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**The Basel 2 agenda for 2009:
progress so far**

by

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I. Introduction

Important parts of the revisions of Basel 2 in response to the credit crisis are now taking shape.¹Two of the major subjects of these revisions, which are discussed in this paper, are the rules for securitization exposures and the Market Risk Framework. These two subjects are covered by consultative documents issued by the Basel Committee on Banking Supervision in January 2009. The documents on the Market Risk Framework follow up an earlier July 2008 consultative document and are mostly concerned with incorporation in the Framework the still provisional rules for securitization exposures which are being developed in response to faults revealed by recent financial turmoil.

Revisions of Basel 2 still to come include supplementing the risk-based minimum regulatory requirements of Basel 2 with simple gross measures (such as banks' aggregate leverage ratios) and including in the rules or guidelines for banks' capital "additional shock absorbers" (such as through-the-cycle or countercyclical reserves) (Wellink, 2008).

II. Revisions of Basel 2's rules on securitization

The term, "securitization", denotes one of a number of different financial operations involving the substitution of securities for other debt or the decomposition of large loans into loan shares or participations for distribution among financial institutions. The best known form of securitization consists of the pooling of loans and other debt obligations by banks and other financial institutions and the sale to investors of interests in the pool (asset-backed securities).

Investment instruments collateralised by pools of mortgage loans have a long history in the United States going back to the nineteenth century. In the 1980s the asset backing in securitization was extended to several other kinds of debt such as computer leases, automobile and truck loans, credit cards, trade receivables, junk bonds, and unsecured consumer loans. Initially the mortgages in the pools of asset-backed securities were overwhelmingly prime, i.e. made to individuals with good credit histories. With the expansion of markets for assets with greater credit risk in the 1990s the pools began to include subprime mortgages made to individuals with less highly rated credit histories. Initial development of markets for asset-backed securities took place mainly in the United States but more recently such markets have also taken off in other developed countries and in some emerging-market countries.

¹ The full text of Basel 2, which is being revised, is the 2006 version (BCBS, 2006).

Owing to the different categories of debt obligation included in asset-backed securities and to the development of legal terminology associated with their regulation, securitization is associated with a bewildering number of different acronyms to denote the different instruments. The discussion which follows focuses primarily on Collateralised Debt Obligations (CDOs) here used as a generic term to cover pools of debt instruments serving as the collateral of asset-backed securities.

In cash-flow CDOs debt instruments are transferred by a bank or another financial institution to a special purpose entity (SPE), a legal structure established to sell shares in the asset-backed securities to investors. Payments due to the investors through these SPEs are made according to various formulae.

The simplest of these formulae is pass through. In this case investors have a pro-rata share in the pooled assets and a corresponding pro-rata share in the cash flows which they generate. Under the pay-through or tranching arrangements which have been a prominent feature of the credit crisis the CDOs are sold to investors after reconfiguration of the cash flows from the original assets into a number of tranches in the form of structured notes. While each tranche is entitled to payments from the pool, this entitlement is subject to different degrees of seniority. Likewise losses on the original assets are allocated according to rules under which the first losses up to a specified percentage are born by the most junior (equity) tranche and subsequent proportions successively by the mezzanine and senior tranches. The rates of return for investors in the tranches reflect the different risk levels and thus are substantially higher for lower-grade tranches.

The principles entailed in tranching for a cash-flow CDO can be illustrated with a simple numerical example in which four tranches or structured notes are created from a pool of loans and bonds.² The first (equity) tranche is based on 5 per cent of the total pool and absorbs losses from the pool until they have reached 5 per cent. The second tranche is based on the next 10 per cent of the pool and absorbs losses in excess of 5 per cent up to a maximum of 15 per cent. The third tranche absorbs losses in excess of 15 per cent of the pool up to a maximum of 25 per cent. The fourth tranche absorbs residual losses in excess of 25 per cent of the pool.

