For details of settlement periods in different financial markets see the appendix.
- (e) a bank's ability to repo assets.

See s11

7 MATERIALITY AND BEHAVIOURAL ADJUSTMENTS

7.1 Materiality

7.1.1 *General*

1 The materiality concession is designed to make reporting easier for banks. The FSA is willing in principle to allow a bank to exclude certain cashflows from its liquidity reporting where they are not material in relation to the total. This is because the FSA recognises that the systems work involved in extracting this information may be greater than the benefit gained since these flows have a negligible impact on the total cashflows.

2 Not all banks may wish to take advantage of this concession. A bank which does not have complex systems and for which it is not overly burdensome to extract all cashflows from its systems may decide to report all the cashflows and not apply for a materiality concession.

3 A bank wishing to apply for this concession should not use it as a device to improve its compliance with its mismatch guidelines. The FSA will expect each bank to apply the same approach to both inflows and outflows and to present a balanced case to its supervisor.

7.1.2 *Assessing the proposal*

4 A bank should approach its supervisor with a proposal, which should include the following:

- (a) a list of items it proposes to exclude from reporting, e.g. utility bills or salaries.
- (b) details of how the individual items and the aggregate of the items roughly will affect the bank's mismatch.
- (c) past actuals detailing the amounts of the cashflows over time and a forecast of the level of the cashflows in the future. A bank should support these data with an analysis of the nature of the cashflows. This analysis should include an assessment of:
 - a) The predictability of the cashflow: a bank will probably not wish to exclude those cashflows which are totally predictable since they can be easily forecast and reported. Cashflows which are highly

unpredictable should be included in cashflow reporting since they are by nature subject to large movement;

- b) External factors affecting the reliability of forecasts: a bank should conduct a simple sensitivity analysis on the figures looking at other non statistical factors which impact on the level of the cashflow; and
- c) Distribution of the cashflow: evenly distributed cashflows have a less variable effect on the mismatch than flows of a similar size concentrated in one period. In addition, cashflows have a more material impact on the mismatch the closer they are to the reporting date.

5 The FSA will have an idea as to the extent of the impact on a bank's mismatch ratios it will allow, though this may vary between banks. In addition to examining the documents submitted by a bank as part of its proposal (paragraph 4 above) the FSA will consider the following factors:

- (a) a bank's previous record of accuracy for statistical and prudential reporting; and
 - a) This is important because it affects the degree to which the FSA can rely on the information it receives.
- (b) a bank's performance against its mismatch guidelines, including whether a bank frequently breaches its guidelines and whether a bank normally operates well within or close to its mismatch guidelines; and

7.1.3 *Reviewing the concession*

6 Details of any agreed materiality concession should be entered in the bank's liquidity policy statement. The basis on which the concession is granted should be reviewed by the FSA and the bank on an annual basis as part of a wider review of the liquidity policy statement.

7 A review primarily looks at how accurately the past actuals reflect the bank's original forecasts, whether there has been any change in the factors underlying the sensitivity of the cashflows and consequently whether any changes need to be made to the agreement.

8 A bank is also expected to monitor the level of the cashflows throughout the year and inform the FSA of any significant change

in either the level of the cashflow or the factors influencing the level of the cashflow.

7.2 Behavioural Adjustments

7.2.1 General

9 For supervisory monitoring, the FSA normally wishes to assess a bank's liquidity position on a "worst case" basis. Therefore, cash inflows are deemed to occur at their latest contractual maturity and cash outflows at their earliest contractual maturity.

10 The FSA recognises that the contractual maturities relating to certain (mainly retail) cashflows do not bear a close relationship to their actual behavioural characteristics. So a bank may apply to the FSA to report its cashflows on two bases: first on a "contractual" basis assuming cashflows behave according to their contractual maturity; and second, with certain "behavioural" assumptions, e.g. assuming current accounts will not all be withdrawn at sight, factored into the calculations.

- (a) The FSA may require a bank to report behaviourally adjusted figures for certain cashflows (e.g. for inflows arising from overdrafts granted by a bank), even if it normally reports only on a contractual basis.
- (b) Where a bank reports on a behaviourally adjusted basis, compliance with mismatch guidelines are monitored using the behaviourally adjusted data.
- (c) A bank reporting on a behaviourally adjusted basis should also report on a contractual basis.

7.2.2 Factors to be included in a proposal

11 Since a behavioural adjustment will in most cases make it easier for a bank to comply with its mismatch guidelines, a bank wishing to take advantage of behavioural adjustments needs to present a proposal to its supervisor. The FSA expects a proposal to contain the following elements, where relevant:

- (a) empirical evidence to support the assertion that certain cashflows behave according to a particular maturity profile;
 - a) This should include a run of historical data, covering previous economic cycles where appropriate and evidence proving the relevance of the data

- (b) some form of sensitivity analysis and any other factors affecting the behaviour of the cashflows;
- (c) breakdown of the cashflows. This is particularly relevant for a mortgage or credit card portfolio covering a number of products targeted at different sectors of the economy;
- (d) responsiveness and relevance of models;
- (e) general details of customers, e.g. where they come from, economic status, why they use a particular bank. Proposals should in general relate to the behaviour of the customer rather than the behaviour of the bank itself;
- (f) currency of denomination;
- (g) penalty clauses for early withdrawal of deposits or early redemption of loans; and
- (h) details of the home country's economic position.

12 Proposals, in general, should not be dependent upon a single factor such as a tax benefit since the behaviour may be radically altered if that factor is changed or withdrawn. A bank may still put forward a proposal on this basis, although the FSA will take a view on the long term durability and stability of the factor in question in assessing the proposal.

13 A bank which has recently moved into a new area of business may still apply for a behavioural adjustment using data relating to other banks already in the same market or that bank's experience in another country. The bank needs to provide evidence to prove that the two markets or banks are comparable and that the data provided is relevant to its case.

7.2.3 *Reviewing the adjustment*

See s10

14 Any behavioural adjustment agreed between a bank and the FSA should be recorded in the bank's liquidity policy statement. The basis on which the adjustment was granted, along with the behaviour of the cashflow against the predicted behaviour, should be reviewed by the bank and the FSA in conjunction with the overall annual liquidity policy statement review.

15 A bank should continuously monitor the behaviour of the cashflows that have been granted a behavioural adjustment throughout the year. A bank should immediately notify the FSA

of any material changes either in the figures themselves or the assumptions underlying the adjustment.

- 16 A change in the behaviour of a particular cashflow will act as a trigger for the FSA to review, but not necessarily withdraw, the behavioural adjustment. The FSA may decide instead to change the nature of the adjustment or take no action pending further information or investigation.

7.3 Committed facilities

7.3.1 *Undrawn committed facilities granted to a bank*

- 17 Undrawn committed facilities granted to a bank should not be included as inflows in the receiving bank's mismatch calculated on a contractual basis. However, the FSA may consider that a proportion of undrawn committed facilities granted to a bank should count towards the mismatch calculated on a behavioural basis.

- (a) It is the behaviourally calculated mismatch that should be maintained within the mismatch guidelines set by the FSA for sight to 8 days and sight to one month. This calculation includes all behavioural adjustments.

- 18 Unless a specific percentage has been agreed with a supervisor, a bank should not report any committed facilities granted to it in the behavioural mismatch calculation (mirroring the reporting in the contractual mismatch calculation).

- 19 The percentage of any committed facilities counted towards the behavioural mismatch should be agreed with a bank's supervisor on a case-by-case basis. The amount should normally be included in the demand timeband.

7.3.2 *Factors considered when agreeing the percentage of committed facilities to be included in the behavioral mismatch calculation*

- 20 A bank wishing to vary the percentages included as inflows in the behaviourally adjusted mismatch calculations will be expected to provide the FSA with copies of facility documentation.

- 21 In considering the percentage of a facility that it is appropriate to include at sight in the behavioural mismatch calculation the FSA takes into account any factors likely to influence a lender's ability or desire to allow drawings. In particular, the FSA considers the following (not listed in order of importance):

- (a) whether the facility is legally binding;
- (b) whether the facility is regularly used to fund a bank's business or whether it is a standby facility expected to be drawn down in an emergency;
 - a) The FSA takes the view that regularly used facilities are less likely to be withdrawn when most needed than emergency standby facilities. In the case of the latter request to draw can suggest to the lender that there is a problem. The FSA therefore takes a more favourable view of facilities used regularly when considering inclusion of such facilities in the behavioural mismatch calculation.
- (c) the identity of the provider of the facility;
- (d) the relationship between the provider of the facility and the bank; and
 - a) In the case of an intra-group facility, the FSA considers the strength of the group and its relevant constituent parts.
- (e) the existence of covenants in the facility documentation;
 - a) Covenanted funding is funding where specific covenants (and/or material adverse change clauses) included in the terms of the agreement specify events of default. If triggered, these covenants/material adverse change clauses prevent further drawings under the facility or, if already drawn, provide for its immediate repayment.
 - b) Covenants provide legitimate safeguards to lenders. However, the existence of covenants means that a facility may be withdrawn under certain circumstances and this, in turn, can threaten a bank's liquidity. The existence of covenants in a facility is likely to reduce the percentage of the facility allowed in the mismatch calculation.
 - c) A bank should provide the FSA with copies of facility documentation, declaring any covenants and confirming that it is not in default against these covenants. A bank's supervisor will examine the wording of covenants in the facility letters before deciding what percentage of the facility it is appropriate to include in the behavioural mismatch calculation.
 - i) The FSA may seek legal opinion on specific covenants.
 - ii) A bank should notify the FSA if at any time a covenant is breached.

- d) A bank's supervisor will consider the amount of headroom a bank has before a covenant is triggered (where there is adequate headroom above a covenant the FSA will be more inclined to consider appropriate a larger percentage of the facility concerned to count towards the mismatch).
 - e) Where a bank depends on a single standby (as opposed to several) that might be judged to be unavailable in a crisis, a supervisor may be inclined to consider appropriate a smaller percentage (if any) of the standby to count towards the behavioural mismatch calculation. However, this logic does not apply if there is a cross-default clause that may mean a breach of one facility may have a knock-on effect for other facilities.
- 22 Any agreements regarding the reporting of committed facilities in the behaviourally adjusted mismatch calculations should be recorded in a bank's liquidity policy statement. Like behavioural and materiality adjustments, agreements regarding committed facilities reporting will be reviewed by the FSA in conjunction with the overall annual liquidity policy statement review.
- (a) In the case of covenanted funding, banks may be asked to submit (as part of the FSA's annual review) a retrospective summary of the previous year's covenant breaches, or else confirm that there have been no such breaches.

7.3.3 *The drawn portion of a committed facility*

- 23 Once a bank has drawn down a committed facility, the amount drawn down should be treated for reporting purposes by the receiver as a potential outflow according to the final maturity date of the facility.
- (a) Supervisors may in certain circumstances request that a bank report the drawings made under committed facilities at the date of the maturity of the drawing (rather than the facility) or even at sight.

- 24 A drawing under a committed facility should usually be reported by the giver as a potential inflow at the end of the term of the facility.

7.3.4 *Undrawn committed facilities granted by a bank*

- 25 Undrawn committed facilities granted by a bank should be included as demand outflows in the providers' mismatch calculated on a contractual basis to the value of 15% of the total

undrawn committed facilities. The supervisor may consider that this percentage should be adjusted to anywhere between 0% and 100% in the behavioural mismatch calculation to reflect more sensitively the expected behaviour of the facility.

8 FACTORS CONSIDERED IN SETTING MISMATCH GUIDELINES

Mismatch guidelines are agreed for each bank for the sight - 8 days and sight - 1 month timebands. These are specific to the bank, taking account of a number of factors.

The factors considered are explained in this section. Some factors may not be relevant to all banks.

8.1 General factors

1 In setting mismatch guidelines, the following factors are considered in all cases:

- (a) the volatility, diversity and source of deposits;
 - a) The volatility of deposits may be more closely related to a bank's perceived creditworthiness, to its position in the banking system or to current economic or financial conditions, than to the precise term of the deposits.
 - b) Particular attention is paid to those deposits that are known to be sensitive to a bank's reputation and standing, e.g. fiduciary deposits.
- (b) the presence of concentrations in the deposit base, including single-source introductions or investment firms' client money accounts;
- (c) the degree of reliance on marketable assets, the depth of market in such assets and the price volatility of such assets;
- (d) the degree of diversification in a bank's portfolio of marketable assets;
 - a) It should not be assumed that large holdings of single assets can be realised at short notice without causing prices to move against the bank. This applies particularly to banks which rarely trade their portfolio (their presence will tend to be noted early in the market) and to large banks (where the asset holding may be large in relation to total market size).
- (e) the availability and reliability of undrawn standby lines;
- (f) the dependence on drawings of standby lines in order to maintain adequate liquidity, and in particular the possibility of calls for early repayment on lines which have already been

drawn (which may result from breaches of material adverse change clauses or other covenants); and

- (g) the impact of other business such as off balance sheet obligations, cash flows from FRAs, swaps, forwards etc.

8.2 Qualitative factors

2 In setting mismatch guidelines consideration should also be given to certain qualitative factors.

- a) In the event of a bank experiencing liquidity difficulties, it may be the qualitative factors that weaken first.

3 Qualitative factors which should be taken into consideration are:

- (a) the asset profile;
- (b) the quality of management information systems;
- (c) the market reputation, general ability of management and the particular skills of the treasury area;
- (d) the ability and willingness of the parent/head office to provide liquidity; and
- (e) the bank's standing and reputation in the market.

8.3 Home country lending

4 A branch which lends a considerable proportion of its own balance sheet back to its home country risks becoming illiquid if, for any reason, the home country is unable to meet its debt service obligations. Partly for this reason the FSA assesses whether to place limits on home country lending for branches

- a) For details on home country exposure limits see the chapter on large exposures.

9 MONITORING LIQUIDITY

9.1 A bank's monitoring of liquidity

9.1.1 *Liquidity policy statements*

See ch GN s3

1 Each bank is required under rule 3.4.3 to formulate a statement of its policy for managing liquidity. It should also agree with the FSA guidelines by which adherence to this policy can be assessed.

See s10

a) Details on the policy on liquidity policy statements are given below.

9.1.2 *Systems for monitoring liquidity*

2 In order to be considered to be conducting its business in a prudent manner a bank must maintain adequate systems. A bank should therefore have in place systems which enable it to monitor its liquidity profile on a frequent and timely basis.

a) What in detail will be considered adequate systems depends on the nature of business conducted by the bank. But every bank should have systems in place that enables it to calculate its liquidity position on a daily basis.

b) The adequacy of the systems in place for monitoring liquidity is checked through the section 166 process and through review team visits.

FSM Act, see
Supervision
manual,
chapter 5

9.2 Monitoring performance against guidelines

3 The FSA conducts its supervision of a bank's liquidity on a quarterly basis by monitoring the performance of a bank against its recommended guidelines.

4 A bank is required to report its cashflow and asset and liability maturity profile on a quarterly basis using the LR return.

a) The accuracy of this return may be examined by the reporting accountants in the course of their section 166 work.

b) While there can be considerable value in management accounts, non-standard reports are only acceptable if they are consistent over time for the bank and are in addition to the standard reporting framework.

c) A bank should be able to provide information to the FSA on a more frequent basis, including on a daily basis where required.

- 5 A bank is required to report all deposits or groups of connected deposits that exceed 2% of total deposit liabilities.
- a) Part 5 of the Form LR is used to identify the concentration of deposits held by the bank.
 - i) UK branches of EEA banks do not need to complete Part 5 of the Form LR.

9.3 Breaches of guidelines

- 6 A bank should report exceptions to its mismatch guidelines to the FSA as soon as they occur. The reason for the breach should be given, together with the bank's proposed action to bring its liquidity position back within its guidelines. A bank should also report any breaches of its guidelines on the Form LR retrospectively at the end of each quarter.

10 POLICY STATEMENTS

- See ch GN s3
- 1 In order to provide a framework for monitoring liquidity on a basis appropriate to each bank the FSA has made a rule requiring each bank to maintain a statement of its liquidity management policy (see rule 3.4.3).
 - 2 The FSA assesses the liquidity policy taking into consideration the nature of the bank and its business activities.
 - 3 A bank with significant currency business should include in its policy statement its policy for controlling and monitoring its liquidity positions in individual currencies.
 - a) A bank should not rely on the swaps market in less freely convertible currencies as a means of switching liquidity from one currency to another, since difficulties in one deposit market may affect others.
 - b) An analysis of liquidity by individual currency may be requested where the business of the bank denominated in that currency is significant, or it is considered that the currency is not quickly and easily convertible.
 - 4 The policy statement should consider the management of liquidity in both normal and abnormal circumstances. In particular, it should include details of the bank's contingency funding plan maintained as required by *PRU 5.1.86E*.
 - a) The statement should also include:
 - i) who is responsible for liquidity management on a day to day basis; and
 - ii) what are likely to be the most reliable sources of funds in normal circumstances.
 - 5 A liquidity policy statement should also cover a bank's agreed guidelines, its retail/wholesale split and any behavioural or materiality adjustments.

11 APPENDIX 1 - SECURITIES SETTLEMENT

11.1 General considerations

1 Banks selling marketable assets receive cash once they have found a counterparty and once the transaction has settled. The discounts allowed for marketable assets are intended to take account of the price that a bank might have to be willing to accept if it needs to find a counterparty immediately.

This appendix details the time that is then likely to elapse before cash is actually received. In particular, it seeks to identify clear outliers - cases where it would not be prudent to discount to sight as opposed to the eight day to one month time band.

- a) The settlement times given apply to repos as well as outright sales, because the same system is used for the transfer of funds in each case.

2 In general, the settlement times given represent the earliest opportunity to receive funds.

- a) In many countries, trades can take place over the counter and in such instances, the settlement period is often a matter for agreement at the time of the trade.

3 The times given usually apply to members of a particular settlement system. Many banks (especially small ones) are not members and the time taken to receive funds is therefore longer (by up to 2-3 working days).

4 Varied time zones also need to be taken into account.

11.2 Domestic settlement systems

Country	Instrument	Settlement
Belgium	Government issued securities, CDs and CP	Same day
	Equities	T+3
Canada	Treasury bills	Same day
	Central and provincial government bonds	T+2 (if maturity < 3 years) T+3 (otherwise)

	Equities	T+3
Denmark	Treasury bills	T+2
	All other securities	Rolling T+3
	Money market transactions	T+1/T+2
France	Money market instruments (through SATURNE)	T (but investors can choose to settle at any time up to T+3)
	Other securities (through RELIT)	Rolling T+3 (for stock exchange transactions)
Germany	Stock exchange transactions in securities	T+2 (settlement in T is also possible with agreement of recipient)
Greece	Stock Exchange transactions	T+2
	OTC transactions	T+3
	Registered shares	T+5
Ireland	Government bonds (through Gilts Settlement Office)	T+1
	Other securities use CREST	See below
	Trading outside CREST	T+2
Italy	Treasury Bills	T+2
	Other government securities (including corporate bonds)	T+3
	Equities	T+5
Japan	Treasury bills	T+3
	Government bonds	T+3

	Equities	T+3
Luxembourg	Most securities settled through Clearstream	See below
	When physical delivery required	T+3
Netherlands	Money market instruments	T+2
	Other securities (including government bonds)	T+3
Portugal	All securities	T+4
Spain	Government securities	T+1
	Securities listed on stock exchange	T+5 (due to move to T+3)
	Non-government bonds	T+1
Sweden	Short-term instruments	T+2
	Long-term bonds	T+3
	Equities and corporate bonds	T+3
Switzerland	Securities (through Swiss Securities Clearing Corporation)	T+3 (same day optional)
United Kingdom	Government securities and money market instruments (through CGO/CMO/ESO)	T+1
	Equities (through CREST)	T+5 (due to become T+3)
	Corporate bonds	T+7
United States	US treasuries and municipals MBS	T+1 (same day possible)
	Corporate securities	T+3
	Corporate MBS	Fixed point in calendar month
	Equities	T+3

11.3 International settlement systems

- 5 Euroclear and Clearstream are the two major depositories and settlement organisations in international securities markets. They deal with Eurobonds, foreign bonds (securities issued in domestic capital markets by non-resident borrowers), euro-notes and domestic securities including equities.
- 6 Members hold cash deposits with Euroclear/Clearstream which allows them to provide settlement facilities:
- (a) In Clearstream, funds can be received on the same day if instructions are issued by 11am, and otherwise settlement is on T+1.
 - (b) In Euroclear, settlement on T is provided. However, standard settlement is T+3.

11.4 Brady bonds/LDC debt

- 7 Brady bonds are almost always settled through Euroclear/Clearstream.
- 8 LDC bank debt which has not been swapped for Brady bonds (or otherwise converted into a security) typically takes three weeks to settle once a price is agreed.

STERLING STOCK LIQUIDITY

1 INTRODUCTION

1.1 Legal sources

1 There are a number of legal requirements arising out of the Act relating to the need to maintain adequate liquidity. These are:

See COND

- (a) The Threshold Conditions require a firm to have adequate resources (which covers inter alia adequate liquidity).
- (b) Principle 3 of the Principles for Businesses requires that a firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems. Principle 4 requires a firm to maintain adequate financial resources, including liquidity; and

See ch
GN(3)

- (c) The rules made to require a bank to maintain adequate liquidity appropriate to the nature and scale of its business, and to set out its policy on liquidity risk management in a written statement.

See ch GN(3)

All banks authorised for the purposes of the Act are required to meet these requirements except EEA banks. An EEA bank with a branch in the UK is subject to rule 3.3.15, which requires its UK branch to maintain adequate liquidity.

2 As part of the phased implementation of the Integrated Prudential Sourcebook (*PRU*), provisions in *PRU* 1.2 and *PRU* 5.1 relating to a firm's systems and controls for liquidity risk have been introduced, superseding – and leading to the revocation or amendment of – material formerly in this chapter. This chapter and chapter LM sets out the FSA's framework for monitoring the liquidity of banks authorised for the purposes of the Act to determine whether the above requirements are met.

See ch LM

- a) Certain banks are subject to a different, mismatch liquidity, approach. For details of this approach see the chapter LM on mismatch liquidity.

The Banking Consolidation Directive (formerly the Second Banking Co-ordination Directive - "2BCD") requires the FSA as host supervisor to monitor, in co-operation with the relevant home supervisor, the liquidity of UK branches of credit institutions incorporated in other EEA countries.

1.2 Application

See ch LM 3 This chapter applies only to retail UK banks. Such a bank should obtain the FSA's written agreement that its use of the Sterling Stock Liquidity approach is appropriate.

See ch LM a) The FSA may consider that it is more appropriate for a bank to which this chapter applies to monitor some or all of its foreign currency liquidity according to the maturity mismatch approach.

Chapter LM on mismatch liquidity sets out the ordinary framework adopted by the FSA for monitoring the liquidity of banks (other than EEA banks). The principles set out in that chapter form the basis for the stock liquidity policy the FSA considers appropriate for UK banks with a large retail deposit base ('UK-incorporated retail banks').

For the majority of banks, the main focus of the FSA's liquidity policy is cash flow, involving the allocation of assets and liabilities to different time bands according to contractual maturity and setting mismatch limits in relation to respective time bands. The FSA considers that such an approach is unsuitable for UK-incorporated retail banks because sterling retail deposits at call or short notice dominate their liabilities, not all of which in practice are withdrawn on the date of their contractual maturity. This 'stickiness' leads to apparently large mismatches at shorter maturities. For these banks, holding an appropriate stock of sterling liquidity against an unexpected loss of funding is more important.

1.3 How this chapter is organised

4 Section 2 outlines the FSA's approach to sterling stock liquidity. Section 3 summarises the main features of the policy. Section 4 describes the detail of the FSA's sterling stock liquidity policy and explains the calculations that are used to determine the stock of marketable sterling assets that a bank on the sterling stock liquidity regime should hold against its estimated possible outflow of sterling funds arising from its liabilities to wholesale and retail depositors within a given timeframe. Section 5 covers monitoring and reporting requirements associated with the sterling stock liquidity regime.

2 THE FSA'S APPROACH TO STERLING STOCK LIQUIDITY

- See ch LM s2 1 Regardless of whether a bank reports on a mismatch basis or a stock liquidity basis, the same principles apply. Namely, prudent liquidity management (on the part of the bank) and liquidity monitoring. Details of these are outlined in Chapter LM on mismatch liquidity.
- See s1 2 The FSA concentrates primarily on a mismatch approach to liquidity management. However, this approach is usually less appropriate for UK banks whose liquidity profile is dominated by sterling retail deposits at call or short notice which, when aggregated, are 'sticky'. Application of the mismatch approach would require a bank to hold more liquid assets with short term maturities than necessary, bearing in mind the 'stickiness' of its deposit base. So the FSA considers it more important that such banks hold an appropriate stock of sterling liquid assets against an unexpected loss of funding.
- a) A bank should not change to or from the sterling stock liquidity approach unless it has received the FSA's written agreement.
- See ch LM b) For the FSA's general approach to liquidity and the mismatch approach to liquidity management, see the chapter on mismatch liquidity.
- 3 The key element of the FSA's sterling stock liquidity policy is that a bank should hold a *stock of sterling liquid assets* that can be sold quickly and discreetly in order to replace funding that has been withdrawn due to an actual or perceived problem with the bank.
- See s4 a) The components of a *stock of sterling liquid assets* are set out below.
- 4 The objective is that this stock should enable the bank to continue business for a period of five working days (the *survival period*), thus providing an opportunity to arrange more permanent funding solutions.
- Five working days is taken to represent the critical period for a bank in crisis, and in which remedial action is most needed and most effective.
- See s4 5 It is difficult to predict accurately how the various classes of depositor will behave if a bank gets into difficulties. Based on experience, the safest assumption to make is that wholesale depositors will be the quickest to react by withdrawing funds.

Accordingly a UK-incorporated bank that is covered by the Sterling Stock Liquidity policy should hold a reserve of high quality sterling liquid assets large enough for it to survive for at least five working days without renewal of its maturing *sterling wholesale funding (on a net basis)* and after the leakage of a small proportion (5%) of its gross *retail deposits*.

a) The FSA's approach in focusing on the need to hold stock against the wholesale cash flow mismatch and a proportion of retail deposits mirrors the way a number of UK-incorporated retail banks manage their liquidity.

See s4

b) For the definition of *wholesale funding (on a net basis)* and *retail deposits*, see below.

See s4

6

In considering the adequacy of a UK-incorporated bank's stock of sterling liquid assets, the FSA also has regard to the degree of diversification of those holdings and the bank's ability to mobilise them quickly and discreetly when required (so as not to alert the market to a possible crisis).

See s4

7

In order to prevent its stock holdings from becoming excessively volatile, a retail UK bank is also expected to hold sufficient sterling stock to meet at all times a minimum 'floor' requirement agreed with the FSA.

3 MAIN FEATURES OF THE POLICY

See ch LM s3

This section should be read in conjunction with its equivalent section in the chapter on mismatch liquidity, which sets out the obligations in respect of liquidity, which apply to all authorised banks. The policy set out below replaces the framework for sterling maturity mismatches and applies only to UK-incorporated retail banks on a consolidated basis (unless otherwise agreed in writing with the FSA).

3.1 The main features of the sterling stock liquidity policy

1 A bank should not use the sterling stock liquidity approach except with the FSA's written agreement.

2 A sterling stock liquidity bank should include in the statement of its liquidity management policy its intention to:

- maintain an internal limit for its maximum wholesale sterling net outflow over the next five working days, as agreed with the FSA;
- hold, as a minimum requirement, a stock of sterling liquid assets sufficient to cover the 'floor', as agreed with the FSA;
- ensure that its sterling stock liquidity ratio is at least 100%; and
- notify the FSA of any breaches.

See s4 a) For definitions of the 'floor' and sterling stock liquidity ratio, see below.

See ch LM s10 b) For matters that all banks should consider for inclusion in their liquidity management policy statements, see Chapter LM on mismatch liquidity.

See s5 3 A sterling stock liquidity bank should monitor its compliance with the sterling liquidity stock policy on an inter-day basis.

See s4 4 A sterling stock liquidity bank should ensure that details of its 'floor' and limit are communicated to the relevant personnel and effectively managed.

See s5 5 A sterling stock liquidity bank should notify the FSA of any breaches of its agreed 'floor' or the sterling stock liquidity ratio as soon as they occur.

See s4 6 A sterling stock liquidity bank should not change its 'floor' or limit without the prior written agreement of the FSA.

3.2 Reporting by a sterling stock liquidity bank

See s5

7

A sterling stock liquidity bank should report its sterling stock liquidity position to the FSA monthly.

- a) Its liquidity position should be reported on the Sterling Liquidity Return ('form SLR1'). Unless otherwise agreed with the FSA in writing, the form SLR1 should be completed on a consolidated basis.
 - i) A sterling stock liquidity bank therefore does not have to complete the other sterling liquidity forms.
- b) Unless otherwise agreed in writing with the FSA, the form SLR1 should be completed as at the second Wednesday of each month.

4 THE MEASUREMENT OF STERLING STOCK LIQUIDITY

4.1 Introduction

1 A sterling stock liquidity bank should at all times hold as a minimum a stock of liquid assets sufficient to cover its agreed 'floor' and to ensure that its sterling stock liquidity ratio is at least 100%, unless otherwise agreed with FSA in writing.

- a) A sterling stock liquidity bank should ensure that the sterling stock liquidity ratio is calculated daily and that all marketable assets included in it are marked to market daily.

2 This section sets out the framework for these two components. It first explains the *sterling stock liquidity ratio* calculation, listing the components of *sterling liquid stock*.

