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Basel Committee for Banking Supervision
c/o Bank for International Settlements
CH-4002
Basel, Switzerland

Submitted via email: baselcommittee@bis.org

GFMA response to the Consultative Document on Revisions to the Basel Securitisation Framework

The Global Financial Markets Association (GFMA)¹ welcomes the opportunity to comment on the proposals (Proposals) set out in the consultative document "Revisions to the Basel Securitisation Framework" published by the Basel Committee on Banking Supervision (BCBS or Committee) on 18 December 2012 (Consultative Document or CD) and explained in part in the technical papers entitled "Working Paper No. 22 – Foundations of the Proposed Modified Supervisory Formula Approach" (WP22) and "Working Paper No 23 – The Proposed Revised Ratings-Based Approach" (WP23) published by the Committee in late January 2013.

We look forward to discussing our response with Committee representatives at their scheduled meeting with industry representatives in April. We would be pleased to discuss any of these comments in further detail, or to provide any other assistance or data that would help facilitate your review and analysis.

This letter has the following sections:

- The context, and initial remarks
- Main themes
- Summary of recommendations
- General comments – including matters not covered by specific questions
- Responses to specific questions

¹ The Global Financial Markets Association brings together three of the world's leading financial trade associations to address the increasingly important global regulatory agenda and to promote coordinated advocacy efforts. The Association for Financial Markets in Europe (AFME) in London and Brussels, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong and the Securities Industry and Financial Markets Association (SIFMA) in New York and Washington are, respectively, the European, Asian and North American members of GFMA. For more information, please visit <http://www.gfma.org>.

- Conclusion
- Annexes – supporting data and further detail on certain topics

The context, and initial remarks

The starting assumptions of the Consultative Document are too narrowly drawn

We are troubled by the starting assumptions of the Consultative Document. On page 1 it states "The performance of, and central role played by, securitisation exposures during the recent financial crisis was a key motivation for revisiting this area of the capital framework".

Page 2 of the CD refers to "other shortcomings of the securitisation framework", and Section I (beginning on page 4) contains the following statements:

- "external credit ratings did not adequately reflect the risk of certain structured finance asset classes, such as mortgage backed securities ...";
- "Rating agency assumptions about expected losses ... often proved to be too optimistic";
- "Capital requirements assigned to highly-rated ... exposures, which could be as low as 56 basis points, were too low"; and
- "Another important factor ... was the significant deterioration in the credit quality of the underlying assets, which is not adequately captured in the existing RBA."

While we accept that these statements are true for some market sectors, they are not true for most others and therefore do not represent the whole truth. For example, for most asset classes globally, 56 basis points of regulatory capital has been more than sufficient to cover losses.

We believe that the Proposals focus too narrowly on the credit losses, price declines and decreases in liquidity associated with sub-prime residential mortgage-backed securities (RMBS) during the financial crisis in 2008. While this is perhaps understandable, and these events were clearly material with systemic implications, they are not representative of the performance of securitisations globally, are unlikely to recur (in light of new legislation, regulation and market-led initiatives taken since) and do not mean that high quality securitisation in general is not a sound financing technique. The Proposals should therefore take into account the broader picture.

Outside certain well-known and defined sectors, securitisations have performed well since the financial crisis

Some statements about securitisation in the Proposals – characterisation of performance, downgrades and mark-to-market losses for banking book positions – are inconsistent with historical results. The credit and, over certain periods, price performance of securitisations globally since the financial crisis has, apart from certain well-known and defined sectors, been very good.

For example, only 0.07% of European RMBS outstanding before the crisis started in 2007 have defaulted (this includes all tranches, including those below AAA). During the period of market turbulence in 2011, the market price performance of European RMBS was superior to most EU sovereign debt, senior bank debt and many covered bonds (except for Pfandbrief). See Annex 1 and pages 21-23 of AFME's November 2012 report entitled "The Economic Benefits of High Quality Securitisation to the EU Economy" (the "**AFME Report**").²

In the United States, aside from sub-prime mortgage-related securitization vehicles, the performance of the major asset classes of consumer securitizations has been exemplary. For example, the cumulative impairment rates from 1993-2011 for auto loan, credit card, and student loan ABS were 0%, 0.1%, and 0.7%, respectively.³ These three asset classes have represented 81% of issuance of ABS in the United States since 2008.⁴

The existing regulatory and industry response

It is important to note that securitisation is no more than a form of finance and that, to the extent it was misused, this was due to bad behaviour rather than the product itself. We believe the Proposals should take into account other policy initiatives which address such bad behaviour and seek to preventing its recurrence.

Many of the regulatory responses to the financial crisis, and to the perceived problems in the securitization market, have sensibly focused on changing behaviours and incentives. New measures adopted since the crisis include the following:

- to improve the alignment of interests between originators or sponsors and investors, rules requiring risk retention by originators or sponsors of securitisation transactions, in the European Union (EU) and other European Economic Area countries under Article 122a of the Capital Requirements Directive (CRD), which requires credit institutions to verify such risk retention as a condition to their investing in or undertaking exposure to securitisations, and under other Directives introducing similar conditions for other regulated investors, and in the US under the Dodd-Frank Act (DFA) by directly requiring the originators and sponsors to retain material risk positions;
- to ensure the quality of the assets originated, rules requiring safeguards in the origination terms of such assets, the best known being the new qualified mortgage (QM) and qualified residential mortgage (QRM) rules in the US, with their intense focus on retail mortgage origination quality;
- investor due diligence requirements, in Europe under CRD Article 122a and corresponding provisions for other regulated investors, and in the US provided for in both the DFA and proposed amendments to the federal securities disclosure laws;

² A copy of the AFME Report is available at <http://www.afme.eu/Documents/Statistics-and-reports.aspx> under the sub-heading "Securitisation".

³ Moody's, Special Report: Default & Loss Rates of Structured Finance Securities: 1993-2011 (16 Nov. 2012).

⁴ Issuance data is from the SIFMA website at <http://www.sifma.org/uploadedFiles/Research/Statistics/StatisticsFiles/SF-US-ABS-SIFMA.xls>.

- new disclosure rules to make securitization more transparent, in Europe under CRD Article 122a, the latest amendments (CRA3) to the EU Credit Rating Agency Regulation (CRA Regulation) and European Central Bank (ECB) and Bank of England collateral eligibility criteria, and in the US principally by means of proposed Regulation AB II, especially focusing on loan level disclosure (in the case of RMBS and other types of assets) and improved disclosure even in private offerings as well as in public offerings;
- new rules requiring either standardization of representations and warranties or increased reporting and improved enforcement mechanisms for them, in the US pursuant to DFA and related regulations;
- new rules prohibiting certain types of conflicts of interest, again in the US mandated by DFA and to be implemented by the Securities and Exchange Commission (SEC);
- elaborate new rules regulating derivatives transactions in the US pursuant to DFA and to be implemented by the Commodity Futures Trading Commission (CFTC) and the SEC; and
- new laws or proposals to regulate the credit rating agencies (CRAs), in Europe pursuant to the CRA Regulation and in the US pursuant to DFA and to be implemented by the SEC.

This is just a partial list of some of the more important reforms. Together the new legislation and regulations contain thousands of pages of provisions designed to curb any conceivable behaviour that led to the problems in the securitisation market as part of the financial crisis.

In relation to capital requirements, among other developments, the Committee in July 2009 adopted new and important reforms to the capital treatment of securitisations, which were implemented as of 31 December 2010.⁵

A BIS working paper from 2011, entitled "Securitisation is not that evil after all", recognises the benefit of originator risk retention (which is now addressed by both US (pending) and EU regulation).⁶ The paper concludes that "the securitisation of prime mortgages is a soundly functioning market and should not be excessively penalised".⁷

Regrettably, many aspects of this large wave of new legislation and regulation broadly target securitisation as a product rather than targeting specific behaviours. The Proposals should not fall into the same trap and stigmatise securitisation as a financing technique. We remind the Committee that the International Organisation of Securities Commissions (IOSCO) recently observed that "it will be beneficial if the impact of the recent legislative and regulatory changes in securitisation (almost all of which have been in effect for less than two

⁵ BCBS, Enhancements to the Basel II framework (BCBS 157, July 2009) ("**BCBS 157**"); BCBS, Enhancements to the market risk framework (BCBS 158, July 2009) ("**BCBS 158**").

⁶ Bank for International Settlements (BIS) Monetary and Economic Dept., Working Paper No. 341, "Securitisation is not that evil after all" (Mar. 2011), pages 18-19.

⁷ Id. page 33.

years) are given time to have their impact assessed before any further (and potentially duplicative) additional regulations are introduced".⁸

The structured finance industry has also itself developed initiatives to enhance and verify the integrity and quality of securitisation products, and to ensure that securitisations demonstrate sound attributes. Such market-led initiatives include the Prime Collateralised Securities (PCS) initiative which has been launched in Europe and which has been acknowledged with support by IOSCO, the ECB and other important policymakers.⁹ PCS seeks to enhance and promote quality, transparency, simplicity and standardisation throughout the asset-backed market.

"Re-establishing securitisation on a sound basis remains a priority in order to support provision of credit to the real economy and improve banks' access to funding in many jurisdictions." – FSB, November 2010¹⁰

"Securitisation, when functioning properly, is a valuable financing technique contributing to economic growth and an efficient means of diversifying risk" – IOSCO, November 2012¹¹

Negative characterisations of securitisation, along with excessive capital requirements and other regulatory constraints, are inconsistent with recent statements and actions by other regulators and policy-makers (see the statements quoted in Annex 2) and discourage finance needed for economic growth. The proposed large increase in risk weights for high-quality senior positions would be likely to materially increase costs for working capital financing of the real economy. See Annex 3 and the AFME Report.

Overly conservative capital charges will either deter investors from participating in the market altogether, or create incentives for them to buy higher risk assets in order for them to meet their target returns on capital.

We strongly encourage the Committee to ensure that its policy framework does not restrict the continued revival of the securitisation markets, particularly in light of current economic conditions and as the global banking system continues to undergo major deleveraging.

We refer the Committee once again to Annex 3 and to the AFME Report.

The need for a balanced, prudently calibrated and holistic policy response

We believe that to seek to address the causes of the crisis solely through the tool of the Proposals is too narrow a focus, and is not the correct approach.

The proposed new regulatory capital framework should not seek to scapegoat securitisation. Rather, it should acknowledge the evidence of strong credit and price performance where

⁸ IOSCO, Global Developments in Securitisation Regulation (Final Report Nov. 2012) ("IOSCO Nov. 2012"), page 50.

⁹ Further information is available via the PCS website at <http://www.pcsmarket.org>.

¹⁰ Financial Stability Board (FSB), Progress since the Washington Summit in the Implementation of the G20 Recommendations for Strengthening Financial Stability, Report of the Financial Stability Board to G20 Leaders (Nov. 2010), page 30, available at http://www.financialstabilityboard.org/publications/r_101111b.pdf.

¹¹ IOSCO Nov. 2012, page 8.

they prevail, and should be calibrated in the context of the broader policy framework. There is a real danger that if the Proposals are calibrated too harshly, they will severely damage the viability of securitisation as a financing option.

The framework should also be designed to ensure a level playing field, both geographically and between different products (for example, covered bonds). Unfortunately, as we describe in more detail below, many aspects of the Proposals fail to achieve this, and indeed make matters worse.

Securitisation prudently deployed and sensibly regulated, as we believe in today's market it already is, has a key role to play in the overall funding of global banks' balance sheets, and should be encouraged.

Main themes

We recognise and support the Committee's goals in framing the Proposals to make securitisation capital requirements more prudent and risk-sensitive, mitigate mechanistic reliance on external credit ratings, and reduce cliff effects. However we are concerned that in a number of ways the Proposals fall short or fail to achieve these goals:

- The Proposals would result in much higher capital requirements for most securitisation positions including high quality senior tranches (though it would reduce capital requirements for some lower quality securitisation positions). While higher capital requirements may be superficially more prudent in the sense of being more conservative, we believe they would be imprudent in substantially increasing banks' capital needs for funding of relatively safe investments, skewing incentives away from securitisation, and restricting an important source of financing for financial institutions, businesses and consumers.
- The Proposals do not increase risk sensitivity, but decrease it, by increasing the risk weight floor and increasing risk weights overall so that risk weights vary according to credit risk only in a fairly narrow band between the risk weight floor and the overall capital charge cap. This effect is shown in Annex 4.1.b.
- Though the Proposals lessen the role of CRA ratings in comparison to the existing framework, they include the revised ratings-based approach (RRBA) which, like the Basel II ratings-based approach (RBA), uses CRA ratings to determine risk weights. We agree with that outcome, given that an RBA remains the most practical option for many banks outside the United States, and, in particular, the modified supervisory formula approach (MSFA), as proposed, would be difficult to apply, especially for banks acting as investors rather than originators. However, we believe the Committee's calibration of the RRBA is excessively conservative and would severely limit the usefulness of this option.
- The Proposals would reduce certain cliff effects, again, within a narrow band between the capital risk weight floor and the pool capital requirement cap. On the other hand, they would retain cliff effects, notably under the RRBA in the case of securitisation positions rated below CCC- and, in Alternative B, would create a dramatic cliff effect between senior high-quality (SHQ) exposures and other securitisation exposures.

In addition to these points, there are several other aspects of the Proposals that our members find troubling:

- Though the related qualitative impact study (QIS) has not been completed, preliminary results of our members' testing of the proposed approaches over a range of asset types and jurisdictions have showed large divergence and inconsistency between the results of different approaches applied to the same securitisation exposures. See Annex 4.1.a. This makes us question whether, despite the Committee's efforts, the Proposals would create a coherent and sensible framework for securitisation capital requirements. Our findings raise concerns that the proposed framework would likely give rise to surprising and unintended consequences, possibly creating adverse incentives and opportunities for regulatory arbitrage. At the very least, these anomalies highlight the need for further detailed study and commentary before any revised framework is adopted.
- Our test results have also shown that the overall capital required for different institutions holding securitisation positions in a single securitisation can be several times the capital required for the underlying exposures if they were held by any institution directly. See Annex 4.1.b and Annex 4.2. This anomaly exists across the frameworks, across underlying asset classes, and is evident across a wide variety of capital structures. These dramatic differences between securitised and unsecuritised loan capital charges could render large parts of the securitisation market non-viable. This could have negative "knock-on" effects to the real economy, as banks would have difficulty accessing funding and managing credit, refinancing, liquidity, prepayment and other risks on small-to-medium enterprise loans, consumer loans and mortgages. It could also distort financial markets by steering investment toward other types of financial assets with similar or less favourable risk profiles but lower capital requirements. Though we understand that the Committee has never embraced "conservation of capital" as a principle in the securitisation framework, we believe that the framework should better align securitisation capital charges with those of the underlying loans and better reflect the risks of the exposures.

As an illustration of the degree to which resulting capital charges would be overly conservative, Annex 4.3 shows results of calculations, in relation to a cash flow collateralised loan obligation (CLO) transaction with US leveraged loans as underlying assets and in relation to RMBS transactions from several jurisdictions, of the cumulative default rate that would be necessary to cause a loss on the senior tranche equivalent to the capital charge under the proposed methods. We found that economic stress scenarios implied by the proposed required capital levels are beyond the systemic risk scenarios from the Basel framework.

- The inclusion in the MSFA (which is used as a basis for calibration of the RRBA and the simplified supervisory formula approach (SSFA)) of a tranche maturity effect to take into account mark-to-market losses from potential future credit deterioration of the underlying pool represents a fundamental change that should not be implemented without further analysis and consideration of its potential effects. While we understand that the maturity adjustment for the underlying corporate IRB approach has been calibrated following similar techniques, the mark-to-market valuation of tranches is significantly more complex and the adequacy of simplified valuation models cannot be justified or benchmarked empirically. Furthermore, as applied to

retail securitisations, the MSFA adds inconsistency with the retail IRB and leads to greater differences in capital required pre- and post-securitisation.

We propose in this letter a number of changes and clarifications to the Proposals which we believe would better align the revised securitisation framework with its stated goals. These revolve around: (a) a modified version of Alternative A that would offer more viable and practical methods for calculating capital requirements for different kinds of transactions and asset classes; (b) certain modifications to the formulation, calibration and operational requirements of the various approaches to make them less punitive, more practical, more consistent in results and better aligned to the capital requirements of the underlying assets, while not adding undue complexity; and (c) adjustment or clarification of certain concepts (notably maturity and resecuritisation) to avoid unintended consequences and address the treatment of certain legacy and other transactions and structures. We submit that these recommendations, if adopted, would result in a revised framework that would be just as if not more prudent, more risk-sensitive, no more reliant on credit ratings, and less distorted by cliff effects and adverse incentives.

Summary of recommendations

Set out below are recommendations which are further discussed in our general comments and our responses to the questions set out in the Consultative Document:

- Given the complexity and importance of the Proposals, both regulators and market participants need more time to analyse and consider their operation and potential effects. The Consultative Document was released in mid-December, the technical papers, which are essential to an understanding of the proposed approaches, were not published until the end of January, and the QIS was not commenced until early February; thus our members have had only about six weeks to analyse and comment on the Proposals. During this whole period, our members have also been working on a number of other consultations and proposals at the international, EU and national levels (including consultations, proposals or other developments in other aspects of the Basel prudential framework, the EU Capital Requirements Regulation, shadow banking and derivatives regulation). The Proposals present two very different alternative hierarchies and leave out important details, such as operational conditions for the MSFA. Even with the benefit of the technical papers and explanations the Committee staff have provided, we feel that the Proposals are not clear and specific enough for us to provide complete comments. We urge the Committee not to adopt a final revised framework without first publishing a more refined proposal and allowing ample time for consultation.
- Reduce the multiple layering of repeated conservative adjustments for model risk. In principle, any capital charge for model risk should be added to the results of the model output, so that the effects on calibration and approximations of the model are kept to a minimum. The existing 1.06 scaling factor in the IRB addresses model risk and should be taken into account.
- Formulation and calibration of the approaches should be adjusted such that the sum of capital requirements of the different tranches in a securitisation transaction is brought more in line with the pre-securitisation capital requirement. In addition, the Committee should look at ways to create more convergence between the components

of different approaches in order to permit more correspondence in the risk weights they produce.

- We propose a hierarchy of approaches based primarily on Alternative A, allowing each jurisdiction to choose whether or not to allow use of the RRBA. In jurisdictions that allowed the RRBA, individual banks could choose (as in the Committee's proposed Alternative B) whether to use the RRBA or the SSFA. In all jurisdictions, at the first level of the hierarchy, banks with appropriate supervisory approval could choose to use either the MSFA or a revised and expanded version of the internal assessment approach (IAA), in each case where that approach's operational requirements were met. This proposal is made on the basis that there must and will be convergence in the procedural and practical implementation of the MSFA and the IAA, as discussed below in our response to Question 4.
- The Committee should also consider the Basel II arbitrage-free approach described in our response to Question 4.
- The IAA should be made available more broadly regardless of the type of funding or structure used and not just for exposures to asset-backed commercial paper (ABCP) conduits.
- The MSFA's operational requirements should be clarified and modified as necessary to allow for this approach to be used more widely by banks as investors as well as originators.
- In the MSFA, the Committee should remove or substantially limit the maturity adjustment or else remove the requirement to cover expected loss after a one-year horizon. It should also revise the model to take account of excess spread and should adjust the calibration.
- The SSFA should be modified to make K_{SA} more sensitive to the credit quality of underlying assets and to take account of excess spread, and its operational requirements (e.g., data standards) should be made flexible enough so generally all banks could use it for all kinds of securitisation exposures.
- The floor risk weight should be reduced to 10%, which is not too low for relatively senior, high quality securitisation positions.
- The RRBA requirement of two qualifying CRA ratings, if adopted, should not apply to existing exposures.
- Tranche contractual maturity is not an appropriate measure for risk weighting securitisation positions. As proposed, its use would result in almost every ABS being treated as having a five-year maturity, which is not consistent with reality. If tranche maturity is used, it should equal the weighted average maturity rather than the legal final maturity (if any) of the securitisation position, so that it would better reflect the expected duration of the risk exposure.
- MSFA and (if adopted) CR_{KIRB} approaches should not require banks to calculate K_{IRB} for each and every securitised exposure, but should allow banks to use proxy data in a conservative way. Portfolio-level calculation of MSFA would consistently produce

more conservative results than calculations using full data for every exposure, and should be permitted in accordance with criteria designed to ensure consistency of results.

- The backstop concentration ratio approach (BCRA) should not include F=2; it is already more than sufficiently conservative by ignoring the credit enhancing effect of more junior tranches.
- Refine the definition of a resecuritisation transaction. The definition is extremely broad, and captures many uncontroversial and simple transactions. If these transactions are forced to utilise the new BCRA, this will generate capital requirements for many hundreds of billions of dollars of assets that are not aligned with risk. As the BCRA is highly conservative, it will result in a material distortion within the banking system. We therefore wish to:
 - Clarify that the definition of resecuritisation refers to credit risk tranching of a pool of underlying exposures (not just one exposure) where at least one such exposure is a securitisation exposure (as indicated in Basel II.5). This would ensure that the simple retransching or re-enhancement of a securitisation position will not create a resecuritisation (provided that the underlying securitisation position is itself not a resecuritisation exposure).
 - Similarly, where retranschings of a number of single securitisation positions are combined in a single security that effectively passes through the cash flows from the underlying retransched positions, without any correlation effect, that security should also not be considered a resecuritisation exposure. This element could be implemented as a grandfathering provision for existing transactions.
 - Ensure that existing senior tranches of transactions with an incidental holding of securitisations (defined as 5% or less of their original portfolio balance when fully invested), would not be considered resecuritisations, provided that (i) any securitisation holdings are assigned zero value when calculating the capital requirement for the transaction under the MSFA or SSFA, and (ii) transactions assessed under the RRBA must benefit from minimum credit enhancement of at least twice the amount of the securitisations in the collateral portfolio (assuming 100% loss-given-default (LGD)).
 - Confirm that ABCP benefiting from 100% liquidity support from a bank is not considered a resecuritisation, and that the existence of programme-wide credit enhancement, provided by a bank that also provides 100% liquidity support, does not (in and of itself) make the programme a resecuritisation for the sponsor bank or for ABCP investors.
- Banks should be allowed to use other approaches, and not only the BCRA, to determine risk weights for resecuritisation exposures.
- Modify concentration ratio approach for resecuritisation to base the risk weight of senior tranches on the average risk weights of the corresponding amount of higher quality assets in the underlying pool. For example, the risk weight of an \$80 senior resecuritisation tranche would be the weighted average risk weight of the best \$80 of assets in the underlying portfolio.

- Confirm and clarify the principle that the capital charge for any securitisation position held by any bank, whether as sponsor, originator, investor or otherwise and whether it uses the standardised approach (SA) or the internal ratings-based approach¹² (IRB) to calculate capital requirements on the underlying assets, will not exceed the capital charge that the bank would have had if it held all the underlying securitised exposures directly.
- Apply the capital cap principle on a proportional basis: when a bank holds a portion of one or more tranches of a securitisation, its capital requirement should be limited to a corresponding portion of the capital requirement for the underlying exposures.
- Further, a position's capital requirement should never exceed its exposure value.
- Confirm that the senior risk weight cap (based on the weighted average risk weights of underlying exposures) can be applied by IRB banks based on underlying risk weights calculated under the SA or the IRB, as applicable. The cap should apply to senior positions defined as those with a detachment point equal to 100%.
- Just as the Consultative Document does not address implications of the Proposals for securitisations in the trading book, our comments in this letter relate to treatment of securitisations in the banking book and do not address trading book issues. The Committee should issue a further proposal for consultation on the relationship between the proposed securitisation framework reforms and the outcome of the Committee's fundamental review of the trading book¹³ (FRTB), including the extent and manner in which risk weights or capital requirements generated under the revised securitisation framework will be used in calculating trading book requirements following FRTB, and in particular the application to short positions.
- Even after further consultation on specific proposed rules, the final rules should provide for grandfathering of certain existing exposures and/or delayed implementation in order to avoid hampering economic recovery. In particular, (a) the RRBA requirement of two CRA ratings, if adopted, should not apply to existing transactions, (b) existing transactions with only incidental exposures to securitisation transactions should not be treated as resecuritisation exposures, and (c) completed restructurings of existing transactions where a number of single securitisation positions are combined in a single security that effectively passes through the cash flows from the underlying restructured positions, without any correlation benefits, also should not be considered resecuritisation exposures.

General comments

We set out here comments that apply to the Proposals generally or that apply to particular topics not covered in our responses to specific questions set out further below.

Publish refined proposal for full consultation before final rules

Since the financial crisis, governments and regulators have enacted significant regulatory reforms affecting securitisation to ensure the stability of financial markets, and we

¹² Referred to in United States proposed rules as advanced approach.

¹³ BCBS, Consultative document, Fundamental review of the trading book (BCBS 219, May 2012).

respectfully submit that there has not been adequate time to consider and observe the impact of the previous securitisation reforms before embarking on a new round of changes.

The Consultative Document sets out two very different alternative hierarchies, each including fundamental and far-reaching changes to existing ratings-based and model-based methods for determining risk weights, and introducing new or largely new approaches.¹⁴ As a result, the Proposals are very complex, and lack crucial details (such as on practical application of the MSFA), while their potential effects are important and far-reaching. The proposed changes would have important effects not only on the structured finance markets but on financial markets more generally and on wider economic activity.

In addition, the consultation period for the Proposals has been short, and it is unlikely that industry participants and regulators will have been able properly to identify and analyse all of the potential issues raised by the new proposed framework.

Therefore, we request that the Committee confirm that it will not issue final rules based on the Proposals until, after considering the results of this consultation and the corresponding QIS, it has issued a revised proposal taking into account those results and allowed ample time for analysis and comment.

In addition, we believe it is critical for the Committee to publish the results of the QIS on an anonymised basis to enhance transparency of the Committee's process in calibrating the revised requirements.

Maturity and market risk adjustments

Our members strongly disagree with the incorporation of maturity and market risk adjustment in the MSFA and its being carried over in the RRBA and in the SSFA calibration. This is a principal driver of excessive capital requirements under the Proposals, and has been proposed without empirical justification.

Under the Proposals, maturity is captured twice, once in the K_{IRB} calculation and again in the new tranche level maturity adjustment. For retail exposures, maturity effects have already been captured in K_{IRB} as an implicit driver in the asset correlations.¹⁵ For wholesale exposures, the K_{IRB} calculation has an explicit maturity adjustment. The Committee states that the double counting of the maturity effect for retail exposures is small,¹⁶ but Annex 4.4 shows that the double counting is significant. Furthermore, the Committee does not seem to have considered wholesale or SME securitisations, for which the K_{IRB} calculation already includes an explicit maturity adjustment. Annex 4.4 also shows the effect of the double-counting on risk weights for wholesale securitisations

We strongly encourage the Committee either to remove the maturity adjustment or else to redesign and recalibrate it to remove the double-counting effect. Our analysis in Annex 4.4

¹⁴ The SSFA had been proposed in the US but not elsewhere. The concentration ratio approaches are based on somewhat similar approaches used since the 2009 market risk framework reforms (BCBS 158 para. 18, adding Basel II para. 712(vi)(c)) and (as applied to unrated most-senior tranches, and to other unrated exposures under a variation in effect in the EU) in the banking book standardised approach (Basel II paras. 572-73; Directive 2006/48/EC, Annex IX, Part 4, point 10), but in the banking book had relatively narrow application.

¹⁵ CD page 37; BCBS, An Explanatory Note on the Basel II IRB Risk Weight Functions (Jul. 2005), page 15.

¹⁶ CD page 37.

shows that the Committee can achieve the stated goals of enhancing the capital framework and removing cliff effects without the maturity adjustment. Furthermore, given the already conservative calibration of the MSFA and the 1.06 scaling factor, we think any amount of double-counting of risks is overly conservative and distorts the risk sensitivity of the framework.

Our analysis (explained further in Annex 4.5) shows that, apart from the risk weight floor and the conservatism "baked into" the MSFA formulation through various prudential add-ons, the maturity adjustment is the single largest factor in increasing capital requirements calculated under the MSFA in comparison to the capital requirements that would apply to the underlying assets before securitisation. The degree of capitalisation increases substantially as maturity moves from one to five years. We believe this is partly the result of the assumption made in the MSFA formulation that the underlying asset portfolio produces no interest cash flows available to cover credit losses after year one.¹⁷ The assumption is very conservative and certainly at odds with the facts of securitisation structures as they relate to senior tranches. We feel there is strong evidence to support our view that, at least for senior tranches, the assumption of no interest after year one should be relaxed.

Model risk adjustments

While we recognise the risks and limitations inherent in credit risk models, whether designed and operated by banks or by CRAs, the Proposals' multiple layers of cautionary adjustments would result in excessive capital requirements for securitisations in comparison with those of the underlying pools and in comparison with other financial assets. We propose that any adjustment for model risk should be added to the results of the model output, so that the effects on calibration and approximations of the model are kept to a minimum. The existing 1.06 scaling factor in the IRB should be sufficient to address model risk, as it does in other IRB asset classes. In addition, because the risk weight floor is not modelled, we would not expect any such scaling factor to apply to the floor.

Allow portfolio-level calculation of MSFA

One of the stumbling blocks ABCP conduits and other regulated securitisation market participants have faced (at least outside the US) is the requirement that in order to use the advanced regulatory capital methodologies (i.e., the Basel II supervisory formula approach (SFA) and proposed MSFA), the K_{IRB} and other values must be calculated for each and every underlying asset in the portfolio. As many portfolios contain tens of thousands of positions, and the calculations must be updated periodically, this quickly becomes an impossibility for anyone but the originator.

A simpler approach, and one that can be employed using currently available information, would be to calculate the MSFA at the portfolio level, using portfolio average data such as the average probability of default (PD), average LGD and a correlation value consistent with the average PD. Analysis by one of our members, summarised in Annex 4.6, showed that in virtually every case the simpler portfolio-level approach is considerably more conservative, i.e. results in a higher capital allocation, than the approach based on calculations done at the underlying asset level. In addition, mathematically it appears that using the average PD can never result in a lower K_{IRB} than the approach where the underlying exposures are individually analysed.

¹⁷ WP22 page 11, para. 18.

As a result of this relationship, it would seem reasonable to allow sophisticated market participants to make use of portfolio-level estimates of PD, LGD and term to calculate the K_{IRB} , and therefore also make use of the MSFA to calculate the regulatory capital for securitisation exposures. This approach (like that already available in the IAA) would have many desirable characteristics:

- Does not rely on ratings.
- Requires fewer estimations than the MSFA.
- Requires less modelling than the MSFA.
- Like the IAA, would be subject to supervisory conditions to prevent it being "gamed".
- Would promote transparency in the market by creating a demand for timely and accurate portfolio level loss data from the originators. This is consistent with the intentions of US Regulation AB II, ECB and other central bank collateral requirements, and other regulatory and market initiatives in various jurisdictions.
- Would promote consistency in capital calculations across both institutions and jurisdictions, since more banks would be able to use the same approach.

We would expect that (as in the case of the IAA) strict guidelines would be put in place around the way banks parameterised the portfolio level PD and LGD estimates in order to reduce the possibility of errors.

Grandfathering of dual rating requirement for legacy exposures

Certain aspects of the Proposals would disproportionately burden existing transactions. Most existing transactions do not provide the particular information fields required for banks to utilise the MSFA (or, for some asset classes in jurisdictions where SA capital requirements are ratings-based or otherwise more risk-sensitive, the SSFA), and so (where the RRBA is permitted) banks will need to use the RRBA or, if they cannot use the RRBA, the BCRA, to determine risk weights.

While a new transaction can be structured with multiple ratings, it is generally not practical to obtain new ratings on existing transactions.

- It is unclear who would pay for any new ratings. Securitisations are established with precise "waterfalls" which govern how their funds are allocated. It is highly unlikely that issuers would have the authority under their transaction documents to divert their cash-flows to pay such costs, particularly when this only benefits a particular subset of investors.
- It is impractical and expensive to amend transaction legal documents, particularly given the number of parties, and the unwillingness of third party participants to assume new liabilities (e.g. rating triggers).
- Non-bank investors in a transaction may obstruct any such amendments or cash-flow allocations, in order to take advantage of forced selling by banks likely to result from an overly conservative risk weighting.

Additional ratings also have less value when applied to legacy transactions. As transactions age, more and more performance data becomes available and this helps confirm or, where applicable, adjust the original ratings.

If banks were required to apply the BCRA to existing transactions, we believe that this would adversely affect many banks and detract from their ability to conduct activity more productive to the general economy. Therefore we propose that, if the Committee adopts the RRBA requirement of two qualifying CRA ratings, that requirement should apply only to new securitisations (concluded after the effective date of the final revised framework) and not to existing securitisation transactions. Such an approach would also be consistent with the recent EU CRA3 regulation that requires multiple ratings only for new transactions.¹⁸

Clarify interaction with trading book rules

If time had permitted, we would have preferred that this consultation (and QIS) also include the treatment of securitisations in the trading book. Given the tasks already assigned to the FRTB, and the uncertainty of timing of that exercise, it would have been better at least to consider some of the specific trading book issues as part of this consultation. The Committee noted that they were "not proposing specific revisions to the trading book rules at this stage" given that the FRTB is under way.¹⁹ However, the 2009 revisions to the current Basel Framework require banks to use banking book risk weights for specific risk of trading book exposures,²⁰ and the initial FRTB consultation document does not set out specific changes to that treatment.²¹ Therefore, it is unclear whether the Proposals are intended to be applied to trading books before the FRTB is completed, and how they will apply after it is completed. We are also concerned that, unless the implementation of the securitisation framework is postponed until the implementation of the FRTB, there will be significant inconsistencies between the trading and banking book methods.

Before adopting revisions to the securitisation framework, the Committee should issue a further proposal on the proposed treatment of securitisation positions in the trading book and allow appropriate time for consultation and comments. The Committee should also provide additional clarity on the treatment of securitisation exposures that are subject to both the trading book requirements and counterparty credit risk requirements to ensure a consistent understanding and application of the framework.

If the Proposals are meant to discourage banks from holding securitisation exposures in the trading book, that goes against the wider statements of the economic usefulness of securitisations for economic activity. If there is an economic reason for supporting securitisation activities (such as articulated by Peter Praet, Member of the Executive Board of the ECB),²² there will also be a need for market-making to support liquidity in secondary

¹⁸ CRA Regulation (Regulation (EC) No 1060/2009) Article 8b, added by European Parliament (EP) legislative resolution of 16 Jan. 2013 on the proposal for a regulation of the EP and of the Council amending the CRA Regulation (CRA3).

¹⁹ CD page 34.