Under the resulting distribution of risks a one-per-cent loss for the pool as a whole becomes a 20-per-cent loss for investors in the equity tranche. The return on their investment, which may be as much or more than twice that on the second tranche and a much higher multiple of the return on the senior fourth tranche, will henceforth be paid only on 80 per cent of their initial investment. A 5-per-cent loss on the pool wipes out the first tranche and with it the return to investors, and a 10-per-cent loss also wipes out 50 per cent of the value of investments in the second tranche. And so on.

Various alternatives to classic, cash-flow CDOs are also available. For example, in synthetic CDOs the risks associated with a pool of assets rather than the assets themselves are transferred to the SPE. The payments to investors depend on the structuring of the synthetic CDO. In a funded CDO investors pay in the principal corresponding to their tranches, and this principal is invested in government or other highly rated securities. Defaults lead to a write-down of this principal. The returns to investors are generated by the interest payments on the government and highly rated securities and by the premiums on the credit derivatives (credit default swaps) also held in the portfolio backing the CDO. In an unfunded synthetic CDO no payments of principal are made by investors and their returns are generated exclusively by the credit derivatives backing the portfolio. Synthetic CDOs also come in the form of hybrid instruments of which some tranches are funded but the lowest-risk (super senior) tranche is unfunded. Large banks themselves often held such super senior tranches in their investment portfolios.

² The example is taken from Hull (2006: 516-517).

The lack of rules for banks' securitization exposures in the 1988 Basel Capital Accord (Basel 1) was one of the shortcomings which led to the decision to start the process leading to Basel 2. The concern of regulators antedated the widespread sale to investors of the more baroque investment instruments just described and focused on securitization's role as a vehicle for regulatory arbitrage under Basel 1.

More profitable but riskier loans and other exposures were not necessarily associated with higher regulatory capital charges according to the risk calibration of Basel 1. This created incentives to regulatory arbitrage under which banks reduced their holdings of less profitable assets whose risks were overestimated under the capital charges of Basel 1 and increased their holdings of more profitable assets whose risks were underestimated, thus increasing profits without a corresponding allocation of capital to cover the greater exposure to credit risk (losses from which would probably take time to appear). Securitization was one of the techniques used by banks and other originating institutions to manage their exposure to credit risks and regulatory capital charges by choosing which loans to keep on their own balance sheets. They also pocketed fees associated with origination and management.

Faced with various national regulatory approaches to securitization, the Basel Committee opted in Basel 2 for rules based on economic substance rather than legal form, thereby avoiding problems linked to differences in national legal regimes for derivatives. A major objective of the rules was to ensure that securitization exposures were no longer the result of artificial incentives to regulatory arbitrage. But the result in the 2006 version of Basel 2 was a particularly complex set of rules for minimum regulatory capital charges

In these rules the reality of risk transfer served as the basis for stringent conditions which had to be met if an operation was to be accepted as a securitization. If these conditions were not met, Basel 2's minimum regulatory capital requirements were set as if the securitization operation had not occurred and the assets were still held on the balance sheet.

The 2006 version of Basel 2 specified a number of alternative ways of measuring the credit risk of securitization exposures. Under the Standardised Approach to securitization exposures the rules follow lines similar to those for the attribution of risk weights under the Standardised Approach to the credit risk of non-securitised positions with some differences in the correspondence between the weights for credit risk and the external ratings of credit rating agencies. Under the Internal Ratings-Based Approach to securitization exposures there were three options. The Ratings-Based Approach (like the simpler Standardised Approach) maps external ratings of exposures into weights for credit risk but on the basis of a finer calibration of risk than for non-securitized exposures as well as of rules which also take account of the seniority of the tranche of asset-backed securities and of concentrations of risks in the pool of underlying assets (the "non-granularity" of the pool, to use Basel 2's term). The Internal Assessment Approach applies mainly to exposures due to sponsorship of securitizations where investments are liquid asset-backed commercial paper (ABCP) and where a bank's own internal ratings of the exposures can be mapped into the external ones of a credit rating agency. When neither of these procedures is possible, recourse is to be had to a third option, the Supervisory Formula. Owing to its complexity this last option was expected to be used only by sophisticated banks.