It then describes, for the purposes of the *sterling stock liquidity ratio* calculation, the wholesale sterling net outflow, the treatment of sterling certificates of deposit and the definition of retail deposits. Finally, it covers the wholesale sterling net outflow limit and the sterling stock 'floor.'

4.2 The sterling stock liquidity ratio

3 Unless otherwise agreed in writing with the FSA, a sterling stock liquidity bank should work to a *sterling stock liquidity ratio* of at least 100%.

4 The *sterling stock liquidity ratio* should be calculated as:

$$\frac{\text{Stock of sterling liquid assets}}{(\text{Wholesale sterling net outflow over the next 5 working days} - \text{allowable sterling certificates of deposit held}) + 5\% \text{ sterling retail deposits falling due in the next 5 working days.}} \times 100$$

- a) For the purposes of this calculation, the date of the calculation counts as the first of the 'next 5 working days'.
- b) A wholesale sterling net inflow is treated as zero. This disallows all sterling certificates of deposit held and means that a bank only needs sufficient stock to cover 5% of its sterling retail deposits falling due in the next 5 working days.
- i) However, it also has to have sufficient stock to cover its agreed 'floor', as set out below.

4.3 The wholesale sterling net outflow limit and sterling stock 'floor'

4.3.1 General

- 5 A sterling stock liquidity bank should not change its limit or 'floor' without the prior written agreement of the FSA.
- 6 A bank's limit and 'floor' should be those included in its most recent liquidity policy statement unless otherwise agreed in writing with the FSA.

4.3.2 The wholesale sterling net outflow limit

- 7 A sterling stock liquidity bank should set an internal limit for its maximum wholesale sterling net outflow over the next five working days.

4.3.3 The sterling stock 'floor'

- 8 A sterling stock liquidity bank should agree in writing with the FSA a *sterling stock 'floor'*. The FSA would normally agree a 'floor' at 50% of the bank's internal limit.
- a) So a bank normally has to have sufficient stock to cover 50% of its limit on the wholesale sterling net outflow over the next five working days.

4.4 Definitions relevant to both components

4.4.1 The stock of sterling liquid assets

- 9 The stock of *sterling liquid assets* consists of:
- (a) *cash*, i.e. Bank of England and other sterling notes and UK coin;
- a) *Cash* includes cash paid into another UK bank which has not yet been credited to the sterling stock liquidity bank's account in the books of the other UK bank.
- b) Holdings of gold sovereigns are excluded.
- (b) operational balances with the Bank of England;
- a) These include reserves that are held with the Bank of England as part of the Bank of England's framework for its operations in the sterling money markets, of the type set out in Section III of the Bank of England's paper 'Reform of the Bank of England's Operations in the Sterling Money Markets: A paper on the new framework by the Bank of England', published 4 April 2005.

- b) Special deposits and cash ration deposits are excluded.
- (c) UK Treasury bills (including those denominated in Euro) and Bank of England Euro bills and notes;
- (d) sterling international bonds ('bulldogs') where they have been issued into (and are held by) the Central Gilts Office settlements system;
- (e) sterling international bonds issued by certain EEA government and international financial institutions, where they have been issued into Euroclear or Clearstream settlement systems;
- (f) Euro-denominated bonds issued by EEA governments or certain international financial institutions, where they have been issued into Euroclear or Clearstream settlement systems and where they are eligible for use in ESCB monetary policy operations;
- (g) a range of Euro-denominated securities, where they are issued by the central governments and central banks of certain EEA countries, where they are eligible for use in ESCB monetary policy operations, and where the relevant central bank of a country participating in EMU has agreed to act as a bank's custodian under the Correspondent Central Banking Model (CCBM);
 - a) Detailed lists of the bonds described in (d), (e), (f) and (g) above can be found on the Bank of England's website under OMO on the 'Eligible Securities' page (www.bankofengland.co.uk/markets/eligiblesecurities.htm).
 - b) The FSA will automatically update the list of bonds that it considers banks may include in their stock of sterling liquid assets in line with the Bank of England's programme of reviewing its eligible securities.
 - i) All relevant announcements can be found on the Bank of England's website.
 - ii) The Bank of England will update its lists of eligible securities regularly.
- (h) *gilts*;
 - a) *Gilts* are defined for this purpose as:
 - sterling and foreign currency denominated stock issued by HMG;

- stocks of nationalised industries guaranteed by HMG;
 - the Irish land purchase stocks; and
 - gilt strips.
- i) The inclusion of gilt strips is subject to review in the light of the development of the gilt strips market.
 - b) Other HMG guaranteed stocks are excluded.
- (i) UK bank bills eligible for rediscount at the Bank of England;
- a) This comprises holdings of sterling bills, irrespective of the drawer, which are both payable in the United Kingdom and have been accepted by *eligible banks*.
 - i) For the definition of *eligible banks*, see chapter 16 of the Supervision Manual.
- (j) UK local authority bills eligible for rediscount at the Bank of England; and
- a) For the definition of *local authorities*, see chapter 16 of the Supervision Manual.
 - b) For the purposes of this calculation, *local authorities* include the governments of the Channel Islands and the Isle of Man.
- (k) certificates of tax deposit.
- 10 Gilts and other components of the stock of sterling liquid assets acquired as a result of entering into a repo or reverse repo transaction may be included in the stock for the duration that they are held.
- a) Collateral taken should, however, be excluded even if it is eligible as liquidity stock, to avoid double counting.
- 11 Stock lent may be included in the stock provided that title remains with the bank.
- a) Collateral taken against such stock lent should, however, be excluded even if it is eligible as liquidity stock, to avoid double counting.
- 12 Where a bank has pledged out or charged assets otherwise qualifying to be part of its stock, it may continue to include them as part of its stock provided it retains the title to them. Conversely it should not include assets otherwise qualifying to be part of its

stock, which have been acquired as pledged or charged assets, unless it receives the title to them.

- a) These treatments are because the bank receiving pledged or charged assets does not obtain ownership unless or until the borrower fails and so cannot on-sell until then.

4.4.2 *Wholesale sterling net outflow*

13 A sterling stock liquidity bank's *wholesale sterling net outflow* is obtained by subtracting wholesale sterling assets maturing over the next five working days from wholesale sterling liabilities falling due over the same period.

For the purposes of this calculation, a bank should include as wholesale sterling liabilities:

- (a) all sterling deposits from banks and building societies taken by its treasury division; and
- (b) all other sterling *deposits* of £1mn or more taken *on wholesale market terms*.
 - a) The FSA recognises that banks differ in the way they manage their wholesale cash flows; the aim of the second element here is to ensure a minimum level of consistency across sterling stock liquidity banks.
 - b) For the purpose of the second element, *deposits on wholesale market terms* are defined as deposits closely related to money market operations which are made as a result of individual customers being offered a specific rate for a particular deposit for a particular period.
 - i) Interest-bearing funds, deposited either with a sterling stock liquidity bank's branches or directly with, for example, its treasury division, on the strength of the interest rate quoted on enquiry on each occasion that a deposit is made, should be included.

All other deposits should be classified as retail deposits.

14 A bank's wholesale sterling assets should include the converse of paragraph 13(a) and (b) above.

4.4.3 *Allowable sterling certificates of deposit*

15 A sterling stock liquidity bank may offset its holdings of sterling certificates of deposit against up to 50% of its wholesale sterling net

outflow. When included in this way, sterling certificates of deposit are subject to a 15% discount.

- a) The 15% discount reflects the possible effect of a forced sale in a troubled market on the value of the bank's certificate of deposit portfolio.
- b) This treatment recognises the role that sterling certificates of deposit play in practice in liquidity management. However, in the FSA's view, sterling certificates of deposit cannot be treated as equivalent to other components of liquidity stock on the grounds that there is no lender of last resort facility for CDs. The risk being that this may make the CD market unpredictable in the event of an actual or perceived problem with a sterling stock liquidity bank.
- c) Negotiable deposits made on terms identical to those on which a sterling certificate of deposit would have been issued, but for which it is mutually convenient not to issue a certificate, should be included in the offset calculation.
- d) If a bank holds sterling certificates of deposit which it has itself issued, these should be excluded from the offset calculation.
- e) A bank's holdings of sterling certificates of deposit maturing within five working days may be included in the sterling liquidity stock ratio calculation.

4.4.4 Sterling retail deposits

- 16 When calculating its sterling stock liquidity ratio, a bank should include its gross sterling *retail deposits* with a residual contractual maturity of five working days or less.
- 17 For this purpose, *retail deposits* are defined as deposits which arise from customer acceptance of an advertised rate (including 0%) for a particular product.
- a) *Retail deposits* include deposits taken in a sterling stock liquidity bank's branch network on the grounds of an existing or new customer relationship where the rates of interest are not directly linked to interbank rates, and are advertised or displayed at the branch counter or are part of standard tariff terms so that depositors can establish, without further enquiry, the rate applicable to each type of deposit.
 - i) All retail deposits with a residual contractual maturity of five working days or less should be included.

- ii) Deposits subject to a penalty on withdrawal should only be included if the residual contractual maturity is five working days or less.
- iii) All deposits of under £1mn taken on wholesale market terms should be included.

5 MONITORING LIQUIDITY

5.1 General

1 All banks are required to maintain a liquidity policy statement to the FSA. They should also maintain adequate systems for monitoring liquidity.

a) These are checked during the normal course of supervision by review team visits, treasury visits and reports under section 166 of the Act.

b) For further details, see the chapter on mismatch liquidity.

See ch LM s9
and s10

5.2 Monitoring and reporting performance of sterling stock liquidity

2 A sterling stock liquidity bank should monitor its liquidity position on an inter-day basis. Any breaches of the wholesale sterling net outflow limit, the sterling stock 'floor' or the sterling stock liquidity ratio should be reported immediately to the FSA and a completed, contemporaneous form SLR1 sent to the FSA detailing the liquidity breach. The reason for the breach should also be given, together with the bank's proposed action to bring its liquidity position back within its guidelines.

a) In normal circumstances, a bank's wholesale sterling actual net outflow should not exceed its wholesale sterling net outflow limit. Exceptions should be notified to the FSA unless the bank concerned has enough surplus sterling stock liquidity, over and above that required to meet the sterling stock liquidity ratio. If this condition is met, the exception need not be reported to the FSA.

3 A sterling stock liquidity bank should report its liquidity position to the FSA monthly on the form SLR1. Unless otherwise agreed in writing with the FSA, the form SLR1 should be completed on a consolidated basis.

a) Unless otherwise agreed in writing with the FSA, the form SLR1 should be completed as at the second Wednesday of each month.

4 The FSA monitors a sterling stock liquidity bank's liquidity profile on a monthly basis in line with the submission of the form SLR1.

a) A sterling stock liquidity bank should be able to provide information on a more frequent basis, where necessary, including on a daily basis.

ACCOUNTING AND OTHER RECORDS AND INTERNAL CONTROL SYSTEMS

1 INTRODUCTION

1.1 Legal sources

See ch GN s3

See COND

1 The FSA's guidance on the Threshold Conditions ('Suitability') states that in determining whether a firm satisfies the TC, the FSA may have regard to whether a firm has identified fully, and considered, the various risks it will encounter in conducting its business and installed appropriate control systems to manage them prudently at all times. This can only be done if the firm has adequate accounting and other records of its business and adequate systems of control of its business and records. This chapter is also relevant to Principle 3 ("Management and Control") and a bank's compliance with the rules in "Senior management arrangements, systems and controls" in SYSC. It also provides guidance on how the FSA expects banks to co-operate with the FSA in accordance with Principle 11 ("Relations with regulators").

2 Section 3.3.9 in this chapter is also relevant to the evidential provision 3.3.23E in chapter GN section 3 that a UK and an overseas bank should have an internal audit function.

1.2 How this chapter is organised

3 This chapter provides the FSA's guidance with respect to a bank's records and controls.

4 Section 2 of this chapter gives an overview of the main features of its policy on which guidance is given in more detail in the rest of the chapter. Section 3 outlines the FSA's guidance with respect to accounting and other records and internal control systems.

1.3 Application

5 This chapter applies to all banks except to the extent that a particular provision provides for a narrower application.

6 For EEA banks with branches in the UK, the FSA's guidance for bank's records and systems described in Section 4 applies only with respect to the liquidity of their UK branches.

- a) *EEA banks* are banks incorporated outside the UK, but within the European Economic Area.

- b) Under The Banking Consolidation Directive (formerly the Second Banking Co-ordination Directive), with the exception of liquidity, supervisory responsibility for EEA banks lies with their home country supervisor. Supervisory responsibility for liquidity lies with the host country supervisor (i.e. for a UK branch, the FSA), in co-operation with the home country supervisor.

7 Section 3 to this chapter covers the guidance which the FSA provides, in its capacity as supervisor under the Act, for banks' records and systems. In addition to that guidance banks should comply with relevant records and systems provisions of the Companies Act 1985 (or overseas companies legislation for UK branches of overseas banks) which are not covered by this chapter.

See s3.1

- a) More information on the scope of the policy is provided below.

2 THE MAIN FEATURES OF THE POLICY

1 This section outlines the main features of the FSA's policy on a bank's accounting and other records and internal control systems. It should be read in conjunction with the sections that follow.

2.1 The bank's role

2 It is the responsibility of a bank's directors and management to take reasonable care to establish and maintain such systems and controls as are appropriate to the nature, scale and complexity of its business. They are required also to ensure that the firm maintains adequate records (including accounting records) which are appropriate to the scale, nature and complexity of its business (see SYSC 3.1.1R and SYSC 3.2.20R).

a) The FSA does not prescribe a standard set of controls for all banks to follow. Rather, it expects that each bank's records, systems and controls will be appropriate to the nature and scale of that bank's operations, and will develop with those operations.

b) This chapter emphasises the scope and nature of the financial information which the accounting and other records should be designed to capture, contain and provide for management and the scope and nature of internal control systems and the purpose for which they are established.

See s3

2.2 The FSA's role

6 The FSA determines in the light of the information which it reviews whether the firm is in compliance with the Principles and Rules.

a) The FSA has available to it several 'tools of supervision' for obtaining information and addressing its supervisory objectives in respect of records and controls. These tools include use of the FSA's own specialists (for example, Risk Review Team and Traded Risk Department visits), prudential and ad hoc meetings with the bank and also section 166 controls reports.

3 ACCOUNTING AND OTHER RECORDS AND INTERNAL-SYSTEMS AND CONTROLS

1 This section outlines the FSA's guidance on adequate accounting and other records and internal control systems for banks. As such, it represents guidance for banks on the high-level rules in the Handbook on systems and controls and records (SYSC 3.1.1R and SYSC 3.2.20R).

3.1 Scope

- 2 The FSA's requirements with respect to maintenance of adequate records and systems apply to all aspects of a bank's business (and not just deposit taking business).
- a) This includes off-balance sheet business, and situations where the bank acts as agent or arranger.
 - b) EEA banks: With the exception of liquidity the FSA's requirements for records and systems do not apply to UK branches of EEA banks. However, there may be similar requirements imposed by the home country supervisor.
 - c) UK branches of overseas banks: The FSA's requirements apply to the authorised bank as a whole. However, where a bank establishes a branch operation in the UK, but is incorporated outside the EEA and is subject to home country supervision, the FSA may draw on the work of the home country supervisor to reduce the need to seek additional information.

3.2 Accounting and other records

3.2.1 Introduction

3 The scope and nature of the accounting and other records which a bank should have for its business to be conducted in a prudent manner should be commensurate with its needs and particular circumstances. They should have regard to the factors identified in SYSC 3.1.2G and to the manner in which the business is structured, organised and managed, and to the nature, and complexity of its transactions and commitments.

4 The accounting and other records should be located where they will best assist management to conduct the business of the bank.

If the accounting and other records are kept overseas (for example at a UK branch's overseas head office) or by another entity (for example, where processing is outsourced), there should be

arrangements which allow local management of the bank to have immediate and unrestricted access to them.

3.2.2 *General*

5 The FSA does not believe it is appropriate to prepare a comprehensive list of the accounting and other records which a bank should maintain. However, they should:-

- (a) capture and record on a timely basis and in an orderly fashion, every transaction and commitment which the bank enters into, with sufficient information to explain:
 - (i) its nature and purpose;
 - (ii) any asset or liability, actual or contingent, which respectively arises or may arise from it; and
 - (iii) any income or expenditure, current or deferred, which arises from it;
- (b) provide details, as appropriate, for each transaction and commitment, showing:-
 - (i) the parties, including, in the case of a loan, advance or other credit exposure, whether (and if so to whom) it is sub-participated;
 - (ii) the amount and currency;
 - (iii) the contract, rollover, value and settlement or repayment dates;
 - (iv) the contracted interest rates of an interest rate transaction or commitment;
 - (v) the contracted exchange rate of a foreign exchange transaction or commitment;
 - (vi) the contracted commission or fee payable or receivable, together with any other related payment or receipt;
 - (vii) the nature and current estimated value of any security for a loan or other exposure; the physical location and documentary evidence of such security; and
 - (viii) in the case of any borrowing, whether it is subordinated, and if secured, the nature and book value of any asset upon which it is secured;

- (c) be maintained in such a manner that financial and business information can be extracted promptly to enable management to:-
 - (i) identify, measure, monitor and control the quality of the bank's assets and safeguard them, including those held as custodian;
 - (ii) identify, measure, monitor and control its exposures by related counterparties across all products;
 - (iii) identify, measure, monitor and control its exposures to liquidity risk, and foreign exchange and other market risks across all products;
 - (iv) monitor the performance of all aspects of its business on an up-to-date basis; and
 - (v) make timely and informed decisions;
- (d) contain details of exposure limits authorised by management which are appropriate to the type, nature and volume of business undertaken;
 - a) These limits should, where relevant, include counterparty, industry sector, country, settlement, liquidity, interest rate mismatch and securities position limits as well as limits on the level of intra-day and overnight trading positions in foreign exchange, futures, options, future (or forward) rate agreements (FRAs) and swaps.
- (e) provide information which can be summarised in such a way as to enable actual exposures to be readily, accurately and regularly measured against these limits;
- (f) contain details of the factors considered, the analysis undertaken and the authorisation or rejection by management of a loan, advance or other credit exposure; and
- (g) provide, on a memorandum basis, details of every transaction entered into in the name of or on behalf of another party on an agency or fiduciary (trustee) basis where it is agreed that the bank itself is not legally or contractually bound by the transaction.

3.2.3 *Information for management*

- 6 Every bank should prepare information for directors and management so that they can monitor, assess and control the

performance of its business, the state of its affairs and the risk to which it is exposed.

- a) This information should be prepared on an individual company and, where appropriate, on a consolidated basis.
- b) The frequency with which information is prepared, its level of detail and the amount of narrative analysis and explanation will depend upon the level of management to which it is addressed. Some types of information will be needed on a more frequent basis than others and it may be appropriate for some to be presented on a basis of breaches from agreed limits by way of exception reports.

7 It is the responsibility of directors and management to decide what information is required and to decide who should receive it. Appropriate management information should be provided to:-

- (a) persons responsible for exercising managerial functions or for maintaining accounting and other records;
- (b) executives who, either alone or jointly, are responsible under the immediate authority of the directors for the conduct of the business of the bank; and
- (c) the directors of the bank.

8 This information should be prepared:-

- (a) to show the state of affairs of the bank;
- (b) to show the operational results of the business both on a cumulative basis and by discrete period, and to give a comparison with budgets and previous periods;
- (c) to provide an analysis of assets and liabilities showing how they have been valued;
- (d) to provide an analysis of its off-balance sheet positions showing how they have been valued;
- (e) to provide an analysis of income and expenditure showing how it relates to different categories of asset and liability and off-balance sheet positions; and
- (f) to show the bank's exposure to each type of risk, compared to the relevant limits set by management.

3.3 Internal control systems

3.3.1 *Introduction*

- 9 The scope and nature of adequate control systems should take account of the matters covered in SYSC 3.1.2G and:
- (a) the amount of control by senior management over day-to-day operations;
 - (b) the degree of centralisation and the extent of reliance on information technology.
- 10 A system of internal control should be designed and operated to provide reasonable assurance that:
- (a) all the bank's revenues accrue to its benefit;
 - (b) all expenditure is properly authorised and disbursed;
 - (c) all assets are adequately safeguarded;
 - (d) all liabilities are recorded;
 - (e) all statutory requirements relating to the provision of accounts are complied with and all prudential reporting conditions are adhered to.

3.3.2 *Control environment*

- 11 The strength of the control environment is important for banks, as a weak *control environment* can undermine an otherwise adequate control system.

- a) A working definition of 'control environment' is provided in Statement of Auditing Standards ('SAS') 300, issued by the Auditing Practices Board:

'Control environment' means the overall attitude, awareness and actions of directors and management regarding internal controls and their importance in the entity. The control environment encompasses the management style, and corporate culture and values shared by all employees'.

- 12 Factors relevant to the control environment include:
- (a) the importance which is attached to controls by management;

- (b) the way in which staff are assessed and rewarded (including remuneration and bonus schemes as well as promotion policies);
- (c) controls training, and the methods for reviewing control, including internal audit.

3.3.3 *High level controls*

13 *High level controls* are the controls which are primarily exercised at director and senior manager level, as distinct from the detailed controls, the operation of which is delegated to others. High level controls typically include:

- (a) the setting of strategy and plans. The strategic plan should be documented and consider the external factors that might impact on the business in the near future, for example macro economic factors and competition. The strategic plan should be reviewed annually and is a key document for the production of the annual business plan that will set out how the bank will achieve its goals for the coming year. Some banks may also consider it appropriate to establish trigger points on key indicators to identify adverse trends in the business that would cause the Board to revisit its strategy or business plan. For banks that are part of a larger group, the strategic plan and annual business plan may be produced on an integrated, group-wide basis;
- (b) approval of risk policies;
- (c) establishment and review of the organisational structure;
- (d) the system for delegation;
- (e) review of high level management information;
- (f) maintaining the framework for monitoring and/or periodic review of risk management and detailed control systems and for the implementation of action points following such a review.

The FSA's requirements for adequate internal control systems apply to high level as well as to detailed control systems.

3.3.4 *The control system: General*

14 The FSA does not believe it is appropriate to prepare a comprehensive list of internal control procedures which would

then be applicable to any bank, nor is it possible to prepare a detailed list of particular procedures which should be undertaken, where appropriate, by all banks. Nonetheless, internal control systems should provide reasonable assurance that:-

- (a) the business is planned and conducted in an orderly and prudent manner in adherence to established policies;
- (b) transactions and commitments are entered into in accordance with management's general or specific authority;
- (c) management is able to safeguard the assets and control the liabilities of the business;
- (d) there are measures to minimise the risk of loss from irregularities, fraud and error, and promptly and readily to identify them when they occur;
- (e) the accounting and other records of the business provide complete, accurate and timely information;
- (f) management is able to monitor on a regular and timely basis, among other things, the adequacy of the bank's capital, liquidity, profitability and the quality of its assets;
- (g) management is able to identify, regularly assess and, where appropriate, quantify the risk of loss in the conduct of the business so that:-
 - (i) the risks can be monitored and controlled on a regular and timely basis; and
 - (ii) appropriate provisions can be made for bad and doubtful debts, and for any other exposures both on and off balance sheet;
- (h) management is able to comply with the FSA's reporting rules (that is fully and accurately and in accordance with the FSA's reporting instructions, and to submit them on a timely basis); and
- (i) the bank is able to comply with the other notification requirements under the Act.

- 15 In seeking to secure reasonable assurance that their internal control objectives are achieved, management needs to exercise judgement in determining the scope and nature of the control procedures to be adopted.

- a) They should also have regard to the cost of establishing and maintaining a control procedure in relation to the benefits, financial or otherwise, that it is expected to provide.

16 It is a responsibility of directors and management to review, monitor and test its systems of internal control on a regular basis in order to assure their effectiveness on a day-to-day basis and their continuing relevance to the business.

- a) In many banks an internal audit function assists management by providing an independent review of such systems.
- b) Such a review should be designed to monitor the effectiveness and operation of the systems and to test compliance with daily procedures and controls (see below).

3.3.5 *Control objectives*

17 The scope and nature of the specific control objectives which should be adopted for the business to be conducted in a prudent manner should be commensurate with a bank's needs and particular circumstances, and should have regard to the manner in which the business is structured, organised and managed, to its size and the nature, volume and complexity of its transactions and commitments.

18 It is not appropriate for the FSA to provide an exhaustive and prescriptive list of detailed control requirements which should apply to all banks. However, the FSA considers that each bank should address the following control objectives:-

- (a) Organisational structure: Banks should have documented the high level controls in their organisation which:
 - (i) define allocated responsibilities;
 - (ii) identify lines of reporting for all aspects of the enterprise's operations, including the key controls and giving outline job descriptions for key personnel.
- a) The delegation of authority and responsibility should be clearly specified.
- (b) Risk management: A bank should document its risk management framework setting out how the risks in the business are identified, measured, monitored and controlled. At a high level this might be documented in a matrix, setting out the key risks in the business e.g. credit, interest rate etc,

key control procedures, the person responsible for monitoring the risk, and the type and frequency of management information to monitor each risk (see below).

- (c) Monitoring procedures: A bank should have procedures in place to ensure that relevant and accurate management information covering the financial state and performance of the bank and the risk exposures which the bank has entered into is provided to appropriate levels of management on a regular and timely basis. Procedures should also be in place which are designed to provide reasonable assurance of compliance with the bank's policies and practices, including any limits on delegated authority referred to above, and with statutory, supervisory and regulatory requirements.
- (d) Segregation of duties: A prime means of control is the separation of those responsibilities or duties which would, if combined, enable one individual to record and process a complete transaction. Segregation of duties reduces the risk of intentional manipulation or error and increases the element of checking.
 - a) Functions which should be separated include those of authorisation, execution, valuation, reconciliation, custody and recording.
 - b) In the case of a computer-based accounting system, systems development and daily operations should be separated.
 - c) For smaller banks, segregation of duties can be difficult due to limited number of staff. In such circumstances, the Board should satisfy itself that the bank is not running undue risk and that there are compensating controls in place e.g. frequent review of the area by internal audit and/or executive directors.
- (e) Authorisation and approval: All transactions should require authorisation or approval by an appropriate person and the levels of responsibility should be recorded as prescribed above.
- (f) Completeness and accuracy: Banks should have controls to ensure that all transactions to be recorded and processed have been authorised, are correctly recorded and are accurately processed.
 - a) Such controls include:
 - i) checking the arithmetical accuracy of the records,

- ii) checking valuations,
 - iii) the maintenance and checking of totals,
 - iv) reconciliations,
 - v) control accounts and trial balances, and
 - vi) accounting for documents.
- (g) **Safeguarding assets:** A bank should have controls designed to ensure that access to assets or information is limited to authorised personnel. This includes both direct access and indirect access via documentation to the underlying assets.
- a) These controls are of particular importance in the case of valuable, portable or exchangeable assets and assets held as custodian.
- (h) **Personnel:** There should be procedures to ensure that personnel have capabilities commensurate with their responsibilities. The proper functioning of any system depends on the competence and integrity of those operating it.
- a) The qualifications, recruitment and training as well as the innate personal characteristics of the personnel involved are important features to be considered in setting up any control system.

3.3.6 *Controls in an Information Technology Environment*

19 The information held in electronic form within a bank's information systems is a valuable asset that needs to be protected against unauthorised access and disclosure. It is the responsibility of management to understand the extent to which a bank relies upon electronic information, to assess the value of that information and to establish an appropriate system of controls.

- a) The control objectives described above apply equally to operations undertaken in both manual and electronic environments, although there are additional risks associated with electronic environments.
- b) The FSA recognises that this will usually be achieved by a combination of manual and automated controls, the balance of which will vary between banks, reflecting the need for each to address its particular risks in a manner which is cost effective.

20 The types of risk most often associated with the use of information technology in financial systems may be classified as follows:

- (a) fraud and theft;

- a) Access to information and systems can create opportunities for the manipulation of data in order to create or conceal significant financial loss. Additionally, information can be stolen, even without its physical removal or awareness of the fact, which may lead to loss of competitive advantage. Such unauthorised activity can be committed by persons with or without legitimate access rights.
 - (b) errors;
 - a) Although they most frequently occur during the manual inputting of data and the development or amendment of software, errors can be introduced at every stage in the life cycle of an information system.
 - (c) interruption;
 - a) The components of electronic systems are vulnerable to interruption and failure; without adequate contingency arrangements this can lead to serious operational difficulty and/or financial loss.
 - (d) misinformation.
 - a) Problems may emerge in systems that have been poorly specified or inaccurately developed. These might become immediately evident, but can also pass undetected for a period during which they could undermine the veracity of supposedly sound information. This is a particular risk in systems where audit trails are poor and the processing of individual transactions difficult to follow.
- 21 Management should be aware of its responsibility to promote and maintain a climate of security awareness and vigilance throughout the organisation. In particular, it should give consideration to:
- (a) IT security education and training, designed to make all relevant staff aware of the need for, and their role in supporting, good IT security practice and the importance of protecting company assets;
 - (b) IT security policy, standards, procedures and responsibilities, designed to ensure that arrangements are adequate and appropriate.

3.3.7 *Money laundering deterrence*

- 22 It is a requirement of the Money Laundering Regulations 1993 that authorised banks have policies and procedures in place to guard against their business and the financial system being used for the purpose of money laundering. The FSA, when considering whether a breach of its *rules* on systems and controls against *money*

laundering has occurred, will have regard to whether a *firm* has followed relevant provisions in the guidance for the UK financial sector issued by the Joint Money Laundering Steering Group.

