

Secretariat of the Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel
Switzerland

Submitted via email: baselcommittee@bis.org

Zurich, March 15th 2013

Credit Suisse response to the Consultative Paper on 'Revisions to the Basel Securitization Framework' (BCBS 236)

Dear members of the Basel Committee,

Credit Suisse AG ('CS') appreciates the opportunity to comment on the Consultative Paper ('CP') on 'Revisions to the Basel Securitization Framework' published by the Basel Committee on Banking Supervision ('Committee') in December 2012, as well as the technical papers '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 in January 2013.

We agree in principle with the stated objectives set out by the Committee with respect to the motivation for a revised securitization framework. We agree with the Committee that the strong reliance of the current framework on external ratings is a shortcoming which should be addressed. In addition, we agree with the Committee that the current framework produces significant cliff effects, resulting in overly conservative risk weights for the lower-rated tranches of certain types of securitizations.

We ask the Committee to consider the following general comments on the CP:

- Allowing additional time for the industry to provide meaningful comments on this set of complex proposals is warranted. Given that the CP lists a number of alternatives and that there is not as yet a defined set of rules, the industry should be provided an additional commentary period once a draft set of rules is available.
- Changes in regulations should not only, as a matter of course, introduce higher capital requirements across all types of securitization transactions, but should also reflect relevant initiatives to address behavior related to securitizations and take into account resulting changes in practice. We refer to the work of the Financial Stability Board ('FSB') on shadow banking, as well as the changes in the way the industry manages risk retention, due diligence, transparency and disclosures following the financial crisis¹. Any perceived shortcomings in behavior should be addressed through Pillar 2 rather than Pillar 1 charges.
- The development and introduction of a separate revised securitization framework which is applicable to banking book positions seems to contradict the Committee's stated objective to work towards limiting

¹ For example, amendments to CRD by Directive 2009/111/EC relating to securitizations through Article 122a include measures related to due diligence and risk management practices and are seen by the Committee of European Banking Supervisors as "an important part of restoring confidence in securitization markets and, in turn, helping the recovery of an additional source of funding to the real economy". As another example, refer to the recent proposed guidelines for qualified US residential mortgages from the Consumer Financial Protection Bureau which is meant to ensure safe and reasonable mortgages and end the irresponsible practices of no doc, zero down risk mortgages that helped contribute to the credit crisis.

the opportunity for arbitrage. Securitization positions should be reviewed in an overall framework across both banking and trading book and should consider all aspects relevant to banks holding such positions (e.g. market making, tranching financing, tranching credit protection).

- There continue to be significant differences in the performance of securitized asset classes. The calibration of the proposed approaches under a 'one-size-fits-all' framework may lead to excessively conservative outcomes across many asset classes and occasionally overly liberal outcomes across others. Introduction of the concept of countercyclical buffers within the Basel 3 framework gives regulators an effective tool to potentially limit the negative impact of specific market disturbances (i.e. by raising capital requirements related to a specific asset class and/or market). We believe that the prudent use of such buffers is a more effective approach and may serve to reduce the potential for negative implications arising from these asset classes.
- As a general principle, the capital requirement for all tranches of a securitization should not be higher than the capital requirement for the pool of underlying assets. The caps partially provide for this, but become much less effective once tranches of a securitization have been distributed amongst multiple market participants. We propose the Committee review the calibrations of the approaches to ensure alignment with this principle.
- The imposition of rules that serve to materially increase the capital requirements of securitizations could have the unintended consequence of creating disincentives for banks to be active in the securitization markets, resulting in the constriction of the credit supply and overall liquidity of the global economy and markets. This could effectively result in a shift of securitizations to the shadow banking arena – in direct contrast to the aims of the Committee and other regulatory bodies to (have the ability to) supervise systemic risk.

We ask the Committee to consider the following specific recommendations in a revision of the current proposed framework:

- We propose that the Committee adopt a revised version of hierarchy A, allowing a bank to choose between the Revised Ratings Based Approach ('RRBA') and the Simplified Supervisory Formula Approach ('SSFA') – to the extent that a jurisdiction allows the reliance on external ratings.
- We agree with the Committee that the Modified Supervisory Formula Approach ('MSFA') be at the top of the rules hierarchy. However, banks that do not have sufficient information to perform a bottom-up calculation of probability of default ('PD') and loss-given-default ('LGD') for each underlying asset should be allowed to determine such parameters by applying a top-down approach or by applying conservative Internal Ratings Based ('IRB') proxies.
- With respect to their exposures to ABCP Conduits, banks should be allowed to choose the Internal Assessment Approach ('IAA') alongside the MSFA at the top of the hierarchy.
- The contractual maturity of a tranche should not be considered in the determination of risk weights for securitizations as this double-counts maturity effects already included in K_{IRB} and external ratings. If the Committee decides to include a maturity component regardless of such double-counting, it should reflect the expected weighted average maturity of the underlying assets or the tranche, as appropriate, rather than the contractual maturity.
- The RRBA calculation framework should include the quality of underlying assets, rather than assuming all underlying assets are 'B' rated, in order to promote risk-sensitive decision making and encourage better underwriting practices.
- We agree with the Committee's view to exclude certain types of re-securitizations from the advanced approaches. However, the definition of what constitutes a re-securitization should be revised. Specifically, re-tranchings of single securities should not be treated as re-securitizations on the basis

that there is no concern for correlation and that the capital can be calculated based on the underlying pool. As a result, banks should be allowed to apply the MSFA to single-bond re-tranchings.

- The benefit from write-downs or discounts should be recognized either by adjusting the attachment point of a tranche (i.e., for synthetic securitizations, by splitting off an equity portion that has a carrying value of zero) or treating market value as a continuous distribution across a tranche (similar to how the MSFA constructs a continuous distribution). Such approach is consistent with the principle to apply risk weights to the market value of a tranche, and would still be subject to a risk weight floor.
- Specific look-through approaches should be allowed for re-securitization exposures backed entirely by senior exposures rather than relying solely on the Backstop Concentration Ratio Approach ('BCRA'). Banks should be allowed to sort the underlying assets and apply the risk weight of the 'best' underlying assets towards senior re-securitization exposures, and the 'worst' underlying assets towards equity re-securitization exposures.
- A 20% risk weight floor across all securitizations may result in a disincentive for banks to securitize high-quality pools. Instead, we propose the concept of a variable floor dependent on the credit quality of the underlying assets.
- The securitization of revolving credit exposures is an important market which relies on structures with early amortization features. Instead of disallowing any benefit from such securitizations, we propose the Committee revise the existing rules.
- Given many existing securitization transactions are longer dated, the final set of rules should provide for a reasonable transition period and specifically allow grandfathering of existing transactions.

In the following section we offer our detailed comments on the questions given in the CP.

