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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

Joint Associations' response to the second Consultative Document on Revisions to the Basel securitisation framework

The Commercial Real Estate Finance Council (CREFC), the Commercial Real Estate Finance Council Europe (CREFC Europe), the Global Financial Markets Association (GFMA) (including the Association for Financial Markets in Europe (AFME), the Asia Securities Industry & Financial Markets Association (ASIFMA) and the Securities Industry & Financial Markets Association (SIFMA)), the Institute of International Finance (IIF), the International Association of Credit Portfolio Managers (IACPM), the International Swaps and Derivatives Association, the Securitisation Forum of Japan (SFJ) and the Structured Finance Industry Group (SFIG) (together the Joint Associations)[1] welcome the opportunity to comment on the proposals set out in the second consultative document "Revisions to the Basel Securitisation Framework" published by the Basel Committee on Banking Supervision (BCBS or Committee) on 21 December 2013 (Consultative Document or CD).[2]

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

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[1] See attached Annex 1 for a description of each of the Joint Associations.

[2] BCBS, Consultative Document: Revisions to the Basel securitisation framework (December 2013), available at http://www.bis.org/publ/bcbs269.pdf.

any of these comments in further detail, or to provide any other assistance or data that would help facilitate the Committee's review and analysis.

Introduction and overview

We greatly appreciate the work the Committee has done to improve the proposed revised framework taking into account the comments it received on the first consultative document (BCBS 236)[3] and results of the first quantitative impact study (QIS). In particular, we welcome the development of a simpler and more straightforward hierarchy of approaches, some reduction of risk weights for higher credit quality exposures, including reduction of the risk weight floor, recognition of credit protection provided by excess spread, preservation of existing flexibility in application of the Internal Ratings-Based Approach (IRBA), preservation of the Internal Assessments Approach (IAA), and requiring one rather than two qualifying credit ratings for application of the External Ratings-Based Approach (ERBA).

However, we believe that the proposed capital requirements for securitisation exposures, especially for higher quality exposures and for medium-term and longer-maturity transactions, remain much higher than justified by historical loss incidence in most asset classes, by comparison with other methods of finance or in relation to the capital requirements of the underlying asset pools. These excessive capital requirements will discourage banks from investing in or otherwise acquiring exposure to securitisation transactions. Together with the many other recent, pending and proposed regulatory measures affecting securitisation, they are likely to impede the redevelopment of this useful and secure form of finance.

We therefore recommend specific changes to certain of the modelling assumptions and parameters used in formulating and calibrating the approaches, as well as changes to the operating conditions for certain approaches and to the risk weight floor and capital cap provisions. These changes, if adopted, will serve the goals of the revisions by helping to create a simpler, more transparent framework, while better aligning securitisation risk weights with empirical data, competing products and underlying risks.

Summary of recommendations

We summarise below our main recommendations, which we discuss in more detail in the following sections.

- Recalibrate the IRBA and the standardised approach (SA) according to asset class so that securitisation capital requirements are brought more closely into line with historical loss experience for most asset classes, with capital requirements for other forms of finance and with those for the underlying asset pools.

- Adjust the calibration of approaches in relation to each other so that IRBA generally produces lower rather than higher risk weights than other approaches for the same exposures. If that is achieved, allow banks and supervisors to develop more flexible approaches to application of operating conditions so that banks can use the IRBA based on information they can get when acting as investors.

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3   BCBS, Consultative Document: Revisions to the Basel securitisation framework (December 2012), available at http://www.bis.org/publ/bcbs236.pdf.

- Amend the definition of maturity (M) to allow use of published weighted average life (WAL) tables where available and to take into account expected prepayments based on supervisory inputs, contractual maturity of the underlying exposures and, in replenishing transactions, early termination triggers and contractual limits on average maturity of underlying exposures.

- Change the formulation and calibration of p in IRBA to provide for different parameters for different asset classes, to limit the maximum p of senior and non-senior tranches to certain percentages, and to lower the floor value of p.

- Recalibrate the ERBA in order to achieve a better alignment of its results in relation to IRBA (which should generally produce lower rather than higher risk weights than ERBA) and in relation to SA (with which it should be broadly aligned).

- For securitisation exposures under interest rate and currency swaps, allow the use of inferred ratings based on either the pari passu tranche or the next subordinated tranche.

- We wish to confirm that, as is the case today under the Basel II[4] internal ratings-based approach (IRB), banks should consult with and seek approval from their respective national regulators for the use of the IAA including any requirements for the existence of a certified IRB approach for a portion of the underlying exposures.

- Allow for IAA application to unrated securitisation exposures funded directly by banks in addition to those held in bank-supported asset-backed commercial paper (ABCP) conduit programmes.

- Adjust the standardised approach (SA) to provide more risk sensitivity by specifying different parameters for different asset types.

- In relation to embedded swaps and cash collateral, require no additional capital if counterparties and structure meet certain criteria, and, where additional capital is required, allow use of proxies for calculation of present value (PV).

- Provide a lower risk weight floor of 10%.

- Allow banks that apply the SA as well as those applying advanced approaches to use the capital requirements cap when acting as investors, provided they have the information needed to calculate the cap under the SA.

- Allow banks to apply the capital requirements cap to a securitisation transaction on a proportional basis according to the largest portion that the bank holds in any tranche of the securitisation or, in the case of a "vertical slice" of all credit risk tranches in a securitisation, according to the risk-weighted asset amount (RWA) of the vertical slice divided by the RWA of the pool.

- Confirm that aggregate capital requirements for an ABCP conduit sponsor bank's exposures under liquidity facilities and programme credit enhancement facilities

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[4]   BCBS, International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version (June 2006) (BCBS 128), available at http://www.bis.org/publ/bcbs128.pdf.

aggregating 100% or more of the ABCP conduit liabilities will not exceed the aggregate capital associated with the underlying securitisation exposures in the programme.

- Refine the wording on resecuritisation to clarify that retranchings of individual ABS transactions and structures that simply aggregate such retranchings without adding more correlation risk will not be treated as resecuritisations.

- Amend the securitisation due diligence rule to replace the 1250% risk weight penalty with a proportional additional risk weight as provided in the European Union (EU) Capital Requirements Regulation (CRR)[5] Article 407.

Discussion of comments

Economies need securitisation to help finance business and consumers

Increasingly, policy-makers, heads of central banks and directors of regulatory authorities at the highest levels have recognised and stated publicly that many securitisation transactions have high credit quality, transparency and structural soundness and that securitisation plays an important role in facilitating access to capital for businesses and consumers. Accordingly, they say, regulatory policy should be formed and implemented in a way that, while providing necessary guidance and restraint, does not unnecessarily stifle the re-growth of this useful market. They note that many regulatory changes have already been put in place to ensure the safety and soundness of securitisation transactions and markets, and speak of securitisation not as a threat but as a tool to improve bank funding and support economic growth. Annex 2 (*Policy support for securitisation*) sets out a sampling of such statements.

Changes in bank capital requirements for securitisation affect the wider market as well as banks. Securitisation increases the availability and reduces the cost of credit to affected sectors of the real economy through the promotion of secondary market liquidity. If the capital rules strongly disincentivise banks from holding securitisation exposures, that can significantly reduce the attractiveness to other investors of holding those exposures. That impact is even greater when it adds to other strands of regulation that raise the capital cost of other investors' holding securitised products.

As pointed out in GFMA's comment letter responding to BCBS 236,[6] the regulatory response to the financial crisis has already generated a comprehensive and multi-faceted set of rules on securitisation. Central banks, lawmakers and regulators are beginning to recognise the value of securitisation and the benefit of the regulatory and market improvements already made. Annex 3 (*Regulatory reform (EU)*) sets out a mapping of both securitisation-specific problems and wider market problems that impacted securitisation during the financial crisis and EU regulatory reforms already achieved.

Subjecting securitisation exposures held by banks to risk-based capital requirements much higher than those that apply under the existing securitisation framework and several times

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[5] Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0001:0337:EN:PDF.

[6] GFMA response to the Consultative Document on Revisions to the Basel Securitisation Framework (18 March 2013) (GFMA 2013), available at http://www.bis.org/publ/bcbs236/gfma.pdf, pages 3 and 4.

those that apply to other types of financial assets would further discourage banks from investing in, originating or sponsoring securitisation transactions. Against the developing policy trend, it would hamper rather than facilitate the opening up of financial markets to expand economic activity.

Calibration of capital requirements

The proposed increases in capital requirements are not justified

The absolute level of capital implied by the proposal remains too high, and represents a threat to the viability of the securitisation market, in spite of both its historical performance and many positive public statements from high-level policy makers endorsing securitisation. Though we know the Committee's view is that "strict capital neutrality is not desirable," in stating its "Objectives and principles of the revisions", the Committee also recognises that "capital charges for a securitisation should be broadly consistent with the capital charges for the underlying pool, in particular for senior tranches."[7] The revised framework should better reflect this principle.

The capital required by the current minimum 7% risk weight has been enough to cover expected loss (EL) and unexpected loss (UL) over the whole history of senior securitisations, except for US subprime mortgage and certain resecuritisation vehicles such as collateralised debt obligations (CDOs) backed by ABS. For example, a study of trade receivables securitisation by the French Banking Federation (FBF) showed that transaction-level credit enhancement covered almost four times the highest levels of experienced losses.[8] Annex 4 (*Historical Default Rates for Securitisation: Mid-2007 to End Q3 2013*) shows that European securitisation transactions involving most asset classes experienced low default rates during the crisis period. High risk weights punish the best quality deals backed by assets such as prime mortgage loans, auto and equipment loan and lease receivables, consumer credit card receivables and trade receivables. By making no distinction as to asset class, the proposed capital requirements would make securitisation unreasonably expensive.

In addition, the proposal still threatens a level playing field between securitisation and other financing techniques. While securitisation is a beneficial financing and risk management tool designed to isolate risk in a legally highly secure fashion and to transform illiquid assets (such as loans and receivables) into tradable securities, the proposed capital treatment puts it at a disadvantage in relation to alternatives such as unsecured loans and bonds and various forms of secured financing. By way of example, for a five year senior AA-rated securitisation exposure, according to the proposed ERBA risk weight table, the risk weight would be 50%, while under the Basel II IRB for corporate exposures, a corporate loan with similar credit quality and tenor and assumed 40% loss given default (LGD) would have a risk weight of only 24%. For a one year A-rated exposure, the ERBA securitisation risk weight would again be 50%, while a corporate loan with similar credit quality and tenor and 40% LGD would have a risk weight of only 8%.

Rather than selectively burdening this form of finance, regulations should be aimed at limiting behaviours such as poor underwriting, lack of alignment of interests and excess

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[7] CD page 4.

[8] *See* French Banking Federation comments on the BCBS Consultative Document on the revisions to the Basel securitisation framework BCBS 236 (15 March 2013), available at http://www.bis.org/publ/bcbs236/frenchbankingfe.pdf, pages 67-69.

leverage that contributed to the financial crisis. The Committee and other regulatory bodies have already introduced many measures to strengthen bank operations and curb irresponsible behaviour (see again Annex 3). Further burdening securitisation with extra capital charges unrelated to actual risk is not justified and is likely to have market-damaging effects.

The approaches produce surprising and incongruous results

When our members applied the proposed approaches to sample transactions or portfolios, as in the examples set out in Annex 5 (*Securitization Capital Analysis*),[9] they found some surprising results, such as the following:

- For a number of transactions, representing several different asset classes (including private securitisations of prime auto receivables, private securitisations of trade receivables, US collateralised loan obligations (CLOs) and AAA-rated Dutch mortgage-backed securities (RMBS)), in all but the most senior tranches where the floor levels drive the results, the IRBA risk weights for a given transaction were higher than risk weights produced by ERBA or SA for the same transaction.

- For an exposure to AAA-rated Dutch RMBS, an asset class recognised as of the highest credit quality, IRBA produced a risk weight of 90%, while the ERBA and SA risk weights were at 25% and 26%. In this transaction, for non-senior tranches, IRBA would require about seven times as much capital as ERBA.

- For US prime RMBS with five-year maturity, the SA risk weights were several times, and for some highly-rated tranches many times, the risk weights that would apply under ERBA.

- For prime auto ABS with five-year maturity, one AAA-rated tranche would have a risk weight under SA about six times higher than under ERBA, while the mezzanine tranches (rated AAA, AAA, AA+ and A respectively) would also have, on average, SA risk weights almost six times higher (including a risk weight of 1221% for a AA-rated tranche).

The marked divergence between ERBA and SA risk weights, even for highly-rated tranches, does not match the Committee's statement[10] that the relative calibration of the two approaches will be broadly aligned. It is especially troubling for US banks, who would not be allowed to use the ERBA, and it would result in a highly unlevel playing field between US and non-US banks and different levels of capital for the same exposures across jurisdictions. That IRBA frequently generates higher risk weights than both ERBA and SA shows that the IRBA

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[9] We have noted an inconsistency in the way the 1.06 "scaling factor" is applied in different jurisdictions. Footnote 26 in the CD points out that "[t]he scaling factor of 1.06 referenced in paragraph 44 of the Basel II framework is applied to the unexpected loss portion of the calculation of K_{IRB}." This is consistent with its application in the EU under CRR (Articles 153(1), 154(1) and 261(1)). The wording in paragraph 44 of the Basel II framework ("The scaling factor is applied to the risk-weighted asset amounts for credit risk assessed under the IRB approach.") is less clear, and US banks applying the US rules (*See* 78 Fed. Reg. 198 at page 62161) have applied the scaling factor to the entire credit-risk weighted assets amount (including EL as well as UL). This means that the results shown in Annex 5 are slightly different from what the results would be under the proposed Basel framework. It also means that under the Basel framework the incongruous excess of IRBA over ERBA and SA risk weights would be even more pronounced (as the scaling factor would be applied only under IRBA and not under ERBA or SA).

[10] CD page 12.

calibration is too punitive. It also contradicts the Committee's and national regulators' efforts to encourage banks taking exposure to securitisations to acquire as much information as possible about the securitised assets, have a solid understanding of the risks involved in those assets and form internal risk opinions on the risks involved in the transactions.

Calibration needs to be better aligned between approaches

According to the principle that advanced approaches, using more information and risk-sensitive models, should produce lower capital requirements, IRBA's calibration needs to be adjusted so that it more often produces lower, rather than higher, risk weights than ERBA and SA.

IRBA application

IRBA operating conditions need added flexibility to facilitate wide application

We understand the Committee intends that banks will have the same flexibility in applying IRBA as they have in applying IRB and the supervisory formula approach (SFA) under the Basel II framework as implemented in their jurisdictions. While preserving existing flexibility is welcome, many of our members believe that banks acting as investors rather than as sponsors or originators will need more flexibility in order to apply the IRBA more generally. It would not be practical or desirable for the Basel framework to set out specific methods that should be applied to different asset classes and transaction types in different markets and jurisdictions. Provided the IRBA is properly recalibrated according to the principle that the more advanced approaches should in general produce lower risk weights, the Committee should make clear that it expects national supervisors to work with banks in order to develop more workable methods of applying IRBA, and should encourage supervisors to communicate with each other and with the Committee in order to improve consistency of overall methods and results across jurisdictions.

The investor due diligence requirements added by Basel II.5[11] require that banks understand the collateral performance, transaction structure and market dynamics for securitisation exposures in which they invest or acquire exposure; however, our understanding is that banks are permitted to apply varying methods to accomplish this, including pool-level analysis, historical review, stress testing, etc. The criteria for determining K_{IRB} are more defined (e.g., bottom-up wholesale analysis, segmentation of retail exposures) and more difficult for investors to achieve.

National regulators in some jurisdictions have met with banks that use the SFA in order to discuss the possibility of broadening use of the SFA for both banking book and trading book exposures. These discussions included potential barriers which might include data availability, modelling, etc.

Major banks generally can and do apply the SFA in most cases where they originate or service the underlying exposures, since they have the data and have developed models to calculate K_{IRB} for these assets. Examples include servicer cash advances for private label securitisation programs, synthetic securitisations that are used to transfer risk of wholesale and retail assets held on balance sheet, and retained tranches from securitisation programs

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[11] BCBS, Enhancements to the Basel II framework (July 2009) (BCBS 157), pages 5-6, adding Basel II paragraphs 565(i)-(iv), available at http://www.bis.org/publ/bcbs157.pdf.

which those banks originated. On the other hand, in many cases, banks are unable to run the SFA when they act in the role of investor. This is due to challenges in obtaining and modelling the underlying exposures in accordance with the rigorous standards for determining K_{IRB}. These include standards for data acquisition and storage, model validation, back-testing, etc.

Regarding data acquisition, for some asset classes (such as US RMBS), a bank may be able systematically to obtain data from outside sources if the bank invests in the required infrastructure. For other asset classes, originators may not be able to provide the level of granular data needed to calculate K_{IRB}. Examples include many credit card, auto and CLO deals. Enhanced disclosure standards already put in place (such as the loan level data requirements of the European Central Bank and the Bank of England) and other initiatives may go some way to address this, but these disclosure data requirements have been designed primarily to assist investors in making credit judgements and may not align with what is needed to calculate K_{IRB} (e.g., granularity and/or specific data elements used in factor models). Any new disclosure standards or initiatives would also be difficult to apply retrospectively to existing transactions. Such disclosure standards also raise data protection and privacy law implications which vary in different jurisdictions.

Assuming that the data could be obtained, a bank would then need to model probability of default (PD), LGD, etc. For retail exposures, it is possible that a bank could utilise an existing model that it applies to its retail portfolio. This could work, for example, for US retail mortgages (in which many US banks have portfolio holdings), but the model might not be appropriate for application to non-US mortgages. In the case of most banks, asset classes and jurisdictions, even a bank that applies the IRB to asset portfolios it originates or services in its home jurisdiction may not have supervisory permission or be able to meet the strict operating conditions to apply the IRB to portfolios of similar assets originated by other banks or in other jurisdictions.

For wholesale exposures (such as CLOs and commercial mortgage-backed securities (CMBS)), our understanding is that banks would need to determine PD (based on internal ratings) and LGD for each underlying exposure. In addition to facing challenges in obtaining detailed data for each underlying exposure, it is difficult for a bank to assign internal ratings to exposures which it does not originate or service. In applying their own IRB models, originators generally use expert judgment based on in-depth knowledge of and insights on their clients, something an investor generally lacks. For some portfolios, investors furthermore lack internal loss history and may not be able to use or have full access to the originator data.

We believe that banks modelling PDs, LGDs etc. as investors would need to use a large number of different models in order to cover the broad range of assets types and transaction structures. While this observation applies to both wholesale and retail exposures, banks would need even more models for wholesale exposures than for retail, due to the requirement to use a "bottom-up" approach of determining inputs for each exposure.

Banks will have to consider the cost and practicality of applying any particular approach in making investment decisions. Applying IRBA would likely require significant investment in data and modelling infrastructure. For some asset classes, such as senior credit card and auto securitisation exposures, it might be more effective to invest in "agency" RMBS or equivalent exposures given the comparable level of risk and returns.

Because of differences in asset and transaction types, market practices and availability of data in different countries, it would not be practical or desirable for the Committee to specify in detail all the specific methods banks may be able to use to calculate K_{IRB} in order to apply the IRBA. However, provided the IRBA calibration is properly aligned in relation to the other approaches, we recommend the revised framework include wording to the effect that bank regulatory supervisors should work with banks in their jurisdictions to develop flexible approaches in order to encourage a wide application of the IRBA while maintaining the integrity and effectiveness of the model. At the same time, it should also be made clear that banks with IRB approvals may use the ERBA or IAA (where allowed) or the SA in cases where there is not sufficient data available to support IRBA application or development of the necessary models would be unreasonably burdensome.

Application to mixed pools – 1250% risk weight

We welcome that the new proposal allows for transactions to use the IRBA for mixed pools of IRB and SA assets. However, the need to apply the risk weight of 1250% to the SA assets adds a severe level of conservatism even for transactions which almost solely consist of IRBA assets. To avoid this, we propose to allow banks to use risk weights from the general standardised approach for these assets up to a threshold of 5% of the nominal value of securitised exposures in the transaction, and only then apply the risk weight of 1250% to any non-IRB assets which surpass this amount.

Maturity adjustment

The proposed definition of maturity, based on contractual maturity of the relevant securitisation tranche, is only distantly related to the expected time to repayment of the securitisation exposure. By way of example, in the comment letter on BCBS 236 submitted by a group of independent vehicle and equipment finance companies,[12] one comment pointed out the effect of the use of final maturity date rather than WAL: A AAA-rated auto ABS bond with a five year maturity would typically have a WAL of 2.5 years based on the contractual payments and, with prepayments, would have an even shorter WAL. Nonetheless, the AAA-rated ABS bond would in some cases have a higher capital requirement than an unsecured exposure to a lower-rated corporate entity that really would be outstanding for five years.

Allow use of published WAL tables where available

We understand that the Committee wishes to avoid opportunities for regulatory arbitrage or inconsistent treatment that could result from banks using their own assumptions and models to calculate WAL. We believe, however, that banks should be allowed to rely on the published WAL tables which are included in ABS prospectuses. Such tables are reviewed by accountants according to agreed-upon procedures to help achieve consistency of approach across different issuers and transactions. Reference to the published WAL tables would also help different banks investing in the same transactions to determine consistent maturity values based on the same WAL calculations.

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[12] Letter (29 March 2013), available at http://www.bis.org/publ/bcbs236/viwg.pdf, pages 9-10.

