Finalised guidance

Supervisory Formula Method and Significant Risk Transfer

September 2011

Supervisory Formula Method (SFM) and Significant Risk Transfer (SRT)

Introduction

We are issuing this guidance to set out our expectations for firms using the Supervisory Formula Method (SFM) to calculate risk-weighted exposure amounts (RWEA) for unrated securitisation positions.

The securitisation framework has a strict hierarchy of methods to determine the capital requirements for securitisation positions (set out in BIPRU 9.12 for firms using the Internal Rating Based (IRB) approach). Where a position is rated, the firm must determine the RWEA based on the rating of the position under the Ratings Based Approach (RBA). Where a position is unrated, IRB firms may be able to use the SFM to calculate the RWEA.

The rules relating to the SFM, however, must be read against the background of the over-arching requirement for securitisation (see BIPRU 9.3.1R). Originators must transfer a significant amount of credit risk associated with the securitised exposures to third parties to be able to apply the RWEA set out in BIPRU 9. We have significant concerns that firms' use of the SFM undermines the significant risk transfer requirement (SRT) with the reduction in RWEA due to the use of the SFM being disproportionate to the credit risk transferred.

Supervisory Formula Method (SFM)

The SFM is a formula based on the underlying asset portfolio's capital requirement calculated under the IRB Approach. The detailed requirements are set out in BIPRU 9.12.21R to 9.12.23R. The underlying formula contains an implicit assumption that there is no systematic risk in tranches of diversified portfolios that attach at a level of credit enhancement above the capital requirement on the underlying portfolio. However, the performance of senior tranches of many securitisations since 2007 has shown this assumption to be flawed. In addition, where a firm's IRB model proves, ex-post, to have under-estimated capital requirements on the underlying portfolio, the SFM leverages any undercapitalisation.

As a result, the SFM will very often fail to appropriately capture the risks in retained securitisation positions. Further, the regulatory capital charges generated by the SFM reduce very quickly and to an extremely low level for small increases in credit enhancement. The resulting RWEA are likely not to be justified by a commensurate transfer of credit risk to third parties, generally causing the SRT test to be failed (see BIPRU 9.3.9G).

Alternative to the use of SFM

The SFM currently gives, in many circumstances, much more favourable RWEA than the requirement that would apply if the same tranches were externally rated. To be satisfied under BIPRU 9.3.9G that commensurate risk transfer has been achieved, and therefore for firms to comply with the SRT test, the FSA will generally expect firms to obtain a public rating on retained tranches and apply the RBA instead of the SFM. Firms should be aware, however, that even the use of RBA might not be, in itself, a sufficient condition to meet the SRT test if, notwithstanding the higher RWEA that would apply to the retained position, there is not a significant transfer of risk for the overall transaction. Firms should ensure they have regard to the External Credit Assessment Institution (ECAI) provisions in BIPRU 9.7 and BIPRU 9.8 when obtaining public ratings on retained positions.

A firm may still be able to demonstrate SRT without a rating but we believe that this is likely to be exceptional and we expect firms to submit any proposal to do so to the FSA before claiming any capital relief.

Cost benefit analysis

Materiality

The number of firms reporting securitisation exposures in FSA004 fell from 30 to 23 from 31 December 2009 to 31 December 2010.[1] In the same period, the number of these firms reporting securitisation exposures under the SFM increased from three to six. This represents an increase from 10% to 26%. The total securitisation exposures reported in FSA004 decreased from £272bn to £211bn from 31 December 2009 to 31 December 2010.[2] In the same period, the total exposures reported in FSA046 under the SFM increased from £5.6bn to £9.7bn. This represents an increase from 2.1% to 4.6% which would increase to 7.5% if the transactions by UK banks currently under review by the FSA were permitted to use the SFM as proposed. Therefore, the potential scale of firms' use of the SFM for capital relief purposes is significant and the impact of any undercapitalisation due to the deficiencies in the supervisory formula could become systemic.

