

16 August 2013

European Banking Authority  
Tower 42  
Old Broad Street  
London EC2N 1HQ

Submitted by email to [EBA-CP-2013-07@eba.europa.eu](mailto:EBA-CP-2013-07@eba.europa.eu)

**Re: Consultation Paper on Draft Regulatory Technical Standards on the determination of the overall exposure to a client or a group of connected clients in respect of transactions with underlying assets under Article 379 (now Article 390) of the proposed Capital Requirements Regulation**

Dear Sir or Madam,

The Association for Financial Markets in Europe ("AFME") welcomes the opportunity to comment on the above Consultation Paper ("the Paper") issued by the EBA.

We fully support the EBA's goal of identifying material underlying exposures that may have a material impact on a single counterparty concentration risk of a firm, and likewise share the EBA's view that limits on exposure to any one counterparty serve important prudential purposes and complement existing risk-based capital requirements.

These limits must, however, be properly tailored and calibrated to the objectives they are intended to achieve. Regulators should avoid requiring firms to apply an overly burdensome process that does not focus effectively on identifying material underlying exposures that actually impact large exposure calculations for a given firm, thereby accomplishing the regulatory goal of capturing indirect investments in large exposures, whilst also reducing compliance burden and complexity. Thus, we have made below a number of observations and suggestions (both high-level and specific and not necessarily covered by the questions in the Paper) that we believe reflect a more proportionate approach.

In particular, we consider that the proposed look-through approach ("LTA") for collective investment undertakings ("CIUs"), securitisations, and similar transactions is unnecessary, inappropriate and requires information that is not available in many instances. As currently drafted, we consider that the proposed standards under the Paper would impose substantial hurdles which are not balanced by corresponding prudential benefits; in some cases these hurdles will be insurmountable - for example, retail exposures where LTA may not be possible for data protection reasons.

Association for Financial Markets in Europe

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## **Key recommendations**

We recommend that:

- concerns regarding potential risk concentrations that may result from investments in CIUs, securitisations or similar transactions where there is an exposure to underlying assets be addressed through a Pillar 2 approach. Under such an approach, firms would monitor and document their exposures at the underwriting stage, if applicable, and thereafter on a quarterly basis. National regulators would review this monitoring process and have the ability to require banks to look-through and aggregate certain underlying exposures that may represent potential large exposures;
- if the standards in the Paper are adopted in their current form, the scope of any look-through requirement should be narrowed by providing exemptions for specific classes of transactions that clearly do not give rise to material exposures or where a LTA may not be possible for reasons such as data protection/privacy law;
- the use of a granularity test should be continued;
- as well as exempting specific classes of transactions and a granularity test, the application of LTA should also be subject to a materiality threshold, which could be defined using a reference value based on the firm's eligible capital;
- the standards in the Paper should then also recognise risk differences between tranches, taking into account the loss absorbing capacity and credit enhancement provided by junior tranches, and provide explicit exemptions from the LTA for those senior tranches meeting specific quality conditions. This would ensure that to the extent that CIUs, securitisations, and similar transactions properly fall into scope, the LTA captures them accurately; and
- the provision on securitisation or investment fund structures as additional exposures should be modified so that certain contingent payment obligations typical of securitisation transactions will not require such a structure to be treated as an additional exposure.

Additionally, even if these recommendations are adopted, we believe it is appropriate that there is full grandfathering for existing transactions to rely on the current guidance. We would respectfully request the EBA and the European Commission (working with other EU authorities as necessary) to use all tools available to provide for such grandfathering.

## **Introduction and context**

Securitisations in Europe have performed well through the crisis, both in credit and market terms, and while (like many other asset classes including unsecured bank debt and covered bonds) they were caught up in the initial panic caused by the onset of the financial crisis, since then and until today most European securitisations remain of high quality with commensurate good performance. Many studies have shown this, including our paper entitled “The Economic Benefits of High Quality Securitisation to

the EU Economy”<sup>1</sup>. Appendix 1 sets out some key data extracted from this report (updated since publication).

Yet despite this strong credit performance the European securitisation market remains very fragile and new issuance is very low. AFME’s most recent data report shows that while total issuance for 2012 was €251 billion, only some €85 billion – just over one third – was placed with investors. The rest was retained by issuers and used for repo purposes under the central bank frameworks. In 2007, the market was €454 billion of which nearly all was placed, so the market has shrunk by 80 per cent. over five years.