In the context of subsequent developments two points about these rules deserve emphasis. Firstly, most of the rules depend directly or indirectly on credit ratings and thus on the integrity of the rating process. Secondly, the rules assume that the different forms of securitization as such are an inevitable part of modern banking practice.

However, at the national level regulatory approaches more restrictive of securitization have in fact been tried. Spain, for example, has adopted rules which mandate the same regulatory capital requirements for securitized and on-balance-sheet exposures, thus removing a major incentive for banks to participate in the “originate and distribute process” for securitized assets whose disfunctioning was at the origin of the subprime crisis (Tett, 2008). The Spanish approach is consistent with the supervisory guidelines for securitization exposures under Pillar 2 of Basel 2 (the minimum regulatory capital charges being part of Pillar 1). Pillar 2 of Basel 2 provides considerable scope for supervisory discretion, and in a section entitled “significance of risk transfer” the text states that “If the risk transfer is considered to be insufficient or non-existent, the supervisory authority...may deny a bank from obtaining any capital relief from the securitisations” (BCBS, 2006: paragraph 786).

Although the 2006 version of Basel 2 covers the different dimensions of banks’ exposures to securitization, developments during the credit crisis have led regulators to decide that further strengthening of the rules was none the less necessary. The proposed revisions of Basel 2 concerning securitization are complemented by the Basel Committee’s rules for the management and supervision of liquidity risk which are not part of Basel 2 but are closely connected to several of its rules (BCBS, 2008c).

Features of the credit crisis especially noteworthy in this context have involved the financing of the SPEs used for securitization and the pricing, rating and valuation of structured investment products.³

Problems associated with financing have arisen in connexion with two vehicles commonly used in securitizations. The structured investment vehicle or SIV is an entity whose assets consist of highly rated medium and long-term assets such as mortgages and CDO tranches financed with short-term, highly rated commercial paper. The bank or other financial institution sponsoring a SIV makes money through management fees and the spread between the funding cost and the return on its assets. In addition to the usual credit, market and interest-rate risks the SIV is exposed to liquidity risk owing to the maturity mismatch between its short-term liabilities and its longer-term assets. In the typical SIV the sponsor does not provide credit enhancement through back-up liquidity.

ABCP (asset-backed commercial paper) conduits have balance sheets similar to SIVs but are usually backed by liquidity commitments, often from the sponsoring institution, i.e. pledges by a financial institution to provide funding when alternative sources are not available.

The credit crisis affected SIVs and conduits in various ways. Losses due to the subprime crisis reduced the return on their assets. The contraction of liquidity adversely affected their refinancing. In these circumstances the sponsoring banks and other financial institutions found themselves constrained to provide back-up financing or to consolidate the SIVs and conduits on their own balance sheets. This applied to the sponsors of SIVs as well of conduits, despite in their case the lack of legal liability, owing to the reputational risk that would be entailed by the insolvency of entities with which their names were associated. Purchase or consolidation could lead to losses for sponsors as a result of the shortfall of the fair (accounting) value of the assets of the SIVs and conduits in comparison with that while they were still on the books of the original operating companies.

The pricing and marketability of securitized investment products has to depend on disclosure regimes and credit ratings which have proved to be subject to serious shortcomings. For example, in the United States detailed disaggregated information on the loans in the portfolio backing securitized investment products is not publicly available, and there is no obligation regarding public

³ The discussion which follows makes extensive use of the account of the subprime crisis in Scott (2008: chapter 12).

disclosure for synthetic CDOs. In consequence, for initial valuation and pricing of CDOs, investors must rely on the ratings of credit rating agencies. But such reliance is believed to have reduced the incentives not only to investors but also to institutions participating in the originate-and-distribute procedures for structured products to monitor properly the quality of the debt in portfolios backing CDOs.