See Money
Laundering
Sourcebook

- a) See also SYSC 3.2 for the FSA's rules on systems and controls against *money laundering*.

3.3.8 *Outsourcing*

See ch OS s4

23 Banks are required to adequately record and control their business. Where a bank has outsourced an aspect of its operations to another part of the group, or to an external supplier, it should ensure that its records and controls adequately cover that business.

24 Banks should put in place procedures for monitoring and controlling the outsourced operations, and for ensuring that the information requirements of the authorised bank's management with respect to the outsourced operations are satisfied (see chapter OS).

3.3.9 *Internal audit*

See ch OS s4

25 The FSA has made a rule as an evidential provision stating that UK and overseas banks should have an internal audit function (see 3.3.23E in chapter GN) - although it accepts that some banks may wish to discharge this function other than by means of an in-house internal audit department: for example, the function might be carried out by head office internal auditors in the case of a branch or could be outsourced.

See ch GN (s3)

26 Although the FSA understands that banks may wish to consult their external auditors for advice on internal audit matters, banks should not outsource outright their internal audit functions to their external auditors or skilled persons. However, in certain circumstances the FSA may agree that the provision of certain internal audit services by a bank's external auditors or skilled persons is appropriate.

See ch OS s4

- a) See the chapter on outsourcing for further guidance.

27 Internal audit provides independent assurance over the integrity and effectiveness of systems.

28 The scope and objectives of internal audit are dependent upon the judgement of management as to its own needs and duties, the size and structure of the bank and the risks inherent in its business.

- a) Important considerations in assessing the effectiveness of internal audit include the scope of its terms of reference, its independence from operational management, its reporting regime and the quality of its staff.

29 The following control functions could be undertaken by internal audit:-

- (a) review of accounting and other records and the control environment;
- (b) assist management with the identification of risk;
- (c) challenge the assumptions within the control systems;
- (d) review of the appropriateness, scope, efficiency and effectiveness of internal control systems;
- (e) detailed testing of transactions and balances and the operation of individual internal controls to ensure that specific control objectives have been met; and
- (f) review of the implementation of management policies.
 - a) In addition, the role of internal audit might include (but should not be limited to) special investigations for management where there are areas of particular concern.

30 It is important to ensure that the internal audit function is appropriately structured and resourced to enable it to provide the independent appraisal of internal controls.

- a) The position of head of Internal Audit should be a key role within the bank and, accordingly, should be undertaken by an experienced and senior individual. The objectivity and independence of internal audit should be supported by appropriate reporting lines. In most cases this would be dual reporting lines from the head of internal audit to the Chief Executive Officer or equivalent, and access to the Audit Committee, usually via the non-executive chairman of the Audit Committee.
- b) Generally, internal audit should not have authority or responsibility for the activities it audits.
- c) Internal audit should have unrestricted access to all of a bank's activities, records, property and personnel to the extent necessary for the effective completion of its work.

- d) The internal audit function should be staffed with individuals who are appropriately qualified for the function either by holding professional qualifications or by having the requisite experience. Internal auditors should have regard to the Auditing Guideline: Guidance for Internal Auditors issued in June 1990 by the Auditing Practices Committee (and adopted by the Auditing Practices Board);
- e) Non-executive directors who review certain aspects of a bank's business on a periodic basis should not be seen as a substitute for an internal audit function.

3.3.10 *Audit committee*

See ch GN s3

31 The FSA has made a rule as an evidential provision stating that UK banks should have an audit committee chaired by a non-executive director of the bank or be an audit committee of non executive directors of the bank's holding company (see 3.3.25E in Chapter GN).

- a) It may not be necessary for a bank to have an audit committee chaired by a non-executive director of the bank in the rare circumstances where an audit committee of non-executive directors of the bank's holding company satisfactorily fulfils the role of audit committee in respect of the bank itself.

32 Both the Cadbury and Hampel Committees have provided guidance for listed institutions on audit committees.

- a) The Financial Aspects of Corporate Governance, published on 1 December 1992, by the Committee on the Financial Aspects of Corporate Governance, chaired by Sir Adrian Cadbury.
- b) The report, published in January 1998, of the committee on corporate governance chaired by Sir Ronnie Hampel.

33 Drawing on the recommendations of the Cadbury Committee and the report of the Hampel Committee, the FSA believes that for an audit committee to be effective:

- (a) the audit committee should have a formal constitution and terms of reference;
- (b) meetings should normally be attended by the external auditors, the head of internal audit and the finance director;
- (c) there should be at least one meeting with the external auditors each year, without executive board members present; and

- (d) the audit committee should have explicit authority to investigate matters within its terms of reference and access to information and external advice.

- 34 In accordance with the Cadbury and Hampel recommendations, the audit committee of a listed bank should have a minimum of three members all of whom should be non-executive and a majority of whom should be independent of the company.
- 35 Unless there are sound reasons to the contrary, the FSA believes that all unlisted banks should appoint a minimum of two non-executive directors to undertake some audit committee functions.
- a) The FSA recognises that some very small unlisted banks may find it difficult to appoint suitable non-executive directors for an audit committee of non-executive directors to be established. The structure of the audit committee should be commensurate with a bank's needs and particular circumstances, and should have regard to its size and the volume and complexity of its transactions and commitments. In these unusual circumstances, the non-executive director who chairs the audit committee should be (i) independent of executive management, (ii) have no allegiance to a particular group of shareholders, (iii) have relevant banking or accounting expertise and (iv) be capable, if necessary, of standing up to the executive management.

FOREIGN EXCHANGE - RISK BASED SUPERVISION

1 INTRODUCTION

1.1 Context

1 This chapter outlines the FSA's policy for monitoring FX risk through risk based supervision, and explains the circumstances in which the FSA considers that this policy is appropriate for a bank rather than one which involves the application of FX guidelines.

2 It is important that the FSA can assess the adequacy of systems and controls for all market risks. As the risk assessment process, established through the RATE programme, is formalised, this chapter may be extended to cover the FSA's policy in relation to other market risks.

3 The policy set out in this chapter covers the minimum standards for determining whether risk based supervision is appropriate for a bank rather than FX guidelines. It is focused on FX risk and not the other risks to which banks are exposed when they deal in foreign currencies. It is not a complete statement of best practice in the control or management of FX or other market risks.

See ch FX

4 All UK banks should include their FX exposures, whether in the banking or trading books, in the calculation of their capital requirements. The framework for calculating capital requirements for FX risk is given in the chapter on foreign exchange risk.

1.2 Legal sources

See COND

5 Principle 3 of the Principles for Businesses requires a firm to take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems, and the Threshold Conditions ("Suitability") include the need for a firm to conduct its affairs soundly and prudently. In order to meet these requirements a bank should have adequate systems of control of its business and records.

- a) One aspect of this is the need for a bank to have adequate systems of control surrounding its FX business.

1.3 Application

6 The policy in this chapter applies to all banks that conduct FX business except EEA banks.

- a) The very limited host country supervisory responsibilities in respect of branches of banks incorporated elsewhere in the EEA under The Banking Consolidation Directive (formerly the Second Banking Co-ordination Directive) do not include the monitoring of FX exposures. The requirements in this chapter therefore do not apply to UK branches of EEA-incorporated banks.

1.4 How this chapter is organised

7 Section 2 covers the background to the change and outlines the basis of the new risk based approach.

Section 3 details the main elements of the policy relating to the monitoring of FX risk. Section 4 details the framework for the approach and Section 5 sets out the policy for determining whether it is appropriate for a bank to use FX guidelines or the internal limits approach.

2 RATIONALE

2.1 General

1 A bank which has *net positions* in foreign currencies (including gold), either because of FX trading positions or because of exposures caused by its overall assets and liabilities, is exposed to the risk that the relevant exchange rate or rates might move against it - *FX risk* (or exchange rate risk). It is therefore important that a bank has adequate systems and controls to manage that risk.

- a) For the purpose of this chapter foreign currency/foreign exchange are referred to as FX.

2.2 The risk based approach

2 The FSA is implementing a system for supervising FX risk which is based on an assessment of a bank's internal limits in relation to its individual internal controls, risk appetite and capital.

- a) A bank's FX exposures were previously supervised through a system where it was set maximum overnight open position guidelines, and banks reported their month-end overnight position, together with any breaches of the guidelines intra-month, on the Form S3.

The guidelines system was intended to enable the extent of a bank's FX exposures to be assessed, in relation to both other risks and capital, and their internal controls. This remains a key objective for the FSA's supervision.

However, since the introduction of the guidelines system, there have been a number of developments, which mean that it is no longer the most effective way to supervise FX risk:

- Many banks now trade a wide range of instruments which expose them to significant market risks, so it is no longer appropriate to have special arrangements for FX risk, to the exclusion of other, possibly significant types of market risk.

- Many banks have developed sophisticated risk measurement systems which cannot readily be accommodated within the guidelines regime, but which can nevertheless be more appropriate bases for measuring their risk.

- Under the CAD and its subsequent amendment (CAD2), capital requirements for FX risk can be based on measures which better reflect risk than the measure used on the Form S3, which underlies the

guidelines regime.

- Many banks now run their FX business in a way which was not envisaged when the regime was established (e.g. as part of a global book), and which cannot now easily be accommodated.

3 MAIN FEATURES OF THE POLICY

3.1 Main obligations on a bank

- 1 In order to be able to assess whether the risk based approach for monitoring FX risk is appropriate for a bank, the bank should provide the FSA with the information needed for the FSA to assess the adequacy of its internal systems and controls and internal limits.
- 2 A bank adopting this approach should provide the FSA with the information it requires for the on-going monitoring of FX risk.
- 3 Under the risk based framework, a bank should still notify the FSA immediately if the limit structure for monitoring FX risk changes.
- 4 Banks not adopting the new risk based approach, should operate within its existing FX guidelines. A bank should provide the FSA with the information it requires to enable the FSA to supervise the bank's FX exposures within the existing guidelines.

3.2 The FSA's supervisory practice

- 5 The FSA assesses the adequacy of a bank's systems and controls, and the limits structure relating to FX business, in the bank, before deciding whether it is appropriate for it to adopt the risk based approach.

Provided the FSA is satisfied that the systems and controls surrounding a bank's internal limits are adequate in relation to the business undertaken by the bank, and that certain minimum standards are in place, it will agree that it would be appropriate for a bank to be supervised using its internal limits.

See s4 a) Further details of the process of monitoring FX risk using a bank's internal limits are given below.

See s5 b) Details of the minimum standards that the FSA expects to be in place are given below.

- 6 Following the transition to a risk based approach, the FSA continues to monitor FX risk from the information received from the bank, including exception reports. The FSA monitors a bank's FX risk against the limit structure agreed with the bank. The FSA may, therefore, request an explanation in cases where a bank does not comply with its limits.

- a) The FSA may set limits on a bank's FX business if significant problems are identified.

4 RISK BASED FRAMEWORK

4.1 General

Under the risk based system for supervising FX risk, banks are supervised in relation to internally set limits. The FSA assesses the adequacy of internal systems and controls relative to the internally set limits.

4.2 Risk assessment

4.2.1 *General*

1 As part of the assessment of the adequacy of internal systems and controls, the FSA considers the extent to which a bank is exposed to FX risk across all of its businesses.

- a) For UK banks this is on a solo (or solo-consolidated) and a consolidated basis.
- b) This is usually undertaken as part of the RATE assessment of a bank.

4.2.2 *On-going monitoring*

2 The FSA identifies one or more high-level internal limits in order to assess the level of FX risk to which a bank may be exposed.

- a) The precise nature of identified limit varies between banks but they may be Value at Risk limits for all FX risk, open position limits or a series of limits covering different blocs of currencies.
- b) Coverage of these identified limits depends on how a bank manages its business (although all material FX exposures should be subject to such limits).

3 The FSA should be notified promptly of any changes to these limits.

- a) Line supervisors may wish to specify the extent to which they expect to be notified of changes e.g. depending upon materiality.

4 The FSA should also be informed of significant business developments which affect the nature of a bank's FX exposures.

- a) This might be, for example, dealing in new products or currencies.

- 5 The FSA needs to understand the process by which the internal limits are set and sub-allocated to different business units and currencies as well as a bank's approach to breaches.
- 6 The FSA expects timely notification of material breaches of the limits once identified. It periodically seeks information on limit usage.
- a) The extent of this information and the frequency with which it is sought depends on the amount of information already received under existing reporting arrangements, e.g. capital adequacy returns for the trading book, and on the particular circumstances of the individual bank.
 - b) In some cases information may be provided by management information reports.
 - c) The materiality threshold for notification of breaches is agreed with a bank on a case-by-case basis, taking into account the precise nature of the limit and on what measure of exposure they are based, e.g. VaR or open position.

4.2.3 *Systems and controls*

- 7 Where a bank decides not to continue to adopt the guidelines system, it is for the bank to set its internal limits in line with its business objectives. The role of the FSA is to assess the adequacy of systems and controls in a bank for a given level of potential risk.
- a) The intensity and frequency of the assessment depends on the assessment of the balance of risks across the whole bank.
- 8 Where the FSA identifies significant concerns, it will seek appropriate remedial action, primarily to improve the relevant systems and controls.

5 THE CASES WHERE IT IS APPROPRIATE FOR A BANK TO ADOPT THE RISK BASED APPROACH

5.1 General

- 1 A bank's control of its FX exposures should be adequate for the nature and scale of its business. A bank should not move to the risk based approach, until it is satisfied as to the adequacy of its internal limits and controls in the context of its business.
- 2 A bank should not move to the risk based approach where the FSA is not satisfied that FX risk will be adequately monitored through a system of internal limits.

5.2 Minimum standards

- 3 In assessing the adequacy of a bank's internal exposure limits and controls the FSA has regard to the following minimum standards:
 - (a) The board of directors and/or its appropriate committee has defined the risk appetite of the bank, approved risk management policies and procedures (including exposure limits which reflect that risk appetite) and delegated day-to-day responsibility for managing FX risk to an appropriate body or individual;
 - (b) The policies and procedures are documented, reviews occur periodically and procedures are in place to ensure compliance. Procedures should be established for:
 - (i) approval of new limits (including for new products);
 - (ii) reallocation of limits, e.g. between currencies;
 - (iii) recording and follow-up of limit excesses;
 - (iv) timely measurement and reporting to management of exposures.
 - (c) Intra-day and overnight limits should be in place for all authorised dealers, all currencies in which the bank deals and all sources of foreign exchange exposure.
 - a) This covers both proprietary trading, and trading on behalf of customers.
 - b) This applies to each relevant business unit.

- (d) The effect of exchange rate and volatility changes on all assets, liabilities and off-balance sheet positions, including options, should be considered.
- (e) Where immaterial exposures are not aggregated with other exposures or subject to limits this should be clearly documented.
- (f) Limits should be based on risk measurement systems which are appropriate to the bank, and the currencies and products in which it deals. The risk of loss from stressful market conditions, including breakdown of key assumptions, e.g. parities between currencies, should be considered when establishing limits.
 - a) These are the minimum standards a bank should meet before ceasing to adopt the guidelines approach. They are focused on FX risk and not the wider risks to which banks are exposed when they deal in foreign currencies. They are not a complete statement of best practice in the control and management of FX and other market risks. Minimum standards are likely to evolve in future.

5.3 Ceasing to adopt guidelines

5.3.1 *Where minimum standards are met*

See s4

- 4 When the FSA is satisfied that a bank meets the above standards, and has been notified of the high-level limits described above, it will consider it appropriate for a bank to be supervised on the basis of internal limits.

- a) Where a bank intends to increase the level or nature of its exposures significantly once guidelines cease to be followed, the FSA may wish to visit the bank to ensure that adequate controls are in place for the nature and scale of business envisaged.

5.3.2 *Where minimum standards are not met*

- 5 Where the FSA judges that the minimum standards are not met, and that adequate internal limits and surrounding controls are not in place, banks are expected to continue to operate within existing guidelines and to remedy control weaknesses before the guidelines cease to apply.

- a) In such circumstances the FSA does not expect to agree any subsequent increase to existing guidelines. Where a bank wishes to change the pattern or scale of its FX business it should first confirm

that the FSA is satisfied that appropriate internal limits and surrounding controls have been put in place.

- b) Such an arrangement should not be permanent. All banks are expected to remedy control weaknesses and transition off guidelines in due course.

FRAUD

1 INTRODUCTION

1.1 Legal sources

See SYSC 3.2.6R

- 1 This chapter is relevant to the rule the FSA has made requiring firms, including banks, to take reasonable care to establish and maintain adequate systems and controls for compliance with its regulatory obligations and for countering the risk that it might be used to further financial crime (see SYSC 3.2.6R). Compliance with that rule is relevant to a bank's compliance with the Principles (as to "Management and control") and its meeting of the Threshold Conditions (as to "Suitability").

See COND

- 2 Firms, including banks, are required to provide the FSA with a wide range of information in order for the FSA to be able to meet its responsibilities for supervising firms and monitoring their compliance with requirements imposed by or under the Act. Chapter 15 of the Supervision Manual sets out rules and guidance for notifications to the FSA. Rule 15.3.1 sets out the general notification requirements. Rule 15.3.17 sets out the notification rule in respect of fraud, errors and other irregularities.

See Supervision
Manual

1.2 Application

- 3 This chapter applies to all UK and overseas banks. Sections 3.3, 3.4, and 3.5 apply to EEA banks. The remainder of the chapter also applies to EEA banks in so far as the matters covered are relevant to the maintenance of adequate systems and controls against money laundering.

1.3 How this chapter is organised

- 4 Section 2 sets out the main obligations on banks and the FSA's financial crime objective.
- 5 Section 3 describes some problem areas, of concern to the FSA, which have given rise to actual cases of fraud or exposed banks to opportunities for fraud.

2 THE MAIN OBLIGATIONS

2.1 A bank's main obligations

See the
Supervision
manual

- 1 Chapter 15 of the Supervision Manual sets out the notification requirements that apply to all firms. Rule 15.3.17 requires firms to notify the FSA immediately if certain events arise and the event is significant.
- 2 Notifying the FSA in no way reduces a bank's responsibility to bring relevant matters to the attention of the relevant law enforcement bodies or other regulators, as appropriate.
- 3 A bank needs to monitor and review its internal controls constantly to ensure its overall control environment protects it against the possibility of fraud, both the direct financial risks involved and reputational risk.
 - a) Reputational risk may arise from a bank unwittingly lending support to the standing of a dubious scheme or its promoters, or by accepting dubious instruments into safe custody.

2.2 The FSA's financial crime objective

See the Act (s2
& 6) and the
Enforcement
Manual

- 4 The Act gives the FSA as one of its regulatory objectives the reduction of financial crime. Section 6 of the Act states that financial crime includes any offences involving fraud or dishonesty; misconduct in, or misuse of information relating to, a financial market; or handling the proceeds of crime.
- 5 The FSA, when informed by a bank of a business offer which it considers dubious, will consider the nature and extent of warnings that should be given to other relevant parties; in doing so, the FSA exercises the greatest care to respect any necessary confidences.

3 COMMON PROBLEM AREAS

1 This section sets out some of the main concerns that the FSA has. These concerns are potentially relevant to every bank, no matter how well run. All should be carefully considered by a bank's management.

3.2 Systems and control weaknesses

General

2 Many of the cases supervisors have observed that have given rise to actual cases of fraud or exposed banks to opportunities for fraud relate to inadequate internal controls. The examples set out below are not all encompassing but give a flavour of recurring problems.

- a) Adequate internal controls are an essential part of a bank's overall control environment, which management should monitor and review constantly.

Segregation of duties

3 In some instances there is still some blurring of responsibilities between a trading operation's front and back offices. Examples include dealers pricing part or all of their portfolios or monitoring their own adherence to limits, with no strong independent middle or back office control.

4 Segregation of duties can only achieve its objective if it is effectively performed. A theoretical control does not stop abuse. In supervisors' experience, procedures which appeared adequate on paper have failed in practice when faced by a determined individual or weak operatives. So a control system can only be judged by whether it operates in practice and under stress, no matter how efficient it may seem in theory.

Possible conflicts of interest

5 Dealers' job specifications have included a variety of responsibilities, some of which may give rise to potential conflicts of interest. There have been a number of instances where dealers have been acting as client relationship managers, as well as carrying out their dealing responsibilities for the bank's own account. This creates potential risks such as front running, misallocation of deals and concealed personal account dealing. Whilst these risks cannot always be avoided by strict segregation, stringent controls should be effectively exercised by a bank's management.

Employees

- 6 The Act requires those persons who are to perform one or more controlled functions to receive approval from the FSA before starting to perform those functions. As part of the process information about the person is assessed to identify those persons who may not be suitable to perform a controlled function.
- 7 However, it is possible for relatively junior members of staff to commit significant proportions of a bank's and a bank's clients' assets through their dealing activities. This makes basic honesty from all employees even more important.
- 8 The FSA has observed an increasing number of problems resulting from the failure of former employers to give balanced references or of prospective employers to take up references. A bank should consider very carefully the implications of not performing full checks before recruiting staff and of not giving frank references for unsatisfactory former employees.

The back office

- 9 Effective management control is dependent on management information that is accurate and complete. There are examples, in banks of all sizes, where basic control procedures are not carried out, which means that information is often inaccurate and incomplete. These are fundamental issues; the scope for the manipulation of results and the balance sheet is directly related to the effectiveness of management control, which can only be achieved on the basis of accurate information. It also concerns the FSA, as supervisors, in assessing a bank's financial reports.
- a) Examples include:
- not performing nostro reconciliations regularly;
 - no procedures for independently reconciling, for profit and loss account purposes, front office revaluations;
 - not clearing suspense accounts; and
 - not reconciling management information to the financial accounts.

Payments systems

- 10 Significant risks can arise from weaknesses in controls over the major payments systems used in banks. There have been instances where internal controls over electronic payments systems and tested telex payments have been breached.

- a) Tested telex payments are often used only as back-up to the transfer of funds by electronic means (e.g. SWIFT) but they are still used for dealings with less sophisticated counterparties.

11 A bank should regularly review its controls over all systems which could enable significant funds to be transferred to unauthorised third parties.

- a) Reliance on detection controls, such as nostro reconciliations, highlight problems - but only after funds have been disbursed.

3.3 Fraudulent invitations

12 A bank may find itself approached to play some role in transactions which are, in reality, fraudulent. These often manifest themselves as complex, high value financial transactions offering attractive opportunities for low-cost funding or high-return investment; they may involve financial instruments (CDs or 'prime bank instruments/guarantees') bearing the name of an unknown, or geographically remote, financial institution.

13 While the ultimate objective may be to obtain some form of payment (e.g. an 'advance fee'), this is unlikely to be the objective in approaching the bank. Rather the bank's participation is likely to be sought with the aim of obtaining documents that - either as they stand or after alteration - appear to add credibility and/or respectability to the approach. Examples include safe custody receipts that name the 'high value' document taken into the bank's care, but may be as innocent as letters which, in declining offers of business, afford access to a bank's headed notepaper.

14 If business of any substance is offered to a bank without a proper introduction from an established and trusted customer or financial associate, or suggest business wholly inconsistent with an existing customer's normal activities, a bank should exercise extreme care in authenticating the nature and origins of the transaction and the introducer of the business. The prudent conduct expected of a bank should be able to address both the direct financial risks and the reputational risks associated with such approaches.

3.4 'Brass plate' banks

15 Fraudsters are particularly attracted by the respect and credibility engendered in the eyes of the public by entities introducing themselves as a 'bank'. While claims to banking status have meaning if authorised in well regulated jurisdictions, elsewhere it may be possible to obtain banking status by the simple payment of a fee; such 'bank licences' are not infrequently acquired for the purposes of fraud.

- a) Criminal offences under the Act may be committed if such entities 'carry on business' in the United Kingdom.

16 A bank should be on its guard against facilitating fraudulent activity by association with such 'banks' - particularly as regards entering into any kind of banking relationship, e.g. the opening of a bank account (whether or not the address given is in the United Kingdom).

3.5 **Illegal deposit-taking**

17 A bank should also be on guard against inadvertently facilitating illegal deposit-taking by unauthorised businesses. Illegal deposit-taking continues to occur and often leads to significant numbers of individuals losing part or all of their savings. In many cases, this is the result of fraudulent activity; in all cases, depositors are exposed to a real risk of loss, because compensation is not available to them from the Financial Services Compensation Scheme

18 Illegal deposit-takers invariably need to use a bank account to handle the funds received and alert monitoring of such accounts by the bank concerned can throw up warning signals justifying further investigation. By prompt action, a bank may be able to protect itself from reputational damage or possible legal action to repay depositors.

COMFORT LETTERS

1 INTRODUCTION

1.1 Legal sources

See COND

1 A bank must meet the Threshold Conditions which include the requirement that it is a fit and proper person having regard to, inter alia, its connection with any person. In addition, persons who acquire control over a bank (a 'controller') must meet the approval requirements set out in section 186 of the Act. A controller's willingness to provide a comfort letter may be relevant to whether these requirements are met in a particular case.

2 The approval requirements are that –

- (a) the controller is a fit and proper person to have the control over the authorised person that he has, or would have if he acquired the control in question; and
- (b) the interests of consumers would not be threatened by the controller's control or by his acquiring that control.

3 As a matter of policy, the FSA normally requests a comfort letter from any person who acquires, or proposes to acquire, 15% or more of a UK bank's voting power, in the context of its assessment of the controllers of that bank. The FSA needs to be assured as to the financial soundness of a controller of a UK bank, including its ability to stand behind it if concerns arise over its solvency and liquidity.

4 The FSA also takes into account in its assessment the willingness (or lack of it) of such a controller to support the bank. In the FSA's view, this involves acknowledging a higher level of responsibility to depositors in a bank than is implied by strict limited liability as a shareholder. It is a purpose of a comfort letter to demonstrate such an acknowledgement.

- a) [This section is intentionally blank.]
- b) For the full definitions of acquiring control see part XII of the Act
 - i) [This section is intentionally blank.]

5 [This section is intentionally blank.]

1.2 Scope of application

See s2

6 This chapter applies to controllers of UK banks and potential authorised UK banks only. There are, however, certain exceptions, notably for a UK bank subsidiary of another UK bank; these are explained below.

1.3 How this chapter is organised

7 Section 2 explains the purpose of comfort letters and who might be asked by the FSA to provide one.

2 THE FSA'S APPROACH TO COMFORT LETTERS

2.1 General

1 A *comfort letter* is a letter provided by a controller of a UK bank to the FSA, undertaking to support that bank beyond the limited liability attached to its shareholding, should this become necessary. It is a statement of intent rather than a legally binding document and is not, therefore, viewed in the same way as a guarantee.

- a) Its existence can, however, help maintain market confidence in a bank during periods of uncertainty; for example, creditors may be willing to allow more time for repayment and other banks may allow covenanted facilities to remain in place.

2 The FSA normally requests a comfort letter from any person who acquires control of 15% or more of the voting power of a UK bank.

- a) If a UK bank has more than one such controller, the FSA normally requests a comfort letter from each. So there would be two or more comfort letters in respect of that bank.
 - i) However, a comfort letter couched in pro rata terms is not usually accepted.
- b) Exceptionally, the FSA may request a comfort letter from a controller holding less than 15% of the bank's voting power. Instances where such a request might be made include:
 - i) where the relevant shareholding appears to confer powers of governance in excess of those that would normally be associated with such a stake; and
 - ii) where significant influence is being exerted, even if the stake is not large.

3 There are two main purposes behind a request for a comfort letter:

- (a) to help the FSA assess a controller in respect of its shareholding; and
- (b) to ensure that the controller:
 - (i) recognises the special nature of a deposit-taking business; and
 - a) that banks are different from other companies because of their responsibilities to depositors and potential depositors, and because of

the potential impact on the wider financial system if they run into difficulties; and

- (ii) confirms its acceptance of a moral responsibility to support the bank, should this become necessary, beyond the limited liability attached to its shareholding.

4 There is, in principle, no limit on the level of expected support given since the controller undertakes to ensure that the bank continues to meet its obligations.

- a) This might result in the controller being expected to provide liquidity support or to take measures to preserve the solvency of the bank.

5 The scope of a comfort letter encompasses not only the UK bank but also flows of funds from the bank to any solo consolidated subsidiaries.

- a) The FSA expects a bank to inform it of any difficulties experienced by its subsidiaries, particularly those which are solo consolidated.

See ch CS s9

- i) The general rules on consolidation, including solo consolidation, are given in the relevant chapter.

6 The FSA does not specify what is an acceptable form of wording for a comfort letter. What constitutes an acceptable form of words depends on the person giving the undertaking and its relationship to the bank.

- a) However, the actual form of words used may impact on the FSA's assessment of the controller in respect of its shareholding.

2.2 Who might be asked

7 The FSA normally asks any *person* acquiring 15% or more of the voting power of a bank to provide a comfort letter.

- a) A *person* includes:
 - i) a company;
 - ii) an overseas bank;
 - iii) a trust;
 - iv) a mutual entity; and
 - v) an individual.

- b) Except where the controller is an individual, a comfort letter should be signed by a senior director, after informing the board.
- c) Where the controller is an individual, he must sign the comfort letter himself.

See COND

8 However, a UK bank is normally excluded, except where its shareholding relates to a consortium bank.

- a) The willingness and ability to stand behind an authorised bank subsidiary forms part of the FSA's assessment as to whether the parent bank meets the Threshold Conditions for authorisation set out in the Act.