Placed issuance in Q1 2013 was only €17 billion compared with €27 billion in the previous quarter. €1.65 trillion was outstanding at the end of Q1 2013, a continued decline, of which more than half was retained.

Many high-level policymakers have recently made positive remarks about securitisation, and the need to restore the market. Commissioner Barnier has said that securitisation needs a “second wind”<sup>2</sup> and President Draghi of the ECB has acknowledged that the regulatory constraints on securitisation need to be addressed, and “should acknowledge the credit performance and ensure an unbiased level playing field with other securities.”<sup>3</sup>

In its March Green Paper “Long -Term Financing of the European Economy”, the European Commission acknowledged that “Reshaping securitisation markets could also help unlock additional sources of long-term finance ... and help financial institutions free capital, which can then be mobilized for additional lending”.

As proposed, we believe that the proposals made in the Paper risk potential damage to the financial system and the broader economy, and in particular will restrict the prospects for recovery of the European securitisation market. It is in this context that we make the comments below.

## **Observations on the Paper**

### ***We do not accept that Highly Granular Transactions should fall within the scope of a large exposures regime***

We consider that the proposed LTA to be applied by firms to determine indirect exposures to the underlying assets in CIUs, securitisations, and similar transactions where there is an exposure to underlying assets, is both unnecessary and inappropriate and will be highly burdensome, particularly given that the EBA proposal does not provide for the application of a granularity threshold (unlike the Basel Committee's proposals). A mandatory look-through requirement without a granularity threshold is a

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<sup>1</sup> Available at <http://www.afme.eu/Divisions/Securitisation.aspx>

<sup>2</sup> [http://europa.eu/rapid/press-release\\_SPEECH-13-150\\_fr.htm?locale=en](http://europa.eu/rapid/press-release_SPEECH-13-150_fr.htm?locale=en)

<sup>3</sup> <http://www.ecb.int/press/key/date/2013/html/sp130708.en.html>

very substantive departure from the approach under the existing CEBS Guidelines<sup>4</sup>, without a clear prudential benefit.

We do not accept the initial premise in the Paper (page 7) that “the excessive or imprudent use of investment opportunities [in CIUs or structured finance vehicles] may lead to single name credit risk concentration which needs to be limited by the large exposures regime.” We do not believe that this risk is present for certain classes of CIUs, securitisations, and other similar transactions that do not present material underlying concentration risks. These are described in more detail below under the heading “EBA approach should include exemptions to a LTA and a materiality threshold” and are referred to in this letter as “Highly Granular Transactions”.

We agree that the objective of the large exposures regime should be “capturing and limit (sic.) the maximum loss caused by the default of a certain obligor” (page 8 of the Paper). However, securitisation uses diversification and statistical analysis to ensure that small, immaterial, individual, “idiosyncratic” risk to single borrowers is aggregated, distributed and absorbed by the structure and the investors participating therein. If the focus of the large exposures regime is on idiosyncratic rather than systemic risk (as it should be), then securitisations which are Highly Granular Transactions should fall outside its scope as the individual assets in the underlying pools will never be of a size sufficient to create a material idiosyncratic risk.

The table below demonstrates the granularity of some typical securitisation structures.

Structure name	Arran Residential Mortgages Funding 2010-1 plc	Claris ABS 2011 s.r.l.	First Franklin Mortgage Loan Trust	Holland Mortgage Backed Series (Hermes) XVI B.V.	Phedina Hypotheken 2011-1 B.V.
Structure Type	RMBS	Auto loan	RMBS	RMBS	RMBS
Total portfolio	£4,647,089,317	€ 2,616,577,280	\$1,705,534,713	€ 3,075,145,557	€ 1,546,745,823
Highest exposure	£2,493,891	€ 4,909,940	NC	€ 1,500,000	NC
Highest exposure % portfolio	0.0537%	0.1876%	NA	0.0488%	NA
Number of loans	33,155	23,411	7,770	14,669	6,786

***Applying a LTA to securitisations which are Highly Granular Transactions is unrealistic, impractical and highly burdensome – Question 6 of the Paper***