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[1] The reduction in the number of firms reporting securitisation exposures was due to mergers, acquisitions and firm failure.

[2] We attribute this decrease to firm failure, disposal of securitisation positions, transactions coming back on balance-sheet (and therefore exposures will be reported as credit risk exposures) and positions maturing.

Costs to firms

The principal direct cost for firms to obtain an external rating on a transaction where they are seeking capital relief is the rating agency fees. This will typically vary across rating agencies and would depend on the size and complexity of the transaction. However, we estimate that for a plain vanilla transaction – for example, a prime Residential Mortgage Backed Security (RMBS) – there would be a one-off cost of £120,000-£150,000 with an on-going cost of £7,000-£15,000 for surveillance fees. Assuming that there are five transactions over the period of a year that make use of SFM for determining their RWEA, the cost of our policy to the industry would be a one-off cost of £600,000-£750,000. These transactions will have an on-going cost of £35,000-£75,000 (assuming firms went ahead with the transactions and obtained a rating). This estimate is considered to be a lower bound estimate, as the number of transactions making use of SFM has been increasing.

Impact on capital

We carried out scenario analysis to compare the possible reduction in RWEA available to firms under the SFM (based on the five transactions presented to us) and that which firms may achieve if they obtained an external rating. In two of our scenarios we assumed the transactions only had two tranches: an AAA position and an unrated first loss position. In our third scenario we assumed the transaction had five tranches (AAA, AA, A, BBB and first loss position).

The table below provides an example of the percentage reduction in RWEA that firms could achieve in the absence of this guidance and under three different scenarios where positions are rated and the RWEA calculated under the RBA. This shows that in our more conservative scenario (scenario 2), the particular transactions we have reviewed would not achieve regulatory capital relief as a result of this guidance. This represents the upper bound of the potential impact of requiring a rating – firms are not obliged to hold more capital than they would have done had they retained the securitised exposures and risk weighted them under the credit risk framework.[3]

	Reduction in RWEA
Supervisory Formula Method	72%
Scenario 1: Assuming 10% first loss position and 90% AAA position	24%
Scenario 2: Assuming 15% first loss position and 85% AAA position	0%
Scenario 3: Assuming 6% first loss position; 2.5% BBB position; 3% A position; 3.5% AA position; and a 85% AAA position	48%

Based on recent public transactions, we consider that 10% to 15% levels of credit enhancement are realistic to achieve a AAA rating on high quality asset pools. However, for riskier portfolios it is likely that substantially greater credit enhancement would be needed to achieve an AAA rating. The transactions presented to us were

[3] BIPRU 9.12.8R

typically structured for most efficient use of the SFM. Consequently, we would anticipate some re-structuring of the transactions when seeking a rating.

Benefits

By better aligning firms' capital requirements against the credit risk of retained securitisation positions, the policy should make firms holding these positions more robust to losses on these exposures and ensure that firms' capital requirements are more closely aligned to the risks they are running. At a firm level, a reduction in the probability of firms failing as a result of inadequate capital held against credit risk reduces the expected costs of such events. At the aggregate level, the new regime should contribute to reducing the frequency of systemic financial crises and the expected costs of such crises.

Use of SFM in the trading book

The guidance on SFM applies to firms seeking to demonstrate SRT, and BIPRU does not explicitly apply SRT to transactions originated in the trading book. In light of this, the guidance does not apply directly to the use of SFM in the trading book. However, we will closely monitor securitisation origination in the trading book for evidence of arbitrage and any undercapitalisation of retained positions. We may use our supervisory powers (normally through an add-on in Pillar 2) to correct any undercapitalisation of positions in the trading book resulting from the absence of the requirement to achieve SRT, including in circumstances where SFM has been used.

IRB firms that invest in unrated securitisation positions in either the trading book or non-trading book will not be required to obtain external ratings on such positions. However, use of SFM by investors in either the trading book or non-trading book requires FSA approval, and we will consider the nature of positions for which use of SFM is being sought, and the potential for SFM to generate inappropriate capital requirements for such positions, as part of our approval decision-making process.