²⁰ BCBS, International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version ("**Basel II (2006)**"), para. 712, as amended by BCBS, Revisions to the Market Risk Framework – Updated as 31 Dec. 2010 (Feb. 2011), para. 18.

²¹ BCBS, Consultative document, Fundamental review of the trading book (May 2012).

²² P. Praet, "Transition of the financial system in the wake of the financial crisis" (address at AFME's 8th annual European Market Liquidity Conference, London, 13 Feb. 2013); see Annex 2.

markets. It would therefore be counterproductive to undermine the holding of almost all securitisations in the trading book as by definition market making activities will be in the trading book.

Among the difficulties the Proposals create are that they do not recognise partial hedges. We think these do need to be recognised in order to support risk-mitigating activities when holding securitisations for market-making activities. We would therefore encourage the Basel working group to discuss with the industry how the methodologies could be expanded to incorporate at least some hedging. We also feel that insufficient clarity has been given on how the various formulas in the Proposals would work for short positions.

Clarify scope of resecuritisation

The definition of resecuritisation is extremely broad, and captures many uncontroversial and simple transactions. If these are now forced to utilise the new BCRA, this will generate capital requirements on many hundreds of billions of dollars of assets that are not aligned with risk. As the BCRA is highly conservative, this will result in a material distortion within the banking system.

We believe that this would not serve the goals of the proposed reforms and that the Committee should take this opportunity to clarify and refine the definition of resecuritisation, so that it focuses on those transactions with higher risk characteristics. In light of the limited time we have had to consider and respond to the Proposals, the points discussed below are not exclusive, and members may wish to raise other questions on this definition during consultation on a more detailed proposal.

Transactions with de minimis structured finance holdings

CLO transactions often have small buckets to hold securitisation positions rather than loans. This bucket is typically 5% or 10% of the transaction (although the actual holding is generally only a fraction of that amount), which is significantly less than the credit enhancement of all but the most junior tranches. Under the current definition, only a single securitisation position in the underlying pool is enough to taint the transaction as a resecuritisation. Therefore these CLOs would often be captured and even the senior AAA positions would be attributed the risk weight of the underlying pool.

Annex 5 shows analysis done by one of our members of outstanding legacy CLOs originated in the United States which include less than 10% of structured finance assets in the underlying pools. Treatment of such CLOs as resecuritisation would negatively impact US\$118 billion in outstanding transactions (by collateral notional amount), or 44% of outstanding US-originated CLO transactions. While detailed data is not yet available in respect of European transactions, we estimate that an additional \$30 billion to \$60 billion of CLOs may be affected.

Research by Moody's Investors Service (Moody's)²³ shows that actual losses on CLOs have been extremely low. Specifically, of the 4,118 tranches that Moody's rated in 719 transactions since January 1996, principal losses have only occurred on 32 tranches in 14 transactions all of which closed between 1997-2001 and most of these were junior/mezzanine

²³ Moody's, CLO Interest (25 Jul. 2012), pages 4-5.

tranches in deals that had invested heavily in conventional high-yield bonds which deteriorated significantly in the stressful credit environment of 1999-2002.

The greatest divergence between economic risk and the results of the BCRA will arise for senior tranches. Senior tranches are also the largest component of the CLO market, and by far the largest component held by banks. Thus, while the logic of excluding transactions with only a de minimis exposure to ABS could be applied to most tranches in the affected transactions, if the Committee wished to obtain greater comfort as to the conservatism of this exclusion, then it could be implemented solely for the senior tranches of the transactions.

As new CLO originations do not have this issue because the underlying pools do not include structured finance assets, this could be implemented as a grandfathering provision for existing deals.

We therefore request that existing senior tranches of transactions with an incidental holding of securitisations (defined as 5% or less of their original portfolio balance at issuance or, if later, when fully invested) would not be considered resecuritisations, provided that (i) any securitisation holdings are assigned zero value when calculating the capital requirement for the transaction under the MSFA or SSFA, and (ii) transactions assessed under the RRBA must benefit from minimum credit enhancement of at least twice the amount of the securitisations in the collateral portfolio (assuming 100% LGD).

Single-deal and combined restructurings

Basel II.5 currently defines resecuritisation as "a securitisation exposure in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation exposure"²⁴ (emphasis added). Though the definition refers to plural "exposures", national regulators have interpreted it in different ways.

We therefore ask the Committee to confirm and clarify that the definition of resecuritisation relies on the restructurings of a number of underlying bonds or other exposures and as such a restructuring of a single bond or other securitisation exposure (which is not itself a resecuritisation exposure) does not constitute a resecuritisation. Similar to a pool-specific liquidity facility in an ABCP programme,²⁵ such a transaction does not introduce correlation effects or other problems that require the special treatment of resecuritisations.

It would be incongruous, for example, to apply the supervisory calibration parameter of 1.5 in the SSFA to a credit-enhanced senior interest in a single securitisation exposure, and as a result to treat the senior interest as more risky than the underlying securitisation exposure itself. We believe that a significant proportion of the senior tranches of the \$900 billion US RMBS markets have been restructured in this fashion, and subjecting these assets to the BCRA would result in a significant additional capital requirement that is not linked to the risk.

We believe the same analysis should apply to transactions in which multiple restructured securitisation exposures are pooled together for operational simplicity in an entity or structure that issues senior and subordinated securities or other exposures, where the subordinated tranche of exposure to the pool is not less than the sum of the subordinated tranches of the

²⁴ BCBS 157, page 2.

²⁵ See id.

underlying restructured securitisation exposures (put another way, the restructuring of a pool of restructured securities is the sum of the restructuring of the underlying securities). Like restructurings of single securitisations, such transactions do not introduce correlation effects or reduce the credit enhancement below the aggregate amount that would otherwise be required for the underlying securities. While existing transactions undertaken in this format cannot be easily restructured, there is no reason why future restructurings have to be conducted in this fashion. A grandfathering of existing transactions would therefore address this sub-issue.

ABCP programme support facilities

We believe the Committee has concluded that ABCP conduit exposures need not be restructurisations because conduits can simply structure their liquidity support to be full support liquidity which would eliminate any restructuring of that exposure and remove the liquidity from the definition of restructurisation.²⁶ However, under the risk retention requirements currently proposed in the United States, ABCP conduit sponsors may need to provide additional programme-wide credit enhancement (PCE) in the form of a funded first loss position (because unfunded facilities would not qualify and 100% funded support would not be economically viable). In addition, some conduit sponsors may need to maintain separate PCE facilities (whether funded or unfunded), in addition to liquidity facilities (whether "full support" facilities or "traditional" facilities subject to an asset quality test), due to other regulatory requirements or reasons other than the US retention requirements. Such PCE facilities should not be treated as restructurisation positions.

We therefore wish to confirm and clarify the application of the credit risk capital requirements to the overlapping liquidity and PCE facilities. "In the case of overlapping facilities provided by the same bank, the bank does not need to hold additional capital for the overlap. Rather, it is only required to hold capital once for the position covered by the overlapping facilities (whether they are liquidity facilities or credit enhancements)."²⁷ So long as the bank holds capital against its exposure under the liquidity facilities (which cover 100% of the underlying conduit exposures), it should not have to maintain any additional capital against the PCE.²⁸ In any case, whether or not the PCE facility is treated as a restructurisation position, when the facilities are provided by the same bank, the capital requirements for the liquidity facilities and PCE facility taken together should be subject to the capital requirements cap, such that the sum of those capital requirements would not exceed the capital requirements the bank would have if it held the underlying conduit exposures directly.

ABCP exposures

We request the Committee also to confirm that, in an ABCP conduit structure involving liquidity and PCE facilities as described above, the ABCP will not be treated as a restructurisation exposure, even if the liquidity facilities are "traditional" liquidity (subject to asset quality tests) rather than "full support" liquidity. The liquidity and PCE facilities taken together have essentially the same effect as 100% "full support" liquidity, that is, "the CP [is] fully supported by the sponsoring bank (i.e. [...] the sponsor provides support to an extent that leaves the CP effectively exposed to the default risk of the sponsor, instead of the underlying

²⁶ See BCBS 157, page 2.

²⁷ Basel II (2006), para. 581 (SA); id. para. 640 (IRB same treatment).

²⁸ Although, if the two types of facilities had different credit conversion factors (CCFs), the higher CCF would apply to the overlapping portion, no corresponding rule is specified for risk weights. Id.

pools or assets) so that the external rating of the CP [is] based primarily on the credit quality of the bank sponsor").²⁹ We believe the Basel text leads to this conclusion, but it may not be uniformly applied in all jurisdictions. For ABCP, under the Proposals, the effects of resecuritisation treatment would be much more severe than under Basel II.5, so the position needs to be clarified.

Potentially allow other approaches for resecuritisation risk weights

The BCRA refers only to the detachment point and lacks even the SSFA's ability to take into account the attachment point. This can lead to incongruities in the capital assigned to resecuritisation positions based on whether or not they are deemed to be senior. For example, consider a bank holding the most senior \$50 of a resecuritisation where the capital requirement on \$100 of underlying assets is \$10. The capital requirement on this exposure under these rules would be \$5. If the investor were to sell the most senior \$20 (from \$80 to \$100 in the capital structure) while retaining the second-most-senior tranche (e.g., from \$50 to \$80 in the capital structure) then the capital requirement would actually increase to \$7.5 on the remaining \$30 of exposure, now representing a subordinated position. This is because the BCRA focuses only on the detachment point and not the attachment point. We feel this is too blunt an approach that is open to inconsistency and would therefore propose that a supervisory formula approach would be more suitable. As in the US implementation, the supervisory approaches should also be available for resecuritisation positions under a different p-value calibration. Our members believe that implementation of different approaches for resecuritisation exposures is both practical and appropriate, as some US banks are already applying SFA to resecuritisation exposures.

Revised concentration ratio approach for senior resecuritisation tranches

When resecuritisation tranches are analysed under the BCRA:

1. Non-senior tranches have risk weightings well in excess of those of the underlying assets, because losses are assumed to be concentrated in the junior tranches.
2. Senior tranches receive the same risk weighting as the underlying assets without any benefit for the fact that losses fall first on the junior tranches providing credit support.

This approach is not only inconsistent, but also introduces undesirable perverse incentives into the structuring of transactions. (The same would apply to other securitisation exposures, but under the Proposals its effect would most likely fall on resecuritisation exposures.)

Let us consider a bank holding \$80 of a resecuritisation secured on \$80 of assets. The risk weightings will be calculated by looking through to the \$80 of assets. Now let us consider the situation when the transaction now has an additional \$20 of higher risk assets securing its liabilities. The bank now has \$80 of lower risk and \$20 of higher risk collateral, securing its \$80 position. Under any normal analysis, this would be seen as lower risk. But under the BCRA, the bank looks through to the average risk weighting of the collateral, which will be higher because of the \$20 of additional higher risk collateral. It gets no credit for the \$20 additional subordination. Paradoxically, this approach is most penal for senior tranches secured on heterogeneous asset pools with low LGDs.

²⁹ BCBS 157, page 2.

One means of mitigating this anomaly is to modify the concentration ratio approach for senior tranches so that they reflect the average risk weights of the corresponding amount of higher quality assets in the underlying pool. Thus, the risk weight of an \$80 senior resecuritisation tranche would be the weighted average risk weight of the best \$80 of assets in the underlying portfolio.

This approach is still extremely conservative, as it effectively assumes 100% PD, 100% LGD and 100% correlation for the excluded assets when calculating the risk weighting of the senior tranche. When one also considers that the junior tranches will have a risk weight based on the concentrated risk position of the overall portfolio, then the degree of conservatism increases further.

Address carrying value of own-originated tranches

Own-originated securitisation positions will not have a carry value for the tranches, as they are usually not derecognised for accounting purposes. Hence the capturing or position size and allocation of value adjustments on the underlying portfolio will have to be reconsidered by the Committee.

Responses to specific questions

Set out below are the questions posed by the Committee in the Consultative Document followed by our responses to each question.

Question 1: What additional costs and benefits of the two hierarchies should the Committee consider? Which hierarchy presents the greater benefits relative to its drawbacks? Which hierarchy would best address the shortcomings identified with the current framework, whilst meeting the Committee's objectives?

We believe that the Committee should consider each of the alternative hierarchies in light of the Proposals' stated goals of making securitisation capital requirements more prudent and risk-sensitive, mitigating mechanistic reliance on external credit ratings, and reducing cliff effects.³⁰ While both Alternative A and Alternative B fall short of meeting these goals, Alternative B does much worse.

Though not one of its stated goals, the Committee should also consider the need for securitisation as an important part of a healthy financial system serving the financing needs of national and global economies. Alternative B is much more likely to discourage the use of securitisation as a financing tool.

The following table compares the Committee's proposed Alternatives A and B with the existing securitisation framework under Basel II.5, with reference to the goals stated in the Consultative Document:

³⁰ CD e.g. pages 1, 7.

Goals\Hierarchies	Alternative A	Alternative B
More prudent	More conservative	Much more conservative, but much less risk-sensitive so arguably less prudent
More risk-sensitive	More risk sensitivity within narrower range between minimum risk weight and maximum capital requirement	Much less risk-sensitive for non-SHQ exposures
Less ratings-based	Prefers MSFA where applicable, but allows jurisdictions to choose RRBA	Allows RRBA on equal footing with MSFA/SSFA
Less cliff effects	Retains cliff effects for tranches below K_{IRB} , tranches rated CCC or below etc.	Extreme cliff effect between SHQ and non-SHQ

Both alternative hierarchies are more conservative than existing Basel II rules in requiring higher levels of capital for most securitisation exposures. As between the two, Alternative B is certainly more conservative in mandating use of a concentration-ratio (or "gross-up") approach for all but SHQ exposures. That does not make it more prudent. Because it is much less risk-sensitive and introduces extreme cliff effects in the treatment of non-SHQ vs. SHQ exposures, in the context of the overall risk-based capital framework, we believe that Alternative B would be less prudent than either existing Basel II rules or Alternative A.

Another aim of the Proposals (as shown by Question 2, for example) is to foster global consistency and a level playing field. The CD asserts that "all jurisdictions would implement the same approach",³¹ but, as under Alternative A, we know that the United States would not allow use of the RRBA, so there would still be material differences in the hierarchy applied in different countries. In the United States, where CRA ratings cannot be used, we doubt that regulators and banks could define SHQ in a way that did not give rise to material inconsistencies in treatment between different banks and between the United States and other jurisdictions. The CD also notes that "judgments regarding whether the tranche qualifies as 'high-quality' could be subjective, thus making global consistency more challenging."

Alternative B would make it much more expensive, in risk-based capital terms, for banks to hold any securitisation exposures other than SHQ exposures.

Question 2: As regards Alternative A, could both the revised RBA and the SSFA be accommodated without raising concerns about regulatory arbitrage or level playing field?

As the two approaches are fundamentally different, allowing jurisdictions to choose between RRBA and SSFA would necessarily cause some level playing field concerns. As the RRBA is based on independent CRA ratings, which take into account factors other than those used in

³¹ CD page 11.

the SSFA, it seems unlikely the RRBA and SSFA could be calibrated to give reliably similar results. However, this highlights the importance of the Committee's efforts to achieve consistent calibration and increase the consistency of results between the different approaches. It is critical that there be consistency in outcome to ensure a level playing field across jurisdictions.

Nonetheless, allowing jurisdictions the choice would be better than not allowing the choice. The alternative would require all countries to adopt the US approach, forgoing the advantages of the RRBA (relatively easy to apply and using third party credit assessments in a cautious and risk-sensitive way) and the IAA (which most jurisdictions other than the US have adopted and are actively using in their IRB frameworks).

If jurisdictions could decide to allow use of RRBA, and if (in jurisdictions that allowed it) banks could decide between RRBA and SSFA (as proposed in our response to Question 4), regulatory arbitrage concerns would be mitigated, as in proposed Alternative B, by requiring banks to adopt policies of using one or the other approach for a given asset type, transaction structure or business line and not deviate from those policies without good reasons. For example, a bank could have a policy to apply RRBA to purchases of rated securities backed by certain types of underlying assets and to apply SSFA in other cases. As another example, according to business line, it could apply SSFA to banking book transactions with customers and RRBA in its trading operations. Again, improving consistency between approaches is also critical for limiting regulatory arbitrage and providing a level playing field.

Question 3: As regards Alternative B, which methods could a bank use to conclude that a securitisation exposure is of high-quality? Would the use of these methods likely result in a capital charge consistently related to credit risk across banks and countries? Would Alternative B produce material cliff effects as exposures deteriorate below high-quality?

We do not favour adoption of Alternative B, for the reasons described above. If it is adopted, we think banks will not be able to apply this hierarchy in a consistent manner without much more clarity around what will be considered SHQ. In the United States, where CRA ratings cannot be used, it would be impossible for banks to determine what was a high-quality position.³² Even if an acceptable substitute credit measure could be found, there would be great differences in treatment between the United States and other jurisdictions. Aside from the CRA ratings issue, to the extent that any additional qualities (other than credit quality) are required, established or developing market standards such as the PCS label should be recognised. While some variation between different asset types, structures and countries must be inevitable, consistency can best be served by applying a relatively clear and uniform set of criteria rather than relying on subjective determinations by different banks and supervisors.

Yes, Alternative B would likely produce material cliff effects between SHQ and non-SHQ positions, thus going against one of the stated goals of the Proposals. The cliff effect would particularly affect relatively high quality mezzanine tranches (because CR_{KIRB} and BCRA do not take account of credit enhancement provided by junior tranches), for non-IRB banks (who could not use CR_{KIRB} and could only use the more conservative BCRA). Its effect will be more severe if, as proposed, banks may use CR_{KIRB} only where they can calculate K_{IRB} for

³² So far the United States has had great difficulty finding a workable substitute for "investment grade", so we cannot imagine their arriving at any method of distinguishing AAA to AA- credit quality in securitisation exposures.

every asset in the pool (and again BCRA will be the only alternative). These cliff effects would be likely to severely limit the investor market for all non-SHQ tranches.

Unless the MSFA operating conditions were clarified or modified to make it practical for banks to calculate K_{IRB} on assets they did not originate, Alternative B effectively would move most non-SHQ investor positions to the BCRA. Currently, in most cases only an IRB originating institution has access to the K_{IRB} required in the $CR_{K_{IRB}}$. Hence any non-SHQ positions that were invested in by any bank or that were originated by an SA bank would fall immediately to the bottom of the hierarchy.

Question 4: Are there alternative hierarchies or revisions to the two proposed (or a combination of both) that the Committee should consider?

Alternative A+

Our members propose a hierarchy of approaches based primarily on Alternative A, allowing each jurisdiction to choose whether or not to allow use of the RRBA. In jurisdictions that allowed the RRBA, individual banks could choose (as in Alternative B) whether to use the RRBA or the SSFA. In all jurisdictions, at the first level of the hierarchy, banks with appropriate supervisory approval would choose to use either the MSFA or the IAA, which would be revised to apply more generally and not only to ABCP conduit exposures.

Alternative A+			
1	Bank's decision: (with supervisory approval)		
	MSFA		IAA
2	Jurisdiction's choice:		
	Bank's decision:		SSFA
	RRBA	SSFA	
3	BCRA		
4	1250%		

We believe it is important to allow jurisdictions the choice of whether to allow the RRBA. The United States, by far the largest securitisation market, will not adopt the RRBA because the DFA would not allow it. Other jurisdictions, while revising their laws and rules to discourage over-reliance on credit rating agency ratings, have not gone so far as to prohibit reference to such ratings in their regulations. For banks without supervisory permission to use the MSFA or the IAA (or where the operational conditions of either were not met), the RRBA would provide a relatively straightforward method of determining the risk weight for rated exposures. However, as noted in our response to Question 2, this difference of approach between jurisdictions highlights the importance of consistent calibration and better consistency of results between the different approaches.

Likewise, in jurisdictions where the RRBA is allowed, banks should be able to choose to use the SSFA for unrated exposures or for rated exposures where they have the requisite information on the underlying exposures. As proposed in relation to Alternative B, to limit

the possibility of regulatory gaming, banks would be expected to make their choice consistently over time, the decision as to which approach to use would be based on an internal policy whose main intention was not to minimise capital requirements, and the decision for a specific position should not be changed over time without adequate justification to the bank's supervisor. However, we would expect that a bank's policies could choose different approaches for different kinds of exposures, the simplest example being RRBA for rated exposures and SSFA for unrated exposures.

Though the IAA was originally designed for ABCP conduit transactions, where use of the supervisory formula approach (SFA) was often impractical, this method can and should be adapted for transactions and structures other than ABCP conduit exposures.³³ As one example, banks may provide receivables purchase facilities to corporate customers either through ABCP conduits or directly from the bank's balance sheet, and should be allowed to use IAA in either case. The IAA is subject to supervisory approval and strict operational requirements, including the use of bank risk management processes based on the most conservative elements of publicly available CRA methodologies, and so provides a sound basis for banks to determine risk weights of securitisation exposures.

The US proposed regulations to implement Basel II and II.5 do not include the IAA, because the IAA maps to CRA ratings and the DFA prohibits regulatory use of CRA ratings.³⁴ However, the IAA does not use CRA ratings to determine risk weights or include any "requirement of reliance on credit ratings".³⁵ It refers to CRA rating criteria as a basis for methods that banks adopt and use subject to conditions and regulatory supervision. Thus we believe the US regulators could craft a version of the IAA that would be consistent with both the letter and spirit of DFA 939A.

We propose that banks with appropriate supervisory approvals would be able to choose to apply either the MSFA or the IAA, in each case at the first level of the hierarchy before resorting to other methods. As in the case of a bank's choice of RRBA (where allowed) or SSFA, banks would be expected to make their choice consistently over time, the decision as to which approach to use would be based on an internal policy whose main intention was not to minimise capital requirements, and the decision for a specific position should not be changed over time without adequate justification to the bank's supervisor. However, we would expect that a bank's policies could choose different approaches for different kinds of transactions or structures or according to the bank's role in the transaction; for example, a bank's policies could lead it to use MSFA when acting as originator and IAA when acting as investor (when it would be less likely to have all information required for MSFA).

In order to ensure there is global consistency and a level playing field for banks whether they choose to apply the MSFA or the IAA, we believe it is imperative that there is sufficient

³³ Certain of the operational requirements (set out in Basel II (2006) para. 620) would need to be amended, including the requirement to use CRA methodologies of the same CRAs that rate the conduit's ABCP.

³⁴ US Department of the Treasury Office of the Comptroller of the Currency, Federal Reserve System and Federal Deposit Insurance Corporation, Joint notice of proposed rulemaking Regulatory Capital Rules: Advanced Approaches Risk-Based Capital Rule; Market Risk Capital Rule, 77 Fed. Reg. No. 169 (30 Aug. 2012), pages 52980, 52991. The IAA is also generally inapplicable in the United States because, under current US accounting standards, most ABCP conduits are consolidated with their sponsors and, under the US bank regulators' interpretation, as a result of the accounting consolidation, the sponsor bank determines its capital requirements in relation to the underlying exposures held by the conduit rather than applying the IAA.

³⁵ DFA §939A(b).

convergence of the procedural and practical implementation of these two approaches. For example, without sufficient convergence in these aspects, capital requirements under the IAA could be calculated based on portfolio level data, whereas the MSFA would require K_{IRB} to be computed for every underlying asset, which makes the practical implementation of the MSFA more difficult. On the other hand, for a bank to use the IAA it will undergo a rigorous approval process with its regulator that is not presently required for the MSFA. However, as noted elsewhere in this letter, we strongly believe that portfolio-level calculation of the MSFA should be permitted based upon strict guidelines (or other appropriate approval processes of a bank's local regulator), that the MSFA should be modified to take account of excess spread as credit enhancement, and that the IAA should be expanded to apply more broadly than only for ABCP conduit transactions.

These changes, as well as the others we have suggested for the MSFA and the IAA throughout this letter, would go a long way in ensuring the overall convergence of these approaches. Without these changes, however, we do not feel the hierarchy we have proposed, or either of the hierarchies in the Consultative Document for that matter, appropriately ensures global consistency and a level playing field for banks, and therefore an entirely new hierarchy would need to be proposed for consideration.

Arbitrage-free approach

We also recommend that the Committee consider a Basel II arbitrage-free approach, i.e. an approach based on the credit theory and principles of the Basel II IRB framework and ensuring the consistency of capital requirements for the pool of assets within or outside of a securitisation. In order to avoid regulatory arbitrage, the approach should follow a set of principles which underpins the Basel II framework, including (a) the conservation pre- & post-securitisation of the following three components: capital requirements, expected loss and model risk charge, and (b) mathematical continuity in calculation of risk-weighted assets, altogether without changing the theoretical framework. The Basel II arbitrage-free approach should be simple and comprehensive. It should be driven by the same theory of calculation of capital requirements for credit risk as the current Basel II IRB framework (Vasicek mathematical developments compatible with the Basel asymptotic single risk factor (ASRF) model), which is classical and implemented worldwide. Regulators would control the settings and calibration of the only additional parameter required by such approach to capture the "homogeneity correlation".

On that basis, the approach should be easily implementable by IRB banks, since it would require the same analysis and the same inputs as the IRB approach for the asset pool prior to securitisation. It should provide a solution to the issues faced in the current securitisation framework: material reduction of cliff effects, management of mixed pools, removal of yield arbitrage, improved consideration of discounted assets, reduction of reliance on external credit rating agencies, no need for complex calibration and unnecessary caps, prudent and consistent allocation of capital according to the unexpected risk of the tranches, including high quality senior tranches.

Further details on the set of principles underpinning the Basel II arbitrage-free approach are provided in Annex 6.

The industry is currently working actively on a paper outlining the implementation of the Basel II arbitrage-free approach to be made available as soon as possible.

Question 5: The Committee recognises that in some instances and in some jurisdictions, the requirement for two external ratings could be difficult to implement or could impose additional costs on banks. The Committee requests feedback on the relative merits of reducing idiosyncratic, rating agencies' modelling risk with the costs of using two ratings and/or whether exceptions to this treatment should be permitted.

In the EU, in principle the requirement to use two credit rating agency ratings in applying the RRBA to securitisation exposures should not have a major effect, since CRA3 already will require use of two ratings for structured finance transactions.³⁶

Also, for the reasons stated above under "General comments – Grandfathering or delayed implementation for certain requirements for legacy exposures", we propose that the RRBA requirement of two qualifying CRA ratings, if adopted, should apply only to new securitisations (after the effective date of the final revised framework) and not to existing securitisation transactions.

Question 6: Is the [Revised] RBA appropriately calibrated and formulated? Should other risk drivers be incorporated?

The RRBA, of course, most directly affects our non-US bank members, but it is also relevant for our US members who may have non-US investors or counterparties and as it fits into the overall framework.

Maturity adjustment issue

See above discussion regarding inclusion of market risk / maturity adjustment in the MSFA. The inclusion of the tranche maturity adjustment (especially without also giving credit for expected interest margin during the period to maturity) and use of the MSFA to calibrate the RRBA results in excessive risk weights for longer-dated tranches under the RRBA.

Assumptions and calibration issues

We disagree with the assumption that all underlying assets will be equivalent to no more than a B-rated corporate exposure with the associated IRB asset value correlation and fixed LGD. This calibration approach would result in overly conservative risk weights in particular for retail assets. The assumption of a single B quality for all assets including retail assets is also inconsistent with the BIS paper mentioned above which states that "the securitisation of prime mortgages is a soundly functioning market and should not be excessively penalised".³⁷

Assuming a probability of 4.73% for ratings of BB or better seems punitive and lacks empirical support – see Annex 7 on corporate default rates and structured finance assets.³⁸

Unless the MSFA operational conditions are made flexible enough for wider application, the SSFA and RRBA will be the first option in the hierarchy for most positions, and under the RRBA most high quality items will attract 58% risk weights. These will not benefit from caps even where they may appear on a 16% risk weighted pool, for investors that have not received the underlying K_{IRB} data.

³⁶ CRA Regulation Article 8b, added by CRA3, cited above.

³⁷ BIS Working Paper No. 341, cited above, page 33

³⁸ BCBS 236 page 35-36.

When applying the RRBA to both senior and non-senior tranches, in some cases it yielded a higher capital requirement on senior tranches rated lower than AAA. This seems to contradict the stated aim of the two calculations in the paper, that the capital charge "should ... be higher for non-senior tranches than for senior tranches."³⁹

Recognise seniority in D-rated tranches.

For senior assets that are rated D, the RRBA requires a deduction from capital, which creates a cliff effect. For banks that are already required to take the expected loss to P&L (for example through the impairment process), we would argue that the LGD of the remaining exposure should be modelled at significantly less than 100%. This will become an increasingly important consideration as the stock of legacy assets matures, and losses are crystallised within the structures.

New transactions will also still be subject to the risk of a small loss triggering the deduction of the entire position from capital, even if it is substantially secured by good assets. Without this adjustment, it is therefore unlikely that the Committee's objective of removing cliff effects will be met.

We therefore propose that the RRBA band for assets rated B to CCC should also be applied to senior tranches rated D, provided those tranches are either (i) held at market value or (ii) treated such that expected losses are permitted to be deducted from capital or are already recognised through P&L.

Question 7: Is it appropriate to require that in order for the MSFA to be used the IRB approach should be applied for all underlying assets?

No, that would not be appropriate. Such a strict requirement would prevent MSFA application in many cases where a bank could calculate K_{IRB} for most but not all underlying exposures. It should be available where the bank can apply IRB to the "predominant" share (as under Basel II) or where it can apply IRB to some larger share short of each and every underlying exposure. Where there are immaterial gaps in the data, the framework should permit a bank to use proxy data in a conservative way.

More broadly, as the MSFA is in a sense the centre-piece of the Proposals, and drives the calibration of the SSFA and the RRBA, it is important that it be made more practically applicable by more institutions in different roles and across a wide range of assets.

In relation to operational requirements for the MSFA, the CD omits most of the detail that was included in the rules for SFA, so the proposal is somewhat unclear and that makes it very difficult to make a full comment. However, we recommend the following:

- **Portfolio level MSFA:** Allow sophisticated market participants to make use of portfolio-level estimates of PD, LGD and term to calculate the K_{IRB} , and therefore also use of the MSFA to calculate the regulatory capital for securitisation exposures, as described above and in Annex 4.6.
- **Retail portfolio:** If there is a "homogeneous" portfolio (from a credit quality perspective) and no one obligor exceeds 1% of portfolio value (measured at

³⁹ BCBS 236, page 13.

commencement of the transaction or if later when fully invested), then portfolio level PD and LGD should be permitted.

- If not a homogeneous retail portfolio, then assume that segmentation into homogenous risk buckets would be available and that PD and LGD by segment would be permitted.
- For wholesale portfolios, the framework should incorporate the treatment available in the US, where if the investor does not have detailed information there is some flexibility to use conservative assumptions (as is permitted in the case of purchased wholesale receivables).
- In terms of the requirement for adequate information, the framework should be consistent with what is currently required (5 years PD and 7 years LGD).

Our European members are particularly concerned that the proposed hierarchies rely heavily on banks' ability to calculate IRB capital charges or IRB estimates of PD and LGD. In the EU, unlike the US, use of the SFA requires supervisory approval which is typically limited to particular asset classes and countries. In addition, while loan-level data is now being made available for some asset classes, there are limitations on the amount and quality of historical loan-level data that is publicly available. Furthermore, to the extent originator-specific underwriting criteria are needed for internal models, banks may simply not be able to calculate IRB estimates on loans that they have not originated even when they do have access to historical data. The combination of these limitations may render the MSFA and CR_{KIRB} approach unusable for the vast majority of bank securitisation exposures in Europe. We propose that the Committee provide details on the requirements it sees as reasonable for banks to use the MSFA and CR_{KIRB} , and also study the results of the QIS to identify how often banks will be able to apply these approaches. The Committee should issue a further proposal including these details for comment and consultation before adopting the revised framework.

Our European members have other concerns about the estimation of IRB parameters (unless the MSFA can be applied at portfolio level as recommended above). The necessary detail that would have to be relayed to an investing institution would include such factors as intellectual property (justifying the originator's underwriting methods) and the last 10 years of performance. A bank's IRB model may need to rely on qualitative factors that may be difficult to ascertain if there is no relationship or only a limited relationship with the customer. Further, a firm's IRB permission designed for one purpose may not work for others. For example, a bank's IRB permission that allowed its mortgage department to apply the IRB to its originated mortgage loans typically would not extend to allow the bank's securitisation department to apply the SFA to investments in RMBS originated by other institutions.

We would also propose that, if originating institutions provide K_{IRB} data on their securitisations for investors to use (either voluntarily or pursuant to any regulatory reporting requirements), then bank investors should be permitted to use those K_{IRB} values in applying the MSFA. The variables featuring in the calculation all lead to K_{IRB} , so provision of this final figure would go some way in addressing any issues around the releasing of confidential data.

Question 8: Is the MSFA appropriately calibrated and formulated? Does it incorporate the appropriate risk drivers? Is the calibration of tau and omega appropriate? If not, what evidence can respondents provide to support an alternative calibration?

See above discussion regarding the market risk / maturity adjustment.

The model component which attempts to capture mark-to-market losses overstates potential losses for tranches which have been already been written down, since the mark-to-market losses are calculated based on par value.

We are especially concerned at the proposed market risk/maturity adjustment as applied to retail assets. Our concerns are two-fold:

- The application of the market risk/maturity adjustment for retail assets not only is inconsistent with the retail IRB approach but also lacks a theoretical basis. Whilst wholesale loans and their single name derivatives can be traded, so that the concept of a mark-to-market can be justified, retail exposures are not traded in a single name form. While it may be true that securitised retail exposures can be traded, the underlying exposures are not. Specifically, the derivation in WP22 Annex 2, Step 1 requires the existence of an equivalent martingale measure at the loan level. Because retail loans are not traded, absence of arbitrage does not apply and there is no unique measure change therefore the risk neutral measure change for retail assets cannot be justified.
- The calibration of the market risk/maturity adjustment is based upon wholesale loan/bond/CDS data both for the term structure of default probabilities (bonds/loans) and for lambda the market price of risk (traded loans/CDS/bond spreads). It does not reflect any retail risk.

The Committee recognised early on the potential problems with retail. The value of lambda for corporates of 0.4 is a well-known value (being used by Moody's since at least 1998) but has no precedent for retail.

In the light of the above, we suggest that the MSFA should not incorporate a market risk/maturity adjustment for retail assets. Its application for non-retail assets also requires review given the lack of empirical evidence to support the calibration and simplified valuation model.