9 Where a controller is substantially owned or controlled by a third party, for example, where it is a company which is part of a larger group, or the subsidiary of a holding company, the FSA considers whether a comfort letter should be sought instead from that third party.

Whilst each case is judged on its merits, generally the FSA's policy is to ask a controller for a comfort letter if it is a company of substance in its own right, and to ensure that the controller's parent is aware that it has provided one.

Where the controller is a company of little substance in its own right (e.g. a small component of a much larger group or a holding company), the FSA may look through it and ask the ultimate parent for a comfort letter instead.

2.3 Returning a comfort letter

10 The FSA is willing to return a comfort letter to a former controller on request.

VALUATION

1 INTRODUCTION

1.1.A Scope

1 Questions of valuation arise in relation to a number of the requirements a bank must meet. Proper valuation is also generally necessary if the FSA is to be able to assess correctly the risks a bank faces. This chapter gives details on valuation relevant generally to underpin the chapters dealing with those individual risks. It is particularly relevant to the chapters on:

See ch CO

- capital adequacy;

See chs LM &

LS

See chs LE & TL

- liquidity; and

- large exposures.

The chapter also outlines the factors which govern the form and content of a bank's statutory financial statements and sets out the basis on which a bank should report its financial information to the FSA.

1.1.B Application

2 This chapter applies primarily to all UK banks. However, UK branches of overseas and EEA banks have reporting requirements. The treatments described in this chapter are relevant to that reporting.

1.1.C Legal Sources

See COND

The need for a bank to adopt prudent valuation practices is relevant to its general compliance with the Principles (in particular the "Financial prudence" requirement) and the Threshold Conditions ("Adequate resources" and "Suitability") and the rules in the IPRU (BANK) in general. It is also relevant to meeting the requirements of the EU banking directives (see references to the directives in the Legal Sources sections in other chapters).

1.2 How this chapter is organised

3 Section 2 sets out the general policy which should be followed by banks when valuing their assets and off balance sheet positions. Section 3 sets out the practices a CAD bank in particular should adopt when valuing its trading book positions. Section 4 sets out

how certain assets and off balance sheet items should be valued when calculating counterparty exposures.

2 GENERAL POLICY ON VALUATION

- 1 A bank should value its assets and liabilities and its off balance sheet positions accurately, in a prudent and consistent manner, and in line with generally accepted accounting standards.
- 2 This is of fundamental importance if the FSA is to assess correctly the risks a bank faces and whether its capital and liquidity are adequate, and that it is conducting its affairs soundly and prudently.
- 3 A bank should report to the FSA its assets and liabilities at the value in its books (*book value*) in accordance with its usual accounting practices unless a different practice has been agreed in writing with the FSA.
- 4 Unless a different practice has been agreed in writing with the FSA, non - CAD bank should value both its trading and its banking books on an *accruals* basis rather than on a cash basis; and a CAD bank should value its trading book on a *mark-to-market* basis and its banking book on an *accruals* basis.

See ch CB

- a) The Capital Adequacy Directive ('CAD' - 93/6 EEC) and its subsequent amendment (98/31/EC) requires banks to split their business between trading and banking books. The chapter on the banking book/trading book division sets out those activities which constitute a bank's trading book; the banking book is defined as all other activities. If a bank's trading book falls below a certain size, it is deemed not to have a trading book for the purposes of the CAD.

See s3

- b) The practice a CAD bank should adopt when valuing its trading book positions are set out elsewhere.
 - i) A bank which does not *mark-to-market* positions held in its trading book for accounting purposes should still value them on a *mark-to-market* basis when reporting to the FSA, unless otherwise agreed in writing.
- c) Monetary assets and liabilities denominated in foreign currencies should be translated using the rate of exchange ruling at the relevant date. The rate used is normally the closing spot rate.
 - i) Where appropriate, the rates of exchange fixed under the terms of the relevant transactions may be used.

- ii) Where there are related or matching forward contracts in respect of trading transactions, the rates of exchange specified in those contracts may be used.
- d) The *accruals based accounting method* recognises revenue and costs when they are earned or incurred, not as money is received or paid.
- e) *Marking-to-market* is the process whereby a security or more generally a trading book position is revalued at current market rates.

A branch of a non UK incorporated bank should discuss the basis of its reporting with its FSA supervisor.

- 5 The form and content of a bank's statutory financial statements are governed by:
- (a) the Companies Act 1985, as amended by the Companies Act 1985 (Bank Accounts) Regulations 1991 ('BAR'), which implemented the EU Bank Accounts Directive, and the Companies Act 1985 (International Accounting Standards and Other Accounting Amendments) Regulations 2004 (SI 2004/ to follow), which made arrangements for the use of *international accounting standards* (see definition in the *Glossary*) by companies and implemented the accounting Modernisation Directive (2003/51/EC) of 18 June 2003;
 - a) The Companies Act sets out the basic format and minimum contents of a bank's balance sheet and profit and loss account.
 - (b) accounting standards comprising statements of standard accounting practice ('SSAPs') and financial reporting standards ('FRSs') or, where applicable, *international accounting standards*; and
 - a) SSAPs, FRSs and *international accounting standards* focus on particular accounting issues and apply to the generality of companies.
 - (c) statements of recommended practice ('SORPs') issued by the British Bankers Association and the Irish Bankers' Federation.
 - a) Because accounting standards apply to the generality of companies and not to banks specifically, they do not cover the accounting treatment of instruments and transactions peculiar to banks. SORPs issued by the BBA seek to plug this gap by codifying best banking industry practices.

6 [deleted]

7 [deleted]

8 [deleted]

9 [deleted]

3 VALUATION OF POSITIONS IN THE TRADING BOOK

See ch CB s5

This section sets out the practices a CAD bank should adopt when valuing its trading book positions. The trading book policy statement agreed with the FSA should reflect how a bank addresses those requirements.

3.1 Valuation practices

See ch CB s3

1 A CAD bank should mark-to-market daily all its trading book positions, including the recognition of accruing interest, dividends or other benefits as appropriate, on a prudent and consistent basis. Where a market determined price is not available, a CAD bank should generate its own mark-to-market valuation.

- a) *Cash items* included in the trading book for hedging purposes may be daily marked-to-market where they have a residual maturity of one month or less. A bank should seek the FSA's written agreement where it does not intend to adopt this practice.
 - i) For this purpose, *cash items* include loans and deposits and the cash legs of repo (stock lending) and reverse repo (stock borrowing) transactions.
- b) In the case of instruments held in the trading book for which a market determined price is not available, the equivalent of marking-to-market on a daily basis should be achieved by net present valuing the instruments concerned.
- c) Mark-to-market valuations do not have to meet the requirements for statutory accounts, because of the difference between historic cost accounting and the techniques associated with the mark-to-market requirement of the CAD.

See ch CB s5

2 A CAD bank should value its trading book positions on a prudent and consistent basis. The policies it applies in valuing those positions should reflect in particular the following:

- (a) whether the bank marks its positions to market using a close-out method based on two-way prices (a long position is valued at its current bid price and a short position at its current offer price), or alternatively using a mid-market price but making a provision for the spread between bid and offer prices for different instruments. The bank should have due regard to the liquidity of the position concerned and any special factors which may adversely affect the closure of the position;

- (i) if a bank is able only to access indicative prices or if the market is thin relative to the size of the bank's holdings, then having regard to the fact they are a guide only, such prices may have to be adjusted to some degree in order to arrive at a prudent valuation;
- (ii) if a bank is only able to access mid-market or single values it should have regard to the fact that these prices will have to be adjusted to some degree in order to arrive at a prudent valuation;
- (iii) how the bank establishes an appropriate size for the necessary provision where it intends to use mid-market prices;
 - a) Factors that a bank should take into consideration include:
 - i) the liquidity of the market;
 - ii) its market concentration; and
 - iii) the nature of its model risk, especially regarding pricing.
- (b) when calculating the value of non-marketable instruments a bank should have regard to the *net present values* of the future cash flows of the contract, using current interest rates relevant to the periods in which the cash flows will arise. In the case of interest rate swaps, currency swaps and FRAs, a bank may use the valuation under 2(a) limited to its net position. It should not, however, do so before discussing its intention with the FSA;
 - a) The valuation formula used by a CAD bank to calculate the values of its swaps and FRAs should accord with generally accepted market practice.
 - b) For a non-marketable instrument, *net present value* is the value of an instrument offering future payment(s) which have been discounted at appropriate interest rate(s).
- (c) where the FSA has agreed in writing that a bank may use a model in the calculation of its capital requirements for options, it may value its options using the values derived from the model;
- (d) where a CAD bank does not use a model and the prices are not published for its options positions, a bank should determine the market value as:

-
- (i) for purchased options, the mark-to-market value should be the product of the *in the money amount* and the quantity underlying the option;
- a) Purchased options in the trading book used as hedges should be identified and valued on the same basis as the banking book items being hedged.
- b) An option is *in the money* if it currently has *intrinsic value* and would therefore be profitable for the holder to exercise.
- i) The *intrinsic value* is the net value of an 'in the money' option if it is exercised:
- For a purchased put option, the *intrinsic value* is the difference between the amount received if the option is exercised and the current market price of the asset underlying the option; and
 - For a purchased call option, it is the difference between the amount paid over and current market price of the asset underlying the option.
- (ii) for written options, the mark-to-market value should be the initial premium received for the option plus the product of:
- the amount by which the current 'in the money' amount exceeds either the 'in the money amount' at the time the contract was written, or zero if the contract was *out of the money* at the time it was written; and
- a) An option is *out of the money* if it currently has no 'intrinsic value' and it would therefore not be profitable for the holder to exercise.
- the quantity underlying the option.
- (e) where the bank is a market-maker in the instruments, the valuation should be the bank's own bid or offer price which should reflect the bank's exposure to the market as a whole and its views on future prices. However, where the bank is the sole market-maker in a particular instrument it should take care to ensure the valuation used is prudent in all circumstances; and
- (f) where the bank has a long (short) position and a short (or long) position in an exactly offsetting instrument, as in the case of a security and an *American Depository Receipt* representing the same security, they may both be valued on a mid-market basis subject to the following:

- (i) the strategy should have been entered into as a specific arbitrage opportunity and should have the certainty of a locked-in profit (or loss) representing a worst case outcome;
- (ii) the profit (or loss) should be realisable instantly, subject to a reasonably short conversion period, and at any time;
 - a) So at no time should there be restrictions on the ability to convert.
- (iii) positions which are not part of the arbitrage should be valued at their respective bid or offer prices as appropriate;
- (iv) the underlying positions should be of reasonable liquidity and held in quantities which are not so large that they would affect their marketability; and
- (v) any conversion costs and foreign exchange costs should be provided for at the appropriate time and should be separately monitored over the life of the *arbitrage*.
 - a) An *American Depository Receipt* ('ADR') is a depository receipt issued by an American bank to promote trading in a foreign stock or share. The bank holds the underlying securities and an ADR is issued against them. ADRs are traded on major American exchanges or in the over-the-counter market.
 - b) *Arbitrage* is the simultaneous buying and selling of the same commodity (physical or financial) in different markets for different prices to realise a certain profit free of market (though not credit) risk.

See ch GN s3

The bank's trading book policy statement notified to the FSA in compliance with rule 3.4.7 should reflect how it meets these points.

4 VALUATION FOR COUNTERPARTY RISK

This section outlines the method the FSA considers relevant for the calculation of exposures arising from over the counter ('OTC') derivatives for large exposures and capital adequacy purposes: the replacement cost method.

4.1 The credit equivalent amount

1 In order to measure counterparty exposures relating to OTC derivatives, a credit equivalent amount ('CEA') should be calculated.

For banking book transactions, a bank should report on the same basis for large exposures and capital adequacy purposes. If a bank wishes to use an alternative, more conservative, methodology for CEAs for large exposures, this should be agreed in writing with the FSA first.

See s3.1
See ch GN s3

For trading book exposures, valuations should be made in line with the valuation procedures set out in the bank's trading book policy statement notified to the FSA in compliance with rule 3.4.7.

- a) The CEA is a more reasonable measurement of the exposure arising from these derivatives because the amount at risk is likely to be appreciably less than their nominal exposure.
- b) OTC derivatives are *interest rate, foreign exchange rate (including gold), equity, precious metals (excluding gold) and other commodities contracts* which are not exchange traded. The *interest rate, equity, commodities and foreign exchange rate contracts* for which the CEA should be calculated are set out in the chapters on large exposures and on counterparty risk on OTC derivatives and unsettled transactions.

See chs LE s6 &
DU s3

2 The CEA is derived from the value of the OTC derivatives calculated using the replacement cost method explained below.

The *notional principal amount* ('NP') is relevant to this method.

See chs LE s6
and DU s3

- a) Details of this method of deriving the CEA from the valuation are set out elsewhere.
- b) In the replacement cost method, the NP is used to calculate the amount added on for potential future credit exposure.

4.2 The replacement cost method

3 The value of a portfolio of OTC derivatives using the *replacement cost* method is the total worth of all its contracts with a positive mark-to-market value.

See ch NE s5

- a) The total may be offset as appropriate by the sum of contracts with negative mark-to-market value if certain conditions are met. These conditions are set out in the chapter on netting and collateral.

4.3 The notional principal amount ('NP')

4 How the NP is calculated differs according to the instrument in question:

- (a) for exchange rate contracts and bond options, the NP is the amount of principal underlying the contract, as regards the asset (currency, equity, bond or commodity) being received by the bank, translated into sterling at the spot exchange rate;
- (b) for an amortising swap, the NP is the amount outstanding;
 - a) for amortising interest rate swaps with cash-flow mismatches in payments, the NP may differ between the two sides of the swap. The NP should be taken as the amount of principal underlying the contract as regards the asset being received by the bank;
 - i) An *amortising swap* is a swap based on a steadily declining notional principal.
- (c) for a swap based on a fluctuating level of principal, the NP is the maximum notional principal outstanding over the remaining life of the swap;
- (d) for swaps involving reference assets, the NP relates to the total volume over the whole contract and not simply the volume per settlement period; and
- (e) for options purchased, the NP is the underlying principal on the option.
 - a) For currency options, the received currency at the spot rate is used.

COLLATERAL AND NETTING

1 INTRODUCTION

1.1 Legal sources

- See ch CO s1
See s3
- 1 The policy in this chapter is relevant to the requirements applying to banks referred to in the Legal Sources section of the Capital Adequacy Overview chapter.
- See s3
- 2 Section 2, on the Solvency Ratio, of Chapter 2, Title V of The Banking Consolidation Directive (formerly the Solvency Ratio Directive - SRD - 89/647/EEC), which establishes the framework within the European Union for bringing credit risk into the assessment of capital adequacy, recognises the use of *collateral* (collateral is when one party provides the other with the right to dispose of an asset to compensate for lack of payment) for reducing credit risk and *bilateral netting* (bilateral netting is the netting that takes place between two counterparties) for reducing credit risk on interest rate and foreign exchange rate contracts. The European Directive (96/10/EEC), the 'Netting Directive', amended the Solvency Ratio Directive to allow for the use of *close-out netting* for off balance sheet contracts.
- 3 The Capital Adequacy Directive ('CAD' - 93/6/EEC) set out the circumstances in which collateral can be used to cover counterparty risk in the trading book and detailed which positions can be netted.
- 4 The FSA's policy on netting and collateral originates from the 1988 Basel Convergence Agreement on capital standards and The Banking Consolidation Directive (formerly the Solvency Ratio Directive). The Capital Accord was amended in April 1995 to recognise the use of bilateral close-out netting and in April 1996 to recognise the use of multilateral netting for forward foreign exchange contracts only.
- 5 As well as these bases, the legal basis for on-balance sheet netting in the United Kingdom originates from the common law right of bankers to net debit and credit balances bilaterally.
- 6 This chapter sets out the FSA's policy on collateral and netting, and implements The Banking Consolidation Directive (formerly the Solvency Ratio Directive, as amended by the 'Netting Directive') and the relevant parts of the other Directives. This chapter sets out the circumstances in which the FSA considers that

it is appropriate for transactions to be reported either net or as collateralised for capital adequacy and large exposures purposes.

1.2 Application

7 This chapter applies to all banks which wish to report to the FSA on a net basis or use collateral for reducing exposures for capital adequacy or large exposures purposes.

8 The policy applies to all UK banks both on a solo (or solo-consolidated) and on a consolidated basis.

- a) Banks incorporated elsewhere with UK branches are subject to the capital adequacy requirements as implemented by their home supervisors.

See s4.5

9 Some parts, such as those parts covering using collateral in the trading book, are only applicable to CAD banks; these are highlighted.

1.3 How this chapter is organised

10 While there are differences in the detail of the FSA's policies on netting and collateral, there are a number of common issues; for that reason, these are given in a single chapter. Section 2 gives a brief rationale for the policy and covers the main elements of the policy. Section 3 explains some of the key terms used in this chapter.

11 Section 4 sets out policy on the use of collateral. It explains where the treatment of collateral is the same for the banking and trading books, those aspects specific to the banking book, and to the trading book and finally the policy on giving collateral.

12 Sections 5, 6, 7 and 8 explain the FSA's netting policy. Section 5 sets out the minimum contractual, system and information conditions which should be met for any netting agreement to be acceptable to the FSA and explains how compliance with those conditions is monitored.

13 Section 6 explains legal aspects of the policy in more detail. These include: the source of the legal opinion, issues which should be addressed in the opinion, walkaway clauses and multibranch and multi jurisdictional agreements.

14 Section 7 gives the detailed policy for on-balance sheet netting. The section explains netting of on-balance sheet counterparty risk positions in the banking book (for single customer and group

accounts) and the netting of repos in the banking book for large exposures reporting purposes.

- 15 Section 8 covers off-balance sheet netting i.e. for OTC derivative contracts, bond and equity forwards and repos. The FSA's policy on multilateral netting and cross-product netting is also set out.

2 RATIONALE AND MAIN ELEMENTS OF THE POLICY

2.1 Introduction

1 Netting agreements and the taking of collateral are two tools used by banks in credit risk management. Both can reduce a bank's exposure to financial loss resulting from the failure of a counterparty to meet its obligations. In both cases the bank is using a claim against someone else's property, assets or receivables (usually the counterparty's) to cover an exposure. Both mechanisms, if correctly structured, can result in a reduction in the amount of capital which may be needed for regulatory purposes.

2 The FSA's main concern in respect of netting is to ensure that a bank's effective exposure is limited to the net amount under the netting agreement. It is critical that the netting agreement has a well-founded legal basis in each relevant jurisdiction, so that the netting process is not invalidated by local law (particularly insolvency law) and that the obligations of the participants do not revert to being gross claims.

3 Where collateral is used the FSA seeks to ensure that the collateral agreement is enforceable and the size of any reduction in the capital which is maintained reflects the value of the collateral provided.

4 The FSA's policy generally accommodate the use of netting and collateral as long as the agreements have a firm legal basis and the bank has adequate systems and controls.

2.2 Key points

This sub section sets out general points applicable to netting and collateral.

2.2.1 *Collateral*

See s4.3

- Where collateral is taken in the form of cash, the bank should have a right of set-off (or other equivalent security interest) which is legally enforceable in all relevant jurisdictions.
- The rights attached to collateral can vary across borders. Therefore the FSA cannot assume that a pledge or fixed charge in another country gives the same effect as it would in the United Kingdom or that the same legal technique exists. A bank's lawyers should provide the appropriate legal opinion.

See s4.9

- In cases where eligible collateral is held, the risk weight may be reduced to reflect that of the collateral held.

2.2.2 *Netting*

See s5

- Whether netting works is a legal question. So when a netting agreement covers more than one legal jurisdiction, the netting arrangements need to meet the local legal requirements for netting to be effective.
- Where netting is permitted, the reporting should reflect the economic reality of how a bank monitors its exposures to a counterparty, and the legal reality.

See s5

- Where banks wish to report net for capital adequacy purposes, the policy set out in this chapter should be followed with regard to the accounting guidelines where relevant.
 - a) The policy for reporting net for capital adequacy and large exposures purposes is different in some respects to the netting rules applying to reporting to the Bank of England for monetary statistical purposes.

2.3 **Main elements of the policy**

2.3.1 *Banks' practices*

5 A bank should ensure, and be able to demonstrate where necessary, that its collateral and netting agreements are legally robust and meet the minimum contractual, compliance and system standards laid out in this chapter.

2.3.2 *The FSA's practice*

6 The FSA checks whether a bank has followed the FSA's policy on collateral and netting in relation to each of its proposals to net its repos and OTC derivatives transactions. The FSA needs to be satisfied that the policy has been followed before determining whether the particular treatment is appropriate for calculating a bank's capital and large exposures.

3 KEY TERMS: COLLATERAL, SET-OFF AND NETTING

3.1 Introduction

1 This section explains some of the key terms used in this chapter. The explanations given here are for guidance only, they are not legal definitions.

3.2 Collateral

2 *Collateral* is used by banks in financial transactions to mitigate credit or counterparty risk in the event of default of a counterparty. For example, in secured lending, by derivative exchanges in the form of margins and in the OTC derivative markets to manage credit risk. In giving collateral a party provides the other with the right to dispose of an asset to compensate for lack of payment.

a) *Collateral* may be considered as assets, property or securities over which a borrower is granted some form of security interest to secure payment of a loan in the event of default.

b) The term collateral does not include guarantees.

3 Collateral may not eliminate risk altogether. Like a guarantee it is a risk transfer mechanism; and there remains a risk that the value of collateral may not cover the exposure, thus leading to loss.

a) So when a loan to a company is collateralised by Zone A government securities, the risk weighting is reduced to reflect that collateralised exposures provide greater protection, in terms of exposure to financial loss, than uncollateralised exposures.

3.3 Set-off

4 Set-off is a legal technique used in netting and collateral agreements to ensure that the creditor's cross-claim can be paid, or discharged by setting it off against the debtor's claim. The main effect of set-off is that a creditor reduces his obligations to a debtor from whom he is also owed money.

5 In essence, where a right of *set-off* exists, if two people owe each other debts, the amount payable by one person to the other may be reduced by the size of the other's debt, to leave a net amount (or nothing) payable.

a) For example, if party A owes party B £150 and party B owes party A £100, both parties are a creditor and debtor. In this case the claims are reciprocal and undertaken by the parties as principals. These

reciprocal claims can be set off, so that B has a net exposure to A of £50.

6 Set-off does not occur automatically, except in insolvency, in the United Kingdom. There is no automatic right of set-off between banks.

3.4 Netting

7 The term *netting* is used to describe a process by which the obligations and payments from and the obligations and payments to, a specific counterparty or counterparties, may be netted against each other so that the amount is reduced to a net sum. The process is formalised in a netting agreement.

- a) For example, two banks can have reciprocal dealings and agree to net their trades. If bank A owes bank B £50 and bank B owes bank A £30, bank A can net its asset and its liability, resulting in a net amount payable by bank A to bank B of £20. Thus bank A's exposure to B has been reduced.
- b) The benefits which arise from netting include: the ability to manage and control counterparty risk proactively and a reduction in banking costs to the parties since only one net amount has to be paid.

See s4.2.2

8 A netting structure does not necessarily require the legal right of set-off to work, which highlights the distinction between the two terms. Set-off is a legal technique, netting is a term used to describe a process. The netting process may involve one of a number of legal techniques, although set-off is the most common.

9 Historically, there has been a well established legal right for bankers to be able to set off different accounts of the same customer. This forms the basis of on-balance sheet netting.

10 There are various forms of netting, but for supervisory purposes only two forms of netting off-balance sheet exposures are recognised: *netting by novation* and *close-out netting*.

- a) In *netting by novation*, obligations between two counterparties to deliver a given amount on a given date are automatically amalgamated with all other obligations to deliver on the same value date.

Such netting should have the effect of legally discharging performance of the original obligations and substituting the single net amount as the sole remaining obligation between the counterparties for the

relevant value date. Thus a single legally binding new contract extinguishes the former contracts.

- i) This technique is used mainly for netting foreign exchange and interest rate contracts.
 - ii) Netting by novation usually will only be used for delivery obligations relating to the same kind of asset. For example, in interest rate agreements, there will be netting by novation of payment obligations that are in the same currency.
- b) *Close-out netting* (often called contractual netting) is a contractual process. It is designed to apply on default of the counterparty - when all outstanding transactions between the counterparties that are subject to the netting agreement are combined and reduced to a single payable sum.

There are three stages to the process: termination, close out and netting. It involves terminating (or fixing) the obligations of both parties on the occurrence of an event, typically insolvency-related events. The loss or cost to each party is calculated according to a prescribed formula, often related to the cost of replacing the transaction by buying an equivalent position in the market at the prevailing time. The sums due on both sides may be calculated in or converted into a single currency and netted to one single payment one way or the other.

- i) The advantage of this technique is that it allows for risk management on a wider scale than netting by novation; exposures on all outstanding transactions entered into between the parties can be brought into the netting calculation, different kinds of product can be netted together, and different currencies can be netted against one another.

4 COLLATERAL

4.1 Introduction

1 The bulk of this section sets out the conditions that the FSA considers should be met before collateral should be considered as reducing credit exposure. Section 4.2 details the general contractual features which the FSA expects to be present in collateral agreements. Section 4.3 sets out the types of collateral which are considered acceptable for collateralising exposures in the trading and banking book. Sections 4.4 and 4.5 set out the policy specific to the banking book and trading book respectively. Section 4.6 explains the FSA's policy on the giving of collateral. Section 4.7 details the FSA's treatment of securities given as collateral, or rehypothecated.

4.2 Contractual arrangements

4.2.1 Main elements of the policy

2 The FSA's concern is to ensure that a bank is able to limit or reduce its exposure by taking as collateral security or assets which afford protection in the event of loss and by ensuring that it does not have to surrender the collateral before the exposure is extinguished.

3 The main mechanism by which cash collateral held by a bank can be enforced is through the legal right of set-off. Cash collateral may be held at the bank with the exposure, or by a third party bank; the latter case is explained elsewhere. However, the FSA is prepared to consider other mechanisms where these are legally effective and offer a similar or better level of protection. In such cases the bank should have obtained an appropriate legal opinion.

4 When eligible securities, as defined below, are used as collateral, a bank should satisfy itself that it has valid security over them. To confirm that this is the case the bank should have obtained an appropriate legal opinion.

5 A bank which reports on a collateralised basis should have obtained an opinion from its legal advisers that the set-off arrangements or other collateral arrangements are:

(a) legally well founded in all relevant jurisdictions; and

- (b) enforceable in the default, liquidation or bankruptcy of the customer or the depositor as well as in liquidation or bankruptcy of the bank.
 - a) In the case of cross jurisdictional transactions, a side letter should be provided to confirm that the collateral arrangements have a well-founded basis in all relevant jurisdictions and the FSA's policy (set out in this section) has been followed.
 - b) Note that in certain jurisdictions assets may be seized to satisfy local creditors; in such cases a bank should not report its relevant claim as being collateralised.

6 The FSA expects such opinions to be provided by an independent legal source of appropriate professional standing.

- a) In certain circumstances, the FSA may wish to be provided with a copy of the legal opinion.
- b) A bank should discuss with the FSA the circumstances in which internal legal advice will be satisfactory for this purpose.

4.2.2 *Flawed asset provisions*

7 Another way of ensuring that a bank does not have to repay cash collateral is through the use of flawed asset provisions, which have the same risk weighting as cash collateral.

8 A *flawed asset provision* in the case of cash collateral arrangements makes the repayment of the cash deposit conditional upon the depositor repaying the debt which the cash collateralises. Once that condition is satisfied the bank becomes liable to repay the cash deposit. In other words, a bank's liability to repay cash deposited with them as collateral for a loan, is conditional upon the customer repaying the loan to the bank.

- a) The flawed asset provision is a contractual provision and does not constitute a set-off provision because the bank has no right to apply the deposit in discharge of the liability - it only has a right to retain the deposit, forever if need be. The creditor's debt cannot be repaid by exercising the provision. The flawed asset provision only permits the creditor to retain the deposit until the debt is repaid. The effectiveness of such a provision should be confirmed in a legal opinion.
- b) The flawed asset provision should be accompanied by a charge or set-off arrangement.

4.3 Common treatment of collateral in the banking and trading book

4.3.1 *Forms of collateral*

9 The following forms of collateral (which are specified in The Banking Consolidation Directive - formerly the Solvency Ratio Directive) should be used to reduce risk weightings and large exposures in the banking and trading book. The collateral should be held for the term of the exposure. No other forms of collateral are considered by the FSA to be acceptable for these purposes:

(a) Cash (including gold) when the following conditions are met:

(i) the cash is held by the bank for the depositor/customer on express terms such that:

-it may not be withdrawn for the term of the exposure;
and

-the bank may apply it to discharge the exposure if and to the extent that it is not discharged by the borrower/customer in accordance with the terms of the agreement (or, with the FSA's agreement, may retain the cash until such time as it is repaid by the debtor).

See s4.2.1

(ii) the bank is able to exercise title over the cash collateral should the loan (exposure) which it secures not be repaid. The contractual requirements set out above should be met;

(iii) the bank which holds the cash should have a right to retain or apply the cash if the exposure goes beyond its normal term;

a) For all capital adequacy purposes the cash should be held with the bank or, where the conditions specified below have been met, with a Zone A credit institution.

b) For all large exposures purposes, the cash should be held with the bank which has the exposure.

See ch CS

i) The only exception to this is where two banks are members of the same consolidated group and the requirements set out in the

chapter on consolidated supervision, zero-weighting of intra group exposures have been met.

