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The Deputy Director General

Paris, 22nd June 2006

FBF response on the CP11

Dear Mrs Nouy,

The French Banking Federation (FBF) welcomes the opportunity to comment on the Consultation paper on the Technical aspects of the management of interest rate risk arising from non-trading activities and concentration risk under the supervisory review process – CP11.

The response to this consultation, as far as Interest Rate Risk in the Banking Book is concerned, has been prepared with the help of the Association Française de Gestion Actif Passif, the French association of assets and liabilities managers. Its contribution has been very valuable to highlight the position of the French banking industry.

The answer on Interest Rate Risk in the Banking Book is much more detailed as the text has already been discussed before with the industry and is very close to the Basel framework.

Conversely, the response on concentration risk is more general as this is a new matter and the views of the regulators and of the banks could diverge significantly.

French banks consider that the regulators should be very cautious in their attempt to tackle concentration risk, which raises many highly difficult methodological and management issues. Practices must be carefully observed before guidelines, if needed, could be issued.

The French Banking Federation is committed to build a level playing field that an adapted regulation can contribute to build. FBF is at CEBS' disposal for any further discussion on these issues.

Please find our detailed comments attached and a marked version of the CP11.

Yours sincerely

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22.06.2006

IRRBB AND RISK CONCENTRATION RESPONSE TO CP11

The French Banking Federation (FBF) welcomes the opportunity to comment on the CEBS consultation paper CP11 on technical aspects of the management of interest rate risk arising from non-trading activities and concentration risk under the supervisory review process.

I- TECHNICAL ASPECTS OF THE MANAGEMENT OF INTEREST RATE RISK ARISING FROM NON-TRADING ACTIVITIES UNDER THE SUPERVISORY REVIEW PROCESS

1. FBF supports the initiative of the CEBS that aims to provide high-level guidance for institutions and for supervisors that aims to build a level playing field in Europe. This principle-based approach is very adapted to the diversity of banking book products and customers' behaviours across Europe, and consequently to the diversity of interest rate risk management practices across European institutions.
2. FBF welcomes that: *"Supervisors encourage institutions to develop their own systems and shocks, in accordance with their risk profile and risk management policies."*
3. FBF understands that supervisors need to be able to compare interest rate risk across institutions through the measurement of one single interest rate risk measure, namely the sensitivity of the banking book economic value, to a standardised interest rate shock.
4. However, any too prescriptive and/or too detailed standardised methodology would introduce discrepancies with the internal methodologies on which the interest rate risk management is based. **FBF recommends that :**
 - a. **supervisors should assess interest rate risk management on the very same internal methodologies that underlie it,**
 - b. **supervisors could require an additional application of an standardised methodology only if internal methodology fail to abide by IRRBB4 (which we propose to stand as IRRBB1).**
5. Since it is a too detailed and prescriptive example, **FBF recommends not to include Appendix II in the final paper.** For instance, this example sets constraints on the management of non-contractual deposits that have never been discussed with the industry and are at odds with common practices of French banks.
6. IRRBB9 guideline states that prudential measures should be implemented if an institution reports that its banking book economic value may decline by more than 20% of own funds as a result of applying the supervisory standard shock. However, the best protection for an institution against an interest rate shock is to generate positive earnings that lead to a positive banking book economic value. That is why, **FBF proposes that interest rate risk assessment takes into account not only the sensitivity but also the protection given by the banking book economic value.**

7. Even though analysis at sub-consolidation level may help understanding the IRRBB at consolidated level, it overlooks diversification and compensation effects between the activities pursued by the various entities of a banking group. **FBF recommends that IRRBB be considered only at consolidated level.**
8. CEBS's concern about the discrepancy between IFRS reporting and risk reporting for IRRBB is very appropriate. IFRS hedge accounting constraints are completely at odds with prudential perspective: IFRS is defined on a gross basis on specific items whereas the prudential perspective must necessarily consider the whole banking book with all its assets, liabilities, off-balance sheet items and derivatives. **FBF is concerned that some institutions may be limited in their capacity to reduce their IRRBB due to IFRS constraints.** This could even be worsened with future evolutions of the IFRS standard,
9. More specific comments and proposals for amendments are included in the attachment.

II- CONCENTRATION RISK

- 1- French banks consider that the regulators **should be very cautious in their attempt to tackle concentration risk**, which raises many highly difficult methodological and management issues. Practices must be carefully observed -they vary widely- before guidelines, if needed, could be issued.
- 2- Even though the Large Exposure regime and the concentration risk management have clearly common grounds, they do not have the same objectives. The first one is designed to be an ultimate safeguard against careless lending, the second aims at optimizing the credit portfolio structure. Ruling is understandable in the first case; it is inappropriate in the second. Large Exposure and concentration are two different issues which must not be commingled.
- 3- Regulators should only define **general principles** and leave banks manage concentration according to their risk profile, their risk appetite and their business; some banks are specialized in a specific area or a country, some are not but probably with less dedicated expertise; there is no definitive good answer to these situations; judgement and business expertise are key. Concentration risk should be part of a constructive and structured dialogue between banks and supervisors in the Supervisory Review Process under Pillar 2.
- 4- French banks are **opposed to any standard and systematic** business or geographic breakdown of their portfolio (Concentration N°8). Such an exercise would be merely of a static and mostly inappropriate one. Concentration analysis must be tailored to the characteristic of the bank's portfolio and to the anticipated deterioration of certain Industries or countries to be precisely delineated. It is a dynamic process; changing over time, focused on decision making.
- 5- French banks consider that concentration is the other side of diversification; there should not necessarily be a negative meaning to concentration; to the contrary the absence of concentration or, better, the presence of diversification must be interpreted as a significant mitigating risk factor
- 6- We recommend not to include the last paragraph and related examples for limits (Concentration N°3 page 20, "Limits could be expressed as : .../...portfolio correlations and variance covariance measures"). These examples may be too prescriptive. The limit

