Basel Committee on Banking Supervision



Guidelines for Computing Capital for Incremental Default Risk in the Trading Book

Issued for comment by 15 February 2008

12 October 2007



BANK FOR INTERNATIONAL SETTLEMENTS



A later consultative document on the same topic has been published in July 2008. http://www.bis.org/publ/bcbs141.htm

Requests for copies of publications, or for additions/changes to the mailing list, should be sent to:

Bank for International Settlements Press & Communications CH-4002 Basel, Switzerland

E-mail: publications@bis.org Fax: +41 61 280 9100 and +41 61 280 8100

© Bank for International Settlements 2005. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.

ISBN print: 92-9131-744-6 ISBN web: 92-9197-744-6

Contents

Ι.	Background and objectives1			
II.	Definition of the capital requirement for incremental default risk in the trading book3			
ΙΙΙ.	Principles which define the capital standard for the capital charge for incremental default risk in the trading book3			
	A.	Scope		
		1.	Covered instruments	3
		2.	Default risk versus event risk	4
	Β.	Consistency with paragraphs 718(xcii) and 718(xciii): soundness standard comparable to IRB, constant level of risk, impact of liquidity, concentration, hedging, optionality, and double counting		
		1.	Soundness standard comparable to IRB	4
		2.	Constant level of risk	4
		3.	Liquidity horizon	5
		4.	Concentration	6
		5.	Hedging	6
		6.	Optionality	6
		7.	Double counting	6
	C.	Model parameterisation principles not specifically linked to paragraphs 718(xcii) and 718(xciii): EAD, PD, LGD and correlations7		
		1.	Exposure at default (EAD)	7
		2.	Default probability (PD)	7
		3.	Loss given default (LGD)	7
		4.	Correlations and diversification	7
IV.	Validation			8
V.	Use of internal models to compute the capital charge for incremental default risk9			
VI.	Frequency of calculation10			
VII.	Fallback option1			
VIII.	Specific issues where feedback is sought10			

A later consultative document on the same topic has been published in July 2008. http://www.bis.org/publ/bcbs141.htm

Guidelines for computing capital for incremental default risk in the Trading Book

I. Background and objectives

1. The Basel/IOSCO Agreement reached in July 2005¹, contained several improvements to the capital regime for trading book positions. Among the revisions to the Market Risk Amendment (MRA) 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 (IDRC) 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.

2. The requirement for the IDRC was set forth in the form of very high level standards in paragraphs 718(xcii) and 718(xciii) of the Basel II Framework.² The Basel II Framework requires that banks using a VaR model to compute specific risk in the trading book for regulatory capital purposes also develop a methodology for measuring incremental default risk in the trading book:

718(xcii). In addition, the bank must have an approach in place to capture in its regulatory capital default risk of its trading book positions that is incremental to the risk captured by the VaR-based calculation as specified in paragraph 718(LXXXViii) above. To avoid double counting a bank may, when calculating its incremental default charge, take into account the extent to which default risk has already been incorporated into the VaR calculation, especially for risk positions that could and would be closed within 10 days in the event of adverse market conditions or other indications of deterioration in the credit environment. No specific approach for capturing the incremental default risk is prescribed; it may be part of the bank's internal model or a surcharge from a separate calculation. Where a bank captures its incremental risk through a surcharge, the surcharge will not be subject to a multiplier³ or regulatory backtesting, although the bank should be able to demonstrate that the surcharge meets its aim.

718(xciii). Whichever approach is used, the bank must demonstrate that it meets a soundness standard comparable to that of the internal-ratings based approach for credit risk as set forth in this Framework, under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging, and optionality. A bank that does not capture the incremental default risk through an internally developed approach must use the fallback of calculating the surcharge

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

² The Basel II Framework refers to "International Convergence of Capital Measurement and Capital Standards: A Revised Framework", Basel Committee on Banking Supervision, June 2006.

³ This is interpreted as referring to the standard multiplier (3X) used to translate 10-day VaR to market risk capital.

through an approach consistent with that for credit risk as set forth in this Framework.

3. The Accord Implementation Group on the Trading Book (AIGTB) was set up primarily to conduct the work on further clarification, as well as to provide a forum for supervisors to share their experience in overseeing banks' implementation of the trading book capital regime. As there is no clear industry standard for measuring incremental default risk for the trading book, the AIGTB has worked closely with industry groups in developing principles for implementing the new charge that build off the principles in banks' internal approaches.