Both the performance and the independence of the credit rating agencies have attracted adverse comment during the credit crisis. Under the first heading critics have focussed on deficiencies in the agencies' procedures for taking account of events causing the clustering of defaults and of the impact of credit migrations leading to the downgrading of the rating of structured investment products. Under the second heading critics have emphasised the potential for conflicts of interest due to the combined role of the agencies as advisers as well as raters of these products.⁴

Traditional credit ratings are based solely on the intrinsic qualities of issues and issuers. However, the dependence of the ratings of structured notes not only on the quality of the debt instruments in the underlying pool but also on default correlations and on the seniority of the tranches in CDOs has typically left them more vulnerable to rapid ratings changes. During the credit crisis such changes have contributed to the - often extreme - price volatility of super senior and other highly rated tranches.

This price volatility in turn has been associated with large accounting losses for banks and other financial institutions carrying structured products on their balance sheets. Under United States and international accounting rules investments in the trading book (financial instruments and commodities held either with trading intent or to hedge other positions in the trading book) are revalued according to their fair value (the amount for which the assets could be exchanged between knowledgeable, willing parties in an arm's length transaction). Resulting losses (or gains) are reflected in reported income. Fair value is estimated on the basis of either market prices for these or similar investments or of models of the cash flows which the investments are expected to generate. In illiquid markets it is questionable whether either of these procedures is capable of serving as a basis for reasonable estimates of investments' fair value.

The Basel Committee's proposals for strengthened rules on securitization under Pillar 1 (Minimum Capital Requirements) of Basel 2 cover both the requirements which must be met if exposures are to be removed from a bank's balance sheets and the capital charges for the exposures which remain.

In the 2006 version of Basel 2 the requirements which had to be met if the removal of assets from a bank's balance sheet was to be recognised by its supervisors concerned such subjects as the absence of residual control by the transferor over, or residual obligations connected with, the transferred exposures, and the autonomy of the transferee SPE with respect to exchanging or pledging the assets involved. Under the strengthened rules banks would also have to meet requirements designed to ensure that they conduct their own due diligence concerning the assets being securitized and not simply rely on the ratings of credit rating agencies. These requirements are intended to reduce failures regarding risk management and due diligence in connection with the originate-to-distribute model during the credit crisis, to which the consultative document (BCBS, 2009c) draws repeated attention.

For the purpose estimating capital charges the calibration of securitization exposures has been refined to take better account of risks connected to such exposures. To the categories used as part

⁴ The importance of structured-products business to credit rating agencies can be illustrated with the example of Fitch. Revenue from the rating of structured products accounted for 51 per cent of the agency's revenue in the first quarter of 2007 (Westlake, 2007).

of the attribution of risk weights in the 2006 version of Basel 2 (senior, non-senior, and granular securitization exposures) has been added resecuritization exposures. These are defined as securitization exposures for which one or more of the assets backing structured investment products are themselves securitization exposures.

This definition would classify as resecuritisation exposures CDOs whose asset backing included other CDOs. Resecuritisation exposures are mostly subject to higher capital charges than other securitization exposures to which equivalent ratings have been attributed under Basel 2 rules. Resecuritisations themselves are classified as senior or non-senior according to conditions which exclude from the senior category those which are themselves resecuritisations. The document of the Basel Committee itself provides an extreme instance of the sort of practices which are the target of the new rules. "This would preclude the situation whereby a bank took a mezzanine [non-senior] resecuritization exposure, created two tranches (eg a junior tranche of 0.1% and a senior tranche of 99.9%), and claimed that the senior tranche should qualify for the senior column of resecuritization weights" (BCBS, 2009c: 3).