settings process should take into account concentration analysis based on both qualitative and quantitative indicators. There must be enough flexibility to express internal credit risk limits with the appropriate metric(s). These metrics should be well understood within the institution.

- 7- The French banking industry agrees with principles listed in Concentration N° 8-2 which refers **both to qualitative and quantitative approaches of concentration risks**.
- 8- French banks do not believe that any kind of regulatory models aiming at benchmarking banks (Concentration N°6) or identifying outliers (Concentration N°8) may be usefully built. They urge supervisors to have a very pragmatic and judgmental approach to concentration issues
- 9- They consider that concentration and diversification can only be managed and supervised at **consolidated level. In most cases, an entity or sub-consolidated level will be inappropriate, as the legal vehicle is generally not the relevant angle for risk management purposes** (Concentration N° 7).
- 10- French banks underline that there is no unique **indicator of risk concentration**. Many times, several indicators together must be considered even though the economic capital associated to an exposure or a set of exposures appears to be the most convenient one. We recommend not to include in the text examples of metrics such as HHI, Gini curves, or other ratios, etc as mentioned in section 35 (i) page 17, section 36 pages 17 & 18. These examples are too detailed and they may be prescriptive in the definitive document. The indicators and the techniques used must be appropriate and commensurate to the bank's risk profile. They must be relevant and well understood by the different users within the institutions. .
- 11- French banks agree that **stress testing is a very useful way to reveal risk concentration** and they think that such stress testing should be performed according to the CP12 principles (Concentration N°9).
- 12- The French Banking Federation is committed to build a level playing field that an adapted regulation can contribute to build. FBF is at CEBS' disposal for any further discussion.

23 March 2006

**Consultation paper on technical aspects of the management of interest
rate risk arising from nontrading activities and concentration risk
under the supervisory review process CP11**

Executive Summary

1. CEBS refers in its guidelines on the Application of the Supervisory Review Process under Pillar 2 issued in January 2006 (commonly called 'CP03Rev') to a structured dialogue between supervisors and institutions that should embrace four types of risks (i) Pillar 1 risks, (ii) risks not fully captured under Pillar 1, (iii) risks covered by Pillar 2 and (iv) external factors not already considered in the previous cases ¹.
2. In particular, institutions should develop and maintain an ICAAP that identifies risks they are or might be exposed to and allocate adequate financial resources against those risks.
3. This consultation paper sets out technical guidelines applicable to two of those risks: "interest rate risk arising from nontrading activities" (here, "interest rate risk in the banking book" or "IRRBB") and "concentration risk", as a followup to CEBS CP03 rev.
4. The document puts the emphasis on high level guidance, some of which is applicable to institutions (both credit institutions and investment firms) and some to supervisors. It is not meant to provide detailed guidance on whether and how quantitative tools and models should be used or developed.
5. For both risks, it sets out general considerations including current international thinking, a definition of what the IRRBB and concentration risk should cover the relevant legal requirements of the CRD, and a summary of current market practices. This, together with the supervisory considerations, explains the context that has led to the guidelines. It is recognized that market practices and supervisory approaches may evolve other time, and therefore there is a need to ensure that such a technical paper is kept under review and, to the extent necessary, adapted to reflect any such developments.
6. The paper then sets out:
 - a. guidance on what the supervisors should expect to see in the ICAAP ², under which it is the institution's own responsibility to manage adequately (i.e. identify, measure, monitor and control) these risks and allocate internal capital, where considered necessary, in support of the interest rate risk and concentration risk in a structured manner,
 - b. the corresponding guidance to supervisors in conducting the Supervisory Review and Evaluation Process (SREP) in relation to the ICAAP. When considered necessary, Supervisors-supervisors¹ will require institutions to show that their internal capital is commensurate with the level of the interest rate risk in the banking book and the concentration risk. In doing so, and in accordance with CEBS guidelines on the application of the supervisory review process under Pillar 2, the supervisory authorities will adapt their approach to ensure it is proportionate to the nature, scale and complexity of the activities of an institution. Similarly, the depth, frequency and intensity of the supervisory evaluation will be determined by the risks posed to the supervisor's statutory objective of ensuring the soundness of the banking sector