- (iv) if the cash is held in the United Kingdom at a UK-incorporated bank or at an overseas branch of the bank, that bank should have a legally enforceable right of set-off or a flawed asset provision over the cash.
 - (v) where the bank is a member of a syndicate and cash has been deposited with, and is held by, the agent itself for the benefit of the syndicate, the claims (or portion of the claims) of members of the syndicate which are cash collateralised may attract the weight appropriate for claims on the agent; and
 - a) If the agent is a bank, its own claims that are cash collateralised may be eligible for a 0% weight.
 - (vi) there are no claims to the cash which would defeat the bank's ability to acquire the cash. If the cash is subject to a third party claim it is not eligible as cash collateral.
- (b) Cash placed, in the form of deposits, with a third party Zone A credit institution. Such arrangements should satisfy the legal requirements for cash collateral set out above. Where this is the case, the reporting bank should include the deposits for large exposure purposes, but may apply a 20% weighting to the exposure for capital adequacy purposes when the following conditions are met:
- (i) The third party holding the collateral confirms in writing to the bank that it holds no rights over the bank's collateral; and
 - (ii) All other legal opinions already required for a normal two party collateral arrangement must be in place.
 - a) These opinions should also cover the effectiveness of the confirmation given in (i) above.
- (c) Certificates of deposit issued by and lodged with the lending bank itself; and
- (d) Eligible securities - i.e. Zone A central government, central bank and multilateral development bank securities.

- a) multilateral development bank securities should be included for large exposures purposes..
- b) Securities used as collateral should be marked to market. A bank not adopting this practice should discuss its proposed practice with the FSA.
- c) The FSA does not consider that a reduced weighting is appropriate to loans collateralised by local authority securities.

- 10 For capital adequacy purposes, claims which are fully collateralised, either in the banking book or trading book, for the term of the exposure, should attract the lower risk weighting attributable to the collateral.
- 11 Where part of the exposure is collateralised, only that part of the exposure should attract a lower risk weighting - the remainder should attract the full weighting appropriate to the counterparty.
- See ch DU s2 12 For some trading book counterparty risk purposes the value of the eligible collateral should be marked to market daily and an “add-on” (equal to the market value of the collateral multiplied by the relevant risk cushion factor) deducted from the value collateralised. For banking book purposes, the value of the eligible collateral may be marked to market daily. The risk weighting treatment in this case is explained below.
- See ch LE s9 13 For large exposures purposes, where an exposure is fully collateralised for the term of the exposure, the exposure may exceed 25% of the bank’s large exposures capital base. The bank should pre-notify the FSA and obtain its written consent. Such exposures are exempt from the limits set out in the chapter on large exposures but they should be reported.
- 14 Where part of the exposure is collateralised with eligible collateral for the term of the exposure, that part of the exposure may be exempted from the calculation of the limits set out in the chapter on large exposures, but should still be reported. However, the entire exposure, including the collateralised exemption, should only exceed the 25% limit where the bank has pre-notified the FSA and obtained its written consent. Exposures that are partially collateralised in this way should not have an uncollateralised element that exceeds the 25% limit.
- a) Exposures may also be partially guaranteed (e.g. by ECGD), where the element of the exposure that is guaranteed can be viewed as an exposure to the guarantor.

- See ch LE s8 15 The FSA still does not condone the practice of *top slicing*
- a) Top slicing is the practice by which a bank systematically collateralises only the element of the exposure that exceeds the 25% limit to bring it within the limit or collateralises only the element of an exposure that exceeds 10% of the bank's large exposures capital base in order to bring the sum of such exposures below the clustering limit. The FSA takes such activity into account when assessing a bank's risk profile and may, as a result, adjust the bank's individual capital ratio(s) accordingly.
 - b) A bank's approach to top slicing should be explicitly stated in its large exposures policy statement and reference should also be made to the bank's policy in respect of collateralising its large exposures.
- 16 An appropriate margin over the collateralised exposure should be maintained to cover fluctuations in the market value of the collateral to ensure that the collateral does not fall below the reported level.
- a) The margin should, among other things, take account of:
 - the maturity of the exposure;
 - where the collateral is denominated in a different currency from the exposure, fluctuations in the exchange rate;
 - the arrangements for marking to market the collateral and ensuring that the resultant deficiency in the margin is made up; and
 - the method by which the overall exposure is controlled.
 - b) A bank should also ensure that minimum transfer amounts are set at an appropriate level.
- 4.3.2 *OTC derivative contracts***
- See ch DU 17 The treatment of OTC derivatives for both capital adequacy and large exposures is the same for positions in the banking book and trading book. The rules for the collateralisation of OTC derivative exposures are likewise common except for the reduction of the "add-on" value for some trading book counterparty risk purposes.
- See ch DU and ch VA s4 18 To calculate the size of the potential exposure on an OTC derivative contract, a credit equivalent amount (CEA) should be calculated. The value of eligible collateral, reduced in the case of trading book transactions by an "add-on" equal to the market

value of the collateral multiplied by the relevant risk cushion factor, should be compared with the CEA. For capital adequacy purposes, where the collateral fully covers the CEA the risk weighting may be reduced accordingly. Where collateral covers only part of the CEA only that part should receive the appropriate lower risk weight.

- a) An exposure attracts a lower risk weight where collateral is held for the term of the exposure. A bank may reduce the level of collateral to match a reduction in the level of the exposure in respect of which the collateral is held.

See ch LE s6
and s7

19 For large exposures purposes, the CEA may be fully or partially collateralised. Where the collateral covers only part of the CEA, the FSA considers that only that part should be exempted from the calculation of the limits set out in the chapter on large exposures, but should still be reported.

4.4 Specific banking book rules

4.4.1 Risk weights

20 The risk weighting for collateral held in the banking book (as set out in Article 43 of The Banking Consolidation Directive - formerly the SRD) is:

- (a) 0% for cash held with the bank and certificates of deposit issued by and lodged with the reporting institution, or held by another bank in the bank's consolidated group;
 - a) 20% for cash held with a Zone A credit institution outside the bank's consolidated group.
- (b) 0% for Zone A central government securities, where the securities are subject to daily mark-to-market valuations and the bank has the right to call for more collateral to cover any exposure arising from the securities' value falling below that of the exposure.

However, an "add-on" (equal to the market value of the collateral multiplied by the relevant risk cushion factor) should be deducted from the value of the collateral.

Where these conditions are not met, the risk weighting adopted for eligible securities should be:

- (i) 10% for Zone A central government and central bank fixed interest securities with a residual maturity of 1 year or less or similar floating rate or index linked securities of any maturity; and
- (ii) 20% for Zone A central government and central bank fixed interest securities with a residual maturity of over 1 year and multilateral development bank securities.

4.4.2 *Off balance sheet items (other than OTC derivatives)*

See ch BC s4
and s4.3.2

- 21 The chapter on credit risk in the banking book explains how to measure credit risk on off-balance sheet exposures (other than OTC derivatives). When off balance sheet exposures are collateralised, the value of eligible collateral should be set against the nominal value of the exposure before applying a credit conversion factor, as defined in the chapter on credit risk in the banking book.
- 22 For an exposure to be fully covered the collateral should be at least equal 100% of the nominal value of the exposure (not of the smaller CEA).
- a) For example, where cash collateral covers 75% of a nominal exposure, the collateral should first be applied to the nominal principal, which should leave an uncovered portion of 25%. The appropriate credit conversion factor should then be applied to the uncovered portion in order to realise the amount that should be weighted.
 - i) If the above exposure had been in respect of a direct credit substitute (CCF of 100%) the amount weighted would equate to 25% of the nominal principal. However, if the exposure had been in respect of a transaction-related contingent (CCF of 50%) the weighted amount would equate to 12.5% of the nominal principal.

4.4.3 *Sale and repurchase agreements in the banking book*

- 23 Repos and reverse repos in the banking book are treated as secured deposits and loans respectively. Therefore, banking book securities sold by a bank under a repo agreement continue to be treated as assets for capital adequacy purposes and the risk weight applied continues to be that relevant to the security.
- 24 A reverse repo (purchase and resale agreement where the bank is the receiver of the assets) is treated in the banking book as a loan to the counterparty collateralised by the securities received. The

risk weight may therefore be reduced to that of the “collateral” securities if they are eligible.

4.5 Specific trading book rules

25 Positions held in the trading book can be collateralised using the same forms of collateral used in the banking book.

26 Zone A central government securities held as collateral in the trading book incur a 0% risk weighting and should meet the following conditions:

- (a) banks should perform daily mark-to-market valuations of Zone A central government securities held as collateral;
 - a) Conversely, in the banking book, banks may perform daily mark to market valuations of Zone A central government securities. The risk weighting treatment in the banking book is detailed above.
- (b) for some trading book counterparty risk purposes an “add-on” (equal to the market value of the collateral multiplied by the relevant risk cushion factor) is deducted from the value collateralised.

4.6 Giving of collateral - floating charges

27 A bank should not give a floating charge over its assets as security for its own borrowings from banks or other sources.

- a) Where a lender seeks security in the form of a charge over assets, that charge should either be applied to specific assets or limited to a certain proportion of specified assets, in order to ensure that there would always be sufficient unencumbered assets to meet the claims of depositors in a liquidation of the bank.

The FSA expects to be informed in advance of any agreement which would create a floating charge on bank’s assets.

4.7 Securities given as collateral/hypothecated

4.7.1 *Provider of collateral*

28 The following concerns a bank's giving of collateral which gives rise to a credit exposure to the collateral taker. This occurs where the form of security interest allows the recipient bank to co-mingle the collateral with its own assets and/or dispose of the collateral and/or grant security interests in it on its own account.

- a) For example, if a bank transfers full title to securities to its counterparty against an exposure, the counterparty is able to use or dispose of the securities as it wishes: the counterparty's only commitment is to return equivalent securities to the bank.
- b) Similarly, it is possible to pledge securities to a counterparty with a *right of rehypothecation*. This means that the recipient is able to dispose of or grant a security interest in those securities on his own account.
- c) In contrast, a bank might have a pledge that does not give the recipient the right to commingle the pledged assets with its own or use/dispose of them. The giving of such a pledge by a bank does not of itself give rise to a credit exposure to the taker.

4.7.2 *The capital charge for securities given as collateral*

29

Where the giving of collateral by a bank results in a credit exposure to the collateral taker, the bank should incur a capital charge in respect of that exposure. Unless the conditions in the next paragraph are met, the capital charge should be calculated by multiplying the appropriate risk weighting (in the banking book) or counterparty risk charge (in the trading book) by the sum of the *replacement cost* of the transaction and the *potential future exposure*.

- a) The replacement cost is equal to the greater of zero and the difference between:
 - the value of the collateral as stated in the bank's records; and
 - the exposure in respect of which it has been given.
- b) The *potential future exposure* equals the value of the collateral multiplied by a risk cushion factor (RCF) as follows:

Product	Residual maturity of securities	RCF
Interest rate products	Less than one year	0.25%
	One to five years	0.5%
	Five years or over	1.5%
Equity products	N/A	6%

- 30 The capital charge is calculated by multiplying the appropriate risk weighting (in the banking book) or counterparty risk charge (in the trading book) by the *replacement cost* only if:
- (a) the provider of the collateral has a right of set off, such that in the event of a liquidation the provider is not exposed to the loss of the full amount of the collateral as well as being required to pay over the full amount of the obligation in respect of which it is given; and
 - (b) the provider has the right to call for the return of any excess collateral provided on a daily basis should there be a market move in its favour.

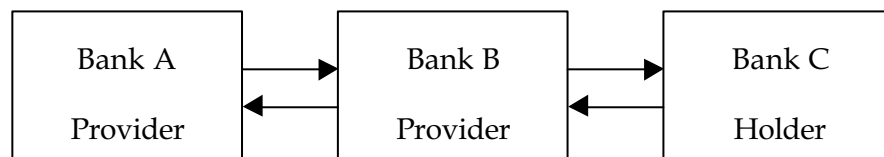
31 The treatment described in the two paragraphs above follows the approach to undocumented and documented repos in the trading book.

32 [Deliberately left blank]

4.7.3 *Rehypothecation of securities taken as collateral: an example*

33 Where securities taken as collateral are subsequently *rehypothecated*, the holding bank becomes a provider and a third counterparty becomes the holder.

- a) *Rehypothecation* is an explicit term where collateral that a counterparty has a pledge over is on-pledged by that counterparty to a third party.
- b) For the purposes of this chapter, 'rehypothecation' means when collateral is given to a counterparty which subsequently on-pledges or effects a full transfer of title to a third party.
- c) It is for each bank to establish whether or not it is entitled to rehypothecate securities it has taken as collateral.



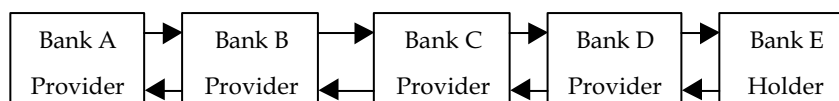
34 Counterparty Risk - Where securities taken as eligible collateral are rehypothecated this should not affect the reduced risk weighting/counterparty risk charge available for the exposure the securities have been obtained in respect of i.e. B can still

benefit from the lower risk weight/counterparty risk charge on A despite the fact the collateral has been passed to C. This is on the basis that once the collateral has been received and is freely available to the holder what he subsequently chooses to do with it should not affect the reduced weighting.

- 35 Where B provides the securities received as collateral from A in respect of an obligation to C, i.e. has rehypothecated them, provided the conditions set out above are met the reportable exposure to C should be the extent to which the value of the collateral exceeds the value of the obligation. If the conditions (a) and (b) above are not met then a risk cushion factor should be applied as set out above. Meanwhile C has obtained the benefit of the collateral for the claim on B.
- 36 Issuer/Specific and General Market Risk - A continues to retain any issuer and market risk on the securities, B and C only adjusting their counterparty risk charges to reflect any fall in value of the securities.

4.7.4 *Examples of when a counterparty defaults*

- 37 In the example below, securities have been rehypothecated a number of times:



- 38 In the event of the default of C, B has a short position with respect to the securities which he must eventually return to A. At the time of the default B has cash covering the value of the securities and holds capital against any excess value of the securities rehypothecated above the exposure collateralised. B is therefore faced with two choices:
- (a) Use cash to purchase required securities i.e. hedge the short position created by C's default and report under the normal two party collateralisation scenario; or
 - (b) Retain cash, in which case a short position should be fed into the calculation of the adequacy of trading book capital.
 - a) Note, short positions in the banking book do not attract a capital charge.

- 39 D originally would have received back its cash from C. Now that C has defaulted, D retains the securities he receives from C, i.e. D has a long position created by the default of C. D has similar choices to B: create a forward sale of the securities and hence return to the original position, or feed long position into the calculation of capital adequacy.
- 40 For capital adequacy purposes: for the banking book the long position should be treated as a risk weighted asset and in the trading book the long position should attract a specific and general market risk charge. In the case of both B and D, account should be taken of any large exposures reporting requirements. All other parties in the rehypothecation chain are unaffected by the default of C.

5 CLOSE OUT NETTING: INFORMATION, SYSTEMS AND KEY CONTRACTUAL FEATURES

5.1 Introduction

1 This section and the next cover the policy on information, systems and contractual matters applying to netting agreements.

2 The policy applies to close-out netting of OTC derivatives, repos and related transactions. The policy relating to the contractual aspects of on balance sheet netting are set out in section 7.

- a) Bank's are not required to inform the FSA in advance of their intention to net using novation. However, legal opinions should be obtained as to the enforceability of the *novation* and records maintained as evidence that the legal requirements have been addressed and met. These records should be available to the FSA for inspection on demand.
- b) For definitions of novation and close-out netting refer to section 3.

3 To report transactions on a net basis banks should first inform the FSA of the scope of the netting they plan to undertake. Section 5.2 sets out the detailed information which should be provided.

See s5.4

4 A bank should only net bilateral transactions once it has satisfied itself and informed the FSA that it has complied with the policy, as set out below. How the FSA monitors compliance with these policies is set out below.

5 The transactions covered by these policies are:

- OTC derivatives including bond and equity forwards; and
- sale and repurchase agreements (and related transactions).
 - a) Total return swaps and other credit derivatives should not be given this treatment.
 - b) Interest-rate and foreign-exchange contracts traded on recognised exchanges where they are subject to daily margin requirements and foreign-exchange contracts with an original maturity of fourteen calendar days or less are excluded.
 - c) When netting agreements contain provisions for the exchange of collateral as well as for the netting of exposures, the bank should ensure that the collateral arrangements comply with the FSA's policy on collateral.

- d) Other arrangements for netting, under a single agreement, on and off balance sheet claims and obligations will be considered on a case by case basis.

5.2 Information

- 6 To report net, banks should first inform their line supervisors of the scope of the netting they intend to undertake.
- 7 The notification should cover the matters set out in paragraph 12 (a) below. In particular, it should include confirmation that, in relation to the transactions to be reported on a net basis, the policy in this section - and explicitly what is said on systems in section 5.3 - and of section 6 have been met. Before conferring agreement to report transactions on a net basis, the FSA may ask for copies of the netting agreement and the legal opinions to be supplied.
- 8 A bank should confirm to the FSA that it has legal opinions confirming the enforceability of the netting agreement.

5.3 Systems

- 9 The bank should have adequate systems and controls in place and confirm:
 - (a) that exposures on transactions falling under the netting agreement are calculated using current exposure (replacement cost) methodology;
 - (b) that exposures on the transactions subject to the netting agreement which are reported on a net basis are calculated on a net mark to market basis; and
 - (c) the limits to the counterparty are monitored in terms of such net exposure.
 - a) This policy does not preclude the maintenance of systems to monitor exposures on a gross basis (indeed gross monitoring may be seen as a necessary complement to net monitoring).
- 10 The bank should be able to demonstrate that it has systems to monitor potential *roll-off exposures*.

- a) *Roll-off exposures* relate to the sudden increases in exposure which can happen when short-dated obligations are netted against longer dated claims and the short-dated obligations then mature.

11 Banks should have procedures in place to ensure that the legal validity of its contractual netting is kept under review in the light of possible changes in relevant laws.

5.4 Legal opinions

12 A bank should satisfy itself that the contractual aspects of its netting agreements comply with the policy set out in this chapter. Compliance with that policy is monitored in two ways:

- (a) the bank's proposal to report on a net basis should specify, as a minimum:
- the netting agreement, counterparties, jurisdictions and different types of transaction and products covered;
 - the source of each legal opinion (whether addressed to the bank or obtained collectively);
 - the date of each legal opinion; where the opinion has been obtained more than twelve months before the bank's proposal is made to the FSA, the bank should obtain a letter from its external legal advisers confirming that there have not been any changes in law or regulation or other legal developments, including (without limitation) court decisions, which would have an adverse effect on the conclusions reached in the opinion; and
 - that the policy set out in this section and section 6 has been followed, in relation to the transactions reported on a net basis.
- (b) the bank should maintain records showing that in relation to the legal opinions obtained the following considerations have been addressed:
- the applicability of the netting agreement to the counterparties, jurisdictions, transactions and products involved;
 - the applicability of the opinions to the counterparties, jurisdictions, transactions and products involved;
 - where more than one jurisdiction is involved, that the combined effect of the opinions it has received is to confirm that the policy set out herein has been followed in a way which would satisfy

the conditions under which the FSA considers netting is appropriate for supervisory purposes;

- all documentation is complete; that the parties involved have the capacity, power and authority in relation to the agreement; and that the agreement has been properly executed;
- the nature and effect of any assumptions, qualifications and omissions in the opinion; and an assessment that these do not impair the enforceability of the netting provisions of the agreement.

13 The bank should annually review the validity of its opinion(s) and confirm in writing the result to the FSA.

6 CONTRACTUAL FEATURES OF CLOSE-OUT NETTING AGREEMENTS

6.1 Overview

- 1 This section sets out in detail the minimum contractual features which the FSA considers a close-out netting agreement should have in order for it to be recognised for supervisory purposes.
- 2 Sections 2 and 3 cover the source of legal opinion and issues which should be addressed in the opinion. Section 4 explains why agreements should not contain walkaway clauses. Sections 5 and 6 cover the additional considerations for multibranch and multi jurisdictional agreements. The remaining sections cover how the FSA would react to the views of other supervisors, the use of qualifications and assumptions, blanket opinions and repeat transactions.
- 3 The bank should have written and reasoned independent legal opinions to the effect that in the event of termination of the netting agreement due to the default, liquidation or bankruptcy (or other similar circumstances) of either the counterparty or the bank, or the member of the bank's group which is party to that agreement, the relevant courts and administrative authorities would in the cases noted above find that the bank's claims and obligations would be limited to the net sum under:
 - the law of the jurisdiction in which the counterparty is incorporated and, if a foreign branch of an undertaking is involved, also under the law of the jurisdiction in which the branch is located;
 - the law that governs the individual transactions included; and
 - the law that governs any contract or agreement necessary to effect the contractual netting.
 - a) The jurisdiction of incorporation of the bank may be relevant in many transactions.
- 4 The bank should annually review the validity of its opinion(s) and confirm the result to the FSA .

6.2 Source of legal opinion

- 5 Legal opinions should be provided by an external *independent* source of advice of appropriate professional standing. Such opinions may be in the form of memoranda of law and addressed directly to the bank or to the sponsors of a particular agreement or may be the product of a number of banks pooling together to seek a collective opinion on a particular netting agreement.
- 6 In each case, the bank should first satisfy itself that the netting agreement and supporting opinions that it proposes to use and rely upon are applicable to the counterparty, transaction type, product and jurisdictions involved. Where an agreement seeks to include transactions or products of a type not covered by the opinion or is entered into with a counterparty outside the categories covered, or materially alters any of the terms in the agreement relevant to netting, additional legal opinions governing such matters should be obtained.

6.3 Issues to be addressed

- 7 The FSA expects certain issues to be addressed in the legal opinion. If any of the items listed below are not explicitly referred to in each opinion obtained by a bank, the bank should assess if, as a result, there is material doubt as to the enforceability of the agreement. If the bank determines that there is such doubt as to enforceability, it should assume that it would not comply with the FSA's policy as set out in this chapter.
- 8 The issues which should be addressed in legal opinions on close out netting agreements are set out below. This list is not intended to be exhaustive. The FSA will not insist that every opinion address each of these points explicitly, but the opinion should make clear:
- (a) which are the central clauses in the documentation which provide for netting of transactions;
 - (b) that the unenforceability or illegality of any other clause in the documentation would be unlikely to undermine these central netting clauses;
 - (c) what are the factual circumstances in which the documentation may validly be used, including the type of counterparty. Banks should take particular care in obtaining opinions regarding counterparties governed by special rules

relating to insolvency (e.g. local authorities, insurance companies, etc.);

- (d) whether the netting or other default provisions would be enforceable in non-liquidation events, such as administration, receivership, voluntary arrangements or schemes of arrangement;
- (e) to what extent, if at all, the netting needs to be reflected in the records of the counterparties in order for it to be effective;
- (f) whether a court or other relevant administrative authority in the jurisdiction covered by each legal opinion would uphold the rate chosen for the conversion of foreign currency obligations for the purpose of calculating the close-out amount; whether statutory or any other applicable rules applied by a court would detract from the enforceability of the agreement;
- (g) if there is anything in the detail of the close-out methodology which might be held inconsistent with a view of the transactions as part of a single agreement insofar as the relevant law requires the same, and if so the effect of this on the enforceability of the netting (if a single agreement provision is not vital to the enforceability of netting in any jurisdiction the opinion should confirm this);
- (h) though it might be difficult to state absolutely that enforceability would not be affected by the law of another jurisdiction, whether there is any reason to believe that the agreement would be unenforceable because of the law of another jurisdiction;
- (i) whether there is a legal preference for automatic rather than optional close-out;
- (j) if there would be legal problems in exercising any discretion or flexibility allowed under the netting agreement; and
- (k) if other clauses are added to a standard form agreement, the FSA would expect lawyers, in giving their opinion, both to explain their effect in full and opine that these additional provisions do not throw any doubt upon the overall effectiveness of the netting agreement.

6.4 Walkaway clauses

9 The netting agreement should not contain a *walkaway clause*.

- a) A *walkaway clause* is a provision which permits a non-defaulting counterparty to make limited payments, or no payments at all, to the estate of the defaulter, even if the defaulter is a net creditor.

In other words, the walkaway clause would have the effect of taking away or limiting the right to receive payment, which a party which is a net creditor would otherwise have, by virtue of the fact that such party is a defaulting party.

6.5 Multibranch agreements

- 10 Where one or both counterparties have entered into transactions subject to a netting agreement with each other through one or more (or certain designated) branches, then all such branches included in the agreement will be considered to be located in a relevant jurisdiction.
- 11 When the agreement covers branches in a number of different jurisdictions, including some where the legal basis for netting is not clear, the validity of netting in more favourable jurisdictions may be jeopardised.
- 12 The opinion should state whether the netting agreement precludes or permits severability of individual transactions and the consequences thereof.
- a) The bank should ask for a side letter from its legal advisers in cross jurisdictional cases confirming whether the netting agreement precludes or permits severability of individual transactions and the consequences thereof.
- b) The presence of non-netting jurisdictions should not jeopardise the validity of the netting agreement as a whole, in any of the jurisdictions where netting would otherwise be recognised.
- c) If transactions cannot be severed then on close out a single net amount will be calculated to be due or payable under the global master agreement. However, in the netting-unfriendly jurisdictions a further amount will be due in respect of the gross obligation. So without severability there is a risk of double payment. When dealing with a counterparty incorporated in a netting unfriendly jurisdiction, transactions with those subsidiaries and branches which cannot be severed from the agreement should continue to be reported gross. Thus the aggregate exposure to such a counterparty will be a mixture of net and gross.
- 13 Transactions through a branch located in a jurisdiction where a satisfactory legal opinion cannot be obtained may be included in

such agreements provided that legal opinion has been obtained confirming that the netting agreement would not be jeopardised because the legal validity of netting is not recognised in relation to transactions connected with that branch. Legal opinions should be obtained from all remaining jurisdictions.

- a) In these circumstances the bank should alert the FSA to the branches in netting unfriendly jurisdictions or to jurisdictions which only countenance netting of certain products or netting with certain types of counterparty.

14 If branches are added to a multibranch netting agreement, which has been previously recognised by the FSA, the bank should update its opinion(s) to reflect this and notify the FSA in writing accordingly.

6.6 Multi jurisdictional agreements

15 Where the laws of more than one jurisdiction are relevant, the bank should have, as a minimum, a legal opinion for each jurisdiction which covers the issues set out in sections 5 and 6 and provides assurances that the netting provisions in the agreement are enforceable in that jurisdiction, notwithstanding actions that may be taken by insolvency officials in other jurisdictions.

16 An additional opinion to address the interrelationship of the different jurisdictions and to assess the potential for conflicts of law is not generally required. Banks should however evaluate the opinions they receive to satisfy themselves that there are no potential conflicts of law.

17 A side letter should be provided to the FSA in relation to all multi-jurisdictional agreements. The letter should be provided by the bank's external or internal legal adviser. It should state that the bank has a legal opinion in respect of each jurisdiction covered in the netting agreement and that subject to the assumptions and qualifications stated in the legal opinion(s), each such legal opinion complies with the FSA's policy so far as the relevant jurisdiction is concerned. The legal advisers providing the side letter will not be responsible for the legal opinions of other legal advisers.

18 The FSA may ask banks what steps they have taken to satisfy themselves that there are no conflicts of law.

19 If, after consulting other competent authorities, the FSA is not satisfied that the netting agreement is legally valid under the law of each of the relevant jurisdictions, then that agreement will not be recognised as risk-reducing for either of the counterparties.

6.7 Views of other supervisors

20 In circumstances where the bank is aware that the supervisor of the counterparty has given notice, directly or through the FSA, that it is not satisfied that the netting agreement is enforceable under its laws, the netting agreement will not be recognised by the FSA regardless of the opinions obtained by the bank.

6.8 Qualifications and assumptions

21 The FSA recognises that with certain aspects of the agreement, it may not be possible to offer a definite opinion or that a positive opinion regarding enforceability of the netting agreement can only be offered subject to certain assumptions and/or qualifications.

22 Where qualifications are made, they should be specific and their effect adequately explained. In the same way, assumptions made by the legal advisers in providing the opinion should not be unduly restrictive. Assumptions underlying the opinion should be specific and of a factual nature (except in relation to matters subject to the law of a jurisdiction other than that covered by the opinion) and should be adequately explained in the opinion.

See s6.1

23 The bank should examine and assess all qualifications, assumptions and omissions from the issues listed above. If as a result, there is material doubt as to the enforceability of the agreement the bank should assume that this is not consistent with the policy in this chapter.

7 ON BALANCE SHEET NETTING

7.1 Overview

- 1 Regulatory recognition of on balance sheet netting is limited in scope, covering single customer accounts and group facilities.
- 2 Banks may set off debit and credit balances of the same customer, or to customers in the same group (e.g. a parent company and its subsidiary), and report net for capital adequacy and large exposures purposes. The conditions set out below should however be met.
 - a) In reporting on a net basis, banks should have regard to accounting guidelines where relevant.
 - b) The reporting should take account of the legal position and the economic substance of the relationship to reflect the bank's true exposure.