Furthermore, the treatment of excess spread as outlined in the model does not represent the role of excess spread in real-life transactions. Other common risk mitigants, including excess spread and early amortisation, are not incorporated in the model. It is unclear why such features are not or cannot be taken into account for reasons other than mathematical complexity. The different treatment of excess spread is one of the elements that makes it impossible to properly calibrate between RRBA (and IAA) and the supervisory approaches.

More generally, the modelling approach introduces a series of approximations and adjustments at various stages in the methodology that lead to multiple layers of adjustment/conservatism. Examples include the variance approximation and its sensitivity to the market price of risk, the use of regulatory correlations when deriving the market price of risk, and the possibility of revisions to the IRB framework (e.g. LGD floors). In order to foster transparency and avoid compounding effects that lead to excessive and possibly

unintended conservatism, we recommend that the Committee develop an approach whereby an adjustment for model risk would be added to a "clean" model-derived capital requirement.

Question 9: Is it prudent to allow the use of the MSFA by banks making use of the foundation IRB approach (ie not calculating internal estimates of the underlying loans' LGD)?

Yes, we believe that banks that have supervisory permission to use the IRB in calculating risk-weighted exposures of underlying assets should be able to use the corresponding MSFA approach in the securitisation framework. Though the underlying LGD values supplied by banks' supervisors will be less risk-sensitive than those supplied by the banks' own estimates, presumably the supervisors make them sufficiently prudent. The exclusion of banks using SA already creates issues, without extending the exclusions further.

Question 10: Is the SSFA (particularly the constant term p) appropriately calibrated? Please provide justification and evidence, to the extent possible, for alternative appropriate levels of calibration?

We believe the calibration of p is unduly conservative. Even $p = 0.5$, in the US proposal, penalises securitisation by increasing risk weights by 50% over those of the non-securitised assets. The Committee should review the calibration of p following its review of the QIS results and modification and re-calibration of the MSFA as discussed above.

As more fully described in our response to Question 19, if Advanced IRB banks are required to calculate K_{IRB} for all securitization transactions, regardless of the regulatory capital calculation method being used, to determine the senior risk weight cap, then most senior securitization exposures held by Advanced IRB banks will not be subject to a cap. This is because, in most cases, the Advanced IRB bank will not be able to calculate the K_{IRB} for the underlying pool of exposures. As a result, we believe that better calibration between different approaches is critical.

Question 11: Is the SSFA properly formulated or should other risk drivers, such as maturity, be incorporated?

The SSFA is not properly formulated in our view. The starting point in the SSFA is K_{SA} . K_{SA} does not adequately consider the credit risk of the financial assets underlying securitisation exposures because it starts with the risk weights of those assets as determined utilizing the SA. The SA does not differentiate for credit quality within any particular asset other than to a very limited extent as proposed (and not yet effective) in the United States for residential mortgages and outside the United States in relation to rated wholesale exposures. As a result, prime and sub-prime auto and equipment loans, corporate loans and credit cards, among many others, all start with a K_{SA} of 0.08 (based on a 100% risk weight).

The only other variables in the SSFA are attachment point (A), detachment point (D) and delinquency adjustment (W). Although W takes into account credit risk to a very limited extent for assets that are already past due, this is retrospective only and provides a blunt view because it does not consider the likelihood of a later payment or recovery. The variables A and D do not directly relate to the credit risk of the underlying collateral at all. We say neither relates "directly" to credit risk of the underlying collateral because at least A is indirectly related to the quality of the underlying collateral. However the way that A is related to underlying asset quality is counterintuitive. Investors size required credit

enhancement levels based on the credit risk of the underlying collateral and that enhancement often is in the form of a subordinated tranche. Because subordinated tranches have the effect of creating a higher attachment point A and a bigger A results in a lower risk weight under the SSFA, securitisation exposures backed by financial assets with the highest credit quality will end up having lower attachment points, thereby attracting higher capital charges, than securitisation exposures backed by financial assets of the same type but with worse credit quality.

We propose that the Committee develop a different approach to the calculation of SSFA that differentiates within the same asset type based on credit quality. The Committee could make the SSFA more risk-sensitive by, for example, adopting a more flexible approach to data inputs which take into account underlying asset quality, performance, and recovery rates, while also recognizing soft credit support in determining A. Alternatively, it is possible that if the Committee responds to our request to make the MSFA more user-friendly and available to all banks as investors then the SSFA would not be needed except in very limited circumstances or perhaps not at all.

As mentioned above, the SSFA does not recognise so-called "soft credit support" for securitisation exposures. For example, the proposal does not recognise excess spread as credit enhancement for purposes of calculating A. However the excess spread between interest received on underlying financial assets and the coupon paid on related securitisation exposures is one of the primary risk mitigants used in some of the best performing ABS. The CRAs have long recognised that excess spread "represents the first line of protection against credit losses. As such, excess spread represents the primary internal credit enhancement facility and is built into every securitisation".⁴⁰ Failure to recognise excess spread prevents proper calibration between the RRBA and the SSFA.

Similarly, the SSFA ignores the carrying value of a securitisation position in determining A. However, when the carrying value of a securitisation position is less than its par value, the discount to par provides additional protection against future credit losses on the underlying financial assets. The difference between the carrying value and par value effectively creates an additional subordinated tranche for the securitisation position and should be recognised as credit enhancement to the same extent as a subordinated tranche issued on the issuance date of the more senior securitisation position. Failure to recognise carrying value discount in A greatly understates this parameter in the SSFA.

The W parameter needs clarification for student loans. Forbearances and deferments should not be included in the W factor.

Annex 4.8 shows a more appropriate approach for auto securitisations, and we believe that a similar approach could be agreed on for other consumer and corporate asset classes. The presentation includes the following points:

- Assigning a single risk weight of 100% to the K_{SA} for all auto securitisations is not risk-sensitive, and does not adequately align the different risks inherent in non-prime versus prime auto loans with a commensurate capital calculation.

⁴⁰ Federal Deposit Insurance Corporation (FDIC), Credit Card Securitization Manual, available at http://www.fdic.gov/regulations/examinations/credit_card_securitization/ch6.html.

- CRAs consider the credit characteristics of the underlying collateral when assigning a rating. Omitting the quality of the collateral in the K_{SA} when calculating SSFA creates a disconnect between the capital calculation of the same exposure under SSFA and RRBA.
- A more granular K_{SA} can be devised based on simple, observable inputs that are justified by empirical analysis. Including a credit metric such as FICO with Margin should result in a greater correlation; however this was excluded on our initial run given the reluctance of some jurisdictions to rely on third party inputs. We would encourage that K_{SA} be reflective of one or two simple, observable and highly correlated inputs, such as Margin and FICO.
- Annex 4.8 demonstrates the benefit of a more risk-sensitive K_{SA} by more appropriately sizing capital which incentivises investors to make prudent risk-sensitive investment decisions. A risk-insensitive K_{SA} would encourage banks to originate and securitise riskier collateral as well as invest in securitisations of riskier collateral in order to obtain a sufficient return on equity. This outcome is inconsistent with the objectives of the Committee and introduces unnecessary additional risk to the banking system.

The application of K_{SA} for mortgages is also a concern, because the p variable ($p = 1.5$) in the Committee's proposed SSFA seems more calibrated to the K_{SA} for mortgages proposed by the Committee than the K_{SA} (or also K_G) as proposed in the US, where application of the SSFA is necessary. Applying the BCBS p -value to the K_{SA} for mortgages proposed in the US results in capital values represented by $K_{SA} * p$ which are overly punitive (see Annex 4.9). The K_{SA} for mortgages as proposed by the BCBS lacks risk sensitivity and is inconsistent with the K_{SA} proposed in the US. This is another valid reason why the Committee should review and adjust the p variable.

The Committee has not included a required timeframe within which the data necessary to calculate the parameter W must be obtained. We appreciate this in light of the nature of the Consultative Paper as a proposal which does not purport to include all implementing rules. We nonetheless urge the Committee to consider that many securitisation exposures benefit from asset-level reporting on only a quarterly or even semi-annual basis. As a result we request that the final implementing rules as well as any re-proposal specify that the data used to calculate the parameters in the SSFA (most importantly, parameter W) be the most recently available data. This will ensure that exposures benefitting from very frequent monthly data are required to use such data, without hindering the ability to use less frequent data if that is all that is available.⁴¹

As to including a maturity parameter, the SSFA appropriately reflects the SA approach in not reflecting maturity. Consistency with the standardised approach would appear to be the objective. Further, the SSFA is already very conservative.

⁴¹ We note that the US regulators have included a requirement that such parameters be determined based on information that is dated no more than 91 calendar days prior to any date of determination. This is not practical for the reasons discussed above.

Question 12: Has the BCRA been appropriately calibrated and formulated?

The BCRA, the CR_{KIRB} and the concentration ratio approach for resecuritisations are extremely conservative in that they ignore the attachment point and so give no credit for loss protection provided by subordinate tranches. In Alternative A, or our modified Alternative A+, where the BCRA is used only as a backstop where the bank does not have enough information to apply otherwise applicable methods, we can accept the blunt conservatism of this approach as a motivation to improve information and modelling capability. However, again under Alternative A, the only positions likely to fall into this category are resecuritisations for which, under the Proposals, no other modelling approaches would be allowed.

In relation to resecuritisation positions, as discussed above, we propose that the definition should be clarified or modified to exclude certain kinds of transactions, that the concentration ratio / look-through approach should be applied to the better quality assets in the underlying pool, and also that use of other approaches should be permitted. As noted above, we also wish to clarify the calculation of risk weights for ABCP conduit support facilities.

Our members strongly disagree with the calibration of $F = 2$ in the case of all non-senior securitisation exposures other than resecuritisation positions. This is unjustified and creates a dramatic cliff effect between most-senior exposures and all other exposures. It is likely to produce excessive risk weights, particularly in the case of senior tranches that are junior to unrated "super-senior" retained tranches and relatively high-quality mezzanine tranches, for which more capital is already allocated because the approach does not take account of credit enhancement provided by more-junior tranches. The Committee should revisit this calibration following the QIS and re-calibration of the other approaches.

Question 13: What factors should the Committee consider in weighing whether the F parameter should be set at 2 for senior as well as non-senior tranches to avoid arbitrage opportunities?

Our members do not agree with the calibration of $F=2$ for non-senior securitisation exposures other than resecuritisation exposures. That calibration would be even less appropriate for senior securitisation exposures.

Question 14: How prevalent and material are securitisation exposures backed by mixed pools?

We have not found any comprehensive data on the prevalence of mixed pools. We believe that mixed pools are characteristic of certain kinds of programmes and transactions, and relatively uncommon in other types of securitisations.

ABCP conduits, an important category of structured finance vehicles, would in many cases include securitisation exposures backed by assets where capital requirements on the underlying assets are calculated under the SA, and other exposures backed by assets to which the IRB applies. These should not, in fact, be thought of as securitisations of mixed pools, as the underlying transactions are not cross-collateralised; excess assets from one such underlying transaction (typically a senior securitisation exposure) cannot be used to cover excess defaults or losses on any of the conduit's other transactions. The conduit sponsor typically provides a liquidity facility covering the conduit's exposure to each underlying transaction (and supporting payment of the ABCP used to fund that transaction), and, under

the current framework, could calculate capital requirements separately with respect to each underlying transaction (using either the IAA, where permitted, or whatever approach would apply if the bank held the conduit's assets directly). As noted above, the ABCP investors rely primarily on the liquidity facilities (and any PCE facility), and not on the underlying assets, for timely payment of the ABCP.

Some European CLOs are backed from loans originated in different countries; and an originator or sponsor of or investor in the CLO may have IRB permission with respect to corporate loans in some of those countries and not others. These would also be mixed pools.

Depending on the strictness of the data requirements for application of the IRB, securitisations of pools of assets in which a bank has supervisory permission to apply the IRB with respect to all the underlying exposures, but does not possess all the required data with respect to each underlying exposure, could be fairly common. If, as suggested above, the requirement of sufficient data allows for the use of reasonable proxies, many of these transactions would not count as mixed pools.

As noted above in relation to the definition of resecuritisation, many CLO transactions completed before the financial crisis included some ABS or other structured finance assets. Recently completed CLOs generally do not include securitisation exposures in the underlying pools.

ABCP conduits may also contain both securitisation and non-securitisation exposures. For example, a single ABCP conduit may enter into separate, negotiated transactions with different customers (i) to purchase or finance AAA-rated senior notes backed by auto loan receivables (which no one would doubt was a securitisation), (ii) to provide revolving facility for purchase of short-term trade receivables in which the seller retains a junior economic interest (which has some characteristics of a securitisation), and (iii) to make a full recourse loan secured by receivables, equipment and other assets (which arguably is not a securitisation). As noted above, the different transactions would not be cross-collateralised, so this is not a mixed pool in the same sense as, say, a CLO of some corporate and some structured finance assets.

Question 15: Is the proposed treatment for mixed pools appropriate, or should another approach be employed?

As noted above, we disagree with the strict proposal to require loan level data on every underlying exposure as a condition for application of the MSFA (or the CR_{KIRB}). Likewise, we believe that a bank that has an exposure to a pool of mixed SA and IRB-qualified exposures should be able to calculate its capital requirements on a pro-rata basis according to the proportion of SA and IRB assets in the pool.

We welcome the proposal to apply securitisation and resecuritisation parameters using a pro-rata approach in calculating risk weights for resecuritisations of mixed pools. This principle is sound. The Committee should take it further by removing the proposed punitive treatment of non-senior securitisation exposures other than resecuritisation, and allowing use of SSFA, and other methods if applicable, to calculate risk weights for resecuritisation exposures.

Question 16: Is the definition of maturity appropriate, in light of the Committee's objectives?

See our comments above on the inclusion of the market risk / maturity adjustment in the MSFA.

Tranche contractual maturity not an appropriate measure of risk duration

Tranche maturity in most ABS is an artificial concept used primarily for CRA rating purposes, and typically falls 18 months or two years after latest contractual final maturity of the latest maturing underlying exposure. This is not an appropriate measure for use in calculating credit risk capital requirements. If used in any of these approaches, tranche maturity should be defined as the weighted average life of the tranche.

As securitisations typically involve sales of underlying exposures, some securitisation positions (within the securitisation framework's broad definition) may not be in the form of debt and so would not have stated maturity dates. For example, a bank may acquire a senior exposure to a pool of short-term trade receivables, with a commitment to fund new purchases of receivables for up to one year. If that exposure is treated as a securitisation position, its maturity should be the remaining term of the commitment plus the weighted average maturity of receivables in the pool (or, at latest, the latest permitted due date of eligible receivables to be purchased during the commitment period).

Contractual vs. expected maturity of underlying

Maturity aligned according to contractual payments does not recognise that there is significant divergence in market conventions that makes contractual maturity a much less reliable indication of the risks than allowing assumptions to be made on the expected prepayment model.

Short-dated senior tranches, of one year to five years expected maturity, are a common feature of securitisations of residential mortgages and consumer finance, such as credit cards, personal loans, and auto loans. The short expected cash flow is the result of structuring either, or both, of issuer call options, early amortisation or the use of principal prepayments to repay the senior tranche.

The short-dated nature of the tranche (as an effect of incorporating the pre-payment assumptions) makes it an attractive investment or hedge for banks, particularly if it can be counted as a liquid asset, rather than a capital-heavy asset. Accordingly, this element is priced into the asset and is an essential part of providing low-cost funding to prime residential/consumer assets.

Prepayment rates by their behavioural nature are variable, however there is longstanding data which supports a base level of prepayment for prime assets through the economic cycle, and particularly through the 2007-12 period of stress (leaving aside buy-to-let or non-conforming mortgages which have shown more volatile prepayment performance). Accordingly, it is appropriate, if capital is partly allocated on a maturity basis, to incorporate a stressed minimum level of prepayment in maturity analysis for prime ABS or MBS. Banks should be able to substantiate the prepayment assumption built into the expected maturity of an asset.

To use contractual maturity for residential mortgages would mean effectively all residential mortgage securitisations would be capped at five years, which would in many cases overstate their likely maturity and related capital requirements. We note that in its 2002 responses to frequently asked questions on QIS3 for Basel II, in relation to a question on PDs for retail mortgages, the Committee said:

The fact that the maturity is subsumed in the correlation assumption just implies that for retail mortgages no explicit maturity adjustment is required. This decision was based on the consideration that the introduction of a separate maturity adjustment for retail mortgages would be too complicated since this would require a separate analysis of prepayment risk and transition behaviour of mortgage counterparties, etc.⁴²

This shows that properly calculating the maturity of residential mortgages would require more than just looking at contractual maturity. Banks should be allowed to take into account expected prepayment rates and other factors to estimate expected life.

Question 17: Is the proposed 20% risk-weight floor set at an appropriate level? Please provide justification and evidence, to the extent possible, for alternative levels for the risk-weight floor.

Our members believe the proposed 20% risk weight floor is excessive and not empirically justified. There is also a clear mismatch when the underlying pool may qualify for a risk weighting of a significantly lower level.

A recent survey of European mortgage IRB risk weights demonstrated risk weights as low as 6% and an average of 16%.⁴³ It seems extreme to suggest that even a senior position secured by a pool of such low-risk assets should receive a risk weight of 20%.

A further example throws this issue into sharp relief: many users of securitisation use it primarily for financing rather than for capital management. They do not seek regulatory capital relief, so the capital held against the securitised portfolio remains in place after securitisation. Should an investor then purchase, say, a AAA tranche from that securitisation, which is backed by prime assets, supported by substantial credit enhancement (say, 15%), excess spread (say, 100-200 basis points) and a historically very low rate of defaults (close to zero basis points), that investor would be obliged to apply a risk weight of at least 20% even though the capital held on the balance sheet of the originator has not changed and the risk of the investment is extremely low.

The Committee may have assumed that these scenarios would be considered in the provision of a capital cap. However the capital cap does not help where an investing or counterparty institution is not able to calculate K_{IRB} of the underlying exposures (see Question 19 response).

Setting the risk weight floor at 20% would severely limit incentives for banks to securitise high-quality assets. This effect is likely to discourage growth of capital availability in the wider economic system. Our members support setting the securitisation risk weight floor at

⁴² BCBS, QIS Frequently Asked Questions (as of 20 Dec. 2002), page 18 (response to part I question 2).

⁴³ Macquarie Equities Research, 16 Jan. 2013, page 8 Fig. 6.

10%, consistent with the risk weight assigned under the CRD to the most highly rated covered bonds.⁴⁴

Question 18: Should the risk-weight floor for short-term exposures be the same as for long-term exposures?

We think the proposed 20% floor is especially inappropriate for high quality short-term exposures such as ABCP. We request the Committee reduce the floor risk weight to 10% for short-term securitisation exposures (with maturities of one year or less) even if it does not substantially reduce the risk weight floor for securitisation exposures generally.

Question 19: Are the proposed caps and their interactions with the proposed floor risk weight appropriate?

Pool capital requirement cap should apply to all holders

The Committee should confirm and clarify the principle that the capital charge for any securitisation position held by any bank, whether as sponsor, originator, investor or otherwise, and whether it would use the SA or the IRB to calculate capital charges with respect to the underlying assets, will not exceed the capital charge that bank would have if it held all the underlying securitised exposures directly. This principle makes sense and should apply universally without ambiguity.

Capital requirement cap should apply proportionally

In order to meet originator risk retention requirements in effect in the EU and pending in the United States, an originator may retain a "vertical slice" consisting of a rateable share (of at least 5%) of each tranche offered to investors in the securitisation. For example, if the capital structure includes a senior tranche, a mezzanine tranche and a junior tranche, the originator would retain 5% of each of the three tranches. In that case, the originator's exposure to credit risk of the pool exposures would be the same as if (under another permitted form of risk retention), instead of retaining those tranches, it had retained an equal amount of randomly selected pool exposures similar to those in the securitised pool. The originator's maximum capital requirement should equal the same rateable share (5%) of the capital requirement that would apply if the pool exposures had not been securitised.

The same principle of proportionality should apply to the originator's (or a sponsor's or investor's) holding of any tranche or tranches of a securitisation: the cap should be proportional to the largest portion of any tranche held by the bank. In the above example, if the originator, rather than retaining a 5% vertical slice, retained half of each of the mezzanine and junior tranches (or half of the mezzanine tranche and one-fifth of the junior tranche), its capital requirement should not exceed half of the capital requirement that would apply if it retained the whole pool of exposures. If an investor bought 10% of the senior tranche, its capital requirement should not exceed 10% of the capital requirement of the unsecuritised pool.

Additional cap at exposure amount

⁴⁴ Directive 2006/48/EC, Annex VI, Part 1, point 71.

Under Basel III, required or recommended capital requirements will be higher than the 8% minimum capital assumed in the derivation and calibration of the supervisory formulas and other approaches (and will be higher for some institutions, such as systemically important financial institutions, than for others). One result is that the 1250% risk weight applied to certain securitisation positions (as to certain corporate exposures under the IRB and certain trading book capital charges) would result in the capital requirement being higher than the position's exposure value. It is illogical to require capital to cover risk of credit loss in excess of the exposure value. We request that the credit risk capital charge related to any securitisation position (or other exposure) be limited to the exposure value of that position.

Senior risk weight cap

The Committee has stated its intent to apply a risk weight cap for senior securitisation exposures equal to the capital of the underlying exposures for both the SA and the IRB framework.⁴⁵ For this purpose, a "senior" position should be defined as one with a detachment point equal to 100%, given that the holder of such a position receives all the benefit of the underlying assets with the additional benefit of credit enhancement.

We request clarification with regard to the formulation of the senior risk weight cap calculation. As the Committee is aware, the MSFA as proposed will have little real-world applicability for investors. If unchanged, this will result in banks needing to use either the RRBA or the SSFA for purposes of calculating regulatory capital for their securitisation exposures. The language in the Consultative Document is vague with regard to how an Advanced IRB bank would calculate the senior risk weight caps when it is unable to utilise the MSFA calculation due to an inability to calculate the K_{IRB} . The language indicates an approach for the SA "framework" and IRB "framework". Based on the industry's technical discussions with the Committee on 21 February 2013, we believed that this risk weight cap was meant to apply broadly to compensate in part for the lack of adequate calibration of the various approaches to assign risk weights, and therefore we read this proposal as indicating that an Advanced IRB bank that was utilizing the SSFA calculation (which is based on the SA framework) for a given senior securitisation exposure would utilise the K_{SA} from that calculation (multiplied by 12.5) as the relevant senior risk weight cap. Alternatively, if that same bank were utilizing the MSFA for its calculation, it would use the K_{IRB} from this calculation (multiplied by 12.5) as the relevant senior risk weight cap. If Advanced IRB banks are required to calculate K_{IRB} for all securitisation transactions regardless of the calculation method used for regulatory capital, then most senior securitisation exposures would not be subject to the cap. In most cases, the investing bank will likely be unable to calculate K_{IRB} .

In the Securitisation QIS FAQs that were released by the Committee on 13 March 2013, we note that in Question 4, the request is based on slightly revised language indicating that an Advanced IRB bank should complete two versions of the QIS. In the first version, the bank would deem itself an IRB bank and would calculate risk-weighted assets using a senior risk weight cap based on the Advanced IRB only (which as a practical matter limits application of the cap to the MSFA). In the second version, the bank would deem itself to be an SA bank and would calculate risk-weighted assets using a senior risk weight cap based on the SA only. We strongly believe that in order for this cap to have broad applicability for senior securitisation exposures, it is critical that the revised framework clarify that the senior risk

⁴⁵ CD page 33.

weight cap is based on the calculation "framework" and not the status of the investing bank as either an Advanced IRB bank or a SA bank.

The caps' mitigation effect is limited to originators

There is no provision for investing institutions to apply the caps, as they may not have access to the underlying IRB risk weights. This means that while the caps are anticipated to kick in on many positions indicating issues on the ratings calibration, this will only be mitigated for originating institutions.

Question 20: Are there other approaches [to treatment of write-downs and purchase discounts] that could provide a more risk-sensitive treatment while still being prudent and operationally straight-forward to implement?

Bottom-up approach

Though the CD states that the risk weight should be calculated and applied against the book value (carrying value),⁴⁶ a security held at discount carries less risk than the same security held at par. The benefit of the carrying value should be incorporated into the attachment point for purposes of MSFA and SSFA. See Annex 4.7.

For example, discounts should be applied "bottom up" on a tranche – e.g., if you own the 50%-100% tranche at a 20% discount, one would apply the discount to the bottom 20% of that tranche (i.e. carry the 50-60% slice at \$0, and the 60-100% slice at \$100). Capital would be the integral of (marginal market value) * (tranchette risk weight).

Different write-downs and their effects

In addition, the definition of "write-down" should be clarified:

If a write-down is defined as remarking of the carrying value of the portfolio (in particular in the case the position is marked to market), the benefit of the carrying value should be incorporated into the attachment point for the purposes of MSFA, SSFA and RRBA as described above and in Annex 4.7.

If a write-down is defined as a reassessment of the expected recovery from the position (also qualified as "credit risk adjustment"), this amount should be deducted from the position's capital requirement (risk-weighted assets times 12.5).

A provision reflects the amount of expected loss which can be estimated reliably in a probable case from and based on the carrying value: if the provision was not applied in deduction of the current regulatory capital, there would be a double-counting of the "buffer" to cover losses on the securitisation position, which would be covered once through the credit risk adjustment that affects the P&L, and once again by the credit risk capital requirement, especially when a securitisation position attracts a 1250% risk weight.

Question 21: Are the assumptions used in developing and calibrating the approaches discussed above appropriate in view of the Committee's stated objectives? Please provide empirical justification for alternative assumptions to those noted above.

⁴⁶ CD page 34.

Please see discussion above on the Proposals and their stated objectives. The approaches as proposed allow only a narrow range for operation of the models between capital caps and floors, and result in capital requirements many times higher than historical loss rates on the underlying assets. We think these demonstrate the assumptions are not appropriate.

Question 22: Is the proposed treatment of retail securitisations using the same approaches as for corporate securitisations appropriate? Would additional complexity (in the form of an additional formula to adjust the AVCs of retail underlying exposures) be justified to remove the double-counting effect of maturity effects?

Please see our comments above regarding application of market risk / maturity adjustments to retail exposures.

Question 23: How could concerns that securitised retail exposures have high default risk or high correlation be managed?

We believe these concerns are misplaced: most securitised retail exposures have shown very low default rates. Exceptionally high default rates in a few asset classes have largely resulted from defects in origination and underwriting practices. Problems of this kind have been and are being addressed through regulation of originating and underwriting practices and through originator risk retention and investor due diligence requirements.

Please provide data supporting any modifications to the proposed approaches, particularly the MSFA and revised RBA, to account for differences in risk based on underlying exposure types.

Please see the discussion above and the referenced Annexes regarding our comments on the proposed approaches.

Question 24: Is the relative calibration of the approaches appropriate? Please provide empirical data to support any conclusions.

Please see the discussion above and supporting Annexes noting the wide and inconsistent divergence between different methods applied to the same portfolios, and our comments on the need for convergence between different approaches.

Conclusion

As explained above in this letter, we believe that the framework envisioned by the Proposals would not best serve the Proposals' stated goals: it would be much more conservative than prudence requires, would have less risk sensitivity, in many respects, than the current framework, would generate inconsistent results across different approaches and would include cliff effects that could lead to adverse incentives. As a result, it would be likely to hamper rather than encourage the redevelopment of a healthy securitisation market, with adverse consequences for economic growth and financial stability. Our proposed modifications would temper some unduly conservative provisions, add risk sensitivity and produce more appropriate capital requirements better aligned with the credit profiles of the underlying assets and to capital requirements for other types of exposures. With these changes, the framework would better serve its prudential goals.

The time we were given to analyse and comment on these complex proposals was severely restricted. We urge the Committee to consider carefully the results of the QIS and other empirical data. The Committee should then issue a complete set of proposed rules with ample time for consultation and comment before adopting a revised framework.

We very much appreciate the opportunity for comment on the Consultative Document and for dialogue with the Committee staff on the Proposals. We look forward to discussing our comments with you at our scheduled meeting next month. Should you have any questions or desire additional information regarding any of the comments, please do not hesitate to contact Richard Hopkin at AFME at richard.hopkin@afme.eu or on + 44 207 743 9375 or Chris Killian at SIFMA at ckillian@sifma.org or on +1 212 313 1126.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Vickie Alvo', written in a cursive style.

Vickie Alvo
Executive Director
GFMA

att: Annexes

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Annex 1

Market Performance Data

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Annex 1.1

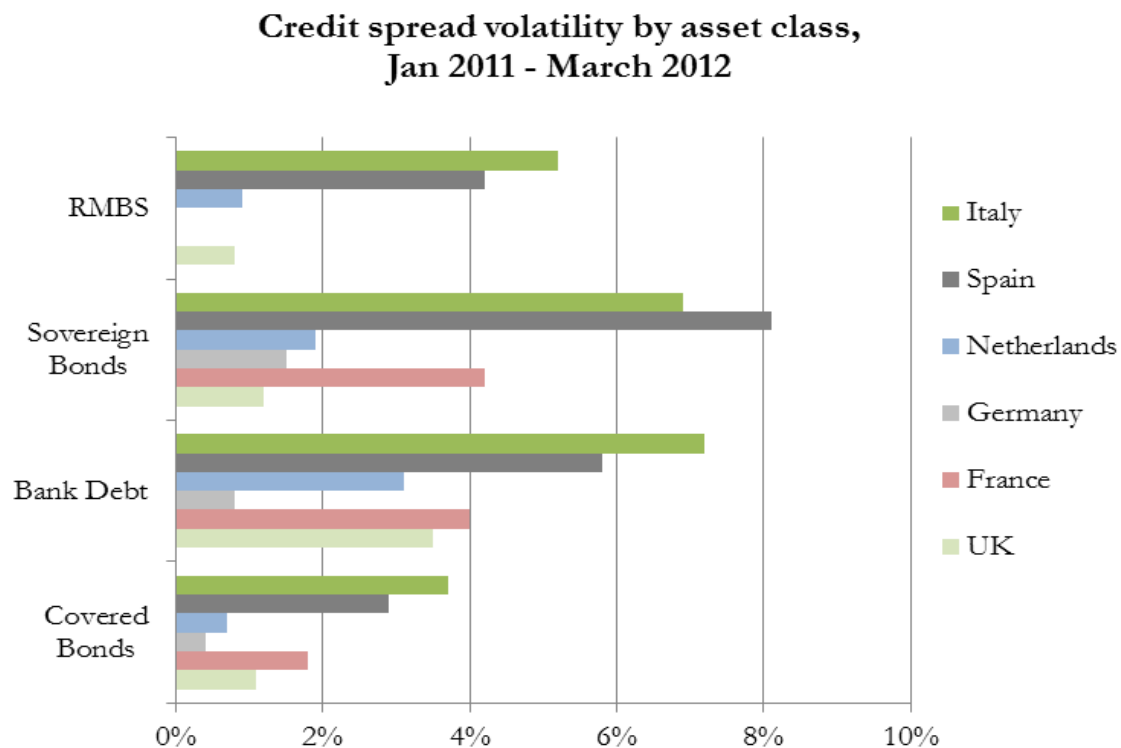
Historical Default Rates for Securitisation: Mid-2007 to End Q2 2012

	Original Issuance (EUR billion)	Default Rate (%)
Europe		
Total PCS eligible asset classes	957.8	0.09
Credit Cards	33.2	0.00
RMBS	753.0	0.07
Other consumer ABS	68.7	0.13
SMEs	103.0	0.23
Total Non-PCS eligible asset classes	736.8	4.06
Leveraged loan CLOs	71.3	0.10
Other ABS	71.0	0.16
Corporate Securitisations	67.7	0.33
Synthetic Corporate CDOs	255.1	2.30
CMBS	165.2	4.55
Other CDOs	77.8	6.10
CDOs of ABS	28.9	39.44
Total European securitisation issuances	1,694.7	1.82
Covered Bonds	1,084.5	0.00
Total European issuances	2,779.2	1.11
Select US asset classes		
Credit cards	295.4	0.00
Autos	198.2	0.04
Student loans	266.8	0.25
RMBS	3,255.0	15.58

Source: Standard & Poor's

Annex 1.2

a. European RMBS Market Price Performance in 2011 vs. Sovereign Debt, Bank Debt and Covered Bonds



Source: BAML

b. European RMBS Price Performance vs. Other Instruments

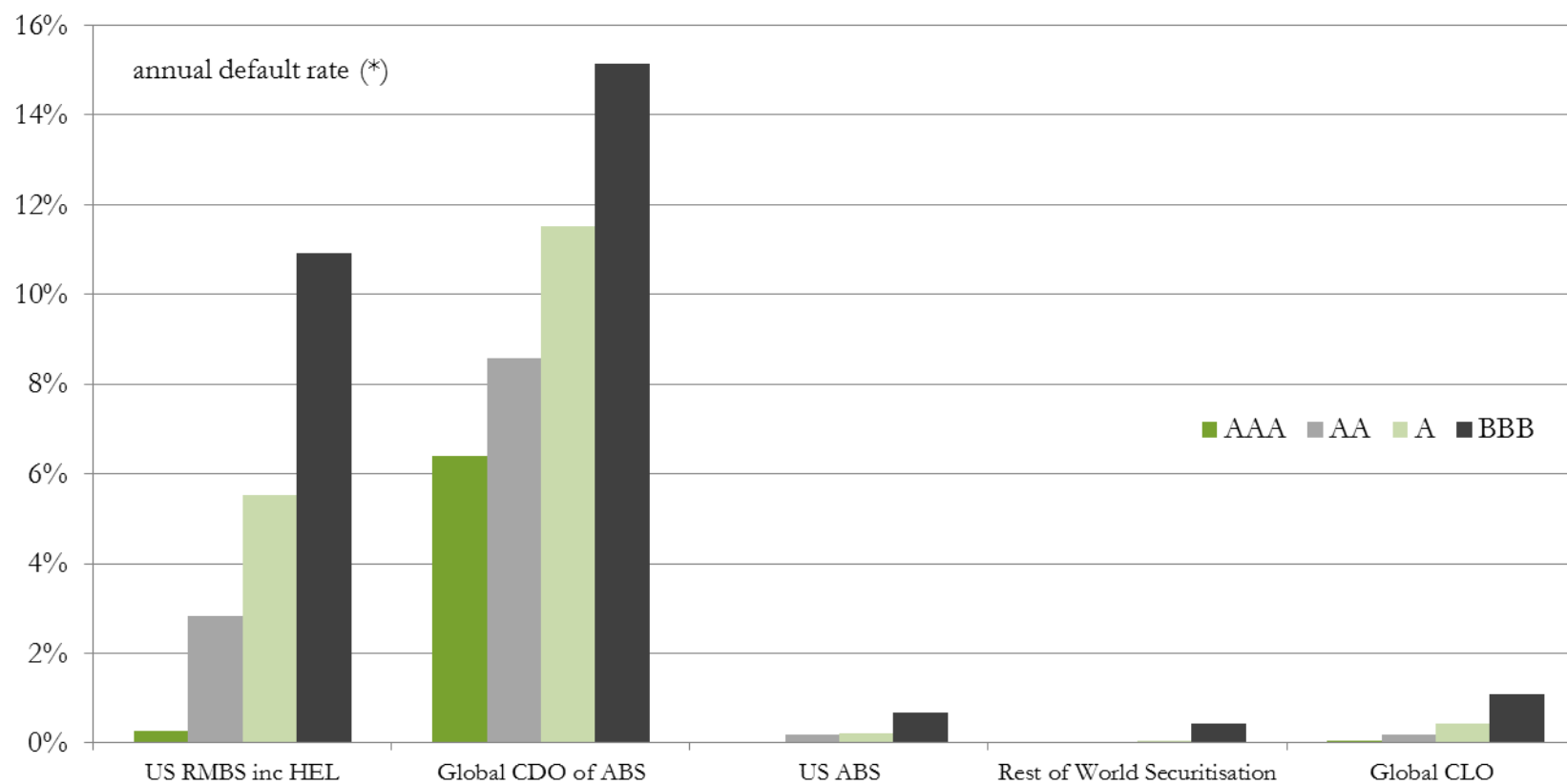
Spread volatility by sector (%)																
	H1 2011				H2 2011				Increase H2 vs. H1				Jan 2011 – Feb 2012			
	CB	Bank	Sovs	RMBS	CB	Bank	Sovs	RMBS	CB	Bank	Sovs	RMBS	CB	Bank	Sovs	RMBS
United Kingdom	0.5	1.8	0.5	0.6	1.3	4.1	1.5	0.9	0.8	2.2	1.0	0.3	1.1	3.5	1.2	0.8
France	0.6	1.1	0.9	NA	2.2	5.2	5.6	NA	1.6	4.1	4.7	NA	1.8	4.0	4.2	NA
Germany	0.3	0.6	0.9	NA	0.5	0.9	1.8	NA	0.2	0.3	0.9	NA	0.4	0.8	1.5	NA
Netherlands	0.6	1.1	0.7	0.8	0.7	3.7	2.6	1.0	0.1	2.6	1.9	0.2	0.7	3.1	1.9	0.9
Portugal	3.2	8.1	9.6	NA	8.5	17.8	18.6	NA	5.3	9.7	8.9	NA	7.9	14.6	15.5	NA
Spain	2.4	3.4	4.5	2.6	2.7	7.5	10.4	3.9	0.3	4.1	6.0	1.3	2.9	5.8	8.1	4.2
Sweden	0.4	1.3	1.1	NA	0.5	3.7	0.9	NA	0.1	2.4	-0.2	NA	0.4	2.8	1.0	NA
Italy	1.9	1.7	2.5	0.8	4.4	9.5	8.8	5.5	2.5	7.8	6.3	4.8	3.7	7.2	6.9	5.2

Source: BAML

Annex 1.3

Historical Default Rates for Securitisation

Historical default rates : major difference between US RMBS/CDO of ABS and all other securitisation



(*) Average of 1 year observed default rates weighted by number of tranches at beginning of year (period 1984-2012)

Source: BNPP based on S&P and Moody's default databases for securitisation

Annex 2

Regulator and Policymaker Remarks re Securitisation

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Regulator and Policymaker Remarks re Securitisation

Michel Barnier, Member of the European Commission, February 2013

"We must also ask ourselves how to give a second wind to the securitisation market so as to improve the maturity transformations by the financial system". ("Et nous devons aussi nous demander comment donner un nouveau souffle au marché de la titrisation de manière à améliorer la transformation d'échéances par le système financier").

http://europa.eu/rapid/press-release_SPEECH-13-150_fr.htm?locale=en

Peter Praet, Member of the Executive Board of the ECB, speech at the *8th annual European Market Liquidity Conference of the Association of Financial Markets in Europe*, London, February 2013

"One market segment that suffered considerably during the financial crisis was the market for asset-backed securities (ABSs), the revival of which I consider essential for the provision of finance to the corporate sector.