¹ To be in line with the previous paragraph

7. As a general remark, CEBS reiterates the need to carry out and seek to coordinate the dialogue between supervisors and institutions in the context of the CEBS guidelines on supervisory cooperation for cross border banking and investment firm groups. Usually, adopting economic approaches at each level of sub-consolidation should enable to minimize discrepancies.
8. In relation to interest rate risk in the banking book, and specifically the CRD requirement that measures should be taken by supervisory authorities in cases where an institution's banking book² economic value declines by more than 20% of own funds as a result of a standard shock, CEBS has proposed a common EU framework for such a standard shock. In doing so, it is recognised that, as part of their dialogue with individual institutions, supervisors may require their institutions to apply routinely shocks of a different order of magnitude, both in amount and time, reflecting the nature, size and complexity of those institutions.
9. Supervisors encourage institutions to develop their own systems and shocks, in accordance with their risk profile and risk management policies.
10. With regard to concentration risk, the consultation paper sets out guidance on the management and mitigation of concentration risk, which should not be considered as a tickbox list of requirements. CEBS draws the attention of market participants that it has subsequently received a technical call for advice from the Commission in the context of the Commission's current review of the large exposures regime. CEBS is aware that the industry is now faced with two related pieces of work from CEBS on concentration risk, one on the guidance with regard to Concentration risk in the context of Pillar 2, and the other on industry practices with regard to the measurement of single name concentration risk, but also on concentration risk practices more generally. CEBS would nevertheless prefer to run the two in parallel both to meet its timetable to respond to the Commission while progressing its Pillar 2 guidance, though in due course the latter might need to be amended to take into account anything material which emerges from the work on the call for advice from the Commission.
11. The guidance put forward has been informed by early and informal dialogue with a number of experts nominated by the CEBS Consultative Panel.
12. The consultation period is three months and will run until **23 June 2006**. Responses should be sent to CP11@cebs.org. Comments received will be published on the CEBS website unless respondents request otherwise.
13. CEBS would especially welcome responses to the following questions:
 - (1) Do you agree with the proposed guidelines?**
 - (2) Do you have further technical comments on the proposals?**

² So as to be more precise and more in line with the risk that is measured which refers only to the banking book, « institution's banking book economic value » is substituted to « institution's economic value » in the text.

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Appendix I: Basel Committee on Banking Supervision Supporting Document Principles for the Management and Supervision of Interest Rate Risk, July 2004.

Appendix II : Basel Committee on Banking Supervision International Convergence of Capital measurement and Capital Standards Annex 4 An example of a standardised framework–June 2004.

Appendix III: Basel Committee on Banking Supervision International Convergence of Capital measurement and Capital Standards, para 770 777–June 2004.

Part 1: the Interest rate risk in the banking book (IRRBB)

GENERAL CONSIDERATIONS

1. The measurement of interest rate risk in the banking book poses a number of major practical difficulties. Most of these difficulties are dealt with by institutions making certain assumptions which may differ between institutions and which may be modified over time even within one institution. Hence interest rate risk in the banking book is part of Pillar 2 where a tailored approach is possible.
2. Some issues, such as the consequences of IFRS for the reporting and management of interest rate risk, have not been captured in the present document and may merit CEBS' attention at some point in the future.
3. Under the IFRS framework, the fair value option in IAS 39 will allow institutions to fair value banking book items that are actively managed³. Although the effect of the change is still not clear, it is likely that institutions will increase the use of fair value – rather than historical cost – for the measurement of a number of financial assets (including derivatives) held in the banking book, and eventually potentially some of their liabilities.

IFRS additionally asks institutions to perform and disclose a sensitivity analysis for each of the market risks to which they are exposed, including the interest rate risk on financial instruments. The disclosure could take a number of forms such as a maturity repricing schedule. Financial risk management policies and objectives must also be disclosed. There will clearly be some overlap differences with the regulatory framework for interest rate risk in the banking book, though because the objectives of prudential regulation and IFRS, and some of the definitions used, will not be the same in all cases.

As far as derivatives are concerned, IFRS hedging relationships are based on gross basis analysis with hedged items either assets or liabilities, which cannot be non interest bearing items (demand deposits for instance). From a prudential perspective, the objective is to ensure that the interest rate risk of the whole banking book, with all its assets and liabilities, bearing or non bearing interest rate is well managed, measured, monitored and controlled.

International context

4. Interest rate risk in the banking book forms part of the Basel Committee on Banking Supervision's revised framework on "International Convergence of Capital Measurement and Capital Standards (June 2004) ('the Basel text')". In particular Section III, paragraphs 761-764, which were complemented by a Supporting Document to the Capital Adequacy Framework, deal with interest rate risk (in both the banking and the trading book) ("Principles for the Management and Supervision of Interest Rate Risk", July 2004). These documents have been used as a sound basis for this paper. Guidance on qualitative aspects of the management and measurement of risks has been set out in the CEBS guidelines on the application of the supervisory review process under Pillar 2, (Chapter 2.1. Guidelines on Internal Governance). These guidelines apply naturally to the IRRBB risk. Overall, it has been ensured that this paper is consistent with current international thinking.