4. To evaluate the quantitative impact of the guidelines on banks' portfolios, the Basel Committee plans to conduct a data collection exercise in autumn 2007.

5. The Committee expects banks to develop their own internal models for calculating a capital charge for incremental default risk in the trading book. This paper provides additional guidance on how the general principles in paragraphs 718(xcii) and 718(xciii) may be met and contains both guidance on how supervisors will evaluate internal models and fallback options deemed acceptable by the Committee.

6. Banks are expected to fulfil the principles for the IDRC laid out in this document to receive specific risk model recognition. Banks that have already received the specific risk model recognition under the 1996 Market Risk Amendment⁴ would not be required to implement the IDRC until 1 January 2010.

- 7. This paper is structured as follows:
- Section II defines in general terms the capital requirement for incremental default risk.
- Section III sets forth the scope and principles for calculating the capital charge for incremental default risk to ensure consistency in the capital charge across banks.
- Section IV sets standards for the validation and benchmarking of banks' internal models of incremental default risk.
- Section V specifies ways the results of banks' internal default risk models can be used as the foundation for this capital charge.
- Section VI defines the frequency of calculation.
- Section VII defines a fall-back approach for banks that do not have approved incremental default risk models.
- Section VIII lists specific issues on which the Basel Committee seeks comments.

⁴ Basel Committee on Banking Supervision, Amendment to the Capital Accord to Incorporate Market Risks, January 1996.

8. The Basel Committee welcomes comments from the public not only on specific issues in Section VIII but also on all aspects of the consultative paper by 15 February 2008. These should be addressed to the Basel 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. Definition of the capital requirement for incremental default risk in the trading book

9. The capital requirement for incremental default risk in the trading book equals the greater of zero or:

- The level of capital required to absorb losses that might occur to trading positions due to defaults of credit-sensitive instruments
- Less the capital requirement for default losses implicit in the bank's VaR-based capital computation.

III. Principles which define the capital standard for the capital charge for incremental default risk in the trading book

A. Scope

1. Covered instruments

10. The incremental default risk capital charge would encompass all positions in the trading book that are subject to default risk, regardless of their liquidity. In this context, default risk includes the potential for material direct loss due to an obligor's default as well as the potential for indirect losses that may arise from default events in equity securities and structured credit assets such as certain asset-backed securities and basket credit derivatives. The bank's model would include all positions in the trading book that are subject to default risk.

11. In general, losses or gains on positions related to listed common equities and unleveraged funds would be included in "event risk" provisions of the Basel II Framework and would not be included in the computation of incremental default risk.

12. However, with supervisory approval, a bank could include listed common equity positions in its incremental default risk calculation when such inclusion would be consistent with how the bank internally measures and manages this risk. A bank might do so, for example, for capital structure arbitrage positions in which it offsets long and short positions in different parts of an issuer's capital structure.

13. If equity securities are included in the computation of incremental default risk, default is deemed to occur if the related debt defaults (as defined in the Basel II Framework paragraphs 452 and 453).

2. Default risk versus event risk

14. The incremental default risk charge, by definition, would be limited to default risk. It would not include credit migration or spread risks that are captured in VaR, nor would it include other sources of event risk captured in VaR such as a take-over bid. In this context, the definition of default is the same as that contained in the Basel II Framework.

B. Consistency with paragraphs 718(xcii) and 718(xciii): soundness standard comparable to IRB, constant level of risk, impact of liquidity, concentration, hedging, optionality, and double counting

1. Soundness standard comparable to IRB

15. Paragraph 718(xciii) specifies that the capital requirement for incremental default risk must meet a soundness standard comparable to the internal ratings-based (IRB) approach for credit risk. For credit risk, the Basel II Framework provides a 99.9% soundness standard at a one-year horizon. Therefore, the incremental default risk capital charge is calibrated to and measured at a 99.9 percent confidence interval over a capital horizon of one year.

16. Because default risk is so fat-tailed compared to market risk, incremental default risk would be measured directly at the 99.9th percentile, rather than measured at a lower percentile and scaled to approximate the 99.9th percentile. For positions with relatively little default risk at relatively short time horizons, default risk at the 99th percentile might be zero, while default risk at the 99.9th percentile would be greater than zero; no scaling factor can adjust for this.