Given the restricted funding sources and elevated bank funding needs, a trend towards more disintermediation from larger corporate issuers has been observed in recent years, and this trend will most likely continue.

By contrast, small and medium sized enterprises (SMEs) are more dependent on their respective domestic banking sectors and are subject to tighter credit conditions than larger firms that have greater access to global financial markets. The question arises as to how these restrictions could be overcome. A reopening of the ABS market may be one way of enhancing funding conditions for SMEs.

It will therefore be essential to better understand the factors that still constrain the recovery in this market and why investors are shying away, despite proven good performance and very few defaults on European ABSs."

<http://www.afme.eu/WorkArea/DownloadAsset.aspx?id=7840>

G30 report on Long-Term Finance and Growth, February 2013, p. 39

"[...] expanding Europe's corporate bond and securitisation markets to the same level of those in the United States could free-up more than \$300bn in Tier 1 capital for European banks."

http://www.group30.org/images/PDF/Long-term_Finance_lo-res.pdf

GUO Shuqing, Chairman of the CSRC, speech at the *Caijing Annual Conference 2012 on “Striving to Build World-class Investment Banks with Chinese Characteristics”*, December 2012

"China's securities industry is currently in the face of the best ever opportunities for development. As pointed out in the 12th Five-year Plan outlines, China will accelerate the development of a multilevel financial market and in particular, “vigorously develop bond market, continue to encourage financial innovation and significantly increase the share of direct financing”, “accelerate the development of an OTC market” , “proactively develop bond market” and “steadily drive forward asset securitization”. These efforts are essential to China's industry restructuring and transformation of growth pattern. It is fair to say that China's capital markets are embracing the best ever historic period of opportunities."

http://202.106.183.101/pub/csrc_en/Informations/phgall/201208/t20120815_213803.htm

Francesco Papadia, Chairman of the Prime Collateralised Securities initiative, November 2012

"Europe needs a healthy securitisation market and we are confident that this initiative, alongside regulatory changes, will revitalise the market as a source of funding for the real economy."

Vince Cable, UK Business Secretary, *Vince Cable: Bundle up SME debt to boost lending*, Telegraph, November 2012

"A new version of securitisation does have a future. Various attempts have been made to relaunch it since the financial crisis and none have quite worked. But it's one of the ways to get money into small businesses and we've got to try everything because there is a serious problem of supply of finance, not just demand."

<http://www.telegraph.co.uk/finance/yourbusiness/9665436/Vince-Cable-Bundle-up-SME-debt-to-boost-lending.html>

IOSCO, *Final Report on “Global Developments in Securitisation Regulation”*, November 2012

"IOSCO believes that securitisation markets can play a role in supporting economic growth ... Securitisation markets potentially [make] bank lending less sensitive to abrupt changes to the cost of funds, ultimately affecting the availability of finance to economic growth. For that reason, access to these funding sources may be important to those economies experiencing slow growth."

<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD394.pdf>

Mario Draghi, President of the European Central Bank, *in a letter to the European Financial Services Round Table supporting the PCS Initiative*, June 2012

“The ECB welcomes the [PCS] initiative, which aims at increasing the attractiveness of asset-backed securities among investors and originating banks. A well functioning ABS market in the EU would allow investors to diversify their investments and ... thereby contribute to a smooth financing of the real economy.”

Andrea Enria, Chairman of the European Banking Authority, supporting the PCS Initiative, June 2012

“EBA believes that the European securitisation market can play an important role in meeting the funding needs of the originators and the asset diversification needs in Europe in the future. The PCS label could be an important component to re-establish a sound and well controlled market for securitisation in Europe.”

IOSCO, *Global Developments in Securitization Regulation Consultation Report*, June 2012, p. 4

“From a European perspective, there is a view that securitization is a viable alternative source of funding for the banking sector at a time when it needs funding diversification. Good functioning of, and access to, securitization as a funding alternative would, in turn, support recovery in the real economy.”

“There is concern among issuers, in particular, that securitization continues to be stigmatised by sub-prime crisis events.”

<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD382.pdf>

Evangelos Tabakis, Head of Financial Markets and Collateral Section, European Central Bank, speech at *the Global ABS Conference, The importance of the ABS market in the implementation of monetary policy in the euro area*, Brussels, June 2012

"The lack of a full scale recovery of the securitization activity is unfortunate. In many ways, securitisation has an important role to play in financial markets. First, subject to a market based on a sound footing, it is a welfare improving activity since it is able to distribute risks in the financial system but also to transform illiquid products such as single mortgage loans or single SME loans into a liquid product. In this way, both originators of securitization transactions and investors in them could diversify their respective portfolios in terms of risk and return.....

...Indeed, the importance of the three segments for banks' longer-term debt financing (unsecured debt, covered bonds and ABSs) can hardly be overstated. First, they contribute to an efficient risk allocation and diversification, leading to lower costs of capital, higher economic growth and a healthy risk taking. Second, they tend to make lending decisions by financial institutions less dependent on business cycle conditions. Third, deep and stable funding markets make debtors less exposed to re-financing or liquidity risk, which increases banks' resilience and helps contain systemic risk.

...I would like to emphasise here however the unique nature of securitization as a funding tool. This is based on its extreme versatility regarding the underlying asset basis and, therefore, the underlying economic sector that it is funding. In that sense ABSs are uniquely shaped to provide targeted funding to a variety of economic activities and the corresponding choice to the investor on his distribution of risk exposure."

[http://www.afme.eu/uploadedFiles/6_Conferences_and_Events/ABS%20Global%20Conference %2014%2006%202012_Brussels_Tabakis.pdf](http://www.afme.eu/uploadedFiles/6_Conferences_and_Events/ABS%20Global%20Conference%2014%2006%202012_Brussels_Tabakis.pdf)

Deepak Singhal, Chief General Manager-in-Charge of the Reserve Bank of India, Announcement on "Revisions to the Guidelines on Securitisation Transactions", May 2012

"With a view to developing an orderly and healthy securitisation market and ensuring greater alignment of the interests of the originators and the investors, it was considered necessary to prescribe a minimum lock-in-period and minimum retention criteria for securitised loans originated and purchased by banks and NBFCs."

<http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=7184&Mode=0>

Steven Maijoor, Chairman ESMA, speech at AFME's European Market Liquidity Conference, February 2012

"[The securitisation market is] ... a very important market that deserves to repair its damaged reputation and restore investor confidence."

John Walsh, Acting Comptroller of the Currency, speech at the American Securitization Forum Annual Conference, January 2012

"Whether in mortgages, credit cards, auto finance, or student loans, meeting the needs of American consumers depends heavily on securitization. It is hard to imagine full recovery of the financial system without the liquidity and funding avenues provided by a well functioning securitization market. Certainly, it is hard to foresee a strong recovery for the housing industry without securitization."

<http://www.occ.gov/news-issuances/speeches/2012/pub-speech-2012-11.pdf>

Emil Paulis, European Commission, speaking at AFME's Funding Conference, Madrid, November 2011

"I would like to reaffirm that for the Commission securitisation is considered as an efficient mechanism to increase the credit availability and lower the cost of credit in line with the G20's November 2010 report that noted that "re-establishing securitisation on a sound basis remains a priority in order to support provision of credit to the real economy and improve banks' access to funding in many jurisdictions." Furthermore, there is no question that it is in the private and public sector interest to reactivate securitisation markets.

FSB, *Shadow Banking: Strengthening Oversight and Regulation*, October 2011, p. 21

“Securitisation is a useful funding technique for financial institutions, and an efficient means to diversify risk.”

http://www.financialstabilityboard.org/publications/r_111027a.pdf

Scott G. Alvarez, General Counsel US Federal Reserve, before the *Subcommittee on Capital Markets and Government Sponsored Enterprises, Committee on Financial Services, U.S. House of Representatives*, Washington D.C., April 2011

“Securitization can reduce the costs of lending because it creates investment products with different maturity and credit risk profiles from a single pool of assets that can appeal to a broad range of investors. In addition, securitization allows for more efficient management of maturity mismatches.”

“Securitization can also promote financial stability by allowing depository institutions and other lenders a means to reduce concentrations in credit risk to certain types of loans and borrowers on their balance sheets.”

<http://www.federalreserve.gov/newsevents/testimony/alvarez20110414a.htm>

Elizabeth A. Duke, Governor of the US Federal Reserve, *AICPA National Conference on Banks and Savings Institutions*, Washington D.C., September 2009

“[...] I fully understand the integral role that financial institutions play in the overall performance of our economy. Equally important are the roles played by those that trade and those that lend and by the securitization markets.”

<http://www.federalreserve.gov/newsevents/speech/duke20090914a.htm>

Randall S. Kroszner, Governor of the US Federal Reserve, *Federal Reserve System Conference on Housing and Mortgage Markets*, Washington D.C., December 2008

“I believe that mortgage securitization has the potential to deliver economic value to investors, lenders, and, ultimately, borrowers.”

“[M]ortgage securitizations make good economic sense: By providing access to the broad capital market, securitization allows loan originators to access a wider source of funding than they can obtain directly. In addition, securitization can limit an originator's exposure to prepayment risks associated with interest rate movements, to geographic concentrations of loans, and to credit and funding risks associated with holding mortgages all the way to maturity. Effectively, securitization can significantly lower the cost of extending home loans, and some of those cost savings can be passed along to homeowners in the form of lower mortgage rates.”

<http://www.federalreserve.gov/newsevents/speech/kroszner20081204a.htm>



Ben S. Bernanke, Chairman of the US Federal Reserve, *UC Berkeley/UCLA Symposium: The Mortgage Meltdown, the Economy, and Public Policy*, Berkeley, October 2008

“The ability of financial intermediaries to sell the mortgages they originate into the broader capital market by means of the securitization process serves two important purposes: First, it provides originators much wider sources of funding than they could obtain through conventional sources, such as retail deposits; second, it substantially reduces the originator's exposure to interest rate, credit, prepayment, and other risks associated with holding mortgages to maturity, thereby reducing the overall costs of providing mortgage credit.”

<http://www.federalreserve.gov/newsevents/speech/bernanke20081031a.htm>

Annex 3

Analysis of the Effect of the Proposals on RAROC

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Annex 3.1

Spread Needed to Keep RAROC (Risk-Adjusted Return on Capital) Constant Under New Framework

Asset	Tranche Rating	Current SA to Revised RBA	Current RBA to Revised RBA	Current RBA to SSFA (p=1.5)	SSFA (p=0.5) to SSFA (p=1.5)
UK Prime RMBS - Granite Master Issuer 2007-1 (standardised approach for underlying pool)	AAA	229.07	654.49	225.71	79.00
	AA	1303.31	1737.28	562.96	422.57
	A	1136.00	2825.29	1640.54	1640.54
	BBB	984.32	1293.36	1647.20	466.88
UK Prime RMBS - Granite Master Issuer 2007-1 (standardised approach for underlying pool)	AAA	229.07	610.86	210.67	79.00
	AA	1303.31	1737.28	147.53	111.00
	A	1136.00	2825.29	461.40	461.40
	BBB	984.32	1293.36	899.67	1084.88
UK NCF RMBS - RMAC 2005-NSP2	AA	984.57	2459.34	571.40	229.40
	AA	3258.27	4343.89	3493.71	2620.63
	A	3477.45	8678.92	16673.81	2240.12
	BBB	4043.17	5371.83	11189.28	825.31
Strong Spanish RMBS - Bankinter 13	A	958.41	3962.35	651.40	394.76
	BBB	3394.10	4506.39	3164.40	2922.06
	BBB	3984.38	5293.44	6026.54	1315.28
Weaker Spanish RMBS - TDA CAM 9	A	1056.87	4372.60	2210.20	1330.04
	BB	1971.73	1671.39	1536.17	908.61

Source: BAML

Spread Needed to Keep RAROC (Risk-Adjusted Return on Capital) Constant Under New Framework (cont.)

Asset	Tranche Rating	Current SA to Revised RBA	Current RBA to Revised RBA	Current RBA to SSFA (p=1.5)	SSFA (p=0.5) to SSFA (p=1.5)
Auto ABS - Driver Ten	AAA	72.49	193.31	326.38	116.97
	A	560.43	1386.38	3942.76	85.27
SME CLO - PYMES Santander 4	A	1107.51	4583.59	660.13	400.00
	BBB	4117.18	5470.51	1500.12	5468.16
Italian Lease - UBI Lease Finance 5	A	474.54	1946.22	485.71	295.34
European CLO - Cairn CLO III	AAA	382.77	1070.98	895.81	321.46
	AA	2662.07	3540.36	3921.55	2947.97
	A	1964.94	4786.34	5319.97	1992.75
	BBB	1648.74	2126.91	1904.55	1112.22
US CLO 2.0 - typical capital structure	AAA	350.88	979.85	364.79	135.61
	AA	2089.05	2776.33	1940.62	1462.26
	A	1760.92	4276.30	3545.94	3109.77
	BBB	1421.30	1823.66	1514.44	1224.11
	BB	731.40	695.16	636.52	665.37

Source: BAML

Annex 3.2

“Tougher Basel III Proposal Puts CMBS and ABS at Risk”

Source: Deutsche Bank, *The Outlook in MBS and Securitized Products*, 27 February 2013, p. 6-7

The securitization markets have been targeted for a multitude of changes in the ensuing years following the credit crisis by regulators and investors alike. Many changes have already occurred organically through the work of various industry groups, issuers and investors. The robust reemergence of the CMBS market in the US has provided the best evidence that changes designed and implemented by market participants can and have addressed past structural problems and corrected many of the issues that were at the core of the excesses of the mid-2000s.

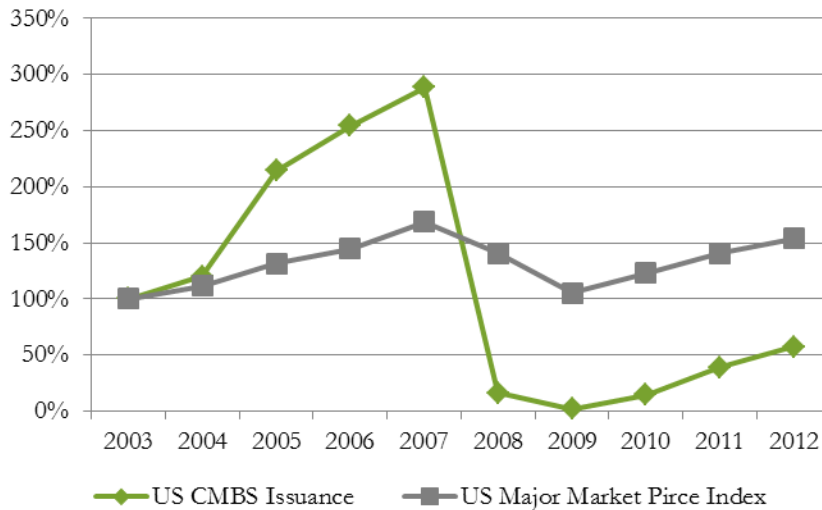
Recent successes notwithstanding, the need for additional regulatory changes have been recognized not only by the regulators and central banks of the EU and US but by investors of all sizes and types. Regarding the latter, a widespread acceptance of the changing regulatory environment for securitization markets has at this point become commonplace. However, acceptance in our view has been based on the belief that regulators would work hand in hand with market participants (i.e., industry associations who could coordinate efficiently with members) to protect the quality and stability of the securitization market while not unnecessarily hindering the functionality of these markets. The recent consultation document proposing changes to the Basel III securitization framework therefore is incongruous to this belief.

Our thoughts on the proposed changes are discussed below though it is difficult to overstate the enormous cost the proposed changes would have not just on the viability of the securitization business but on the broader economy. Given the large number of assets and markets that benefit from securitization, for the purpose of simplicity we will briefly review the broader potential impact through two of the largest non-residential asset classes: US commercial mortgages and the US auto loan market.

The larger of the two markets and the one that would also suffer the most if the proposed changes were implemented is the commercial real estate market. In short, by virtue of the fact the capital charges for a CMBS transaction are not consistent with the charges for holding commercial mortgages, the result will severely erode the availability of financing and increasing borrowing costs for owners of commercial real estate. This will not only affect owners but the negative corresponding effect on property values will hamper the ability of the banking system (especially regional and community banks) to continue to bolster capital. Furthermore, in both the US and European commercial real estate markets, the balance of both securitized and balance sheet loans maturing over the next few years totals hundreds of billions.

As shown in the chart below, the reemergence of a strong new issue CMBS market in the US has contributed to nearly a complete recovery of commercial property values in major markets. This comes after nearly a 40% decline in average prices between 2007 and 2009 and the complete collapse of the new issue CMBS market. Even pre-crisis, securitization funding played an important role in expanding the size of the lending market, which serves as a major source of investment for not only the banking industry but insurance companies as well.

US CMBS issuance versus CPPI



Aside from the collective financial impact on banks and the ruinous impact on CMBS issuance, we also would expect a meaningful loss of jobs. In the EU, the commercial real estate industry employs 4 million people and contributes approximately €300 billion to GDP.¹ In the US, the immediate impact would come from CMBS lenders, and the many service providers to the industry such as accounting firms, law firms, servicers, rating agencies, technology companies that provide analytic and information services. However, the related downward pressure on property prices would negatively impact many more.

Further evidence of the positive benefits of having a healthy securitization market can be found in a recent survey of global real estate investors, who collectively manage assets over \$4 trillion. They ranked four US cities (NY #1, San Francisco #3, Washington DC #4, Houston #5) among the five most attractive markets globally for investment. The stability of asset values that result from the stabilizing impact securitization has on these markets is a major reason why they are so attractive to global investors. In the EU, the lack of a vibrant new issue CMBS market is one of the reasons why the recovery of the CRE (commercial real estate) market there has languished compared to the US market.²

The consumer debt market is more diverse but similar trends to what was detailed above in CRE/CMBS can be found across the space. In the US ABS market, issuance of deals backed by prime and subprime auto loans is the largest segment of the market. Over the last ten years the amount of cars sold in the US has exhibited nearly a perfect correlation to the balance of related ABS issuance. As almost every purchase of a car in the US requires financing, and securitization is an important and sizable source of financing. Intuitively it follows that the ability of lenders to securitize assets drives vehicle sales. One of the main reasons that securitization remains a primary funding source for issuers is the cost advantage it offers compared to alternative sources. For example, last year Ford Credit (the largest auto ABS issuer in 2012) was able to sell triple-A notes in its US public retail ABS transactions at a weighted average spread of 9 to 22 bp over the relevant benchmark. This is substantially lower than the

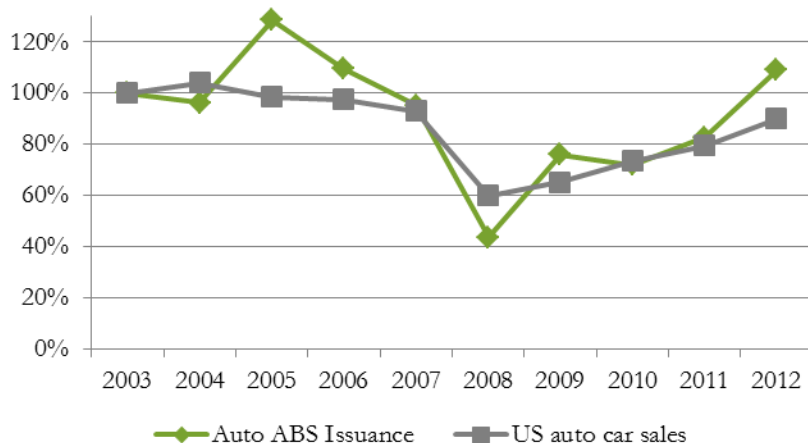
¹ http://www.epra.com/media/EPRA_Real_estate_in_the_real_economy_infog1_1354797656783.pdf

² <http://afire.org/sites/default/files/pdf/press/2013-foreign-investment-survey-pr.pdf>

cost of its unsecured corporate debt, which was offered at spreads of 199 to 338 bp over the relevant benchmark.³

Apart from risking a renewed decline in underlying asset values and the continued employment of millions of people, the proposed rules also endanger the liquidity institutional investors currently access in the secondary securitized markets. Significantly higher capital costs will cause dealers to reduce inventory levels and their ability to provide liquidity to markets. For fixed income market participants facing unprecedented low yields in sovereign bond and corporate markets, securitized bonds have become even more important. The lower overall market liquidity will cause buyers to price in larger liquidity premiums to all securitized products, which will harm the banks, insurance companies, government and corporate pension funds, university endowments and the millions of employees, retirees and shareholders that depend on the returns generated by investments in the space.

Correlation of auto ABS issuance and US auto sales



In some cases buyers could disappear from the markets altogether as they not only face much less liquidity but also will face higher capital costs of their own. In the ABS space, in particular, the additional financing costs will initially be borne by the companies financing assets but will in time get passed through to consumers and influence their purchasing decisions. Already questions stemming from earlier proposals regarding risk retention and the absence of a distinction between commercial and residential mortgage servicing assets have introduced doubt on the long term viability of the CMBS and ABS markets, so any additional regulatory burdens could have potentially catastrophic effects.

³ Ford Credit 10-k filing, December 2012

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Annex 4

Sample Portfolio Analysis

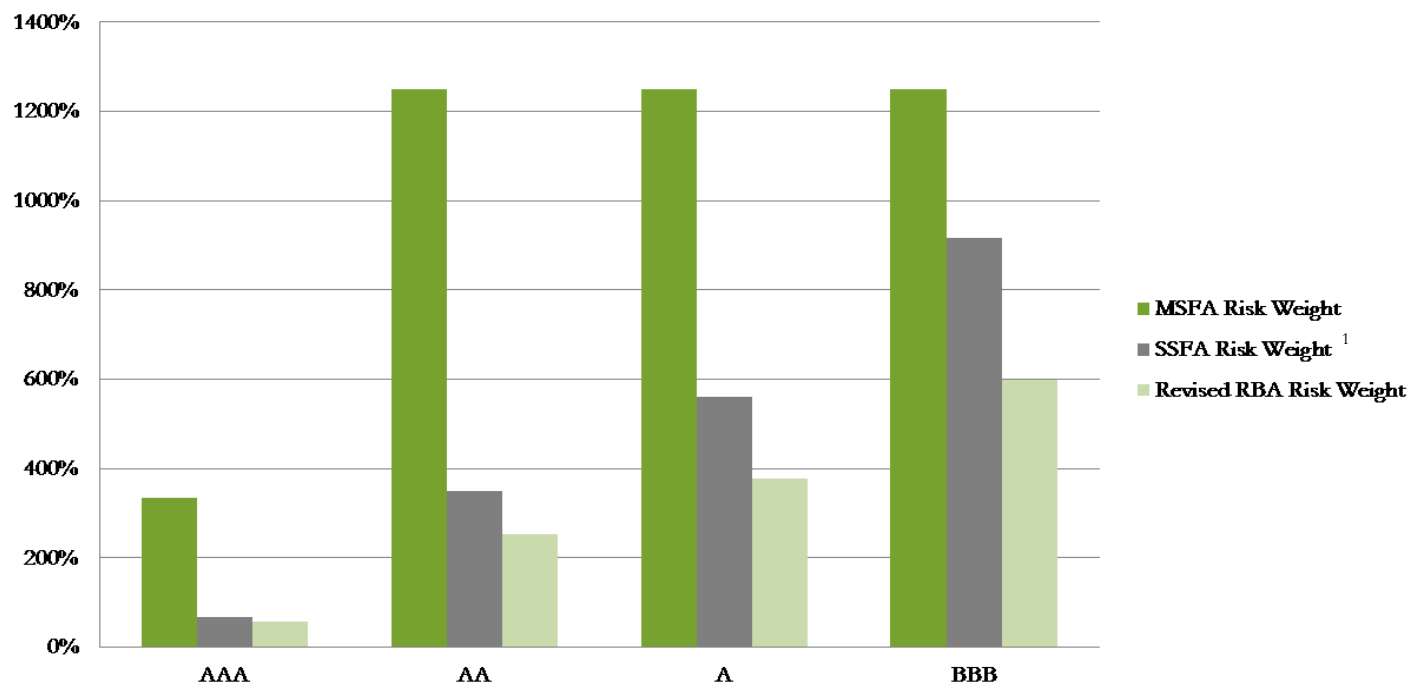
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Annex 4.1.a

RWA Analysis of Sample Transactions

- The following nine pages show results of initial analysis of a number of transaction types with risk weights calculated under the different capital calculation methodologies.
- All data from analysis of actual transactions. The names of public transactions are shown; the names of private transactions have been redacted.

Subprime Auto Transaction I

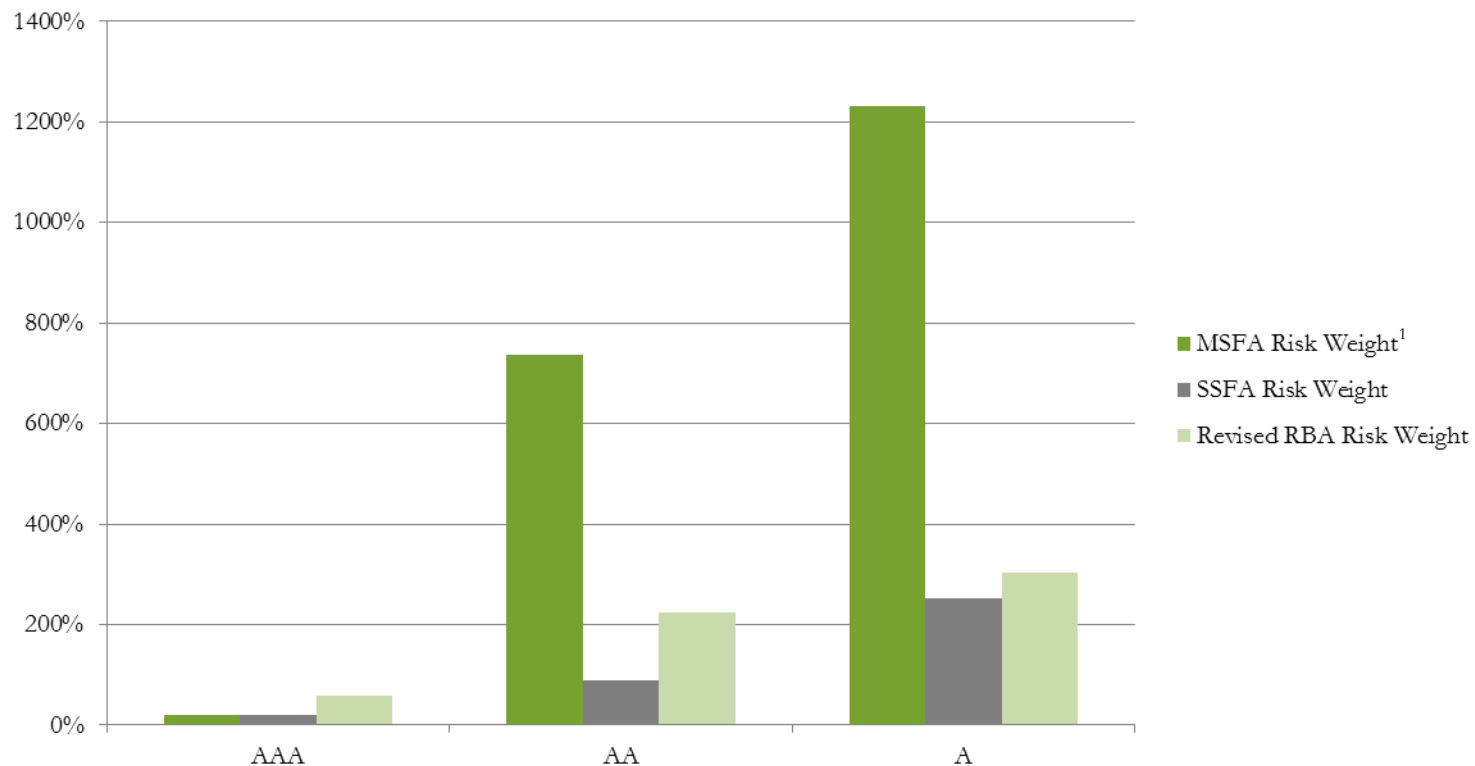


Ksa	W	Kirb	Attachment	Detachment	Maturity	Public Rating	MSFA Capital Requirement	SSFA Capital Requirement	Revised RBA Capital Requirement	MSFA Risk Weight	SSFA Risk Weight	Revised RBA Risk Weight
7.92%	6.52%	33.46%	34%	100%	5.0		26.8%	5.5%	4.6%	335.4%	68.3%	58.0%
7.92%	6.52%	33.46%	28%	34%	5.0	AA	100.0%	28.1%	20.3%	1250.0%	350.8%	253.6%
7.92%	6.52%	33.46%	19%	28%	5.0	A	100.0%	44.9%	30.2%	1250.0%	560.7%	377.7%
7.92%	6.52%	33.46%	12%	19%	5.0	BBB	100.0%	73.4%	47.9%	1250.0%	917.6%	599.0%

¹ For illustrative purposes MSFA was run assuming PD/LGD as currently calculated in US market would be retained in order to allow for comparison of approaches.