Definition

³ Using fair value option is not limited to actively managed items

5. For the purpose of this paper, interest rate risk is taken to be the current or prospective risk to both the earnings and capital of institutions arising from adverse movements in interest rates. In the context of Pillar 2, this is in respect of the banking book only, given that interest rate risk in the trading book is already covered under the Pillar 1 market risk regulations. This risk may be attributable to repricing mismatches of assets and liabilities and off-balance sheet long and short positions, as well as so-called basis risk and the linear and nonlinear risk inherent in (embedded) options.
6. Consideration of interest rate risk from the perspectives of both earnings and economic value of the banking book is important. Volatility of earnings is an important focal point for interest rate analysis because significantly reduced earnings can pose a threat to capital adequacy. Measurement of the impact on banking book economic value provides a more comprehensive view of the potential long term effects on an institution's overall exposures. In this context, banking book economic value, as it relates to the institution's solvency, should be one of the main variables monitored by institutions under their ICAAP on interest rate risk.

Legal Basis

7. In the CRD, interest rate risk in the nontrading book is treated under the ICAAP/SREP framework. Similar to other Pillar 2 risks, the CRD requires that:
 - an institution shall implement systems to evaluate and manage the risk arising from potential changes in interest rates as they affect a credit institution's nontrading activities (Annex V. para. 10),
 - based on the evaluation of those risks, an institution is also required to hold internal capital against these risks, if it considers internal capital to be the appropriate buffer (Article 123), and
 - competent authorities have to review risk management processes and capital adequacy (Article 124).
8. In contrast to other Pillar 2 risks however, Article 124(5) places on the supervisor the specific obligation to take action in cases where the banking book economic value of an institution declines by more than 20% of own funds as a result of applying a supervisory standard shock to its interest rate risk in the nontrading book.

Current market practices

(i) Identification of IRRBB

9. There are numerous ways that financial institutions currently identify and measure IRRBB. Their methods reflect the specific form of the risk in question and the nature, scale and complexity of their activities. IRRBB encompasses:
 - risks related to the mismatch of repricing of assets and liabilities and off balance sheet short and long term positions,
 - risks arising from hedging exposure to one interest rate with exposure to a rate which reprices under slightly different conditions,
 - risk related to the uncertainties of occurrence of transactions e.g. when expected future transactions do not equal the actual transactions, and

- risks arising from embedded options e.g. consumers redeeming fixed rate products when market rates change.
- risks arising from non-interest bearing products or products with interest rates not perfectly correlated with market rates

(ii) Monitoring and management of IRRBB

10. A wide range of tools may be used by institutions to measure and monitor IRRBB. Institutions are usually using:

- systems which track the progress of transactions, based on which institutions estimate the likely take-up rate or pipeline risks,
- gap analysis showing the assets and liabilities at the different repricing dates, and the sensitivity of the present value of these buckets to different scenarios in interest rates, and
- simulation techniques using scenarios that calculate the impact of changes in market conditions, e.g. the different repricing instruments, simulation of interest rate paths, customer behaviours etc.

~~11~~⁴ Furthermore, ~~§~~ Stress testing can also be performed, in order to measure financial institutions' vulnerability under stressed market conditions like abrupt changes in the level and scope of the term structure of interest rates, changes in the relationships among key market rates, etc.

~~12~~¹ When using gap analysis and/or simulation techniques, institutions measure the IRRBB under straightforward different shifts of the term structure of interest rate (parallel shifts and yield curve twists).

13. Based on these various tools, institutions use different types of hedges to mitigate the risks, ~~or set limits usually on earnings and/or on value sensitivities. Some institutions both positional and in terms of the profit and loss account, such as stop-loss and set aside capital buffers~~⁵.

~~14~~⁶ The management body sets out the IRRBB policy. In large or more complex institutions, the function of measuring, monitoring and controlling IRRBB is usually called "Asset and Liability

⁴ §12 and §11 have been exchanged so that §11 deals with simpler techniques than §12.

Besides, the term "straightforward" is not correct when considering simulation techniques.

⁵ This paragraph was unclear and did not convey our current practice

⁶ Principle 3 of the Consultative Document "Principles for the Management and Supervision of Interest Rate Risk" is more general and does not assume a specific organization to satisfy its objectives "Banks should clearly define the individuals and/or committees responsible for managing interest rate risk and should ensure that there is adequate separation of duties in key elements of the risk management process to avoid potential conflicts of interest. Banks should have risk measurement, monitoring and control functions with clearly defined duties that are sufficiently independent from position-taking functions of the bank and which report risk exposures directly to senior management and the board of directors. Larger and more complex banks should have a designated independent unit responsible for the design and administration of the bank's interest rate risk measurement, monitoring and control functions".

Besides, from institution to institution, Asset and Liability Management can have different role and attributions. For instance, it can be a sub part of the Risk Management department or a sub part of the Treasury Department. That is why we propose not to specify a restrictive definition of Asset and Liability Management. We also propose not to specify a restrictive definition of ALCO.

Management" (ALM). It is usually assigned to an independent risk control unit. Some institutions also have a committee with powers delegated by the board, usually called "Asset and Liability Committee (ALCO)", responsible for major interest rate risk hedging and new asset and liability decisions.