Feedback Statement

In May 2011, we consulted on proposed guidance on the use of the supervisory formula method (SFM) by originators of securitisations seeking to reduce their capital requirements via securitisation through the demonstration of significant risk transfer (SRT). The final guidance is set out on pages 1 – 4 of this document whilst the remainder of the document summarises the feedback to the consultation and sets out our responses.

We received nine responses to the consultation for which we are grateful. Although the feedback generally opposed the proposed guidance, we do not believe that any of the points raised materially undermine our concerns with the SFM and we are therefore issuing the guidance in the same terms as we consulted on. We also take this opportunity to clarify our approach to the use of SFM by originators of securitisations in the trading book and by IRB firms that are investors in unrated securitisation positions in either the trading book or non-trading book.

Summary of feedback received

Nine formal responses to the consultation were received. The responses were received from banks and hedge funds. One ECAI also publicly commented on the guidance but did not submit a formal response. All of the formal responses opposed the proposed guidance. The comments received, and our responses to them, are set out below.

One respondent requested clarification as to whether our concerns with the SFM only relate to its use in SRT transactions or whether our concerns extend to use of the SFM by investors. Several respondents asked for clarification of how the proposed guidance would apply to positions held in the trading book.

Our response

As stated in the guidance consultation, we have concerns with the SFM itself and believe it will frequently underestimate the appropriate level of capital for tranches that attach above Kirb.

Capital charges generated by the SFM reduce very quickly and very significantly as credit enhancement increases. This means that regulatory capital charges rapidly reduce to a floor charge of 0.56% from the maximum charge of 100%. The use of the SFM creates a regulatory capital ‘cliff’ where small incremental nominal exposure transfer can have a very significant impact on the risk weighting of the retained risk. Firms can back-solve how much risk they need to transfer in order to obtain a high degree of capital relief, by adjusting the attachment points of retained tranches to just above Kirb.

The SFM contains an implicit assumption that there is no systematic risk in tranches of diversified portfolios which are senior to the Kirb capital requirement. Due to this assumption, the underlying formula actually requires 0% capital for positions above Kirb, however, there is an over-ride which requires a minimum level of capital (0.56%) to be held in respect of positions attaching above Kirb. The assumption follows from the Basel II assumption of a single global risk factor driving all losses, but securitisation, and the SFM in particular, makes stronger use of the assumption than the IRB approach for the underlying assets does. Basel II IRB modelling assumes a single global factor model, and that individual contributions are small in the context of a bank’s overall pool. These assumptions imply that capital requirements are additive (that is, that the total capital of the bank is the sum of the capital

requirement of each asset, and the capital requirement for each asset is independent of the composition of the bank) and therefore greatly simplifies modelling.

However, for senior tranches of securitisations, the single factor model implies that any single sub-portfolio can only have catastrophic losses when the entire economy is in a very extreme state. Using these assumptions in a model based on the risk-weighting of the underlying assets gives zero capital requirements for senior tranches of granular portfolios.[4] Recent experience has not been consistent with this assumption.

The IRB approach assumes that only in one in every 1,000 years will losses in any diversified portfolio exceed the IRB capital level and assumes that all the systemic losses are 100% correlated. This has not transpired over recent years because some sectors have seen much higher losses than others. Therefore, the SFM is problematic even where a firm's IRB modelling for the underlying assets is adequate. However, if the IRB modelling transpires to be deficient, then the SFM can magnify the deficiencies. The flawed assumptions behind SFM can lead to risk weights which are too low for tranches attaching above Kirb, creating a leveraged undercapitalisation of retained exposures. Whilst there may be instances where a small increase in the nominal exposure value transferred could be responsible for a dramatic increase in economic risk transfer, in most circumstances this will be extremely unlikely.