Yours sincerely,

Credit Suisse AG



Rudolf Bless
Managing Director
Deputy Chief Financial Officer



Brian Chin
Managing Director
Head of Securitized Products

Detailed CS comments on questions

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?

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?

Question 3 – As regards Alternative B, which methods could a bank use to conclude that a securitization 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?

Topics: Hierarchies

Recommendation: We propose that the Committee adopt a revised version of hierarchy A, allowing a bank to choose between the RRBA and the SSFA – to the extent that a jurisdiction allows the reliance on external ratings. With respect to their exposures to ABCP Conduits, banks should be allowed to choose the IAA alongside the MSFA at the top of the hierarchy.

Hierarchy A most adequately addresses the Committee's objectives by installing an approach reliant upon internal models at the top of the hierarchy which further allows banks to apply alternative methods only if the requirements for the MSFA are not met. This is in line with our view that banks should rely on internal models rather than external ratings that may not necessarily reflect the actual risk embedded in the securitization exposures.

At a bank's discretion, the IAA should be eligible alongside the MSFA for exposures to ABCP Conduits and similar warehouse facilities instead of requiring banks to apply the MSFA to such positions. The IAA is an approach that is particularly meaningful for such exposures, which are typically senior and low-risk. The assessments under IAA are validated regularly by the capital markets as almost all assets are taken from the conduits to the securitization market where both public ratings and investor response provide data for calibration. Finally, by requiring the most conservative rating methodology to set the minimum credit enhancement, this approach avoids outliers in rating methodologies that might result from 'ratings shopping'.

There is a concern with hierarchy A that the jurisdictional choices made by regulators when implementing either RRBA or SSFA will have an inconsistent impact when viewed across all banks. This may lead to the unintended consequences of (i) increasing systemic risk by concentrating exposure to particular classes of securitization assets within a limited set of banks, and (ii) creating incentives for a shift of securitization markets into the shadow banking arena, as certain banks are no longer able to compete for such assets due to the associated cost of capital.

This concern could be mitigated by allowing banks to choose between the RRBA and the SSFA, similar to the choice between approaches under hierarchy B (there limited to senior high-quality exposures). Banks should be allowed to make such choice per type of securitization exposure, which could be required to be defined in bank-internal policies to ensure consistent application across banks.

This would be consistent with our view that capital requirements should reflect the risk inherent in the respective securitization exposures. We believe that excessively conservative capital requirements for securitizations will constrain a vital source of financing to the economy and open the possibility of regulatory arbitrage. The option to apply the appropriate approach in line with an internal policy would ensure appropriate and consistent treatment for similar types of securitizations.

Hierarchy B does not effectively address the objectives stated by the Committee:

- It could lead to severe cliff effects when exposures have to be re-classified from high-quality to non-high-quality. We believe that such cliff effects could potentially be severe, would most likely be procyclical and would impede a bank's capital management.
- In order to make a determination of high-quality, banks would have to either (a) take into account external information such as credit ratings, or (b) rely on internal determinations as to what constitutes a 'high-quality' exposure. The effect of approach (a) would be an implicit requirement to have external ratings for exposures, whereas the effect of approach (b) would be to potentially create significant variations between different banks' determinations of 'high-quality' exposures. Either of effects (a) or (b) would contravene the Committee's stated objectives of the framework, and the recent focus on consistency amongst banks in capital requirements.

We therefore do not favor hierarchy B. If hierarchy B were implemented, we suggest the following changes should be made:

- Qualifying external ratings for high-quality exposures should be from AAA to A- (not from AAA to AA-). Such range would correspond to a short-term rating of A-1/P-1.
- Specifically related to senior tranches, banks should be allowed to (traditionally or synthetically) re-tranche them without such re-tranching leading to a re-securitization treatment. The basis for this treatment is the principle that within every senior tranche there is a portion which is high-quality.

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

Topics: Hierarchies, Purchase discounts, Caps & Floors

Recommendation: Single-bond re-tranchings should not be treated as re-securitizations, and write-downs/discounts should be applied towards more junior portions of a tranche; this follows naturally from the MSFA framework. Additionally, caps based on the underlying assets should apply to re-securitization exposures backed by senior securitization exposures.

The CP proposes the application of the BCRA to all re-securitizations due to concerns regarding the quantification of risks. Although re-securitizations can be analytically challenging, there are structures (single bond re-tranchings and re-securitizations backed entirely by senior exposures) where risks can be readily quantified and there is evidence to support a modeled approach.

Whilst correlation assumptions are an issue for multi-bond re-securitizations, they are irrelevant for single-bond re-tranchings. The definition of a re-securitization should therefore be refined to avoid bringing these structures, where risks can be readily quantified, into scope. These tranches should be treated under the MSFA, rather than the broad brush approach of the BCRA.

Additionally, the motivation for many single-bond re-tranchings has been to apply more granular pricing across a tranche's internal capital structure, as well as to expose embedded high-quality senior exposures and allow appropriate risk weights. Similar to the way the MSFA constructs a probability distribution of losses for infinitesimally small tranches, a more granular approach to market value would make capital requirements more risk-sensitive and reduce incentives for non-economic transactions. Consistent with this analysis, any write-downs or discounts should be applied to the more junior portion of a tranche; the tranche would still be subject to the appropriate risk weight floor.

For re-securitizations backed entirely by senior securitization exposures, total capital requirements are capped by the capital requirements for the underlying assets calculated under MSFA, IAA, RRBA or SSFA as appropriate; an ordering (by risk weight) of the underlying assets should be used to compute caps for senior and equity re-securitization exposures.

Refer to the appendix for a more detailed discussion of the proposed treatment for certain re-securitizations and the treatment of write-downs.

Question 5 – The Committee recognizes 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.

Topics: RRBA: details & assumptions

Recommendation: The requirement to have two external ratings in order to apply the RRBA would impose additional significant costs on new-issue transactions, impair liquidity in some assets, and is unlikely to materially improve the accuracy of risk weights. The Committee should therefore re-consider the requirement for two external ratings.

Rating agencies are generally aligned in their assessments of risks and ratings, which suggests that the second rating will not add material new information to most transactions. To the extent that there is concern regarding 'ratings shopping' by originators, the demonstrated willingness and ability of rating agencies to issue unsolicited ratings serves as a check on the accuracy of ratings.

An additional consideration is that many investors have migrated towards requiring multiple ratings on new-issue transactions. Where possible, originating banks have accommodated this trend, by sometimes even getting ratings from all 4 major agencies. However, there are some asset classes for which only one rating agency has the requisite data/model/expertise to rate the transaction. In this case, a requirement for two ratings would effectively shut these assets out of the new-issue markets.

Based on these observations, it is possible that formally requiring two external ratings would not materially improve the quality of ratings information for major asset classes, while impairing liquidity for certain non-traditional asset classes. We suggest that the Committee take into account the above observations when considering the requirement for two external ratings.

