

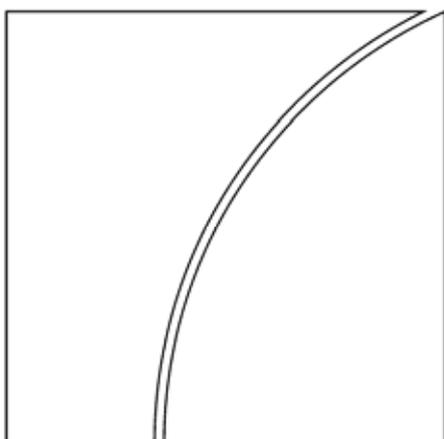
Basel Committee on Banking Supervision

Consultative document

Guidelines for Computing Capital for Incremental Risk in the Trading Book

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A later consultative document on the same topic has been published in January 2009. <http://www.bis.org/publ/bcbs149.htm>

Guidelines for computing capital for incremental risk in the trading book

I. Background and objectives

1. The Basel Committee/IOSCO Agreement reached in July 2005,¹ contained several improvements to the capital regime for trading book positions. Among these revisions was a new requirement for banks that model specific risk to measure and hold capital against default risk that is incremental to any default risk captured in the bank's value-at-risk (VaR) model. The incremental default risk charge was incorporated into the trading book capital regime in response to the increasing amount of exposure in banks' trading books to credit-risk related and often illiquid products whose risk is not reflected in VaR. In October 2007, the Basel Committee on Banking Supervision (the Committee) released guidelines for computing capital for incremental default risk for public comments. At its meeting in March 2008, it reviewed comments received and decided to expand the scope of the capital charge to capture not only price changes due to defaults but also other sources of price risk, such as those reflecting credit migrations and significant moves of credit spreads and equity prices. The decision was taken in light of the recent credit market turmoil where a number of major banking organisations have experienced large losses, most of which were sustained in banks' trading books. Most of those losses were not captured in the 99%/10-day VaR. Since the losses have not arisen from actual defaults but rather from credit migrations combined with widening of credit spreads and the loss of liquidity, applying an incremental risk charge covering default risk only would not appear adequate. For example, the incremental default risk charge would not have captured recent losses in CDOs of ABS and other re-securitisations held in the trading book. Moreover, a number of global financial institutions commented that singling out just default risk was inconsistent with their internal practices and could be potentially burdensome.

2. Broadly, the incremental risk charge (IRC) set forth below is intended to address a number of perceived shortcomings in the current 99%/10-day VaR framework. Foremost, the current VaR framework ignores differences in the underlying liquidity of trading book positions. In addition, these VaR calculations are typically based on a 99%/one-day VaR which is scaled up to 10 days. Consequently, the VaR capital charge may not fully reflect large daily losses that occur less frequently than two to three times per year as well as the potential for large cumulative price movements over periods of several weeks or months. Moreover, the current framework's emphasis on modelling short-run P&L volatility (eg backtesting requirements) allows the use of relatively short data windows for estimating VaR parameters (as short as one year), which can produce insufficient required capital against trading positions following periods of relative calm in financial markets.

3. The Committee expects banks to develop their own models for calculating the IRC for trading book positions. This paper provides guidelines on how an IRC model should be developed. It also contains both guidance on how supervisors should evaluate banks' IRC models and fallback options deemed acceptable by the Committee.

4. As there is no single industry standard for addressing the trading book issues noted above, the IRC guidelines generally take the form of high level principles, with considerable

¹ Basel Committee on Banking Supervision, *The Application of Basel II to Trading Activities and the Treatment of Double Default Effects*, July 2005.

flexibility afforded banks in terms of how to operationalise these principles. The Committee, through its Trading Book Group (TBG), will continue to work closely with industry groups and individual firms during and after the comment period to refine these principles and the supporting supervisory guidance for implementing the new capital requirement.

5. Banks must meet the guidelines for calculating the IRC that are laid out in this document in order to receive specific risk model recognition. For portfolios or products for which banks have already received specific risk model recognition under the 1996 Market Risk Amendment (MRA),² they would not be required to implement the IRC until 1 January 2010. Effective 1 January 2010 a bank's IRC model must incorporate, at a minimum, credit default and migration risks for positions subject to credit risk or, subject to supervisory approval, the bank must use the fallback option described below. Banks will be allowed one more year (ie until 1 January 2011) to incorporate into their IRC models all remaining price risks for credit positions (ie risks that are unrelated to defaults or credit migrations) as well as all price risks for equity positions.