15. Supervisors recognise that there are various levels of centralisation of ALM⁷ within institutions, e.g. in cross border groups some may have a centralised management and assessment function for IRRBB while others do not.

(iii) Variables monitored in the IRRBB process

16. As already mentioned above, institutions usually consider two different, but complementary, perspectives in their process of assessing IRRBB.

17. The earnings perspective focuses on the sensitivity of earnings in the short term⁸ (over the next one or two years) to interest rate movements. Institutions usually adopt this perspective due to two main reasons: (i) this is the variable through which an interest rate change has an immediate impact on reported earnings; and (ii) the assessment of interest rate risk from an economic perspective is difficult because it is mainly based on assumptions about the behaviour of long term instruments, such as stable demand deposits or other non-interest bearing balance sheet items, and those with prepayment embedded options.

18. With the caveats mentioned above⁹, the economic value perspective focuses on the sensitivity of economic values of the banking book items to interest rate changes¹⁰ of the market values of all interest rate bearing instruments. The changes in market economic values may in turn have an impact on net worth. For instance, negative changes in the market economic values of all interest rate instruments give an indication of the potential deterioration on future net interest income.

Supervisory considerations

19. A number of considerations arise from the above:

- as it has not been standard practice to require additional own funds (regulatory capital) for interest rate risk in the banking book, supervisors will need to develop their approaches to the appropriate use of this prudential measure,

At last, as CP11 deals with technical aspects of the IRRBB and not with internal control that is addressed by another CP text, we propose to suppress this paragraph.

⁷ ALM is no longer defined in the previous paragraphs of the text

⁸ The horizon on which earnings are estimated depend from institution to institution, it could also be longer than two years.

⁹ We refer to «the assessment of interest rate risk from an economic perspective is difficult because it is mainly based on assumptions about the behaviour of long term instruments, such as stable demand deposits and those with prepayment options" mentioned in the previous paragraph that correctly states that economic value of banking book items is very close to model value of banking book items, with all the uncertainty about client behaviourization.

¹⁰ A significant part of the banking book interest rate risk comes from demand deposits that bear very low or no interest rate. That is why, a banking book interest rate risk measure must include non interest rate bearing items. More generally, a banking book interest rate risk measure must capture the risk coming from the whole banking book.

- incentives must be in place, as appropriate, for the development and application of advanced models and techniques,
- the level playing field should be disturbed as little as possible in terms of maintaining a consistent and fair approach,
- the administrative burden should not be excessive,
- the supervisory policy on interest rate risk and any information obtained under that policy should be complementary to aggregate financial stability analyses across institutions, and
- ¹¹ ~~because the nontrading books of investment firms are usually (relatively) small, the main application of this policy is likely to be on credit institutions. Moreover, consideration should be given to proportionality, for instance, by considering the absolute or relative size of the nontrading activities, in a way similar to the Pillar 1 market risk regulation for interest rate risk in the trading book.~~

20. There are arguments both for and against standardised reporting of interest rate risk in the banking book, as well as for and against the possible middle ground of standardised reporting applied to less complex institutions and nonstandardised reporting applied to complex institutions. This paper expresses no preferences in this respect.

21. Nonetheless, institutions should at least be able to compute and report the effects of the standard shock on banking book economic value, as described in IRRBB 5 and 6¹². They should also be able to report the effect of instantaneous or gradual interest rate changes on earnings over a relevant time period, as requested by national supervisors. Moreover, they should be able to report the amount of internal capital set aside for interest rate risk in the banking book.

22. Whichever approach to reporting is employed, supervisors should collect sufficient information about internal methodologies and underlying assumptions of institutions (e.g. yield curves used, internal measurement of positions without contractual maturity, treatment of optionality etc) for them to evaluate the reported information and to make their own assessment of the adequacy of the results of interest rate risk measurement.

23. Offsite supervision can take place on the basis of institutions' internal reports and/or following some standardised, supervisory format. Supervisors can also undertake onsite inspections.

GUIDANCE FOR INSTITUTIONS

~~IRRBB1~~ IRRBB4

Institutions are required to show supervisors that their internal capital is commensurate with the level of the interest rate risk in the banking book. In that respect, institutions should be able to calculate the:

- **potential changes in their banking book economic value resulting from changes in the level of interest rates.** Institutions are free to develop and use their own methodologies so

¹¹ This part is not necessary

¹² Only IRRBB5 deals with the standard shock that is referred in this sentence.

long as they abide by IRRBB1¹³, albeit that supervisors may also require institutions to apply an additional standardised methodology. An example of such a methodology is provided by the standardised framework of Annex 4 of the supporting Basel document "Principles for the management and supervision of interest rate risk" See Annex II, and

the overall interest rate risk in the banking book at various levels of consolidation, subconsolidation and solo entity if required to do so by supervisors.

IRRBB 2

Institutions must be able to compute and report to their supervisory authority the change in their banking book economic value as a result of applying a standard shock prescribed by the authority (see IRRBB 5 below).

Institutions are free to develop and use their own methodologies, albeit that supervisors may require institutions to apply a standardised methodology when they are not satisfied with the internal methodology. Supervisors will adapt, when necessary, the standardised framework to local context.