The SFM also does not take into account the structural features of a transaction and the impact of such features on the risk of any given tranche and on risk transfer. For example, it does not account for non-sequential amortisation or payments under swaps or other facilities.

For the reasons set out above, our concerns are relevant to use of the SFM by both originators (seeking to demonstrate SRT) and investors. However, the guidance does not relate to IRB firms acting in the capacity of investors. But investors in securitisation positions in the non-trading book and trading book require FSA approval to use SFM, and, as part of our approval process, we will consider the nature of positions for which SFM approval is being sought and the extent to which we consider that the SFM may result in undercapitalisation of such positions. In circumstances where we do not grant approval for use of SFM, firms will be required to 1250% risk-weight the positions or deduct them from capital.

As the guidance relates to use of the SFM by firms seeking to demonstrate SRT, and given that BIPRU does not explicitly apply SRT to transactions originated in the trading book, the guidance does not apply directly to use of SFM by originators in the trading book. However, we will closely monitor securitisation origination in the trading book for evidence of arbitrage and any undercapitalisation of retained positions. We may use our supervisory powers (i.e. through a Pillar 2 add-on) to correct any undercapitalisation of positions in the trading book resulting from the absence of the requirement to achieve SRT, including in circumstances where SFM has been used.

Several respondents requested further clarification of the 'exceptional' cases in which SRT could be demonstrated without an external rating. It was argued that small value transactions, transactions with low risk underlying assets and intra-group transactions should be considered exceptional.

Our response

We cannot provide a list of 'exceptional' cases in which SRT could be demonstrated without an external rating given that the assessment of 'exceptional' must be made on a case-by-case basis. As a general principle, there may be strictly limited cases that could be considered 'exceptional', such as where it may

[4] Because the capital is the expected loss conditioned on the global factor being at its 99.9% level, which for tranches attaching above the IRB capital level is (by construction of that level) zero.

be impossible or disproportionate for a firm to get an external rating. For example, for certain asset classes, eligible ECAIs may be unable or unwilling to provide a rating on the transaction if they have limited experience or expertise in analysing such assets. Or for transactions of a very small exposure value, the costs of obtaining a rating could potentially be disproportionate to the potential capital relief available (although we note that in such cases the consequence of not obtaining capital relief will also be small).

In each case, the firm must be able to provide us with sufficient evidence of such 'exceptionality'. In the first case outlined above, this would include written confirmation that no eligible ECAIs were prepared to rate the transaction. In cases where it was not possible to obtain a rating from an eligible ECAI due to the nature of the underlying assets, the FSA's assessment of credit risk transfer will typically be conservative to reflect the complexity of assessing the risk of the assets.

In the second case above, it would be necessary for a firm to provide an analysis of the costs of obtaining a rating relative to the potential capital reduction available from the transaction. We do not expect firms to seek to exploit the boundary of what might constitute 'exceptional' cases (e.g. by deliberately structuring many small transactions rather than a single larger transaction in order to claim a rating would be disproportionately expensive relative to the size of each transaction).

The mechanics of the SFM means that there is still potential for undercapitalisation of tranches attaching above Kirb in transactions with low risk underlying portfolios. This is because Kirb should reflect the risk of the underlying portfolio. Therefore, a lower risk underlying portfolio will typically enable tranches with a lower attachment point to get a 7% risk weight under SFM (as Kirb will be lower) so our concerns regarding the implicit SFM assumption of no systematic risk in tranches attaching above Kirb would be equally relevant.

We also note that the need for a rating on retained tranches, and the restriction on capital relief for transactions where such a rating is not obtained, does not prevent firms undertaking such transactions for the purpose of risk management. Indeed, we would often expect transactions that achieved genuine risk transfer to be economically rational even in circumstances where regulatory capital relief was not available.

One respondent asked for clarification of the appropriate approach in circumstances where a firm gets a retained position rated by one ECAI, and a different ECAI also provides an unsolicited rating. It was asked what rating the firm should rely on in such circumstances.