* Regulatory Cap has been ignored here for illustrative purposes

Subprime Auto Transaction II

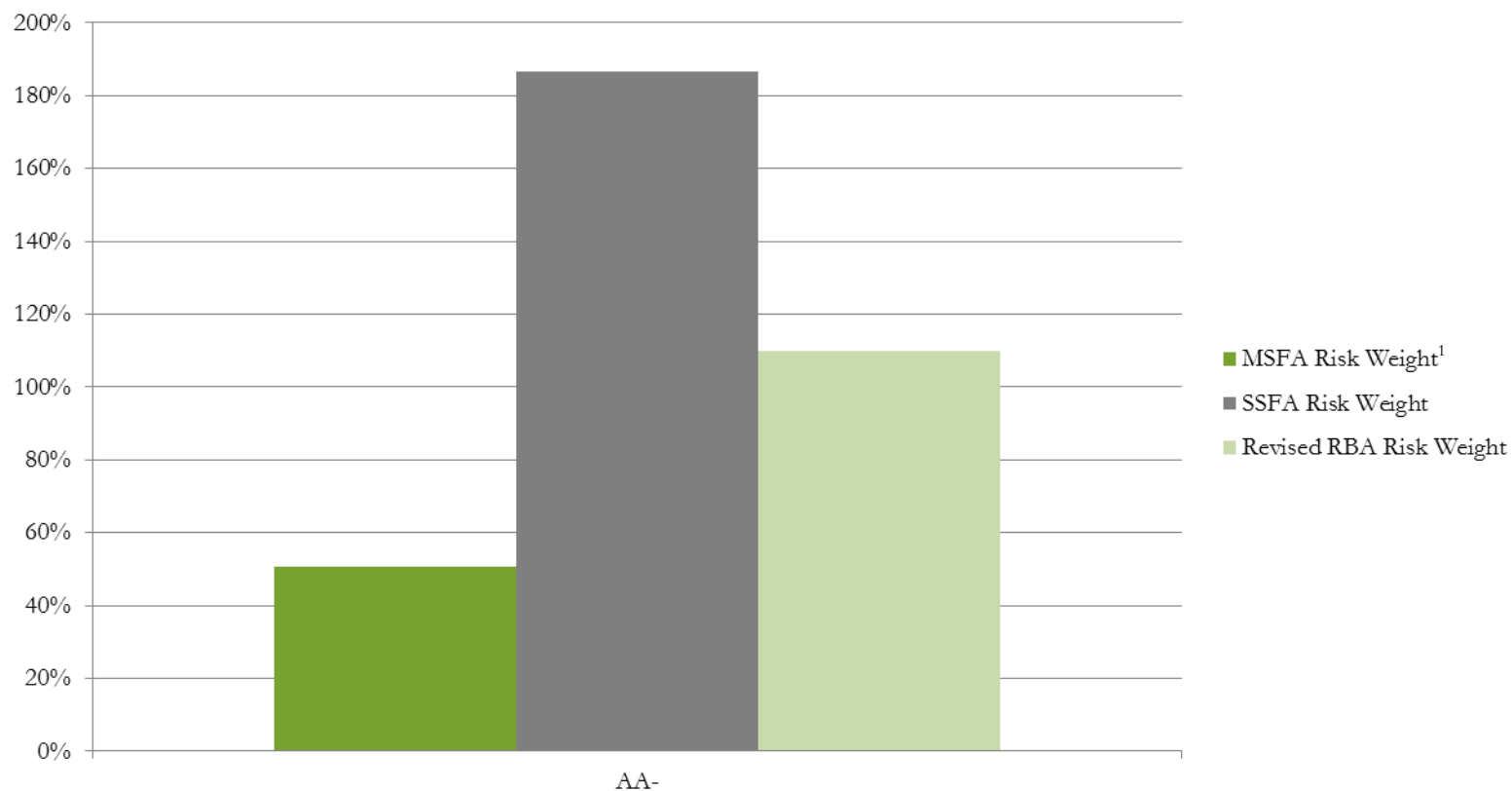


Ksa	W	Kirb	Attachment	Detachment	Maturity	Public Rating	MSFA Capital Requirement	SSFA Capital Requirement	Revised RBA Capital Requirement	MSFA Risk Weight	SSFA Risk Weight	Revised RBA Risk Weight
8.00%	3.03%	26.47%	52%	100%	5.0		2%	2%	5%	20.0%	20.0%	58.0%
8.00%	3.03%	26.47%	41%	52%	5.0	AA	59%	7%	18%	736.2%	88.6%	225.3%
8.00%	3.03%	26.47%	24%	41%	5.0	A	98%	20%	24%	1231.2%	251.7%	302.7%

¹ For illustrative purposes MSFA was run assuming PD/LGD as currently calculated in US market would be retained in order to allow for comparison of approaches

* Regulatory Cap has been ignored here for illustrative purposes

Fleet Lease Transaction

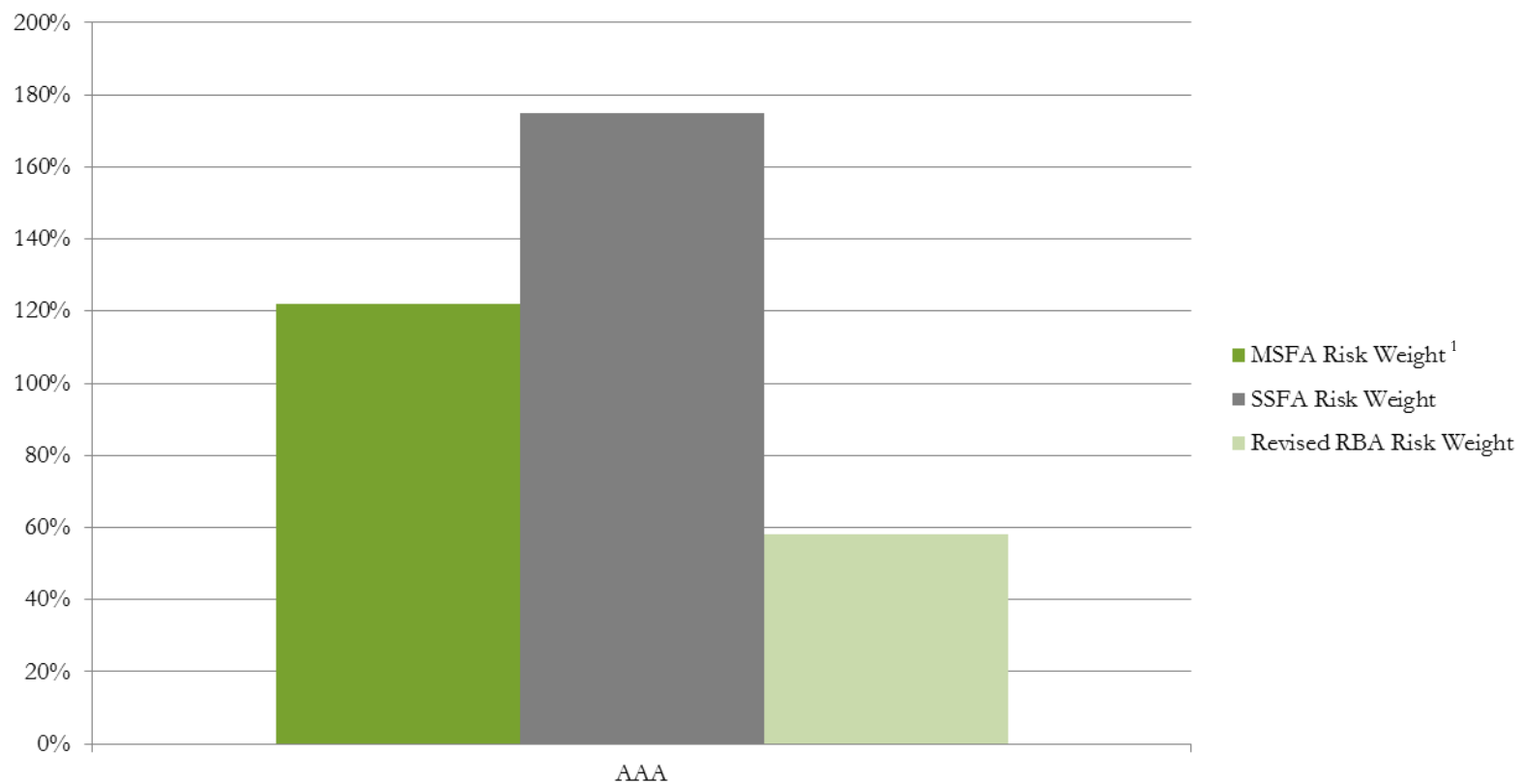


Ksa	W	Kirb	Attachment	Detachment	Maturity	Public Rating	MSFA Capital Requirement	SSFA Capital Requirement	Revised RBA Capital Requirement	MSFA Risk Weight	SSFA Risk Weight	Revised RBA Risk Weight
7.93%	0.22%	5.34%	6%	100%	5.0	AA-	4.1%	14.9%	8.8%	50.7%	186.7%	109.9%

¹ For illustrative purposes MSFA was run assuming PD/LGD as currently calculated in US market would be retained in order to allow for comparison of approaches

* Regulatory Cap has been ignored here for illustrative purposes

Prime Auto Transaction

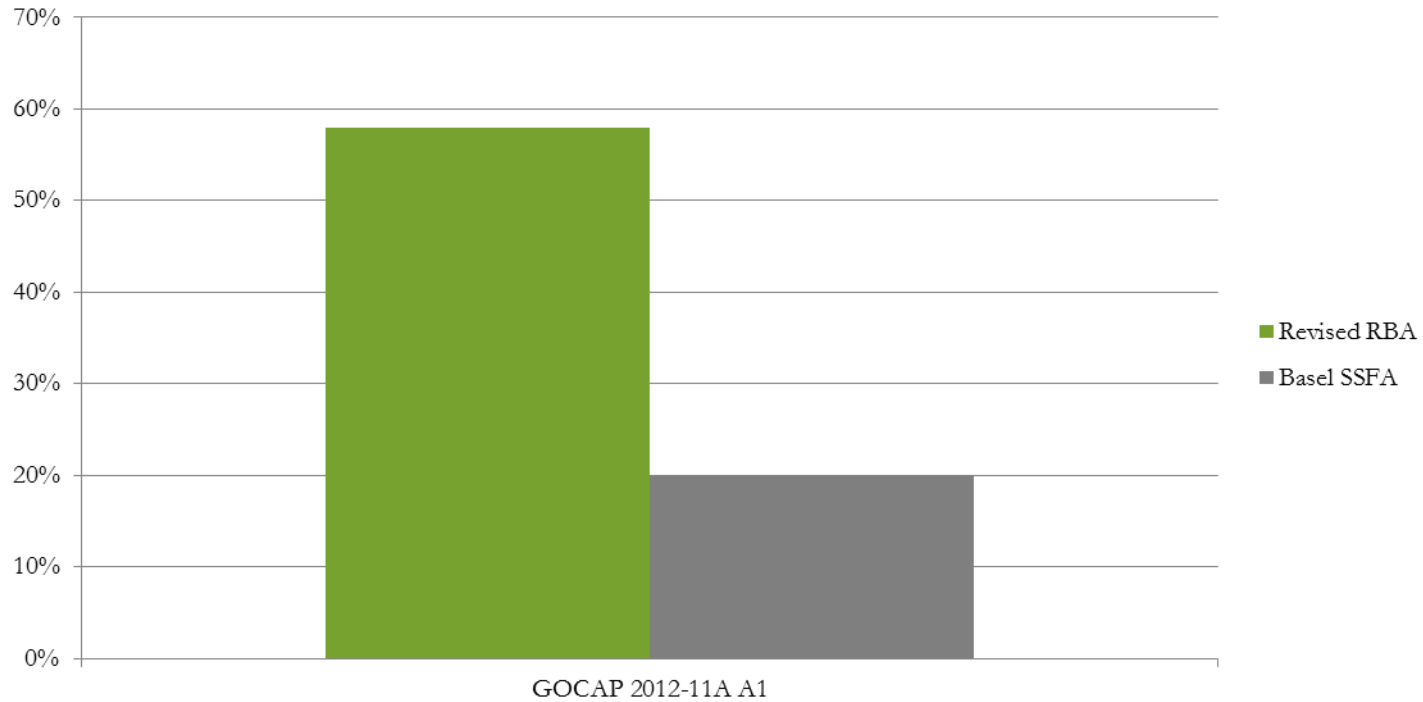


Ksa	W	Kirb	Attachment	Detachment	Maturity	Public Rating	MSFA Capital Requirement	SSFA Capital Requirement	Revised RBA Capital Requirement	MSFA Risk Weight	SSFA Risk Weight	Revised RBA Risk Weight
8.00%	0.37%	5.83%	7%	100%	5.0		9.8%	14.0%	100.0%	122.0%	175.1%	58.0%
8.00%	0.86%	6.80%	47%	100%	5.0	NR	1.6%	1.6%	1	20.0%	20.0%	1250.0%

¹ For illustrative purposes MSFA was run assuming PD/LGD as currently calculated in US market would be retained in order to allow for comparison of approaches

* Regulatory Cap has been ignored here for illustrative purposes

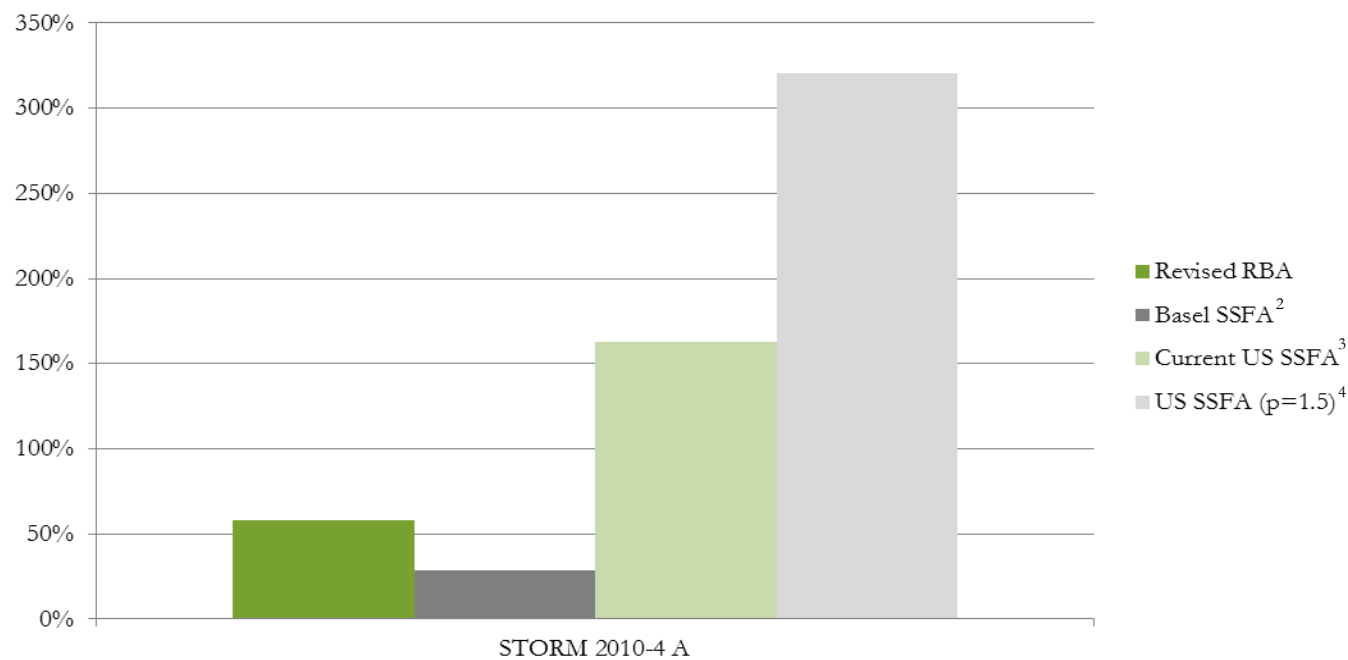
US Collateralized Loan Obligation (CLO)



Ksa	W	Attachment	Detachment	Maturity	Public Rating	Revised RBA Capital Requirement	MSFA Risk Weight
8%	0%	36%	100%	5	AAA	4.6%	20%

Note: GOCAP 2012-11A A1 was used as a proxy for impact on US CLO

Dutch Prime RMBS



	Ksa	W	Attachment	Detachment	Maturity	Public Rating	SSFA Capital Requirement	Revised RBA Capital Requirement	SSFA Risk Weight	Revised RBA Risk Weight
Basel Proposal	2.80%	0.10%	5.75%	100.00%	5.0	AAA	4.86%	4.64%	28.70%	58.0%
Current US Rules	11.98%	0.10%	5.75%	100.00%	5.0	AAA	13.02%	4.64%	162.78%	58.0%
Current US Rules (p=1.5)	11.98%	0.10%	5.75%	100.00%	5.0	AAA	25.63%	4.64%	320.33%	58.0%

Note: STORM 2010-4 A was used as a proxy for impact on Dutch RMBS

Basel SSFA assumes Ksa =4% Basel US assumes Kg as currently defined Category 1 and 2

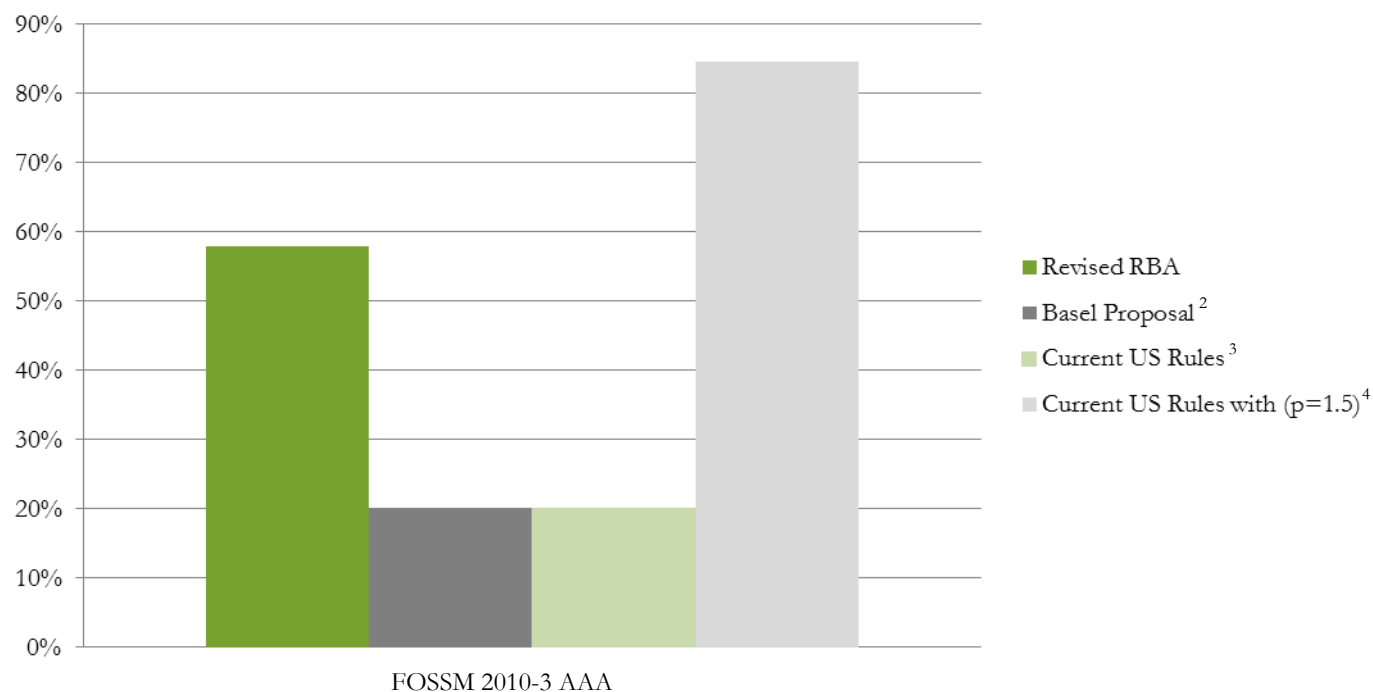
2 SSFA as proposed by Basel Committee

3 SSFA as proposed by US Regulators (p = 0.5) assuming mortgages required to be risk weighted based on US mortgage risk weights

4 SSFA with p=1.5 assuming mortgages required to be risk weighted based on US mortgage risk weights

* Regulatory Cap has been ignored here for illustrative purposes

UK Prime RMBS



	Ksa	W	Attachment	Detachment	Maturity	Public Rating	SSFA Capital Requirement	Revised RBA Capital Requirement	SSFA Risk Weight	Revised RBA Risk Weight
Basel Proposal	2.80%	0.26%	22.18%	100.00%	5.0	AAA	1.60%	4.64%	20.00%	58.0%
Current US Rules	9.03%	0.26%	22.18%	100.00%	5.0	AAA	1.60%	4.64%	20.00%	58.0%
Current US Rules (p=1.5)	9.03%	0.26%	22.18%	100.00%	5.0	AAA	6.77%	4.64%	84.68%	58.0%

Note: FOSSM 2010-3 A3 was used as a proxy for UK Prime RMBS

Basel SSFA assumes Ksa =4% Basel US assumes Kg as currently defined Category 1 and 2

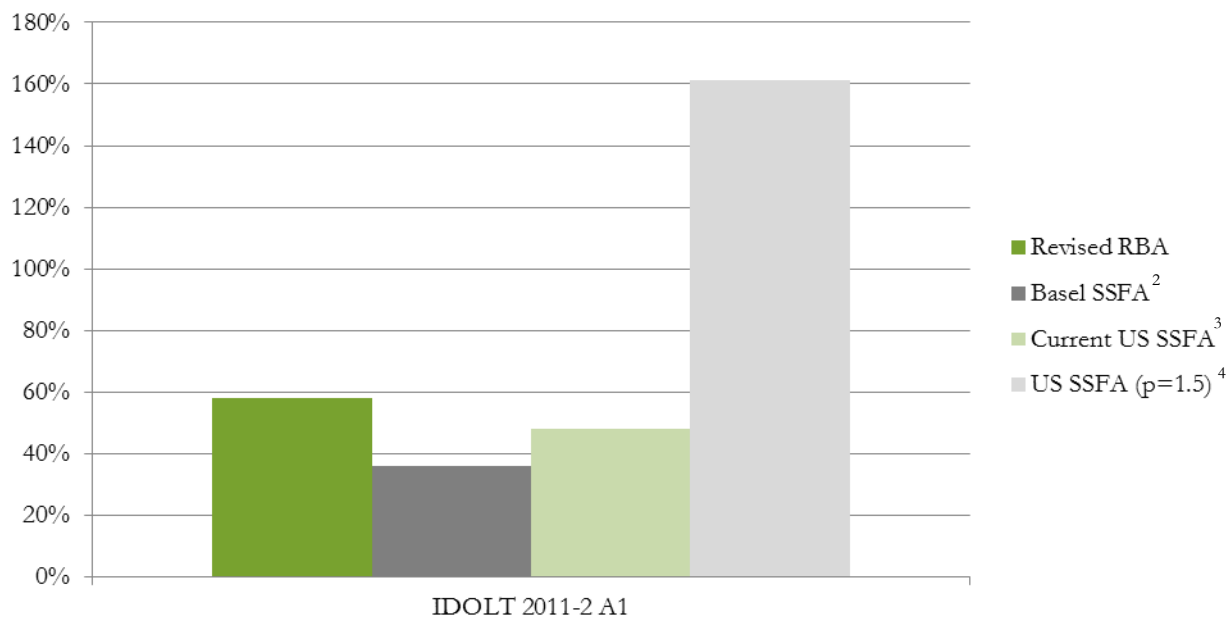
2 SSFA as proposed by Basel Committee

3 SSFA as proposed by US Regulators (p = 0.5) assuming mortgages required to be risk weighted based on US mortgage risk weights

4 SSFA with p=1.5 assuming mortgages required to be risk weighted based on US mortgage risk weights

* Regulatory Cap has been ignored here for illustrative purposes

Australian Prime RMBS



	Ksa	W	Attachment	Detachment	Maturity	Public Rating	SSFA Capital Requirement	Revised RBA Capital Requirement	SSFA Risk Weight	Revised RBA Risk Weight
Basel Proposal	4.00%	0.00%	9.00%	100.00%	5.0	AAA	2.87%	4.64%	35.82%	58.0%
Current US Rules	8.29%	0.00%	9.00%	100.00%	5.0	AAA	3.84%	4.64%	48.01%	58.0%
Current US Rules (p=1.5)	8.29%	0.00%	9.00%	100.00%	5.0	AAA	12.90%	4.64%	161.29%	58.0%

Note: IDOLT 2011-2 A1 was used as a proxy for Australian RMS

Basel SSFA assumes Ksa =4% Basel US assumes Kg as currently defined Category 1 and 2

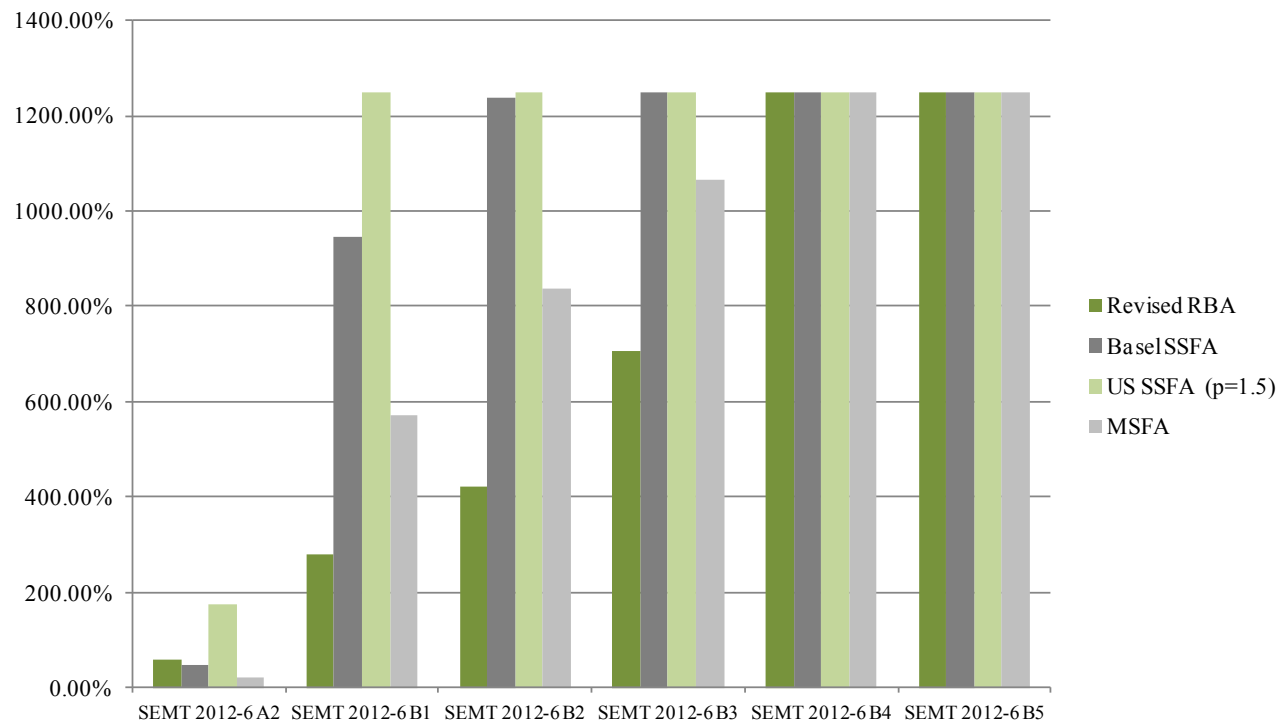
2 SSFA as proposed by Basel Committee

3 SSFA as proposed by US Regulators (p = 0.5) assuming mortgages required to be risk weighted based on US mortgage risk weights

4 SSFA with p=1.5 assuming mortgages required to be risk weighted based on US mortgage risk weights

* Regulatory Cap has been ignored here for illustrative purposes

New Issue Non-Agency RMBS



	Ksa	W	Attach	Detach	Maturity	Public Rating	Revised RBA	Basel SSFA	US SSFA (p=1.5)	MSFA
SEMT 2012-6 A2	8.00	0	7.052%	100.000%	5	AAA	4.64%	3.88%	13.92%	1.60%
SEMT 2012-6 B1	8.00	0	4.402%	7.052%	5	AA	22.49%	75.60%	100.00%	45.87%
SEMT 2012-6 B2	8.00	0	3.003%	4.402%	5	A	33.80%	99.06%	100.00%	67.03%
SEMT 2012-6 B3	8.00	0	1.853%	3.003%	5	BBB	56.58%	100.00%	100.00%	85.19%
SEMT 2012-6 B4	8.00	0	1.053%	1.853%	5	BB	100.00%	100.00%	100.00%	100.00%
SEMT 2012-6 B5	8.00	0	0.000%	1.053%	5	N/A	100.00%	100.00%	100.00%	100.00%

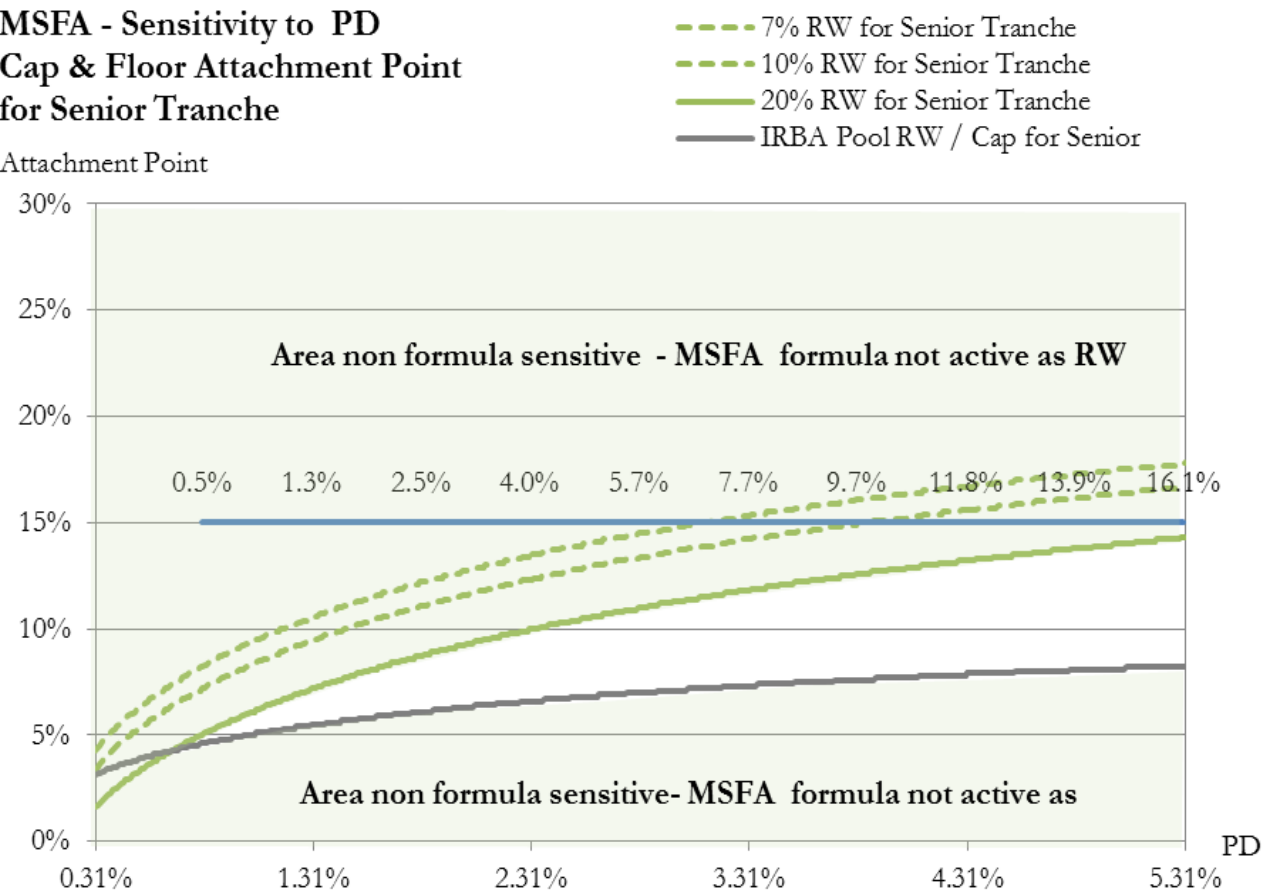
Annex 4.1.b

Specific Analysis: MSFA and SSFA

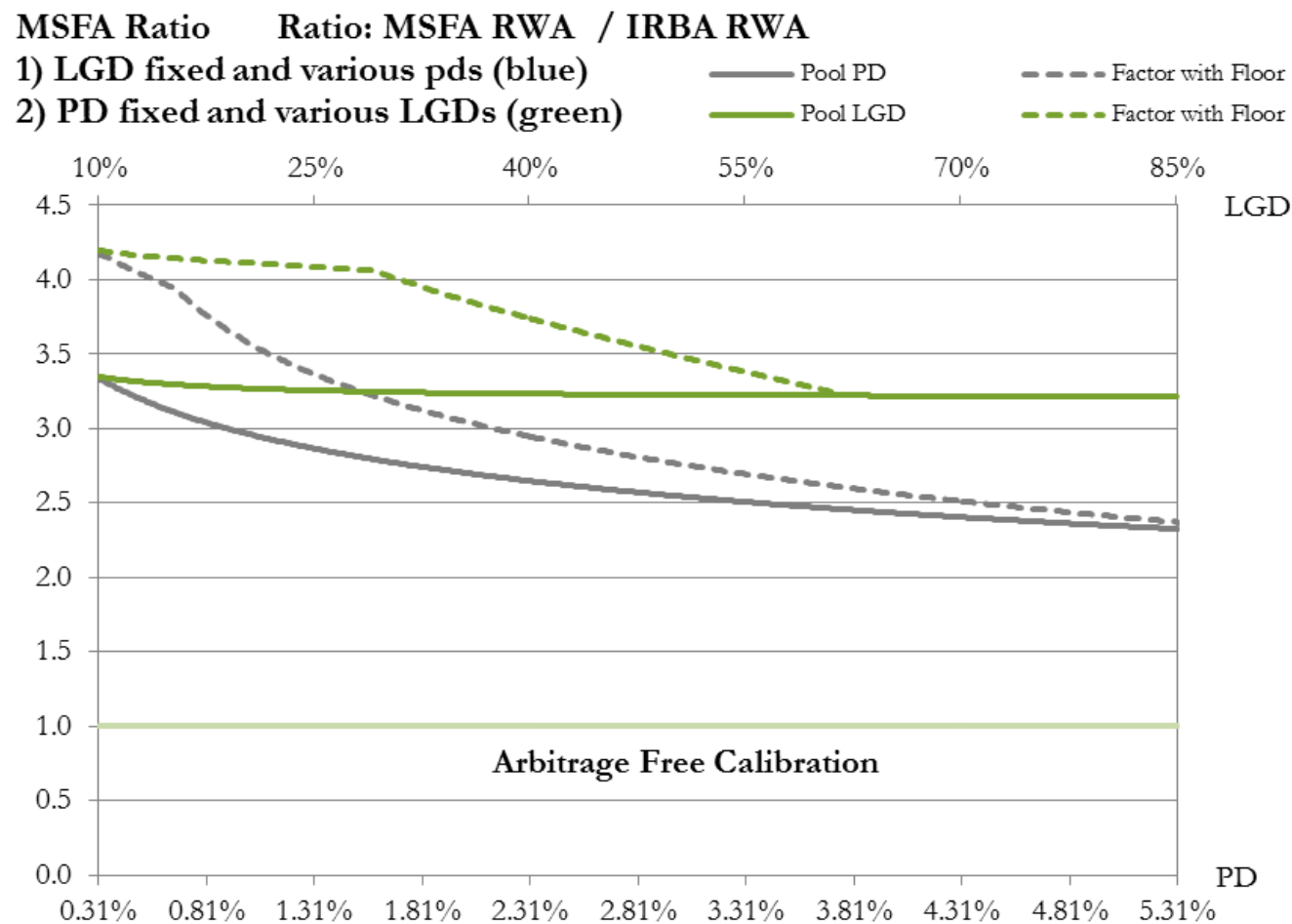
Narrow Area of MSFA Formula Use on Senior Tranche - Case of Prime European RMBS