Applying a LTA to securitisations which are Highly Granular Transactions will require extensive systems and human intervention, and in some cases will not be possible. In particular, firms do not have real time access to underlying portfolios in many instances because the fund is subject to frequent change and does not disclose changes to underlying assets with the same frequency. Most term securitisations report quarterly. In addition, issuers are prohibited by privacy laws from disclosing certain information including, in particular, names or other ways in which underlying obligors can be

<sup>4</sup> "Guidelines on the implementation of the revised large exposures regime" issued by the Committee of European Banking Supervisors in December 2009.

identified, particularly in the context of transactions securitising retail exposures or in which the obligors are natural persons (e.g. typical mortgage, automobile, credit card or student loan ABS). In our opinion, requiring institutions to “look-through and identify the obligors of all credit exposures underlying the transaction” in this context would go beyond the requirement to “take all reasonable steps to look-through” (page 5 of the Paper).

Further, given the difficulties in applying the LTA, many underlying assets could be deemed “unknowns” and therefore require aggregation as exposures to the single “unknown client”<sup>5</sup>. Many schemes provide for a limit on the largest single obligor in the pool, and this is typically in the region of 3-4%. Often these obligors will be unknown, but what will be known is that the pool consists of, say, 30 or 40 different obligors. Thus the implicit assumption that a single client underlies all of the various diverse exposures across asset classes and markets is punitive and unrealistic, and imposing a large exposure limit on the “unknown client” does not necessarily reflect the understandable regulatory goal of identifying material underlying exposures that may have a material impact on a single counterparty concentration risk of a firm. Indeed, these operational burdens and complexities are not balanced at all by the assumed corresponding prudential benefits.

### ***EBA should instead consider a Pillar 2 approach***

In our opinion the EBA should assess material underlying exposures that impact a firm's large exposure calculations in a variety of less burdensome, more practical yet still prudent ways. For instance, rather than requiring firms to apply a LTA, the indirect exposures of firms to positions held by CIUs, securitisations, and other similar transactions should be addressed through a Pillar 2 approach that relies on a firm's own monitoring of indirect exposures. This should enable the EBA to address the risk of “institutions circumventing the large exposures limit by concealing exposures to a certain obligor in opaque structures” (page 8 of the Paper). AFME is surprised by this claim, is not aware of any examples of such behaviour and asks to discuss evidence of the same with the EBA.

We propose that firms should be called upon to review underlying exposures to determine, document, and offer quantitative support for whether an underlying asset impacts its large exposure calculations. This review would occur both at the underwriting stage as applicable, and on a quarterly basis to monitor changes in exposure size. This inventory would supplement firms' own internal risk management processes and would also provide written, quantitative documentation for national regulators to review. Further, national regulators may use their supervisory authority to look through any vehicles where they believe the underlying assets present large exposure risks. For example, the standards under the Paper could allow national regulators to look through where the vehicle fails discrete, objective concentration tests and presents a risk that the underlying assets improperly mask a firm's concentration exposures.

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<sup>5</sup> This would be required under the current wording of Article 6 of the Draft Regulatory Technical Standards.

Where underlying assets impact large exposure calculations—either as determined by the firm itself or through the supervision process—then the firm should be expected to aggregate the underlying exposure with other exposures to the same counterparty. For example, securitisations which are Highly Granular Transactions should not call for look-through because the underlying borrowers are natural persons or other “small-euro” borrowers that do not impact a bank’s large exposure calculations, and this determination would be documented and supported in the Pillar 2 review.

We strongly urge the EBA to adopt the Pillar 2 alternative. This approach would more effectively focus on identifying material underlying exposures that actually impact large exposure calculations for a given firm, thereby accomplishing the regulatory goal of capturing indirect investments in large exposures, whilst also reducing compliance burden and complexity.

***EBA approach should include exemptions to a LTA for Highly Granular Transactions, and a materiality threshold - Questions 3 and 4 of the Paper***

If a Pillar 2 approach is not adopted, the EBA should endeavour to exempt certain classes of CIUs, securitisations, and other similar transactions that do not present material underlying concentration risks. This is particularly important given the proposal under the Paper to remove the granularity threshold currently available under the CEBS Guidelines. We oppose this approach, which we believe is entirely unnecessary and without justification based upon the evidence that many securitisations contain thousands or tens of thousands of underlying exposures each of which contributes only immaterially to overall exposure.