Allow use of WAL based on specified assumptions

For cases where published WAL tables are not available, we ask the Committee to allow banks to calculate WAL using specified, conservative assumptions of prepayment rates according to asset class. As a starting point, we propose the following for consideration based on research by some of our members:[13]

Asset type	Prepayment assumption
US Auto loans	1.2% Absolute prepayment speed (APS)
European auto loans	7% APS
Auto leases	0.75% APS%
Personal/unsecured loans	5% APS
Private credit student loan	4% Conditional prepayment rate (CPR)
FFELP student loan	6.5% CPR
Equipment finance – heavy	5% CPR
Equipment finance – light	10% CPR
CMBS	0% (bullet maturity)
US + Canada RMBS	5% CPR
Dutch RMBS	5% CPR/early call date[14]
UK RMBS	10% CPR

If a bank's internal policies required use of a lower assumed prepayment rate, it would use that lower internal rate in place of the supervisory input.

Limit M based on contractual maturity of underlying exposures

Alternatively, the definition of maturity should be based on (and not longer than) the weighted average contractual maturity of the underlying securitised exposures, rather than of the securitisation tranche. For example, in the case of a static pool where the underlying financial assets have contractually fixed cash flows (e.g., amortising loans), banks could map those contractual cash flows (both scheduled instalments and final maturity) to the securitisation tranches in order of priority, and, in the case of time-tranched securities, for

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[13] Certain of these figures are based on research reported in J.P.Morgan, Asset-Backed Securities – Securitized Products Weekly (31 January 2014 and 14 March 2014). Others are from unpublished internal research by our members. Further details can be provided on request.

[14] Early call date is for structures which include a substantial increase in pricing if tranche is not called on the early call date.

each tranche, using the most conservative assumption as to order of payment. Again, we understand the Committee is concerned about model risk and inconsistent results from the use of cash flow models. For most transactions, however, this exercise would involve a fairly straightforward mapping of contractual cash flows to tranches in order of seniority.

For purposes of the maturity calculation based on maturity or weighted average life of the underlying pool, whether or not taking into account expected prepayments, we propose that the default rate should be assumed to be zero. For senior tranches, defaults on the underlying exposures normally will not affect the time of payment of the securitisation exposure, and may actually result in faster reduction of the tranche principal amount (by application of enforcement recovery proceeds or credit enhancement). Even for junior tranches, where defaults may mean part of the securitisation exposure would be written off rather than paid, defaults before maturity would reduce the time during which the tranche principal remains outstanding.

Maturity of replenishing transactions should reflect contractual limits

The proposed maturity treatment of replenishing pools results in a striking difference in capital requirements before and after securitisation. If a bank holds a pool of loans with a weighted average maturity of, say, three years, it will hold capital against that pool based on the weighted average maturity or average life of those loans. If it then buys credit protection for a subordinated or mezzanine tranche of the pool, and calculates its capital requirement under the securitisation framework as proposed, it will have to assume the maturity of its securitisation exposures equals the sum of the replenishment period (during which it may add loans to the securitised pool) and the longest permitted maturity (say five years) of any securitised loan. The credit protection which reduces the bank's overall exposure to credit risk of the underlying exposures will thus increase the bank's related capital requirement.

Typically, a replenishing securitisation transaction includes contractual provisions that terminate or allow investors to require termination of the replenishing period on occurrence of any one of several portfolio performance triggers that show the portfolio is not performing as expected. In those circumstances, the replenishment period does not add to the risk horizon of the securitisation exposure and should not be counted at all. Exposure to transactions that include such early termination triggers should be treated the same as fixed pools.

Even without giving effect to early termination provisions, rather than adding to the replenishment period the longest possible maturity of any asset added to the pool during the replenishment phase, banks should be allowed to take into account contractual safeguards such as limits on the weighted average contractual maturity of the replenished pool. For example, if the securitisation contracts require that, upon any addition of receivables to the securitised pool, the maturity of any receivable so added must not exceed three years, and after adding the new receivables the weighted average maturity of all the securitised receivables must not exceed two years, then, for senior tranches, maturity of the securitisation exposure should equal the sum of two years, rather than three years, plus the remaining replenishment period.

Maturity of synthetic securitisation tranches

Maturity of the securitisation tranche should, however, be taken into account in the case of synthetic securitisation, particularly for the credit protection provider. To the extent that the

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contractual maturity of the credit protection is less than that of the protected exposures, it should be treated as the outer limit of the maturity adjustment for the resulting securitisation exposure.

Parameter *p* in IRBA

This comment responds to Question 2 in the Consultative Document.

The Committee should consider more granular asset classes to derive *p*. The hypothetical portfolios the Committee have used are not granular enough to strike the appropriate balance between simplicity and risk sensitivity. As proposed, IRBA is not risk-sensitive enough and would penalise a wide variety of asset classes and transaction types, which could have deleterious impacts to commercial and consumer lending and the broader economy. In addition, the model and calibration should be made more transparent, and the calibration should be based on actual transactions and empirical data rather than stylised, hypothetical transactions.

As previously discussed with the Committee, some of our members have developed an alternative model, the Arbitrage Free Approach (AFA), based on the principles of objective statistical basis, capital neutrality (except for transparent model risk charges), regulatory control and transparency. The AFA working group (or "Quant group") has also developed a simplified version of the AFA (SAFA), designed to permit investors to use the formula, by replacing direct estimates of maturity and LGD with representative values for regulatory asset classes. Responding to regulators' preference for a capital distribution that is monotonic as to seniority (that is, in which more junior tranches always have higher risk weights than more senior tranches), and modifying the SAFA to include expected losses (that is, to base capital on the tranche modified value at risk (MVaR) rather than UL), the Quant group has developed a "Conservative Monotone Approach" (CMA).[15] Since the simplified supervisory formula approach (SSFA) is not a risk model but a capital allocation function, we understand that the BCBS 269 calibration is derived from the outputs of the revised modified supervisory formula approach (MSFA). The CMA may be considered as a basis for better calibration of the SSFA which underlies both the IRBA and the SA.

As an alternative to the CMA, the Quant group has developed a modified version of the SSFA, known as the Modified SSFA (MSSFA), which uses two different *p* variables to provide more risk sensitivity while reducing opportunities for arbitrage and solving other issues related to the delinquency factor (*w*).

The Quant group has also developed a proposed calibration of the CMA, MSSFA and SSFA using a transparent calibration methodology for different regulatory asset classes, for use with the Standardised or IRB Approach. Annex 6 (*Transparent Calibration Methodology per Asset Classes – CMA – Standardised Approach*) shows the latest version of the proposed calibration. Annex 7 (*Calibration under the Standardised Approach*) shows comparative securitisation capital surcharges for different regulatory asset classes, for senior and for non-senior tranches, under the CMA, the MSSFA and the SSFA, alongside the capital surcharge under the proposed SA (100% for all asset classes).

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[15]   G. Duponcheele, W. Perraudin & D. Totouom-Tangho, Reducing the Reliance of Securitisation Capital on Agency Ratings (3 February 2014), available at http://www.riskcontrollimited.com/public/Reducing_the_Reliance.pdf.

The examples shown in Annex 5 (*Securitization Capital Analysis*), discussed above, and other examples discussed in this letter demonstrate the need for a granular approach to calibration. The Quant group's work demonstrates the value and feasibility of calibrating the credit risk model by asset class. We believe that the accuracy and risk sensitivity of the results can be improved still further by calibrating not according to the regulatory asset types but according to common securitisation asset types.

We believe that the regulatory categories used in the existing Basel framework are not adequate for this purpose, as there are great differences between different asset types within, for example, the wide wholesale and retail categories. In addition, the regulatory categories are different for banks using the IRB approach and the standardised approach, whereas the Committee should use data on the same asset classes from both large and small banks to get the largest possible sample.

Accordingly, we request that the Committee ask national supervisors to ask banks to add a new column to their responses to the current QIS, in order to specify the asset class of their transactions according to categories like those listed below. This would provide the Committee with ample empirical data it could use as basis for calibration by asset class.

Though this list is not definitive, we propose the following categories for consideration:

- Credit card receivables
- Retail auto finance (loans and/or leases)
- Collateralised loan obligations (CLOs)
- Trade receivables
- Equipment and inventory finance (including auto fleet and dealer finance)
- Student loans – FFELP (or other government-guaranteed)
- Student loans – private
- RMBS (with sub-categories recourse and non-recourse)
- CMBS (with subcategories single borrower/single credit (SBSC) and conduit)
- SME finance
- Other

Limit maximum p *and reduce minimum* p

The supervisory parameter *p* in the IRBA formula serves as an add-on factor that forces total capital across the structure to be higher after securitisation than when the underlying assets are held directly by the bank before securitisation. We understand this is intended to take into account model risk in the securitisation process and the resulting uncertainty in risk attribution across different tranches. The proposed formulation for *p* is based on a number of inputs and has a floor of 30%, implying that total capital across the structure after securitisation will be at least 30% higher than before. However, the current formulation is unbounded on the high end, and certain combinations of parameters can result in this factor being greater than 100%, effectively more than doubling the capital.

First, we believe that a proper calibration would justify a floor at 20% rather than 30%. Second, we propose that the supervisory *p* parameter within the IRBA formula be capped, for senior securitisation tranches, at 60%, and for non-senior tranches, at 90%. This formulation would still ensure capital after securitisation would be at least 20% higher and up to 60% higher than capital before securitisation. The proposed lower floor and senior and non-senior

caps are consistent with the results of CMA recalibration of the SSFA, summarised in Annex 8 (*Calibration of the SSFA with one parameter*), in which the lowest *p* value is 0.21 and the maximum *p* is 0.58 for senior tranches and 0.89 for non-senior tranches.

As a result the revised formulation for the supervisory parameter *p* would be (for senior tranches):

$$P=\min[0.6;\max[0.2;(A+B*(1/N)+C*K_{IRB}+D*LGD+E*MT)]]$$

For non-senior tranches the formulation would be the same except 0.9 would replace 0.6.

The approach of capping the *p* parameter is appropriate for the following reasons:

- conceptually, senior tranches should not have more capital than the underlying pool, but, though we know the Committee is not comfortable with capital neutrality, a reasonable cap should be acceptable;

- the approach is simple;

- the proposed *p* parameter already includes a floor, so it is not inconsistent to add a cap; the notion is also consistent with other cap features in the proposal;

- it addresses concerns in terms of model risk;

- it results in post-securitisation capital higher than the capital associated with the underlying assets for all tranches.

Treatment of certain non-granular transactions

Particular difficulties arise in relation to the granularity parameter where CMBS is concerned. The underlying asset class of commercial real estate (CRE) differs from those underpinning other forms of securitisation in that individual assets are highly heterogeneous and individual assets (and loans) can be very large. Furthermore, risk diversification can also be achieved at the level of tenancies rather than at the level of assets or loans: a single shopping centre may be financed with a single loan, but the credit exposure may be diversified across 100 different tenants. A statistical approach to assessing and managing risk based on high granularity is not always the most appropriate way of approaching CMBS.

While assembling commercial real estate asset portfolios large enough to be susceptible to statistical analysis is indeed one valid approach, another is to securitise exposure to a very small number of assets, borrowers and loans – potentially a single large asset, or a small portfolio of assets, and just one borrower. It is then possible to carry out rigorous asset-specific due diligence, rather than adopting the more financial or sample-based approach required for large portfolios.

These features of commercial real estate should be recognised in the risk calculation and capital treatment of CMBS. A CMBS exposure with a single large and complex asset such as a shopping centre or office development (where "N" is 1) may present a lower risk (and may be easier to assess as a risk) than a CMBS exposure with 30 large and complex commercial properties, despite the apparent concentration of risk and lack of granularity. The true counterparty risk will in any event depend on the underlying tenants, rather than on the number of borrowers. Unfortunately, the proposed approach to calculating *p* does not allow

for that, automatically penalising exposures where N is small. CMBS pose another example of the need for separate calibration according to asset class.

In considering (and calibrating for) CMBS, it is important to distinguish between SBSC and "conduit" transactions. SBSC transactions are backed by a single commercial real estate mortgage loan or by several mortgage loans related to a single property or a group of homogenous properties with one borrower. All the loans are cross-collateralised, and thus the cash flows from one loan can be used to support the obligations related to the other loans. Since 1997, these transactions have performed extraordinarily well, with only 0.25% of cumulative losses over this period, mostly concentrated in a single deal. Based on their characteristics and performance, the CRE Finance Council has recommended to US federal bank regulators that SBSC transactions that meet certain criteria − cross-collateralisation of loans, $200 million or larger, and adherence to a rigorous disclosure regime − be given tailored treatment under the US credit risk retention framework.[16]

ERBA calibration and application

Calibration generally

After the calibration of the IRBA and SA are refined as proposed elsewhere in this letter, the calibration of the ERBA will need to be revisited in order to achieve a better alignment of its results in relation to IRBA (which should generally produce lower rather than higher risk weights than ERBA) and in relation to SA (with which it should be broadly aligned). We recognise that an appropriate and consistent alignment of resulting capital requirements between the different approaches has been very difficult to achieve due to the differences in their formulation and the types of inputs. However, we believe this aspect can be much improved by approaching calibration according to asset classes.

 Differentiate between CC and lower rated senior tranches within the ERBA

Currently, all exposures rated below CCC- are to be assigned a 1250% risk weight. This is a penal approach, as it implicitly assumes that these positions suffer 100% PD and 100% LGD.

The GFMA response to the prior consultation therefore requested lower risk weights for senior tranches (only) rated below CCC. We understand that the Committee may face practical issues in implementing such an approach for assets rated D, as this would require a process to ensure that any expected losses had been separately identified and deducted from capital.

We therefore propose a simplified approach that retains the 1250% risk weighting for exposures rated C or D. But senior exposures rated CC would receive an 850% risk weight (subject to the overall recalibration of the ERBA), reflecting their materially lower risk as outlined in Annex 9 (*Risk-weighting of lower-rated tranches*). Such an approach would further the Committee's goals of reducing cliff effects in addition to aligning capital to risk.

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[16] CRE Finance Council, letter to heads of US Federal banking regulatory authorities re: Single Borrower Single Credit Qualified Commercial Real Estate Eligibility (28 February 2014), available at http://www.federalreserve.gov/SECRS/2014/March/20140314/R-1411/R-1411_022814_112060_334350278974_1.pdf.

Inferred ratings for interest rate and currency hedges

Securitisation structures often require derivative solutions to risk manage mismatch between assets and liabilities. To infer a rating, the framework looks to the rating of the most senior position that is subordinated to the swap position (so, in a typical transaction, an interest rate or currency swap that ranks pari passu with Class A notes will have a risk weighting based on the Class B notes). We think this makes no sense from a credit risk perspective and, as, such from credit risk capital requirements perspective. We recommend that the Committee consider allowing inferred ratings from notes rated either pari passu with or junior to the derivative.

IAA application

IAA and IRB approval

With reference to the statements in the CD on IAA application,[17] though only banks with some IRB approval can use the IAA, and the proposed rules text[18] is similar to wording in the Basel II rules,[19] the details of when and how IAA can be applied to particular transactions and their relation to specific IRB approvals and operating conditions have been and, we expect, will remain matters on which banks need to consult their national supervisors. We wish to confirm our understanding that neither the CD nor the revised rules are intended to change existing rules and practices in this regard.

Extend IAA to certain bank-funded transactions

The IAA was originally designed to provide an appropriate method for banks to determine capital requirements for securitisation exposures held by banks acting as sponsors of ABCP conduits and providing liquidity facilities and programme credit enhancement facilities, and perhaps interest rate and currency exchange rate hedges or other unrated exposures, to those conduits. Through its exposures to the conduit, a bank sponsor becomes exposed to the credit risk of the securitisation transactions entered into by the conduit with the bank's customers. ABCP conduit sponsor banks have found the IAA to be a useful, appropriate and risk-sensitive method of calculating their capital requirements for such transactions. The IAA, like the SFA or IRBA, also requires a great deal of detailed information and analysis and is subject to a high level of regulatory supervision.

Banks, whether or not they sponsor ABCP conduits, often enter into securitisation transactions with their customers that are identical to those typically entered into by ABCP conduits, except that funding is provided by the bank directly rather than by the conduit issuing ABCP supported by bank facilities. It is increasingly common for a receivables securitisation facility to be provided by a lender group consisting of one or more ABCP conduits, supported by their sponsor banks, and one or more banks providing funds directly. It is anomalous that, in those cases, the ABCP sponsor banks may use the IAA to determine their capital requirements while the other banks, having essentially the same exposure (though funded rather than unfunded), may not. We believe that banks that develop the necessary models and obtain supervisory permission should be permitted to apply the IAA to

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[17]   CD page 9.

[18]   CD page 30, paragraph 46.

[19]   BCBS 128 paragraphs 607, 609.

unrated securitisation exposures in appropriate conditions whether or not it funds those exposures through an ABCP conduit.

Of course, the IAA operating conditions, developed for exposures to ABCP conduits, will need to be adapted to apply to exposures not held through conduits. Annex 10 (*Proposed changes to IAA provisions*) sets out our proposed changes to paragraphs 46 and 66 through 69 of the proposed framework text.

Standardised approach (SA) – operative conditions and calibration

SA adds too much conservatism to already conservative underlying capital requirements

We appreciate that the SA is designed to be relatively simple, so that it can be applied by smaller as well as larger banks, including those acting as investors as well as originators or sponsors, to a wide range of assets and transactions. However, a comparison of its results with those of ERBA shows that the capital requirements it produces will be excessive. This flawed calibration will be most disadvantageous to banks in jurisdictions where they will not be allowed to use the ERBA, and will create a highly unlevel playing field between jurisdictions. The SA's calibration should be adjusted to reflect the high credit quality of most securitisation transactions and to take into account the conservatism already built into SA capital requirements for the underlying asset pools. Since those capital requirements are themselves relatively risk-insensitive and so are calibrated on a conservative basis, any further addition of capital for the related securitisation exposures should be limited to a reasonable and transparent adjustment for securitisation model risk.

The use of a delinquency adjustment within the SA appears to double up on the capital on the underlying pool. Because K_{SA} is less risk-sensitive than K_{IRB}, it is calibrated conservatively to cover a wide range of credit quality including the possibility of a high proportion of delinquent receivables. The resulting risk weight should not have to be further increased to account for delinquencies that the capital requirement is already sized to cover.

SA needs to distinguish between asset and transaction types

In addition, though we recognise the advantages of simplicity, a "one size fits all" approach is not suitable for the wide range of assets subject to securitisation. In order to provide for capital requirements that are appropriate for securitisations of different classes of assets, it will be necessary to make some distinctions between different asset classes and characteristics of transactions.

In the SA, the increase in *p* from 0.5 (in the US) to 1.0 most severely affects prime retail securitisations. The attachment points tend to be lower for these securitisations to reflect the higher credit quality of the borrowers. The resulting increased capital requirements would make many of the current market structures uneconomic and could either reduce lending or increase the cost for borrowers, particularly to retail borrowers.

One example showing the need for a more differentiated approach is a comparison of cumulative losses for securitisations by different vintages across different asset classes. Annex 11 (*Collateral Cumulative Loss by Vintage (US)*), using data from Intex and other public sources, represents cumulative losses over time for all securitisations originated in the US market only. It shows that 2007 non-prime securitisations performed markedly worse than others, while most asset classes of most vintages performed remarkably well. Though

we can appreciate regulators' concern that other asset classes that have performed well historically may perform worse in future, this graph illustrates the need for some differentiation between asset classes.

As discussed above, we advocate a recalibration of the SSFA formula according to asset classes, for both the IRBA and SA applications. The Quant group work shows how this can be done, and securitisation data sorted by asset class categories like those we listed above would provide the basis for recalibration.

Derivative contracts other than credit derivatives

The following comments respond to the Committee's Question 1 in the Consultative Document.

Ease treatment of counterparty risk in the calculation of K_{IRB} for eligible counterparties

Paragraph 50 of the proposed rules text defines counterparty risk to be considered when calculating K_{IRB}. This also includes assets in which the securitisation special purpose entity (SPE) may have invested (such as reserve accounts or cash collateral) as well as claims against counterparties resulting from interest rate or currency swaps. Though we acknowledge that such assets also contribute to pool RWA and K_{IRB}, our analysis showed that the actual impact on K_{IRB} and subsequently the tranche risk weights is only minor, particularly for transactions that have, as is typical, minimum counterparty eligibility requirements and provisions designed to protect against counterparty credit deterioration. However, the ongoing inclusion of those positions in the calculation of K_{IRB} would require considerable effort, in particular to calculate the fluctuating exposure from embedded interest rate or currency swaps. Hence, the proposed rule would impose a significant administrative burden on banks while yielding only a negligible increase in risk sensitivity.

We therefore propose to define qualitative criteria and additional safeguards which justify that those assets do not need to be considered when calculating K_{IRB}. From our experience, appropriate counterparty criteria should be based on initial minimum requirements and a process which takes effect in the case of adverse transition. Initially, the following should be fulfilled for a counterparty to be deemed eligible:

- Counterparty fulfils the requirements of an eligible guarantor under the framework as implemented in the relevant jurisdiction; and

- Claims are not subordinated.

Safeguards in the case of loss of eligibility could be the following:

- Transfer of cash collateral to eligible deposit bank (reserve accounts, cash collateral);

- Transfer of obligations to eligible counterparty (interest rate or currency swap); or

- Counterparty provides collateral to the SPE (interest rate or currency swap).