7.2 Contractual matters

- 3 A bank which reports transactions on a net basis should have obtained an opinion from its legal advisers to the effect that the security arrangements are legally well founded in all relevant jurisdictions and would be enforceable in the default, liquidation or bankruptcy of the customer or depositor as well as in the liquidation or bankruptcy of the bank.
- 4 The FSA expects that such opinions will be provided by an independent, external source of advice of appropriate professional standing.
 - a) In some circumstances the FSA may wish to see a copy of the legal opinion.
 - b) Banks should discuss with the FSA the circumstances in which internal legal advice will be satisfactory for this purpose.
 - c) Note that in certain jurisdictions assets may be seized to satisfy local creditors.
- 5 In cross-jurisdictional transactions, the FSA will usually require a side-letter from the bank's legal advisers confirming that the FSA's policy has been followed in all relevant respects.

7.3 Single customer account netting

- 6 For the purposes of supervisory reporting a bank may net single customer's accounts that are in credit and the accounts that are in debit to arrive at a net credit or debit balance. The following criteria should be met:
- (a) there is a formal agreement with the customer(s) to do so;
 - (b) a legal right of set-off exists such that the set-off arrangements would survive insolvency;
 - (c) accounts are controlled and managed on a net basis;
 - (d) debit and credit balances relate to the same customer;
 - (e) the potential for roll-off exposure is monitored and controlled where there is cross-maturity netting; and
 - (f) debit and credit balances are denominated in the same currency or are in different currencies which are *freely convertible*.
 - a) The bank should have regard to the overall position of the customer's accounts. A formal agreement allowing the bank to net credit balances against debit balances would provide a strong indication that accounts were being managed in this way.
 - b) Credit balances which cannot be off set against debit balances may be eligible for inclusion as cash collateral provided the policy in section 4 is followed.

7.4 Group facilities

- 7 For group facilities, where netted accounts relate to customers in the same group, e.g. a parent company and its subsidiary, additional conditions apply:
- (a) The facility should be advised and controlled on a net basis.
 - a) For group customers, the systems requirements are more complex and calculation of the net position may be difficult to perform.
 - (b) The arrangements should be supported by a full cross-guarantee structure. The amount of the guarantee may be restricted to credit balances held so as to avoid the situation where each member of the group makes itself responsible for all the debts of the other members.

- a) The cross-guarantee requirement is intended to create mutuality of debts. In the case of accounts which are joint and several liabilities of all group members, it is not necessary to create mutuality so cross-guarantees are not required.

8 OFF BALANCE SHEET NETTING

8.1 Introduction

1 The FSA considers that a bank may net the following off balance sheet products in cases where all the contractual and systems requirements set out in sections 5 and 6 have been met:

- OTC derivative contracts in the banking and trading book;
- bond and equity forwards in the trading book; and
- sale and repurchase agreements for capital adequacy purposes in the banking book and trading book, and large exposures in the trading book.

Subsections 8.2 to 8.4 cover these product types in turn.

Subsection 8.5 covers cross product netting. Subsection 8.6 sets out the FSA's policy on multilateral netting and the netting of positions in the banking book and trading book.

Banks should not net on versus off balance sheet positions e.g. OTC derivative exposure (off balance sheet) against deposits (on balance sheet) for supervisory purposes.

8.2 Netting of OTC derivatives

See ch DU s3

2 The treatment of the netting of OTC derivatives contracts is the same for positions in the banking and trading book.

- a) See the chapter on counterparty risk treatments common to the banking book and the trading book for a complete list of the contracts.

See ch DU

3 For OTC derivative contracts, current exposures calculated using the replacement cost methodology may be netted using close-out netting for capital adequacy and large exposures purposes.

- a) For these purposes the maturity of the net replacement cost is deemed to be under one year, if there is at least one less than one year obligation included under the netting agreement. If there are no less than one year obligations, but there exist obligations of greater than one year but less than three year, then the maturity of the net replacement cost figure is deemed to fall between 1 and 3 years.
- b) Amounts due in respect of interest rate and foreign exchange transactions may be reported on a net basis if the net amount derived is pursuant to the application of a bilateral agreement based upon netting by novation.

- c) While contracts traded on a recognised exchange, written options or similar off-balance sheet items, and foreign exchange contracts (except contracts concerning gold) with an original maturity of 14 days or less may be excluded from the calculation of the add-on because they have negligible or no credit risk, they may be recognised as risk reducing where they are included in contractual netting agreements, provided that a bank's systems are sufficient to monitor this and that the other requirements for netting are in place.

8.3 Netting of 'add-ons'

8.3.1 General

See s5 and s6

- 4 A bank that wishes to report the 'add-ons' net should first satisfy itself and notify the FSA that it has followed the policy relating to contractual matters and systems as set out above and has adequate systems in place to net 'add-ons'.
- 5 A bank which has satisfied the FSA as to its practice for off-balance sheet netting and which now wishes to net add-ons should satisfy the FSA that it has adequate systems in place to net add-ons. It should then pre-notify the FSA of its intention to do so.
- 6 Once the FSA has been satisfied that adequate systems and controls are in place it will notify the bank in writing that it has no objections to the bank reporting the 'add-ons' on a net basis.
- 7 The 'add-ons' used to capture the potential future exposure (PFE) may be netted using the following formula:

$$PFE_{red} = 0.4 * PFE_{gross} + 0.6 * NGR * PFE_{gross}$$

Where

- PFE_{red} = the reduced figure for potential future credit exposure for all contracts with a given counterparty included in a legally valid bilateral netting agreement.
- PFE_{gross} = the sum of the figures for potential future credit exposures for all contracts with a given counterparty which are included in a legally valid bilateral netting agreement and are calculated by multiplying their notional principal amounts by percentages set out in the add-on matrix.
- NGR = "Net-to-gross ratio" this should be done as a separate calculation: the quotient of the net replacement cost for all contracts included in a legally valid bilateral netting

agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a legally valid bilateral netting agreement with that counterparty (denominator).

- 8 [Deliberately left blank]
- 9 A bank intending to use the interim aggregate method concession should consult its supervisor and give advance written notification to the FSA. It should also submit to the FSA a plan outlining how and when it will make the transition to the separate counterparty method. Banks using the concession will be expected to move to the separate counterparty method as soon as possible. Once a bank has reported on a separate counterparty basis it should continue to do so.
- 10 A bank that uses the separate counterparty method may reduce the reported large exposures accordingly.
- 11 For the calculation of the potential future credit exposure according to the above formula perfectly matching contracts included in the netting agreement may be taken into account as a single contract with a notional principal equivalent to the net receipts. Perfectly matching contracts are forward foreign exchange contracts or similar contracts in which the notional principal is equivalent to cash flows if cash flows fall due on the same value date and fully or partly in the same currency.
- 12 If a netting agreement leads to a net obligation for the credit institution calculating the net replacement cost then the current replacement cost may be calculated as 0.
- 8.3.2 Collateralisation of the net 'add-ons'**
- See NE s4.3 13 For capital adequacy purposes, netted CEA claims which are fully collateralised by eligible collateral, for the term of the exposure, attract the lower risk weighting of the collateral.
- See ch DU s2 a) For some trading book purposes the value of the eligible collateral should be marked to market daily and an 'add-on' (equal to the market value of the collateral multiplied by the relevant risk cushion factor) deducted.
- 14 Where part of the netted CEA exposure is collateralised for the term of the exposure, only that part of the exposure attracts the lower risk weighting - the remainder attracts the full weighting appropriate to the counterparty.

15 For large exposures collateralisation, the FSA splits the CEA into two segments, the replacement cost and the 'add-on'. A bank should collateralise fully the entire net replacement cost of the contract for it to be considered collateralised, and not covered, for large exposures reporting purposes. The net 'add-on' may remain uncollateralised but should be reported.

- a) A bank that applies collateral to the 'add-ons' for large exposures purposes should consult its supervisory analyst.

16 Collateral that is earmarked for particular transactions may not be used to collateralise the net CEA; for both capital adequacy and large exposures purposes, it will be considered risk reducing only for those transactions to which it may be applied.

8.4 Netting of sale and repurchase agreements

17 In the banking book for both large exposure and capital adequacy purposes:

- the reporting institution that have repoed out securities retain the issuer risk of those securities, there is no counterparty risk; and
- a reverse repo should be treated as a loan unless eligible collateral is held (when it is then considered a secured loan).

18 Therefore counterparty risk in respect of repo business only arises on reverse repos when the securities reversed in are not eligible collateral, or are of a lesser value than the cash provided.

19 Netting against repo exposures is not therefore generally possible (because the exposure is issuer risk on the security rather than the risk on the repo counterparty).

20 Similarly, netting against reverse repo exposures where the collateral is eligible is not generally possible (because the exposure is treated as one to the issuer of the collateral).

21 Where counterparty risk does arise on a reverse repo, where the collateral is ineligible, or to the extent that the value of the eligible collateral falls short of the cash paid out, it may be reduced by netting:

- any excess of the value of eligible collateral received over cash paid out on other reverse repos with the same counterparty; and

- any excess of the cash received over the value of securities repoed out on repos with the same counterparty.

22 The treatment of repos in the trading book depends on whether the repos are documented or undocumented.

See ch TC

- a) The chapter on counterparty risk in the trading book explains how to measure counterparty risk for documented/undocumented repos.

23 Counterparty risk on repos arises when the value of the collateral reversed in is less than the value of securities repoed out. For reverse repos counterparty risk arises when the value of the securities reversed in is less than the value of the collateral given. This counterparty risk can be offset either by excess eligible collateral on other repos with the same counterparty, or excess securities received on other reverse repos with the same counterparty.

For documented repos the replacement cost can be reported net for capital adequacy and large exposures purposes.

- a) For repos, when netting is allowed, the weighted amount will be the higher of zero and: {market value of securities sold or lent - market value of collateral taken - reductions from netting} x counterparty risk weight x 8%.
- b) For reverse repos, when netting applies the weighted amount will be the higher of zero and: {market value of collateral given - market value of securities bought or borrowed - reductions from netting} x counterparty risk weight x 8%.

For undocumented repos, the replacement cost can also be reported net for capital adequacy and large exposures purposes, but the risk cushion factors, where applicable, should be reported gross.

8.5 Cross product netting

24 Where the policy relating to contractual matters is met, the FSA is prepared to accept cross-product netting. However, the bank should have the systems to monitor the exposures arising under the different products on a net basis.

25 If systems do not allow for exposures arising from certain transactions or products under a netting agreement to be monitored net, then such exposure should continue to be reported gross.

8.6 Multilateral netting of forward foreign exchange contracts

8.6.1 *Overview*

26 In April 1996 the Basel Committee issued an interpretation of the Capital Accord which recognised the benefits of *multilateral netting* of forward value foreign exchange contracts. The FSA's approach broadly follows this interpretation.

- a) *Multilateral netting* is the netting of all transactions, that originate bilaterally between the participating counterparties, through a *central clearing* house. For every eligible transaction agreed by a pair of participants the clearing house is interposed as the contractual legal party to each participant. Credit risk is still linked to specific counterparties through loss sharing arrangements, so parties remain exposed to each other.

27 The FSA's approach is designed to determine the capital a bank should have to capture both current exposure and potential future exposure.

28 The FSA's approach focuses only on forward replacement risk, the potential cost of replacing the cash flows on outstanding forward foreign exchange contracts in the case of counterparty default.

29 This section explains how to calculate a banks' capital adequacy, for both current and future exposure, when participating in a multilateral netting agreement.

8.6.2 *Capital to cover current exposure*

30 Under the Capital Accord amendments 1994 and the SRD (now replaced by The Banking Consolidation Directive), bilateral netting allows the offset of positive and negative market values to calculate a single net current exposure for all transactions covered by the netting agreement (subject to a minimum value of zero). While each contract in the multilateral netting arrangement shows the clearing house and one of the participants to be the legal counterparties, this does not mean that the forward credit risk of a participant should be measured in terms of its net bilateral claim on the clearing house.

- a) The primary risk of loss for a participant arises from the possibility of another participant default, not from a default by the clearing house itself.
- b) Depending on the structure of the clearing system, participants may be responsible for satisfying claims of other participants in the event a

participant defaults, according to the system's (pre established) loss allocation rules.

- c) The *clearing house* will, on a daily basis, determine the loss it could incur if a participant failed, allocate that loss among the surviving participants according to the pre-established loss allocation formula, and notify each participant of its exposure vis-à-vis every other participant in the system (referred to as the primary loss allocation).
- d) Loss sharing arrangements in place aim as a minimum to protect the system from the failure of the largest member.

31 A participating bank's capital requirement for credit exposure is determined on the basis of the *primary loss* allocations of the clearing house (that is, the participant's pro rata share of the clearing house exposure). Since a defaulter cannot be identified in advance, a participant's total net current exposure is the sum of the primary loss allocations it could be required to absorb from a default by every other participant, individually, in the clearing system.

32 The FSA approach currently does not include an explicit capital charge for *second round effects*.

- a) *Second round effects* are the additional losses that a clearing house participant could face in the event of simultaneous default by two or more of the other participants.

8.6.3 *Add-on for potential credit exposure*

33 The add-on for potential future exposure in a multilateral netting system is calculated as if netting occurred bilaterally with the same set of counterparties.

See s8.3

- a) The "add-ons" are calculated according to the bilateral formula set out in the 1995 revision to the Capital Accord. The formula for calculating the net add-ons is set out above.
- b) The approach taken reflects the difficulties of approximating a multilateral netting participant's potential future exposure. Further research into the volatility of current exposures under multilateral netting, as compared with the volatility of current exposure under bilateral netting for the same set of contracts and counterparties, has been recommended by the Basel committee to determine whether "add-ons" under multilateral netting should be reduced.
- c) In contrast to *bilateral netting*, where potential future exposure is a function of the volatility of the contracts between two counterparties, a

multilateral netting participant's potential future exposure can depend on the transactions across all participants of the clearing house, as well as on the arrangements for sharing losses should a participant default.

8.6.4 *Risk weighting*

34 For each participant the *credit equivalent amount* is calculated as:

Primary loss allocation + "add-on" for potential future exposure.

See s4.4.1

35 The credit equivalent amount is then assigned to the appropriate risk categories according to the identity of the other participants (most likely 20%) or the nature of the collateral to determine the capital considered necessary.

CONSOLIDATED SUPERVISION

1 INTRODUCTION

1.1 Legal sources

See COND

- 1 A bank's compliance with the policy set out in this chapter will help establish that it satisfies the Threshold Conditions (as to "Adequate resources" and "Suitability") and complies with the Principles (as to "Management and control" and "Financial prudence").
- 2 The Banking Consolidation Directive (2000/12/EC) sets required minimum standards for the performance of consolidated supervision of groups including banks within the EEA. This chapter on consolidated supervision is the principal vehicle implementing those parts of The Banking Consolidation Directive that derive originally from the Second Consolidated Supervision Directive (92/30/EEC) and have now been further amended by the Financial Groups Directive (2002/87/EC). Banks that are part of a group should also refer to the rules and guidance on group risks in PRU 8.1.
- 3 The Capital Adequacy Directive (CAD - 93/6/EEC) introduced both a framework for capital requirements for market risk and a requirement for a consolidated assessment of groups including investment firms. This chapter includes the updates to the consolidated supervision regime applied to banks which resulted from its implementation, most notably the introduction of aggregation plus as a technique for consolidating trading book exposures in some cases for CAD banks.
- 4 The obligations in these directives require consolidation up to the highest relevant parent incorporated in the EEA. Where the ultimate parent is outside the EEA, the FSA also needs to establish whether the bank is subject to equivalent consolidated supervision by the competent authorities in the ultimate parent's home country, and if not, to take appropriate measures to achieve the objectives of the Banking Consolidation Directive. This is covered in more detail in PRU 8.5: banks with non-EEA parents should therefore note that they are also subject to the relevant provisions in PRU 8.5.
- 4A It is open, however, to supervisors to go further than the minimum requirements. It may be important to consolidate other parts of the group, in order to have all the relevant risks included. The FSA is committed to extending its consolidated supervision beyond the requirements of the directives if the result is a more accurate assessment of risk to a bank. Moreover, where a banking group

includes an entity active in the insurance sector, it may possibly constitute a *financial conglomerate* and would then be subject to additional rules and guidance necessary to implement the Financial Groups Directive in such cases. The exact definitions and criteria as to what constitutes a *financial conglomerate*, and the additional rules and guidance that apply to them, are set out in PRU 8 4. If a banking group is, or becomes, a *financial conglomerate*, it will be subject to these additional rules and guidance, as well as to the rules and guidance in this chapter.

1.2 Application

- 5 This chapter applies to UK-incorporated banks (and banking groups with UK-incorporated non-bank parents) only.
- a) Banks incorporated elsewhere in the EEA with UK branches are, of course, subject to the requirements of The Banking Consolidation Directive as implemented by their home supervisors.

1.3 How this chapter is organised

- 6 Section 2 outlines the principles that lie behind the FSA's approach to consolidated supervision - and explains why the FSA regards it as a complement to *solo supervision*. It introduces the distinction between the quantitative and qualitative aspects of consolidated supervision.
- a) *Solo supervision* means supervision of either the bank alone or of the bank and the subsidiaries for which solo consolidation treatment has been agreed.
- 7 Sections 3-7 then cover quantitative consolidated supervision. Section 3 outlines the main elements of the policy. Section 4 explains how to determine which group companies should be included in consolidated reporting. Sections 5-7 explain the techniques which should be used to include those companies. Section 5 outlines the basic techniques, covering all those of relevance to non-CAD banks, which should be used. Section 6 gives the refinements which CAD banks should adopt- and explains the technique of aggregation plus. Section 7 explains in such cases how consolidated capital should be computed.
- 8 Material on qualitative consolidated supervision, formerly in section 8 of this chapter (now deleted), has been replaced by the

rules and guidance in PRU 8.1. And Section 9 explains the solo consolidation treatment which may be adopted for solo purposes.

- 9 There is a close relationship between aspects of the FSA's policy on consolidated supervision and policy covered in other chapters - to which, therefore, reference may also be necessary. The requirements stemming from the Post-BCCI Directive, in relation to persons with close links with a bank, also have implications for groups including a bank (though they also impose 'solo' obligations on banks).

2 THE FSA'S APPROACH TO CONSOLIDATED SUPERVISION

1 In the FSA's view, banks should be *supervised on a consolidated basis* whenever they are members of a wider group.

- a) *Supervision on a consolidated basis* ('*consolidated supervision*') is an overall evaluation - both quantitative and qualitative - of the strength of a group to which a bank belongs, to assess the potential impact of other group companies on the bank.

The assessment is based on a number of sources of information. One source is *consolidated returns - quantitative consolidated supervision*.

Consolidated supervision also includes a qualitative assessment of the whole group - including the activities of group companies not incorporated in the consolidated returns, because the nature of their assets is such that their inclusion would not be meaningful (for example industrial or insurance companies). This assessment includes, for example, consideration of the controls within a group. The additional consolidated supervision beyond the quantitative assessment is known generally as *qualitative consolidated supervision*.

- i) *Consolidation* is the preparation of consolidated returns covering a group or sub-group including a bank.

2 Consolidated supervision is desirable because there are risks to a bank, which may pose a threat to it, arising as a result of its membership of a wider group. These risks include:

- the risk that risks taken by other group companies might undermine the group as a whole;
 - the financial risks taken on by a bank in its links with other group companies, such as intra-group lending; and
 - the reputational risk to a bank if there are losses or other problems elsewhere in the group.
- a) Given the existence of the third of these types of risk, even if a bank were entirely ring-fenced from the rest of its group and had no intra-group lending, problems elsewhere in the group might pose a risk to the bank.
- b) Although intra-group lending does not show up on consolidated returns, consolidated supervision is relevant to the control of a bank's risks arising

from intra-group lending, since its aim is to ensure that the group as a whole is strong enough to cope with the risks run, which otherwise might threaten the repayment of intra-group lending.

- 3 But the focus of the FSA's banking supervision (solo and consolidated) remains the bank itself. The banking supervisor's purpose in consolidated supervision is not to supervise all the companies in a group including a bank, but to supervise the bank as part of its group.
- 4 The FSA takes account of the activities of other group companies to the extent that they may have a material bearing on the reputation or financial soundness of the bank in the group.
- 5 The FSA regards consolidated supervision as a complement to, not a substitute for, solo supervision.
 - a) Solo supervision is needed as well. For events elsewhere in the group and the activities of other group companies can pose a threat to the bank in ways which consolidated supervision alone cannot detect: for example, intra-group linkages arising from transactions between the bank and other group companies will only be revealed by solo supervision. And a complementary assessment of solo capital adequacy permits an assessment of whether, so far as the bank itself is concerned, there is an appropriate distribution of capital in a group.
 - b) So institutions should comply with the FSA's policy on capital adequacy and large exposure on both a solo (or solo-consolidated) and a consolidated basis.

The FSA also seeks to ensure that persons who effectively direct the business of a financial holding company are of sufficiently good repute and have sufficient experience to perform these duties. This requirement was introduced into the Banking Consolidation Directive by the Financial Groups Directive (article 54a of the Banking Consolidation Directive as inserted by article 29(8) of the Financial Groups Directive). But without prejudice to this specific requirement , the Directive also makes clear that the consolidation of the financial situation of a financial holding company (as part of the consolidated supervision of its banking subsidiary by the FSA) in no way implies that the FSA is required to play a supervisory role in relation to that financial holding company on a stand-alone basis .

Article 55a of the Banking Consolidation Directive (as inserted by article 29(9) of the Financial Groups Directive) also requires the FSA to exercise general supervision over transactions between a bank that is a subsidiary of a mixed activity holding company (MAHC), and the MAHC itself and its other subsidiaries. The relevant guidance to banks is set out in section 3 of this chapter, para 3.1.4. If these intra-group transactions were to pose a threat to the bank's financial position , the FSA will take appropriate measures.

3 QUANTITATIVE CONSOLIDATED SUPERVISION

3.1 Main elements of the policy

3.1.1 *Capital adequacy*

See ch GN

1 A UK bank is required to maintain adequate capital at all times (see rule 3.3.13 in chapter GN section 3). In relation to this, where appropriate, the FSA sets a bank a consolidated capital ratio which it should meet in addition to that set on a solo (or solo-consolidated) basis.

See ch CO

a) Generally, the same principles are used for calculating the consolidated ratios as the solo ratios.

See s7

i) The specific additional techniques used to compute capital requirements on a consolidated basis for a CAD bank are explained below.

2 The capital ratio set on a consolidated basis is normally the same as that set on a solo basis for the principal bank in the group.

a) Factors which may lead to a different consolidated ratios being set include:

i) the location of capital in the group, in particular to ensure that reliance is not being placed on surplus capital which is locked into particular companies or countries because of regulatory considerations, exchange controls or taxation;

ii) the degree of risk diversification in the group as a whole, compared with that of the principal bank; and

iii) any risks which arise on a group basis but are not reflected in the factors influencing the principal bank's ratio.

b) To minimise double-counting of capital, exposures to another group company may be zero-weighted in calculating a bank's solo capital ratio where all the following criteria are met. The bank should obtain the agreement of the FSA that the criteria are in fact met in a particular case:

i) the group is managed as an integrated banking business by a UK bank, which is the principal bank in the group;

ii) the other group company is consolidated in the calculation of the group's consolidated capital ratio; and

See pa2(a)

- iii) capital resources are freely transferable between the other group company and the principal bank in the group.

When these criteria are met, a bank is normally set a capital ratio which is the same as that for the consolidated group, unless there are particular circumstances to justify a different ratio.

- 3 Where a bank fails to meet its consolidated individual capital ratio, the FSA considers whether this poses a threat to the bank, so requiring it to consider whether to take action.
- (a) If the bank is the parent company of the group, the question arises as to whether it continues to fulfil the requirements of the Act.
 - (b) If the bank is not the parent company of the group, the FSA considers what action is needed to protect the bank. It may also consider whether it continues to fulfil the requirements of the Act.
 - a) The action needed may be, for example, to pursue the controller for a rectification of the capital position, to raise individual capital ratios, to require better liquidity or to restrict lending to other group companies.

3.1.2 *Large exposures*

- 4 A bank should follow the limit and notification policies in respect of large exposures to individual counterparties or groups of closely related counterparties on a consolidated basis set out in chapter LE.
- a) Generally, the same principles should be used for calculating the consolidated position as for the solo position.

See ch LE s3

- i) In certain cases, however, there are variations in how the limits and notification policies apply on a consolidated or sub-consolidated basis; see the chapter on large exposures for details.

3.1.3 *Adequate controls*

See ch GN s3

- 5 A bank should have adequate internal control mechanisms to produce any data and information which might be relevant for the purpose of supervision on a consolidated basis: this is now placed on a new and stronger footing in PRU 8.1 (see also rule 3.3.19 which requires a bank to have adequate systems and controls which enable it to monitor, control and calculate its large exposures).

3.1.4 *Intra group transactions with MAHC*

- 5A Where a bank's parent is a mixed-activity holding company (MAHC), the FSA is required to supervise transactions between the bank, and the MAHC and its other subsidiaries, and any significant transactions are to be reported to the FSA. The most important category of such transactions will be those (i.e. credit exposures and off balance sheet items) that give rise to "exposures" to the relevant connected counterparty for the purposes of chapter LE and the large exposure reporting forms . The FSA considers that in these cases the directive requirement is adequately met by the existing arrangements under which the bank's exposures to individual, or groups of, connected counterparties are reported and monitored (see 3.1.2 above, and also chapter LE section 9.2.2, and the large exposure reporting forms in SUP 16Ann 1R). Reporting of other significant transactions (that do not give rise to "exposures") is also now required as a separate item by SUP 16.7.8R. The requirements for the bank to have adequate systems and controls to produce the necessary information (see 3.1.3 above), and systems and controls generally to mitigate group risk, are also covered in PRU 8.1 which applies to all banks that are part of groups.

3.2 Reporting obligations on banks

See Supervision Manual, chapter 16

- 6 A bank is required to submit consolidated returns covering capital adequacy at least twice a year and large exposures at least four times a year (see Supervision Manual chapter 16).

3.3 Other matters

- 7 The FSA needs to be satisfied that the scope of a bank's consolidated returns is appropriate.
- a) To do this, it is necessary to maintain an organogram of the group, showing parents, subsidiaries and sister companies. For parents it is necessary to know which, if any, are incorporated outside the EEA. The organogram should also show which group companies are supervised by another financial supervisory authority, identifying the authority.

See Supervision Manual, chapter 5

- 8 The FSA includes within the scope of reports it requires under section 166 of the Act examination of the internal control systems used to generate consolidated data and information.

4 SCOPE OF CONSOLIDATION

4.1 Introduction

See Supervision
Manual chapter
16

1 Which UK banks should submit consolidated returns for capital adequacy and large exposures? Which group companies should be included? What consolidation technique should be used to include them? This section and the next two take step by step the questions to be answered in deciding which companies to consolidate and how. (See also the reporting rules in the Supervision manual).

The FSA considers that a bank should adopt at least the following practices.

4.2 Domain of consolidation within a group including a bank

2 Consolidation should be undertaken in the following cases:

- (a) when the bank is itself the *parent* of companies which conduct one or more of the *listed activities*; and
- (b) when the bank is not the *parent* company, but:
 - (i) the bank is part of a group or sub-group whose business wholly or *mainly* comprises the *listed activities*; and
 - (ii) the *parent* of the group or sub-group is itself a *financial institution*.

See a10.1

a) The *listed activities* are those given in the first paragraph of the first appendix to this chapter.

See s4.3

b) The definition of *parent* is given below.

c) To qualify as a *financial institution*, the exclusive or *main business* of a company should be either to carry out one or more of the listed activities or to acquire holdings in companies undertaking these activities. The formal definition of a *financial institution* is given in the Glossary.

d) The FSA interprets the phrases '*mainly*' and '*main business*' to mean the balance of business, i.e. it generally considers that consolidation is appropriate when companies carrying out the listed activities comprise over 50% of the group or sub-group balance sheet. In determining the balance of business, it also takes account of the off balance sheet activities of group companies, and of fee-based services provided by group companies.

See 4.5

- i) Where such a balance of business test is inconclusive, the FSA takes into consideration the number of subsidiaries which fall into the financial and non-financial categories. Generally, the presumption will be in favour of consolidation.
- e) Group consolidation should at a minimum extend up to the highest relevant EEA parent, except where another EEA supervisor performs consolidated supervision. (For the limitations where consolidated supervision of the group is carried out elsewhere, see below.)
- f) In addition to consolidating a whole group, the FSA may also consolidate a sub-group from a bank down, depending on the scale and complexity of business of the sub-group.

4.3 Companies to be consolidated

3 Consolidation then extends to all relevant financial companies within that domain: that is the *parent company*; its *subsidiaries*; and companies in which the parent or its subsidiaries have a *participation*.

- a) The definitions used of *parent* and *subsidiary* for the purposes of consolidated supervision derive from Articles 1(12) and (13) of the BCD. These provisions refer to Article 1(1) of the Seventh Company Law Directive (83/349/EEC); these are implemented in the United Kingdom in section 258 of the Companies Act 1985. The definition of *participation* is set out in the Table in chapter GN.
- b) [deleted]
- c) The threshold for the consolidation of group companies which are not subsidiaries - *participations* - is the ownership of 20% or more of the voting rights or capital.
- d) (d)In the case where undertakings are linked to the domain of consolidation by a relationship within the meaning of article 12(1) of Directive 83/349/EEC (see definition of "consolidation article 12(1) relationship" in the Glossary), the FSA will determine how consolidation is to be carried out.
- e) *Asset management companies* (which for this purpose has the meaning given in the Glossary) are also to be consolidated, whether or not they come within the definition of *financial institution* , thereby fulfilling specific requirements in the Financial Groups Directive.

4 Companies whose business is not financial are not usually included in the consolidation; however, the FSA may consider that it is appropriate to include them.

a) Insurance and the broking of insurance are not financial activities for this purpose, and so these companies are not usually included in a consolidation.