We refer the EBA to the Basel Committee on Banking Supervision which in its Consultation Paper of March 2013 said “Although the Committee believes that ideally a bank would be able to look-through to the underlying exposures, it also recognised that there is an appropriate balance to strike between requiring banks to exert considerable effort to identify exposures in very granular portfolios and the financial stability benefits of capturing accurately all single-name concentration risks. The Committee has therefore decided that the transaction should first undergo a “granularity test” because it recognises that, for transactions with very small individual underlying assets, the effort of identifying them exceeds the likely financial stability benefits.”

We believe the following categories of CIUs, securitisations, and other similar transactions that are unlikely to impact a firm’s large exposure limits should be classified as “**Highly Granular Transactions**” and exempted from application of an LTA:

- Retail asset backed securities, such as securitisations of credit card receivables, auto loans and residential mortgages because the underlying borrowers are natural persons and other small-euro borrowers such as small and medium-sized enterprises<sup>6</sup>.

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<sup>6</sup> Issuers may also be prohibited under data protection and privacy law from disclosing information regarding underlying obligors, particularly in the context of transactions securitising retail exposures or in which the obligors are natural persons (e.g. typical mortgage, automobile, credit card or student loan ABS).

- Pools of finance receivables because the underlying borrowers are small businesses (e.g., dealer floor plans, equipment leases and loans).
- Trade or other receivables financed within multi-seller ABCP conduits supported 100 per cent. by liquidity lines provided by sponsor banks.
- Registered mutual funds because they already meet transparency, asset quality and asset diversification requirements. They are also subject to ongoing regulatory oversight. Moreover, firms invest in these funds for the fund manager's expertise, not to gain exposure to the underlying assets.
- Other types of funds that are subject to stringent regulatory requirements intended to diversify risk and minimize risk, leverage, and conflicts of interest.

These categories should be exempt because they simply do not hold the types of underlying assets that present large exposure issues.

Second, for those CIUs, securitisations, or other similar transactions that are not exempt from the LTA, the EBA should adopt a feasibility test to determine whether the LTA would apply. This test would require a firm to apply the LTA if it has ready access to the information required to look through to the underlying investment. National regulators could structure this process, for example, by requiring firms to provide a list of their investments that fit into this category, an explanation of or support for the firm's determination that the information required for a look-through is not reasonably available, and the categorization of the underlying exposures and asset type (e.g. by industry and market).

Third, we would also support the application of a threshold in relation to the value of individual exposures for which the obligor has not been identified (a "**materiality threshold**"). Such a materiality threshold should be defined as a ratio between the value of the underlying exposure and the firm's eligible capital. We would suggest a 1 per cent threshold. Moreover, we consider that a materiality threshold combined with a granularity threshold would provide a much more tailored and proportionate approach for a LTA. It would allow underlying exposures which contribute only immaterially to an overall exposure to be excluded from the LTA (such as retail exposures), whilst capturing under the materiality threshold exposures significant to individual firms which might not be captured under the granularity threshold. This would also mitigate the effect of the draft Article 6 in aggregating exposures to several unknown obligors in a pool where the scheme documents contain limits on the largest obligor exposure, and thus the unknown obligors are clearly not a single unknown client. We would be happy to work further with the EBA on the development of appropriate thresholds where both a materiality and granularity threshold would be applied.

We believe that such a combined approach would be far more proportionate, tailored and effective than the proposed requirement to aggregate all unknown underlying assets as exposures to a single "unknown client". This proposed approach avoids the overly conservative results, and is consistent with the need to mitigate the risk that CIUs, securitisations, or other similar transactions may mask the true concentration risk to a single counterparty.

***Treatment of tranches and recognition of credit enhancement - Question 2 of the Paper***

We do not believe that the LTA accurately captures the risks of certain CIUs, securitisations, and similar transactions. In particular, the pro rata LTA does not accurately capture the risk differences among senior, mezzanine, and junior tranches of such vehicles. Additionally, treating all tranches in a securitisation equally, not recognising risk differences among the tranches of securitisations or, more broadly, any form of credit enhancement, and assuming that multiple defaults can occur simultaneously would seem to contradict the underlying purpose of the large exposures regime which, as stated in the Paper, is to ensure that a firm can absorb losses resulting from the sudden failure of a single counterparty or group of connected counterparties without itself failing. This is a matter of significant concern for us. Failing to take into account the loss absorbing capacity and credit enhancement provided by, for example, junior tranches will overstate the exposure arising from a single name concentration.