Other new rules concern the capital charges for a bank's exposures in the form of back-up liquidity support for securitizations (liquidity facilities). Under the simpler Standardised Approach to credit risk of Pillar 1 of Basel 2 the capital charge for such off-balance-sheet exposures meeting certain conditions is estimated by multiplying them by a credit conversion factor (CCF) of less than 100 per cent to convert them to their on-balance-sheet equivalents. Under the new rules for securitized exposures the CCFs are standardised at a single level of 50 per cent, and the 20-per-cent CCF for short-term exposures, which was previously part of the rules, is suppressed. The rules for CCFs in other approaches to securitization exposures are also tightened and various options permitting low CCFs suppressed. This applies now in particular to market disruption lines which are liquidity facilities available to support securitizations only in the event of general market disruptions. The suppression of the low CCF here is clearly a response on the part of the Basel Committee to heightened awareness of the risks associated with market disruption lines revealed by the credit crisis.

The additional recommendations of the consultative document (BCBS, 2009c) under Pillar 2 of Basel 2 (Supervisory Review) cover responsibilities of both supervisors and management not only for better oversight and control of securitization but also more generally. Implicit in one of the recommendations on board and senior management oversight is a criticism of the lack of professionalism displayed by several boards of directors. As the Basel Committee puts it, "The board of directors should possess sufficient knowledge of all major business lines to ensure that appropriate policies, controls and risk monitoring systems are effective. They should have the necessary expertise to understand the capital markets activities in which the bank is involved – such as securitization and off-balance sheet activities – and the associated risks" (BCBS, 2009c: para. 17). Hopefully this will serve as a clarion call regarding the qualifications of board members, which can be incorporated in the process for selecting them either by law or as part of a code of corporate governance.

The Pillar-2 recommendations also run through shortcomings on the front of risk management of securitization exposures during the credit crisis. Of special interest here is the digest here of points raised in the Basel Committee's September 2008 document, *Principles for Sound Liquidity Risk Management and Supervision* (BCBS, 2008c). The Basel Committee has often been criticised for not sufficiently integrating its rules for regulatory capital for credit risk, on the one hand, and those for liquidity management and supervision, on the other. (The rules for market risk naturally incorporate liquidity risk since liquidity determines the marketability and prices of the items in banks' trading books at which these rules are directed.). While the tightening of the rules on CCFs for liquidity

facilities described above contained is a step forward on this front, the Basel Committee's critics on this score are none the less unlikely to be satisfied until liquidity risk in an overall regulatory framework which integrates macro- and micro-prudential considerations and recognises more fully its link to other major banking risks including those covered by Basel 2.

The recommendations under Pillar 3 of Basel 2 (Disclosure Requirements) cover additional requirements regarding the disclosure of securitization exposures. Particularly noteworthy here are the inclusion of new mandatory disclosures concerning "all securitization activities which the bank sponsors, regardless of whether they are in the banking or trading book, on- or off-balance sheet, and whether or not they are subject to the securitisation framework". In the 2006 version of Basel 2 disclosure of sponsorship activities was encouraged but voluntary.

III. Market Risk Framework

The market risk framework of Basel 2 was the subject of two consultation documents of July 2008, *Guidelines for Computing Capital for Incremental Risk in the Trading Book* and *Proposed Revisions to the Basel II Market Risk Framework* (BCBS, 2008a and 2008b) These consultation documents have been revised in two new consultation documents covering the same subjects published in January 2009 (BCBS, 2009a and 2009b).

The Market Risk Framework is now part of the regulatory rules for banks' capital in developed countries and in several developing countries and transition economies of Eastern Europe – more than 15, for example, in the sample of developing countries covered in the 2007 Global Survey of the New-York-based Institute of International Bankers (Institute of International Bankers, 2007: 8). Banks in the great majority of these countries are also permitted by their regulators to use internal models (see below) to measure market risks for their minimum regulatory capital requirements.

The Market Risk Amendment was added in 1996 to the original Basel Capital Accord of 1988 (Basel 1). The Amendment is directed at risks associated with banks' trading books, i.e. positions in financial instruments and commodities held either with trading intent or to hedge other positions in the trading book (as opposed to the institutions' banking books which contain assets such as loans and selected off-balance-sheet or contingent positions, both of which were the main target of the 1988 Accord.). Positions in the trading book are regularly revalued and actively managed. The most important risks of these positions are due to movements in their market prices or values.