See ch CA s10

i) For an explanation of the treatment of investments in insurance companies, see the chapter on the definition of capital.

5 A non-financial subsidiary or *participation* should be excluded from the consolidation only with the FSA's prior agreement. If the exclusion is agreed, the investment in that company should be deducted from consolidated capital and its assets not included in group weighted risk assets.

a) The method of valuation used for the investment should be the normal accounting practice followed by the bank.

See ch CA s10

b) Some stakes below the threshold for consolidation should also be deducted. For details of these and of the other deductions from capital base, see the chapter on the definition of capital.

4.4 General exceptions to the above policy

6 As provided for by Article 52.3 of The Banking Consolidation Directive, in a limited number of cases the FSA may permit the exclusion from a bank's consolidated returns of subsidiaries or participations which otherwise meet the criteria for consolidation, where:

- inclusion would be inappropriate or misleading;
 - the affiliates which otherwise would be consolidated have a combined balance sheet total lower than the lesser of Euro 10 million and 1% of the balance sheet total of the parent - the *de minimis exemption*; or
 - there are legal impediments to the transfer of information.
- a) Use of the *de minimis* exemption should only be made for a number of affiliates if the sum of their balance sheets meets the numerical test; otherwise they should all be included in consolidated reporting.
- i) Applying the exemption to the sum of their balance sheets prevents the formation of a number of small affiliates being a way round the consolidation requirements.

- b) Use of the legal impediments criterion for exclusion other than on a temporary basis is likely to be inconsistent with the Basel minimum standards and has to be considered in this light.

- 7 All exclusions from consolidation for these reasons should be agreed in writing by the FSA in advance.
- 8 Where such an exclusion is agreed, the investment in that company should be deducted from consolidated capital and its assets not included in group weighted risk assets.
- a) The method of valuation used for the investment should be the normal accounting practice followed by the bank.

4.5 The policy where a bank is subject to consolidated supervision elsewhere

- 9 Where a bank is a member of a group including a number of EEA-incorporated banks, the FSA may following discussion with the other supervisor(s), agree that consolidation is not necessary.
- 10 For a group including a bank whose ultimate parent is incorporated in a country outside the EEA, the treatment of the whole group is set out in PRU 8.5. This does not affect the usual operation of the Banking Consolidation Directive for the EEA sub-group i.e. from the highest relevant EEA parent down.

In those cases in which it determines that a whole-group consolidation would not be appropriate, the FSA nonetheless considered that sub-consolidation from the highest relevant EEA parent down, as outlined above, would be appropriate.

4.6 Groups not subject to consolidation

- 11 When a bank belongs to a group or sub-group for which the FSA determines consolidation would be inappropriate (for example in cases where the preponderance of the group's business comprises industrial or insurance business), the FSA may ask the parent institution and its other subsidiaries to supply it with any data or information which it considers relevant to the purpose of supervising the bank.
- 12 When the parent of a bank is an insurance company (but the whole group does not constitute a *financial conglomerate*), the FSA does not normally consider it necessary to consolidate down from the insurance company, pending further harmonisation of the basis of accounting for banks and insurance companies. However, the FSA seeks to liaise with the supervisors of the insurance company parent if that supervisor is

not the FSA. Where the group as a whole constitutes a *financial conglomerate*, it will in any case be subject to the additional rules and guidance on consolidated supervision set out at PRU 8.4.

5 TECHNIQUES OF CONSOLIDATION: BASIC CASES

5.1 Introduction

Having decided which group companies need to be consolidated, the correct technique for consolidation needs to be determined in each case. *Full consolidation* is usually considered necessary. And *line-by-line* consolidation is the normal technique. But variations from each of these norms are possible.

- a) *Full consolidation* means including in the group's consolidated returns all the relevant assets and liabilities of the companies being consolidated.
- b) *Line-by-line consolidation* is the consolidation of balance sheets according to conventional accounting rules (including the netting of balances between companies included in the consolidation).

This section explains first the situations in which pro rata, rather than full, consolidation is considered to be appropriate. It then explains how the appropriate technique for consolidation for non-CAD banks should be chosen. Sections 6 and 7 deal with the variations in these policies for CAD banks.

5.2 Full and pro rata consolidation

- 1 The normal technique of consolidation is full consolidation of all majority shareholdings and participations.
- 2 The FSA will agree that proportionate (*pro rata*) consolidation of participations is appropriate only in exceptional circumstances, where it is satisfied that there are other significant shareholders who have the means and the will to provide as much parental support to the entity as the shareholder subject to consolidated supervision.

This criterion is most likely to be met by another bank.

- a) *Pro rata consolidation* means including in the group's consolidated returns only the group's share of assets and liabilities in the affiliate concerned. So for a company in which the group holds 25%, the capital adequacy returns would include 25% of that affiliate's capital, 25% of its other liabilities and 25% of its assets, and the large exposures returns 25% of its exposures. Balances between companies included in the consolidation would be netted in full.
- b) The normal purpose of pro rata consolidation is to reflect in the capital adequacy and large exposures calculations the fact that a participation

has another shareholder providing at least as much parental support as the bank.

5.3 Consolidation when the CAD regime does not apply

- 3 Consolidation is usually carried out on a line-by-line, or accounting, basis.
- 4 If all the following conditions are satisfied, consolidation should be carried out using the principle of *deduction plus*:
- (a) on a consolidated basis, the group is not a CAD group;
 - (b) the relevant group company is an investment firm supervised by a recognised regulator and is subject to its capital requirements; and
 - (c) the group company concerned is non-trading.
 - a) *Deduction plus* is a risk-focused consolidation technique, by which the higher of the investment in the affiliate and the affiliate's capital requirement as determined by its regulator is deducted from capital base. The assets of the affiliate are not included in the calculation of weighted risk assets.
 - b) The use of deduction plus enables the capital requirement calculated by the affiliate's regulator to be reflected in the capital calculation.
 - c) For other circumstances in which deduction plus may be used, see below.

See s6.3.2

6 WHEN THE CAD REGIME APPLIES

6.1 The CAD regime and the consolidated supervisor

6.1.1 General

See s10.2 1 This section explains which consolidation technique should be used for a group company when the FSA is the consolidating supervisor for a CAD bank. (A table in the appendices summarises the usual treatments in these cases.)

See ch CO a) An overview of the CAD regime is given in the overview of capital chapter.

6.1.2 The consolidated supervisor

See ch CB s4 2 To assess whether, on a consolidated basis, the CAD regime as implemented by the FSA applies to a banking group, the tests used to establish whether a bank's solo trading activities constitute a trading book - the 5% (Euro 15mn) / 6% (Euro 20mn) thresholds - should also be applied to the combined investment firms and trading books of the banks within the group.

See s6.3.3 a) Investment firms whose business is non-trading may be excluded from the test.

3 Where a banking group is above the CAD threshold at a consolidated level, but includes entities - be they the parent bank, or bank or investment firm subsidiaries - which at a solo level fall below the threshold, it should apply to its supervisor for its agreement not to apply the CAD at a consolidated level.

See Ch CB, s4.2 a) In other words it may be appropriate for entities in a CAD group which at a solo level fall below the de minimis thresholds and therefore do not apply the CAD in calculating their solo capital requirements, not to apply the CAD calculations in working out their contribution to the consolidated capital which is needed.

6.1.3 Large exposures

4 For large exposures purposes, affiliates should always be consolidated on a line-by-line basis (irrespective of whether the exposure is in the banking or trading books).

See ch LE s9 5 The application of large exposure limits to counterparty exposures should be based upon either:

- (a) the sum of all the counterparty exposures to an individual entity or group; or
- (b) where the FSA's prior approval has been granted, a group may aggregate the sum of its counterparty exposure limits to determine whether it complies with the large exposure policy for counterparty exposures.

6.1.4 *Capital adequacy*

- 6 For capital adequacy purposes, the primary distinction is between what is consolidated into the group banking book and what into the group trading book.

With the exception of any banks in the group which have both a trading and banking book, the assets of group companies – other than in *exceptional circumstances* – should be consolidated wholly into one book or the other.

- a) This does not usually prevent the relevant risks being fully captured. In particular, non-trading assets in an investment firm deemed to be 'trading' are captured, since the CAD simply uses the SRD (now replaced by The Banking Consolidation Directive) weightings for such firms.

The only "*exceptional circumstances*" which are currently considered to be relevant are when a '*trading*' investment firm is found to have a large volume of non-trading assets which appear to have been booked to it in order to circumvent a banking book individual capital ratio - in other words, where the assets should be classified as banking book assets. In such cases, the firm's assets should be split into trading and non-trading - the latter being consolidated line-by-line into the banking book.

6.2 **Risks consolidated into the banking book**

Risks should be consolidated into the banking book in the following cases; the technique used should always be line-by-line consolidation:

6.2.1 *Banking books of other group banks*

- 7 The normal regime for non-trading activities should be adopted.

6.2.2 *Assets of financial companies other than investment firms*

- 8 These usually fall to be consolidated into the banking book.

6.3 Risks consolidated into the trading book

Risks should be consolidated into the trading book in the following cases, using the consolidation technique outlined.

Only where the technique used is line-by-line consolidation should banks offset long and short positions in different financial instruments in the calculation of consolidated capital requirements for market risk. Banks wishing to offset exposures should consult the FSA first.

6.3.1 *Trading books of group banks (and foreign exchange and commodity exposures)*

9 Trading book exposures of group banks (including counterparty exposures) and commodity and foreign exchange exposures should be usually consolidated using *aggregation plus*.

a) *Aggregation plus* is a technique of consolidation introduced to help apply the requirements of the CAD. The aim is to use the relevant local supervisor's capital regime, where possible, to generate a capital requirement for the affiliate, which is aggregated with the capital needed arising as a result of the group's other business. The aggregate capital needed is then compared with consolidated group capital.

See s10.3

i) Where an affiliate has to compute a capital requirement on a solo basis for a CAD supervisor or a supervisor of a broadly equivalent regime, aggregation plus can have the advantage that only one capital calculation in respect of the affiliate is necessary for both solo and consolidated supervision.

For lists of investment firm and banking regimes deemed broadly equivalent to the CAD, see the Appendices.

ii) Because an affiliate's capital is computed on an individual company basis when using aggregation plus, intra-group exposures are not netted out and there is no allowance for the offsetting of positions between companies, when looking at the group position.

10 As an alternative, consolidation of a trading book may be carried out on a line-by-line basis, all the following conditions are met (the bank should satisfy the FSA that this is the case):

(a) the parent bank calculates or monitors trading book positions in an integrated fashion across the entities using line-by-line consolidation;

- (b) the banking subsidiary satisfies its local supervisory requirements on a solo basis;
- (c) the parent bank is able to carry out adequate line-by-line consolidation on a daily basis; and
- (d) capital resources are freely transferable between the banking subsidiary and the rest of the group.

6.3.2 *Mixing consolidation techniques*

- 11 For trading books of banking subsidiaries only, the FSA may agree it is appropriate for a bank to consolidate part of its trading book using line-by-line consolidation and the rest using aggregation plus. For instance, a bank may meet the conditions for line-by-line consolidation only for interest rate risk, if it manages other risks on a more decentralised basis.
- See ch TV 12 The conditions which apply to mixing consolidation techniques depends on whether or not the bank subsidiary uses an internal VaR model for regulatory capital purposes.
- 13 Where the bank subsidiary does not use a VaR model, it should as normal apply either the (standard approach) rules of a CAD / CAD-equivalent local regulator, or the FSA's own CAD policies, to the sub-set of risk factors being consolidated using aggregation plus. (In either case, the CAD's "building block" approach to market risk will mean that these risk factors will each incur their own separate capital charges, which can then simply be fed into the consolidated calculation.) By definition, those risk factors which meet the policy requirements for line-by-line consolidation and are included at group level on this basis are subject to the FSA's policy.
- See s7.4 14 Policy on mixing consolidation techniques when a bank subsidiary uses a recognised VaR model for solo capital adequacy purposes is set out below (together with other policy on consolidating entities which use such models).

6.3.3 *Risks in group investment firms*

- 15 Investment firms are usually consolidated using aggregation plus. But there are distinctions in treatment between *trading* and *non-trading* investment firms.
- a) An investment firm is usually deemed to fall into either the *trading* or the *non-trading* category according to the balance of its business.

See s6.1.2

- b) The use of aggregation plus for trading investment subsidiaries may be constrained by the size of non-trading activity. If this is large, the FSA may consider that line-by-line consolidation is appropriate for the banking book for these assets (even if the normal line-by-line consolidation policy below is not followed).

- 16 As an alternative to aggregation plus, consolidation of an investment firm whose business is trading may be carried out on a line-by-line basis, if the bank can satisfy the FSA that all the conditions (a) to (d) below are met.
- 17 As an alternative to aggregation plus, consolidation of an investment firm whose business is non-trading may be carried out on a line-by-line basis into the trading book if conditions (b) to (d) below are met (the bank should satisfy the FSA that this is the case):
- (a) the parent bank calculates or monitors trading book positions in an integrated fashion across the entities using line-by-line consolidation;
 - (b) the investment subsidiary satisfies its local supervisory requirements (where these apply) on a solo basis;
 - (c) the parent bank is able to carry out adequate line-by-line consolidation on a daily basis; and
 - (d) capital resources are freely transferable between the investment subsidiary and the rest of the group.
 - a) The agreement to consolidate non-trading investment firms on a line-by-line basis includes cases where an investment firm is deemed only to be exposed to counterparty risks (i.e. no market risks apply).

In considering whether this condition applies, the FSA pays particular regard to the appropriateness of the banking supervisors' capital adequacy regime for the business conducted by the investment firm. If, as is likely, the relevant securities regulator's regime provides a more accurate measure of the capital required by the subsidiary, the FSA may consider that the use of aggregation plus based on the local regulator's rules is appropriate.

- 18 In the case of consolidation of an investment firm, where the quality of the bank's control systems or the ease with which surplus capital can be transferred out of the subsidiary make this appropriate, the FSA may require to exclude from the

consolidated capital base any relevant excess or immobile capital located in the subsidiary.

- 19 The FSA has historically allowed certain trading investment-firm subsidiaries to be consolidated using deduction plus. A trading investment-firm subsidiary that is consolidated using deduction plus may continue to be consolidated using deduction plus. The agreement of the banks' line supervisor to this practice should be sought.

6.3.4 *Exceptionally, risks in other financial companies*

- 20 The risks in other, non investment firm financial companies may, exceptionally, be consolidated into the trading book.

6.4 **Deductions from capital when using aggregation plus**

See ch CA s10

- 21 In addition to the other deductions from capital outlined in the chapter on capital, when a subsidiary is consolidated using aggregation plus based on the relevant local supervisor's capital regime, all the deductions from capital made by the local regulator should be deducted from the consolidated capital base.
- a) So where, for example, the local supervisor applies a deduction in respect of illiquid assets, this deduction is reflected in the consolidated capital base.

7 COMPUTING CONSOLIDATED CAPITAL WHEN THE CAD REGIME APPLIES

7.1 Introduction

See ch CO

1 The general policy for computing capital is summarised in the chapter giving an overview of the capital adequacy regime. This section outlines the policy applying in the case of the consolidated capital calculation for banks to which the CAD regime applies.

Any incremental capital generated at a solo level by large exposures in a subsidiary should be stripped out when including it in the consolidated returns.

7.2 Consolidating using aggregation plus

2 When consolidating using aggregation plus, the capital needed in relation to the investment firm (or bank's trading book) should be determined using:

- (a) the CAD as implemented by the relevant EEA banking/securities supervisor;
- (b) the host banking/securities supervisor's rules, where these are *deemed to be broadly equivalent* to the CAD; or, when neither of these conditions are met,
- (c) the CAD as set out in the chapters on capital adequacy.
 - a) In the case of an affiliate incorporated in an EEA state other than the United Kingdom, the FSA's policy may be followed if preferred by the bank.
 - b) Lists of non-EEA securities regulators and banking supervisors with *regimes deemed to be broadly equivalent* to the CAD regime are given in the appendices.

See ch CO

See s10.2

3 Where appropriate in cases 2(a) and (b) above, the notional weighted risk assets should be converted into a capital requirement, by multiplying them by the individual capital ratio applied to the subsidiary (typically 8%). In case 2(c), notional weighted risk assets are converted by multiplying by the trading book individual capital ratio set by the FSA.

See s10.4

- a) An example of the calculation of the key ratios using various assumptions on consolidation technique and which supervisor's rules are used is given in the appendices.

- 4 When using aggregation plus and receiving the written agreement of the FSA, a bank may satisfy itself on a daily basis that it meets its individual capital ratio set by the FSA with reference to position limits, as opposed to actual positions.
- 5 It should adopt such a procedure only after first satisfying the FSA that its control systems are such that actual positions may reliably be taken as being no higher than the adopted position limits.

7.3 Line-by-line consolidation

- 6 When using line-by-line consolidation, a bank may - if it wishes - construct its consolidated capital requirement for general market risk without first calculating the net position in each security on a consolidated basis. However, the method used to measure general market risk should be the same for all entities subject to the line-by-line consolidation.

7.4 Consolidation of entities that use internal (VaR) models

7.4.1 General

- 7 Where a subsidiary that is consolidated via aggregation plus uses an internal model recognised by its local CAD or CAD-equivalent regulator to generate its solo capital charges, then the output of the model may be used when calculating the consolidated capital requirement. However, the calculation of the subsidiary's notional risk weighted assets, for inclusion in the consolidated capital requirement, should include the multiplication and any plus factors set by the local regulator.
- 8 If the subsidiary is unregulated, the FSA will consider a request for its internal model to be recognised for regulatory capital purposes at the consolidated level. The model should meet the FSA's quantitative and qualitative standards; but even if it does the FSA may consider that alternative capital proxy requirements are appropriate. If model recognition is given, it is likely to include higher multiplication factors and additional reporting expectations, to address the lack of local regulatory scrutiny of the subsidiary.
- 9 Where a banking group uses a recognised internal model at a consolidated level, and certain positions are consolidated into it on a line-by-line basis, then the group should run a consolidated backtest on the model (in addition to any solo backtesting performed). The consolidated backtest should match exactly the

scope of the consolidated internal model: it should not therefore cover those trading activities that are subject to the standard approach or those that are subject to aggregation plus consolidation. Subsidiaries subject to line-by-line consolidation but which use an internal model on a solo basis, should not include in its consolidation any multiplication/plus factors applied by the local regulator to calculate solo charges.

- 10 Within a consolidated group, different approaches may be taken to the same risk class in different legal entities. For example, the main trading entity may apply for recognition of its model of interest rate risk, while a smaller subsidiary may choose to adopt the standard approach. However, groups should not use different internal models for the same risk in different legal entities subject to line-by-line consolidation.

7.4.2 *Mixing consolidation techniques*

See s6.3.2

- 11 As described above, for trading books of banking subsidiaries only, the FSA may agree to a bank consolidating part of its trading book using line-by-line consolidation and the rest using aggregation plus. Where the bank subsidiary uses a VaR model, it should only mix consolidation techniques in this way if the model's scope does not extend beyond the risk factors that are being consolidated using aggregation plus.

(i) In other words, if the subsidiary wishes to consolidate via aggregation plus its equity and foreign exchange risks, then the VaR model used to calculate its solo capital charges should cover, at most, only equity and FX risks.

(ii) The reason for this restriction is to ensure that the capital charges being fed into the consolidated calculation have been properly verified at a solo level by the local regulator. Also, it may not be possible to break down the VaR model output to identify a subset of capital charges.

i) For instance, if a recognised model covered interest rate as well as equity and FX risks, then the backtesting of the model would not necessarily identify discrepancies between just equity and FX P&L and their individual VaR estimates. Even if it were possible to break down and monitor separately the different components of the VaR model, the local regulator would only apply plus factors if

there were discrepancies between the model's overall output and actual P&L of all three risks.

- 12 On the other hand, a recognised VaR model can cover fewer risk factors than those being consolidated via aggregation plus. In this case, those risks outside the model, and not line-by-line consolidated, would simply be subject to the local regulator's (standard approach) CAD rules: their solo capital requirements for these risks would be added to the VaR based capital requirement for inclusion in the consolidated capital requirement calculation.

8 QUALITATIVE CONSOLIDATED SUPERVISION

[deleted]

9 SOLO CONSOLIDATION

9.1 Introduction

Solo consolidation is a reporting treatment which may be adopted for capital adequacy and large exposures reporting. Reporting on a solo-consolidated basis is a substitute for solo (or unconsolidated) reporting: banks should not report on both a solo-consolidated and a solo basis. A bank should discuss with the FSA prior to reporting on a solo-consolidated basis.

- a) In the case of large exposures, the FSA will notify the bank in writing of those subsidiaries which should be solo consolidated.
- b) The aim is to include only those subsidiaries which have a close relationship to the bank, such that it should be possible to wind up the subsidiary rapidly and repatriate the net assets (capital) to support depositors with the parent, i.e. solo-consolidated subsidiaries should not be a potential source of weakness to the parent.

9.2 Criteria for solo consolidation

1 In calculating its solo ratio, a bank may consolidate certain subsidiaries, specifically where all the following conditions apply:

- (a) the subsidiary is at least 75% owned by the bank;
 - a) This criterion is to ensure that the parent has control over the subsidiary to facilitate winding up.
- (b) either the subsidiary is wholly funded by its parent bank or its exposure to risk is wholly in respect of its parent bank;
 - a) Either the assets or the liabilities side of the subsidiary should, with only *de minimis* exceptions, be fully taken up by the parent. So if the subsidiary needs to be wound up quickly, either there are no competing claims from other creditors or all the liabilities can be repaid from assets held by the parent. This should facilitate winding up.
 - b) Parental guarantees are not adequate substitutes for either full funding or all the risks being with the parent. This is because the circumstances of the subsidiary's capital being needed - i.e. problems in the parent - are those under which the guarantee would be of no value.
- (c) the management is under the effective direction of the parent bank;
 - a) This criterion is also intended to ensure ease of winding up.

- (d) it is clear that there are no potential obstacles to the payment of surplus capital up to the parent bank, in particular taking account of overseas exchange controls, potential legal and regulatory problems, and taxation; and
- a) Where a UK bank has established overseas subsidiaries which it wishes to solo consolidate, it is normally expected that a provision for the potential liability from either capital gains or withholding tax arising from the repatriation of capital will be made. The tax liability should be calculated on the basis that the capital would need to be repatriated on the next day (irrespective of whether or not it is the bank's intention to maintain the investment in the long term). An approximate figure, derived using marginal tax rates, is usually sufficient.
 - b) For domestic subsidiaries, the FSA does not require a provision to be made for capital gains tax.
- (e) there is sufficient capital in the bank's own balance sheet to fund its investments in those subsidiaries which are to be solo consolidated (i.e. if the investments were to be deducted rather than solo consolidated, the parent should be left with positive net worth).
- a) The measure of capital used here is the sum of allowable Tiers 1 and 2.
- 2 Even where all the criteria are met, it is open to supervisors not to agree to solo consolidation.
- 3 In the case of *active-trading subsidiaries*, as well as the criteria in 1 above, three additional criteria should be met:
- (a) solo consolidation should result in the direct supervision of the subsidiary by the FSA, and is contemplated only where this is practicable;
 - (b) the controls within the proposed solo-consolidated entity should be adequate to ensure that its business is controlled prudently and, in particular, that exposures to companies outside the solo-consolidated group can be incurred only in a controlled manner; and
 - (c) suitable reassurance regarding these controls should be received on a continuing basis, either through reports under section 166 of the Act on the systems and controls across the solo-consolidated group or through other equivalent means agreed with the other regulator where applicable.

-
- a) The reassurance referred to in (c) can be sought by commissioning a report on the parent with respect to its controls over the subsidiary or on the subsidiary itself (using the powers under section 166 of the Act).
 - b) A subsidiary is held to be *actively trading* when:
 - i) it has a funding requirement which fluctuates, or is capable of increasing, significantly; and
 - ii) it has the ability to adjust its asset composition to assume or divest itself of risk, with the objective of generating operating profits for its own account.
- 4 A UK-authorized bank should not be solo consolidated with its parent bank.
- 5 Any other non bank subsidiary regulated by the FSA may be solo consolidated. But since the subsidiary also continues to be supervised on an unconsolidated basis, solo consolidation is unlikely to be of value.

10 APPENDICES:

10.1 Appendix A: Activities which should be consolidated

- 1 Companies undertaking one or more of these activities are classified as *financial* for the purposes of the policy on consolidated supervision:
- (a) Ancillary banking services (defined as 'an undertaking the principal activity which consists in owning and managing property, managing data processing services, or any other similar activity which is ancillary to the principal activity of one or more credit institutions').
 - (b) Lending (including, inter alia, consumer credit, mortgage credit, factoring with or without recourse, financing of commercial transactions (including forfaiting)).
 - (c) Financial leasing.
 - (d) Money transmission services.
 - (e) Issuing and administering means of payment (e.g. credit cards, travellers' cheques and bankers' drafts).
 - (f) Guarantees and commitments.
 - (g) Trading for own account or account of customers in:
 - money market instruments (cheques, bills, CDs etc.);
 - foreign exchange;
 - financial futures and options;
 - exchange and interest rate instruments;
 - transferable securities.
 - (h) Participation in securities issues and the provision of services relating to such issues.
 - (i) Advice to undertakings on capital structure, industrial strategy and related questions and advice and services relating to mergers and the purchase of undertakings.
 - (j) Money broking.
 - (k) Portfolio management and advice.

- a) The category includes fund management companies. Investment funds themselves are not included. But investments by venture capital subsidiaries in financial companies meeting the threshold requirement are normally consolidated.
 - i) Holdings in investment funds are usually weighted at 100%.

(l) Safekeeping and administration of securities.

2 The following activities are not covered by the above list:
insurance; insurance broking; estate agency.

10.2 Appendix B: Consolidation techniques

The table below summarises the usual consolidation treatments:

Types of affiliate	Non-CAD group	CAD group
Banking books of bank affiliates	Line by line into banking book	Line by line into banking book
Trading books of bank affiliates	Aggregation plus* May be line by line if special conditions are met	Normally, aggregation plus May be line by line if special conditions are met
Trading investment firms	Aggregation plus* May be line by line if special conditions are met Exceptionally, may be deduction plus subject to permission of line supervisor	Normally, aggregation plus May be line by line if special conditions are met
Non-trading investment firms	Deduction plus	Normally, aggregation plus May be line by line if special conditions are met
Other companies subject to consolidation (e.g. leasing)	Normally, line by line into banking book	Normally, line by line into banking book
Others not subject to consolidation	Deduct investment	Deduct investment

- a) It is possible for an affiliate to be subject to the CAD capital requirements on a solo basis while the group is a non-CAD group

(these cases are marked with an asterisk in the table), although this situation is not expected to occur very often.

- b) When a trading investment-firm affiliate has a large volume of non-trading assets, these should be split off and consolidated line by line into the banking book.

10.3 Appendix C: Investment firm regimes deemed broadly equivalent to CAD regime

3 Regulators of investment firms in the following countries are deemed to have CAD equivalent regimes:

Australia	Sydney Futures Exchange* Australian Stock Exchange*
Canada	Alberta Stock Exchange Montreal Exchange Toronto Stock Exchange Vancouver Stock Exchange Investment Dealers Association of Canada
Hong Kong	Hong Kong Monetary Authority Hong Kong Securities and Futures Commission
Japan	Japanese Financial Supervisory Agency
Singapore	Monetary Authority of Singapore Stock Exchange of Singapore
South Africa	Johannesburg Stock Exchange South African Futures Exchange Bond Exchange of South Africa
Switzerland	Federal Banking Commission
USA	Securities and Exchange Commission Commodities and Futures Trading Commission
	* To the extent that subsidiaries have market or counterparty risk which is not captured by these exchanges' rules, the FSA's policy needs to be applied.

4 The FSA does not plan to publish a list of investment firms (inside or outside the EEA) that qualify for a 20% risk weighting. It expects credit departments to know the status of their counterparties.

10.4 Appendix D: Third country banking supervisors with equivalent regimes

- 5 When using aggregation plus to consolidate the trading book of third country banking subsidiaries, banks may use host country rules where the FSA has deemed these rules to be “broadly equivalent” to the CAD. Non-EU/EEA banking supervisors that the FSA currently accepts have market risk regimes broadly equivalent to the CAD include those of Australia, Canada, Hong Kong, Japan, Singapore, Switzerland and the USA. Banks should refer to their supervisor should they wish to check the status of other third country regimes.

10.5 Appendix E: Calculation of consolidated capital adequacy

- 6 Suppose a consolidated group contains three companies:
 - a parent bank
 - a banking subsidiary outside the UK
 - an investment subsidiary.

- 7 Suppose also that the following applies:

Consolidated banking book risk weighted assets: B_A

Trading book notional risk weighted assets:

- consolidated, using line-by-line T_A

- parent bank T_p

- banking subsidiary, using FSA rules: T_{b1}

- banking subsidiary, using host supervisor rules T_{b2}

- investment subsidiary, using FSA rules: T_{i1}

- investment subsidiary, using local supervisor rules T_{i2}

These assumptions assume capital regimes for the trading activities that produce trading both notional risk weighted assets (and not simply a capital requirement).