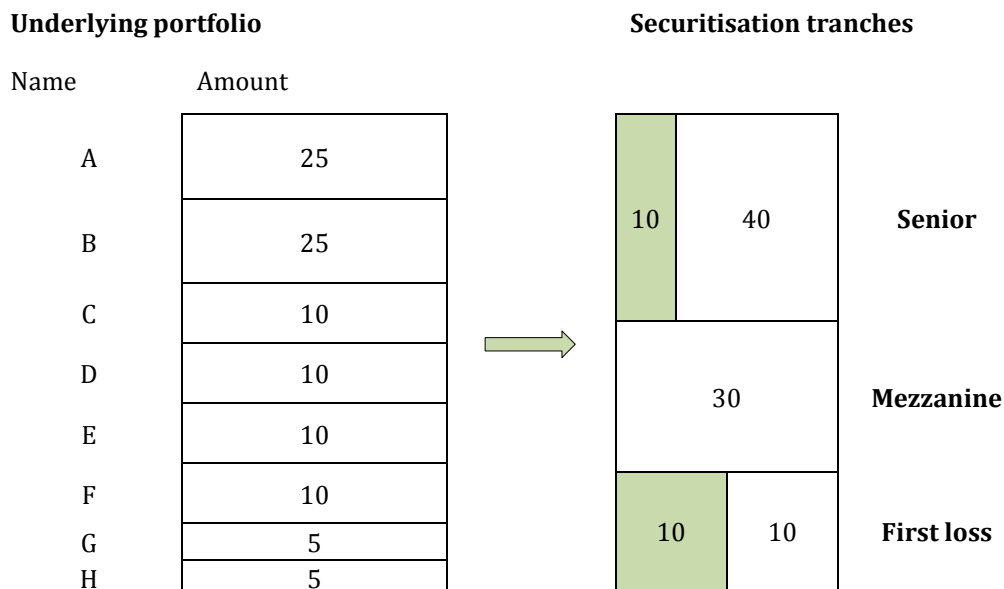
In the Paper, the EBA cites as justification for the change in the approach to credit enhancement that it has “taken into account the experience gathered by the national supervisory authorities in the application of the CEBS Guidelines and other market developments”, implies that the recognition of credit enhancement in the CEBS Guidelines is a “shortcoming” in the treatment of securitisation and that “subordinated tranches may have been exhausted without the institution having time to recognize the increase in exposure to certain names ...” (page 8 of the Paper).

We respectfully request the EBA to disclose to us the examples of the securitisation transactions on which they have based this policy decision. We do not believe that transactions exhibiting this kind of behaviour are typical. On the contrary, we believe that the vast majority of high quality securitisation structures contain mechanisms for dynamic adjustment and replenishment of credit enhancement on a regular and ongoing basis, that on the whole such structures have performed well and that therefore there is insufficient evidence to support such a major policy change. We respectfully request specific further dialogue with the EBA in this regard.



**Potential for an overstatement of exposures - Analysis of Example 4 in the Paper - Question 1 of the Paper**

Example 4 in the Paper is a good example of the potential for an overstatement of exposures under the standards set out in the Paper:



The maximum loss for each exposure must recognise that, when a loss on a *particular* underlying exposure is taken in a junior tranche, the exposure passed upward to more senior tranches is correspondingly reduced by the *total* loss taken by *all* tranche investors. Example 4 above, as set out in the Paper, does not recognise this.