6. The quantitative impact of these guidelines on banks' capital requirements will be evaluated in two stages. In the first stage, the Committee plans to largely rely on the data collected from the previous quantitative impact study in late 2007 to examine the impact of incorporating default and migration risk into the IRC by 2010. In stage two, additional data will be collected to examine the impact of incorporating other risks such as credit spread and equity price risk into the IRC by 2011.

7. The remainder of this paper is structured as follows:

- Section II describes in general terms the proposed IRC framework.
- Section III sets forth the scope of the IRC and principles underlying the construction of IRC models.
- Section IV discusses the validation of IRC models.
- Section V specifies ways in which the results of banks' internal risk measurement models can be used as the foundation for an IRC.
- Section VI defines the frequency of IRC calculation.
- Section VII defines a fall-back approach for banks that do not have approved IRC models.
- Section VIII sets forth the IRC disclosure requirement.
- Section IX lists specific issues on which the Committee seeks comments.

² Basel Committee on Banking Supervision, *Amendment to the Capital Accord to Incorporate Market Risks*, January 1996.

8. The Committee welcomes comments from the public on all aspects of this consultative document by 15 October 2008. These should be addressed to the Committee at the following address:

Basel Committee on Banking Supervision
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Alternatively, comments may be sent by e-mail to baselcommittee@bis.org.

II. Overview of capital charge for incremental risk in the trading book

9. The proposal set forth below would apply only to banks that are subject to the MRA and that seek to model specific risk in the trading book. Subject to the phase-in schedule noted above, in order to receive specific risk modelling approval from its supervisor, a bank must have an approved IRC model in addition to meeting the current standards for specific risk modelling within the 10-day VaR calculation. For banks subject to the MRA that do not model specific risk, the current rules for calculating capital charges would remain in effect.

10. Under the proposal, the trading book capital charge for a firm modelling specific risk would consist of three components: a general market risk charge and a specific risk charge (both measured using a 10-day VaR at the 99 percent confidence level) plus the IRC. The scope and implementation requirements for the general market risk and specific risk charges would be unchanged from the current market risk regime and, as at present, firms could choose to model these risks using either an integrated model or separate models. When calculating the associated capital charge, the 10-day VaR estimates would be subject to a multiplier of three, or higher as required by the national supervisor in light of qualitative weaknesses or backtesting results. Thus, the separate surcharge for specific risk under the current framework would be eliminated. As described in more detail below, for positions covered by the IRC, the incremental capital charge would represent an estimate of the trading book's overall exposure to certain risks over a one-year capital horizon at a 99.9 percent confidence level, taking into account the liquidity horizons of individual positions or sets of positions. The Committee has not yet determined whether to allow a bank's IRC to be adjusted for double-counting of risks that also are included in the 10-day VaR capital calculation.

III. Principles for calculating the IRC

A. IRC-covered positions and risks

11. The IRC would encompass all positions subject to the MRA, regardless of their perceived liquidity, except those positions whose valuations depend solely on commodity prices, foreign exchange rates, or the term structure of default-free interest rates ("non-IRC market factors"). IRC covered positions would include, for example, debt securities, equities, securitisations of commercial and consumer products, CDOs, and other structured credit products as well as derivatives referencing such instruments.

12. For IRC covered positions, the IRC would capture *all* price risks other than those directly attributable to non-IRC market factors. Thus, the IRC would capture both

idiosyncratic and systematic risks (and associated risk factors). IRC covered risks would include, for example,

- Default risk. This means the potential for direct loss due to an obligor's default as well as the potential for indirect losses that may arise from a default event;
- Credit migration risk. This means the potential for loss due to an internal/external rating downgrade or upgrade;
- Credit spread risk. This means the potential for loss due to a change in an instrument's credit spread (defined as the instrument's yield relative to that of a comparable-duration default-free instrument) that is not attributable to defaults or credit migrations (for example, a change in liquidity premia); and
- Equity price risk. This means the potential for loss due to a change in the price of an equity instrument.