2. Constant level of risk

17. As required by paragraph 718(xciii), the capital charge for incremental default risk is based on the assumption of a constant level of risk over the one-year capital horizon.⁵

18. 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 credit 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.

⁵ 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.

19. 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

20. Paragraph 718(xciii) provides that the incremental default risk charge may be adjusted to reflect the liquidity of positions subject to this charge. Positions in the trading book tend to be actively traded and more liquid than positions in the banking book. Where a position's liquidity can be maintained in the relevant markets under stress conditions, the bank would have the ability to trade out of a deteriorating exposure prior to the event of default. As such, it is appropriate that default risk capital charges for trading book positions reflect these liquidity considerations.

21. The liquidity horizon represents the time required to sell the position or to hedge all material credit risk factors in a stressed market. The liquidity horizon would 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 adjustments and the management of stale positions. Adverse market conditions provide an opportunity to reassess the liquidity horizon to ensure a prudent standard.

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

- Ten business days, consistent with the approach taken in market risk capital rules
- The time period consistent with the bank's actual trading experience and risk management process in rebalancing similar positions during stressed market conditions when they experience a decline in credit quality

23. In general, noninvestment-grade positions would be expected to have a longer liquidity horizon. Conservative assumptions regarding the liquidity horizon for noninvestment-grade positions are warranted until further evidence is gained regarding the market's liquidity during systematic and idiosyncratic stress situations.

24. 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.

25. 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.

26. The liquidity horizon for a securitisation warehouse would reflect the time to build the inventory of assets and securitise the assets under stressed market conditions. However, if a bank demonstrates a pattern and practice of hedging default risk in its securitisation warehouses, supervisors may allow the liquidity horizon to be determined by the time to hedge the default risk, rather than the time to securitise the assets.

4. Concentration

27. A bank's model of incremental default risk would be sensitive to issuer and market concentrations, such that, other things being equal, a concentrated portfolio would attract a higher capital charge than a more granular portfolio (see also paragraph 25).

5. Hedging

28. Paragraph 718(xciii) allows the impact of hedges to be incorporated into the capital charge for incremental default risk.

(a) Intra-obligor hedges

29. 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 definition of default or a different LGD.

30. If a hedge has a shorter maturity than the liquidity horizon, the capital charge would, where material, include the impact of potential default losses during the interval between the hedge's maturity and the liquidity horizon. In this context, short positions would be evaluated to ensure that the short position can be maintained, even as the issuer approaches default.

(b) Inter-obligor hedges (net short positions)

31. The capital charge for incremental default risk may incorporate the benefit of net short positions. A bank would validate the benefit of systematic hedging. For example, if a bank is modelling default risk within a single-period model, the bank would consider whether, due to the path-dependant nature of the default losses, the benefit of systematic hedges would be reduced to address the possibility that the longs default before the shorts.

6. Optionality

32. Paragraph 718(xciii) requires that the capital charge for incremental default risk reflects the impact of optionality. Accordingly, banks' models would include the nonlinear impact of options, structured credit derivatives and other positions with material nonlinear behaviour with respect to default losses. The bank would also have due regard to the amount of model risk inherent in the default risk measures for such products.

7. Double counting

33. Paragraph 718(xcii) specifies that double counting is to be avoided. Banks may take into account the extent to which default risk has already been incorporated into the VaR-based capital calculation. The adjustment for double counting is limited to the incremental increase in market risk capital that results from the inclusion of default risk in VaR. The double counting adjustment would not include elements of the VaR computation relating to transitions other than default.

34. The method for adjusting for any such double counting would depend on the particular methodology for both 10-day market risk VaR and incremental default risk and, in all cases, would require approval by the supervisor.

C. Model parameterisation principles not specifically linked to paragraphs 718(xcii) and 718(xciii): EAD, PD, LGD and correlations

1. Exposure at default (EAD)

35. The EAD is defined as the change in a position's market value resulting from default of an obligor, assuming a post-default market value of zero for claims on the obligor. For undrawn traded commitments, the EAD would be based on the expected drawn amount, assuming default of the obligor within the liquidity horizon.