Question 6 – Is the RRBA appropriately calibrated and formulated? Should other risk drivers be incorporated?

Topics: Calibration issues, RRBA: details & assumptions

Recommendation: The assumption that all underlying assets are 'B' credits with a 60% LGD should be revised; one approach would be to use the deal structure and ratings to infer underlying asset performance and proxy PD/LGD estimates.

The current revision of the securitization framework is intended to make capital requirements more risk-sensitive (and implicitly promote risk-sensitive behavior). Investors should therefore have lower capital requirements for securitizations backed by high-quality assets. A failure to address this will lead to 'asset quality indifference' when purchasing AAA assets.

The US Residential Mortgage Backed Securities ('RMBS') market provides a simple example of transactions where the underlying asset quality varies greatly across different asset pools. Risk-sensitive capital requirements should distinguish between (e.g.) Subprime-backed AAA exposures and Prime-backed AAA exposures.

Estimates for underlying asset performance can be inferred or imputed from third party ratings. One simple approach would be to use 60% LGD and assume that a AAA requires (e.g.) 3x loss coverage. For a AAA

requiring 20% support, the implied PD is $(20\% / 60\% / 3) = 11\%$. The Committee might explore using the ratings model constructed in WP22 to develop a more systematic or sophisticated approach.

Additionally, there are some securitizations where the underlying assets have well-known ratings/LGD data – for example, Federal Family Education Loan Program ('FFELP') securitizations, where each loan is 97% guaranteed by the US Government. Disregarding available loan-level information seems less than ideal.

We therefore suggest the Committee investigate whether and how it would be possible to infer the PD of the underlying assets from the ratings structure of the transaction, or incorporate known asset-level information, and thus permit a more risk-sensitive calibration of the RRBA.

As an enhancement to the current proposal, the Committee should address the treatment of exposures to securitizations that are more senior than the most senior tranche, such as mortgage servicer advances and certain derivatives. Such exposures are typically not rated yet their position in the cash flow waterfall provides considerable credit protection.

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?

Topics: MSFA: details & assumptions

Recommendation: Banks that do not have sufficient information to perform a bottom-up calculation of PDs and LGDs should be allowed to determine such parameters by applying a top-down approach or by applying conservative IRB proxies.

The requirement under the current rules (§607) is sufficient to permit the majority of the assets in the pool to be under IRB (instead of each and every underlying asset). For assets not under IRB, banks should be allowed to apply conservative proxy IRB estimates.

In order to ensure a level playing field between originators and investors and to avoid some of the distortive effects for the securitization markets (e.g. risk concentration, shift to shadow banking arena), banks that do not have sufficient information to perform a bottom-up calculation of PDs and LGDs should be allowed to determine such parameters by applying a top-down approach. Such a possibility would give banks an opportunity to calculate capital in a risk-sensitive manner, as best allowed under the MSFA.

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?

Topics: MSFA: details & assumptions, Calibration issues, Maturity

Recommendation: The contractual maturity of a tranche should not be considered in the determination of risk weights for securitizations as this double-counts maturity effects already included in K_{IRB} and external ratings. If the Committee decides to include a maturity component regardless of such double-counting, it should reflect the risk horizon of the exposure, i.e. the expected average maturity of the underlying assets or the expected average maturity of the tranche, rather than the contractual maturity.

The Committee has introduced the concept of a maturity adjustment within the MSFA methodology in order to address mark-to-market losses in respect of tranche exposures. We suggest such maturity adjustment is inappropriate since:

- The maturity of the underlying assets is already taken into account when determining the K_{IRB} in respect of the portfolio of underlying assets, and the introduction of a maturity adjustment under the MSFA results in a double-counting of maturity effects; and
- In cases where the scope of the proposed securitization framework currently applies to banking book underlying assets which are themselves not subject to mark-to-market treatment, the introduction of a maturity adjustment within the MSFA framework aiming at addressing mark-to-market losses in respect of tranche exposures creates capital volatility and mismatch between the treatment of the underlying assets versus the treatment of the tranche exposures in respect of such underlying assets.

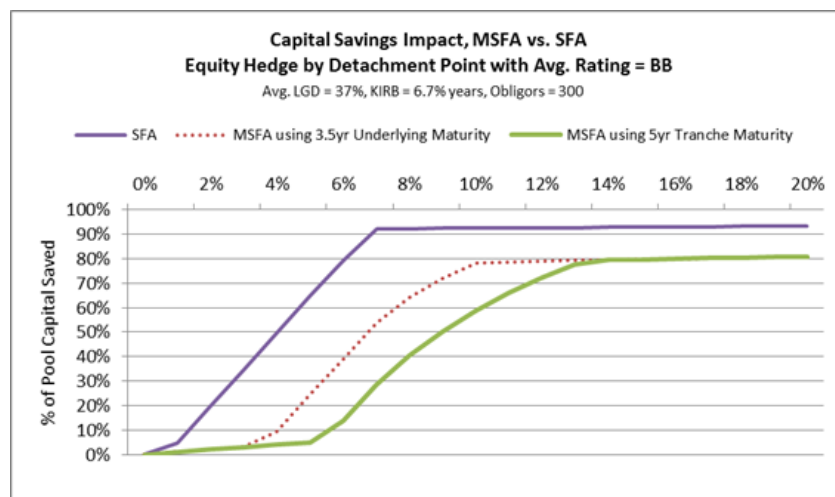
To achieve the Committee's goal of a risk-sensitive framework, the rules should contemplate cases where the tranche maturity is shorter than asset maturity, e.g. time-tranched seniors, as well as cases where the asset maturity is shorter than the contractual maturity of the tranche, e.g. structures that contain triggers which limit the exposure to the life of the assets despite a longer contractual maturity.

Given the fact that application of the MSFA requires detailed knowledge of the underlying assets, and is therefore more likely to be applied by originating banks whose actual credit exposures in respect of the retained tranche is linked to the maturity of the underlying assets, a more appropriate maturity input to the MSFA would be to:

- apply the expected weighted average maturity of the tranche or the underlying asset pool as appropriate when calculating capital requirements under the MSFA framework; and
- assume a 1-year maturity for each underlying asset when calculating the K_{IRB} , in order to avoid double-counting of maturity effects.

The Committee has acknowledged in other cases that the effect of maturity should not be double-counted, such as for the credit valuation adjustment ('CVA') under Basel III where the maturity can be set to 1 year for the risk weight calculation under paragraph 272 (with regulatory approval).

The example below shows the impact of the MSFA on a pool whose expected weighted average maturity is 3.5 years on a tranche of 5 years. We believe that this result is consistent with the Committee's objectives and more reflective of the underlying asset risk and the economic behavior of the tranche.



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)?