If as a result of this standard shock an institution's banking book economic value were to decline by more than 20% of own funds it should be prepared to discuss with the supervisory authority measures which might need to be taken to mitigate such a potential decline.

IRRBB 3

Besides the standard shock, larger and/or more complex institutions should measure their exposure, if material, and sensitivity, to changes in the shape of the yield curve, changes between different market rates (i.e. basis risk) and changes to assumptions, for example those about customer behaviour.

Institutions should also consider whether a purely static analysis of the impact on their current portfolio of a given shock or shocks should be supplemented by a more dynamic simulation approach. Larger and/or more complex institutions should also take into account scenarios where different interest rate paths are computed and where some of the assumptions (e.g. about behaviour, contribution to risk and balance sheet size and composition) are themselves functions of interest rate levels.

IRRBB 4¹

Institutions should have a well reasoned, robust and documented policy to address all issues that are important to their individual circumstances.

Without prejudice to the principle of proportionality, this includes, where applicable, the following technical issues:

- The internal definition and boundary between "banking book" / "trading activities".
- The definition of banking book economic value (for example based on the discounted value of future earnings, on the discounted value of future cash flows or other methods).
- The size and the form of the different shocks to be used for internal calculations.
- The use of a dynamic and / or static approach in the application of interest rate shocks.
- The treatment of commonly called "pipeline transactions" (including any related hedging).
- The aggregation of multicurrency interest rate exposures
- The treatment of basis risk resulting from different interest rate indexes

¹³ This part was very confusing. This paragraph deals with the internal capital. It would be better to mention a standardised methodology in the paragraph that deals with the standardised interest rate shock.

- The inclusion (or not) of non interest bearing assets and liabilities of the banking book (including capital and reserves)
- The treatment of current and savings accounts (i.e. the maturity attached to exposures without a contractual maturity).
- The treatment embedded options in ~~of fixed rate assets (or liabilities)~~ where customers still have a right to repay (withdraw) early.
- The extent to which sensitivities to small shocks can be scaled up linearly without material loss of accuracy (i.e. covering both convexity generally and the nonlinearity of payoff associated with explicit option products).
- The degree of granularity employed (e.g. offsets within a time bucket)
- Whether all future cash flows or only principal balances are included.

GUIDANCE FOR SUPERVISORS

IRRBB 5

Supervisory authorities will set a comparable standard shock as referred to in the CRD and applicable to the nontrading book of all their relevant institutions. Supervisors may decide to set different standard shocks for different currencies. The following guidelines will be put in place:

- A standard shock could, for example, be set so that it will be broadly equivalent to the 1st and 99th percentile of observed interest rate changes (five years of observed one day movements scaled up to a 240 day year), This would currently equate approximately to a parallel 200 basis points shock for major currencies as suggested by the Basel Committee (~~See Annex H below~~).
- National supervisors will be expected to use this as their starting point when considering at what level to set the shock, but they will also need to take into account factors such as the general level of interest rates and any relevant national characteristics in their financial systems
- National supervisors will periodically review the size of the shocks in the light of changing circumstances, in particular the general level of interest rates (for instance periods of very low interest rates) and their volatility. Institutions' internal systems should therefore be flexible enough to compute their sensitivity to any standardised shock that is prescribed. Supervisors will not, however, make frequent or minor amendments for the purpose of spurious statistical accuracy.
- If the required shock (e.g. a 200 basis point shock) would imply negative interest rates or if such a shock would otherwise be considered inappropriate, the national supervisor will adjust the requirements accordingly, and
- Where an institution is a subsidiary of an institution which is authorised in another EU member state, the respective supervisors will, in accordance with the CEBS guidelines on supervisory cooperation for cross border banking and investment firm groups, seek to coordinate their approaches on the standard shocks to be applied

IRRBB 6

The supervisory review should encompass both the qualitative and organisational aspects of interest rate risk management, an evaluation of the institution's quantification of interest rate risk and an assessment of the adequacy of the relationship between interest rate risk and internal capital.

This approach will be tailored to an institution's specific risk profile, drawing on the Basel Supporting Document "Principles for the Management and Supervision of Interest Rate Risk" See Annex I below.

IRRBB 7

The scope of application of the supervisors' assessment of interest rate risk is that used for the Supervisory Review Process (SRP) 7.

Where necessary, for instance where there are obstacles to cash movements among subsidiaries¹⁴ ~~or separate management processes among subsidiaries~~, supervisors will have the discretion to apply assessments at the level of individual entities. Supervisors at the consolidated level may take those specificities into account.

IRRBB 8

Supervisors will need to know and understand the internal method used for calculating the banking book economic value, and if used by the institution, the internal method for requested calculating the amount of earnings, exposed to interest rate risk in the banking book, including underlying assumptions (e.g. yield curves used, treatment of optionality).

This will include allowing for in-depth analysis and assessments by institutions (including their assumptions underlying the issues raised in IRRBB 4-1 above), which could form the basis for peer group analysis and/or (model) benchmarking, and offer the supervisor a handle for discussions

with the institution. Institutions may be requested to calculate the effects of specific, ad hoc interest rate scenarios.