13. The proposed scope and coverage for the IRC set forth above reflects the Committee's attempt to strike a reasonable balance between conceptual soundness on the one hand, and operational practicality, on the other. The shortcomings of the current VaR framework that the IRC is intended to address (eg potential illiquidity, insensitivity to large but infrequent losses, and short data windows) would argue for a comprehensive approach that focuses on the potential for large trading losses irrespective of whether such losses are driven by movements in commodity prices, foreign exchange rates, or the default free interest rates. Indeed, the Committee recognises the potential for these non-IRC market risks to create large trading losses if they are not managed effectively. The decision to exclude these risks reflects the Committee's concerns that the proposed IRC already goes well beyond the current state of risk modelling at most banks, and that mandating a more comprehensive approach is not compatible with realising major Pillar 1 improvements for the trading book in the near term. Even so, the Committee believes the improvements resulting from this proposal would be substantial for products impacted by the recent market turmoil, as well as for many other trading activities, including equities. At some future time, the knowledge and experience that is gained from these improvements could be used to reassess whether the IRC's scope and coverage should be further expanded. The Committee explicitly seeks comment on whether at inception the IRC should be broadened to include all trading positions and price risks (see Section IX).

14. The IRC must capture all material risks affecting prices of IRC covered positions (other than risks attributable to non-IRC market factors) irrespective of whether they also are incorporated into a bank's 10-day VaR. For example, the IRC would capture price risks associated with movements in broad indices of stock prices and market credit spreads (eg an index of credit spreads on BBB-rated corporate bonds), even though such price risks generally are captured in a bank's 10-day VaR calculations.

15. For IRC covered positions whose valuations depend partly on non-IRC market factors (eg corporate bonds whose prices reflect both the general level of default-free interest rates and market credit spreads), the IRC must capture that portion of overall risk that is not attributable to the non-IRC market factors. Alternatively, the bank could subject the entire position to the IRC. Whichever method is used should be used consistently.

B. Key supervisory parameters for computing IRC

1. Soundness standard comparable to IRB

16. One of the Committee's underlying objectives is to achieve broad consistency between capital charges for similar positions (adjusted for illiquidity) held in the banking and trading books. Since the Basel II Framework reflects a 99.9 percent soundness standard over a one-year capital horizon, the IRC is also described in these terms.

17. Specifically, for all IRC covered positions, a bank's IRC model must measure all losses (except those attributable to non-IRC market factors) at the 99.9 percent confidence interval over a capital horizon of one year, taking into account the liquidity horizons applicable to individual trading positions or sets of positions. As noted above, losses caused by broader market-wide events affecting multiple issues/issuers, including events of generalised market illiquidity, are encompassed by this definition.

18. In addition to providing comparability with the Basel II Framework, the above requirement is intended to provide a common, overarching conceptual standard for measuring and aggregating risks across all IRC covered positions. Broad coverage is essential in order to deal with hedging strategies that involve multiple product types as well as the potential for illiquidity and price shocks to impact many financial markets together. The Committee also believes that the proposed IRC framework would be less vulnerable to regulatory arbitrage and would more effectively promote forward looking risk measurement approaches for both Pillar 1 and internal risk management purposes, compared with an approach that focused on a limited set of specific event types. Given its importance, this is an area where the Committee explicitly seeks industry comment (see Section IX).

19. Under this framework, an IRC model must capture each IRC covered position's risk of loss over the liquidity horizon, regardless of whether losses reflect jump-like or diffusion-like price movements. As described immediately below, for each IRC covered position the model also would capture the impact of rebalancing positions at the end of their liquidity horizons so as to achieve a constant level of risk over a one-year capital horizon. The model may incorporate correlation effects among the modelled risk factors, subject to validation standards set forth in Section IV. The trading portfolio's IRC would equal the IRC model's estimate of losses at the 99.9 percent confidence level, less any allowable adjustments for double-counting.

2. Constant level of risk over one-year capital horizon

20. An IRC model would be based on the assumption of a constant level of risk over the one-year capital horizon.³

³ This assumption is consistent with the capital computations in the Basel II Framework. In all cases (loans, derivatives and repos), the Basel II Framework defines EAD in a way that reflects a roll-over of existing exposures when they mature.