Our response

We would expect firms to follow the criteria set out in BIPRU 9.8 when determining which rating to rely on.

Several respondents argued that there is no need to limit use of SFM to exceptional circumstances as the FSA can always challenge a firm's SRT assessment and prevent firms taking disproportionate capital relief that way.

Our response

As we have consistently stated, firms should not seek to undertake securitisation transactions that are motivated by the intention to take capital relief that is disproportionate to the amount of risk transfer to

third parties. We are therefore disappointed to have been presented with transactions which we consider to be seeking capital relief that is not justified by the amount of risk transfer.

Although the FSA has the power to challenge a firm's assessment of SRT (and require additional capital to be held via an Own Initiative Variation of Permission (OIVOP) in circumstances where we consider the capital relief being claimed to be disproportionate to the credit risk transferred to third parties), we consider that it would be a disproportionate use of our resources and inconsistent with the principles of good regulation to engage with firms on a case-by-case process of challenge where we are of the view that the structural flaws of the SFM will likely result in a failure to meet SRT. This will typically be the case where the SFM results in undercapitalisation of retained securitisation positions as the pre and post securitisation RWEA comparison will be flawed.

Several respondents stated that ratings can only be provided on credit portfolios where rating agencies have developed internal models and believe they can assess the credit risk of the whole transaction. Their view was that requiring a rating will restrict firms to only securitising portfolios that fit within the ECAIs' strict rating criteria and that the ability to obtain a rating will be subject to the ECAIs' commercial discretion. It was also argued that it may not be possible to obtain a rating on transactions where the underlying assets are unrated and that for less liquid, unrated portfolios, ratings mapping will be difficult to achieve and individual shadow ratings will be expensive and time-consuming.

Our response

We recognise that ECAIs may be unable or unwilling to rate transactions with certain underlying portfolios. If a firm is unable to get a transaction rated by any eligible ECAI, but believes that SRT is justifiable, we would expect the firm to produce sufficient evidence of why it has not been possible to obtain a rating. This could fall into one of the 'exceptional' cases we mentioned above. But we will take a conservative approach in assessing cases where an ECAI is unwilling to rate a transaction on the basis it considered the structural features of the transaction too complex, or the assets too bespoke, to evaluate its risk. In such cases, it would be reasonable to conclude that the unwillingness to rate a transaction is indicative that the risk of the transaction is high and/or difficult to assess. It may not be possible to evidence that SRT can be met in such circumstances.

Several respondents stated that ECAIs do not publish ratings on retained portfolio risk in a synthetic securitisation, but rather will only assign ratings on funded notes or swap transactions, meaning firms will need to issue credit linked notes or execute collateralised swap transactions on retained positions.

Our response

We acknowledge that firms may be required to create an instrument relating to the retained tranche of the portfolio in order to obtain a rating on the tranche. We believe this will be relatively easy for firms to achieve (e.g. it may be possible to create a back-to-back swap between group entities in order to create a rateable position).

One respondent argued that the need to obtain a rating on retained positions contradicts the general Basel IRB approach of relying on a firm's internal ratings.

Our response

We disagree with this comment. Whilst the IRB approach allows firms to use their own inputs to calculate RWEA for non-securitised exposures, the hierarchy of approaches in the CRD securitisation framework explicitly relies on the use of external ratings, rather than firms' own estimates of probability of default (PD) and loss given default (LGD), for calculating RWEA for rated securitisation positions. This is because the Basel framework and CRD recognise the complexity of assessing the risk of securitisation positions and consequently restrict firms' flexibility to internally model such positions. Only in the strictly limited circumstances where a securitisation position is not rated do the Basel framework and CRD contemplate allowing firms to rely on their internal modelling for calculating regulatory capital.

Also, we understand that it was the intention of the Basel Committee on Banking Supervision (BCBS) that SFM should only be used as a fallback option in circumstances where it was not possible to get a position externally rated.