Proxy calculation of counterparty risk

Our members noted that the CD proposal on derivatives contracts was clarified in the QIS instructions[20] to use a method more consistent with capital charges on swaps. However, there is still the practical issue that in most cases, banks, particularly when acting as investors, would not have access to all the information needed to calculate the PV of future swap payments to the issuer in order to derive the swap capital charge. This means that both the IRBA and the SA cannot be used. In view of this practical issue, the Committee should approve one or more alternative methods to take into account the swap capital charge.

Besides excluding eligible counterparties from the requirement to add capital for embedded swaps, we propose that the revised framework allow banks to use a proxy calculation for the PV of plain vanilla currency and interest rate swaps. The data required to calculate the proxy PV can usually be accessed through different sources available to investors, such as the offering circular, periodic reports and widely used valuation models such as Intex. The proxy calculation would be as follows:

- For a floating/floating currency swap: PV equals notional amount times (one minus the current foreign exchange rate divided by the foreign exchange rate at inception).

- For a fixed/floating or floating/floating interest rate swap: PV equals notional amount times WAL times (current interest rate minus initial swap rate).

Floors and caps

Risk weight floor should be lower for senior exposures

We appreciate the Committee's lowering the proposed risk weight floor from 20% in the first consultation to 15% in the CD. We believe that a lower floor of 10% is justified.

We agree that model risks need to be addressed, and the use of inputs such as PDs and LGDs, and RWAs in multilayered models, which may be inconsistent or over-simplified, may bring uncertainty in the estimate of UL at the tail of the capital structure (i.e. senior tranches) and thus may justify a floor. However, we think that applying a floor of 15% risk weight introduces a buffer that is too punitive for the senior tranches.

For most asset classes, there has been so far no loss at all on the senior tranches, including during the recent crisis (e.g. good quality European RMBS, consumer loans, trade receivables, and others). This is explained by the protection of the senior tranches which has been resilient even in the downturn.

During the year that has passed since the first consultation, the industry has done further work on the analysis and calibration of credit risk in securitisation transactions based on empirical data. These include the analytical work done by the Quant group and discussed in their published papers. With the recent developments of models such as the CMA, which provide a more comprehensive and consistent approach to capital for securitised portfolio, we believe that the model risk has been decreased, especially with additional layers of conservatism included in these models.

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[20]   BCBS, Instructions for the Quantitative Impact Study on the Revisions to the Basel Securitisation Framework (3 February 2014), pages 21-22, paragraph (vi).

Annex 12 (*CMA with scenarios of parameters on sample of transactions*) shows results of application of the CMA to a selection of sample transactions. Results of stress scenarios changing inputs and parameters of these models show that in some asset classes, the MVaR would still not reach the proposed 15% floor for some of the asset classes (good quality RMBS, SME, consumer loans, trade receivables in our sample).

Capital requirements cap should be available to SA banks acting as investors

The capital requirements cap should be allowed for all banks holding securitisation positions, whether as sponsors, originators or investors. We understand the Committee's view is that the cap should apply only where the investor has access to the underlying loan information and is able to calculate K_{IRB}. That explanation would imply that all originators and sponsors will use IRBA and be able to calculate K_{IRB}, and that is not the case. There will be standardised banks that sponsor and originate and will therefore use the SA rather than IRBA. If all sponsors and originators were able to calculate K_{IRB}, as the cap provision would imply, there would be no need to extend the capital requirements cap to banks applying the SA. Investor banks that cannot apply the IRB to the underlying exposures should be allowed to calculate and apply the capital requirements cap on the basis of the SA capital requirements for the underlying exposures.

Capital requirements cap should be proportional to bank's largest holding of any tranche

This comment responds to the Committee's Question 3 in the Consultative Document.

As noted in GFMA's comment letter on the prior consultation,[21] 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 percentage 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: Subject to our comment below on vertical slice retention, 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 only the senior tranche, its capital requirement should not exceed 10% of the capital requirement of the unsecuritised pool.

This proportional application is particularly appropriate and necessary in order for banks acting as investors in securitisations to get any benefit from the cap. We do not see any reason to think this application would not be prudent or that it would give rise to

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[21] GFMA 2013 page 37.

opportunities for regulatory arbitrage. We would be happy to discuss with the Committee any specific concerns they may have on this point.

Further limit capital requirements to retained vertical slice

Members also propose that, for an originator retaining a net economic interest in the securitisation in the form of a vertical slice (either a minimum percentage of each tranche of securities issued or a corresponding percentage of each securitised exposure or of randomly selected exposures similar to the exposures transferred in the securitisation), the originator's aggregate capital requirement for its retained tranches or exposures should not be greater than the capital charge of the underlying pool multiplied by the percentage of net economic interest retained by the originator. That percentage would be calculated as the RWA of the tranches or exposures or portions of tranches or exposures retained by the originator divided by the total RWA of all the securitisation tranches and retained exposures after the securitisation. Annex 13 (*Capital requirements cap based on retained economic interest*) sets out in more detail the rationale for this treatment, with numerical examples.

While these examples refer to cases where a vertical slice is retained to comply with applicable retention rules, the same treatment should apply to a retained vertical slice regardless of whether it relates to a regulatory requirement. If the bank retains a vertical slice while also holding a larger portion of certain tranches, this treatment should apply to the vertical slice portion, and the capital requirement for the incremental portions would be calculated separately and added to that calculated for the vertical slice.

Overlapping facilities in ABCP conduits

This issue is relevant for banks that provide both liquidity facilities and programme-wide credit enhancement facilities to ABCP conduits. Banks that currently utilise either the IAA or the SFA assign a risk-weight to the backstop liquidity commitment supporting the securitisation exposure in a manner that (1) treats the bank as if it owned the underlying securitisation exposure held by the conduit (that is, there is no conversion factor to reduce the risk weights below direct ownership), and (2) does not recognise the benefit of structural protections afforded to liquidity providers (such as the requirement not to fund defaulted receivables).

In essence, the capital assigned to the liquidity facility is at least as conservative as the capital that is assigned to funding the exposure directly on the bank's balance sheet. The current proposal requires that banks capitalise the programme-wide credit enhancement as a resecuritisation exposure (even though, in structures that use programme-wide credit enhancement, the sum of the backstop liquidity facilities and programme-wide credit enhancement exceeds 100% of the ABCP conduit liabilities). As a result, the total regulatory capital associated with the liquidity facilities and programme-wide credit enhancement facility supporting the ABCP conduit far exceeds the regulatory capital that the bank would be required to hold if it simply guaranteed every asset funded by the ABCP conduit.

The impact of this resecuritisation approach is an excessive and inconsistent regulatory capital requirement when compared to the regulatory capital that would be required for the liquidity facilities alone (which are treated as if the bank held the conduit's securitisation directly on its balance sheet). We therefore recommend that the Committee make it clear that, when a bank provides more than 100% committed facilities in support of an eligible ABCP conduit, its total capital requirement for those facilities (regardless of the approach

used to determine it) will not exceed the amount it would be required to hold if it fully guaranteed each of the underlying securitisation exposures held by the ABCP conduit. Annex 14 (*Illustration of Program Wide Credit Enhancement Treated as Resecuritization*) illustrates the recommended treatment with a sample calculation.

Resecuritisation

There is broad agreement that the retranching of a single ABS should not be considered a resecuritisation. Though we appreciate the Committee's effort to clarify this point, the industry is still concerned that the current draft wording can be interpreted in multiple ways. There are also questions regarding the interaction of the resecuritisation provisions with products such as CMBS and transactions such as repackagings of Japanese RMBS.

The main concerns are:

- The definition of "pool"

- Transactions that aggregate ABS without correlation assumptions between them.

- "Directness" and the need for repackaging SPEs.

There is also a "double counting" situation referred to above in relation to ABCP, which is less of a resecuritisation question and more about a need to clarify the operation of the capital requirements cap and the provisions on overlapping facilities.

For ease of reference, the CD statement on resecuritisation is as follows (underlining added)[22]

> "The previous consultation revealed some uncertainty within the industry regarding the scope of resecuritisation as defined in Basel 2.5. The Committee clarifies that an exposure is considered a resecuritisation exposure if its cash flows depend on the performance of a <u>pool</u> of assets that contains one or more securitisation exposures. For example, exposures resulting from retranching are not resecuritisation exposures if, after retranching, they act like a <u>direct</u> tranching of a pool with no securitised assets. Here retranching does not increase correlation risk, which was the rationale for assigning higher risk weights to resecuritisation exposures."

The meaning of "pool"

There is uncertainty regarding whether a single ABS is a "pool" for this purpose. If it is not a pool, then the current wording works as intended. But if it is considered to be a pool, then the wording does not achieve its desired aim.

Unfortunately the proposed rules text is not helpful in this respect, as it includes the statement (in paragraph 6) that "The underlying pool may include one or more exposures."[23] This is necessary in the context of that section, as it ensures that the retranching of a single loan should be considered to be a regular securitisation. But some observers have "read across" the concept that a pool can be comprised of a single obligation into the resecuritisation section. They therefore believe that a single ABS may constitute a pool, and that any

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22   CD page 19. This statement relates to securitisations generally and appears in BCBS 128 paragraph 542.
23   CD page 21.

retranching of it is therefore a resecuritisation. Under this interpretation, the example in the CD wording contradicts the general rule in the preceding sentence.

Transactions that aggregate ABS without correlation assumptions between them

Some structures simply aggregate exposures to a number of underlying ABS. This is typically done when the underlying ABS are of sub-optimal size. Examples include ABCP programmes (which are typically secured on a portfolio of separate ABS exposures), many CMBS structures (as the property loans securing a CMBS may technically count as ABS if they are tranched), and various RMBS transactions in Japan which repackage bonds issued by smaller banks.

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RMBS 1                    Aggregate Deal

    80
                              160
    20

RMBS 2

    80
                               40
    20
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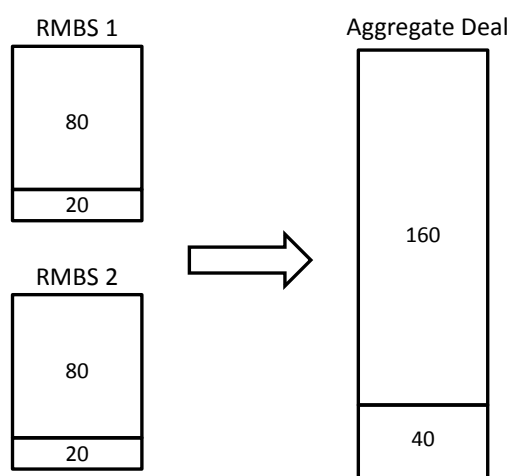
In a typical repackaging structure, the rating agencies simply look through to the underlying ABS, and calculate the tranching that each one can support. The debt issued by the repackaging programme is just the sum of the parts – no credit is given for the diversification between the various ABS. When a transaction is analysed in that fashion (whether by a rating agency or by a bank utilising the IRBA or the SA), there is no increase in correlation risk. These structures should not be considered resecuritisations simply because they aggregate cashflows.

"Directness" and the need for repackaging SPEs or trusts

Most retranchings are conducted in the secondary market after a transaction has closed. The underlying ABS is held in an SPE or trust that issues the new retranched securities. Thus almost by their definition, the new security is an "indirect" tranching rather than a "direct" tranching of a pool with no securitised assets. A similar problem exists in ABCP programmes where a series of SPEs (typically one for each client transaction) are funded by an aggregation SPE that issues ABCP in the market. Features such as liquidity facilities and swaps may exist at either the underlying transaction SPE or the aggregation vehicle.

ABS | **Retranching SPV**

Underlying Collateral

100

80

20

80

60

10

10

New Bonds
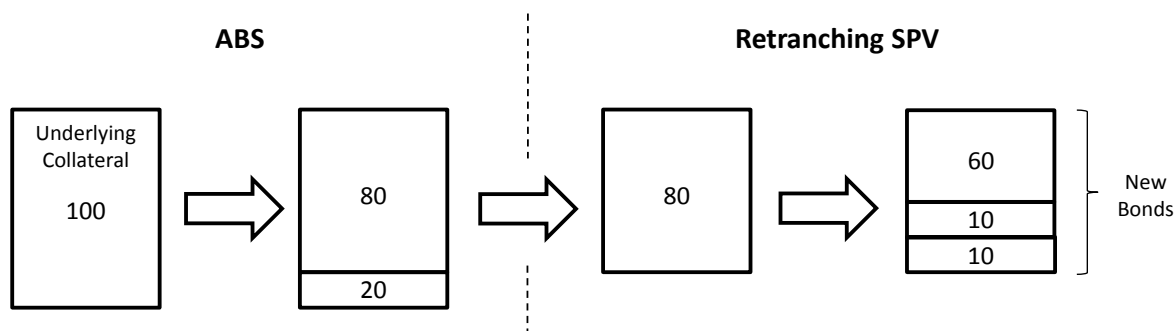
Our proposal

We therefore request that the resecuritisation wording be amended as follows:

> The previous consultation revealed some uncertainty within the industry regarding the scope of resecuritisation as defined in Basel 2.5. The Committee clarifies that the rationale for assigning higher risk weights to resecuritisation exposures is the increase in correlation risk. For example, this can be found in CDOs of ABS where the risk assigned to each tranche of the CDO is dependent on the correlation assumed between various ABS, or between an ABS exposure and other assets. This second-order correlation introduces an additional layer of volatility into the risk assessment compared to that present in a normal securitisation exposure. The Committee therefore clarifies that an exposure is considered a resecuritisation exposure if its cash flows depend on the performance of a pool of more than one asset that contains one or more securitisation exposures. For example, exposures resulting from retranching are not resecuritisation exposures if, after retranching, they act like a ~~direct~~ tranching of a pool with no securitised assets. Here retranching does not increase correlation risk ~~which was the rationale for assigning higher risk weights to resecuritisation exposures~~. In addition, the Committee confirms that exposures which simply aggregate exposures to multiple underlying ABS are not resecuritisations if their risk weights (or ratings under the ERBA) are derived without the use of correlation assumptions between multiple ABS, or between an ABS and other assets.

Due diligence requirements – penalty risk weight

The investor due diligence requirements set out in paragraphs 32 through 34 of the draft revised framework[24] appears in the existing Basel capital framework[25] and in US bank capital rules,[26] as well as (in more detailed form) in the EU's CRR Article 406 (former CRD 122a(4) and (5)) alongside the CRR's risk retention rule. In EU CRR 407, a bank investor that breaches either the due diligence requirement or the risk retention requirement can be required to apply an additional risk weight according to a formula starting at 2.5 times the risk weight that would otherwise apply. In Basel II.5,[27] in the US capital rules and in the draft revised securitisation framework (paragraph 35), a bank investor that breached the due

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[24] CD page 28.

[25] BCBS 157 pages 5-6, adding Basel II paragraphs 565(i)-(iv).

[26] *E.g.* 12 C.F.R. §3, Appendix B, Section 10(f) (Office of the Comptroller of the Currency), 12 C.F.R. §208, Appendix E, Section 10(f) (Federal Reserve System), and 12 C.F.R. §325, Appendix C, Section 10(f) (Federal Deposit Insurance Corporation).

[27] BCBS 157 page 5 (before the new rules text).

diligence requirement would have to apply a risk weight of 1250%. (The first consultation document did not include draft rules text and did not raise this point.)

We believe that the 1250% risk weight penalty creates an "in terrorem" effect that is likely to dissuade many banks from investing in securitisations or having other securitisation exposures, particularly as the due diligence rules are broadly drafted and provide no clarity on what exactly banks are required to do in order to meet the standard in particular cases. We believe the proportional additional risk weight approach prescribed in CRR 407, and set out in more detail in draft implementing technical standards, offers a much more appropriate remedy. Annex 15 (*Calculation of Additional Risk Weights*) sets out the CRR rule and related technical standard for reference. We propose that the Committee adopt this rule in place of the 1250% penalty.

Terminology etc.

This does not affect the substance, but please consider giving IRBA a different name – perhaps something based on SFA – that would be less easily confused (especially in spoken rather than written discussions) with ERBA, RRBA and RBA as well as IRB.

Similarly, there would be less chance for confusion if the proposed SA was called SSFA or something similar rather than having the same name as the overall Basel SA.

Of course, market practices and terminology often differ across jurisdictions, and we expect that national regulatory authorities will have reasonable discretion to adapt the framework to their individual markets rather than being required to apply it mechanically.

Conclusion

We very much appreciate the serious work the Committee has done in developing its proposal from the previous consultative document and taking into account the comments and QIS results from the previous consultation, and we are also grateful for the opportunity to offer our comments and suggestions on its revised proposal. We believe that the proposal has improved considerably during this process and that, though its problems remain substantial, the revised framework can be very much improved by application of the proposed changes explained in this letter. We look forward to discussing our comments with the Committee at our meeting next month and to continuing work with the Committee on this important project.

Should you have any questions or desire additional information regarding any of the comments, please do not hesitate to contact any of the Joint Associations' representatives listed below.

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Annexes

Annex 1 – Joint associations

The **Commercial Real Estate Finance Council** (CREFC) is the trade association for lenders, investors and servicers engaged in the $3.1 trillion commercial real estate finance industry. More than 250 companies and 5,500 individuals are members of CREFC. Member firms include commercial banks, insurance companies, private equity funds, mortgage REITs, investment grade and B-piece buyers, servicers and rating agencies, among others. CREFC promotes capital formation, encouraging commercial real estate finance market efficiency, transparency and liquidity. In addition to its member Forums, committees and working groups, CREFC acts as a legislative and regulatory advocate for the industry, plays a vital role in setting market standards and provides education for market participants in this key sector of the global economy. For further information, please visit www.crefc.org.

The **Commercial Real Estate Finance Council Europe** (CREFC Europe) is the voice of the commercial real estate finance industry in Europe. Our role is to promote transparency and liquidity in commercial real estate finance markets by developing and disseminating best practice and engaging with regulators, so our industry can flourish while playing its part in supporting the real estate industry and the wider economy. In addition we are the meeting place for lenders, capital providers, those seeking finance and others with an interest in the health of this market. We provide education and networking opportunities for market participants, and seek to ensure that the industry we champion has a bright and sustainable future. For further information, please visit www.crefceurope.org.

The **Global Financial Markets Association** (GFMA) 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.

The **Institute of International Finance**, **Inc.** (IIF) is a global association created in 1983 in response to the international debt crisis. The IIF has evolved to meet the changing needs of the international financial community. The IIF's purpose is to support the financial industry in prudently managing risks, including sovereign risk; in disseminating sound practices and standards; and in advocating regulatory, financial, and economic policies in the broad interest of members and foster global financial stability. Members include the world's largest commercial banks and investment banks, as well as a growing number of insurance companies and investment management firms. Among the IIF's Associate members are multinational corporations, consultancies and law firms, trading companies, export credit agencies, and multilateral agencies. All of the major markets are represented and participation from the leading financial institutions in emerging market countries is also increasing steadily. Today the IIF has more than 470 members headquartered in more than 70 countries. For more information, please visit www.iif.com.

The **International Association of Credit Portfolio Managers** (IACPM) is an industry association established in 2001 to further the practice of credit exposure management by providing an active forum for its member institutions to exchange ideas on topics of common interest. Membership in the IACPM is open to all financial institutions that manage portfolios of corporate loans, bonds or similar credit sensitive financial instruments. The

IACPM represents its members before regulatory and administrative bodies around the world, holds conferences and regional meetings, conducts research on the credit portfolio management field, and works with other organizations on issues of mutual interest relating to the measurement and management of portfolio risk. Currently, there are 90 financial institutions worldwide that are members of the IACPM. These institutions are based in 17 countries and include many of the world's largest commercial wholesale banks, investment banks and insurance companies, as well as a number of asset managers. More information about the IACPM may be found on our website: www.iacpm.org.

Since its founding in 1985, the **International Swaps and Derivatives Association** (ISDA) has worked to make over-the-counter (OTC) derivatives markets safe and efficient. Today, ISDA has over 800 member institutions from 62 countries. These members include a broad range of OTC derivatives market participants including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure including exchanges, clearinghouses and repositories, as well as law firms, accounting firms and other service providers. ISDA's work in three key areas – reducing counterparty credit risk, increasing transparency, and improving the industry's operational infrastructure – show the strong commitment of the Association toward its primary goals; to build robust, stable financial markets and a strong financial regulatory framework. For more information, please visit www2.isda.org.

The **Securitization Forum of Japan** (SFJ) was founded as a voluntary association in 2005 and established as a corporation in 2007. SFJ aims to contribute to the sound development of the asset securitization market and carry out the following operations: (1) research and study associated with asset securitization; (2).exchanges and cooperation with internal and external organizations concerned, etc. associated with asset securitization; (3), diffusion and enlightenment of asset securitization; (4) policy recommendations concerning asset securitization; and (5) any other operations incidental or relevant to operations of the above items. For more information, please see http://www.sfj.gr.jp/e/index.html.

The **Structured Finance Industry Group** (SFIG) was established in March 2013 for the purposes of: (1) educating members, legislators, regulators, and other constituencies about structured finance, securitization and related capital markets, (2) building the broadest possible consensus among members on policy, legal, regulatory and other matters affecting or potentially affecting the structured finance, securitization and related capital markets, (3) advocating on behalf of the structured finance and securitization industry with respect to policy, legal, regulatory and other matters affecting or potentially affecting the structured finance, securitization and related capital markets, (4) accomplishing all of the above while being dedicated to the core principles of governance, financial transparency, inclusion and respectful accommodation of divergent member views. For more information, please visit www.sfindustry.org.