The Market Risk Amendment was the Basel Committee's response to the increase in the involvement of banks generally in trading (particularly of derivatives) and brokerage as compared to the more traditional business of receiving deposits and other repayable funds from the public and granting credits for their own account. The rules eventually adopted followed a long consultation period, in which banks themselves played an active role, and were designed to incorporate banks' own experience and practices.

The rules of the 1996 Amendment allow two approaches to calculating the minimum regulatory capital requirement for market risk. The standardized approach uses a series of conversion factors for different instruments and positions. This approach is cumbersome and likely to generate a higher minimum regulatory capital requirement than the alternatives. Under the internal-models approach banks use their own internal risk models to estimate the requirement.

In addition to general market risk, i.e. that due to overall changes in financial markets in such indicators as equity prices or interest rates, trading books are exposed to specific market risk, i.e. that due to changes in the value of particular instruments such as stocks or bonds. In the 1996

Amendment capital requirements for specific market risk under the standardized approach vary for different instruments and positions. Under the internal-models approach calculation of specific market risk by means of a bank's own models may be permitted by regulators. If not, capital charges for specific market risk are calculated according to rules given in the standardized approach and are added to that for general market risk.

Under the internal-models approach, exposure to general market risk is calculated on the basis of a measure of Value at Risk or VaR. This makes possible a statement of the following form: the bank is X per cent (for example, 99 per cent in the Market Risk Framework) certain that it will not lose more than a specified amount due to general market risk during the holding period, i.e. the period required to liquidate the trading positions, thus stopping further losses. More colloquially VaR is an answer to the question of how bad things can get (Hull, 2006: 436).

For the purpose of such a calculation the bank requires a statistical frequency distribution or models for the profits and losses due to factors to which its trading book is exposed. These tools are then used to identify the maximum loss to the bank corresponding to the chosen level of probability for its VaR.

Three alternative techniques are used for this purpose: historical simulation, Monte Carlo simulation, and the model-building approach.

Under historical simulation a frequency distribution is derived empirically from the effects on the bank's trading book of actual movements in market variables. In Monte Carlo simulation the frequency distribution of profits and losses in the trading book is generated by sampling values for profits and losses on positions in different instruments which have themselves been generated by statistical modelling. Both of these processes are highly time-consuming and costly in terms of computer power.

Under the internal model-building approach the inputs to the estimates of VaR for trading positions in particular instruments are the sensitivity of the value of the positions to changes in market prices or values and hypothetical maximum changes in these prices or values corresponding to the level of probability selected for the VaR. The VaR of trading positions in particular instruments are then combined into an estimate of the VaR of the trading book as a whole, after taking account of reductions in aggregate VaR due to diversification across particular positions.

Modelling and assumptions about the statistical properties of the distributions of prices or values enter at three stages in the model-building approach: (1) the estimation of the sensitivities of the values of positions to the determinants of changes in market prices or values; (2) the frequency distribution generating the hypothetical maximum changes in prices or values; and (3) the correlations between different positions used to estimate the benefits from diversification.

Estimates of VaR are not infallible guides to market risk so that, for the purpose of calculating capital levels in the 1996 Amendment, a bank's VaR is multiplied by a factor of at least three which is set by the bank's supervisor on the basis of assessment of its model. A key test of the performance of the bank's model is provided by the results of back-testing, a procedure which compares actual profits and losses with those generated by the model. For VaR corresponding to a 99-per-cent confidence level there should be only one period out of 100 for which the loss exceeds that calculated by the VaR model. Under the 1996 Amendment a failure to meet this standard leads to an increase by the bank's supervisor in the multiplicative factor used to set its capital requirement. A bank is also to have in place a stress-testing programme providing for computer-based scenario analysis of disturbances capable of having a major impact on the market risks faced by a bank. Such scenarios

could include the crash in stock markets of October 1987 and the exchange-rate crisis in the European Union in 1992-1993.