One respondent argued that the consultation underestimates the cost of obtaining a rating. They gave a view that the cost of a rating is approximately £500,000 per tranche rather than the £120,000-£150,000 estimate provided in the guidance consultation. One respondent also argued that the guidance consultation CBA underestimates costs arising from the preparation of additional documentation and the potential distortion in the market for rating fees if a rating is made mandatory.

Our response

We acknowledge that rating costs will be higher for certain transactions than for others. We also accept that there may be additional costs involved in preparing information in a format required by the relevant ECAI(s). But we would expect firms to already have most of the information required, for example, from investor presentations or for the purpose of gaining internal sign-off for the transaction by internal credit committees. So whilst formatting the documentation may result in additional costs, we would not expect significant amounts of additional data to be required.

Whilst we acknowledge that the regulatory requirement to obtain a rating could alter the negotiating position of the ECAIs when determining rating fees on such transactions, we would not expect the impact to be significant. The vast majority of securitisation transactions are already rated as investors typically have a preference for rated positions. In addition, within the constraints set out in BIPRU 9.8, firms have some flexibility in terms of the ECAI they use to obtain a rating.

Several respondents expressed a view that the proposal runs contrary to the general move away from a reliance on external ratings.

Our response

We accept that the guidance does increase the use of ratings within the securitisation framework. We also recognise that there have been inadequacies in ECAI structured finance ratings in the past and that there is potential for ECAIs to make errors in their assessment of the credit risk of structured finance transactions in the future. However, the SRT test requires a comparison of the economic risk transfer with the reduction in RWEA achieved by the transaction, as calculated under BIPRU 9. Therefore, the rating is not the only input into the SRT assessment and firms are required to do their own due diligence and credit analysis on the transaction. We therefore do not consider that the guidance introduces mechanistic reliance on ratings (which was a concern of the Financial Stability Board). In this sense, we

believe the guidance is consistent with Article 122a of the CRD as it allows reliance on ratings as an input into a firm's overall credit analysis.

One respondent was of the view that increased regulatory use of ECAIs will increase the pro-cyclicality of bank capital requirements. It was also suggested that the regulatory use of ECAI estimates can lead to significant capital volatility due to rating agency methodology changes rather than portfolio credit migration.

Our response

We accept that the RBA is itself subject to what could be described as capital 'cliff' effects. However, firstly, this is a function of the mapping of ECAI ratings to a fixed number of credit quality steps and their associated risk weights. Secondly, we consider that the cliff effect may well be far more severe under the SFM than the RBA, particularly in respect of transactions with large senior tranches that attach just above Kirb (which has been the case in many transactions we have been presented with). This is because, under the SFM, the RWEA for the senior tranche can quickly increase from 7% to 1,250% for only a small decrease in credit enhancement (given that, subject to limited smoothing immediately around Kirb, tranches attaching below Kirb attract a 1,250% risk weight under the SFM and those attaching above Kirb attract a 7% risk weight).

Whilst a downgrade of only one notch can result in a cliff effect under the RBA for positions lower down the rating scale, the cliff is far less pronounced for positions originally rated A or above (i.e. most senior tranches) and an 11 notch downgrade would be required under the RBA for a position to migrate from a 7% risk weight to a 1,250% risk weight.

We accept that changes in ECAI methodology can result in capital volatility in the absence of a portfolio credit quality deterioration. But we continue to be of the view that this impact is less pernicious than that of the flaws in the SFM.

One respondent expressed a view that the most appropriate way of addressing any concerns with the SFM would be to amend the formula itself.

Our response

We are actively involved in the BCBS Ratings and Securitisation Group, which looks at a wide range of issues relating to securitisation. We are not able to comment on the specific areas of focus of the workstream, however, we can say that we have raised our concerns with the SFM. If any changes were to be determined at the BCBS level this could take some time to be incorporated into UK regulation. In the interim period, we do not consider it would be appropriate to allow firms to potentially undercapitalise their securitisation risks via use of the SFM.