Annex 2 – Policy support for securitisation

Mario Draghi, president of the ECB, Press conference following the meeting of the Governing Council of the ECB on 6 March 2014

"If we consider just the revitalisation of the ABS market, there are many things that need to change in regulation and in legislation. Today, the capital charges for ABS discriminate ABS unfavourably with respect to other instruments with similar degrees of riskiness. The current capital regulation of ABS was calibrated on a reality which is not the European one. To give you an idea, I can't remember exactly the period of reference, but let's say over five or ten years, the default rate of ABS in the United States was 17.4%; in Europe, it was 1.4%. So you see that the capital charges are certainly not being calibrated on European ABS, which are traditionally of a much simpler, transparent and unstructured form. These things have to be changed, and it will be up to the Basel Committee and the European Commission, as far as legislation within the EU is concerned, to change some of these regulations. Also there are issues like the sovereign cap: ABS are rated according to their sovereign – perhaps with a few points difference, but this often does not make much sense. So there are several issues and, in the end, it may well be the case that, to launch this market, one may need third party guarantees. So, it is a complex thing on which the ECB's staff is working."

http://www.ecb.europa.eu/press/tvservices/webcast/html/webcast_130905.en.html

Mario Draghi, president of the European Central Bank (ECB), quoted in Financial Times 4 March 2014

The ECB president said last month: "We think that a revitalisation of a certain type of [asset-backed security], a so-called plain vanilla [asset-backed security], capable of packaging together loans, bank loans, capable of being rated, priced and traded, would be a very important instrument for revitalising credit flows and for our own monetary policy.

http://www.ft.com/cms/s/0/544e68ea-a2cd-11e3-ba21-00144feab7de.html?siteedition=uk#axzz2wPfK8AZl

"Yves Mersch, Member of the Executive Board of the European Central Bank in a recent speech , discussing the necessary requirements for the recovery in SME funding: Speech to the Institute of International European Affairs, Dublin, 7 February 2014

"This is why I have been vocal in supporting the revitalisation of the securitisation market in Europe, which has virtually dried up in recent years. I see this as an important tool to help banks manage the credit risk associated with lending to SMEs. However, for it to recover it is critical that the regulatory treatment of asset-backed securities (ABS) is based on real data and not the legacy of the US sub-prime disaster. We have a very different experience with ABS here in Europe: between mid-2007 and the first quarter of 2013 the default rate on ABS in the EU was only around 1.4%, whereas it was 17.4% in the United States."

http://www.ecb.europa.eu/press/key/date/2014/html/sp140207.en.html

Mario Draghi, president of the ECB, at Davos, quoted in January 2014

"What other assets would we buy? One thing is bank loans . . . the issue for further thinking in the future is to have an asset that would capture and package bank loans in the proper way."

http://www.ft.com/cms/s/0/6646e826-86ab-11e3-aa31-00144feab7de.html#axzz2wPfK8AZl

Mario Draghi, president of the ECB, at Davos, quoted in January 2014

"Right now securitisation is pretty dead," the ECB president said adding, "that there was a possibility of buying asset backed securities" if they were "easy to understand, price and trade and rate."

http://www.ft.com/cms/s/0/6646e826-86ab-11e3-aa31-00144feab7de.html#axzz2wPfK8AZl

The Economist, 11 January 2014

"Most structured products performed well through the crisis[…] Defaults in Europe remained low despite the recession." "Lenders across Europe are under pressure to improve the ratio of capital they hold to loans made. One way of doing this is […] through securitisation, by bundling and repackaging loans and selling them to outside investors such as insurance firms or asset managers, they could lend more money to credit-starved companies."

Andrew Haldane, Director of Financial Stability at the BoE, 10 December 2013

"… securitisation could be the "financing vehicle for all seasons" if proper standards are maintained […]. In a world where we are squeezing risk out of the banking system we would want a simple, safe, vibrant set of channels for non-bank financing to emerge and securitisation is one of those…"

http://www.ft.com/cms/s/0/fdeeb11e-61bb-11e3-916e-00144feabdc0.html#axzz2wPfK8AZl

Yves Mersch, Member of the Executive Board of the ECB, 13 November 2013

"… we should promote other forms of financing to complement the banking channel […] through strengthening capital markets and in particular securitisation […] We need to revive this market. This implies removing some key impediments to its functioning."

http://www.ecb.europa.eu/press/key/date/2013/html/sp131113.en.html

Mark Carney, Governor of the Bank of England, noted in a discussion about restoring SME lending, 28 August 2013

…"a well-functioning securitisation market - does mean more efficient balance sheets for the financial sector as a whole which frees up capacity, which then can have a knock on effect."

http://www.bankofengland.co.uk/publications/Documents/speeches/2013/speech675trans.pdf

Governor Daniel K. Tarullo, Federal Reserve, 3 March 2013

"The growth and deepening of capital markets lowered financing costs for many companies and, through innovations such as securitization, helped expand the availability of capital for mortgage lending."

http://www.federalreserve.gov/newsevents/speech/tarullo20130503a.htm

Commissioner Michel Barnier, 21 February 2013

"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

Thomas J. Curry. Comptroller of the Currency, 14 February 2013

"Securitization markets are an important source of credit to U.S. households, businesses, and state and local governments. When properly structured, securitization provides economic benefits that lower the cost of credit."

http://www.occ.gov/news-issuances/congressional-testimony/2013/pub-test-2013-29-written.pdf

Thomas J. Curry. Comptroller of the Currency, 28 January 2013

"The credit-availability pendulum has swung, as it was bound to do, in reaction to poor performance of the underlying assets, home price instability, and a lack of investor demand for anything other than a government guaranteed product. As these factors abate, underwriting standards will need to find a new equilibrium of risk and reward for a sustainable mortgage market. Getting the securitization pipeline flowing again is a critical component in turning this picture around"

http://www.occ.gov/news-issuances/speeches/2013/pub-speech-2013-19.pdf

Annex 3 - Regulatory reform (EU)

Mapping of securitisation specific problems during the financial crisis and European Union regulatory reform*

The issue

- Overreliance on credit rating agencies
- Misaligned interests between originators and investors
- Lack of price information in stressed secondary market conditions
- Misalignment of reg capital with credit risk
- Quality of certain products

High Level Solution

- Enhanced &standardised disclosure
- Legal due diligence obligations for investors
- Appropriate use of credit rating agencies
- Originator to retain some risk
- Price transparency
- Review of regulatory capital requirements
- Review and standardisation of lending practices

Solution through regulation

- Information for comprehensive assessment of the ABS
- Originators providing disclosure to investors and ongoing reports
- Standardisation of disclosure
- Investors must demonstrate a comprehensive understanding of the risks of any ABS they invest in
- Ongoing monitoring of risk
- Investors to check that the originator is retaining risk
- Investors to check the risk profile of the originator
- Conditions for use and issuer pays
- Originator incentivised to hold a percentage of the risk
- Pre and post trade transparency for venue and OTC trades

Detailed requirements

- Example: (1) Credit quality and performance of the individual underlying asset (2) structure (3) cash flows (4) collateral support (5) all information necessary to conduct stress tests on cash flows and any collateral values
- Originators directly and indirectly obligated provide detailed information to investors to meet their due diligence requirements
- Loan-level disclosure and standardised monthly investor reporting
- Investors must gather sufficient information to demonstrate they have a comprehensive a understanding of the risk profile of their securitisation positions (e.g. structural features of the securitisation, the reputational loss experience of the originator, risk characteristics of the underlying asset)
- Monitor performance information on exposures. Regular stress tests on exposures
- Investor needs to check that the originator has retained risk prior to investing. Investor to receive confirmation at least on an annual basis
- Prior to investment investor must check origination criteria are sound. Confirm effective systems to manage asset administration. Adequate diversification of originator portfolios. Ensure originator has a written policy on credit risk
- Conditions for use: requirement to use (i) two rating agencies; (ii) mandatory rotation for resecuritisation; (iii) firms may only use CRAs if all of a number of conditions are satisfied
- Originator needs to retain risk in order to sell to European investor on an ongoing basis
- Disclosure of price, volume and time of transactions for all trades. Firm pricing for liquid instruments and pre trade disclosure on demand for illiquid instruments
- Review of capital charges for securitisations based on risk assessments. New capital regime for complex structures (i.e. resecuritisations)

Regulations

Information for comprehensive assessment of the ABS	Originators providing disclosure	Standardisation of disclosure	Investors demonstrate understanding	Ongoing monitoring of risk	Investors check originator retaining risk	Investors check risk profile of originator	Conditions for use and issuer pays	Originator incentivised	Pre and post trade transparency	Review of regulatory capital requirements	Review and standardisation of lending practices
Article 8b CRA3	Art 409 CRR	ECB (not regulation)	Art 406 CRR	Art 206 CRR	Art 406 CRR	Art 15 AIFMR	CRA3	Art 405 CRR	MIFID II	CRD III	Mortgage Credit Directive
Art 409 CRR	Article 8b CRA3	Bank of England (not regulation)	Art 135 Solvency II	Solvency II	Art 135 Solvency II	Solvency II	Article 268/269 CRR	Art 135 Solvency II	PCS liquidity criteria (not regulation)	Basel RWA	Consumer Credit Directive
ECB (not regulation)	Solvency II	PCS (not regulation)	Art 17 AIFMD	Art 17 AIFMD	Art 17 AIFMD			Art 17 AIFMD		Solvency II	Art 408 CRR
Bank of England (not regulation)	AIFMD	PRIPS	Art 50 UCITS	Art 50 UCITS	UCITS					CRR/CRD IV	PCS/TSI (not regulation)
PCS (not regulation)	UCITS	European Data Warehouse (not regulation)									
		Article 8b CRA3									

*US has introduced similar regulatory initiatives for securitisation, primarily under Dodd-Frank

afme / Finance for Europe

Mapping non-asset linked wider market problems that impacted securitisation during the financial crisis and regulatory reform

The issue

Refinancing risk: maturity transformation by entities heavily dependent on short term funding (e.g. CP) and holding longer term assets whose funding lines are suddenly pulled (e.g. SIVs)

Excessive leverage of entities heavily dependent on funding from repo markets that suddenly suffer a liquidity shortage (e.g. fund vehicles dependent on repo funding)

Systemic risk and interconnectedness of the financial system

- Regime for these entities or entities acquiring their assets
- Regime for banks providing credit lines to non-banks
- Regime for banks exposed to non-banks through the provision of repo financing

Issue boxes:
- Entities were systemic
- Sufficient stable funding unavailable in stress
- Short term funding being pulled and no recourse to selling of liquid assets
- Misalignment of reg capital with credit risk
- Incorrectly identifying who bears the risk
- Lack of appropriate fire sale exit strategy
- Management of risk exposures to entities
- Entities providing credit lines – systemic through interconnectedness

High Level Solution

- Identification of globally and domestically systemic entities
- Measures for systemic entities
- Require proportion of stable funding
- Require holding of proportion of liquid assets to match stressed outflows
- Align reg cap to risk
- Clarification and disclosure of group entity risks
- Fire-sale exit strategy must be in place
- Management of risk exposures to counterparties
- Management of leverage introduced through credit lines
- Disclosure
- Have a resolution strategy in place wrt credit lines
- Identification of globally and domestically systemic entities
- Measures for systemic entities
- Minimum haircut requirements
- Transparency of repo markets
- Cap on bank leverage
- Macroprudential tools

Solution through regulation

- Methodologies for identifying GSIBs at group level
- Methodologies for national authorities to identify non-bank GSIFIs
- Capital buffers for GSIBs
- Stable funding structural measures
- Liquidity buffers
- Determine whether an entity should be included on banks consolidated balance sheet
- Strategy must be in place for recovery and resolution
- Cap the maximum level of exposure
- Align reg cap to counterparty credit risk
- Hold liquid assets against credit lines to counterparties
- Credit lines subject to leverage ratio
- Disclosure of group level exposures and credit lines
- Methodologies for identifying GSIBs at group level
- Methodologies for national authorities to identify non-bank GSIFIs
- Capital buffers for GSIBs
- Countercyclical buffers
- Macroprudential levers to dampen credit
- Sectoral specific requirements

Detailed requirements

- 2.5% capital buffers for GSIBs
- **FOR BANK ENTITIES AT CONSOLIDATED GROUP LEVEL & ENTITY LEVEL:** Net Stable Funding Ration (NSFR) – proportion of funding needs to be obtained from stable source
- **FOR BANK ENTITIES AT CONSOLIDATED GROUP LEVEL & ENTITY LEVEL:** Liquidity Coverage Ratio (LCR) – bank/bank entities must hold a certain percentage of liquid assets that can be sold off within 30 days under stressed conditions **FOR NON-BANK ENTITIES:** tools for regulators to introduce liquidity buffer requirements
- **FOR BANK ENTITIES AT CONSOLIDATED GROUP LEVEL & ENTITY LEVEL:** Holding of appropriate level of capital to absorb potential losses **FOR NON-BANK ENTITIES:** tools for regulators to introduce liquidity buffer requirements
- **FOR BANK ENTITIES AT CONSOLIDATED GROUP LEVEL & ENTITY LEVEL:** fire-sale strategy must be in place
- **BANKS:** Maximum cap on exposures to non-banks
- **BANKS:** need to hold capital against the counterparty
- **BANKS:** needs to hold liquid assets against their credit lines – in the event that a counterparty defaults
- Banks providing funding to non-banks through a securities financing transaction must require a minimum haircut. Banks providing funding to non-banks through a securities financing transaction must calculate haircuts on the basis of minimum qualitative requirements

Regulations

- Basel III
- FSB proposed methodologies for identifying non-bank GSIBs
- Basel III
- CRR/Basel III
- CRR | FSB WS3 shadow banking tools
- CRR | Fundamental review of trading book | FSB WS3 shadow banking tools
- IFRS 10, 11, 12 | LEI
- BRRD | FSB non-bank resolution proposals
- Basel Large Exposures | CRR
- CRR
- CRR
- CRR
- IFRS 7 1 July 2011 | CRR/CRD
- BRRD
- Basel III
- FSB proposed methodologies for identifying non-bank GSIBs
- Basel III
- FSB WS5 shadow banking proposals
- EC SFT proposals
- CRR
- CRR/CRD | Banking Union
- CRR/CRD | Banking Union
- CRR/CRD | Banking Union

*US has introduced similar regulatory initiatives for securitisation, primarily under Dodd-Frank

afme / Historical Default Rates for Securitisation: Mid-2007 to End Q3 2013

Finance for Europe

	Original Issuance (EUR billion)	Default Rate (%)
Europe		
Total PCS eligible asset classes	**960.2**	**0.13**
Credit Cards	33.2	0
RMBS	756.0	0.10
Other Consumer ABS	68.0	0.13
SMEs	103.0	0.41
Only senior tranches to be PCS labelled, the default rate for which is zero, like Covered Bonds		
Total Non-PCS eligible asset classes	**728.9**	**5.53**
Leveraged Loan CLOs	71.3	0.1
Other ABS	68.4	0
Corporate Securitisations	64.9	0.13
Synthetic Corporate CDOs	254.3	2.86
CMBS	163.3	9.89
Other CDOs	77.8	6.51
CDOs of ABS	28.9	40.4
Total European securitisation issuances	**1,689.1**	**2.46**
Covered Bonds	**1,085.0**	**0.00**
Total European issuances	**2,774.1**	**1.50**
Select US asset classes		
Credit Cards	295.4	0.07
Autos	198.2	0.04
Student Loans	266.9	0.33
RMBS	3,254.9	21.64

Source: Standard & Poor's

6

SECURITIZATION CAPITAL ANALYSIS

March 2014

Agenda

SECURITIZATION CAPITAL ANALYSIS

Assumptions

- Internal Ratings Based Approach calculations exclude the impact of the 1.06 scaling factor applied to the unexpected loss within the KIRB calculation. Results are therefore understated under this approach relative to the Consultation.

- For purposes of this analysis, when a bond has more than one AAA tranche, those that share pro rata losses and have detachment points at 100% are treated as senior for the purposes of the External Ratings Based Approach.

- For transactions with excess spread, the Standardized Approach results in materially higher levels of capital compared to the External Ratings Based Approach due to the lack of recognition of the transaction's excess spread.
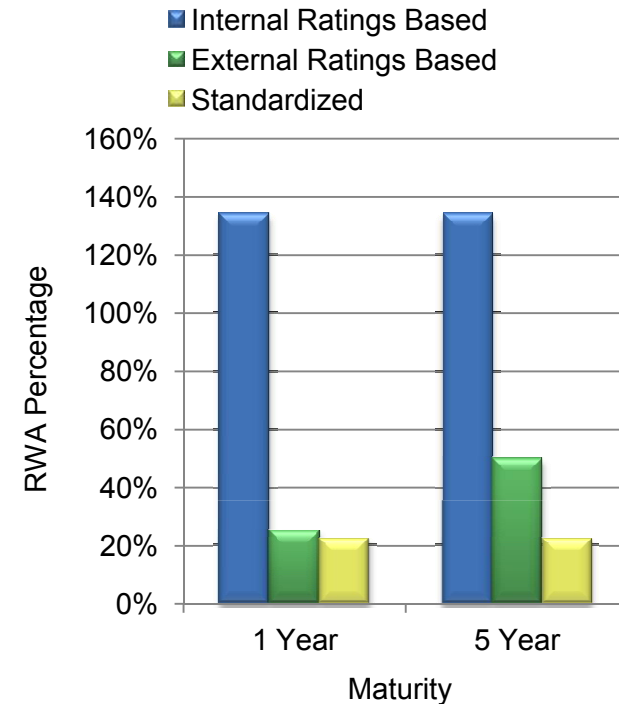
Private Auto Transactions

Prime "A+" Auto Transaction[1]

- Internal Ratings Based
- External Ratings Based
- Standardized
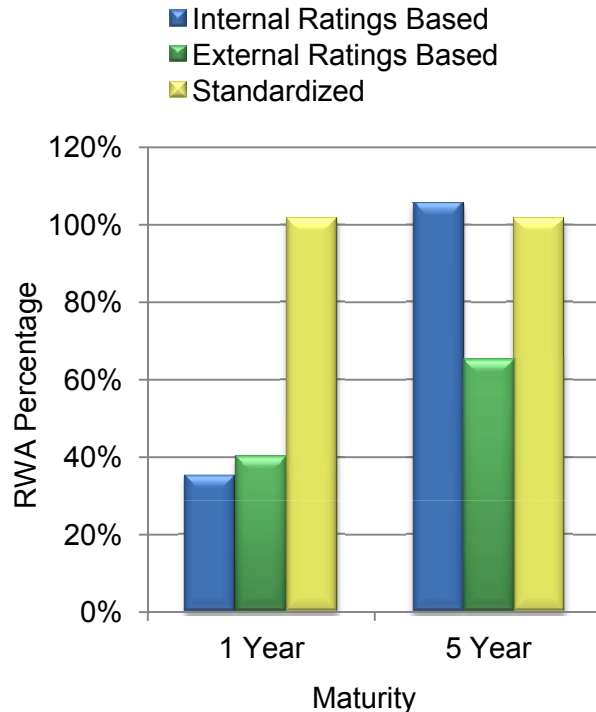
Maturity	Internal Ratings Based	External Ratings Based	Standardized
1 Year	35%	40%	102%
5 Year	106%	65%	102%

Subprime "AA" Auto Transaction[1]

- Internal Ratings Based
- External Ratings Based
- Standardized

Maturity	Internal Ratings Based	External Ratings Based	Standardized
1 Year	134%	25%	22%
5 Year	134%	50%	22%

These charts display capital calculations for a private auto transaction funded through an ABCP conduit. In addition to the notable lack of calibration in capital calculations between the approaches, for illustrative purposes, we assumed maturities of one and five years for both transactions and we discovered that the Internal Ratings Based Approach ("IRBA") is only sensitive to changes in maturity for the highest quality assets. We believe that if maturity is an important factor, it is counterintuitive that it only affects assets of the highest quality.

[1]Transactions are not publicly rated. Public ratings are inferred from internal credit ratings.