Correctly recognising the waterfall under Example 4 would mean that, for underlying A, the maximum loss would assume (1) write-down sufficient to wipe out the first loss tranche, (2) losses on *other* exposures that wipe out the Mezzanine tranche, and (3) remaining losses taken by the senior tranche. Note that (1) assumes a loss on Exposure A of 20 is taken by the first loss tranche (split evenly among investors), leaving a total exposure remaining of 5 for the senior tranche to absorb. Thus:

$$\text{Maximum loss (A)} = (10/20)*20 + (10/50)*(25-20) = 11$$

$$\text{Maximum loss (B)} = (\text{same})$$

$$\text{Maximum loss (C)} = (10/20)*10 = 5 \text{ (senior tranche not affected as exposure wiped out)}$$

$$\text{Maximum loss (F)} = (\text{same})$$

$$\text{Maximum loss (G)} = (10/20)*5 = 2.5 \text{ (senior tranche not affected as exposure wiped out)}$$

$$\text{Maximum loss (H)} = (\text{same})$$

Indeed by ignoring the waterfall and assuming for the purposes of the standards in the Paper that there is no benefit from the existence of subordinated and mezzanine tranches, then the implicit assumption for the formulation of the LTA is a single

counterparty default accompanied by a market wide default. This is a very blunt (and unrealistic) assumption, contrary to the stated purpose of the large exposure regime (which is to capture *idiosyncratic* risk) and one which is not being applied elsewhere in the context of prudential rules.

Clearly, within a securitisation, there are important differences between the various tranches, and the standards set out in the Paper should take into account the structural features in securitisations and other credit enhancements which, upon underlying single obligor default, reduce both loss probabilities and loss severity. Most senior securitisation tranches are protected by various forms of credit enhancement, and therefore, actual exposures to underlying obligors are not equivalent to a firm's pro-rata interest in the underlying issuer. Further, obligor concentrations are an explicit factor in determining the amount of required credit enhancement for a particular securitisation transaction, and as a consequence, credit enhancements may also directly mitigate the concentration risk of such exposures.

We propose an exception from the LTA in the following circumstances: (i) the bank's exposure is to the most senior tranche and is in the form of debt, and (ii) the securitisation exposure is rated as investment grade or the firm has determined that its exposure is "investment grade" (i.e., the issuer has adequate capacity to meet financial commitments, the risk of default is low, and the full and timely repayment of principal and interest is expected). The economic justification for an exemption is that a default of any single underlying obligation will result in no material loss to the firm on the value of the senior securitisation.

***Potential for an overstatement of exposures – synthetic trades on an index - Question 1 of the Paper***

An alternative, but conceptually similar way of recognising credit protection compared to the worked example above should be permissible whereby firms would calculate exposure per single name by calculating the profit and loss impact on the tranche value by assuming sudden default of the single underlying reference asset in question. The calculation undertaken implicitly takes into account any credit enhancement because the tranche is re-priced using widely used pricing methodologies with that name removed from the pool. This would represent the most accurate measure of the impact to the firm should that underlying name default, and as such should be taken as the "exposure" for purposes of the large exposure limit. The impact would be added to any other existing counterparty/issuer risk exposure of that same single name. Firms would repeat this exercise for each underlying name in the securitisation portfolio.

Please see Appendix 2 for an illustrative example showing impact to capital if a single name (Company X) jumps-to-default with zero recovery, given a holding in an Itraxx tranche, compared to the EBA proposals. Holders of the senior tranche would have an exposure of €2,885, despite the underlying Company X notional being €1,000,000, due to the credit protection afforded by more junior tranches. Holders of the equity tranche would, however, have an exposure of €944,909 – slightly short of the full underlying exposure due to premiums received for the protection sold.

**Article 7 and conditions for additional exposures – Question 6 of the Paper**

We appreciate the EBA's proposal in Article 7 of the draft RTS to provide for cases in which an exposure to a securitisation transaction would not be treated as an additional exposure. We believe, though, that the condition in paragraph 1(b) of the proposed article would effectively exclude typical securitisation transactions from the Article 7 exception. Securitisation transactions typically include obligations by the originator, seller and/or servicer of the securitised exposures, or by an affiliated entity, to make payments to the securitisation special purpose entity, the investors or their representative in certain circumstances including a breach of representations and warranties regarding the securitised assets and non-credit-related dilutions of securitised exposures. Such customary provisions by themselves should not prevent a transaction from meeting the conditions for not being treated as an additional exposure.