IRRBB 9

Prompt prudential measures, including both qualitative and quantitative elements tailored to an institution's specific circumstances, may be required from either the overall supervisory assessment or in response to an institution reporting that its banking book economic value may decline by more than 20% of own funds as a result of applying the supervisory standard shock.

The supervisor should take into account the current level of the banking book economic value so that the assessed risk is diminished when the level of banking book economic value is positive, which can result from past evolutions of the balance sheet and/or interest rates.¹⁵

¹⁴ A decentralized asset and liability operational management does not mean less control by the mother company because a centralized control, reporting and limits' systems can be defined.

¹⁵ Let us consider an example to clarify this point.

Institution A's banking book economic value is + 1 bn€ while institution B's banking book economic value is - 1 bn€. If both institutions have the same decline of their banking book economic value when applying the supervisory standard shock, institution A is less risky than institution B.

The measures can include a range of possible supervisory measures which are not limited to:

- improvement of risk management arrangements,
- variations to internal limits,
- reduction of the risk profile, and
- increase in the quantity of required own funds (regulatory capital) if an additional own funds requirement for interest rate risk arising from nontrading activities is imposed, it will be additional to the own funds requirement for other risks.

The measure(s) used in response to the application of the standard shock will depend, inter alia, on the complexity of the calculation method used and the appropriateness of the standard shock.

If the reduction in banking book economic value is determined by a relatively straightforward or standard method of calculation, the initial supervisory reaction might be to request additional, possibly internal, information. If, however, the reduction is based on the outcome of a more complex model about which the supervisors have greater information, they might reach an assessment of the appropriate measure(s) more quickly. In the latter case, the choice of the measure can take into account elements such as:

- the absolute and relative size of the exposure,
- the effects of other shifts or twists in the yield curve (other than the standardised),
- the treatment of multicurrency aggregation,
- the treatment of optionality and behavioural maturity, for example of current and savings accounts,
- the expected impact on earnings and the timing thereof,
- the quality of risk management, the internal systems and methodologies and the internal control system,
- the market segments in which the institution is active,
- the link with other risk exposures of the institution, for example credit risk,
- peer group comparison (and benchmarking where the methodologies are similar),
- the composition of the institution's own funds, and
- the relationship between the quantity of the institution's internal capital and regulatory own funds and the quantity of its actual surplus of regulatory own funds.

This distinguishes banking book items from trading book items. Trading book items' economic value have already been accounted for in the PnL and cannot mitigate the risk situation. That is why trading risk measurement should not take into account the current value of its items. Conversely, non trading book items' economic values will be "released" in the future : they are embedded. Hence, a banking book could embed its own "buffer".

Appendix I

Basel Supporting Document on Interest Rate Risk

The 15 principles given in the Basel Supporting Document Principles for the Management and Supervision of Interest Rate Risk, July 2004, are listed below.

Board and senior management oversight of interest rate risk

Principle 1: In order to carry out its responsibilities, the board of directors in a bank should approve strategies and policies with respect to interest rate risk management and ensure that senior management takes the steps necessary to monitor and control these risks consistent with the approved strategies and policies. The board of directors should be informed regularly of the interest rate risk exposure of the bank in order to assess the monitoring and controlling of such risk against the board's guidance on the levels of risk that are acceptable to the bank.

Principle 2: Senior management must ensure that the structure of the bank's business and the level of interest rate risk it assumes are effectively managed, that appropriate policies and procedures are established to control and limit these risks, and that resources are available for evaluating and controlling interest rate risk.

Principle 3: Banks should clearly define the individuals and/or committees responsible for managing interest rate risk and should ensure that there is adequate separation of duties in key elements of the risk management process to avoid potential conflicts of interest. Banks should have risk measurement, monitoring and control functions with clearly defined duties that are sufficiently independent from position taking functions of the bank and which report risk exposures directly to senior management and the board of directors. Larger or more complex banks should have a designated independent unit responsible for the design and administration of the bank's interest rate risk measurement, monitoring, and control functions.

Adequate risk management policies and procedures

Principle 4: It is essential that banks' interest rate risk policies and procedures are clearly defined and consistent with the nature and complexity of their activities. These policies should be applied on a consolidated basis and, as appropriate, at the level of individual affiliates, especially when recognizing legal distinctions and possible obstacles to cash movements among affiliates.

Principle 5: It is important that banks identify the risks inherent in new products and activities and ensure these are subject to adequate procedures and controls before being introduced or undertaken. Major hedging or risk management initiatives should be approved in advance by the board or its appropriate delegated committee.

Risk measurement, monitoring, and control functions

Principle 6: It is essential that banks have interest rate risk measurement systems that capture all material sources of interest rate risk and that assess the effect of interest rate changes in ways that are consistent with the scope of their activities. The assumptions underlying the system should be clearly understood by risk managers and bank management.

Principle 7: Banks must establish and enforce operating limits and other practices that maintain exposures within levels consistent with their internal policies.

Principle 8: Banks should measure their vulnerability to loss under stressful market conditions including the breakdown of key assumptions and consider those results when establishing and reviewing their policies and limits for interest rate risk.