Private Trade Receivables Transaction

| ■ Internal Ratings Based |
| ■ External Ratings Based |
| ■ Standardized |
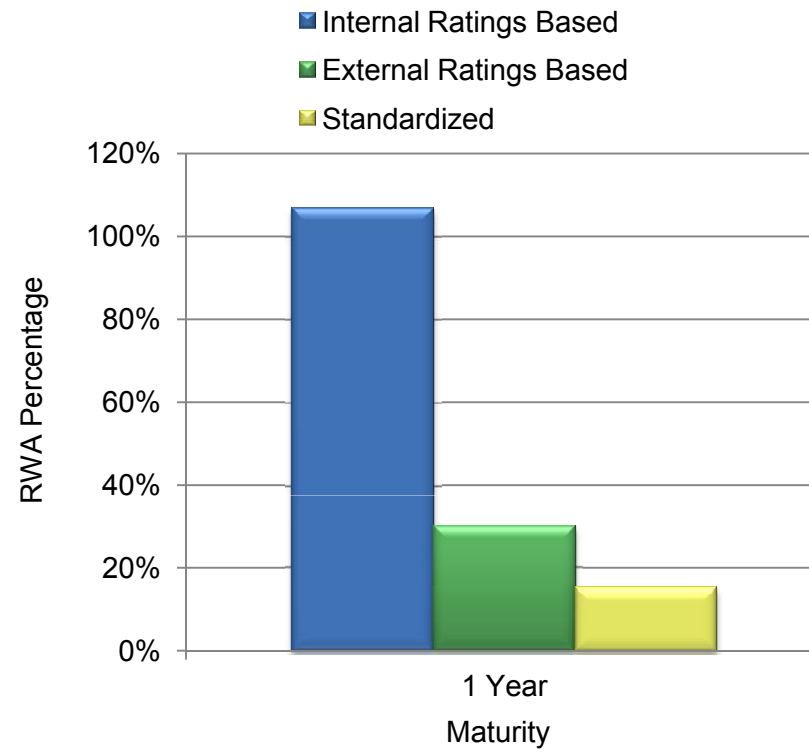
Maturity	Internal Ratings Based	External Ratings Based	Standardized
1 Year	107%	30%	15%

This chart displays capital calculations for a private trade receivables transaction funded through an ABCP conduit. IRBA results in significantly higher capital than either the External Ratings Based Approach ("ERBA") and Standardized Approach ("SA"). For U.S. banks who will not have the option of utilizing the ERBA, IRBA capital levels represent an average of 7 times that of SA, resulting in an unlevel global playing field across jurisdictions.

[1]Transactions are not publicly rated. Public ratings are inferred from internal credit ratings.

US CLO Transaction

TELOS 2013-3 CLO – 5 Year Maturity

Legend: ■ Internal Ratings Based ■ External Ratings Based ■ Standardized

RWA Percentage (chart with tranches AAA, AA, A, BBB, BB, B)

Tranche	Internal Ratings Based	External Ratings Based	Standardized
AAA	15%	25%	15%
AA	146%	117%	74%
A	496%	176%	220%
BBB	1105%	304%	476%
BB	1250%	737%	856%
B	1250%	1032%	1209%
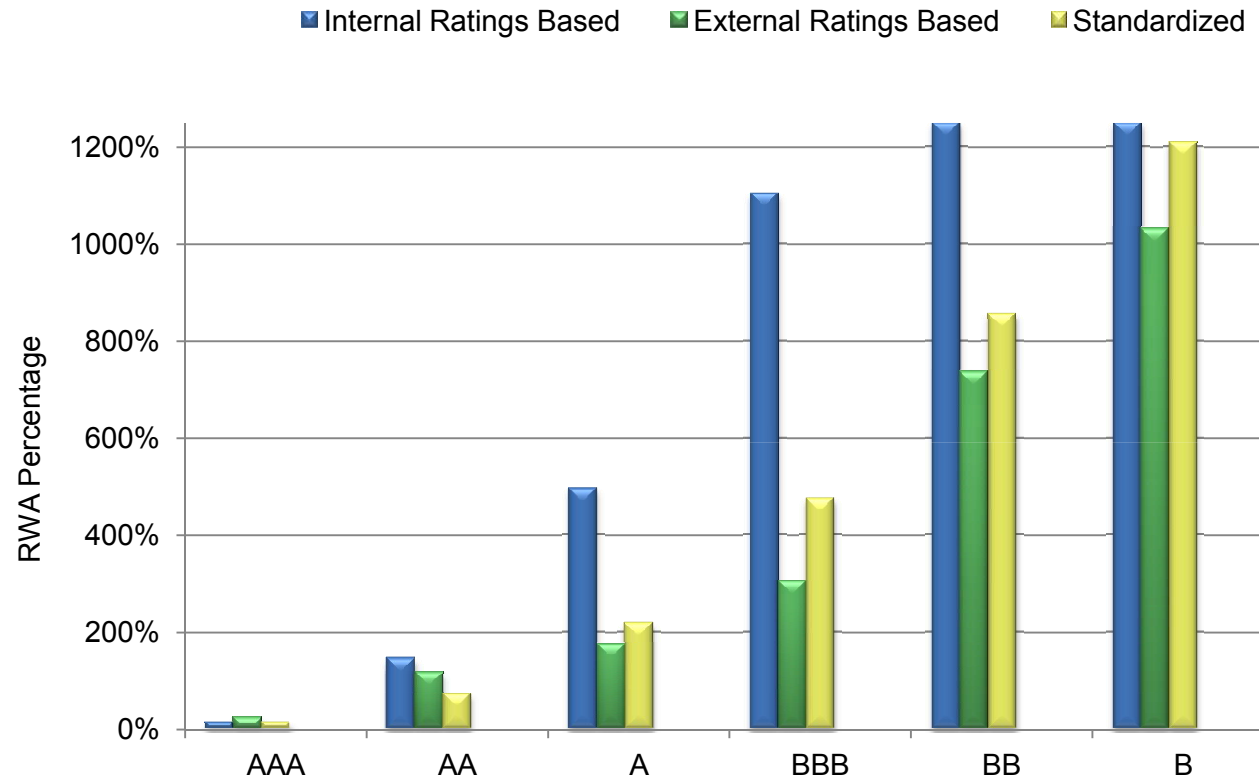
This chart represents the result of the entire hierarchy of proposed capital calculations. A couple of observations to note:
• Due in part to the maturity assumption included in the IRBA, the IRBA (in all but the senior most tranches where the floor levels drive the results) would result in a far more conservative and outsized level of capital.
• In addition, we note that there are jurisdictional differences regarding required conservatism in the calculation of KIRB for investors with imperfect information. The IRBA is much more sensitive to conservatism than the previous SFA approach, and leads to excessively conservative results under the IRBA.

TRANSACTION EXAMPLES

US CLO Transaction

TELOS 2013-3 CLO – 5 Year Maturity

Legend: ■ Internal Ratings Based   ■ SFA

This chart has been added to display the material increase in capital between the previous SFA approach and the newly proposed IRBA. As an investor with imperfect information, there is a requirement to build conservatism into the KIRB. This conservatism, when combined with the more conservative IRBA inclusive of maturity, leads to unreasonably high capital levels on both absolute and relative bases.

Tranche	Internal Ratings Based	SFA
AAA	15%	20%
AA	146%	20%
A	496%	30%
BBB	1105%	796%
BB	1250%	1250%
B	1250%	1250%

Dutch RMBS Transaction

DOLPH 2012-2 RMBS Transaction – 5 Year Maturity

■ Internal Ratings Based ■ External Ratings Based ■ Standardized (Prudently Underwritten)
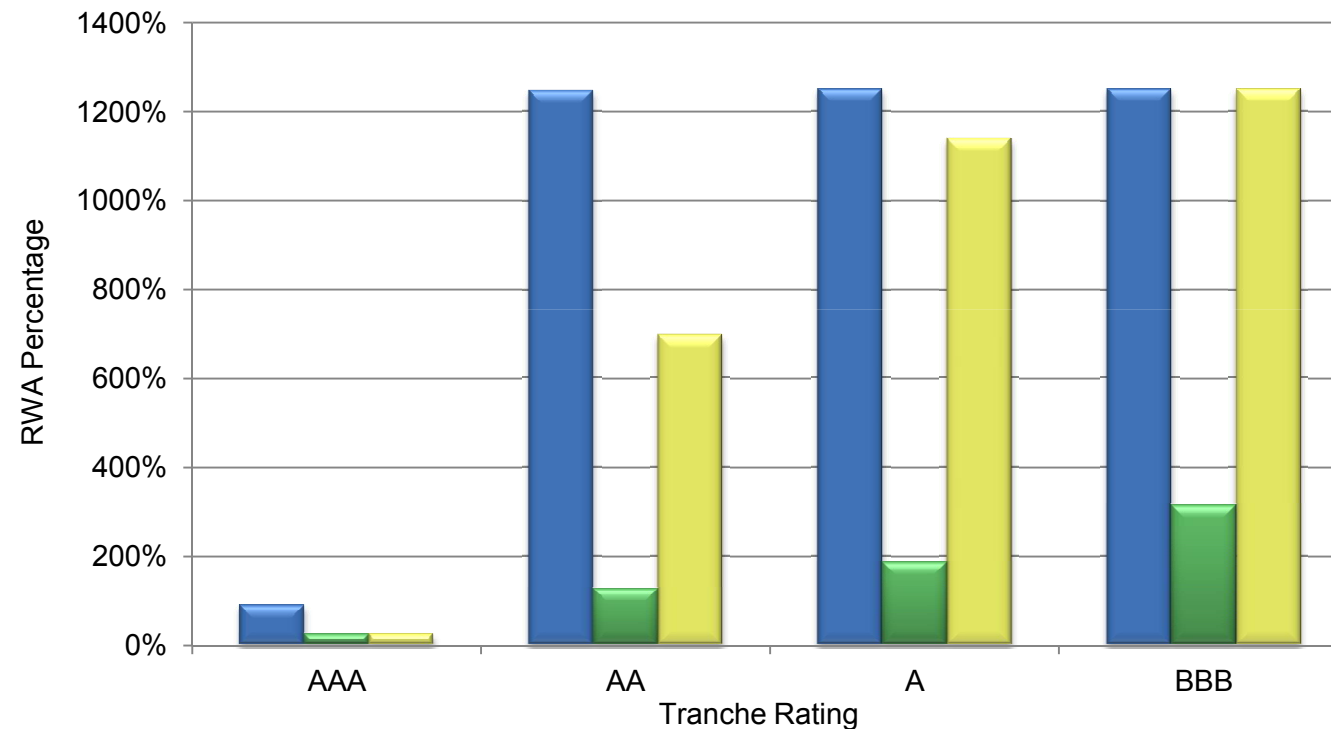
IRBA leads to excessive capital results for high quality Dutch RMBS for the same reasons cited in the prior slide. For investors that may not have the information required to calculate the IRBA, the extreme lack of calibration between the ERBA and the SA is notable. IRBA capital levels represent an average of 6 times the capital generated by the ERBA for this transaction, and will create a very significant unlevel playing field across global banks for the same exposure.

Tranche	Internal Ratings Based	External Ratings Based	Standardized
AAA	90%	25%	26%
AA	1246%	127%	697%
A	1250%	185%	1138%
BBB	1250%	313%	1250%

US RMBS Transaction

US Prime RMBS – JPM13003 – 5 Year Maturity

Legend: ■ Internal Ratings Based ■ External Ratings Based ■ Standardized

This is a recent RMBS transaction, and was added to this analysis following the initial discussion with the Securitization Working Group. SA results represent 12 times capital vs. ERBA for the 2 subordinate AAA tranches, and approximately 10 times capital for the AA tranche. These differences are of serious concern to U.S. banks who can not utilize the ERBA. While we fully understand the inability to fully calibrate between approaches, such extreme differences in capital will impede efficient markets and lead to material differences in capital levels across banks and jurisdictions.

Tranche	Internal Ratings Based	External Ratings Based	Standardized
AAA	15%	25%	85%
AAA	15%	25%	85%
AAA	15%	25%	85%
AAA	15%	25%	54%
AAA	15%	77%	750%
AAA	32%	78%	1138%
AA	82%	129%	1250%
A	193%	186%	1250%
BBB	478%	315%	1250%
BB	906%	762%	1250%
NR	1250%	1232%	1250%

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US RMBS Transactions

US Prime RMBS – JPM13002 – 5 Year Maturity
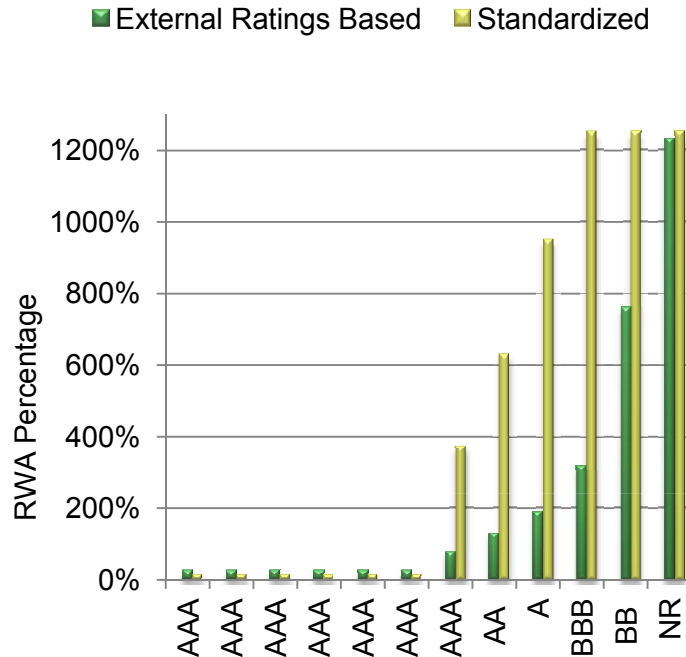
■ External Ratings Based ■ Standardized

Tranche	External Ratings Based	Standardized
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	77%	373%
AA	129%	630%
A	186%	950%
BBB	315%	1249%
BB	761%	1250%
NR	1232%	1250%

US Prime RMBS – CML06FX1 – 5 Year Maturity[1]

■ External Ratings Based ■ Standardized
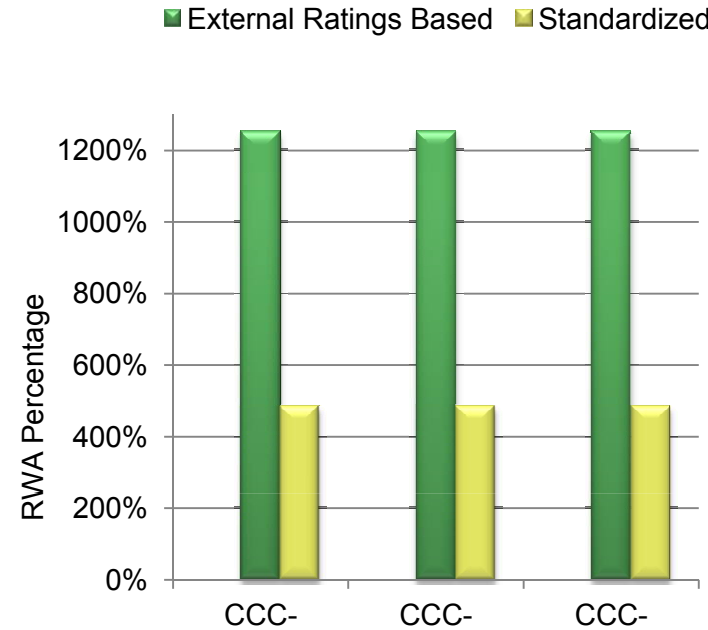
Tranche[2]	External Ratings Based	Standardized
CCC-	1250%	485%
CCC-	1250%	485%
CCC-	1250%	485%

[1] Mezzanine tranches all have $0 balance.
[2] CCC- rating equivalent to Caa3 public rating. Shown as CCC- for presentation purposes.

These transactions illustrate significant disparity throughout the entire capital structure between all approaches. Given the inability of U.S. banks to utilize the ERBA, this will result in significant differences in capital levels for the same exposures between jurisdictions.

US CMBS Transactions

US CMBS- JPC13C16
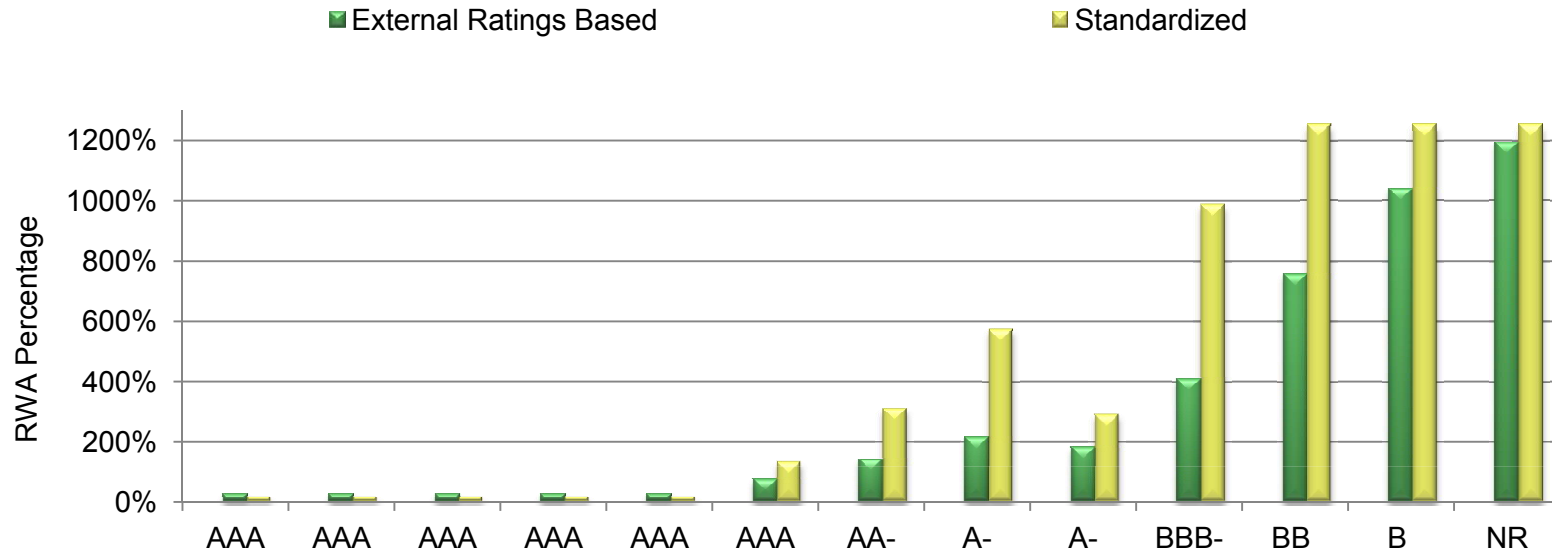
Legend: ■ External Ratings Based   ■ Standardized

Tranche	External Ratings Based	Standardized
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	25%	15%
AAA	74%	131%
AA-	140%	309%
A-	212%	572%
A-*	181%	288%
BBB-	408%	985%
BB	756%	1250%
B	1039%	1250%
NR	1192%	1250%

This U.S. CMBS transaction displays significantly higher capital levels for SA relative to ERBA. Again, this will lead to bank and jurisdictional differences in capital levels for identical exposures.

* The AA- tranche is relatively thin (attaching 16 and detaching 22). The first A- tranche is also thin (attaching at 12 and detaching at 16). The second A- tranche is an exchange tranche, and relatively thick (attaching at 12 and detaching at 30). An exchange tranche allows an investor to exchange their Class A B or C certificate for a related amount of this exchange tranche, which effectively gives the investor the risk profile of the A,B and C tranches combined.

US CMBS Transaction

US CMBS – JPC07C20

Chart legend: ■ External Ratings Based   ■ Standardized

Y-axis: RWA Percentage (0% to 1200%)

X-axis tranches: AAA, A+, AAA, A+, BBB-, BBB-, B, CCC, CCC, CC, CC, C, C, C, D, D
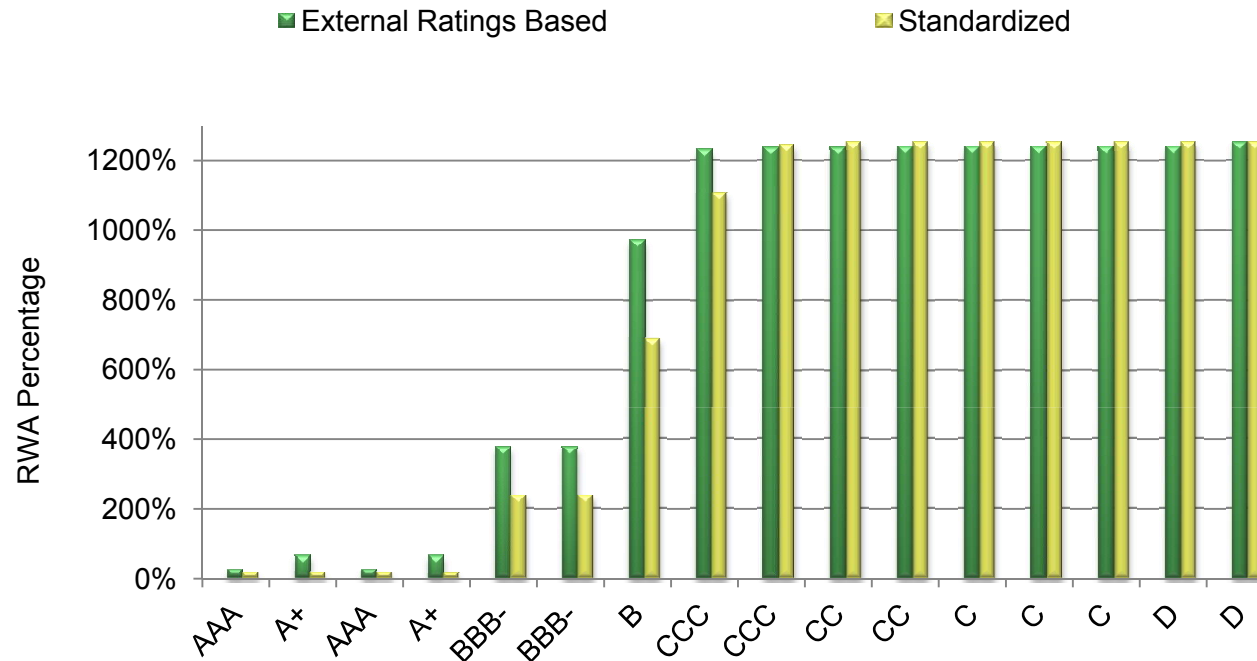
Several tranches of this CMBS deal were downgraded since the transaction's inception in 2007. Capital levels between the ERBA and SA appear to now be better calibrated. It is worth noting that until the downgrades, there were large disparities between the ERBA and SA capital levels, specifically for the higher rated tranches typically owned by banks.