2. Default probability (PD)

36. The IRB standard of defaults includes both material credit-related economic losses and formal default events. Therefore, the PDs measured over the liquidity horizon for a credit risk category should be based on historical default data including both formal default events and price declines equivalent to default losses. Where possible, this data should be based on publicly traded securities over a complete economic cycle. The credit risk category may be determined by credit ratings or objectively determinable market factors, such as credit spreads or volatility of credit spreads. The annual PD of non-sovereign obligors is subject to a floor of 3 basis points. Intra-year PDs are not subject to a floor; however, intra-year PDs may not be zero unless the annual PD is zero.

37. The PD over a liquidity horizon of T is defined as the probability that a position with a given credit risk category at time zero will default before time T. Default events occurring after time T are not included in this definition because the position is assumed to be rebalanced to the initial risk category at time T.

38. The PD over a given liquidity horizon may be estimated based on historical data of default frequency over a time horizon equal to the liquidity horizon.⁶ The PD over the liquidity horizon may also be calculated on a theoretical basis (eg geometric scaling), provided that the bank is able to demonstrate that such theoretical derivations are in line with historical default experience. In any case, the reduction in PD resulting from the benefit of liquidity would not exceed that which is consistent with the bank's actual trading experience and risk management process in rebalancing its trading positions.

3. Loss given default (LGD)

39. LGD would be determined from a market perspective, based on a position's current market value less the position's expected market value subsequent to default. The LGD would reflect the type and seniority of the position. LGD may not be less than zero.

4. Correlations and diversification

(a) Correlations between defaults

40. Systematic economic and financial dependence among obligors causes a clustering of default events. Accordingly, the capital requirement for incremental default risk includes the impact of correlations between default events. Models must include the impact of such clustering of default events.

⁶ Historical studies of PD over a given liquidity horizon should not scale up default observations over time horizons shorter than the liquidity horizon.

(b) Correlations between default risk and other market factors

41. The impact of diversification between default risk in the trading book and other risks in the trading book is not currently well understood. Therefore, for the time being, the impact of diversification between default events and other market variables would not be reflected in the computation of capital for incremental default risk. This is consistent with the Basel II Framework, which does not allow for the benefit of diversification when combining capital requirements for credit risk and market risk. Accordingly, the capital charge for incremental default losses would be added to the VaR-based capital charge for market risk. If a bank computes incremental default risk within its VaR model, the results of the computation would be adjusted to represent the capital charge that would have resulted if default risk were modelled on a stand-alone basis.

42. In theory, certain aspects of default risk in the trading book should diversify against other risks in the trading book. For this reason, this topic should be the subject of further discussion between the industry and the international regulatory community.

IV. Validation

43. Banks would apply the validation principles described in the Basel II Framework in designing, testing and maintaining their internal models for incremental default risk. This includes evaluating conceptual soundness, ongoing monitoring that includes process verification and benchmarking, and outcomes analysis. The type of backtesting appropriate for a trading risk VaR model will not be required to validate incremental default risk models due to the extreme confidence interval (99.9%) and long time horizon. Some factors to consider in the validation process include:

- Liquidity horizons should reflect actual practice and experience during periods of both systematic and idiosyncratic stress events.
- PD over the liquidity horizon should take into account objective data for defaults over short time horizons and include a comparison of default losses of a rebalanced portfolio with the default losses of a portfolio with fixed positions.
- For positions with market values substantially below par, banks should review PDs and LGDs to ensure they are not introducing distortions.
- The impact on default risk of stochastic LGD and the potential correlation between PD and LGD should be evaluated and incorporated, where material.
- The impact of clustering of default events used in a bank's model must be supported by analysis of objective data in a conceptually sound framework. A bank would validate that its modelling approach for correlations is appropriate for its portfolio, including the choice and weights of its systematic risk factors. A bank would make transparent the equivalent annual pairwise asset correlations implied by its correlation model.
- If a bank uses a multi-period model to compute incremental default risk, it should evaluate the implied annual correlations to ensure they are reasonable and in line with observed annual correlations.
- 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 default.
- A model's sensitivity to concentration should be evaluated. One reasonableness test is to compare the capital charge for incremental default risk with the potential loss of

market value upon default of the largest net long position rated BBB or below, as well as to the sum of the two largest net long positions rated B or below.