Topics: Hierarchies, MSFA: details & assumptions

Recommendation: It is adequate and prudent to allow assets treated under F-IRB or any other IRB approaches that do not require the internal determination of both PD and LGD (e.g. slotting criteria approach for specialized lending, simple approach for equity exposures) to flow into the MSFA. In addition, as outlined in our response to question 7, banks should be allowed to apply a top-down approach to determine PDs and LGDs if a bottom-up IRB calculation is not possible.

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?

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

Topics: SSFA

Recommendation: The definition of the delinquency rate should be clarified and adjusted for any provisions taken by the bank against the delinquent assets.

In order to ensure consistency of application across banks and jurisdictions, greater clarity is required on the definition of delinquency ('w') in the context of the SSFA as there are delinquencies of different durations quoted on investor reports, and where they are not quoted a valid basis of estimation is required. Additionally, w should be adjusted for any provisions taken by the bank against the delinquent assets.

We believe that the current US calibration with p equal to 0.5 is appropriate and there is no need for setting p at 1.5.

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

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?

Topics: Backstop approaches: details & assumptions

Recommendation: F should equal 1 for all exposures, i.e. senior and non-senior securitizations as well as re-securitizations.

The BCRA only looks at the detachment point of the tranche and ignores its attachment point. The BCRA therefore does not adequately take into account differences in the credit quality of a tranche resulting from either (i) over-collateralization effects, or (ii) the presence of other subordinated tranches that act as a buffer for losses before the tranche in question has to suffer a loss.

Based on the conservative nature of the BCRA we believe that there is no need for the F parameter to be set at 2 – neither for senior nor non-senior tranches. A difference between the F parameter for senior and non-senior tranches would lead to unnecessary cliff effects.

Question 14 – How prevalent and material are securitization exposures backed by mixed pools?

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

Topics: Hierarchies, Backstop approaches: details & assumptions

Recommendation: As outlined in our response to question 7, banks should be allowed to apply advanced approaches such as the MSFA and the RRBA to pools for which PDs and LGDs are available for the majority of the underlying assets. The proposed concepts for mixed pools should only apply if a significant portion of a pool is not under IRB and no conservative IRB proxies can be estimated.

Firstly, for mixed underlying pools of non-securitizations, the basis of the capital requirement under option (a) is the SA or IRB approach, as appropriate to the underlying asset type. However, if a securitization position is added to the same pool, the capital requirement of all non-securitization positions is to be calculated under the SA (regardless of whether the underlying is within the scope of the IRB approval). Such treatment seems inconsistent, and we believe that the addition of a securitization position should not impact the application of the IRB approach to the non-securitization positions.

Secondly, the calculation of capital under the BCRA for a mixed pool (option (b)) which includes both IRB and SA as well as securitization and non-securitization exposures is unclear. Clarification is needed to ensure consistent application by banks.

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

Topics: Maturity, RRBA: details & assumptions, MSFA: details & assumptions

Recommendation: As outlined in our response to question 8, the expected weighted average maturity of the underlying assets or the tranche, as appropriate, should be used as the basis for the maturity determination rather than the contractual maturity of the securitization tranche.

In addition, we believe that there is a double-counting of maturity in the approaches currently outlined:

- Under the MSFA, the maturity of the underlying assets is already embedded in the K_{IRB} as one of the main inputs into the calculation and is then considered as an additional component in the MSFA itself.
- External ratings already take into account the expected life of a securitization transaction, so there is a double-counting when the RRBA has an additional adjustment for maturity.

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.

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

Topics: Caps & Floors, Maturity

Recommendation: We propose the concept of a variable floor dependent on the credit quality of the underlying assets in combination with the maturity.

The risk weight floor should be lower for short-term exposures, where the criteria for short-term exposure should reflect either the maturity of the position or a high likelihood of exit at a given horizon. For example, warehouse lines which incorporate step-up/amortization features at expected maturity are generally rolled over to new warehouse lines or moved to a new lender. These exposures should have their expected

maturity used as the criteria for 'short-term' treatment. A lender should be able to demonstrate through historical performance that they achieve a standard of 'high likelihood' of exit. The current 7% risk weight floor appears to be appropriate for short-term AAA tranches given its alignment with IRB.

If the Committee determines that the full maturity of the underlying assets should be considered rather than the expected exit date, the MSFA should provide benefits for warehouse lines or other similar financing, such as trade finance, with expected maturities under 1 year. For scenarios where assets deteriorate, a shorter renewal horizon allows a lender to terminate and exit a transaction with a smaller loss, rather than being locked into a longer holding period while assets deteriorate further. Providing capital relief for structures which provide better loss controls will continue to align incentives and move the framework towards a risk-sensitive foundation.

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

Topics: Caps & Floors

Recommendation: Capital for a pro-rata interest in a securitization exposure should not exceed the capital for a pro-rata interest in the underlying assets.

We agree with the Committee that the maximum capital requirement from a securitization exposure should not exceed the capital requirement that would result if a bank were holding all the underlying assets. Additionally, capital for a pro-rata interest in a securitization exposure should not exceed the capital for a pro-rata interest in the underlying assets. This should apply to any tranche of a securitization. For example, if a bank owns 5% of a tranche in a securitization then capital should not be higher than 5% of the capital of the underlying assets. Such principle should apply regardless of the bank's role in the securitization, i.e. regardless of whether a bank acts as an originator, sponsor or investor.

We request the Committee clarify a key point regarding the implementation of the look-through cap: Whilst it is appropriate for the capital requirements for a securitization to be capped at the capital requirements for the underlying assets, the pricing assumption regarding the underlying assets is unclear. For securitizations held at a discount or with specific provisions, the underlying asset pool would also likely be held at a discount. As the Committee intends to use carrying value as a risk weight, guidance with regard to the hypothetical carrying value for the underlying pool of assets should be provided to ensure consistent implementation across jurisdictions.

Additionally, refer to our response to question 4 regarding caps for re-securitizations.

Question 20 – Are there other approaches that could provide a more risk-sensitive treatment while still being prudent and operationally straight-forward to implement?

Topics: Purchase discounts, Early amortizations

Recommendation: The benefit from write-downs or discounts should be recognized either by adjusting the attachment point of a tranche (i.e. for synthetic securitizations, by splitting off an equity portion that has a carrying value of zero) or treating market value as a continuous distribution across a tranche (similar to how the MSFA constructs a continuous distribution). Such approach is consistent with the principle to apply risk weights to the market value of a tranche, and would still be subject to a risk weight floor.

For traditional securitizations, for which the securitization SPE issues tranches of notes and for which a distinct valuation is available, the application of the risk weight to that fair value of the tranche held is possible. However, where an exposure falls within the securitization framework by virtue of protection purchased on a tranche of a portfolio (§199), there is no valuation of the tranche itself on which to apply the

risk weight; in such instances, it is therefore appropriate to take into account the provisions already taken to P&L when determining the capital of the tranche (§629). For exposures with significant write-downs/discounts, the application of such discount would primarily be applied to the more junior portion of the exposure (refer also to our response on question 4 and the appendix).