Tranche	External Ratings Based	Standardized
AAA	25%	16%
A+	65%	16%
AAA	25%	16%
A+	65%	15%
BBB-	375%	239%
BBB-	375%	239%
B	970%	688%

Tranche	External Ratings Based	Standardized
CCC	1230%	1105%
CCC	1234%	1243%
CC	1234%	1250%
CC	1236%	1250%
C	1236%	1250%
C	1236%	1250%
C	1236%	1250%
D	1236%	1250%
D	1250%	1250%

US Auto Transaction

Ally Prime Auto – ALLYA125 – 5 Year Maturity

■ External Ratings Based   ■ Standardized
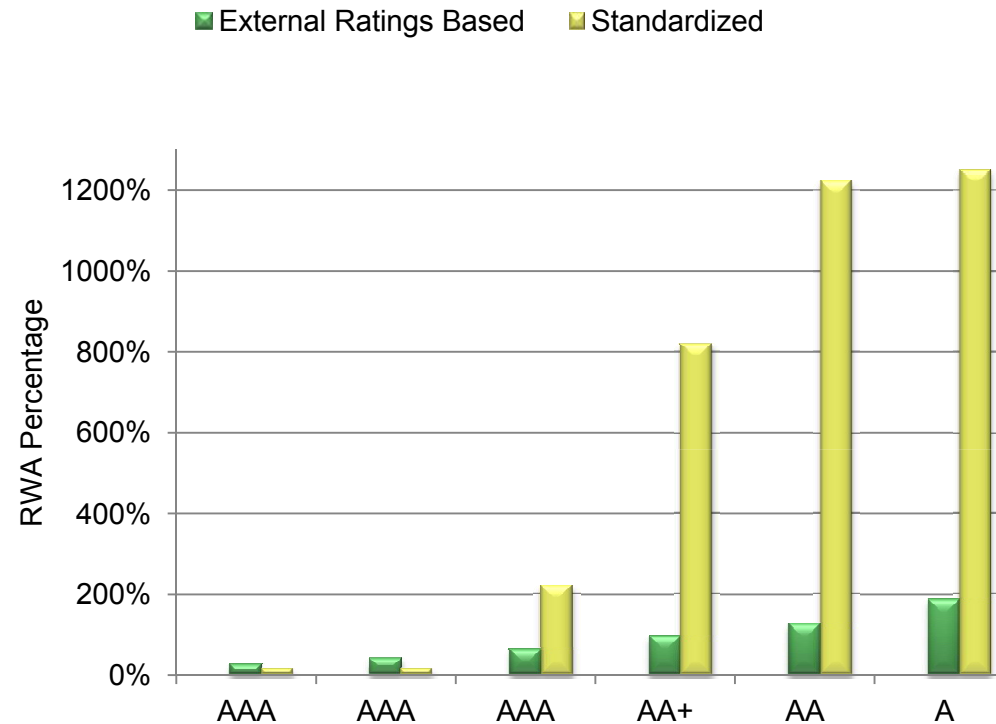
The prime auto transaction displayed here reflects the entire capital structure for a transaction that is publicly rated. SA capital levels are once again materially higher for all non-senior tranches at approximately 6 times higher capital levels than those dictated by the ERBA. Again, this is a source of material concern for U.S. banks who will not be able to utilize the ERBA approach.

Tranche	External Ratings Based	Standardized
AAA	25%	15%
AAA	41%	15%
AAA	64%	222%
AA +	95%	820%
AA	126%	1221%
A	187%	1250%

US Credit Card Transaction

American Express Credit Card (High Quality) – AMCA1202 – Year Maturity

■ External Ratings Based   ■ Standardized
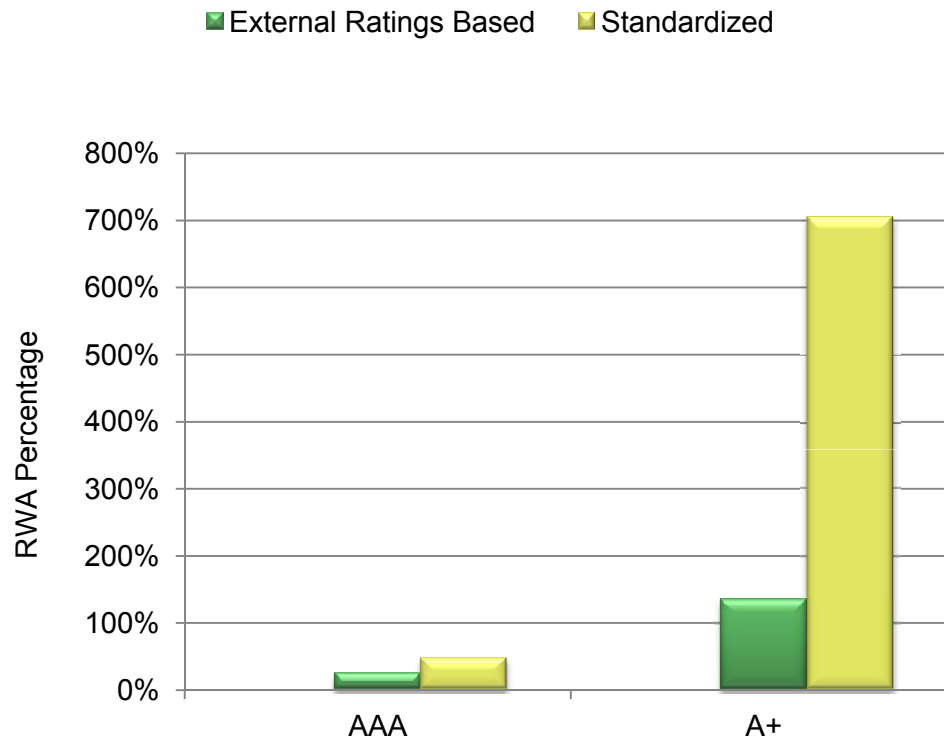
This transaction represents all tranches that were not retained by the seller. SA capital is again approximately 2-5 times higher than ERBA capital levels.

Tranche	External Ratings Based	Standardized
AAA	25%	48%
A+	135%	704%

Private Student Loan Transaction

Sallie Mae Private Student Loan – SLMPC04A – 5 Year Maturity

■ External Ratings Based ■ Standardized
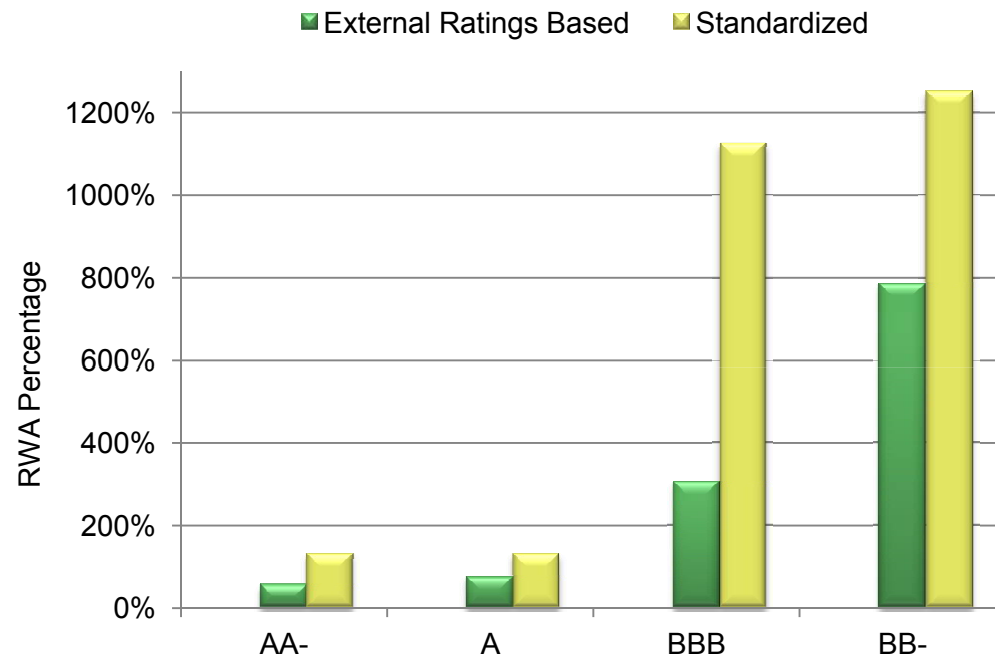
This transaction illustrates that across the capital structure, the proposed framework results in SA capital that is approximately 2-3 times higher than capital calculated utilizing the ERBA .

Tranche	External Ratings Based	Standardized
AA-	55%	131%
A	75%	131%
BBB	304%	1123%
BB-	786%	1250%

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SECURITIZATION CAPITAL ANALYSIS

Results

US Prime "A+" Auto Transaction

Maturity	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
1 Year	35.23%	40.00%	101.58%	9.35%	100.00%	0.83%	9.15%	30.00%
5 Year	105.61%	65.00%	101.58%	9.35%	100.00%	0.83%	9.15%	85.82%

US Subprime "AA" Auto Transaction

Maturity	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
1 Year	133.94%	25.00%	22.40%	30.47%	100.00%	4.56%	29.09%	30.00%
5 Year	133.94%	50.00%	22.40%	30.47%	100.00%	4.56%	29.09%	30.00%

"AA-" Trade Receivables Transaction

Maturity	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
1 Year	106.66%	30.00%	15.00%	27.25%	100.00%	0.84%	25.61%	30.00%

US CLO - TELOS 2013-3 CLO – 5 Year Maturity

Rating	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
AAA	15.00%	25.00%	15.00%	36.14%	100.00%	0.00%	15.20%	32.60%
AA	146.23%	116.53%	73.88%	25.78%	36.14%	0.00%	15.20%	46.44%
A	496.38%	175.79%	219.73%	18.30%	25.78%	0.00%	15.20%	46.44%
BBB	1104.68%	303.68%	475.72%	13.20%	18.30%	0.00%	15.20%	46.44%
BB	1250.00%	736.89%	855.51%	8.90%	13.20%	0.00%	15.20%	46.44%
B	1250.00%	1032.15%	1209.15%	7.20%	8.90%	0.00%	15.20%	46.44%

Dutch RMBS - DOLPH 2012-2 RMBS Transaction – 5 Year Maturity

Rating	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
AAA	90.46%	25.00%	25.66%	8.10%	100.00%	0.85%	7.74%	90.53%
AA	1245.76%	127.14%	697.27%	5.90%	8.10%	0.85%	7.74%	112.28%
A	1250.00%	185.06%	1138.47%	3.30%	5.90%	0.85%	7.74%	112.28%
BBB	1250.00%	312.96%	1250.00%	1.10%	3.30%	0.85%	7.74%	112.28%

US Prime RMBS – JPM13003 – 5 Year Maturity

Rating	Basel Proposal			Parameters				
	IRBA	ERBA	Standardized	Attach	Detach	W	KIRB	p (IRB)
AAA	15.00%	25.00%	84.88%	10.17%	100.00%	0.00%	1.32%	136.95%
AAA	15.00%	25.00%	84.88%	10.17%	100.00%	0.00%	1.32%	136.95%
AAA	15.00%	25.00%	84.88%	10.17%	100.00%	0.00%	1.32%	136.95%
AAA	15.00%	25.00%	53.91%	14.17%	100.00%	0.00%	1.32%	136.95%
AAA	15.00%	76.80%	750.20%	10.17%	14.17%	0.00%	1.32%	148.15%
AAA	32.01%	77.60%	1137.79%	7.17%	10.17%	0.00%	1.32%	148.15%
AA	82.07%	128.68%	1250.00%	6.16%	7.17%	0.00%	1.32%	148.15%
A	193.22%	185.86%	1250.00%	3.98%	6.16%	0.00%	1.32%	148.15%
BBB	477.66%	315.30%	1250.00%	2.51%	3.98%	0.00%	1.32%	148.15%
BB	905.75%	761.72%	1250.00%	1.44%	2.51%	0.00%	1.32%	148.15%
NR	1250.00%	1232.05%	1250.00%	0.00%	1.44%	0.00%	1.32%	148.15%

Data Support for Transactions without IRBA Results – 1 of 2

US Prime RMBS – JPM13002 – 5 Year Maturity			Basel Proposal		Parameters			
JPMMT 2013-2	**Tranche**	**Rating**	**ERBA**	**Standardized**	**Attach**	**Detach**	**W**	**Kg**
46640BAA2	A1	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAC8	A2	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAD6	A3	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAE4	A4	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAQ7	A5	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAR5	A6	AAA	25.00%	15.00%	10.65%	100.00%	0.00%	4.02%
46640BAF1	AM	AAA	77.36%	372.63%	7.35%	10.65%	0.00%	4.02%
46640BAJ3	B1	AA	128.55%	629.60%	6.24%	7.35%	0.00%	4.02%
46640BAK0	B2	A	185.96%	949.84%	4.11%	6.24%	0.00%	4.02%
46640BAL8	B3	BBB	315.07%	1249.21%	2.57%	4.11%	0.00%	4.02%
46640BAM6	B4	BB	761.00%	1250.00%	1.40%	2.57%	0.00%	4.02%
46640BAN4	B5	NR	1232.47%	1250.00%	0.00%	1.40%	0.00%	4.02%

US Prime RMBS – CML06FX1 – 5 Year Maturity			Basel Proposal		Parameters			
CMLT 2006-FX1	**Tranche**	**Rating[1]**	**ERBA**	**Standardized**	**Attach**	**Detach**	**W**	**Kg**
17309YAC1	A3	CCC-	1250.00%	484.91%	0.00%	100.00%	28.08%	7.66%
17309YAD9	A4	CCC-	1250.00%	484.91%	0.00%	100.00%	28.08%	7.66%
17309YAE7	A5	CCC-	1250.00%	484.91%	0.00%	100.00%	28.08%	7.66%

US CMBS- JPC13C16			Basel Proposal		Parameters			
JPMCC 2013-C16	**Tranche**	**Rating**	**ERBA**	**Standardized**	**Attach**	**Detach**	**W**	**Kg**
46641BAA1	A1	AAA	25.00%	15.00%	30.03%	100.00%	0.00%	8.00%
46641BAB9	A2	AAA	25.00%	15.00%	30.03%	100.00%	0.00%	8.00%
46641BAC7	A3	AAA	25.00%	15.00%	30.03%	100.00%	0.00%	8.00%
46641BAD5	A4	AAA	25.00%	15.00%	30.03%	100.00%	0.00%	8.00%
46641BAE3	ASB	AAA	25.00%	15.00%	30.03%	100.00%	0.00%	8.00%
46641BAH6	AS	AAA	74.09%	130.98%	22.65%	30.03%	0.00%	8.00%
46641BAJ2	B	AA-	140.24%	309.49%	16.14%	22.65%	0.00%	8.00%
46641BAK9	C	A-	212.02%	572.09%	12.51%	16.14%	0.00%	8.00%
46641BAL7	EC	A-	181.46%	288.30%	12.51%	30.03%	0.00%	8.00%
46641BAP8	D	BBB-	408.48%	984.77%	7.51%	12.51%	0.00%	8.00%
46641BAR4	E	BB	755.55%	1250.00%	5.63%	7.51%	0.00%	8.00%
46641BAT0	F	B	1039.49%	1250.00%	4.63%	5.63%	0.00%	8.00%
46641BAV5	NR	NR	1192.12%	1250.00%	0.00%	4.63%	0.00%	8.00%

[1] CCC- rating equivalent to Moody's Caa3 public rating. Shown as CCC- for presentation purposes.

DATA SUPPORT FOR TRANSACTION EXAMPLES

Data Support for Transactions without IRBA Results – 2 of 2

US CMBS – JPC07C20				Basel Proposal			Parameters			
JPMCC 2007-C20	Tranche	Rating		ERBA	Standardized		Attach	Detach	W[1]	Kg
46631QAC6	A3	AAA		25.00%	16.37%		31.59%	100.00%	3.37%	8.00%
46631QAD4	A4	A+		65.00%	16.37%		31.59%	100.00%	3.37%	8.00%
46631QAE2	ASB	AAA		25.00%	16.37%		31.59%	100.00%	3.37%	8.00%
46631QAF9	A1A	A+		65.00%	15.00%		31.59%	100.00%	0.00%	8.00%
46631QAH5	AM	BBB-		375.13%	239.24%		18.83%	31.59%	2.91%	8.00%
46631QBX9	AMFX	BBB-		375.13%	239.24%		18.83%	31.59%	2.91%	8.00%
46631QAJ1	AJ	B		969.62%	687.85%		11.18%	18.83%	2.91%	8.00%
46631QAM4	B	CCC		1230.06%	1104.85%		9.58%	11.18%	2.91%	8.00%
46631QAP7	C	CCC		1234.05%	1243.46%		8.31%	9.58%	2.91%	8.00%
46631QAR3	D	CC		1234.05%	1250.00%		6.87%	8.31%	2.91%	8.00%
46631QAT9	E	CC		1236.04%	1250.00%		5.76%	6.87%	2.91%	8.00%
46631QAV4	F	C		1236.04%	1250.00%		4.64%	5.76%	2.91%	8.00%
46631QAX0	G	C		1236.04%	1250.00%		3.36%	4.64%	2.91%	8.00%
46631QAZ5	H	C		1236.04%	1250.00%		1.61%	3.36%	2.91%	8.00%
46631QBB7	J	D		1236.04%	1250.00%		0.01%	1.61%	2.91%	8.00%
46631QBD3	K	D		1249.83%	1250.00%		0.00%	0.01%	2.91%	8.00%

Ally Prime Auto – ALLYA125 – 5 Year Maturity				Basel Proposal			Parameters			
Ally Auto Recbles 2012-5	Tranche	Rating		ERBA	Standardized		Attach	Detach	W	Kg
02005BAB2	A2	AAA		25.00%	15.00%		82.79%	100.00%	0.39%	8.00%
02005BAC0	A3	AAA		41.29%	15.00%		34.40%	82.79%	0.39%	8.00%
02005BAD8	A4	AAA		63.81%	221.61%		14.16%	34.40%	0.39%	8.00%
02005BAE6	B	AA+		95.12%	820.13%		9.29%	14.16%	0.39%	8.00%
02005BAF3	C	AA		125.77%	1221.45%		6.04%	9.29%	0.39%	8.00%
02005BAG1	D	A		186.91%	1250.00%		4.41%	6.04%	0.39%	8.00%

American Express Credit Card (High Quality) – AMCA1202 – 5 Year Maturity				Basel Proposal			Parameters			
American Express 2012-2	Tranche	Rating		ERBA	Standardized		Attach	Detach	W	Kg
02582JGD6	A	AAA		25.00%	47.73%		16.00%	100.00%	0.56%	8.00%
02582JGE4	B	A+		134.78%	704.41%		10.25%	16.00%	0.56%	8.00%

Sallie Mae Private Student Loan – SLMPC04A – 5 Year Maturity				Basel Proposal			Parameters			
SLM Private 2004-A	Tranche	Rating		ERBA	Standardized		Attach	Detach	W	Kg
78443CBG8	A2	AA-		55.00%	131.42%		15.62%	100.00%	9.53%	8.00%
78443CBH6	A3	A		75.00%	131.42%		15.62%	100.00%	9.53%	8.00%
78443CBJ2	B	BBB		304.40%	1123.40%		10.74%	15.62%	9.53%	8.00%
78443CBK9	C	BB-		785.53%	1250.00%		1.03%	10.74%	9.53%	8.00%

[1] Different W values within the same transaction result from distinct collateral pools underlying different tranches.