The combination of the constant level of risk assumption and the one-year capital horizon reflects supervisors' assessment of the appropriate capital needed to support the risk in the trading portfolio. It also reflects the importance to the financial markets of banks having the capital capacity to continue providing liquidity to the financial markets in spite of trading losses. Consistent with a "going concern" view of a bank, this assumption is appropriate because a bank must continue to take risks to support its income-producing activities. For regulatory capital adequacy purposes, it is not appropriate to assume that a bank would reduce its VaR to zero at a short-term horizon in reaction to large trading losses. It also is not appropriate to rely on the prospect that a bank could raise additional Tier 1 capital during stressed market conditions.

21. This constant level of risk assumption implies that a bank would rebalance, or roll over, its trading positions over the one-year capital horizon in a manner that maintains the initial risk level, as indicated by a metric such as VaR or the profile of exposure by credit rating and concentration. This means incorporating the effect of replacing positions whose credit characteristics have improved or deteriorated over the liquidity horizon with positions that have risk characteristics equivalent to those that the position had at the start of the liquidity horizon. The frequency of the assumed rebalancing would be governed by the liquidity horizon for a given position.

22. Rebalancing positions does not imply, as the IRB approach for the banking book does, that the same positions would be maintained throughout the capital horizon. Particularly for more liquid and more highly rated positions, this provides a benefit relative to the treatment under the IRB framework. However, a bank may elect to use a one-year constant position assumption.

3. *Liquidity horizon*

23. Recent credit market events have shown that firms cannot assume that markets remain liquid under stressed conditions. Indeed, banks experienced significant illiquidity in a wide range of credit products held in the trading book, including leveraged loans and various types of structured credit products. In addition, liquidity in many parts of the securitisation markets dried up, forcing banks to retain exposures in securitisation pipelines for prolonged periods of time. The Committee therefore expects firms to pay particular attention to the appropriate liquidity horizon assumptions within their IRC models.

24. The liquidity horizon represents the time required to sell the position or to hedge all material risks (other than those attributable to non-IRC market factors) in a stressed market. The liquidity horizon must be measured under conservative assumptions and should be sufficiently long that the act of selling or hedging, in itself, does not materially affect market prices. The determination of the appropriate liquidity horizon for a position or set of positions may take into account a bank's internal policies relating to, for example, prudent valuation (as per the prudent valuation guidance of the Basel II Framework), valuation adjustments⁴ and the management of stale positions.

25. The minimum liquidity horizon for a position or set of positions would have a floor equal to the greater of

- (a) One month for equities traded on a recognised exchange as well as exposures to broad equity market indices and benchmark interest rate spreads traded in liquid markets (eg for Eurodollar interest rate derivatives, the spread between such rates and Treasury rates); one year for re-securitisations; and three months for all other IRC covered positions; and
- (b) The time period consistent with the bank's actual trading experience and risk management process in rebalancing similar positions during stressed market conditions.

26. In general, within a given product type a non-investment-grade position would be expected to have a longer assumed liquidity horizon than an investment-grade position. Conservative assumptions regarding the liquidity horizon for non-investment-grade positions are warranted until further evidence is gained regarding the market's liquidity during

⁴ For establishing prudent valuation adjustments, see also paragraphs 698 to 701 of the Basel II Framework.

systematic and idiosyncratic stress situations. Firms also need to apply conservative liquidity horizon assumptions for structured credit products, regardless of rating, where secondary market liquidity is not deep, particularly during periods of financial market volatility and investor risk aversion. The application of prudent liquidity assumptions is particularly important for rapidly growing product classes that have not been tested in a downturn.

27. A bank could assess liquidity by position or on an aggregated basis (“buckets”). If an aggregated basis is used (eg investment-grade European corporate exposures not part of a core CDS index), the aggregation criteria would be defined in a way that meaningfully reflect differences in liquidity.

28. The liquidity horizon is expected to be greater for positions that are concentrated, reflecting the longer period needed to liquidate such positions. This longer liquidity horizon for concentrated positions is necessary to provide adequate capital against two types of concentration: issuer concentration and market concentration.