Several reservations have been expressed about the model-building approach and VaR of the Market Risk Framework. Some of these reservations are primarily technical and concern the models and the hypothetical changes in prices and values used to calculate VaR. Others concern their relation to market stability. Thus, for example, the experience of the impact on financial markets of the Russian default and the collapse of the hedge fund, LTCM, in 1998 heightened misgivings about the potential of risk management based on VaR to exacerbate markets' procyclicality.

As a senior risk manager at Goldman Sachs characterized the experience of 1998 at the time, "Consider a situation when volatilities rise and there are some trading losses. VaRs would be higher and tolerances for risk would likely be lower. For an individual firm, it would appear reasonable to reduce trading positions; however, if everybody were to act similarly it would put pressure on their common trading positions" (Dunbar, 2000: 203). The increased orders to sell into the market would coincide with a drying-up of buying orders and liquidity.

Recent revisions by the Basel Committee have been directed at some but not all of the Market Risk Framework's perceived shortcomings.

Revisions in 2005 were directed at preventing the gaming of minimum regulatory capital through the shifting of exposures between banking and trading books to reduce capital requirements, at the valuation of trading positions and the need during times of stress to establish special reserves for illiquid positions in the trading book, and at fleshing out the capital requirements for specific risk. In the preamble to these revisions text the Basel Committee acknowledged problems due to the observed assignment by banks to the trading book of an increasing number of instruments related to the management and trading of credit risk and of other structured and exotic products. These practices were the result of financial innovations whose importance had increased during the long process of drafting Basel 2. As the Basel Committee put it, "These products are generally less liquid and give rise to risks that were not entirely contemplated in the market risk framework when it was introduced" (BCBS,2005: paras. 258-263)..

The Market Risk Framework in the revised 2006 version of Basel 2 included in the internal- models approach a requirement for additional capital in the form of an incremental default charge designed to capture the impact of default risk on trading positions which was not already covered by the charge for specific market risk (BCBS, 2006: paras. 718 (xcii) and 718 (xciii)).

The revisions proposed in the 2008 documents of the Basel Committee are the result of agreement reached at a meeting in March 2008 that, reflecting experience of the credit crisis, the scope of the incremental default charge in the internal-models needed to be expanded to become an Incremental Risk Charge to capture the impact on trading positions not only of default but also of other sources of price risk.

As the Basel Committee put it, "The decision [to propose an Incremental Risk Charge] was taken in the 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 [transfers of positions in the trading book between different risk classes in banks' systems for rating credit risk], combined with widening of credit spreads [due to increased credit risks] 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 of CDOs of ABS and other resecuritisations held in the trading book...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 price movements over periods of several weeks or months" (BCBS, 2008b: paras.1-2).

The Incremental Risk Charge is intended to address these shortcomings. But the Basel Committee acknowledged that there is not yet an industry standard for addressing and thus measuring the risks covered by the Incremental Risk Charge. Thus its guidelines for setting the Charge take the form of high-level principles with considerable flexibility for banks as to how they implement them.

The documents of January 2009 on the Market Risk Framework (BCBS, 2009a and 2009b) contain the results of a consultation process which is still incomplete. The document which provides an overall review of proposed revisions of the Market Risk Framework (BCBS, 2009a) is primarily devoted to extension of the Market Risk Framework to incorporate the new rules for securitization exposures as well as to a consolidation of Basel 2's rules for the prudential valuation.

The rules for securitization exposures which are to be incorporated in the Market Risk Framework are those of the standardized approach to market risk (see section II) since consensus is still lacking in the Basel Committee as to a methodology for a model-based estimate of the risks of securitized products which should become part of the specific risk of the trading book. As in the case of the new rules for securitization exposures, for the purpose of setting regulatory capital charges these rules distinguish between securitization exposures and resecuritization exposures (i.e. those for which one or more of the assets backing structured investment products are themselves securitization exposures), attributing higher capital charges to the latter.