Agenda

SECURITIZATION CAPITAL ANALYSIS

Weighted Average RWA of Transactions where IRBA was able to be Calculated
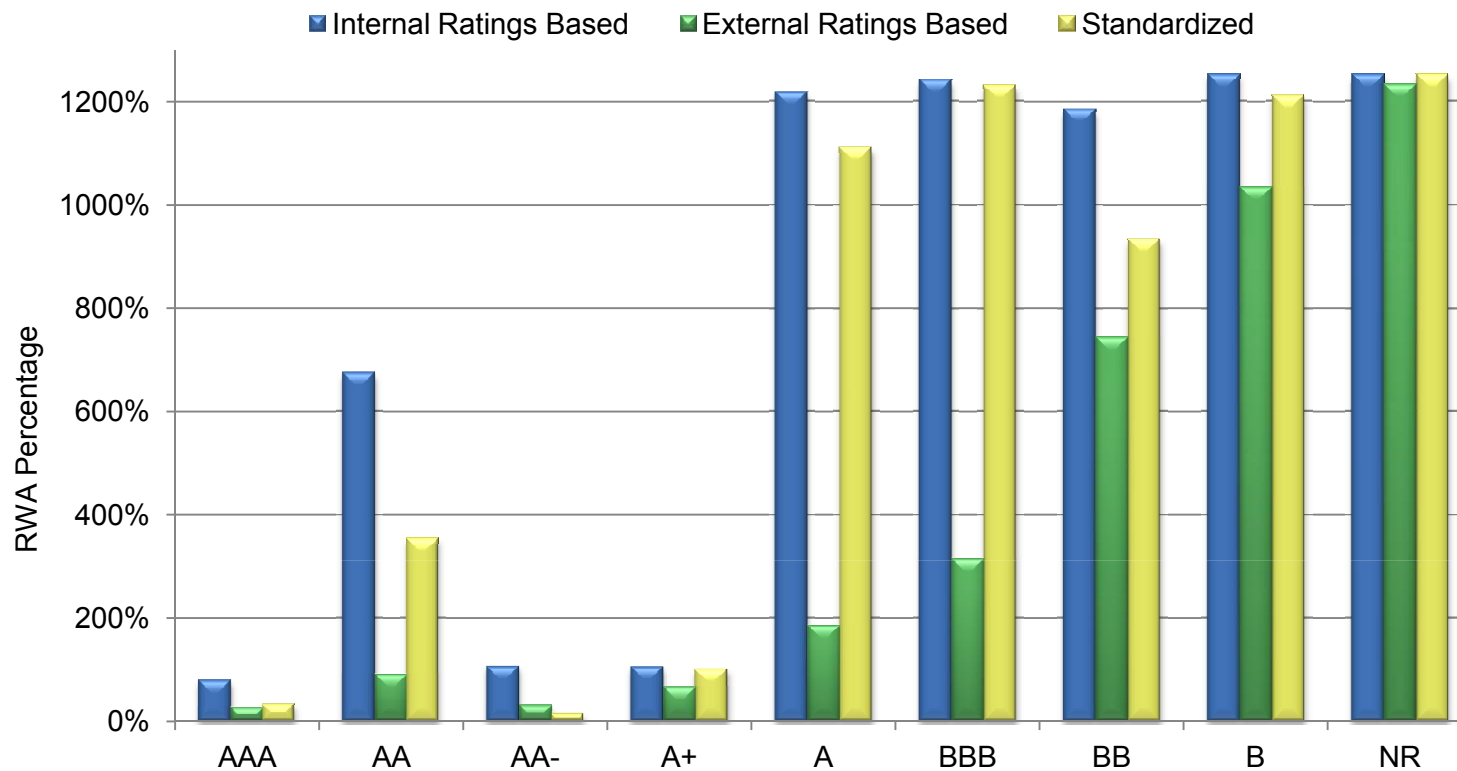
Tranche	Internal Ratings Based	External Ratings Based	Standardized
AAA	79%	25%	33%
AA	674%	89%	355%
AA-	107%	30%	15%
A+	106%	65%	102%
A	1216%	185%	1110%
BBB	1241%	313%	1230%
BB	1183%	742%	932%
B	1250%	1032%	1209%
NR	1250%	1232%	1250%

This slide represents the weighted average of the six transactions where IRBA was calculated. The lack of calibration of the three approaches is distinctly noticeable and the IRBA provides higher capital than both alternative approaches in all cases.

Weighted Average RWA of Transactions where Only External Ratings Based Approach and Standardized Approach could be Calculated
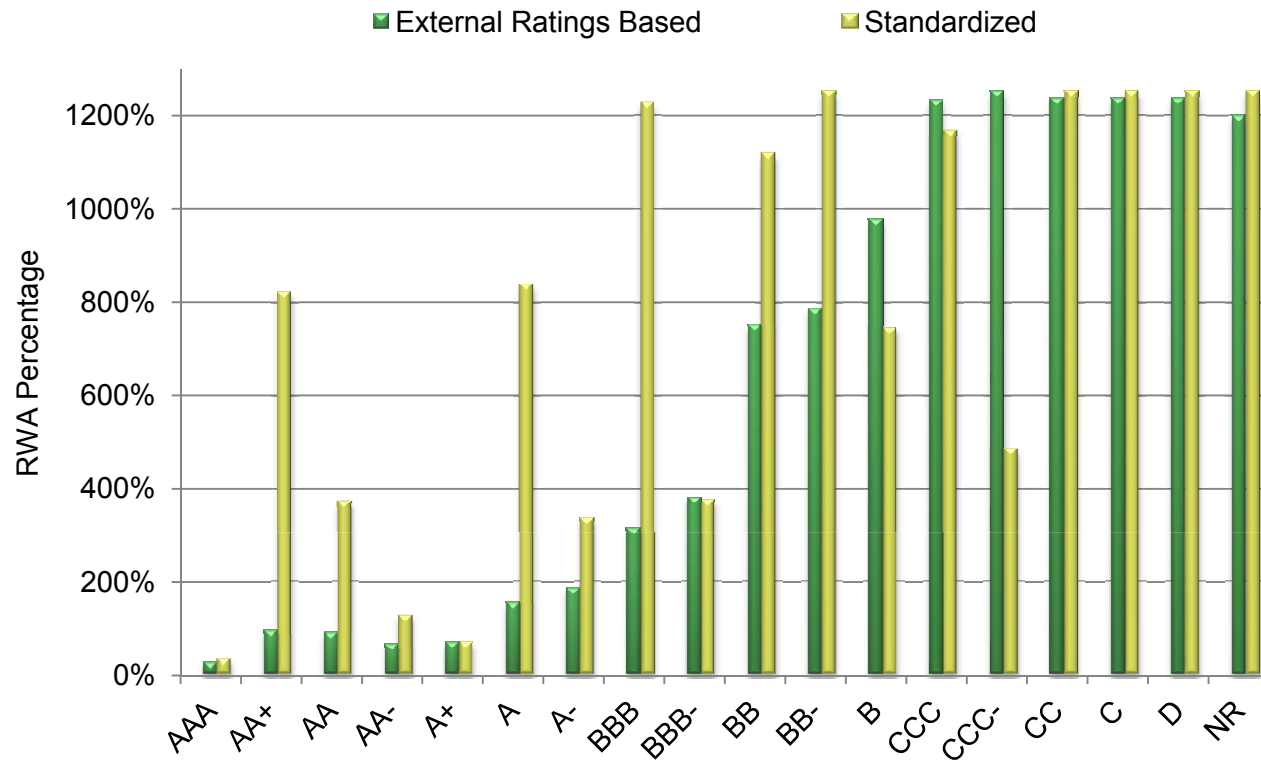
This slide represents the weighted average calculations for the nine transactions where IRBA could not be calculated. We see that for the higher rated tranches that banks typically hold (AAA through BB-), the SA yields materially higher capital than ERBA for almost all of these higher rated tranches.

Tranche	External Ratings Based	Standardized
AAA	27%	35%
AA+	95%	820%
AA	90%	372%
AA-	66%	127%
A+	70%	71%
A	154%	837%
A-	187%	337%
BBB	312%	1226%

Tranche	External Ratings Based	Standardized
BBB-	381%	375%
BB	750%	1118%
BB-	786%	1250%
B	976%	744%
CCC	1232%	1166%
CCC-	1250%	485%
CC	1235%	1250%
C	1236%	1250%
D	1236%	1250%
NR	1199%	1250%

WEIGHTED AVERAGE CAPITAL ACROSS ALL TRANSACTIONS

ANNEX 6: TRANSPARENT CALIBRATION PER ASSET CLASSES – CMA – STANDARSISED APPROACH *

Framework	Proposed Regulatory Asset Class	Typically real life asset class	Regulatory LGD	Stressed Concentration Correlation ρ^{*}_{M}	(for Senior Tranche) Capital Surcharge Scaling Factor $CSSF_M$	(for Non-Senior Tranche) Capital Surcharge Scaling Factor $CSSF_M$
Wholesale	Granular Short Term Corporate Exposures	Trade Receivables, Trade Finance (typically assets with 1 to 3 months maturity)	46%	8%	1.00	1.05
Wholesale	Granular Low RW Medium to Long Term Corporate Exposures	High Grade (typically assets rated in the 100% category or exceptionally lower)	46%	22%	1.05	1.18
Wholesale	Granular High RW Medium to Long Term Corporate Exposures	Leveraged Loans (typically assets rated in the single B category or risk weighted at 150%)	46%	16%	1.10	1.36
Wholesale	Granular SME	European SME (BCBS128, art 273, corporate exposures where the reported sales for the consolidated group of which the firm is a part is less than €50 million)	45%	15%	1.05	1.17
Wholesale	Specialised Lending (Commodities Finance)	Commodities Finance (BCBS128, art 224, structured short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (e.g. crude oil, metals, or crops)	27%	13%	1.00	1.18
Wholesale	Specialised Lending (Project Finance)	Project Finance (BCBS128, art 221, large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure)	27%	33%	1.10	1.33
Wholesale	Specialised Lending (Object Finance)	Transportation (BCBS128, art 223, ships, aircraft, satellites, railcars, and fleets)	27%	27%	1.16	1.52
Wholesale	Specialised Lending (Income Producing Real Estate)	CMBS (BCBS128, art 226), office buildings to let, retail space, multifamily residential buildings, industrial or warehouse space, and hotels)	47%	36%	1.06	1.19
Wholesale	Specialised Lending (High Volatility Commercial Real Estate)	CRE CMBS (BCBS128, art 227, real estate assets where source of repayment is substantially uncertain)	47%	34%	1.08	1.24
Wholesale	Other Granular Wholesale	Typically, CFOs of Hedge Funds, Private Equity, Market Value CLOs	76%	30%	1.07	1.23
Wholesale	Other Non-Granular Wholesale		53%	40%	1.08	1.26
Retail	Low RW Residential Mortgages	Typically, Prime Mortgages	25%	11%	1.14	1.47
Retail	High RW Residential Mortgages	Typically, Subprime Mortgages	45%	12%	1.22	1.73
Retail	Revolving Qualifying Retail	Credit Cards	75%	3%	1.06	1.39
Retail	Other Retail	Consumer Loans, Auto Loans, etc...	75%	12%	1.10	1.35

* Full details appear in G. Duponcheele, W. Perraudin & D. Totouom-Tangho, Calibration of the Simplified Supervisory Formula Approach (BNP Paribas mimeo, 21 March 2014).

Annex 7 – Calibration under the Standardised Approach

The table hereafter summarises suggested calibration for the capital surcharge in the CMA, MSSFA and SFFA for different securitisation asset classes, both for senior and non-senior tranches, when SA Risk Weights are employed. This calibration is based on the work done by the Quant group. The calibration is transparent and is described in details in the paper "Calibration of the Simplified Supervisory Formula Approach" by Duponcheele and al.

The last column in the table shows the calibration under BCBS 269 for the capital surcharge of the SSFA SA for which a one-size-fits-all capital surcharge of 100% is proposed.

Framework	Proposed Regulatory Asset Class	CALIBRATION UNDER THE STANDARDISED APPROACH						
		(for Senior Tranche) Capital Surcharge CMA (CSSFM-1)	(for Senior Tranche) Capital Surcharge MSSFA (p2-p1)	(for Senior Tranche) Capital Surcharge SSFA (p)	(for Non-Senior Tranche) Capital Surcharge CMA (CSSFM-1)	(for Non-Senior Tranche) Capital Surcharge MSSFA (p2-p1)	(for Non-Senior Tranche) Capital Surcharge SSFA (p)	(for Senior and Non-Senior Tranche) BCBS 269 Capital Surcharge SSFA (p)
Wholesale	Granular Short Term Corporate Exposures	0%	7%	27%	5%	11%	29%	100%
Wholesale	Granular Low RW Medium to Long Term Corporate Exposures	5%	13%	47%	18%	26%	54%	100%
Wholesale	Granular High RW Medium to Long Term Corporate Exposures	10%	17%	36%	36%	41%	52%	100%
Wholesale	Granular SME	5%	12%	43%	17%	25%	49%	100%
Wholesale	Specialised Lending (Commodities Finance)	0%	6%	21%	18%	18%	28%	100%
Wholesale	Specialised Lending (Project Finance)	10%	20%	55%	33%	47%	69%	100%
Wholesale	Specialised Lending (Object Finance)	16%	26%	50%	52%	69%	77%	100%
Wholesale	Specialised Lending (Income Producing Real Estate)	6%	13%	55%	19%	29%	62%	100%
Wholesale	Specialised Lending (High Volatility Commercial Real Estate)	8%	18%	52%	24%	37%	62%	100%
Wholesale	Other Granular Wholesale	7%	13%	54%	23%	31%	62%	100%
Wholesale	Other Non-Granular Wholesale	8%	17%	58%	26%	34%	67%	100%
Retail	Low RW Residential Mortgages	14%	21%	44%	47%	55%	66%	100%
Retail	High RW Residential Mortgages	22%	28%	44%	73%	88%	89%	100%
Retail	Revolving Qualifying Retail	6%	9%	23%	39%	35%	41%	100%
Retail	Other Retail	10%	16%	46%	35%	42%	61%	100%

Annex 8 – Calibration of the SSFA with one parameter

Table 2: Calibration of the SSFA with one parameter

	Securitisation Regulatory Asset Class	Senior p	Non-Senior p
Wholesale	Granular Short Term Bank/Corporate	0.27	0.29
	Granular Low RW Medium to Long Term Bank/Corporate	0.47	0.54
	Granular High RW Medium to Long Term Bank/Corporate	0.36	0.52
	Granular Small- and Medium-sized Entities	0.43	0.49
	Specialised Lending (Commodities Finance)	0.21	0.28
	Specialised Lending (Project Finance)	0.55	0.69
	Specialised Lending (Object Finance)	0.50	0.77
	Specialised Lending (Income Producing Real Estate)	0.55	0.62
	Specialised Lending (High Volatility Commercial Real Estate)	0.52	0.62
	Other Granular Wholesale	0.54	0.62
	Other Non-Granular Wholesale	0.58	0.67
Retail	Low RW Residential Mortgages	0.44	0.66
	High RW Residential Mortgages	0.44	0.89
	Revolving Qualifying Retail	0.23	0.41
	Other Retail	0.46	0.61

Source: D. Duponcheele, W. Perraudin & D. Totouom-Tangho, Calibration of the Simplified Supervisory Approach (BNP Paribas mimeo, 21 March 2014).

Annex 9 – Risk-weighting of lower-rated tranches

This table compares ERBA proposed risk weights for lower-rated senior tranches with Moody's idealised expected loss rates and implied risk weights:

Rating	ERBA Risk Weight (Senior Tranche)		Moody's Idealised Expected Loss Rates		Moody's Implied Risk Weights	
	1 year	5 year	1 year	5 year	1 year	5 year
CCC	460%	530%	14%	27%	460%	530%
CC	1250%	1250%	**55%**	**55%**	**837%**	**810%**
C	1250%	1250%	100%	100%	1250%	1250%
D	1250%	1250%	100%	100%	1250%	1250%

This table compares ERBA proposed risk weights for lower-rated senior tranches with Fitch idealised default rates and implied risk weights:

Rating	ERBA Risk Weight (Senior Tranche)		Fitch Idealised Default Rates		Fitch Implied Risk Weights	
	1 year	5 year	1 year	5 year	1 year	5 year
CCC	460%	530%	25%	51%	460%	530%
CC	1250%	1250%	**51%**	**75%**	**871%**	**887%**
C	1250%	1250%	75%	100%	1250%	1250%
D	1250%	1250%	100%	100%	1250%	1250%

Implied risk weights are calculated by extrapolating between the CCC risk weights and 1250%, according to the relative expected loss and default rates. The average outcome is 851%.

Annex 10 – Proposed changes to IAA provisions

46.   A bank that is located in a jurisdiction that permits use of the External Ratings-Based Approach may use an Internal Assessment Approach (IAA) as described in paragraphs 66 to 69 for its unrated securitisation exposure (eg liquidity facilities and credit enhancements) to an ABCP programme that is an SA pool or its other unrated securitisation exposure funded directly by the bank. In order to use the IAA, a bank must have supervisory approval to use the IRB approach. A bank should consult with its national supervisor on whether and when it can apply the IAA to its securitisation exposures, especially where the bank can apply IRB for some, but not all underlying exposures. To ensure appropriate capital levels, there may be instances where the supervisor requires a treatment other than this general rule.

…

(iii)   Internal Assessment Approach (IAA)

66.   Subject to supervisory approval a bank may use its internal assessments of the credit quality of the securitisation exposures the bank extends to ABCP programmes (eg liquidity facilities and credit enhancements) and unrated securitisation exposures the bank funds directly if the bank's internal assessment process meets the operational requirements below. Internal assessments of such exposures provided to ABCP programmes must be mapped to equivalent external ratings of an ECAI. Those rating equivalents are used to determine the appropriate risk weights under the External Ratings-Based Approach for purposes of assigning the notional amounts of the exposures.

67.   A bank's internal assessment process must meet the following operational requirements in order to use internal assessments in determining the IRB capital requirement for securitisation exposures arising from liquidity facilities, credit enhancements, or other exposures extended to an ABCP programme and for unrated securitisation exposures funded directly by the bank.

(a)   For the unrated exposure to qualify for the IAA, the ABCP must be externally rated. The ABCP itself is subject to the External Ratings Based Approach.[Reserved]

(b)   The internal assessment of the credit quality of athe securitisation exposure to the ABCP programme must be based on ECAI criteria for the asset type purchased, and must be the equivalent of at least investment grade when initially assigned to an exposure. In addition, the internal assessment must be used in the bank's internal risk management processes, including management information and economic capital systems, and generally must meet all the relevant requirements of the IRB framework.

(c)   In order for banks to use the IAA, their supervisors must be satisfied (i) that the ECAI meets the ECAI eligibility criteria outlined in paragraphs 90 to 108 and (ii) with the ECAI rating methodologies used in the process. In addition, banks have the responsibility to demonstrate to the satisfaction of their

supervisors how these internal assessments correspond with the relevant ECAI's standards.

For instance, when calculating the credit enhancement level in the context of the IAA, supervisors may, if warranted, disallow on a full or partial basis any seller-provided recourse guarantees or excess spread, or any other first-loss credit enhancements that provide limited protection to the bank.

(d)   The bank's internal assessment process must identify gradations of risk. Internal assessments must correspond to the external ratings of ECAIs so that supervisors can determine which internal assessment corresponds to each external rating category of the ECAIs.

(e)   The bank's internal assessment process, particularly the stress factors for determining credit enhancement requirements, must be at least as conservative as the publicly available rating criteria of the major ECAIs that are externally rating the ~~ABCP programme's~~ commercial paper issued by the bank's ABCP programme, if any, or of at least two of the major ECAIs, if otherwise, for the asset type being purchased by the programme. However, banks should consider, to some extent, all publicly available ECAI rating methodologies in developing their internal assessments.

- In the case where (i) the commercial paper issued by an ABCP programme is externally rated by two or more ECAIs, or the bank otherwise selects two or more ECAIs whose rating criteria will be the basis for its internal assessments, and (ii) the different ECAIs' benchmark stress factors require different levels of credit enhancement to achieve the same external rating equivalent, the bank must apply the ECAI stress factor that requires the most conservative or highest level of credit protection. For example, if one ECAI required enhancement of 2.5 to 3.5 times historical losses for an asset type to obtain a single A rating equivalent and another required two to three times historical losses, the bank must use the higher range of stress factors in determining the appropriate level of seller-provided credit enhancement.
- When selecting ECAIs to externally rate an ABCP programme or whose published criteria will otherwise provide the basis for the bank's internal assessment process, a bank must not choose only those ECAIs that generally have relatively less restrictive rating methodologies. In addition, if there are changes in the methodology of one of the selected ECAIs, including the stress factors, that adversely affect the external rating of the programme's commercial paper, then the revised rating methodology must be considered in evaluating whether the internal assessments assigned to ABCP programme exposures or other unrated exposures are in need of revision.
- A bank cannot utilise an ECAI's rating methodology to derive an internal assessment if the ECAI's process or rating criteria is not publicly available. However, banks should consider the non-publicly available methodology — to the extent that they have access to such information — in developing their internal assessments, particularly if it is more conservative than the publicly available criteria.
- In general, if the ECAI rating methodologies for an asset or exposure are not publicly available, then the IAA may not be used. However, in certain instances, for example, for new or uniquely structured transactions, which are

not currently addressed by the rating criteria of an ECAI rating the programme's commercial paper, a bank may discuss the specific transaction with its supervisor to determine whether the IAA may be applied to the related exposures.

(f)   Internal or external auditors, an ECAI, or the bank's internal credit review or risk management function, must perform regular reviews of the internal assessment process and assess the validity of those internal assessments. If the bank's internal audit, credit review, or risk management functions perform the reviews of the internal assessment process, then these functions must be independent of the ABCP programme or other relevant business line, as well as the underlying customer relationships.

(g)   The bank must track the performance of its internal assessments over time to evaluate the performance of the assigned internal assessments and make adjustments, as necessary, to its assessment process when the performance of the exposures routinely diverges from the assigned internal assessments on those exposures.

(h)   The ABCP programme or, as applicable, the bank's relevant business line must have credit and investment guidelines, ie underwriting standards, for the ABCP programme or that business line, as applicable. In the consideration of an asset purchase, the ABCP programme (ie the programme administrator) or the business line, as applicable, should develop an outline of the structure of the purchase transaction. Factors that should be discussed include the type of asset being purchased; type and monetary value of the exposures arising from the provision of liquidity facilities and credit enhancements; loss waterfall; and legal and economic isolation of the transferred assets from the entity selling the assets.

(i)   A credit analysis of the asset seller's risk profile must be performed and should consider, for example, past and expected future financial performance; current market position; expected future competitiveness; leverage, cash flow, and interest coverage; and debt rating. In addition, a review of the seller's underwriting standards, servicing capabilities, and collection processes should be performed.