• A bank should validate that its modelling framework for incremental default risk, including the assumptions and simplifications embedded in the framework, is appropriate for its portfolio of default risk.

44. The Gaussian copula model (which forms the basis for the IRB formula) represents a relevant external benchmark of the results of models based on different frameworks. As default risk modelling practices develop, other relevant benchmark models may emerge.

V. Use of internal models to compute the capital charge for incremental default risk

45. As noted in paragraph 718(xcii), no specific approach for capturing incremental default risk is prescribed. Because a consensus among banks does not exist with respect to the methodology for measuring default risk in the trading book, it is anticipated that banks will develop different approaches for measuring this risk. The approach that a bank uses to measure default risk in the trading book is subject to the "use test". The approach must be consistent with the bank's internal risk management methodologies for identifying, measuring and managing default risk.

46. Ideally, banks would incorporate in their capital models the supervisory principles laid out in the guidelines. However, some approaches for measuring default risk in the trading book may not map directly into the 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 capital charge is comparable to a charge produced by a model that directly applies the supervisory principles.

47. If the bank's approach is not consistent with supervisory principles and if the capital charge produced by its internal model is not comparable to the charge produced by a model that directly applies the 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 supervisory principles.
- 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 default 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% confidence interval and must include all positions subject to default risk 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. A firm should disclose its adjustment factor, as well as key ways in which its internal model differs from the guidelines.

48. 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 capital principles.

VI. Frequency of calculation

49. Banks would calculate a default risk measurement daily. The capital charge for incremental default risk must be calculated with the same frequency as that required for the bank's market risk capital computation. The capital charge for incremental default risk during a reporting period would represent the average of the capital charge over the days in the reporting period.

VII. Fallback option

50. With supervisory approval, a fallback option for a bank unable to calculate an incremental default risk capital charge to the satisfaction of its supervisor would be the application of the IRB approach for banking book exposures to its trading positions with default risk, incorporating the following elements:

- No adjustment for expected loss (PD x LG)
- Appropriate adjustments, as needed, for concentrated positions
- Maturity (M) of one year
- Inclusion of only net long exposures to each obligor, not net short exposures

51. A bank would choose between two options for the calculation of PD in the fallback option:

- The annual PD may be used. In this case, the bank would not be subject to the requirements in Section III regarding the calculation of the liquidity horizon and the PD over the liquidity horizon.
- The PD over the liquidity horizon may be geometrically annualised. In this case, the bank would be subject to the requirements in Section III regarding the calculation of the liquidity horizon and the PD over the liquidity horizon.

VIII. Specific issues where feedback is sought

The Committee seeks comments on the following specific points:

1. Commenters' feedback is sought on whether the guidelines achieve an appropriate balance between providing sufficient clarity to achieve consistent implementation and allowing flexibility for banks to leverage off their internally developed models. What are commenters' views on the feasibility of implementing the overall guidelines?

2. What are commenters' reactions to the proposed scope on instruments covered in the guidelines?

3. What are commenters' reactions to Paragraph 49 which requires banks to calculate the capital charge for incremental default risk with the same frequency as that required for the bank's market risk capital computation?

4. What are commenters' views on the desirability and feasibility of applying the Capital Adjustment Factor in the guidelines?

5. Do the guidelines sufficiently clarify supervisory expectations regarding the estimation of liquidity horizons? Would it be helpful if the guidelines articulated a number of product categories for which supervisors expect a separate estimation of the liquidity horizon, for instance investment grade corporate bonds, high yield corporate bonds and tranched products? Do commenters believe that, in light of recent market developments, the concept of liquidity in a "stressed market" needs further clarification?

6. Do the guidelines provide sufficient clarity as to how the Incremental Default Risk of structured products such as asset backed securities should be estimated? Do commenters believe that the transparency of structured products in the trading book is sufficient to allow banks to estimate in all cases the risk of loss from structured products triggered by defaults in the underlying assets?

7. The guidelines stipulate that a bank use a definition of default that is consistent with the Basel II Framework in its calculation of the incremental default risk capital charge. Commenters' reactions are sought with regard to capturing in PD estimates significant declines in market prices due to material deterioration in credit quality.

8. Commenters' views are sought on including listed common equity positions in the scope of instruments covered in the incremental default risk capital charge.