MSFA - Sensitivity to PD Cap & Floor Attachment Point for Senior Tranche

Attachment Point



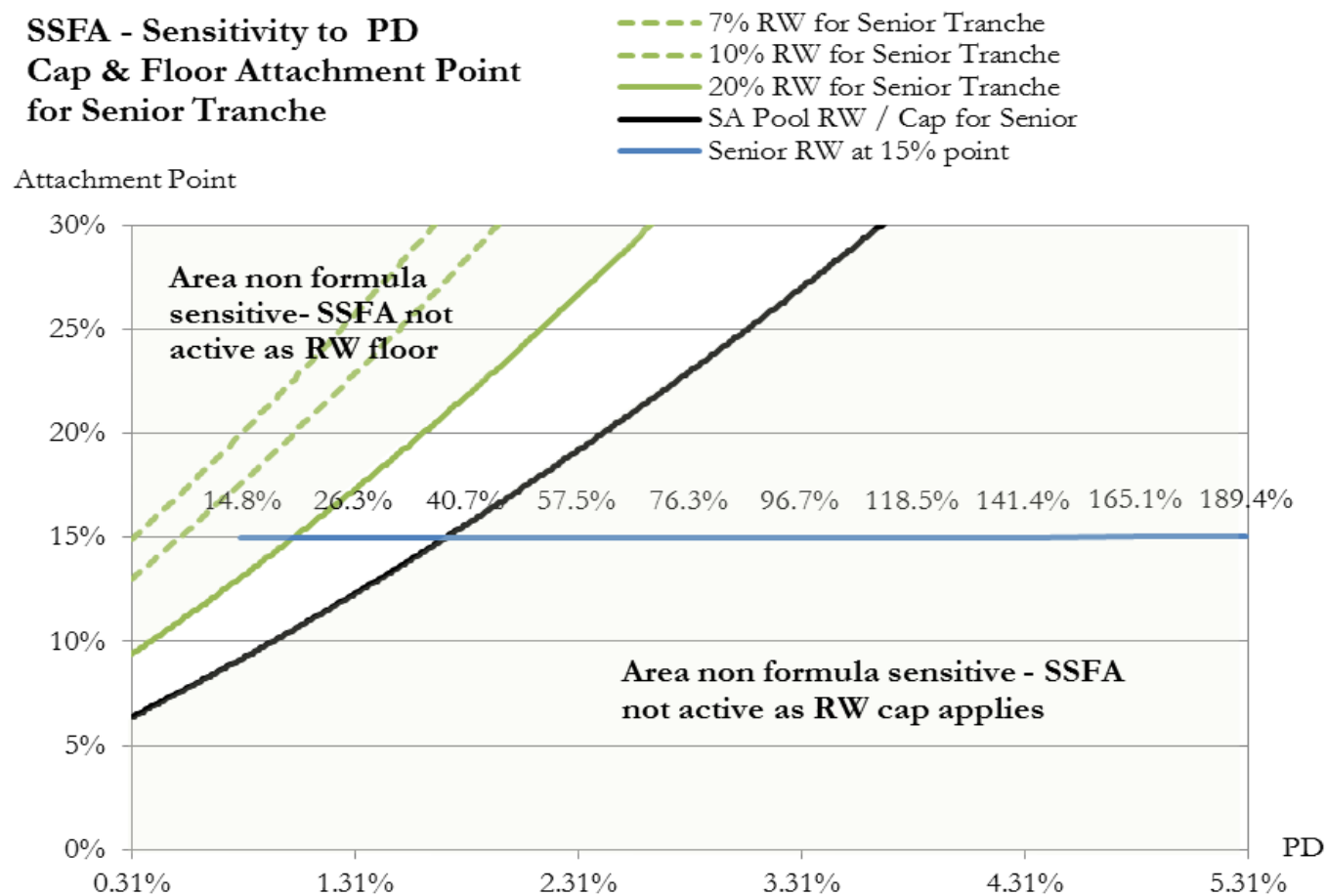
MSFA Returns High Multiple of Pre-Securitisation RWA - Case of Prime European RMBS



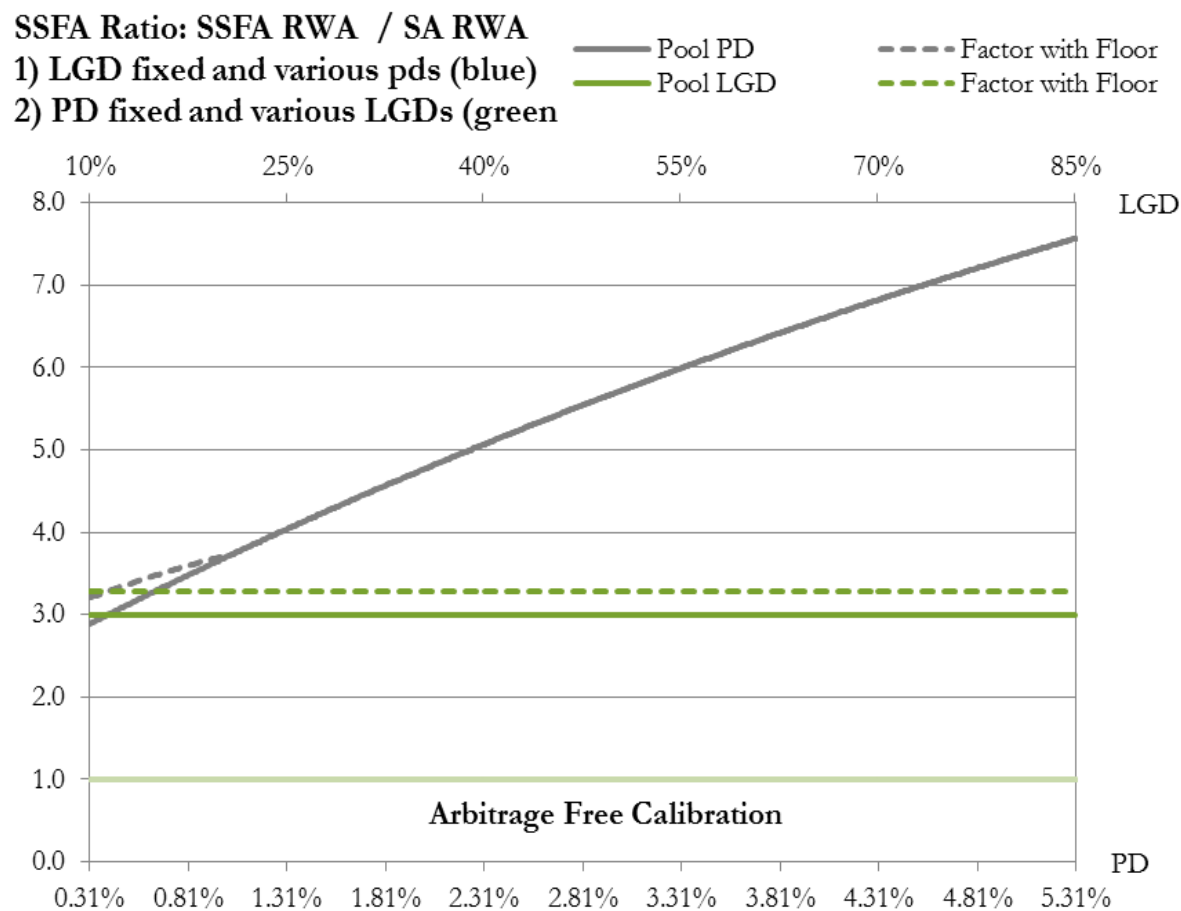
*Arbitrage Free Calibration: the ratio of RWA post securitisation (underlying assets) and pre securitisation is 1

Narrow Area of SSFA Formula Use on Senior Tranche - Case of Prime European RMBS

SSFA - Sensitivity to PD Cap & Floor Attachment Point for Senior Tranche



SSFA Returns High Multiple of Pre-Securitisation RWA - Case of Prime European RMBS



*Arbitrage Free Calibration: the ratio of RWA post securitisation (underlying assets) and pre securitisation is 1

Annex 4.2

a. Post- vs. Pre-Securitisation Capital Charge

- We have conducted a sample impact review on a series of 10 reference securitisation of assets across retail (*) and corporate (**) portfolios.
- The tables below show the ratio of the securitisation position's RWA to the pre securitisation RWA (the ratio below is the ratio between the RWA of the tranches (both capped -senior tranches- or uncapped) and RWA of the pool before securitisation (IRBA or SA depending on the proposed method).

Alternative A							Backstop
	MSFA (A)	Before senior cap	SSFA (A)	Before senior cap	RRBA (A)	Before senior cap	BCRA
Number of deals applicable	10	5	10	3	10	6	10
Average ratio	2.8	3.6	2.7	4.4	3.0	4.9	2.9
Max ratio	4.4	5.0	4.9	8.1	6.0	9.6	3.6
Min ratio	1.7	2.0	1.6	2.5	1.6	2.6	1.6

Alternative B							Backstop
	MSFA (B)	Before senior cap	SSFA (B)	Before senior cap	RRBA (B)	Before senior cap	BCRA
Number of deals applicable	10	3	10	0	10	3	10
Average ratio	2.2	3.2	2.4	n.r.	2.7	5.9	2.9
Max ratio	3.3	3.5	3.5	n.r.	4.3	6.3	3.6
Min ratio	1.2	2.9	1.2	n.r.	1.6	5.7	1.6

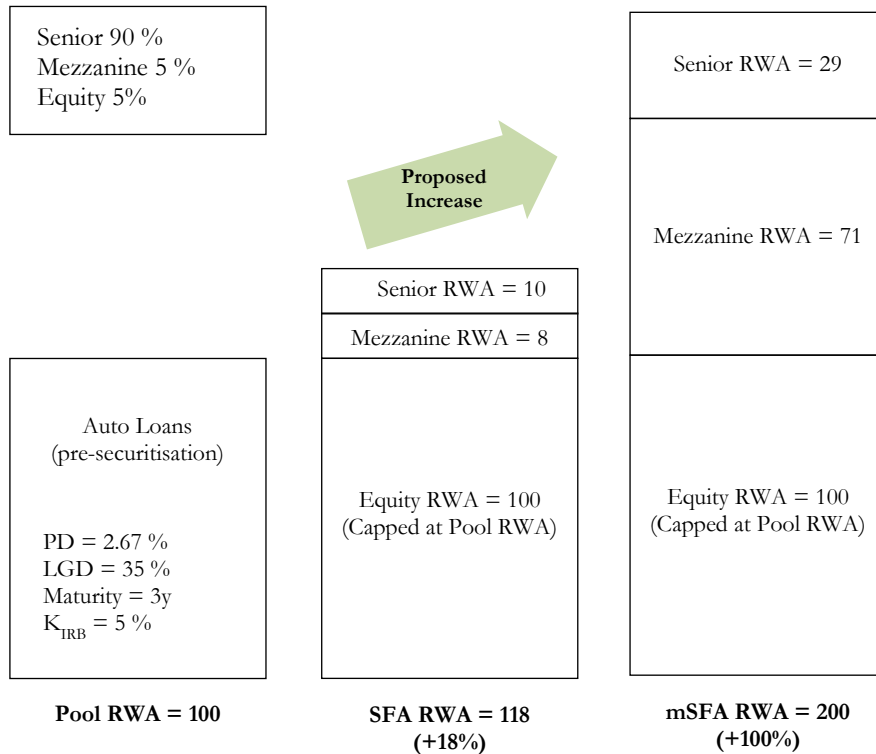
(*) Retail : French Auto ABS, UK RMBS, Benelux RMBS 1, Benelux RMBS 2, US Subprime RMBS

(**) Corporate: French SME, Italian SME, CLO high grade European corporates, CLO US Leveraged loan – pre crisis, CLO US leveraged loans – post crisis

b. Post- vs. Pre- Securitisation Capital Charge*

Calculation of RWA for Auto Loan Example

Securitisation structure



Calculation of K_{IRB}



- The components to calculate K_{IRB} are asset class specific and are validated by historical loss data, leading to higher capital charges for asset classes with historically high credit losses
- K_{IRB} covers portfolio losses for a 99.9% quantile
- Senior tranches with credit enhancement equal to K_{IRB} are comparable to non-securitisation positions with 10 bp PD

* Hypothetical transaction

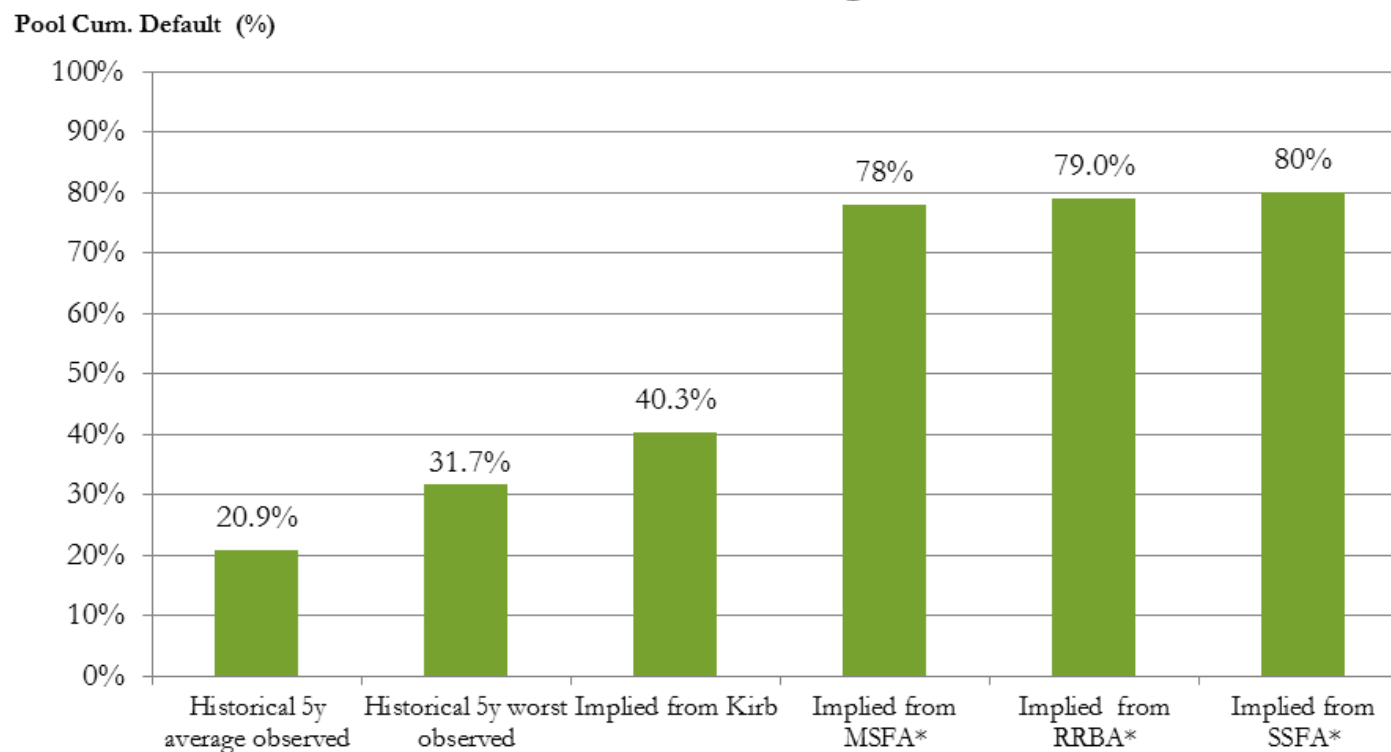
Annex 4.3

Implied Default Rates Under BCBS CP 236

- We have calculated the cumulative default rate that would be necessary on the pool of a cashflow CLO with US leveraged loans as underlying assets to cause a loss on the senior tranche equivalent to the capital charge under the proposed methods
- Stressed parameters used for an extreme scenario: stressed LGD of 50% above the historical average of 35% and stressed Constant Prepayment Rate (CPR) of 15% below historical average of 25%
- Economic scenarios implied by the new framework are beyond the systemic risk scenarios from the Basel framework.
- The graph shows the relationship between the default rate on the underlying assets (K_{IRB}) and the capital charge for the proposed methods.

Pool default rates implied by proposed approach vs observations : CLO - Octag12

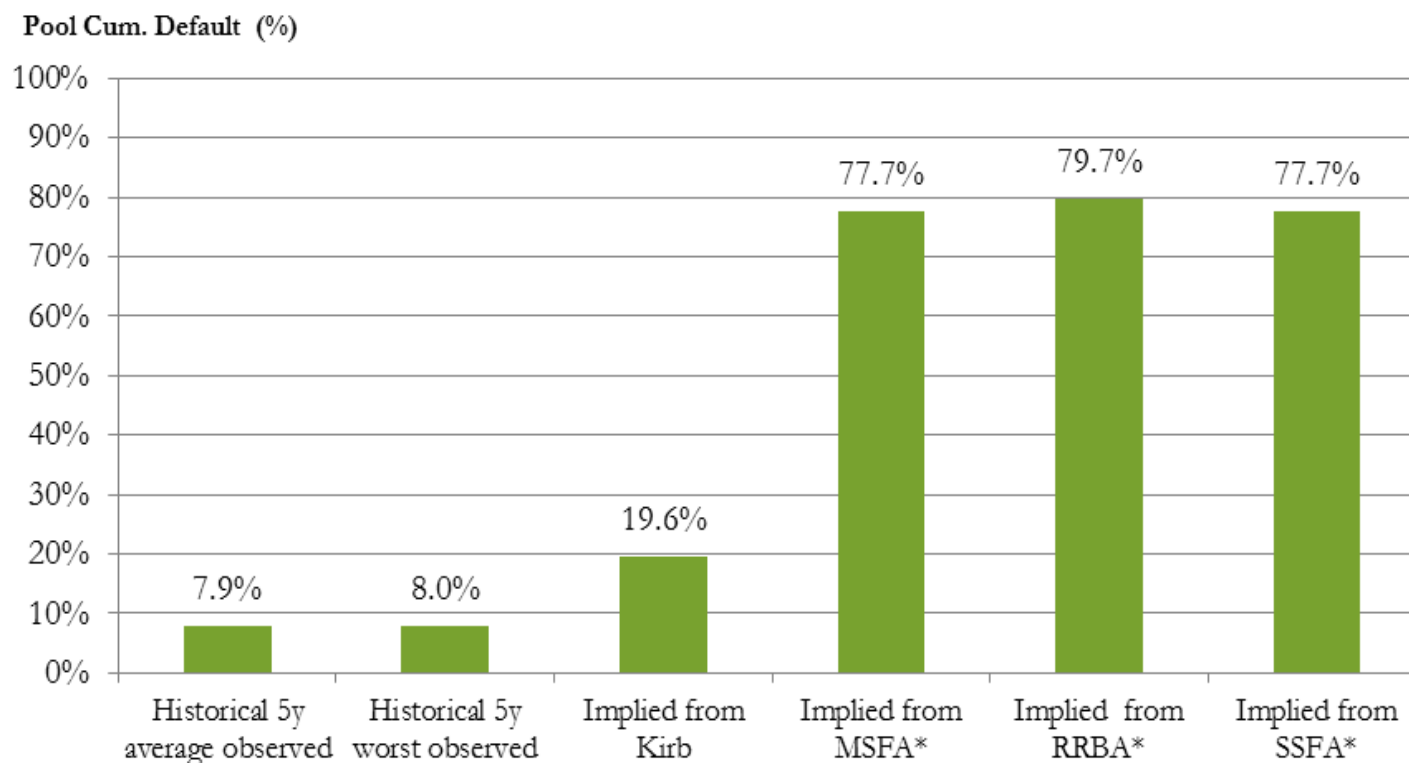
CPR= 15%
LGD = 50%



* Pool default implied by having senior tranche loss equal to proposed capital

Pool default rates implied by proposed approach vs observations : UK NC RMBS - RMAC 06-NS2

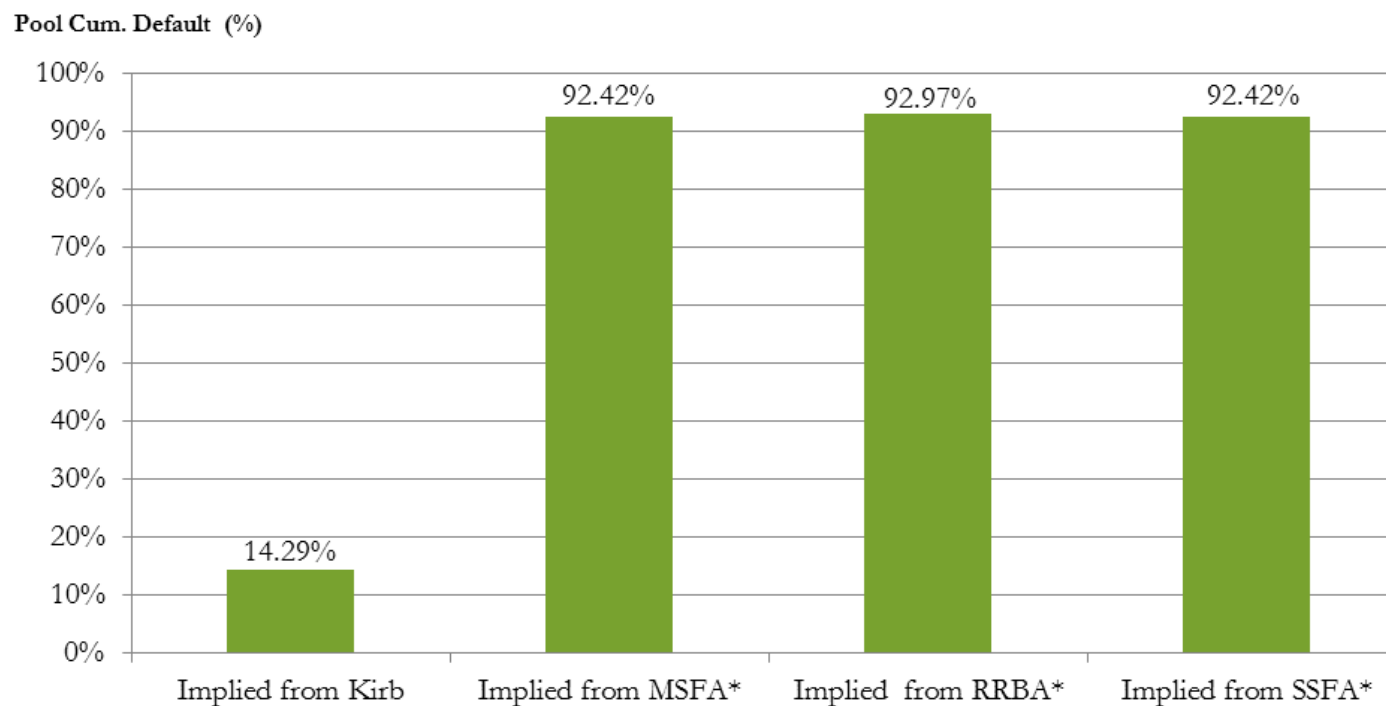
CPR= 0%
LGD = 34%



*Pool default implied by having senior tranche loss equal to proposed capital

Pool default rates implied by proposed approach vs observations: UK NC RMBS - RMS 25

CPR = 0%
LGD = 31%

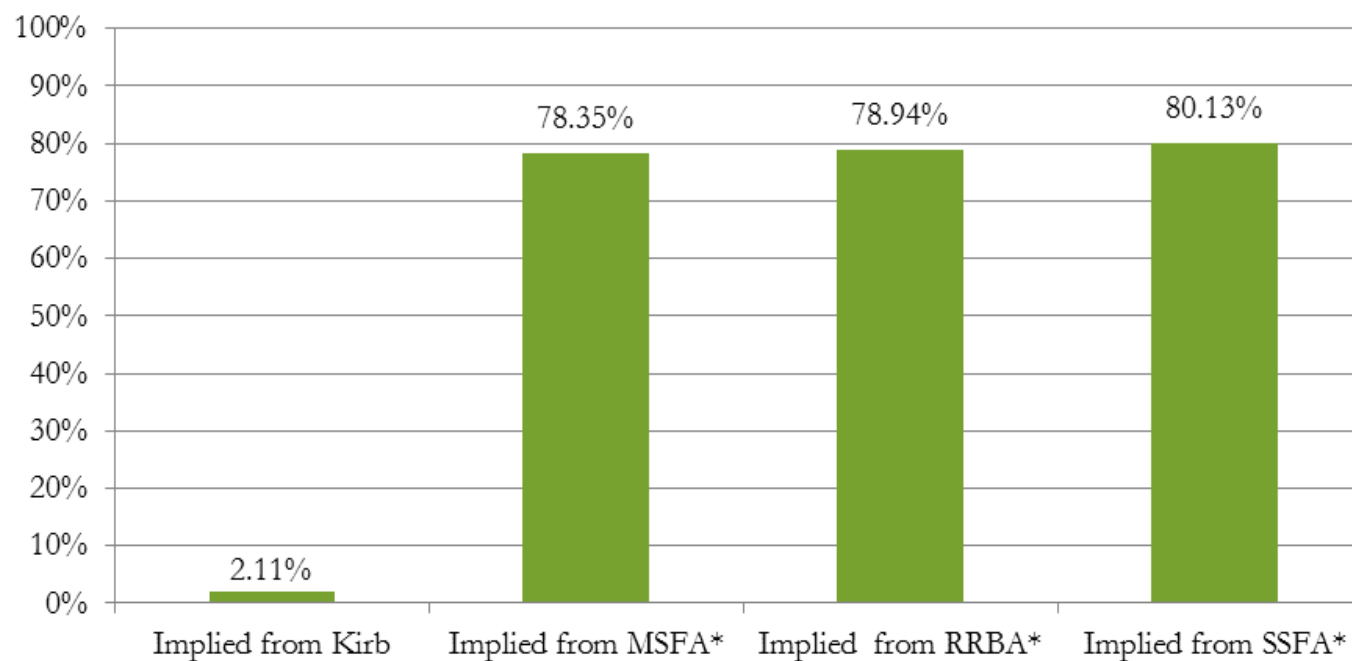


*Pool default implied by having senior tranche loss equal to proposed capital – Floor reached

Pool default rates implied by proposed approach vs observations: UK Prime RMBS - Arran RMF 2010-1

CPR = 0%
LGD = 22%

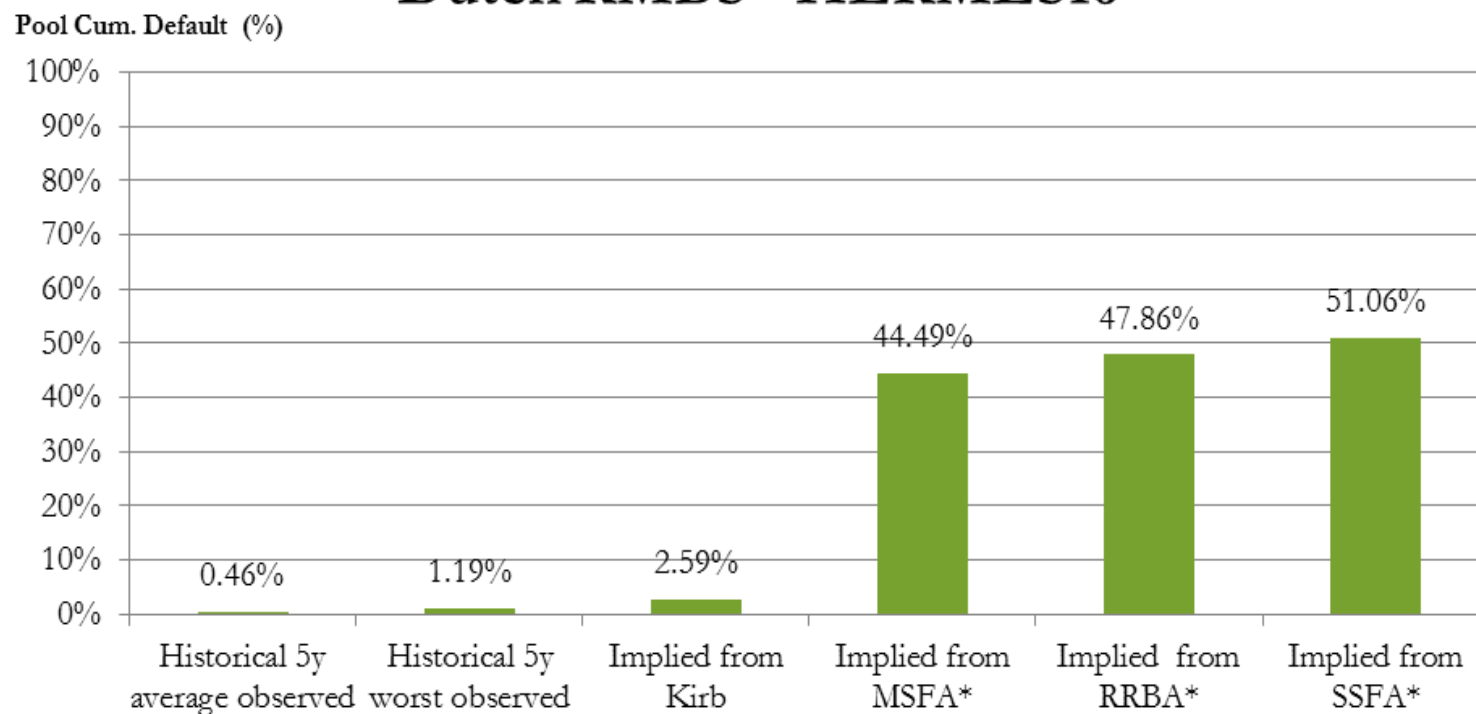
Pool Cum. Default (%)



*Pool default implied by having senior tranche loss equal to proposed capital – cap and floor reached

Pool default rates implied by proposed approach vs observations: Dutch RMBS - HERMES16

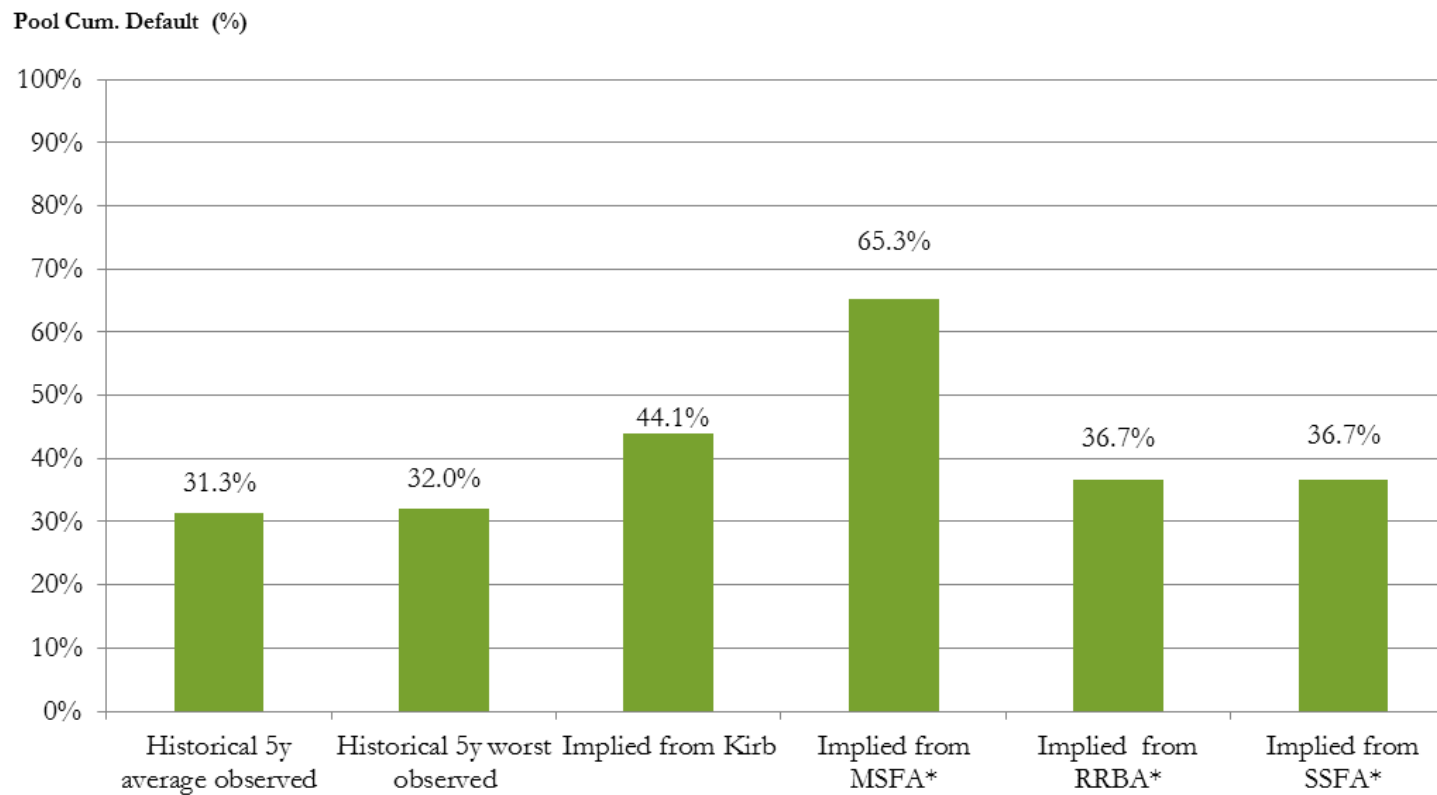
CPR = 0%
LGD = 22.45%



*Pool default implied by having senior tranche loss equal to proposed capital – Cap and Floor reached

Pool default rates implied by proposed approach vs observations: US subprime RMBS - FFML 05-FF9