One respondent argued that ECAIs currently apply a level of conservatism in models, as well as haircuts on ratings mapping and LGD, but that this has not always been the case. It was argued that ECAI methodologies are subject to change and can result in changes to ratings in circumstances where the credit quality of the underlying exposures has not changed.

Our response

We recognise that ECAI methodologies are potentially subject to change and that such changes may impact the rating of securitisation positions with a consequent impact on the assessment of risk transfer. To the extent ECAI methodological changes are driven by revised observed historical market data (e.g.

an increase in observed LGDs), we believe the changes may well be appropriate and we do not believe this is a reason to change the guidance.

Several respondents disagreed with the view that the historic performance of securitisation transactions indicates any issues with a model based on a single systematic risk factor. It was argued that the transactions that performed badly during the crisis were of a different nature to typical SRT deals and that European real economy assets performed very well during the crisis.

Our response

The single systematic risk factor assumption implies that all non-idiosyncratic losses are driven by a single factor. The high level of losses in certain significant asset classes shows that the assumption is false and that the current risk-weights, based on that assumption, are insufficient. The difference in performance of European and US assets is further evidence that the single factor assumption does not hold in practice.

Several respondents proposed alternative approaches to addressing concerns with the SFM. These included the following:

- Use of the internal assessment approach (IAA) to demonstrate the level of credit enhancement needed to get an equivalent level of capital relief using a ECAI rating methodology.
- Stress the granularity parameter (N) in SFM to address concerns that SFM overstates diversification benefit in the underlying pool.
- Use of a stressed Kirb, taking into account historic losses, as an SFM input.
- Apply a dynamic floor on the risk weight produced by SFM.
- Apply deduction from capital for a retained position.
- Impose regulatory capital haircuts.

Our response

The CRD explicitly limits use of the IAA to calculating RWEA for unrated positions in asset-backed commercial paper (ABCP) programmes. To extend its use to non-ABCP positions would be inconsistent with the Basel framework and the CRD. Also, given that the intention of the IAA is for firms to replicate the methodology of an eligible ECAI, use of the IAA would not remove the concern raised by some respondents that ECAI methodologies may be difficult to apply to securitisations with predominantly unrated, illiquid underlying exposures.

Stressing the granularity parameter (N) in the SFM, should, all other things being equal, increase the capital requirement generated by the SFM to reflect lower diversification benefit within the underlying pool of exposures. However, only adjusting this SFM input, and leaving other inputs unchanged, would not address other concerns with the SFM (for example, it would not address the SFM's inability to account for structural features in a securitisation).

Use of a stressed Kirb based on historic losses would reduce the potential for Kirb to underestimate the risk in the underlying portfolio and the leveraging of any such underestimation under the SFM. However, as with stressing the granularity parameter, it would fail to address other concerns with SFM.

Setting a higher floor on the risk weights generated by SFM would have the impact of requiring an originator to hold a higher amount of regulatory capital against any position that was currently subject to a 7% risk weight under SFM. However, this would not materially address the concern that the SFM allows small increases in credit enhancement to reduce the risk weight applying to a position by a very significant amount. Even if the capital floor for positions attaching above Kirb was increased substantially in proportionate terms (e.g. by three times from 7% to 21%), it would still be possible for a marginal increase to a position's credit enhancement (so that the position attached just above rather than below Kirb) to reduce the risk weight applying to the position from 1,250% to 21%. It would therefore be necessary to calibrate the floor to a very high level in order to smooth the regulatory capital cliff for marginal nominal changes in risk transfer around Kirb.

Regarding the proposal to deduct retained positions from capital resources, we note that under BIPRU 9.4.1R(2) for traditional securitisations, and BIPRU 9.5.1R(1)(b) for synthetic securitisations, a firm is permitted to exclude securitised exposures from its calculation of risk weighted exposure amounts and expected loss if the originator applies a 1,250% risk weight to all retained securitisation positions or deducts such positions from capital resources.