Recommendation: The securitization of revolving credit exposures such as credit card receivables is an important market which relies on structures with early amortization features. Instead of disallowing any benefit from such securitizations, we propose the Committee revise the existing rules (§590 to §604).

The Committee proposes for revolving credit exposures with early amortization provisions that all of the securitized assets should be treated as if they were 'on-balance sheet' for regulatory capital purposes. The rationale of the Committee is its observation that securitizations with early amortization provisions typically result in very limited transfer of risk to investors.

We do not agree with this observation. If there is an abrupt change in consumer credit markets caused by economic cycles, yield curves or illiquidity then we would expect investors in such securitization to potentially suffer sizeable losses, which demonstrates that risk transfer is achieved.

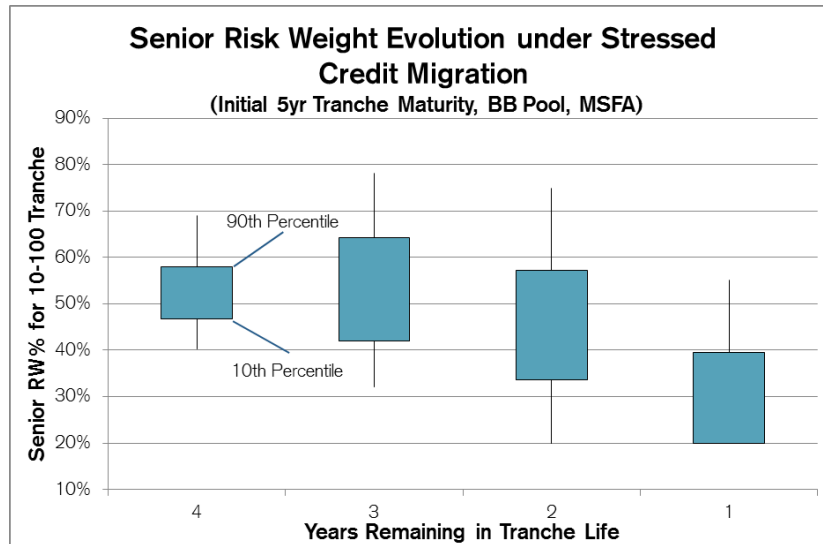
We understand the concerns the Committee has raised, but rather than completely eliminating the incentives to securitize such assets, the existing calculations should be revised by making them more prudent or enhancing guidelines for their use.

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.

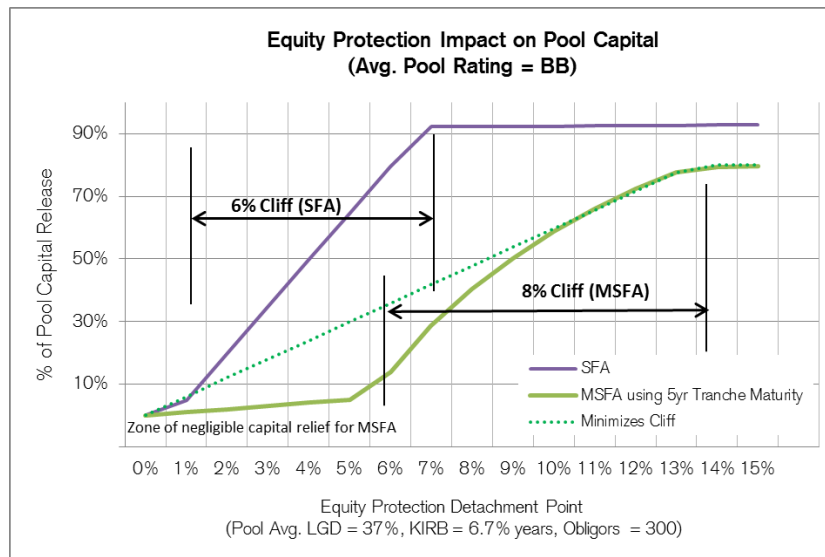
Topics: Calibration issues

The interplay between maturity and asset quality migration appears unbalanced; additionally, cliff effects remain in the current formulation, which could be resolved by a wider transition zone through the equity. More generally, the MSFA calibration should address the significant improvements in securitization practices since the credit crisis, the relative performance of different asset classes, and overly conservative treatment in that the sum of capital after securitization across the entire capital structure is a multiple of the capital before securitization. The other issues noted elsewhere in this letter (i.e. the treatment of senior re-securitizations, single-bond re-tranchings, use of carrying value for risk weights, the treatment of unrated exposures senior to issued bonds, etc) should also be addressed in the final rules.

The interplay between maturity and credit quality migration can be seen by calculating a tranche risk weight after applying rating transition matrices. Using the 4-year period in the early 2000's as a conservative sample, we calculated the risk weight for a 10-100% tranche on a pool of 300 names with a weighted average PD of 1.7% and a weighted average LGD of 35%. Over the life of the tranche, even in the face of severe negative migration and losses, the risk weight of the tranche declines markedly. It would be more reasonable to expect the rating migration to play a more important role and the risk weight to be stable or even increase at a rate similar to the underlying pool in the face of severe credit migration. We believe a declining risk weight under this type of credit stress is evidence of overly conservative treatment of maturity in the MSFA.



Cliff effects remain in the MSFA calibration, when a 'cliff' is defined as the gap between where purchasing equity protection provides capital relief and where the risk weight floor comes into effect. In the example below, we find that zone to be approximately 6% under the existing SFA framework and 8% under the MSFA. In addition, there is a significant zone that extends from zero to K_{IRB} where equity protection results in nearly no capital relief. To produce a wider transition zone and reduce cliff effects, we propose a flatter transition that lies between the SFA and MSFA.



Question 22 – Is the proposed treatment of retail securitizations using the same approaches as for corporate securitizations 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?

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

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.

Topics: Calibration issues

We are in favor of removing double-counting effects of maturity. Additional AVC adjustments do not seem to be very significant in terms of complexity. In fact, in many respects the simplicity of the framework poses material risk to eliminating some forms of securitization that we view as supporting economic activity.

Regarding retail securitizations, there is a fundamental issue in that a securitization achieves a true sale of assets, which by definition removes the requirement for enhanced due diligence by the originator. Covered bonds achieve this alignment of interests, but these are not securitizations. Ideally investors should perform the same level of due diligence on loans in securitizations as originators would perform for loans held on the originator's balance sheet. One approach would be to allow for lower capital requirements when a portion of the loans has been independently re-underwritten by a third party. A second approach would be to allow for lower capital requirements when a transaction was originated subject to risk retention requirements.

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

Topics: Calibration issues

The relative calibration of the approaches appears to be well-aligned for some transactions, and not well-aligned for others. We recognize the difficulty in building a framework which is applicable to the wide range of structures and asset classes and, therefore, refer to our proposal stated above to allow banks to choose between the RRBA and the SSFA per type of securitization exposure.