CPR = 0%
LGD = 75.09%

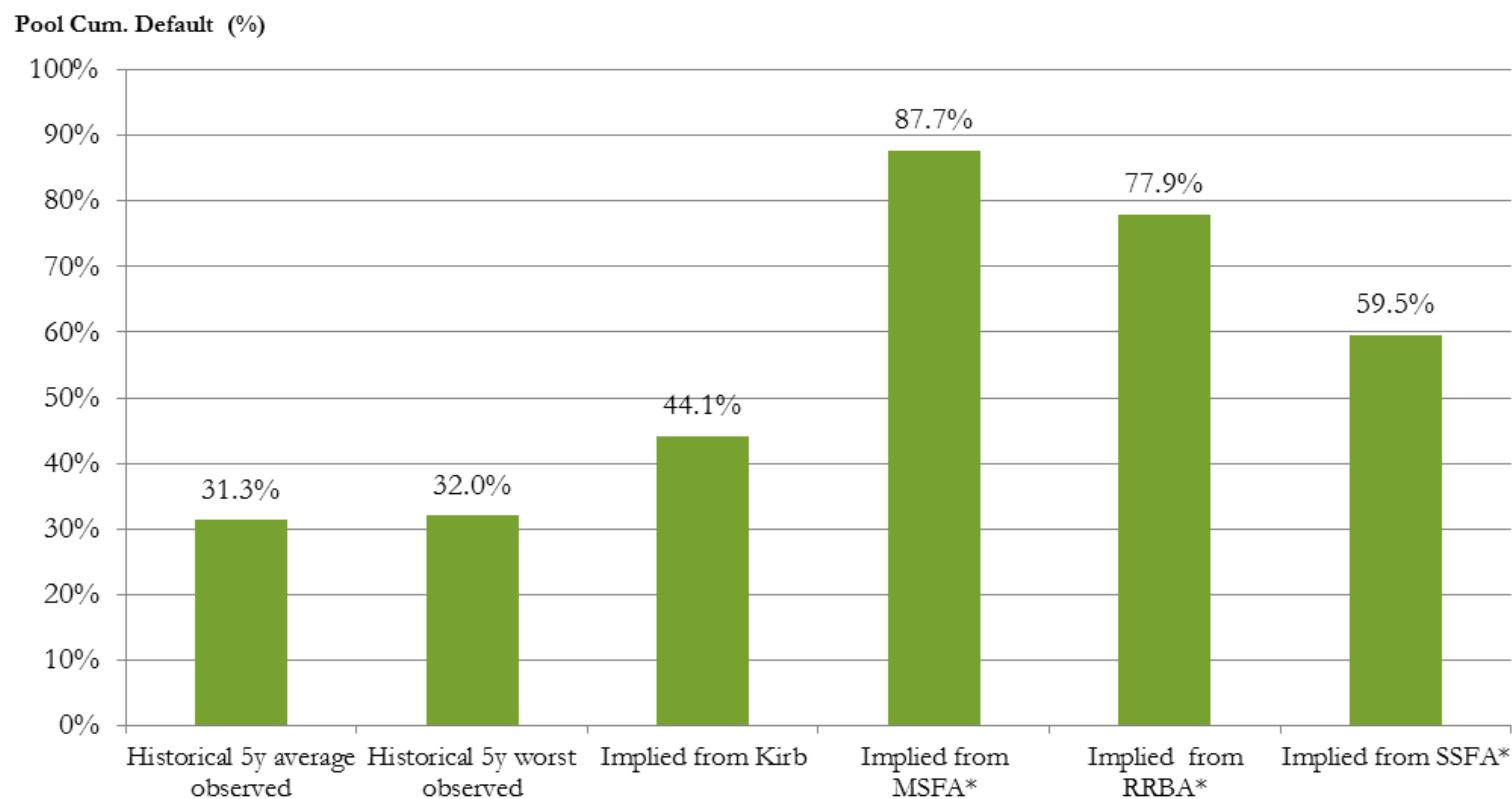


with cap

*Pool default implied by having senior tranche loss equal to proposed capital

Pool default rates implied by proposed approach vs observations: US subprime RMBS - FFML 05-FF9

CPR= 0%
LGD = 75.09%



without cap

*Pool default implied by having senior tranche loss equal to proposed capital

Annex 4.4

MSFA Maturity Effects: RMBS and Wholesale

Residential Mortgages		Scenario A			Scenario B			Scenario C			Change in MSFA due to higher K_{IRB} caused by longer maturity	Change in MSFA Capital Due to Maturity Adjustment	Total increase due to maturity
Attach Point	Detach Point	K_{IRB}	SFA Capital %	MSFA Capital %	K_{IRB}	SFA Capital %	MSFA Capital %	K_{IRB}	SFA Capital %	MSFA Capital %			
0%	10%	4.1%	53.6%	63.3%	11.9%	100.0%	100.0%	11.9%	100.0%	100.0%	36.7%	0.0%	36.7%
10%	15%	4.1%	1.9%	9.2%	11.9%	66.4%	77.0%	11.9%	66.4%	98.4%	67.8%	21.4%	89.2%
15%	20%	4.1%	1.6%	2.2%	11.9%	14.4%	27.4%	11.9%	14.4%	90.9%	25.2%	63.4%	88.7%
20%	25%	4.1%	1.6%	1.6%	11.9%	3.6%	11.5%	11.9%	3.6%	78.9%	9.9%	67.5%	77.3%
25%	30%	4.1%	1.6%	1.6%	11.9%	1.6%	4.2%	11.9%	1.6%	63.0%	2.6%	58.8%	61.4%
30%	40%	4.1%	1.6%	1.6%	11.9%	1.6%	1.6%	11.9%	1.6%	37.9%	0.0%	36.3%	36.3%

	Scenario A	Scenario B	Scenario C
Probability of Default	3.00%	3.00%	3.00%
Loss Given Default	60.00%	60.00%	60.00%
Remaining Maturity	1 year	1 year	5 years
Correlation	0.04	0.15	0.15

- Scenario A reflects the SFA and MSFA capital requirements for a retail securitization of Qualifying Retail Exposures (QRE), which has an asset value correlation of 0.04.
- Scenario B revises Scenario A to increase the asset value correlation to 0.15, which is reserved for Residential Mortgages.
- While the retail IRB formula does not contain an explicit maturity adjustment, "the maturity effects have been left as an implicit driver in the asset correlations"¹. Furthermore, the "implicit maturity effect also explains the relatively high mortgage correlations: not only are mortgage losses strongly linked to the mortgage collateral value and the effects of the overall economy on that collateral, but they have usually long maturities that drive the asset correlations upwards as well."¹
- The increase in capital requirements between Scenario A and Scenario B is solely a function of the higher correlation factor for residential mortgages as compared to QREs. Since the Basel Committee has stated that the higher correlation for residential mortgages is due to the longer maturity of residential mortgages, one can think of this increase as being due to longer maturity.
- There is a significant increase in capital due to the higher K_{IRB} between Scenario A and B, which is due to higher asset value correlations, which is due to longer maturity.
- Scenario C revises Scenario B to increase the maturity from 1 year to 5 years. The higher MSFA requirements is the due to the tranche level maturity adjustment, which is significantly duplicative and double counts the maturity effect already captured in the higher correlation.
- The Basel Committee should remove the double count to ensure a risk sensitive and prudent framework that is not distortive of the securitization risks. Even without the maturity adjustment, the MSFA results in reduced cliff effects and an appropriately conservative calibration.

¹ CD page 37: BCBS, An Explanatory Note on the Basel II IRB Risk Weight Functions (Jul. 2005), page 15.

* The capital requirements do not include Expected Loss (EL) in the K_{IRB} since it is independent from the double-count

Wholesale		Scenario A			Scenario B			Scenario C			Change in MSFA due to higher K _{IRB} caused by longer maturity	Change in MSFA Capital Due to Maturity Adjustment	Total increase due to maturity
Attach Point	Detach Point	K _{IRB}	SFA Capital %	MSFA Capital %	K _{IRB}	SFA Capital %	MSFA Capital %	K _{IRB}	SFA Capital %	MSFA Capital %			
0%	10%	7.8%	87.9%	90.6%	13.2%	100.0%	100.0%	13.2%	100.0%	100.0%	9.4%	0.0%	9.4%
10%	15%	7.8%	14.3%	22.0%	13.2%	85.2%	94.9%	13.2%	85.3%	91.8%	69.8%	3.1%	72.9%
15%	20%	7.8%	2.9%	8.0%	13.2%	20.9%	60.9%	13.2%	20.9%	39.4%	31.4%	21.5%	52.9%
20%	25%	7.8%	1.6%	2.6%	13.2%	5.7%	41.9%	13.2%	5.7%	17.5%	14.9%	24.4%	39.3%
25%	30%	7.8%	1.6%	1.6%	13.2%	1.6%	27.5%	13.2%	1.6%	7.0%	5.4%	20.5%	25.9%
30%	40%	7.8%	1.6%	1.6%	13.2%	1.6%	13.1%	13.2%	1.6%	1.6%	0.0%	11.5%	11.5%

	Scenario A	Scenario B	Scenario C
Probability of Default	1.00%	1.00%	4.25%
Loss Given Default	60.00%	60.00%	60.00%
Remaining Maturity	1 year	5 years	1 year

- Scenario A reflects the SFA and MSFA capital requirements for a wholesale securitization based on the parameters listed above.
- Scenario B revises Scenario A to increase the maturity from 1 year to 5 years while holding all other parameters constant. The higher capital requirements under Scenario B reflect the joint impact of the longer maturity captured through K_{IRB} for both the SFA and MSFA, as well as the tranche level maturity adjustment for the MSFA.
- Scenario C revises Scenario A to calibrate the Probability of Default higher such that the resulting K_{IRB} is equivalent to the K_{IRB} under Scenario B. The resulting K_{IRB} is identical under Scenario C as under Scenario B. Since the higher K_{IRB} in Scenario B is a result of a longer maturity, the higher capital requirements under Scenario C as compared to Scenario A can be thought of as reflecting ONLY the effect of the longer maturity that is captured through K_{IRB}, but NOT through the tranche level maturity adjustment.
- There is a significant increase in capital between Scenario A and C, which is solely a function of the higher K_{IRB}, which in turn is due to longer maturity.
- Since Scenario B captures the joint impact of the longer maturity on K_{IRB} and the tranche level maturity adjustment and Scenario C captures only impact of the longer maturity on K_{IRB}, the increase in capital requirements by moving from Scenario C to Scenario B reflects the incremental increase in the MSFA capital requirements that is due to the tranche level maturity adjustment. This is significantly duplicative and double counts the maturity effect already captured in the K_{IRB}.
- The Basel Committee should remove the double count to ensure a risk sensitive and prudent framework that is not distortive of the securitization risks. Even without the maturity adjustment, the MSFA results in reduced cliff effects and an appropriately conservative calibration.

* The capital requirements do include Expected Loss (EL) in the K_{IRB} since it is independent from the double-count

Annex 4.5

Analysis of Systemic Overcapitalisation in the Basel III MSFA

Overview

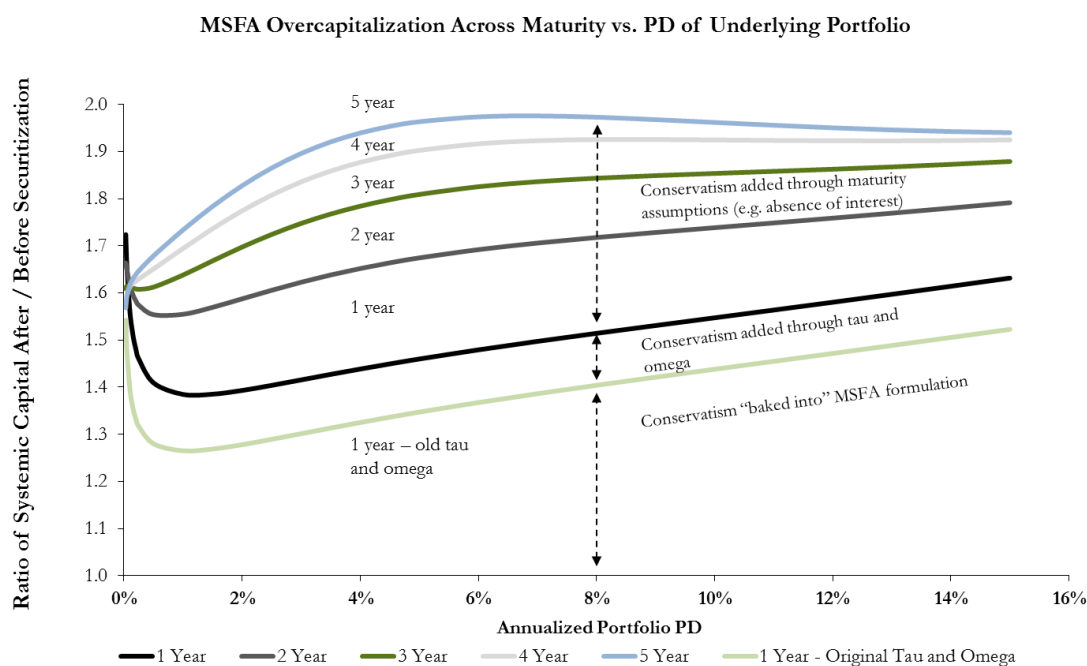
In this analysis, we identify 4 categories of conservatism that give rise to systemic regulatory overcapitalization in the Basel III MSFA calculation.

1. Elements "baked into" the MSFA formulation that accumulate through various conservative assumptions, sometimes referred to as prudential add-ons
2. Conservatism added as a result of the re-specification of the tau and omega parameters
3. Conservatism that is a function of the treatment of maturity, likely the result of the assumption that there is no interest income thrown off by the underlying assets after year one
4. Conservatism added by the superimposition of the 20% risk weight floor

This overcapitalization results in the systemic regulatory capital after securitization being multiples of the capital before securitization, viewed as a sum across the entire capital structure.

Impact of Maturity on MSFA results

Graph 1 displays the result of an analysis taken across a broad range of values for PD, assuming a 30% LGD and before the introduction of the 20% risk weight floor. The values in the graph represent the multiple of systemic capital (capital after securitization divided by capital before) that results from the implementation of the MSFA. The results describe the impact of three categories of conservatism, those "baked into" the MSFA, the tau and omega factors and the impact of maturity.

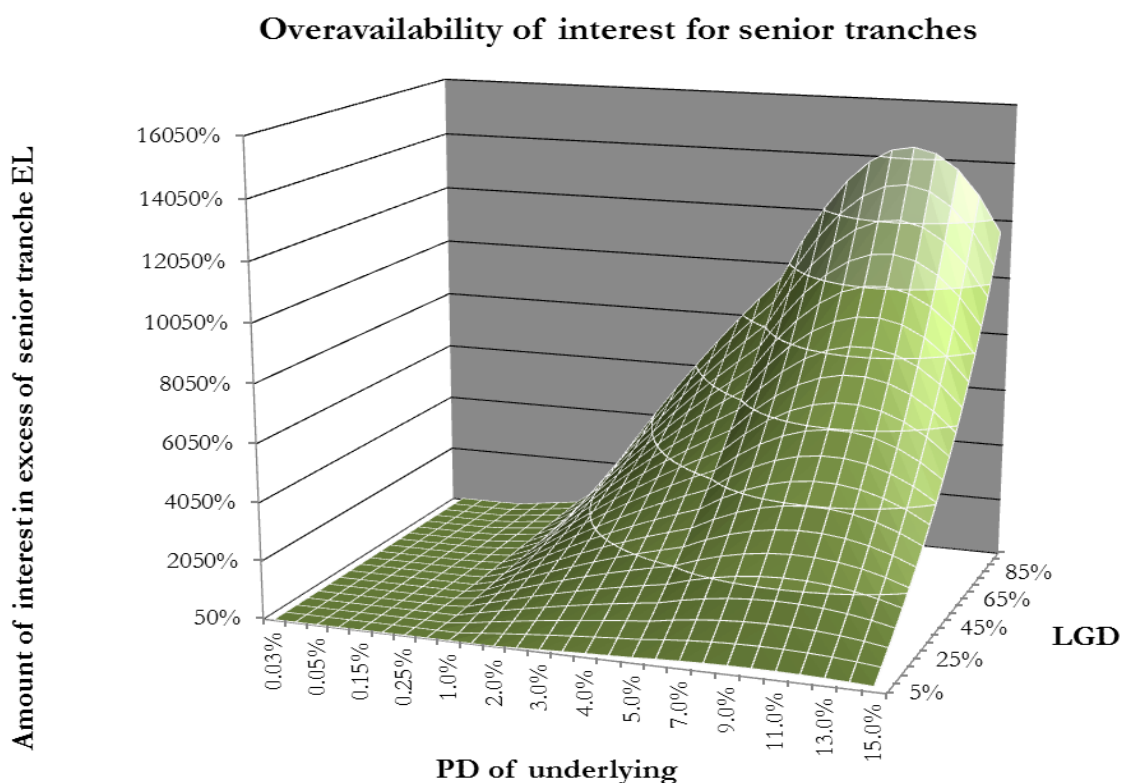


Graph 1

Prudential add-ons appear to be responsible for causing capital after securitization to be at least 1.25 times capital before securitization. The re-specification of tau and omega contribute another 10% increase, and as we go from 1 to 5 years in term, the degree of overcapitalization increases to nearly 2 times. We believe this is a result of the assumption made in the MSFA implementation that the underlying portfolio of assets throws off no interest after year 1. Paragraph 18 of "Working Paper No. 22 - Foundations of the Proposed Modified Supervisory Formula Approach" from January 2013 includes this text:

... IRB Pillar 1 charges assume, in effect, that expected default losses beyond the capital horizon will be covered by margin income or excess spread. This assumption was problematic for many securitisations during the financial crisis, as sharp deteriorations in the underlying pools eroded anticipated excess spread. A key difference between the IRB framework for wholesale exposures and the MSFA framework is that the latter does not provide any capital benefit for excess spread. For maturity exceeding one year, this difference in the treatment of excess spread is one of several reasons why the sum of MSFA charges across all tranches of a securitisation would tend to exceed the IRB charge for the underlying pool, even abstracting from the proposed MSFA's prudential add-ons.

This assumption is quite conservative and is certainly at odds with the facts of securitization structures as they relate to senior tranches. The senior-most tranches will be the beneficiary of more than their pro rata share of the interest thrown off by the underlying portfolio of assets, far more than enough to pay for the expected losses on those tranches. Our analysis shows a minimum of 70% more interest than necessary to pay for the expected losses of the senior tranche, given the common securitization structures that divert interest to the senior tranches first.

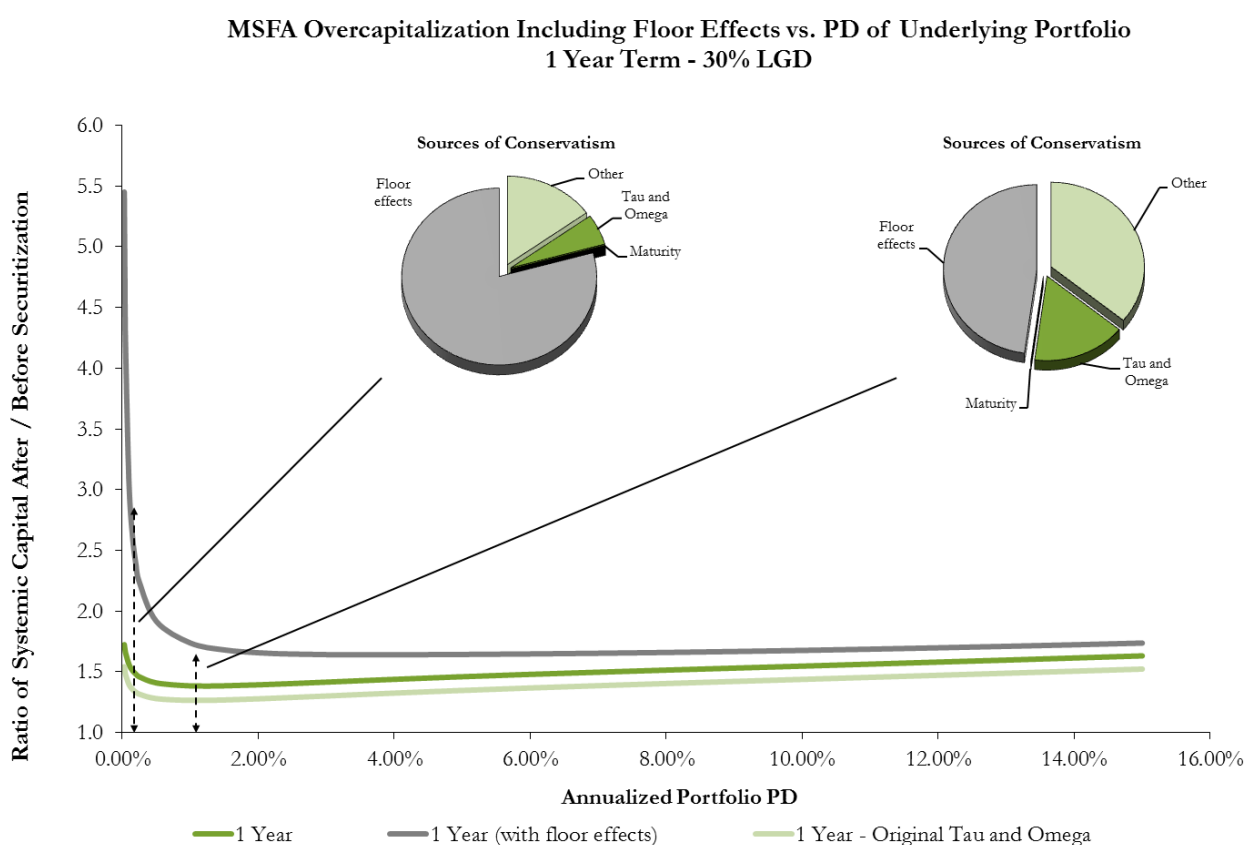


Graph 2

We feel there is strong evidence to support the contention that at least for senior tranches, the assumption of no interest past year 1 be relaxed. This should have the effect of reducing the amount of overcapitalization attributable to the maturity adjustments for these positions.

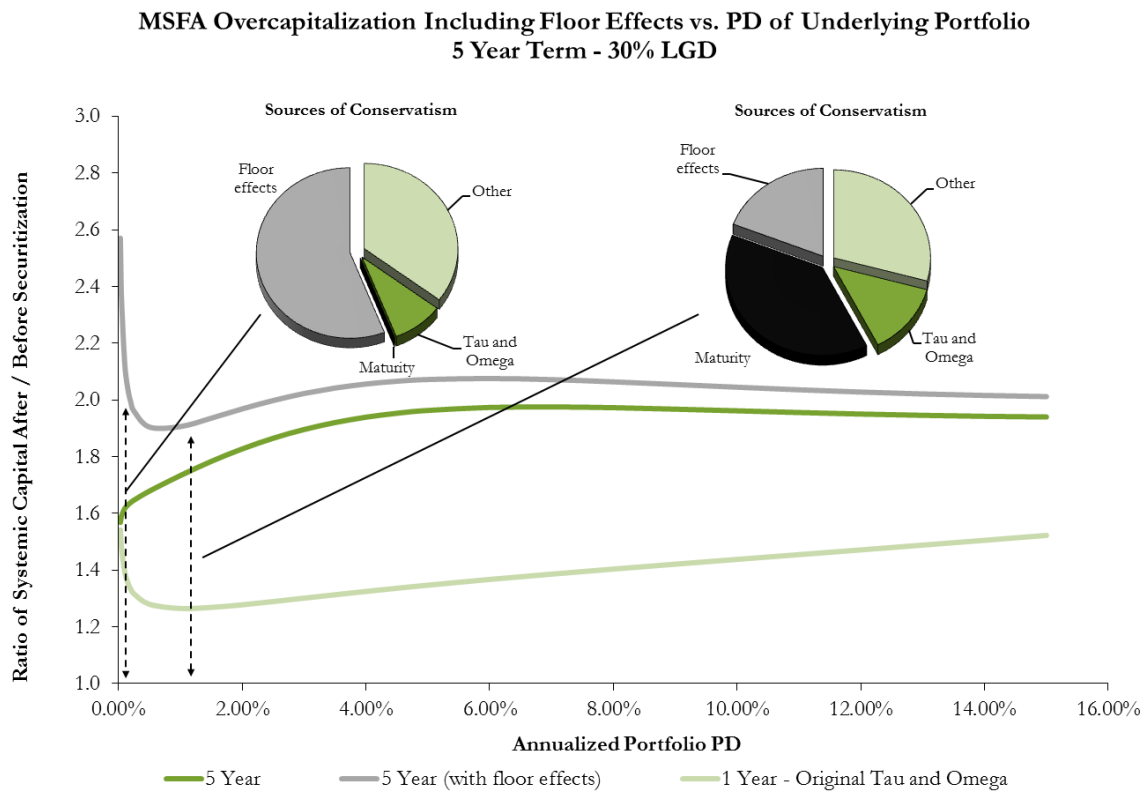
Impact of Risk Weight Floor

Another key source of overcapitalization is the risk weight floor of 20%. Graphs 3 and 4 extend the analysis to include the impact of the floor and display the relative contribution to this overcapitalization attributable to each of the four elements: Prudential add-ons, tau/omega, maturity and floor. For the lowest risk portfolios, the floor becomes the driving factor to overcapitalization multiples that can exceed 10x. Graph 3 shows these effects for a broad spectrum of PD assumptions at the 1 year point, assuming a 30% LGD. The floor dominates the results.



Graph 3

Graph 4 displays the impact at the 5 year point, where the floor has less of an impact, due to the inflation of the results that can be traced to the maturity assumptions.



Graph 4

Conclusion

The analysis would tend to support the proposal to relax the assumption of no interest generated past year one, at least for the senior tranches of securitization. In addition, the analysis suggests that results are distorted for the lowest risk portfolios by the imposition of the 20% floor, generating systemic overcapitalization on an unrealistic scale.

Annex 4.6

Portfolio Level MSFA Proposal

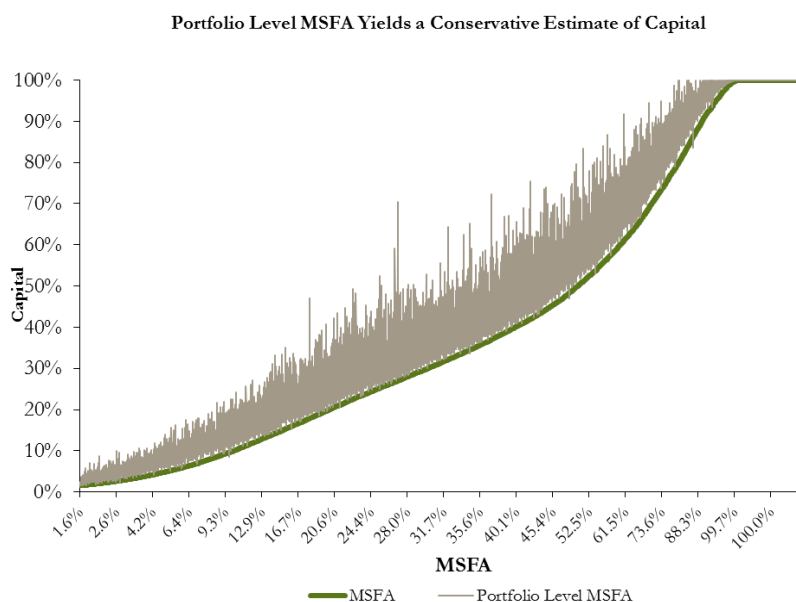
One of the stumbling blocks conduits and other regulated securitization market participants have faced is the requirement that in order to use the advanced regulatory capital methodologies (i.e. SFA and now MSFA), the Kirb and other values must be calculated for each and every underlying asset in the portfolio. As many portfolios contain tens of thousands of positions, and the calculations must be updated periodically, this quickly becomes an impossibility for anyone but the originator.

A simpler approach, and one that can be employed using currently available information, would be to calculate the MSFA at the portfolio level, using portfolio average data such as the average probability of default, average LGD and a correlation value consistent with the average PD. We can show that in virtually every case the simpler portfolio-level approach is considerably more conservative, i.e. results in a higher capital allocation, than the approach based on calculations done at the underlying asset level.

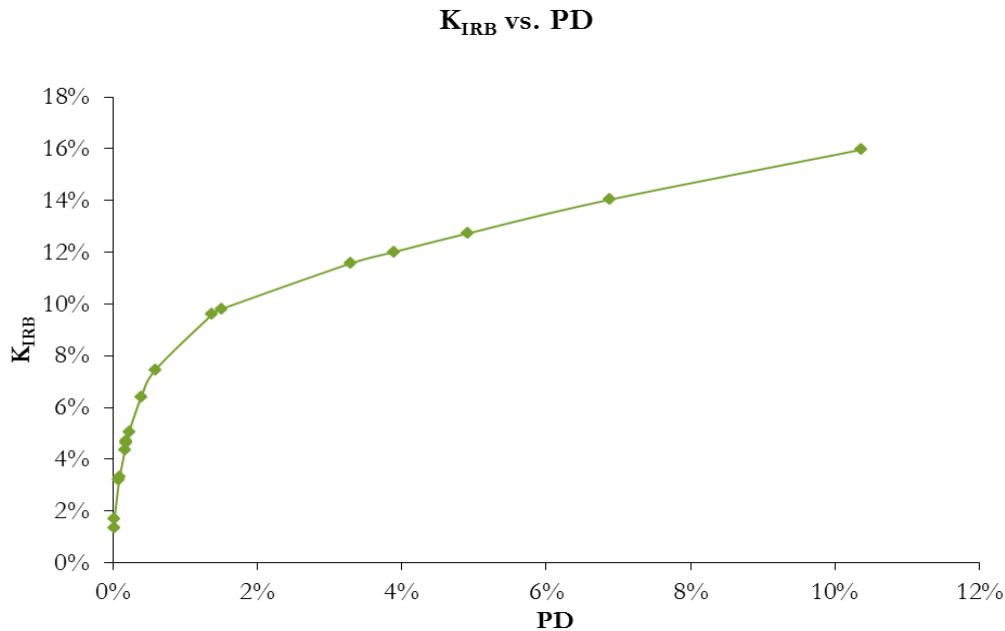
We performed a simulation analysis of 50,000 samples that created random tranches with a wide variety of characteristics as follows:

- 100 underlying exposures with random notional amounts over a 0-1000 range
- PD values randomly assigned from 0 to 30% for each of the 100 underlying
- LGD values randomly assigned from 0 to 100% for each of the 100 underlying
- AVC values calculated as a function of the PD values per the IRB approach
- Attachment points varying randomly from 0 to 50%
- Detachment points varying randomly from attachment + 1% to 100%

We find that in 99.9% of cases the portfolio level calculation results in a higher capital allocation. The ratio between the portfolio level result and the standard MSFA result averaged 124%. See graph below:



In addition, a purely mathematical argument can be made on the basis of the relationship between K_{IRB} and the probability of default variable. The K_{IRB} curve levels off as the PD goes up, so the higher risk names contribute "less than linearly" to the total capital (see graph). Or in other terms, the second derivative of the K_{IRB} with respect to PD is always negative. As a result, using the average PD can never result in a lower K_{IRB} than the approach where the underlyings are individually analyzed.



As a result of this relationship, it would seem reasonable to allow sophisticated market participants to make use of portfolio level estimates of PD, LGD and term to calculate the K_{IRB} , and therefore also make use of the MSFA to calculate the regulatory capital for securitization exposures. This approach would have many desirable characteristics:

- Does not rely on ratings
- Requires fewer estimations than the MSFA
- Requires less modeling than the MSFA
- Could not be "gamed"
- Would promote transparency in the market by creating a demand for timely and accurate portfolio level loss data from the originators. This is consistent with the intentions of Reg AB.

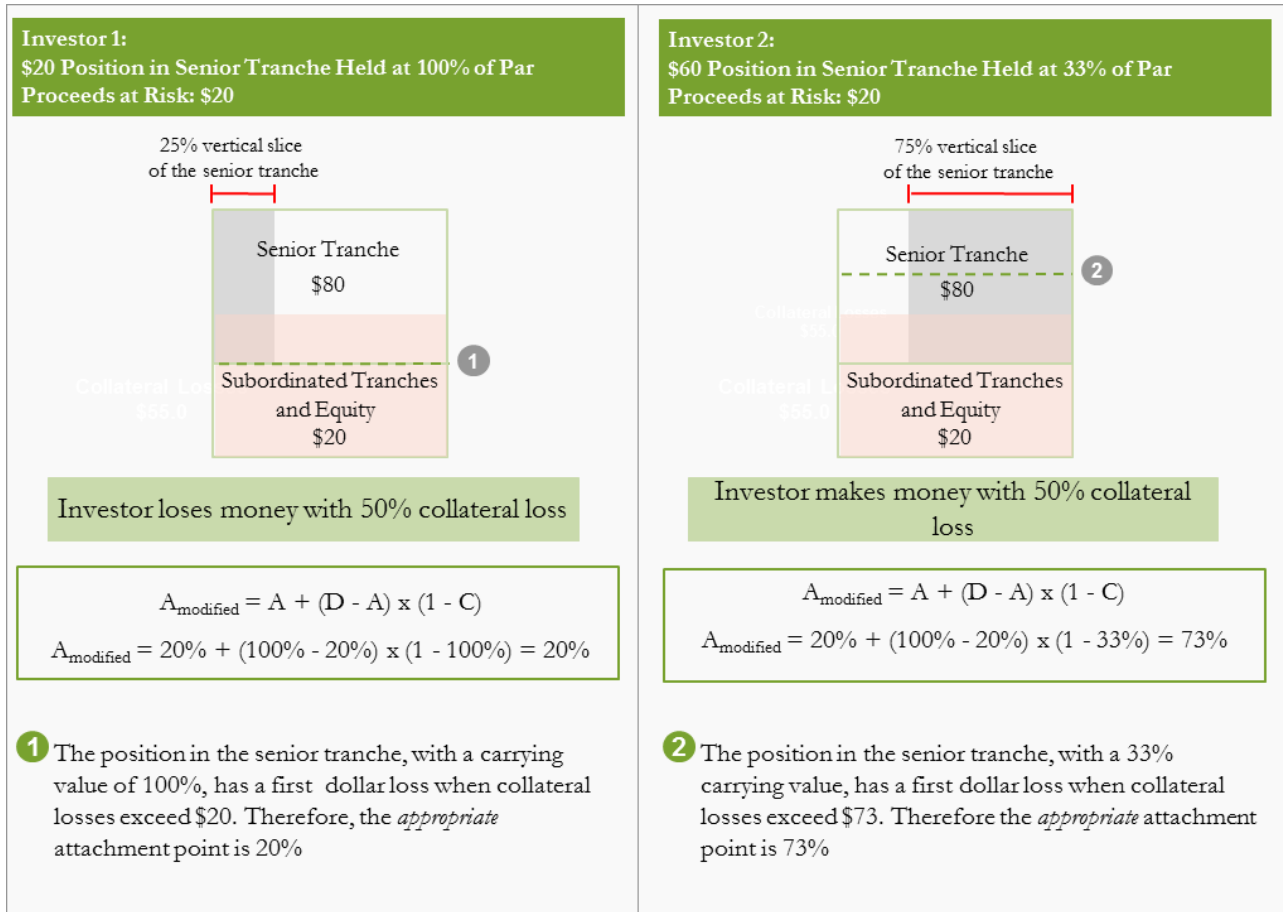
We propose that strict guidelines be put in place around the way banks parameterize the portfolio level PD and LGD estimates in order to reduce the possibility of errors.