29. The liquidity horizon for a securitisation warehouse should reflect the time to build, sell and securitise the assets, or to hedge the material risk factors, under stressed market conditions. In principle, the liquidity horizon of those positions should be substantially longer than three months, reflecting the potential for prolonged periods of illiquidity in securitisation markets during stressed market conditions.

4. Concentration

30. A bank’s IRC model must appropriately reflect issuer and market concentrations. Thus, other things being equal, a concentrated portfolio should attract a higher capital charge than a more granular portfolio (see also paragraph 28). Concentrations that can arise within and across product classes under stressed conditions must also be reflected. For example, holdings of asset-backed securities where the underlyings are not correlated under normal conditions can become concentrated exposures when correlations increase under stress.

5. Hedging

31. Hedges can be incorporated into a bank’s IRC model subject to the guidelines below. However, in all cases firms need to reflect maturity mismatches (in the sense of paragraph 33) between the positions being hedged and those undertaken for hedging purposes, as well as the potential for significant basis risks in hedging strategies by product, seniority in the capital structure, internal or external rating, maturity, vintage, etc.

(a) Intra-obligor hedges

32. Hedges involving identical instruments or securities may be recognised by offsetting of positions. Hedges involving different instruments or securities of the same obligor may also be recognised. In this case, the hedge benefit would be adjusted for differences between the instruments, such as a different payout triggers and procedures.

33. If a hedge has a shorter maturity than the liquidity horizon, the capital charge would, where material, include the impact of potential risks that could occur during the interval between the hedge’s maturity and the liquidity horizon.

(b) Inter-obligor hedges

34. The IRC model may incorporate the benefit of inter-obligor hedges, including reductions in risk from portfolio hedging strategies. A bank would validate the benefit of systematic hedging to the satisfaction of its supervisor.

6. *Optionality*

35. The IRC model must reflect the impact of optionality. Accordingly, banks' models should include the nonlinear impact of options, structured credit derivatives and other positions with material nonlinear behaviour with respect to price changes. The bank should also have due regard to the amount of model risk inherent in the valuation and estimation of price risks associated with such products.

7. *Double-counting*

36. While the risk factors incorporated into a bank's IRC and 10-day VaR calculations generally will overlap to some degree, the Committee has not yet determined how any double-counting adjustments should be computed. Offsets for any double-counting (for example, reducing the IRC by the amount that shared risk factors contribute to 10-day VaR capital) could diminish the prominence of the 10-day VaR calculation in Pillar 1 and weaken incentives for banks to measure normal day-to-day trading risks as accurately as possible. On the other hand, providing only limited recognition of double-counting could distort incentives to hedge trading risks effectively.

37. Since the specific approach to dealing with double-counting necessarily would depend on the particular methodologies used in measuring the 10-day VaR and IRC, in all cases a bank's approach to double-counting would require explicit supervisory approval.

IV. Validation

38. Banks would apply the validation principles described in the Basel II Framework and under the current MRA rules in designing, testing and maintaining their IRC models. This includes evaluating conceptual soundness, ongoing monitoring that includes process verification and benchmarking, and outcomes analysis. Some factors that should be considered in the validation process include:

- Liquidity horizons should reflect actual practice and experience during periods of both systematic and idiosyncratic stresses.
- The IRC model for measuring price risks over the liquidity horizon should take into account objective data over the relevant horizon and include comparison of risk estimates for a rebalanced portfolio with that of a portfolio with fixed positions.
- Correlation assumptions must be supported by analysis of objective data in a conceptually sound framework. A bank must validate that its modelling approach for correlations and price changes is appropriate for its portfolio, including the choice and weights of its systematic risk factors. A bank must document its modelling approach so that its correlation and other modelling assumptions are transparent to supervisors.
- Where a hedge is not contractually assured (eg a short position), a bank should validate that the hedge can be maintained, even as the obligor approaches the event.
- The IRC model should be subjected to a variety of stress tests, including sensitivity analysis and scenario analysis, to assess its qualitative and quantitative reasonableness, particularly with regard to the model's treatment of concentrations. Such tests should not be limited to the range of events experienced historically.

39. Banks will not be required to use the same backtesting regime that is used for trading risk VaR models, due to the IRC's high confidence interval (99.9 percent) and longer capital horizon. However, quantitative validation of models should still play an important role in bank's internal model validation process. As a consensus develops over modelling standards that are applied to IRC risks, additional guidance might be necessary.