Appendix – Additional background for questions 4 and 20

The discussion of re-securitizations backed by a single underlying exposure is tied together with the issues of write-downs/purchase discounts, notional vs. market value weights, and ratings methodology. These are therefore addressed together below.

Our proposals are:

- Single-bond re-tranchings should not be treated as re-securitizations.
- Under the MSFA, the benefit from write-downs/discounts should be recognized and applied in a consistent fashion, while maintaining non-zero capital requirements.
- Under the RRBA, the benefit from write-downs/discounts should be recognized and applied in a consistent fashion, using information imputed from a ratings model.
- For senior re-securitization exposures backed entirely by senior exposures, a cap based on 100% correlation would apply.
- For equity re-securitization exposures backed entirely by senior exposures, a cap based on 100% correlation would apply.
- For re-securitizations under the IAA, a cap based on an ordering of sub-tranches by risk weights would apply.

Re-securitizations:

Re-securitizations can be challenging analytically – certainly, re-securitizations backed entirely by mezzanine risk performed poorly when compared to their ratings, suggesting that the models used by ratings agencies were flawed. However, for some special cases (which are relevant in the marketplace), the analytical challenges are actually tractable, and there is empirical evidence to support the treatment.

- Special case 1: Single-bond re-tranchings (usually a senior bond), currently treated as a re-securitization
- Special case 2: Re-securitizations backed entirely by senior exposures.

The issue of re-securitizations backed entirely by senior exposures is relevant to both ABCP conduits as well as certain other transactions, while single-bond re-tranchings are relevant across many asset classes.

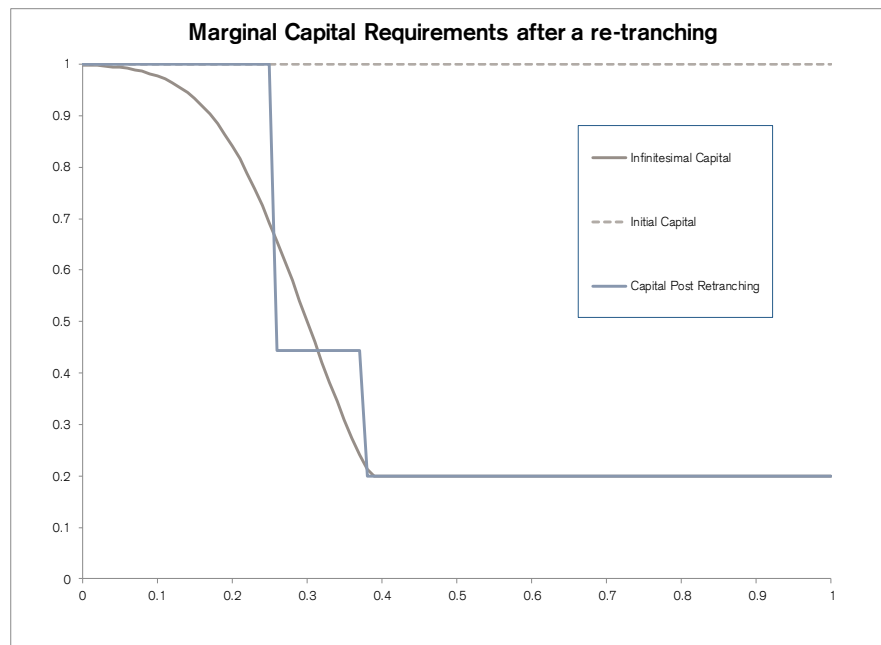
Special Case 1: Single-bond re-tranchings

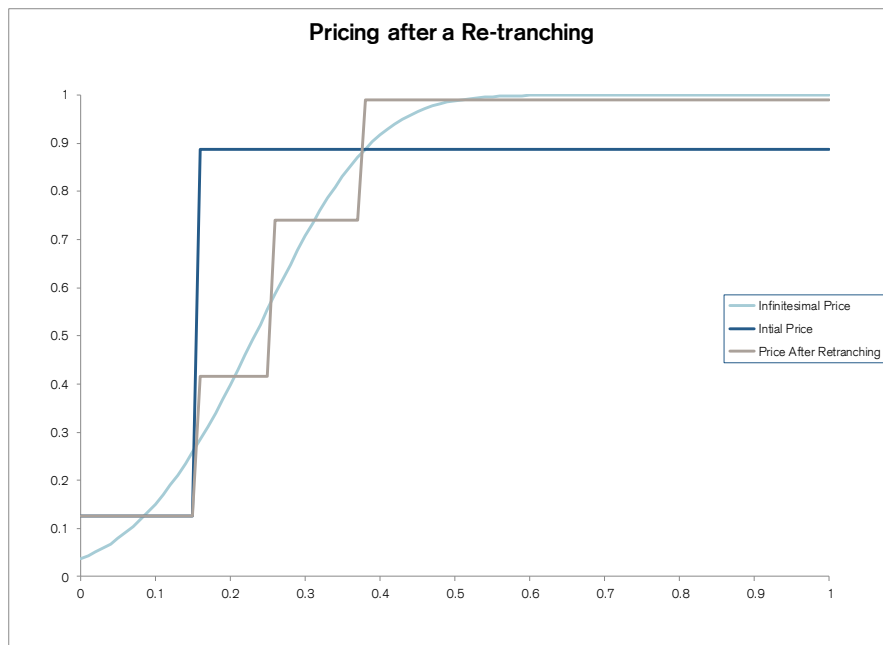
There are 4 high-level points to be made regarding single-bond re-tranchings and capital requirements:

- 1) Ratings, which generally look at probability of loss to the lower attachment point, are not the most appropriate metric for senior tranches:
 - a. Even though Moody's uses 'Expected loss', their ratings are very close to Fitch's and S&P's ratings which reflect 'First dollar of loss'
 - b. Senior bonds rated CCC generally can be re-tranched to expose an embedded AAA asset; that AAA exposure, prior to re-tranching, was capitalized using the CCC rating which reflected the 'First dollar of loss'
- 2) The MSFA (or any similar approach which constructs a cumulative distribution function for the probability of loss) is a much more appropriate metric
 - a. The MSFA constructs a probability distribution and a cumulative distribution function, and weights a tranche by $S[D]-S[A]$, implicitly adjusting for different risk weights across the infinitesimal tranches which compose the entire exposure
 - b. If a senior exposure, priced at \$100 and covering $[A,D]$, is re-tranched into $[A,M]$ and $[M,D]$, the MSFA would yield $(S[D]-S[M])+(S[M]-S[A]) = S[D]-S[A]$, i.e. no change in

capital requirements. This invariance is an improvement to the RBA. While the Moody's methodology is 'EL Invariant', RWA capitalizes UL, not EL.