Banking book individual capital ratio $y\%$

Trading book individual capital ratio $x\%$

Case 1: All trading activity consolidated using line-by-line

Risk Asset Ratio: $Total\ capital / (B_A + T_A)$

Capital adequacy: $Total\ capital / (\langle B_A \times y\% \rangle + \langle T_A \times x\% \rangle)$

Case 2: Trading activity consolidated using aggregation plus but Bank rules

Risk Asset Ratio: $Total\ capital / (B_A + T_p + T_{b1} + T_{i1})$

Capital adequacy: $Total\ capital / (\langle B_A \times y\% \rangle + \langle [T_p + T_{b1} + T_{i1}] \times x\% \rangle)$

Case 3: Trading activity consolidated using aggregation plus and host supervisors' rules

Risk Asset Ratio: $Total\ capital / (B_A + T_p + T_{b2} + T_{i2})$

Capital adequacy: $Total\ capital / (\langle B_A \times y\% \rangle + \langle T_p \times x\% \rangle + \langle [T_{b2} + T_{i2}] \times 8\% \rangle)$

OUTSOURCING

1 INTRODUCTION

1.1 Legal sources

- See COND 1 Principle 3 of the Principles for Businesses states that a firm must take reasonable care to organise and control its affairs responsibly and effectively, which includes having adequate systems and controls (see also the high-level rule in SYSC 3.1.1R). The Threshold Conditions ('Suitability') also includes the need to ensure that a firm conducts its affairs 'soundly and prudently'. Relevant to the meeting of these requirements is a bank's outsourcing arrangements. In considering any outsourcing proposal, a bank should consider whether the outsourcing meets the material outsourcing definition below. Where the proposal meets these criteria, the bank should take into account the system and control implications, including adequate anti-money laundering systems, and the degree to which management control of the task will be relinquished to the supplier. The FSA considers that a bank's management is accountable for the adequacy of systems and controls for the outsourced activity.
- See Supervision Manual, chapter 2 2 The FSA has powers under section 165 of the Act to require a bank to provide documents to the FSA which it reasonably requires in connection with the exercise of its functions under the Act. Nevertheless additional steps need to be taken to protect the FSA's access to information in relation to outsourced activities.
- 3 Material outsourcing is the use of third parties to provide services to a bank which are of such importance to the bank that:
- See COND (a) a weakness or failure in any of the activities outsourced would cast into serious doubt the bank's continuing compliance with the Principles for Business and Threshold Conditions; and
- (b) the outsourcing is by business units which are *significant units*.
- a) A *significant unit* is one which is covered by the FSA's risk assessment.
- i) The first step in the FSA's RATE approach is to agree with banks exactly which units are significant: this process is described in paragraphs 26 to 30 (UK banks) and 31 to 33 (overseas banks) of the FSA's June 1998 paper "Risk based approach to supervision of banks".

- b) The purchase of a standardised service from, for example, Bloombergs or Reuters and the provision of custody arrangements fall outside of the definition of material outsourcing.

4 This definition is solely for the purpose of determining the scope of the policy on outsourcing. It is not intended to restrict discussion with the FSA, nor is it intended to limit the issues that the FSA considers as part of the RATE process. A bank should apply its normal tests in deciding which issues should be raised with the FSA.

5 If in doubt as to whether a function would be considered material the bank should discuss the definition of material outsourcing with the FSA.

6 Although the principles in Section 4 apply to both intra- and extra-group outsourcing, the FSA applies them flexibly where the outsourcing is intra-group or to another regulated entity, particularly where the outsourced activity is a regulated core business function carried out by the supplier for its own purposes, e.g. cheque clearing.

1.2 Application

7 The policy set out in this chapter applies to all banks except EEA banks.

8 A bank which had outsourcing arrangements in place on 30 June 1999 or which was close to completing outsourcing arrangements on or after this date, is exempt from the application of this policy until the existing contracts become due for renewal. At that time the FSA expects a bank to discuss with it how the bank intends to apply this policy to the renewal of its existing arrangements.

1.3 How this chapter is organised

9 Section 2 sets out the basic scope and range of the FSA's approach to outsourcing proposals. Section 3 summarises the main features of the policy.

10 Section 4 details the minimum criteria a bank should adopt when it intends to outsource. These range from its due standard of care, to its relationship with the FSA and to its customers.

11 Section 5 sets out some points for further consideration regarding the structure of a bank's relationship with the supplier of the outsourced function. It stresses particularly the standards the bank should expect a supplier to meet and how the bank should monitor

the relationship. This section does not represent additional minimum criteria, but a bank still needs to have considered the issues raised; the FSA may ask the outsourcing bank what procedures have been put in place to address relevant concerns.

12 Section 6 is an appendix setting out the FSA's general approach to *central booking*. It also explains when the FSA regards central booking as a form of material outsourcing for the purposes of sections 2 to 5.

- a) *Central booking* is where the business is carried out in one location or legal entity within a group and booked in the accounting records of another. In some cases, the risks arising from such business may be managed in a third location.

2 THE FSA'S APPROACH TO OUTSOURCING

- 1 Banks frequently decide to outsource aspects of their operations, either to other group companies or to independent third parties. This is sometimes done on grounds of cost, sometimes because the other party can deliver a better service than can be provided in-house, and sometimes a combination of both.
- 2 The FSA recognises that outsourcing can bring significant benefits to banks and their customers. However, the FSA is concerned that when an important function is performed outside a bank, the bank may lose or have reduced control of the outsourced activity. Furthermore, the FSA's ability to exercise its supervisory powers to gather information or to require changes in the way that the outsourced function is carried out may be affected adversely. In addition, there may be some circumstances in which the FSA will need to assess the suitability of the service provider and its key staff. This policy is designed to address these concerns without impeding unduly banks' ability to use outsourcing to further their business objectives.
- 3 The FSA recognises that some of this policy will not be appropriate to intra-group outsourcing. Where a particular principle applies only to outsourcing either solely within or alternatively outside the consolidated group this has been clearly stated. Where there is no such statement it should be assumed that the policy applies to both intra- and extra-group outsourcing.

3 THE MAIN FEATURES OF THE POLICY

This section summarises the main features of the policy applying in relation to outsourcing banks. It should be read in conjunction with section 4 below.

3.1 Informing the FSA

- See s4.1
- 1 A bank should make the FSA aware, through its normal supervisory channels, of its intention to outsource a task which, materially, either impacts on its systems and controls or affects its risk profile. This should take place in reasonable time to allow the FSA to consider the proposal and to raise any concerns.
 - 2 During the course of the outsourcing agreement a bank should make the FSA aware of any material problems encountered with the outsourcing supplier.

3.2 Material outsourcing proposals

- See s4
- 3 The FSA expects a bank to be able to analyse the impact outsourcing a particular function will have on its overall risk profile and the bank's internal systems and controls.
 - 4 A bank should ensure that the FSA has access to any information relevant to the outsourced activity reasonably required by the FSA in connection with the exercise of its functions under the Act.
 - 5 A bank should ensure that its internal and external auditors have access to any relevant information they require to fulfil their responsibilities.

3.3 The FSA's consideration of banks' outsourcing proposals

- See s4.1
- 6 The FSA will consider a bank's outsourcing proposal and raise any concerns that it has. The FSA is aware of commercial pressures involved in outsourcing contracts and will agree with the bank a suitable timescale for response.

4 PRINCIPLES OF OUTSOURCING

4.1 General

1 A bank should make the FSA aware of a material outsourcing proposal in reasonable time to allow the FSA to consider the potential impact of the proposal on the bank and to raise any concerns. The FSA is aware of commercial pressures involved in outsourcing contracts and will agree with the bank a suitable timescale for response. Once a bank has notified the FSA of a material outsourcing proposal, the FSA will determine the level of its ongoing scrutiny of the process and ask the bank to provide further information accordingly.

See ch GN s3

2 Regardless of whether the outsourcing supplier is inside or outside the group, the FSA holds the bank's management responsible for ensuring that the outsourced function is carried out to a proper standard and that the integrity of the bank's systems and controls is maintained. The FSA would expect a member of the bank's senior management to take responsibility for each material outsourced function; this person should be an approved person (see 3.3.24G).

3 In some limited circumstances it is possible that a person employed by a supplier may be subject to the approved persons requirements under the Act. Further details are given in the Supervision Manual.

a) The scope and principles of the approved persons requirements are set out in Part V of the Act, the High Level Standards for Business and the Supervision Manual.

b) Applicants apply to the FSA to become approved persons using Form A in chapter 10 of the Supervision Manual.

4.2 Principles governing a bank's relationship with its supplier

See s5.2

4 A bank should monitor and manage on an ongoing basis its relationship with the supplier so as to seek to ensure the integrity of its systems and controls is maintained.

5 The supplier should be a competent, financially sound firm with good relevant knowledge and expertise. The bank should be able to demonstrate that it has taken proper steps to verify this and that it also has procedures for assessing the supplier's performance on a continuous basis. Additionally, the bank should be able to satisfy the FSA that the supplier is committed for the term of the

contract to devoting sufficient, competent resources to providing the service.

- a) Where the supplier is a member of the same group as the bank, the latter is likely to have a greater pre-existing level of knowledge about the former. The level of assessment may therefore be reduced.

6 The agreement between the bank and the supplier should provide that the bank is informed of any developments which may have a material adverse impact on the supplier's ability to meet its obligations. This includes, for example, relevant material control weaknesses identified by the supplier's internal or external auditors. The supplier's auditors do not have a responsibility to report any concerns to the FSA. Nonetheless, the bank should ensure that there is a clear reporting line between the supplier and itself so that any material problems relating to the outsourced activity can be communicated and to enable it (or the FSA) to make any further enquiries of its own into such problems.

- a) Where the supplier operates abroad, the Data Protection Act 1998 sets out legal requirements governing the transfer of data across borders.

7 For outsourcing outside the group there should be a right to terminate the contract in the event that the supplier undergoes a change of ownership or the supplier becomes insolvent or goes into liquidation or receivership.

4.3 Principles covering service level agreements ('SLAs')

See s5.4

8 An *SLA* is a negotiated agreement on the standards of service between the supplier and the end-user (the bank). A bank should always have a written SLA in place with its supplier, where the outsourcing is outside the group. The SLA should also provide for periodic reviews and appropriate remedies should problems arise. Such reviews should allow for the relationship to be amended via the SLA or contract as appropriate, on the basis of performance against specified targets.

- (a) Banks may be asked to submit SLAs to their supervisors.

9 Where the outsourcing is intra-group a SLA may not always be appropriate. This is particularly the case where a service is supplied on a group wide basis. In such circumstances the supplier may wish to provide a statement of the standard of service to be provided to the whole group. This statement may be supported by a wide range of other existing relationship management systems. Where these provide a sufficient performance measurement structure a SLA may not be required.

4.4 Principles affecting contingency planning

See s5.5

10 A bank should have and regularly review contingency plans to enable it to set up new arrangements as quickly as possible, with minimum disruption to business, if the contract is suddenly terminated or the supplier fails. The level of detail in such plans may vary. For example, if there are large numbers of possible alternative suppliers the outsourcer may simply be able to use one of the alternative supplier(s). However, this may still be a complex and time consuming process and a bank should consider how it would deal with the hand-over process. If, on the other hand, the only option is for the bank to resume the activity itself the plan should be far more detailed.

- a) As the contract with an intra-group supplier is highly unlikely to be terminated through the actions of the supplier, the only significant risk is that the service will be interrupted by another unrelated event. Such events should be covered by the supplier's business continuity plan and therefore a separate contingency plan for the bank may not be appropriate.

4.5 Principles governing supervisors' access to information

See Supervision
Manual,
Chapter 5

11 The contract between the bank and the supplier should ensure that the bank can provide the FSA with any information relating to the outsourced activity that the FSA may require in order to carry out effective supervision, whether the outsourcing is within or without the group, for example, through section 166 reports by a person with relevant professional skill.

12 Where the supplier is based outside the UK, the bank should assess the extent to which the local regulator/regulations may restrict access to information about the outsourced activity.

13 The FSA should be informed if any other regulator raises serious concerns with the bank's proposal to outsource.

4.6 The auditor's role

14 A bank should have processes in place to identify and deal with any weaknesses in the supplier's procedures which could have a material adverse impact on the service provided to the bank. This could include access for the bank's internal and external auditors, independent reports on the supplier and/or monitoring of detailed performance statistics.

15 In line with the FSA's approach to other areas of banking supervision, where internal or external audit raises material

problems the bank should alert its supervisor. The bank should also ensure that it has the management capacity to assess and respond to any such concerns so raised.

4.7 Outsourcing internal audit

16 All cases of outsourcing internal audit will be considered material.

17 A bank should not outsource its internal audit function to either its skilled persons or its external auditors. A bank should have an internal audit function independent from external audit as this segregation of responsibilities would be compromised if the same firm fulfilled both functions.

See ch AR s3

18 However, the FSA considers that it may be appropriate for certain internal audit services to be provided by the external auditors/skilled persons where the following conditions are met:

- (a) the work is carried out under the overall supervision and management of the bank's own internal audit staff;
- (b) ultimate responsibility for the adequacy and effectiveness of internal audit lies with the Head of Internal Audit.
- (c) the Head of Internal Audit is a senior and experienced individual who is an employee of the bank, or the group of which the bank is a part.
- (d) the FSA is satisfied that the Head of Internal Audit has satisfactory reporting lines. These lines would typically involve unfettered access to the audit committee or at a minimum a non-executive director.

19 A bank wishing to use its external auditor/skilled person to perform any part of internal audit's function should notify the FSA of its intention to do so. It need not, however, notify where individual employees of a bank's external auditors/skilled persons are seconded to work within the internal audit function.

20 Where internal audit is outsourced to another firm which is not otherwise involved in the auditing or accounting function of the bank, the independence issue does not arise. Therefore, outsourcing proposals meeting this criterion are assessed in the same way as any other function.

4.8 Principles covering sub-contracting

21 The contract should state that if the outsourcing supplier decides to sub-contract further the original outsourcing supplier continues to be contractually liable and the level of service and systems and controls will not deteriorate.

- a) *Sub-contracting* is where the supplier of an outsourced function further contracts out that function to a third party unrelated to the bank or supplier.

5 FURTHER AREAS FOR CONSIDERATION

Banks should have considered the issues raised in this section as the FSA may ask what procedures have been put in place to address these concerns.

5.1 General

- 1 Any voluntary Codes of Conduct adopted by the bank that would have a direct impact on customers could also be observed by the supplier. This step may help to prevent a deterioration in the service received by its customers.

5.2 A bank's relationship with its supplier

5.2.1 *General*

See s4.2

- 2 The bank may wish to be aware of the material risks to which the supplier is exposed in relation to the service provided to the bank by the supplier and the corresponding control procedures in place. There might also be provision for relevant management information so that problems, such as a deterioration in service, are brought to the attention of the appropriate individuals in the bank at an early stage. The bank may wish to take steps to seek to ensure that it is clear who is accountable at the appropriate level in respect of such problems. One such mechanism may be through establishing clear lines of escalation both within the supplier and the bank.
- 3 It would be prudent for a bank's management to provide adequate resources at appropriately senior levels to ensure that the relationship with the supplier is properly managed and monitored against performance targets.
- 4 Where the outsourcing supplier is in direct contact with the bank's customers, the bank may wish to establish how its customer relations policies will be reflected by the supplier, for example, answering complaints within a certain time period. Such policies could be measured and factored into any consideration of the supplier's performance. This is important to a bank since any material deterioration in customer relations may adversely affect its reputation. This matter has greater significance if the supplier is external to the group since the supplier might have a different culture.

5.2.2 *Termination of contract with the supplier*

See s4.2

- 5 A bank may wish to make provision in the contract to ensure that it does not lose any work or records which are material to the bank's business and has been carried out by the supplier, should the contract be terminated. In

any case it would be sensible for termination clauses to provide adequate notice for the bank to put in place alternative arrangements.

5.3 Confidentiality

6 Confidentiality may not be a significant issue if the outsourcing is within a bank's group. However, the bank may wish to consider whether the confidentiality constraints below need to be fulfilled.

7 Where a supplier deals with a bank's competitors distinct procedures (such as Chinese Walls) may be advantageous in seeking to ensure that there is no breach of client confidentiality. Where the supplier operates abroad, the Data Protection Act sets out legal requirements governing the transfer of data across borders.

5.4 Service level agreements ('SLAs')

See s4.3

8 In order to ensure that there is no confusion over respective duties banks may wish to clearly define what is to be outsourced in their SLA. Additionally the SLA may incorporate the capacity for change (including technological change) or expansion, set out clearly who is responsible for ensuring that work is completed and incorporate details of the reports that the bank might wish to receive from the supplier and their frequency.

9 Where a supplier provides a service for several banks or the bank has peak periods of service, the bank might wish to seek to ensure that a minimum level of resources will be continuously devoted to provide an agreed level of service.

10 For extra-group outsourcing, the contract may provide the option for regular re-tendering. However, for both intra- and extra-group outsourcing, it may be prudent for the relationship to be reviewed, where and when appropriate, but at least annually to take account of all relevant business and environmental changes and the review may also include a financial strength assessment of the supplier.

11 An agreed standard of service between the supplier and the bank might be particularly relevant in the case of extra-group outsourcing. A bank may wish to consider whether the standard of service operated by the supplier needs to be as high as that operated within the bank. Performance targets might be included within the SLA, along with provision for escalation and termination where the targets are not met.

5.5 Contingency planning

See s4.4

12 Daily operations and systems problems, such as temporary disruption/suspension of the service, could be included within a plan

although this could be covered in the supplier's own contingency arrangements.

- 13 A bank might wish to ask the supplier for information about its own contingency plans, in order to assess the level of comfort it can draw from these plans and consider the implications for its own contingency planning. Where sufficient comfort cannot be drawn the bank may wish to make alternative contingency arrangements either in-house or through an alternative supplier as appropriate.

6 APPENDIX – CENTRAL BOOKING

See COND

Central booking is where the business is carried out in one location or legal entity within a group and booked in the accounting records of another location or legal entity. This general description covers a range of different scenarios, as explained in the remainder of this section: in all cases, the overriding objective is that, however a bank chooses to organise its activities, it must continue to comply with the Principles for Businesses and Threshold Conditions for Authorisation and with its other legal and supervisory obligations, including those relating to the provision of information to the FSA. The FSA expects banks to discuss significant new central booking proposals with their supervisors, in the same way as for any other significant change in its organisational arrangements.

6.1 Central booking between different locations of the bank

- 1 Banks often record transactions in a different physical location to that in which the business is undertaken. This will never fall within the definition of material outsourcing (because a bank cannot, by definition, outsource to itself). A bank should nevertheless satisfy itself that, wherever the various functions associated with its business are physically carried out, the bank complies with its legal and regulatory obligations including (but not limited to):
 - (a) the maintenance of adequate accounting and other records and internal control systems;
 - (b) the adequacy of provisions, liquidity and capital (where relevant); and
 - (c) the provision of information to the FSA (including periodic reporting such as prudential returns and the notifications on large exposures, controllers and close links, and ad hoc requests for information).

6.2 Central booking between different legal entities

- 2 A bank should consider both the legal form and the commercial substance of its arrangements with the other entity in order to establish the true nature of the relationship and therefore the procedures which are appropriate to enable the bank to comply with its obligations. The key consideration is the risks to which the bank is exposed as a result of the transactions undertaken and/or its arrangements with the other party.

- 3 Material outsourcing issues only arises where the bank records, and bears the risk of, business which is initiated by another legal entity in the group acting in the bank's name (so that clients/counterparties believe that they are dealing with the bank's own staff).
- a) In contrast, where another legal entity in the group acts as broker/introducer for example, it provides a discrete service in its own name to both the bank and customers/counterparties.

PROVISIONING POLICY STATEMENTS

1 INTRODUCTION

1.1 Context

See ch CA 1 This chapter deals explicitly with provisioning policy statements and provisions in their generality, although general/collective provisions are mentioned in the context of the definition of capital.

1.2 Legal sources

See ch GN s3 2 The rules made by the FSA applying to banks under the Act include a rule requiring a bank to have adequate provisions. The maintenance of adequate provisions is also relevant to whether a bank meets the Threshold Conditions (“adequate resources”), and the Principles (“financial prudence”). The need to maintain adequate provisions mirrors the requirement of the Companies Act 1985 that provision should be made for depreciation or diminution in the value of an institution’s assets, for liabilities that will or are expected to fall to be discharged and for any losses which it will or expects to incur. Consequently provisions need to be made for a variety of reasons, for example, bad and doubtful debts, valuation uncertainties in long-term investment portfolios, contingent claims (for example, arising from guarantees or other off-balance sheet exposures), tax liabilities, etc.

See COND

1.3 Application

See ch GN s3 3 The requirement to maintain adequate provisions applies to all banks except EEA banks. A bank must provide the FSA with a copy of its provisioning policy statement in conformity with rule 3.4.5.

- a) For a UK bank, where the FSA is responsible for the consolidated supervision of the entire banking group, the policy should ideally cover this group. It need not cover unconsolidated subsidiaries or undertakings supervised by the FSA.
- b) An overseas bank with a UK branch presence is also required to submit a provisioning policy statement but this only need relate to provisions made in the accounts of its operations in the UK.

4 In assessing the adequacy of a bank’s provisions, the FSA looks at its provisioning policies, and the methods and systems for calculating provisions in accordance with those policies.

- a) A bank's provisions and policy is also reviewed as part of the RATE process in the context of 'Asset Quality' - see Section 8.6 of the RATE Guidelines.

1.4 How this chapter is organised

5 Section 2 outlines the FSA's basic approach to provisioning.

Section 3 provides guidance on the key issues that should be included in the provisioning policy statements.

2 THE FSA'S BASIC APPROACH TO PROVISIONING

- 1 The FSA regards the prudent valuation of assets and the establishment of provisions as of fundamental importance. The FSA expects contingent liabilities and anticipated losses to be recognised in accordance with accepted accounting standards (as embodied in the Statements of Standard Accounting Practice and Financial Reporting Standards or, where applicable, *international accounting standards* (see definition in the *Glossary*)).
- 2 The FSA's overall approach is that a bank should hold an adequate level of provisions. The FSA accepts that what is 'adequate' will differ between banks, according to the precise nature and scale of the business(es) they undertake. These provisions may be in the form of general/collective or specific/individual provisions.
- 3 The objective of requiring a bank to provide the FSA with a statement of its provisioning policies is to enable the FSA to understand more fully the procedures that a bank goes through when making provisions. The receipt of this information is a valuable tool of ongoing supervision and will be used in the context of the RATE process.
- 4 Although more detailed guidance on what should be contained in the statement is provided below, as a general rule, it should clearly document the following key points:
 - responsibility for the policy (who owns it, implements it, reviews it, monitors it etc);
 - the scope of the policies (the areas of business/activities that it covers, whether it encompasses all forms of provision, whether it is a high level framework or a set of rules set down in a procedures manual); and
 - reporting requirements, (e.g. what should be reported to whom, by whom and when, and for what purpose? Which accounting standards/practices are followed - this is particularly important for provisioning for liabilities).
- 5 The FSA has deliberately avoided setting down a prescribed style, format or length for a bank's provisioning policy statements, as one format would not be appropriate for the diverse range of banks authorised in the United Kingdom.

See s3

3 THE PROVISIONING POLICY STATEMENT

3.1 General

See ch GN s3

The FSA has made a rule under the Act requiring banks to have a provisioning policy statement (see rule 3.4.5 in chapter GN section 3). The guidance below indicates what a bank's provisioning policy statement should contain. It is only an indicative list and by no means exhaustive. Statements do not have to follow the order below; a bank may find it more convenient to provide the information in a different format.

- 2 This section has been divided into three parts to reflect the fact that some issues relate only to credit exposures, some only to liabilities and some to both.

3.2 Issues relating to provisioning for credit exposures and other liabilities

- 3 *Who in the bank has responsibility for drawing up and monitoring the policy?*

As with all aspects of a bank's business, the board as a whole should have overall responsibility. A bank's board, or another body eg its audit committee, on behalf of the board, must approve the policies. It is important, however, that one of the executive directors has particular responsibility for the bank's provisioning policies.

- a) For an overseas bank with a UK branch, a member of the branch's senior management team, as well as a member of its board at head office, should have responsibility for the policy.

For a larger bank, and/or a bank for which the FSA is responsible for the consolidated supervision of the whole bank, the policy statement should cover the whole group. In such cases, it may be that the board/audit Committee only approves the high level provisioning framework, delegating more formal and detailed responsibility to other executive or managerial positions.

As well as the above, a member of the bank's senior management team should have responsibility for monitoring implementation of the policy on a day to day basis, and for ensuring that all the relevant members of staff are aware of the policy.

- 4 *Who is responsible for reviewing and updating the policies and how often is this done? What are the review processes?*

Once the policies are in place, they must be reviewed at least annually to ensure that they are still appropriate for the business the bank

undertakes and the economic environment in which it operates. This should be undertaken by a member of the senior management team in the first instance, and reviewed and approved by the audit committee or the board.

- 5 *Does the policy apply to all of a bank's business?*

The documentation should clearly state to which areas of the bank's business the policies relate, i.e. whether they apply to the bank's business as a whole, or whether there are different policies for different areas of its business. If different policies exist, the key features of each should be outlined in the statement.

- 6 *How often are the provisions reviewed? By whom? What is the system of review?*

As the status of the exposures/potential losses changes, so the level of provisions held against them will need to be adjusted. The policy documentation should provide for regular reviews of provisions (both general/collective and specific/individual) to cater for sudden changes in conditions associated with the exposures.

- 7 *What type of management reports/other reports are generated and who sees them?*

As the bank's management has overall responsibility for ensuring that the level of provisions is adequate, they need to be able to monitor this in some way using management information. The documentation should summarise the types of reports that are produced, how often, who sees them and what they are used for. It should also note any reports that are sent to overseas supervisors, head office, the parent bank or external auditors.

- 8 *How is the implementation of the policy checked, and by whom?*

This is a crucial point in policy implementation. Is it done through, for example, management reports, internal audit checks, external audit reports, or Head Office examiners? Who within the bank is responsible for seeing that this is done? What measures are there in place if the policies are not adhered to?

3.3 Issues relating to provisioning for credit exposures only

- 9 *For the different types of business that the bank undertakes, what constitutes a non-performing exposure? How are they identified?*

Banks have different views as to what constitutes a non-performing exposure. Because of this the documentation should explain clearly

and concisely the definition the bank uses. In addition, a bank needs to have a process for identifying such exposures and ensuring clarity as to who is responsible for doing so; for example, does the bank have a loan grading system to determine this and/or does it operate a watch or problem list? If the bank has a loan grading system, details of how it operates should be included.

- 10 *How does the bank identify watch list or other problem exposures? How are they defined?*

In order to identify problem exposures and have the opportunity to do something about them, the bank should monitor its loan portfolio on a regular basis. Such exposures can then be put on a watch or problem list and monitored more closely by management. Some common examples of potential problems are: late payment of interest; breaches of limits; failure to comply with covenants or other conditions; and problems emerging from a review of published financial information or management information.

- 11 *At what stage are provisions on credit exposures raised?*

Is this simply a matter of when an exposure meets the non-performing criteria - or at a certain loan grading level - that the bank has laid down, or is it a matter of judgement for management, or a combination of the two?

- 12 *How are specific/individual provisions calculated? Is it the result of a formula, a loan grading policy or another method?*

How the level of specific/individual provisions is calculated is important both for consistency and to ensure that there is an audit trail showing the methodology used.

- 13 *Who decides whether the proposed level of specific/individual provisions on an individual non-performing exposure is adequate?*

Is this decided by an individual or a committee?

- 14 *What methodology determines the level of general/collective provisions on credit exposures?*

Does the bank make general/collective provisions according to a formula or is it left to management or a committee to decide? Does the formula provide a methodology to determine latent impairment in the portfolio?

- 15 *What are the bank's policies for the revaluation of collateral, guarantees or insurance that it has in place?*

The value of any collateral in place will have a bearing on the need for and appropriate size of any provision to cover credit exposure. A bank needs to have systems for ensuring that the security or collateral it has in place is adequately and accurately valued.

- 16 *How does the bank ensure the continuing enforceability of the collateral, guarantees or insurance that it has?*

So as to ensure that the collateral etc is in place when it is required, a bank needs to have a system for reviewing its enforceability periodically and replacing/replenishing it if necessary.

- 17 *At what point are exposures written down to the estimated net realisation value of any security and at what point are they finally written off?*

Does this occur when an exposure meets some non-performing criteria, or at a certain loan grading level that the bank has laid down, or is it a matter of judgement for management, or a combination of these?

- 18 *What is the bank's arrears management and recovery policy?*

What procedures are in place for the bank to recover exposures that are in arrears or that have had provisions written against them? Is this the responsibility of a dedicated internal department, the customer relationship or credit departments or does the bank pass debts to an external collections company?

- 18 *Does the bank review its write-off experience against provisions raised to identify whether its policies result in over or under provisioning across the cycle?*

Such exercises are useful in contributing to the reviews of provisioning policies, and the design of loan grading systems and credit risk models, as well as risk pricing.

- 20 *What is the bank's policy on writing back provisions?*

The methodologies and procedures for identifying those exposures on which provisions are no longer deemed necessary should be described.

3.4 Issues relating to provisioning for other liabilities only

- 21 *What is the bank's policy with regard to providing for other liabilities such as tax, contingent liabilities?*

Which accounting standards does the bank comply with in terms of providing for other liabilities?

22 *At what stage are such provisions raised, how are they calculated, who decides their proposed level, and how frequently are they reviewed?*

These are similar to issues relating to credit exposures mentioned in 9-12 above. This part of a bank's policy should cover all of these issues as they are very likely to be dealt with in a different way and possibly by different people.