Principle 9: Banks must have adequate information systems for measuring, monitoring, controlling and reporting interest rate exposures. Reports must be provided on a timely basis to the bank's board of directors, senior management and, where appropriate, individual business line managers.

Internal controls

Principle 10: Banks must have an adequate system of internal controls over their interest rate risk management process. A fundamental component of the internal control system involves regular independent reviews and evaluations of the effectiveness of the system and, where necessary, ensuring that appropriate revisions or enhancements to internal controls are made. The results of such reviews should be available to the relevant supervisory authorities.

Information for supervisory authorities

Principle 11: Supervisory authorities should obtain from banks sufficient and timely information with which to evaluate their level of interest rate risk. This information should take appropriate account of the range of maturities and currencies in each bank's portfolio, including off-balance sheet items, as well as other relevant factors, such as the distinction between trading and nontrading activities.

Capital adequacy

Principle 12: Banks must hold capital commensurate with the level of interest rate risk they undertake.

Disclosure of interest rate risk

Principle 13: Banks should release to the public information on the level of interest rate risk and their policies for its management.

Supervisory treatment of interest rate risk in the banking book

Principle 14: Supervisory authorities must assess whether the internal measurement systems of banks adequately capture the interest rate risk in their banking book. If a bank's internal measurement system does not adequately capture the interest rate risk, banks must bring the system to the required standard. To facilitate supervisors' monitoring of interest rate risk exposures across institutions, banks must provide the results of their internal measurement systems, expressed in terms of the threat to economic value, using a standardized interest rate shock.

Principle 15: If supervisors determine that a bank is not holding capital commensurate with the level of interest rate risk in the banking book, they should consider remedial action, requiring the bank either to reduce its risk, to hold a specific additional amount of capital, or a combination of both.

† This annex contains an example setting out the methodology and calculation process in one version of a standardised framework. Other methodologies and calculation processes could be equally applicable in this context, depending on the circumstances of the bank concerned. Such a framework is intended for supervisory reporting purposes only, and is not intended to represent an adequate framework for internal risk management purposes.

A. Methodology

2. Positions on the bank's balance sheet would be slotted into the maturity approach according to the following principles:

- (a) All assets and liabilities belonging to the banking book and all OBS items belonging to the banking book which are sensitive to changes in interest rates (including all interest rate derivatives) are slotted into a maturity ladder comprising a number of time bands large enough to capture the nature of interest rate risk in a national banking market. Annex 2 discusses issues relating to the selection of appropriate time bands. Separate maturity ladders are to be used for each currency accounting for more than 5% of either banking book assets or liabilities.
- (b) On balance sheet items are treated at book value.
- (c) Fixed rate instruments are allocated according to the residual term to maturity and floating rate instruments according to the residual term to the next repricing date.
- (d) Exposures which create practical problems because of their large number and relatively small individual amount (e.g. instalment or mortgage loans) may be allocated on the basis of statistically supported assessment methods.
- (e) Core deposits are slotted according to an assumed maturity of no longer than five years.
- (f) National supervisors will provide guidance on how other items with a behavioural maturity or repricing that differ from contractual maturity or repricing are to be slotted into the time band structure.
- (g) Derivatives are converted into positions in the relevant underlying. The amounts considered are the principal amount of the underlying or of the notional underlying.
- (h) Futures and forward contracts, including forward rate agreements (FRA), are treated as a combination of a long and a short position. The maturity of a future or a FRA will be the period until delivery or exercise of the contract, plus where applicable the life of the underlying instrument. For example, a long position in a June three month interest rate future (taken in April) is to be reported as a long position with a maturity of five months and a short position with a maturity of two months.
- (i) Swaps are treated as two notional positions with relevant maturities. For example, an interest rate swap under which a bank is receiving floating rate interest and paying fixed rate interest will be treated as a long floating rate position of maturity equivalent to the period until the next interest fixing and a short fixed rate position of maturity equivalent to the residual life of the swap. The separate legs of cross currency swaps are to be treated in the relevant maturity ladders for the currencies concerned.
- (j) Options are considered according to the delta equivalent amount of the underlying or of the notional underlying.

B. Calculation process

Table 1 is provided in the Basel document itself

3. The calculation process consists of five steps:
 - (a) The first step is to offset the longs and shorts in each time band, resulting in a single short or long position in each time band.
 - (b) The second step is to weight these resulting short and long positions by a factor that is designed to reflect the sensitivity of the positions in the different time bands to an assumed change in interest rates. The set of weighting factors for each time band is set out in Table 1 below. These factors are based on an assumed parallel shift of 200 basis points throughout the time spectrum, and on a proxy of modified duration of positions situated at the middle of each time band and yielding 5%.
 - (c) The third step is to sum these resulting weighted positions, offsetting longs and shorts, leading to the net short or long weighted position of the banking book in the given currency.
 - (d) The fourth step is to calculate the weighted position of the whole banking book by summing the net short and long weighted positions calculated for different currencies.
 - (e) The fifth step is to relate the weighted position of the whole banking book to capital.