- 3) Write-downs/discounts are not applied uniformly across the capital structure:
 - a. When re-tranching a senior bond into a super-senior/mezzanine, generally the super-senior is priced to reflect full principal repayment, while the mezzanine is priced to reflect only partial principal repayment
 - b. This can be done at a more granular level to create a pricing curve $P[x]$, similar to $S[x]$, which gives the incremental value for infinitesimal tranches
 - c. $P[x]$ can be a step function (which is analytically tractable) or derived via the same methodology as the MSFA, assuming some distribution of losses and a market price of risk, calibrated to match the total carrying value of the exposure.
- 4) Single-bond re-securitizations allow for a discrete approximation to (2) and (3) above:
 - a. Where $S[x]$ and $P[x]$ are both available, the capital requirement for an infinitesimal tranche would be (marginal market value $\times$ risk weight)
 - b. For a thick tranche, the correct capital requirement should naturally be the sum of the capital requirements for the infinitesimal tranches which compose it, i.e. the integral of the marginal market value multiplied by the risk weight.
 - c. Broadly, re-tranchings are a discrete approximation to this; the super-senior tranche should receive a RW% of $S[D]-S[M]$, a market value of $P[D]-P[M]$, and thus be capitalized as $(S[D]-S[M]) \times (P[D]-P[M])$.
 - d. While single-bond re-tranchings lower the risk weight of downgraded senior exposures, they are very much in alignment with the mathematical basis of the MSFA framework





An additional point is inextricably linked, regarding market value vs. notional and the treatment of write-downs/discounts:

- 5) The MSFA estimates losses as a portion of notional, rather than market value. For distressed assets owned at (e.g.) a 50% discount, risk weights should reflect the economics of the asset:
 - a. While there are various reasons for a decline in market price (e.g., interest rates movement or illiquidity), many of these are small in comparison to the price declines which reflect expected principal shortfalls. Deep discounts generally reflect implied write-downs of principal.
 - b. If an investor purchases a senior bond priced at \$15, and the bond is only expected to take 20% losses, this is clearly a relatively safe position, as the investor will not suffer net losses until losses reach 85%. Purchasing the same bond at \$79 is clearly more risky, since a 1% increase in losses will result in a net loss. Risk weights and capital requirements should distinguish these two scenarios.
 - c. Failure to give RWA relief for credit enhancement provided by write-downs/discounts will create false incentives and lead to unintended and undesired trading activity, executed solely to achieve RWA recognition of the discount.

Proposals:

- 6) Single-bond re-tranchings should not be treated as re-securitizations:
 - a. Re-securitizations backed by mezzanine exposures from different pools and relying on incorrect correlation assumptions were clearly abusive, and should require heavier capital; single-bond re-tranchings are clearly distinguishable and do not have any of the characteristics associated with (e.g.) subprime mezzanine CDOs
 - b. Single-bond re-tranchings can be handled in a straightforward fashion under the MSFA, as attachment points are easily computed and no new correlation assumptions are required
 - c. Single-bond re-tranchings can create new breakpoints or exposures which could have been created during the initial structuring but were not envisioned. For some RMBS structures, MACR classes were created at issuance which allowed the (e.g.) 5%-100% tranche to be exchanged for a 5%-10% and a 10%-100% tranche, all CUSIP-ed

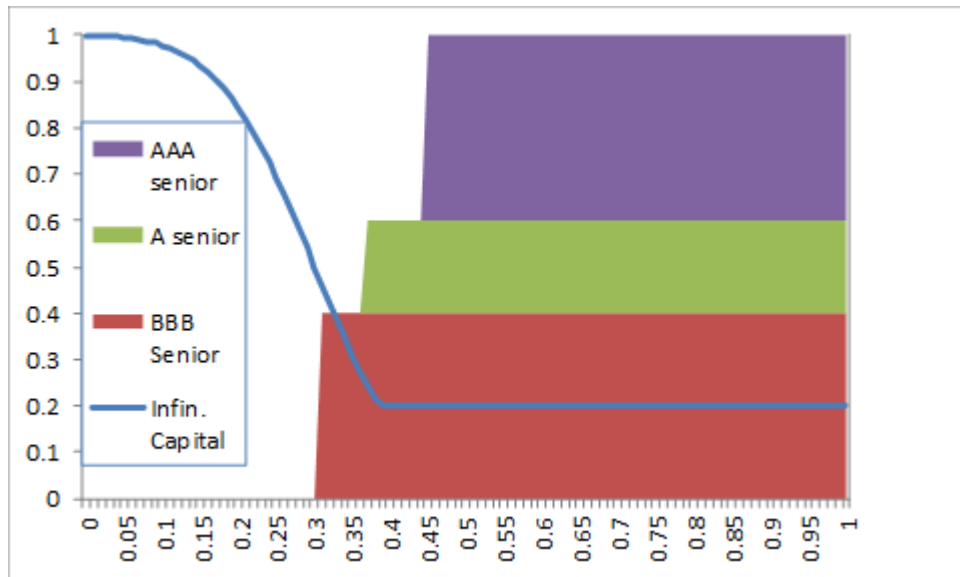
securities listed on the original prospectus. None of these tranches are treated as re-securitizations. Creating these breakpoints 'after the fact' should not result in an artificial RWA penalty.

- 7) Under the MSFA, the benefit from write-downs/discounts should be recognized and applied in a consistent fashion, while maintaining non-zero capital requirements
 - a. Treating the pricing function $P[x]$ as a step function would result in essentially raising the lower attachment point for a tranche. A bond owned at \$75 would be treated as if the 0%-25% sub-tranche was priced at \$0, and the 25%-100% sub-tranche was priced at \$100. The 25%-100% sub-tranche would be subject to any applicable risk weight floor, eliminating issues where bonds at a sufficient discount attract no capital.
 - b. A more elaborate mechanism could be applied, using the MSFA and CAPM to impute the shape of $P[x]$, numerically integrating across multiple scenarios, and calibrating an appropriate functional form, similar to the approach used repeatedly in WP22 and WP23. This would result in somewhat more complicated formulae, but higher capital requirements than a step function, as more of the 'market value' would be attributed to more junior portions of the capital structure.
- 8) Under the RRBA, the benefit from write-downs/discounts should be recognized and applied in a consistent fashion, using information imputed from a ratings model.
 - a. If the 20%-100% tranche of a securitization is rated A and is priced at \$70, and $P[x]$ is treated as a step function, the rating for the 44²%-100% tranche can be imputed, and the RRBA applied as if the 44%-100% tranche is priced at \$100
 - b. Likewise, assuming a functional form for $P[x]$, numerical integration and fitting could be performed to estimate the capital requirements based on the tranche price and rating.