(j)   The ABCP programme's or relevant business line's underwriting policy must establish minimum asset eligibility criteria that, among other things:

•   exclude the purchase of assets that are significantly past due or defaulted;
•   limit excess concentration to individual obligor or geographic area; and
•   limit the tenor of the assets to be purchased.

(k)   The ABCP programme or relevant business line, as applicable, should have collections processes established that consider the operational capability and credit quality of the servicer. The programme or business line should mitigate to the extent possible seller/servicer risk through various methods, such as triggers based on current credit quality that would preclude co-mingling of

funds and impose lockbox arrangements that would help ensure the continuity of payments to the ABCP programme or the bank.

(l)   The aggregate estimate of loss on an asset pool that the ABCP programme or relevant business line, as applicable, is considering purchasing must consider all sources of potential risk, such as credit and dilution risk. If the seller-provided credit enhancement is sized based on only credit-related losses, then a separate reserve should be established for dilution risk, if dilution risk is material for the particular exposure pool. In addition, in sizing the required enhancement level, the bank should review several years of historical information, including losses, delinquencies, dilutions and the turnover rate of the receivables. Furthermore, the bank should evaluate the characteristics of the underlying asset pool (eg weighted-average credit score) and should identify any concentrations to an individual obligor or geographic region and the granularity of the asset pool.

(m) The ABCP programme or other relevant business line, as applicable, must incorporate structural features into the purchase of assets in order to mitigate potential credit deterioration of the underlying portfolio. Such features may include wind-down triggers specific to a pool of exposures.

68.   The exposure amount of the securitisation exposure to the ABCP programme or other unrated securitisation exposure must be assigned to the risk weight in the External Ratings-Based Approach appropriate to the credit rating equivalent assigned to the bank's exposure.

69.   If a bank's internal assessment process is no longer considered adequate, the bank's supervisor may preclude the bank from applying the IAA to its ABCP exposures or other unrated exposures, both existing and newly originated, for determining the appropriate capital treatment until the bank has remedied the deficiencies. In this instance, the bank must revert to the Standardised Approach described in paragraphs 70 to 77.

Collateral Cumulative Loss by Vintage (US)
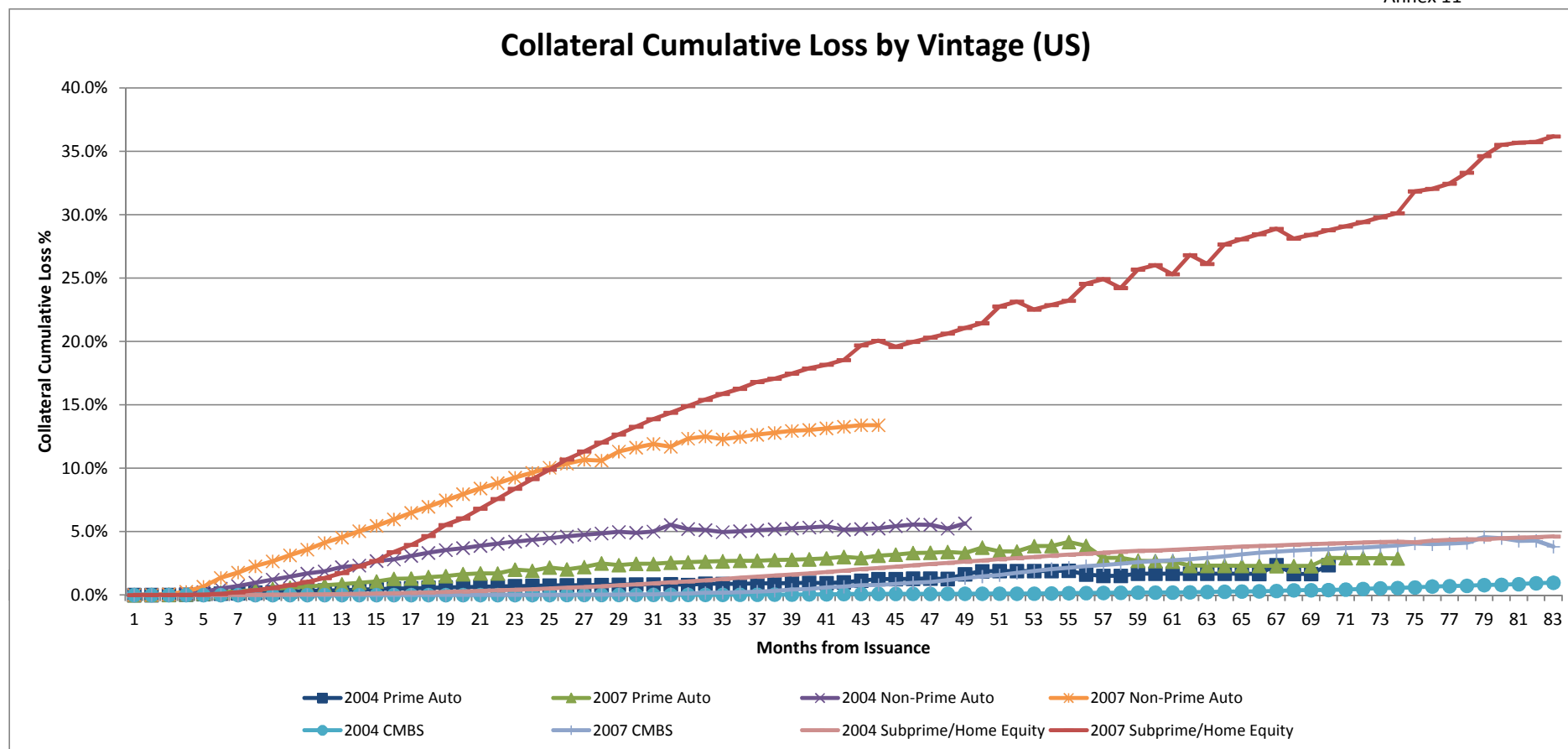
Source: Auto collateral loss data sourced from **JP Morgan Research** consumer ABS research reports. CMBS and Subprime/Home Equity loss data sourced from **Intex** (data retrieved as of 2/24/13)

Note: For Auto, the loss curve ends prior to Month 83 as the weighted-average life of the collateral was shorter than the other asset classes

CMA with scenarios of parameters on sample of transactions

CMA using standard CSSF of 1.3 and 20% stressed correlation **Base** **Stress** **Stresses**

				Pool RW * 2	LGD *1.5		
					Current rho*	rho* x2	rho* x5
French SME	**Attachment**	**SSFA KIRB uncapped and unfloored**	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
Tranche S	6.10%	32.3%	32.1%	112.1%	64.1%	61.9%	71.5%
Mezzanine	3.50%	1243.0%	770.0%	1167.8%	892.6%	936.8%	767.1%
Equity	0.00%	1250.0%	1124.0%	1239.7%	1153.0%	1179.7%	1048.0%
CLO Corporate High grade	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
Tranche S	4.60%	23.1%	23.7%	79.2%	43.2%	46.5%	56.7%
Mezzanine	0.50%	1237.4%	879.8%	1167.9%	913.0%	841.1%	626.8%
Equity	0.00%	1250.0%	1237.8%	1249.5%	1230.3%	1201.9%	1003.0%
CLO US pre crisis	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A-1L	26.76%	45.4%	44.8%	347.3%	163.0%	181.7%	232.5%
A-2L	21.03%	945.6%	588.3%	1245.3%	927.9%	859.4%	737.6%
A-3L	16.92%	1250.0%	814.9%	1249.0%	1066.1%	985.6%	823.7%
B-1L	11.25%	1250.0%	1018.3%	1249.8%	1166.0%	1095.4%	915.5%
B-2L	8.57%	1250.0%	1152.3%	1250.0%	1220.6%	1172.3%	999.2%
PREF	0.00%	1250.0%	1232.5%	1250.0%	1245.7%	1231.5%	1129.2%
CLO US post crisis	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A	37.74%	6.6%	3.2%	150.1%	56.8%	79.1%	138.8%
B1	31.60%	243.5%	131.0%	1186.9%	509.7%	524.4%	540.9%
B2	25.46%	491.0%	330.2%	1235.6%	730.1%	698.2%	642.6%
C	20.30%	930.5%	584.8%	1247.2%	927.8%	860.5%	741.7%
D	15.41%	1249.8%	831.4%	1249.5%	1075.3%	996.1%	835.1%
E	10.39%	1250.0%	1045.3%	1249.9%	1177.9%	1111.1%	933.3%
F	8.36%	1250.0%	1159.2%	1250.0%	1223.1%	1176.9%	1007.6%
SUBORD	0.00%	1250.0%	1232.6%	1250.0%	1245.7%	1231.7%	1131.4%
Benelux RMBS 1	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A	8.30%	0.4%	0.1%	1.1%	1.3%	2.3%	6.0%
B	6.90%	47.2%	10.3%	82.2%	74.9%	98.3%	142.5%
C	4.40%	138.9%	39.2%	203.3%	174.9%	194.6%	220.2%
D	1.60%	573.7%	217.8%	578.5%	511.7%	485.7%	420.2%
E	0.00%	1238.3%	830.0%	1106.5%	1070.5%	1007.6%	833.8%
Italian SME	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A	36.50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
B	0.00%	307.2%	253.5%	506.9%	356.3%	356.3%	355.9%
UK RMBS	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
Class-A	18.22%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Class-M	14.73%	0.0%	0.0%	0.0%	0.2%	0.9%	8.3%
N	13.23%	0.1%	0.0%	0.3%	0.7%	2.6%	15.6%
B	0.00%	207.8%	105.2%	210.4%	194.0%	193.6%	189.1%
Benelux RMBS 2	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A	6.67%	0.2%	0.0%	0.4%	0.6%	1.2%	3.5%
B	2.00%	189.3%	57.5%	241.3%	210.1%	223.3%	240.9%
C	0.00%	1088.8%	654.0%	994.9%	940.9%	883.6%	736.3%
French Auto	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
Parts A	21.68%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Part B	1.48%	104.4%	40.9%	132.8%	85.7%	86.3%	94.7%
Fonds de Reserve	0.00%	1250.0%	939.1%	1182.8%	1172.7%	1164.2%	1050.0%
Equity	0.00%	1250.0%	1250.0%	1250.0%	1250.0%	1250.0%	1250.0%
US Subprime RMBS	**Attachment**	uncapped and unfloored	**CMA**	**CMA**	**CMA**	**CMA**	**CMA**
A	23.77%	545.0%	322.4%	840.1%	673.7%	674.6%	681.7%
B	0.00%	1250.0%	1225.3%	1250.0%	1248.5%	1245.3%	1222.8%

Annex 13 – Capital requirements cap based on retained economic interest

<u>(IRB Approach)</u>

We understand that the addition of the overall cap aims to provide with more conservative capital requirements for an originator bank, which should not be required to hold more capital after securitisation than before.

The proposal of the Committee of a pro rata calculation of the maximum capital requirement, where a bank determines its maximum capital requirement by multiplying the largest proportion of interest that the bank holds for each tranche by the capital charge of the underlying pool is in our view a positive achievement compared to the BCBS 236 proposal where the cap was simply on the total capital charge of the underlying portfolio.

However, we believe that the idea of capital neutrality for originators, which underlies this proposal, is only partially transcribed by this computation, especially when an originator bank achieves significant risk transfer and net economic interest retention in the transaction at the same time.

We believe that in order to avoid any regulatory arbitrage and to provide with more conservative capital charge for an originator bank the overall cap should be computed by multiplying the percentage of economic interest hold by the originator bank by the capital charge of the underlying pool.

CRR Net economic interest retention rules (Art. 405) claims for an overall cap proportional to the underlying portfolio capital charge for originators:

An originator willing to attract investors regulated by CRR has to retain at least 5% of net economic interest in the securitisation. Under CRR Art. 405, this can be achieved through vertical retention of 5% of each tranches or through random selection of 5% of the assets to be transferred to the SPV.

If the option of random selection is chosen, the capital charge for the originator after securitisation would equal 5% of the portfolio before securitisation (assuming a granular pool), whereas the capital charge after securitisation would be greater with the vertical retention option.

For instance, let us assume a French RMBS structure aiming risk transfer. The risk parameters of the underlying pool are estimated under the IRB approach and are reflective from the average good quality of the French residential book:

N parameter	10,000
EAD	1,000 M€
WA 1 year PD	1.5%
WA LGD	15.0%
EL	2.3 M€
RWA	100.0 M€
Kirb	10.3 M€

For the purpose of the example, we assume a tranching similar to the one achieved by Orange Lion 2013-10, which is a €2bn Dutch prime RMBS transaction issued in July 2013, where the originator has achieved sale of all credit risk in the underlying portfolio to external investors.

The IRB approach would be applied for the capital charge computation of the securitised exposures (retail parameters). If we assume a vertical 5% retention of all the tranches:

Class	Attachment point	Detachment point	Maturity (Y)	% Retention	p	KSSFA	Tranche RW (%)	Tranche RWA (total)	Tranche RWA (Originator)	Capital charge for Originator
A	9.1%	100.0%	5	5%	123%	0.0%	15.0%	136 M€	7 M€	0.5 M€
B	6.4%	9.1%	5	5%	137%	1.0%	15.0%	4 M€	0 M€	0.0 M€
C	4.1%	6.4%	5	5%	137%	5.6%	70.1%	16 M€	1 M€	0.1 M€
D	2.2%	4.1%	5	5%	137%	24.3%	303.9%	59 M€	3 M€	0.2 M€
E	0.5%	2.2%	5	5%	137%	68.8%	984.1%	162 M€	8 M€	0.6 M€
F	0.0%	0.5%	5	5%	137%	121.1%	1250.0%	63 M€	3 M€	0.3 M€
								441 M€	22 M€	1.8 M€

Under such an example and without the overall cap, the originator would have a capital charge of 1.8 M€ after securitisation, equal to 5% of the total capital charge of the tranches, which should reflect 5% of the risks of the underlying portfolio, whereas the 5% share of the portfolio risks would actually equal 0.5 M€ if it was directly computed on the capital charge of the underlying portfolio (5%*10.3 M€).

Despite the transfer of 95% of the net economic interest to external investors, the originator would proportionally have more capital charge after securitisation than before if no overall cap based on the underlying portfolio's capital was applied.

This example claims for an overall cap based on the capital charge of the underlying pool since it would create a discrepancy between the two options permitted by the CRR regulation to achieve the net economic interest retention.

This first example leads also to the fact that the overall cap for an originator should be computed as the multiplication of the capital charge of the underlying pool by the economic interest retention proportion instead of the maximum proportion of retention of all the tranches.

Indeed, the proposed overall cap could create an incentive for originator to transfer the riskiest tranches of the structure. For instance, let us consider the same structure as in the first example, but where 20% retention is achieved on the mezzanine tranches C and D:

Retention structure n°1 :

Class	Attachment point	Detachment point	Maturity (Y)	% Retention	p	KSSFA	Tranche RW	Tranche RWA (total)	Tranche RWA (Originator)	Capital charge for Originator
A	9.1%	100.0%	5	5%	123%	0.0%	15.0%	136 M€	7 M€	0.5 M€
B	6.4%	9.1%	5	5%	137%	1.0%	15.0%	4 M€	0 M€	0.0 M€
C	4.1%	6.4%	5	20%	137%	5.6%	70.1%	16 M€	3 M€	0.3 M€
D	2.2%	4.1%	5	20%	137%	24.3%	303.9%	59 M€	12 M€	0.9 M€
E	0.5%	2.2%	5	5%	137%	68.8%	984.1%	162 M€	8 M€	0.6 M€
F	0.0%	0.5%	5	5%	137%	121.1%	1250.0%	63 M€	3 M€	0.3 M€
								441 M€	33 M€	2.7 M€

The overall cap computed as the maximum retention of each tranches multiplied by the underlying pool capital would equal 2.05 M€ (20%*10.3 M€). This overall cap would be exactly the same if the 20% retention was on the most junior tranches E and F as follow:

Retention structure n°2:

Class	Attachment point	Detachment point	Maturity (Y)	% Retention	p	KSSFA	Tranche RW	Tranche RWA (total)	Tranche RWA (Originator)	Capital charge for Originator
A	9.1%	100.0%	5	5%	123%	0.0%	15.0%	136 M€	7 M€	0.5 M€
B	6.4%	9.1%	5	5%	137%	1.0%	15.0%	4 M€	0 M€	0.0 M€
C	4.1%	6.4%	5	5%	137%	5.6%	70.1%	16 M€	1 M€	0.1 M€
D	2.2%	4.1%	5	5%	137%	24.3%	303.9%	59 M€	3 M€	0.2 M€
E	0.5%	2.2%	5	20%	137%	68.8%	984.1%	162 M€	32 M€	2.6 M€
F	0.0%	0.5%	5	20%	137%	121.1%	1250.0%	63 M€	13 M€	1.0 M€
								441 M€	56 M€	4.5 M€

In order to avoid any regulatory incentive, we believe that the overall cap should be computed as the capital charge of the underlying pool (10.3 M€) **multiplied by the percentage of economic interest retained by the originator after securitisation. This percentage of economic retention should be seen as the RWA after securitisation retained by the originator divided by the total RWA after securitisation.**

With the overall cap computation proposed by the Committee, the retention structure n°1 and n°2 would be exactly the same from an originator capital charge point of view: the overall cap would equal 2.05 M€, whereas the retention of risk is not the same. Our proposal to compute the cap on the % of economic retention would lead in our view to more conservative capital charge for the originator and to a more continuous overall cap:

	Retention structure n°1	Retention structure n°2
Kirb (A)	10.3 M€	10.3 M€
RWA retained by originator after securitisation (B)	33.3 M€	56 M€
Total RWA after securitisation (C)	440.5 M€	440.5 M€
% of originator economic interest (D = B/C)	7.56%	12.66%
Overall Cap (A * D)	**0.8 M€**	**1.3 M€**

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Illustration of Program Wide Credit Enhancement treated as Resecuritization   Annex 14

	Current Basel III Resecuritization Language	Maximum Aggregate Capital Requirement
Number of securitizations transactions in the eligible ABCP conduit	10	
Mapped rating of securitization transactions	AAA	
Size of each securitization transaction	$100	
RWA % for each securitization transaction	15%	
Liquidity Agreement Factor	102%	
Total Notional of Liquidity Facilities	$1,000	
% of program-wide credit enhancement	10%	
Notional of program-wide credit enhancement	$100	
(A) Calculation of RWA for program-wide C/E		
KSA (assuming 15% RWA for the underlying securitizations)	1.2%	
RW using standardized approach (p=1.5)	373%	
RWA	**$373**	
(B) Calculation of securitization RWA for the liquidity facilities		
102% x Notional of liquidity facilities x 15%		**$153**
90% x 102% x Notional of liquidity facilities x 15%	**$138**	
Total RWA (A) + (B)	**$511**	**$153**

Annex 15 – Calculation of Additional Risk Weights

(This transcription omits wording that relates to the risk retention requirement and exemptions from it and not to the due diligence requirement.)

From CRR:

Article 407

Additional risk weight

Where an institution does not meet the requirements in Article … 406 [(*Due diligence*)] … in any material respect by reason of the negligence or omission of the institution, the competent authorities shall impose a proportionate additional risk weight of no less than 250 % of the risk weight (capped at 1 250 %) which shall apply to the relevant securitisation positions in the manner specified in Article 245(6)[1] [(*Calculation of risk-weighted exposure amounts*)] or Article 337(3) [(*Trading book – Own funds requirement for securitisation instruments*)] respectively. The additional risk weight shall progressively increase with each subsequent infringement of the due diligence provisions.

[…]

From European Banking Authority (EBA) Final Draft Implementing Technical Standards Relating to the convergence of supervisory practices with regard to the implementation of additional risk weights (Article 407) of Regulation (EU) No 575/2013 (17 Dec. 2013):

Article 2 – Calculation of additional risk weight

1. Competent authorities shall apply the following formula to determine the total risk weight ('Total RW') in accordance with the approach specified in Articles 245(6) and 337(3) of Regulation (EU) No 575/2013 to be applied where an institution does not meet the relevant requirements in any material respect:

Total RW = Min[12.5 ; Original RW * (1 + (2.5 + 2.5 * $\text{InfringementDuration}_{years}$) …)]

Where:

12.5 is a factor representing the maximum value that the total risk weight can reach;

Original RW is the risk weight that would apply to the securitisation positions if no additional risk weight was imposed;

2.5 is the minimum factor applying to the original risk weight in order to calculate the additional risk weight;

$\text{InfringementDuration}_{years}$ is the duration of the infringement, expressed in years, rounded down to the nearest 12-month period. This variable is equal to "0" for an infringement of less than 12 months, equal to "1" for an infringement of more than 12 months but less than 24 months, equal to "2" for an infringement of more than 24 months but less than 36 months,

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[1]   "The total risk weight shall be determined as the sum of the risk weight set out in this Chapter [5 (*Securitisation*)] and any additional risk weight in accordance with Article 407."

etc. The duration shall generally be measured from the start of the infringement for the securitisation, although competent authorities, taking account of the specificities of the securitisation, may impose other starting points. 'Infringement' shall mean the breach of one or more of the requirements capable of triggering an additional risk weight. The infringement shall turn into a 'subsequent infringement' when time passes without rectifying the infringement, leading to a progressive increase of the additional risk weight.

[…]