Annex 4.7

Carrying Value and Risk Profiles

Two holders of the same CUSIP can have very different risk profiles based on carrying value. The current SSFA fails to recognize these differences.

- Unlike rules which allow price discounts offset capital on a dollar-for-dollar basis, we are simply looking to incorporate the correct attachment point into the calculation
 - Under this methodology, the capital percentage will never be reduced to zero
- Without this change, investors are effectively being penalized for owning a portion of the risk at zero cost basis
 - For example, an investor holding the 0 to 100 tranche at 50% of par is treated worse than an investor holding the 50 to 100 tranche at par



Annex 4.8

Auto Loan Securitization - Underlying Exposures Risk Weight Analysis

Issues

- Assigning a single risk weight of 100% to the K_{SA} for all auto securitizations is not risk sensitive. This approach does not adequately align the different risks inherent in non-prime versus prime auto loans with a commensurate capital calculation.
- Credit Rating Agencies consider the credit characteristics of the underlying collateral when assigning a rating. Omitting the quality of the collateral in the K_{SA} when calculating SSFA creates a disconnect between the capital calculation of the same exposure under SSFA and RRBA.
- The rule encourages perverse lending behaviour. Banks are incentivized to originate and securitize lower quality (non-prime) capital in order to obtain an adequate Return on Equity.
- The Advance Approach suggests a lower capital number (4%) for prime auto loans (See table on the next page).

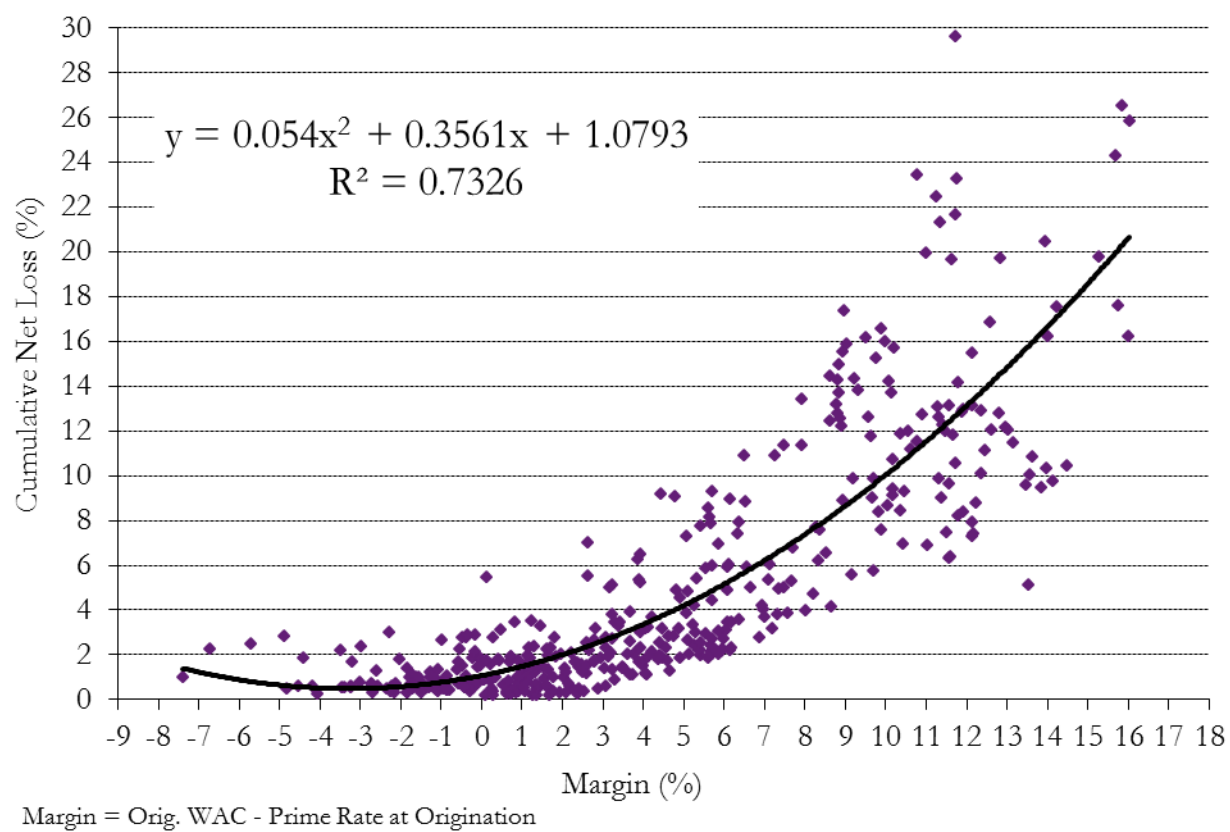
Drivers of Risk

- An empirical analysis was used to determine a more risk sensitive and viable approach to calculate capital using non-FICO inputs that are readily available to investors.
- An analysis of auto loans in transactions from 2000-2009 resulted in the conclusion that Margin (Original WAC – Prime Rate at Origination) is an appropriate and commonly available metric to determine K_{SA} .
- Including a credit metric such as FICO with Margin should result in a greater correlation; however FICO was excluded given the reluctance of some jurisdictions to rely on third party metrics to determine capital.
- The chart on the next page demonstrates the relationship between Margin and Cumulative Net Losses at 36 months seasoning. 36 months seasoning was chosen given that on average 90%+ of the losses in an auto transaction occur within this period.
- Our conclusion is that a Risk Sensitive K_{SA} could be constructed using Margin.

Margin	Risk Sensitive K_{SA}
$\leq 0\%$	4%
$0\% < x \leq 5\%$	6%
$5\% < x \leq 12\%$	8%
$> 12\%$	10%

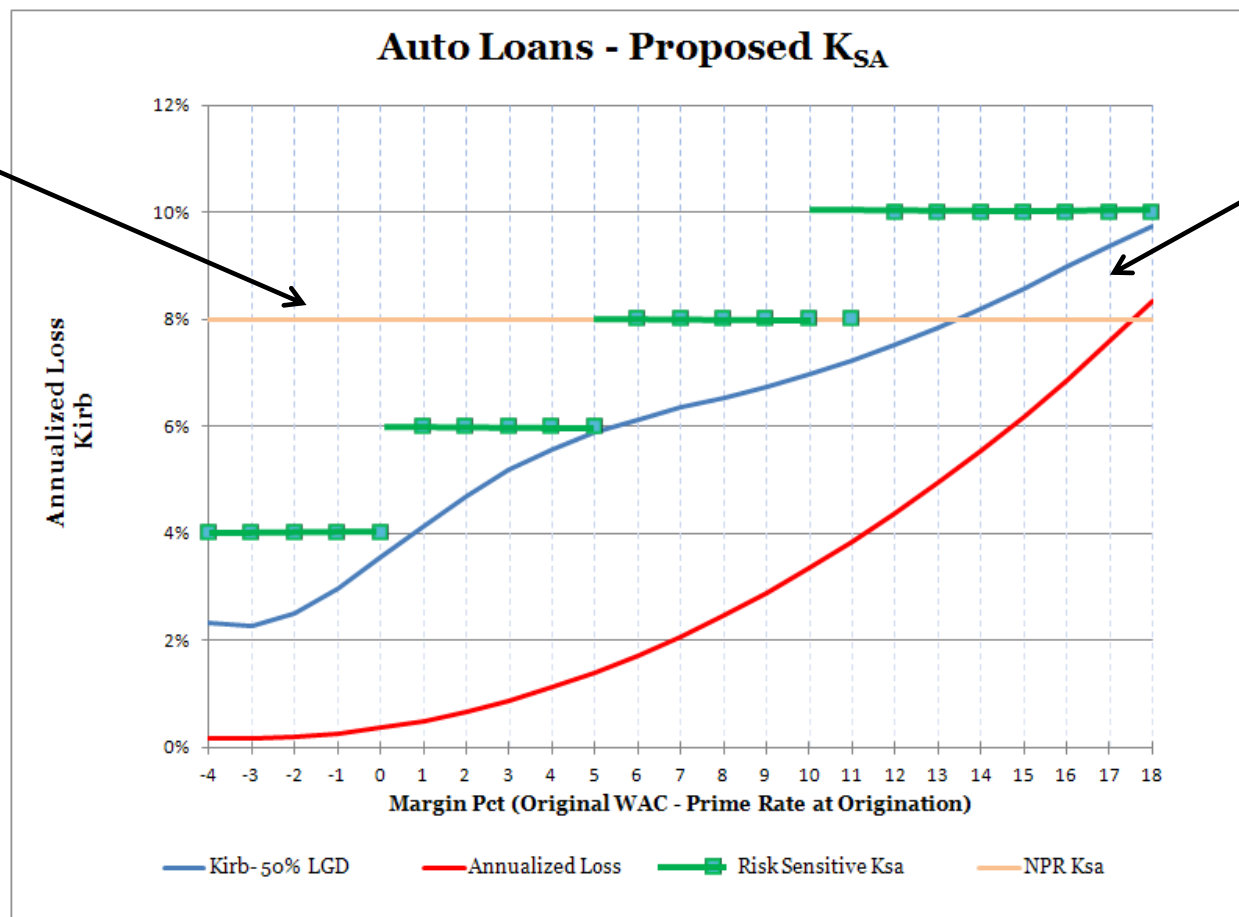
Historical Analysis of Auto Loans

Cumulative Net Losses vs. Margin: 36 Months Seasoning



Proposed K_{SA} based on Actual Performance

K_{SA} overstates
credit risk



K_{SA} understates
credit risk

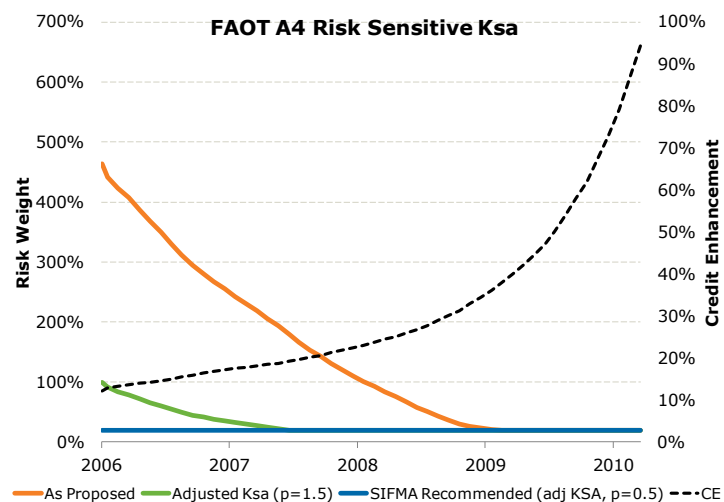
Risk Sensitive K_{SA}

The chart below shows the SSFA results for FAOT 2006 B A4 using a risk sensitive K_{SA} based on margin

- Margin is calculated as the APR of the loan at origination minus the prime rate at origination
 - The K_{SA} is set at the origination of the loan and will not change over time
- The proposed K_{SA} is set based off of the following table:

Margin	Risk Sensitive K_{SA}
$\leq 0\%$	4%
$0\% < x \leq 5\%$	6%
$5\% < x \leq 12\%$	8%
$> 12\%$	10%

- The FAOT 2008B A4 tranche experienced no losses and was paid down fully in 4 years as expected



Historical Analysis of Auto Loans

- 1) $y = 0.054x^2 + 0.3561x + 1.0793$
 - x = Margin, y = Cumulative Net Losses
- 2) Annualized Loss = Cumulative Net Losses
- 3) Set LGD = 50% and Solve for Annualized PD
- 4) Solve for K_{IRB} using Annualized PD and LGD

Margin	-4	-3	-2	-1	0	1	2	3	4	5	6
Cum Net Loss	0.52%	0.50%	0.58%	0.78%	1.08%	1.49%	2.01%	2.63%	3.37%	4.21%	5.16%
Annualized PD	0.35%	0.33%	0.39%	0.52%	0.72%	0.99%	1.34%	1.76%	2.25%	2.81%	3.44%
Kirb- 50% LGD	2.33%	2.27%	2.51%	2.97%	3.55%	4.15%	4.71%	5.18%	5.57%	5.88%	6.13%
Annualized Loss	0.17%	0.17%	0.19%	0.26%	0.36%	0.50%	0.67%	0.88%	1.12%	1.40%	1.72%
Risk Sensitive K_{SA}	4.00%	4.00%	4.00%	4.00%	4.00%	6.00%	6.00%	6.00%	6.00%	6.00%	8.00%

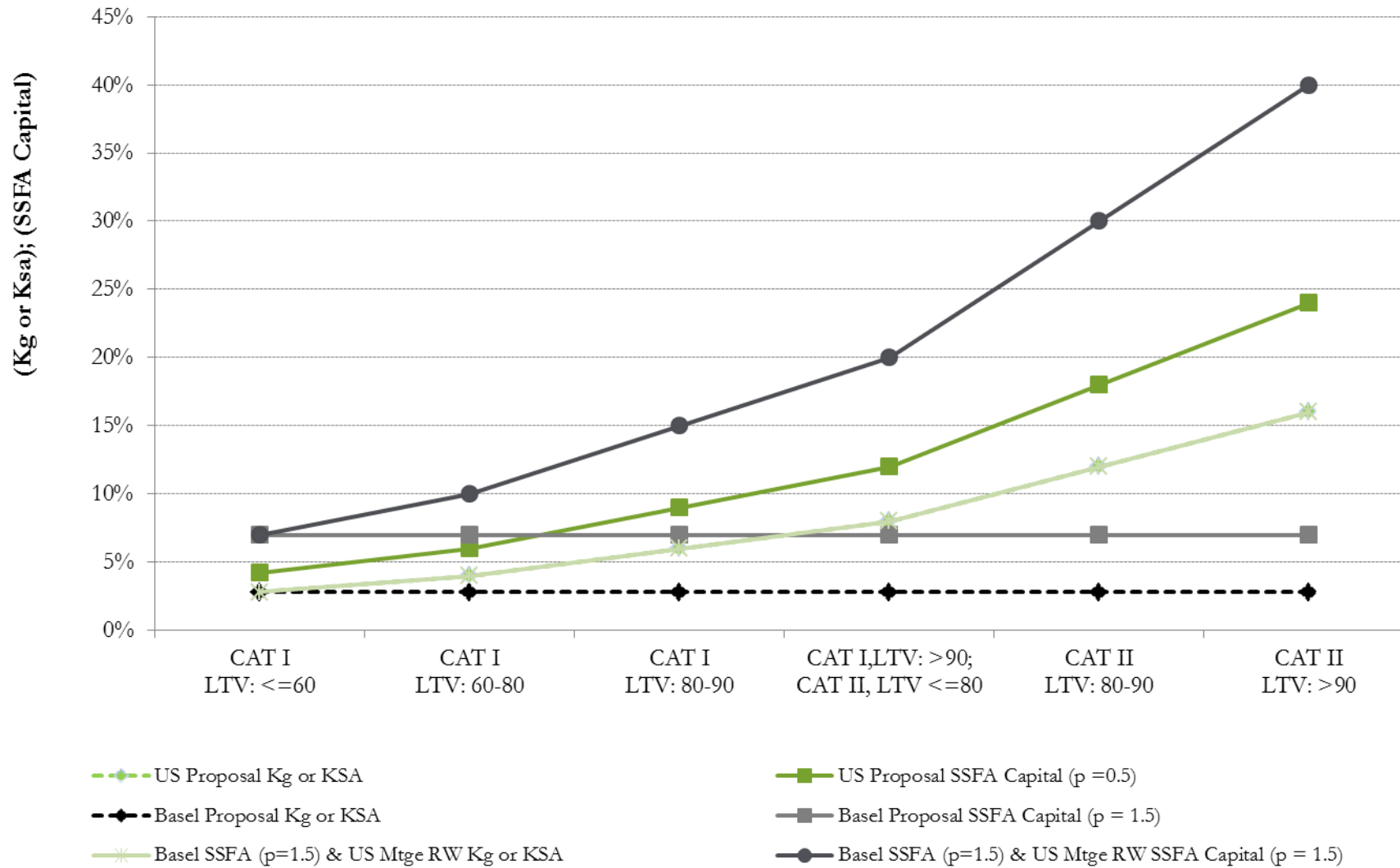
Margin	7	8	9	10	11	12	13	14	15	16	17	18
Cum Net Loss	6.22%	7.38%	8.66%	10.04%	11.53%	13.13%	14.83%	16.65%	18.57%	20.60%	22.74%	24.99%
Annualized PD	4.15%	4.92%	5.77%	6.69%	7.69%	8.75%	9.89%	11.10%	12.38%	13.73%	15.16%	16.66%
Kirb- 50% LGD	6.34%	6.54%	6.75%	6.97%	7.23%	7.53%	7.85%	8.21%	8.59%	8.97%	9.36%	9.75%
Annualized Loss	2.07%	2.46%	2.89%	3.35%	3.84%	4.38%	4.94%	5.55%	6.19%	6.87%	7.58%	8.33%
Risk Sensitive K_{SA}	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Annex 4.9

a. Incongruence of Mortgage RW with BCBS SSFA and US SSFA

US Proposal		Basel Proposal		Basel SSFA (p=1.5) & US Mtge RW	
	K_g or K_{SA} SSFA Capital (p =0.5)	K_g or K_{SA} SSFA Capital (p = 1.5)		K_g or K_{SA} SSFA Capital (p = 1.5)	
CAT I LTV: <=60	2.8% 4.2%	2.8% 7.0%		2.8% 7.0%	
CAT I LTV: 60-80	4.0% 6.0%	2.8% 7.0%		4.0% 10.0%	
CAT I LTV: 80-90	6.0% 9.0%	2.8% 7.0%		6.0% 15.0%	
CAT I, LTV: >90; CAT II, LTV <=80	8.0% 12.0%	2.8% 7.0%		8.0% 20.0%	
CAT II LTV: 80-90	12.0% 18.0%	2.8% 7.0%		12.0% 30.0%	
CAT II LTV: >90	16.0% 24.0%	2.8% 7.0%		16.0% 40.0%	

b. Incongruence of Mortgage RW with BCBS SSFA and US SSFA



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Annex 5

CLOs Containing Resecuritization Assets

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CLOs with Resecuritization Assets (1997-Current)

CLOs with Resecuritization Assets (1997-Current)								
Year	Total Collateral Balance of CLOs with Resecuritization (Structured Products)				Percentage Collateral Balance of CLOs with Resecuritization (Structured Products)			
	0	>0 and <5%	>5%	Total	0	>0 and <5%	>5%	Total
1997	74,458,937	-	-	74,458,937	100%	0%	0%	100%
1998	118,935,215	-	-	118,935,215	100%	0%	0%	100%
1999	26,479,883	-	23,037,829	49,517,713	53%	0%	47%	100%
2000	39,301,390	-	-	39,301,390	100%	0%	0%	100%
2001	202,005,940	-	4,726,024	206,731,964	98%	0%	2%	100%
2002	413,618,916	231,712,253	-	645,331,169	64%	36%	0%	100%
2003	1,308,941,348	358,624,711	108,892,447	1,776,458,507	74%	20%	6%	100%
2004	3,395,252,988	2,356,037,321	467,595,537	6,218,885,845	55%	38%	8%	100%
2005	12,898,722,161	14,310,839,413	2,123,607,001	29,333,168,575	44%	49%	7%	100%
2006	23,847,105,525	39,637,482,737	5,122,163,862	68,606,752,124	35%	58%	7%	100%
2007	30,737,700,896	45,502,401,757	6,892,532,866	83,132,635,519	37%	55%	8%	100%
2008	6,542,476,206	879,589,214	319,253,340	7,741,318,760	85%	11%	4%	100%
2010	2,350,274,665	-	-	2,350,274,665	100%	0%	0%	100%
2011	13,261,927,843	-	-	13,261,927,843	100%	0%	0%	100%
2012(E)	55,000,000,000	-	-	55,000,000,000	100%	0%	0%	100%
Total	150,217,201,912	103,276,687,406	15,061,808,908	268,555,698,226	56%	38%	6%	100%

Legacy CLOs

1997-2008	79,604,999,405	103,276,687,406	15,061,808,908	197,943,495,719	40%	52%	8%	100%
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Source: Intex

CLOs with Resecuritization Assets (1997-Current)					
Year	Total Collateral Balance of CLOs with Resecuritization (Structured Products)				Percentage Collateral
	0	>0 and <5%	>5%	Total	0
1997	74,458,937	-	-	74,458,937	100%
1998	118,935,215	-	-	118,935,215	100%
1999	26,479,883	-	23,037,829	49,517,713	53%
2000	39,301,390	-	-	39,301,390	100%
2001	202,005,940	-	4,726,024	206,731,964	98%
2002	413,618,916	231,712,253	-	645,331,169	64%
2003	1,308,941,348	358,624,711	108,892,447	1,776,458,507	74%
2004	3,395,252,988	2,356,037,321	467,595,537	6,218,885,845	55%
2005	12,898,722,161	14,310,839,413	2,123,607,001	29,333,168,575	44%
2006	23,847,105,525	39,637,482,737	5,122,163,862	68,606,752,124	35%
2007	30,737,700,896	45,502,401,757	6,892,532,866	83,132,635,519	37%
2008	6,542,476,206	879,589,214	319,253,340	7,741,318,760	85%
2010	2,350,274,665	-	-	2,350,274,665	100%
2011	13,261,927,843	-	-	13,261,927,843	100%
2012	55,000,000,000	-	-	55,000,000,000	100%
Total	150,217,201,912	103,276,687,406	15,061,808,908	268,555,698,226	56%

Source: Intex

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Annex 6

Principles of Basel II Arbitrage-Free Approach

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Principles of Basel II Arbitrage-Free Approach

Principle 1 (Accounting Concepts and Pillar 1 Key Assumption): the balance sheet of the Bank has two sides: the asset side (loans that accrue and trading activities) and the liability side (capital, wholesale debt and retail deposits). Securitisation SPVs have also two sides: the asset side with the securitised assets and the liability side with the tranches. For a financial entity, you will thus have asset concepts and liability concepts. A securitisation tranche is an asset of the Bank and this asset represents an insignificant portion of the balance sheet of the large and diversified Bank; it has a non-zero marginal contribution to the systemic risk of the Bank, like any other asset.

Principle 2 (IRBA ULC Components): in IRBA, the Unexpected Loss Contribution (ULC) of any asset to the capital requirement of the Bank has 3 components; it is equal to a) its marginal contribution to the value at risk of the Bank (dependent only on the systemic risk factor Y_{Bank}) less b) its marginal contribution to the expected loss of the Bank, adjusted for c) its marginal contribution to the model risk charge.

Principle 3 (ULC Additivity⁴): the ULC of an individual asset is proportional to its size and is additive to the UL of the large and diversified Bank. The principle of ULC additivity is not changed by the mere fact of being in an homogeneous pool (the 'Pool').

Principle 4 (Entity Neutrality): the Pool does not change its contribution to the UL of the Bank, by the mere fact of being on-balance sheet in a portfolio (the 'Portfolio') or off-balance sheet in an SPV (the 'SPV').

Principle 5 (EL Conservation): the Expected Loss of an untranching Pool is the same as the Expected Loss of all the tranches from that same Pool when tranching.

Principle 6 (Avoiding Model Arbitrage): the IRBA model (the Asymptotic Single Risk Factor model) developed by the Basel Committee has an underlying theory derived from the Vasicek mathematical development. To avoid model arbitrage⁵, an arbitrage-free model for securitisation capital tranches should use the same underlying theory as the ASRF with regards to the systemic risk of the Bank.

Principle 7 (Model Risk): the marginal contribution of a Pool to the model risk charge of the Bank should not generate further model risk.

Principle 8 (Mathematical Continuity): for a continuous tranching function (the 'infinitely grained' tranches) with a continuous asset function ('infinitely grained' pool), the computation of the capital requirement should not exhibit any mathematical discontinuity.

Principle 9 (Transparency): any adjustment to reflect specific changes to the securitised assets or structural features or non-respect of model or regulatory assumptions need to be explicit and transparent, if arbitrage is to be avoided.

⁴ ULC Additivity leads to 'RWA Additivity' for assets

⁵ Model arbitrage can be done easily when the distributions of two models are fundamentally different, even if the aggregate is identical. A model can be capital-neutral for example, that will not make it arbitrage-free. Example of such a model that is capital-neutral, but not arbitrage-free, is a model that results in the full deduction of capital for tranches below a certain threshold equal to the aggregate of capital requirement of the pool, and zero capital requirement for tranches above.

Practical consequences from those principles

Consequence A from Pillar 1 principle: since Pillar I is mainly concerned with the contribution of an asset to the systemic risk of the Bank, the inputs needed in the IRBA model are vis-à-vis the systemic risk, but not necessarily vis-à-vis other risks that are not systemic for the Bank. Vis-à-vis the systemic risk, the inputs to the arbitrage-free model for an individual securitised asset should not change.

Consequence B from Pillar 1 and IRBA ULC Components principles: since securitisation tranches are also assets of the Bank, its contribution to the capital requirement of the Bank should also be equal to its marginal contribution to the value at risk of the Bank (calculated with the systemic risk factor Y_{Bank}) less its marginal contribution to the expected loss of the Bank, adjusted for its marginal contribution to the model risk charge.

Consequence C from the ULC Additivity principle: the addition of an asset in the Pool should modify the ULC of a tranche based on the characteristics of that asset only. There should be no part in the capital structure resulting in an area that is not risk sensitive to the underlying asset risk.

Consequence D from ULC Additivity and EL Conservation principles: the unexpected loss contribution is distributed 'above' (or 'on top') of the expected loss contribution.

Consequence E from ULC Additivity and Mathematical Continuity principles: the arbitrage-free model should be able to calculate capital requirement of any tranche, from very thick to infinitely grained, continuously, assuming that the tranche itself is an asset of the bank, in a bank large and diversified.

Consequence F from the Mathematical Continuity principle: since there is no mathematical discontinuity, the arbitrage-free model should not require the use of smoothing techniques.

Consequence G from ULC Additivity and Avoiding Model Arbitrage principles: the arbitrage-free model should not require caps, to correct for a mathematical distribution that 'overshoots'.

Consequence H from Avoiding Model Arbitrage and Model Risk principles: the arbitrage-free model should not require a mathematical floor⁶, instead a capital charge for model risk should be added to any core mathematical results of the model itself.

Consequence I from ULC Additivity and Entity Neutrality principles: by having the securitised assets in an SPV, the arbitrage-free model does not add, nor does it reduce artificially the ULC of the Pool.

Consequence J from Transparency principles: the requirement for transparency should lead to explicit adjustments for specific features typically seen in securitisations, as well as determining the assumptions under which an approach can be used validly or not. The calibration of a model should be done in a transparent manner, and when a regulatory choice to apply an arbitrary

⁶ A floor is defined mathematically by using the $\min()$ function. A model requiring a floor can be arbitrated by construction. Indeed at the point where the distribution is equal to the floor, the capital is always half what it ought to be, by construction. To avoid arbitrage, the concept of a floor should be removed altogether and replaced by an explicit and transparent additional capital charge for model risk. You cannot arbitrage a mathematical addition.

parameter, it should be made clear that it is arbitrary. Uncontrolled arbitrary choices are potential sources of arbitrage.

Consequence K of respecting all 9 principles: there should be no possibility to arbitrage regulatory-wise the model in itself, as the originator or investor would be indifferent whether to sell or to keep a particular tranche or tranchelet (from the perspective of a mathematical distribution). A model respecting all the above would thus be a 'Basel 2 arbitrage-free' model.

There is a very simple and straight-forward methodology to implement, to be arbitrage free, and rating free, with no cliff-effect which complies with the principles above-mentioned.

It is important to note that the 'Basel 2 arbitrage-free' solution is not necessarily mathematically unique. There could be other solutions that could satisfy the principles that have been stated⁷.

The proper way would be for the Basel Committee to launch a consultation period for banks to propose appropriate alternatives, and at the same time to address governance issues. The mathematical assumptions of the model should be subject to rigorous analysis by independent experts. We agree with the assumption that if the securitized assets were held directly by the bank, their capital charge would be equal to the IRBA capital charge. However, we note that in all the proposed models, this rule is not respected and new capital is created artificially. To respect the rule, an overall cap is necessary outside the model. In the Basel II arbitrage free approach that we propose, the UL of the tranches is derived from the PD/LGD/Correlation of the securitized assets. This method ensures that if the securitized assets were to be held directly by the bank on its balance sheet, they will warrant the same capital charge as under the IRBA approach.

⁷ As a concept, should the Basel Committee be inclined towards Principle Based Modelling Approaches, then open Requests For Proposals could be sent to the academic world and industry specialists once the Basel Committee has established the principles that such proposals need to meet. Then an assessment of the answers of such proposals would lead to an appropriate solution to various regulatory issues. To a certain extent, BCBS236 by asking questions on alternatives to the current models that have been developed by following Rule-Based Modelling Approaches, is opening the path towards Principle-Based Modelling Approaches.

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Annex 7

Loss and Impairment Ratings for Structured Finance and Corporate Transition Rates

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Structured Finance Loss and Impairment Rates

Moody's Cumulative five year loss and impairment rates for Global CLOs and EMEA securitisations (%)				
	Estimated Multi-Year Cumulative Loss Rate by Cohort Rating		Multi-Year Cumulative Impairment Rates by Cohort Rating	
	1993-2011		1993-2011	
	Global CLOs	EMEA ABS, CMBS, RMBS	Global CLOs	EMEA ABS, CMBS, RMBS
Aaa	0.3	0.01	0.35	0.05
Aa	0.24	0.84	0.35	1.04
A	0.57	1.4	1.45	1.74
Baa	1.36	3.88	5.16	4.59
Ba	4.31	13.44	8.32	15.72
B	21.63	28.91	30.57	34.83
Caa	32.29	57.87	40.38	68.3
Investment Grade	0.62	1.16	1.87	1.41
Speculative Grade	5.59	19.96	9.73	25.64
All	1.53	2.49	3.3	3.12

Source: Moody's

Corporate transition rates

Moody's Global Corporate Average One-Year Transition Rates by Rating Modifier, 1983-2010																				
From/To	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1-C	WR	Default	Total
Aaa	86.24%	5.83%	2.91%	0.55%	0.31%	0.13%	0.01%	0.01%	0.00%	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	3.97%	0.00%	100%
Aa1	2.19%	74.91%	8.36%	6.41%	1.60%	0.53%	0.13%	0.17%	0.03%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	5.65%	0.00%	100%
Aa2	1.06%	4.74%	74.22%	9.26%	3.46%	1.32%	0.45%	0.11%	0.11%	0.01%	0.02%	0.00%	0.00%	0.02%	0.01%	0.01%	0.03%	5.18%	0.00%	100%
Aa3	0.21%	1.49%	4.38%	74.94%	8.84%	2.91%	1.00%	0.27%	0.22%	0.08%	0.02%	0.03%	0.02%	0.02%	0.00%	0.00%	0.00%	5.54%	0.05%	100%
A1	0.06%	0.11%	1.34%	5.35%	75.43%	8.04%	2.91%	0.70%	0.39%	0.16%	0.23%	0.12%	0.04%	0.07%	0.02%	0.01%	0.01%	4.96%	0.06%	100%
A2	0.08%	0.04%	0.23%	1.13%	5.19%	75.75%	7.98%	2.86%	0.84%	0.40%	0.19%	0.10%	0.12%	0.05%	0.04%	0.01%	0.07%	4.87%	0.06%	100%
A3	0.05%	0.06%	0.14%	0.25%	1.87%	6.71%	73.37%	6.67%	3.22%	1.06%	0.45%	0.18%	0.18%	0.10%	0.05%	0.02%	0.03%	5.44%	0.06%	100%
Baa1	0.03%	0.04%	0.08%	0.15%	0.27%	1.85%	6.81%	72.67%	7.38%	2.97%	0.78%	0.41%	0.30%	0.37%	0.07%	0.05%	0.12%	5.56%	0.14%	100%
Baa2	0.05%	0.07%	0.04%	0.08%	0.17%	0.71%	2.63%	5.87%	73.60%	6.75%	1.64%	0.63%	0.57%	0.48%	0.24%	0.11%	0.18%	6.01%	0.17%	100%
Baa3	0.05%	0.01%	0.04%	0.05%	0.13%	0.25%	0.58%	2.74%	8.74%	70.00%	5.02%	2.59%	1.13%	0.84%	0.38%	0.27%	0.44%	6.48%	0.29%	100%
Ba1	0.03%	0.00%	0.03%	0.05%	0.18%	0.14%	0.36%	0.57%	3.06%	9.80%	63.00%	4.75%	3.87%	1.49%	1.09%	0.67%	0.38%	9.87%	0.67%	100%
Ba2	0.00%	0.00%	0.03%	0.00%	0.03%	0.08%	0.07%	0.30%	0.75%	3.18%	8.68%	62.74%	7.01%	2.94%	2.25%	1.03%	0.60%	9.84%	0.76%	100%
Ba3	0.00%	0.02%	0.01%	0.03%	0.02%	0.15%	0.13%	0.16%	0.29%	0.72%	2.54%	6.18%	63.88%	5.95%	4.43%	2.14%	1.02%	10.62%	1.73%	100%
B1	0.03%	0.01%	0.02%	0.01%	0.04%	0.08%	0.09%	0.07%	0.13%	0.28%	0.45%	2.45%	6.54%	63.92%	6.69%	3.97%	2.43%	10.42%	2.38%	100%
B2	0.00%	0.00%	0.01%	0.02%	0.02%	0.00%	0.04%	0.10%	0.09%	0.14%	0.28%	0.60%	1.88%	6.96%	61.57%	7.89%	6.03%	10.59%	3.78%	100%
B3	0.00%	0.01%	0.04%	0.00%	0.01%	0.02%	0.07%	0.04%	0.05%	0.10%	0.08%	0.23%	0.58%	2.34%	6.34%	59.09%	12.62%	11.24%	7.16%	100%
Caa1-C	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%	0.00%	0.02%	0.02%	0.06%	0.10%	0.07%	0.23%	0.49%	1.10%	3.83%	57.63%	13.94%	22.51%	100%
Default	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%	100%

Source: Moody's