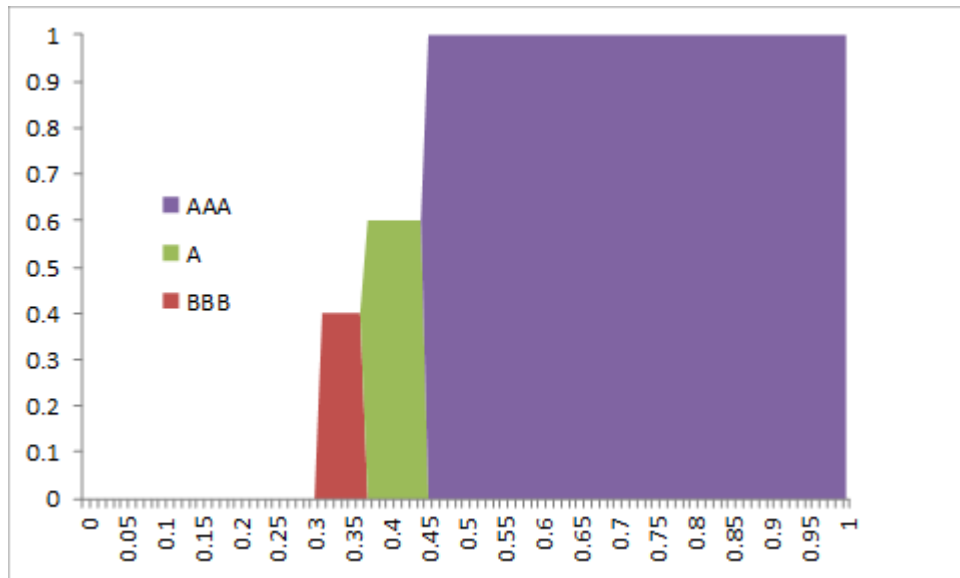
² $100\% - 70\% * (100\% - 20\%) = 100\% - 70\% * 80\% = 100\% - 56\% = 44\%$

Special Case 2: Re-securitizations backed entirely by senior exposures

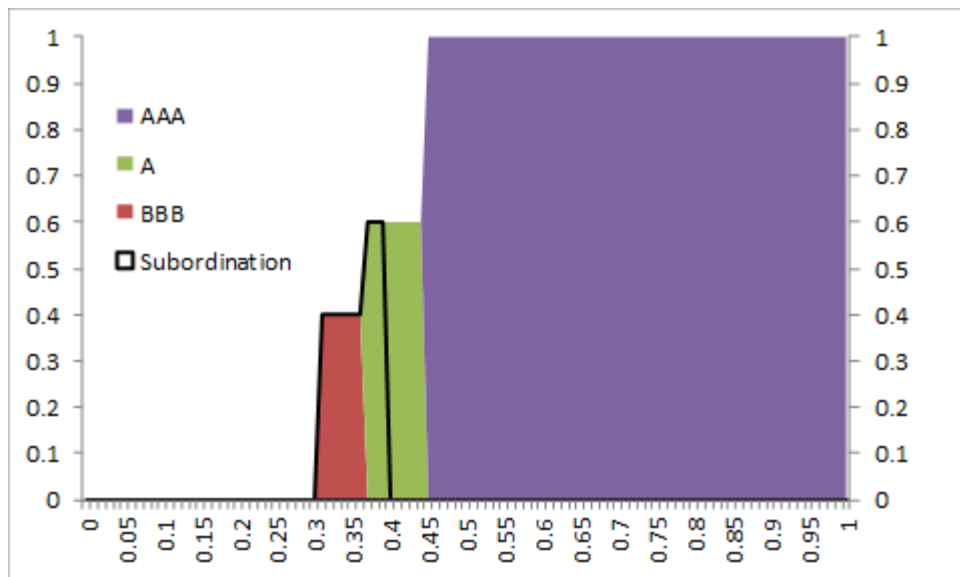
- 1) Re-securitization exposure capital requirements are capped by the capital requirements of the underlying assets; this is consistent with the various caps laid out in the proposed revisions.
- 2) Senior re-securitization exposures backed entirely by senior securitization exposures can be capped in a straightforward fashion assuming 100% correlation across asset pools
 - a. Consider the underlying asset pools as 100% correlated, i.e. assume a 99.9% event occurring in one pool will result in a 99.9% event occurring in another pool. In this case, the entire exposure can be seen as a sum of scaled-up exposures to the same underlying pool. Each exposure must be 'stretched' so that its infinitesimal capital requirement curve is identical – this is necessary as $K[x]$ will have a different shape depending on the underlying asset quality.



- b. Grouping exposure attachment points across asset pools would treat the entire exposure as various mezzanine tranches, with attachment points corresponding to those of each sub-exposure.



- c. Finally, subordination supporting the senior re-securitization interest would be treated as a reduction in exposure at the bottom of the capital structure – essentially applied pro-rata across the lowest mezzanine tranches.



- 3) Equity re-securitization exposures backed entirely by senior securitization exposures can be capped through the same procedure

Proposals:

- 4) For senior re-securitization exposures backed entirely by senior exposures, a cap based on 100% correlation would apply
 - a. Given a total amount of subordination SU , and underlying senior exposures E_i ($i=1..n$), each with lower attachment point A_i
 - b. There are a collection of attachment points M_i and a marginal capital level K_m so that for each E_i ,
 - i. The capital requirement for a thin tranche attaching at M_i is equal to K_m for each exposure E_i
 - ii. The total exposure $\sum(M_i - A_i) \leq SU$ (with the sum appropriately weighted)
 - c. Capital requirements for the pool can be capped by $\sum(S[1] - S[M_i])$
- 5) For equity re-securitization exposures backed entirely by senior exposures, the a cap based on 100% correlation would apply
 - a. Given a total amount of subordination SU , and underlying senior exposures E_i ($i=1..n$), each with lower attachment point A_i
 - b. There are a collection of attachment points M_i and a marginal capital level K_m so that for each E_i ,
 - i. The capital requirement for a thin tranche attaching at M_i is equal to K_m for each exposure E_i
 - ii. The total exposure $\sum(M_i - A_i) \geq SU$ (with the sum appropriately weighted)
 - c. Capital requirements for the pool can be capped by $\sum(S[M_i] - S[A_i])$
- 6) For re-securitizations under the IAA, a cap based on an ordering of sub-tranches by risk weights would apply
 - a. If a bank's IAA approach provides sufficient granularity, each underlying securitization exposure can be treated as (e.g.) a BBB, A, and AA mezzanine and a AAA senior
 - b. Each of these sub-exposures would generate a Risk Weight
 - c. By rank-ordering these exposures by Risk Weight, a senior backed by (e.g.) the top 80% of the re-securitization would be capped by the capital requirements for the 'best' 80% of the underlying sub-exposures (with a pro-rata allocation of any sub-exposure which straddles the lower attachment point)
 - d. Similarly, an equity exposure backed by the bottom 20% would be capped by the capital requirements for the 'worst' 20% of the underlying sub-exposures