Under prudent valuation, the rules of Basel 2 would be extended to all positions subject to fair-value accounting. Thus these rules would apply to such positions in the banking book as well as those held for trading. The rules for prudent valuation generally follow analogous international accounting rules: marking-to-market valuation, when feasible, i.e. valuation at market prices in orderly transactions; and when market prices are not available, marking-to-model, for example, on the basis of market inputs and discounted expected cash flows. However, prudent valuation according to the rules of Basel 2 is also to include in addition to international accounting rules adjustments of valuation to allow for illiquidity "which may be in addition to any changes to the value of the position for financial reporting purposes" (para. 718 (xcxx) of the version of the Basel 2 which will incorporate post-2006 revisions).

The July 2008 consultative document on guidelines for computing the Incremental Risk Charge (BCBS, 2008b) was somewhat tentative and discursive. The sequel of January 2009 (BCBS, 2009b) clarifies and simplifies the guidelines of the earlier document. "Specifically, for all IRC-covered positions, a bank's IRC model must measure losses due to default and migration at the 99.9 percent confidence interval over a capital horizon of one year, taking into account the liquidity horizons [the times required to sell the position or to hedge all material risks covered by the IRC model in a stressed market] applicable to individual positions or sets of positions" (BCBS, 2009b: para. 13). The model for the Incremental Risk Charge is not to incorporate securitization positions since in the Basel Committee's judgement "for the purpose of quantifying default and migration event risks, the state of risk modelling in this area is not sufficiently reliable as to warrant recognising hedging or diversification benefits attributable to securitization positions" (BCBS, 2009b: para. 10).

IV. Preliminary assessment

The proposed new rules for securitization exposures and for the Incremental Risk Charge would refine the calibration of the risks covered by the Market Risk Framework and would lead to higher minimum regulatory capital requirements, and thus reduced leverage, for banks. The new charges would thus meet the commitment in the 2008 reform agenda of the Financial Stability Reform (FSF, 2008) to strengthen the treatment in Basel 2 of structured credit and securitization activities and to issue specific proposals for the raising of capital requirements for certain complex structured credit products such as CDOs of asset-backed securities.

The proposed new rules for securitization exposures, including those which contribute to specific risk in the Market Risk Framework, incorporate credit ratings as an integral part of the estimation of capital charges. Changes in the rating process and in the oversight and regulation of the credit rating agencies introduced as part of the overall agenda of financial reform will thus affect how these rules work out in practice. Similar considerations apply to the new extended rules of Basel 2 on prudent valuation since these link the valuation of exposures under Basel 2 to international accounting standards which are also likely to be affected by the agenda of financial reform.

In the absence of an industry consensus on the measurement of the risks covered by the Incremental Risk Charge, implementation of the Charge can be expected to lead to still greater variation in the minimum capital requirements accepted by regulators under Basel 2. The Charge is thus likely to further undermine one of the underlying objectives of Basel 2, namely “maintaining sufficient consistency that capital adequacy regulation will not be a source of competitive inequality among internationally active banks”. However, this objective has already been compromised by the multiplicity of options and approaches elsewhere in Basel 2 and would appear to be part of the price which has to be paid for the achievement of agreement on global capital standards.

For developing countries which introduce the Market Risk Framework the Incremental Risk Charge will represent a challenge to their supervisors additional to the others posed by the implementation of Basel 2, even though the Basel Committee does also propose in its guidelines a simpler fall back option.

Perhaps most interesting for techniques of risk management more generally is the questioning of the effectiveness of VaR which is implicit in the Basel Committee’s acknowledgement that the Incremental Risk Charge is explicitly intended to address perceived shortcomings in the VaR framework. Since the early 1990s VaR has been one of the principal jewels in the crown of quantitative financial risk management. Its downgrading in the Basel Committee’s new guidelines may point towards reassessment of ways of managing and supervising market risk.

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