V. Use of internal risk measurement models to compute the IRC

40. As noted above, these guidelines do not prescribe any specific modelling approach for capturing incremental risk. Because a consensus does not yet exist with respect to measuring risk for potentially illiquid trading positions, it is anticipated that banks will develop different IRC modelling approaches. For example, a bank could develop a comprehensive asset pricing model incorporating both diffusion and jump processes for price movements over liquidity horizons. Alternatively, subject to whatever treatment for double-counting is ultimately adopted, a bank could potentially quantify the incremental risk associated with moving from the 99%/10-day VaR to the 99.9%/1-year IRC in terms of discrete "events" that capture all material price risks, except those reflecting non-IRC market factors, including but not necessarily limited to defaults, credit migrations, gapping of credit spreads, and equity prices. Risks may be excluded on the basis of immateriality, provided that the aggregation of such excluded risks is immaterial for the trading portfolio as a whole.

41. The approach that a bank uses to measure the IRC is subject to the "use test". Specifically, the approach must be consistent with the bank's internal risk management methodologies for identifying, measuring, and managing trading risks.

42. Ideally, the supervisory principles set forth in this document would be incorporated within a bank's internal models for measuring trading book risks and assigning an internal capital charge to these risks. However, in practice a bank's internal approach for measuring trading book risks may not map directly into the above supervisory principles in terms of capital horizon, constant level of risk, rollover assumptions or other factors. In this case, the bank must demonstrate that the resulting internal capital charge would be comparable to a charge produced by a model that directly applies the supervisory principles.

43. If a bank's internal approach is not consistent with the supervisory principles described above, and if its internal risk capital charge is not comparable to the capital charge produced by a model that directly applies these supervisory principles, the bank has two alternatives, both of which are subject to approval by the national supervisor:

- The bank may run an alternative version of its internal model using assumptions consistent with the above supervisory principles; or
- The bank may propose a Capital Adjustment Factor to adjust for differences in its internal model compared to supervisory principles. The result of its internal model would be multiplied by the Capital Adjustment Factor in order to determine the capital for incremental risk. The adjustment factor, which would be reassessed no less than annually, would incorporate differences in capital horizon, constant level of risk, rollover assumptions or other factors that deviate from the supervisory principles. However, the bank may not scale from a lower percentile to the 99.9 percent confidence interval and must include all IRC covered positions in its model calculation. The adjustment factor is to be used in a strictly controlled manner. To ensure consistency and a level playing field among banks and jurisdictions, supervisors will communicate how the adjustment factor is applied in their

jurisdiction to the general supervisory community using existing international forums and communication vehicles.

44. In either case, the bank would demonstrate on a periodic basis, and in no case less than annually, that the result of the capital computation based on its internal model (including the application of the Capital Adjustment Factor) is at least as conservative as the result produced by a model agreed with its supervisor that is parameterised consistently with the supervisory principles contained in this document.

VI. Frequency of calculation

45. A bank would calculate the IRC at least weekly, or more frequently as directed by its supervisor. The IRC for a given reporting period would equal the average charge over the reporting period.

VII. Phase-in period and fallback option

46. For portfolios or products for which a bank already has specific risk model recognition, in order to retain such recognition past 1 January 2010 the bank must implement by that date an approved IRC model incorporating, at a minimum, default and migration risks. By 1 January 2011 the IRC model must meet all of the standards set forth in these guidelines for all IRC covered positions in order to retain specific risk model recognition.

47. Subject to supervisory approval, between 1 January 2010 and 31 December 2010 a temporary fallback option is available to a bank that is unable to calculate an IRC for default and migration risks to the satisfaction of its supervisor.

48. Under the temporary fallback option, in addition to the 10-day VaR capital charge for trading positions, reflecting general market and specific risks, IRC covered positions would incur an additional charge equal to the IRB capital charge (advanced IRB or foundation IRB) that would apply to similar positions held in the banking book. However, use of the fallback option would be subject to the following conditions:

- No adjustment for expected loss (ie $PD \times LGD$).
- Inclusion of net long exposures to each obligor; net short positions would be treated as net long positions of the same absolute value.
- The IRB Ratings-Based Approach must be used for all securitisation exposures.

49. An institution having neither an approved IRC model nor supervisory approval to use the temporary fallback option would incur a total capital charge for trading book positions equal to the general market risk charge plus the standardised specific risk charges.

50. For re-securitisations that are cash or derivative credit positions, banks are subject to a capital requirement as set out in paragraph 615 of the Basel II Framework starting 1 January 2009 until the bank has fully implemented both phases of IRC for these positions.⁵

VIII. Disclosure

51. Under Pillar 3, the IRC would be disclosed publicly at the same frequency and alongside the required disclosures of the bank's market risk capital calculation.

IX. Specific issues where feedback is sought

The Committee seeks comments on the following specific points:

Scope and coverage

1. Under the proposal, the IRC would reflect all price risks except those directly attributable to movements in commodity prices, foreign exchange rates, or the term structure of default-free interest rates ("non-IRB market factors").

- (a) Would it be preferable for supervisors to list specific types of events that must be captured (eg defaults, migrations, and only certain types of movements in credit spreads and equity prices)? What should be the basis for determining which types of events would be included, and how could the Committee ensure that the framework was not largely backward looking?
- (b) Would it be worthwhile to expand the scope and coverage of the IRC to capture price risks associated with commodity prices, foreign exchange rates and the term structure of default-free interest rates?

General versus specific risks

2. For covered IRC positions, Pillar 1 charges would depend in various ways on three types of risks: general market risks and specific risks, as defined under the current MRA, and IRC covered risks. Are the differences among these types of risks clear and measurable?

Double-counting adjustments

3. While the capital horizons and confidence levels underlying the IRC and the 10-day VaR charge would differ, the risk factors captured by these risk measures would overlap to a significant degree. However, any adjustments to offset double-counting would complicate the framework and diminish the Pillar 1 importance of the 10-day VaR calculations including

⁵ The Committee is currently reviewing the risk weights for re-securitisations. Revised risk weights will be incorporated into paragraph 615.

incentives to estimate the 10-day VaR as accurately as possible. Is it possible to provide double-counting adjustments that do not raise such concerns? How?

Capital horizon and confidence level

4. The proposal stipulates that an IRC model incorporate a one-year capital horizon, a 99.9 percent confidence level, and a liquidity horizon appropriate for each trading position. The Committee recognises that such an approach could present considerable practical challenges, including the need for data to calibrate key parameters.

- (a) What alternative guidelines would achieve the Committee's objectives, but in a manner that would be less costly or difficult to implement?
- (b) Given the current state of risk modelling, is it feasible to estimate the portfolio loss distribution (excluding non-IRC market factors) over a one-year capital horizon at a 99.9 percent confidence level?
- (c) Would it be worthwhile to allow banks to use a single horizon for all covered positions (eg three months) and a lower confidence level (eg 99 percent), together with a supervisory scaling factor that was calibrated to achieve broad comparability with the IRB Framework for the banking book? Would such an approach be as useful for internal risk management purposes as the proposed IRC?

Validation

5. Given the IRC soundness standard of a one year time horizon and 99.9th percentile loss, the Committee seeks comment on how the resulting risk measure might be validated quantitatively. For example, would it be reasonable to validate the underlying model at shorter horizons and/or at lower percentiles? If so, how might one ensure that the validation exercise is relevant for the one year 99.9th percentile standard? Also, would different aspects of the model likely require different validation approaches?

6. The flexibility built into the proposed IRC potentially could make Pillar 1 charges for trading positions less comparable across banks. How might the framework ensure greater comparability without unduly limiting firms modelling choices? In particular, would it be productive to require banks to calculate risk measures for standardised test decks of trading portfolios, which could be used to compare model results across banks

Implementation timeline

7. Is the proposed implementation schedule feasible? If not, which IRC guidelines, and what specific types of positions or risk factors, are most problematic?

Disclosures

8. What additional Pillar 3 disclosures related to the IRC, or the trading book more broadly, would be helpful to market participants and contribute to market discipline?

Interim treatment for re-securitisations

9. Paragraph 50 requires a capital charge for re-securitisations. This would start on 1 January 2009 and last until the IRC has been implemented for these positions. Would it be worthwhile to expand the scope of these positions to all securitisations?