In addition, many transactions benefit from liquidity facilities, credit enhancement facilities or other commitments from third parties in limited amounts, as well as limited interest rate and currency swaps or other derivative contracts. The EBA should consider providing that such an obligation will not disqualify a transaction from the Article 7 exception if the bank treats a portion (corresponding to the bank's proportionate investment in the transaction) of that obligation as an exposure of the bank to the payment provider in an amount equal to that portion of the facility amount or the exposure value of the derivative contract, as applicable.

Thank you once again for the opportunity to provide comments on the Paper. Should you have any questions or desire additional information regarding any of the comments, please do not hesitate to contact Richard Hopkin at [richard.hopkin@afme.eu](mailto:richard.hopkin@afme.eu) or on + 44 207 743 9375 or Michael Percival at [michael.percival@afme.eu](mailto:michael.percival@afme.eu) or on + 44 207 743 9358.

Yours faithfully,



Richard Hopkin

Michael Percival

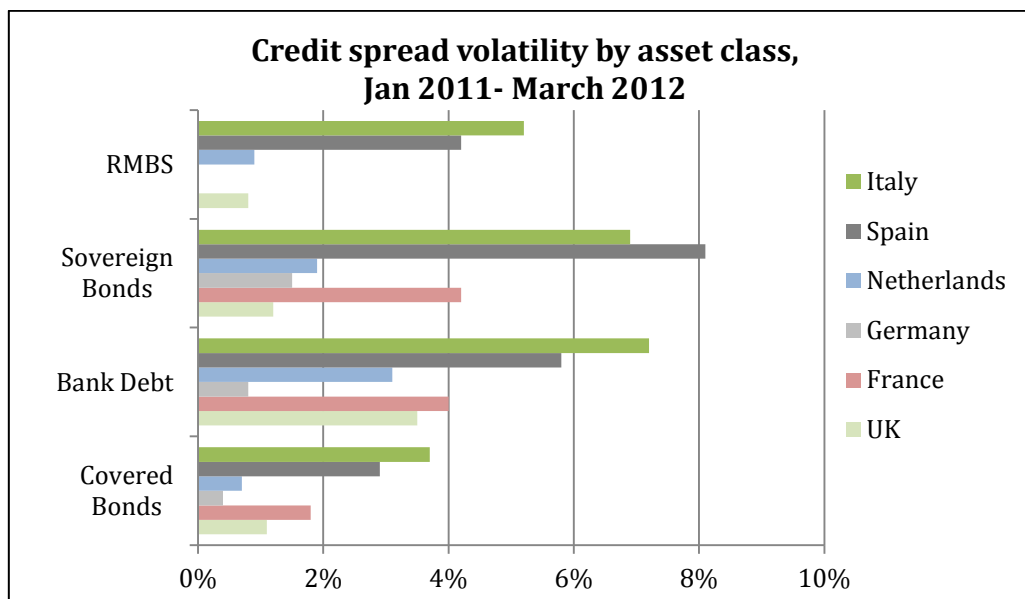
## Appendix 1

### Historical Default Rates for Securitisation: Mid-2007 to End Q1 2013

	Original Issuance (EUR billion)	Default Rate (%)
<b>Europe</b>		
<b>Total PCS eligible asset classes</b>	<b>959.9</b>	<b>0.10</b>
Credit Cards	33.2	0.00
RMBS	755.7	0.08
Other Consumer ABS	68.0	0.13
SMEs	103.0	0.29
<i>Only senior tranches to be PCS labelled, the default rate for which is zero, like Covered Bonds</i>		
<b>Total Non-PCS eligible asset classes</b>	<b>732.6</b>	<b>5.30</b>
Leveraged Loan CLOs	71.3	0.1
Other ABS	71.3	0.16
Corporate Securitisations	65.8	0.34
Synthetic Corporate CDOs	254.3	2.76
CMBS	163.2	9.08
Other CDOs	77.8	6.37
CDOs of ABS	28.9	40.21
<b>Total European securitisation issuances</b>	<b>1,692.5</b>	<b>2.35</b>
<b>Covered Bonds</b>	<b>1,085.0</b>	<b>0.00</b>
<b>Total European issuances</b>	<b>2,777.5</b>	<b>1.43</b>
<b>Select US asset classes</b>		
Credit Cards	295.4	0.04
Autos	198.2	0.04
Student Loans	266.8	0.29
RMBS	3,254.9	19.80

**Source:** Standard & Poor's

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



Source: BAML

**European RMBS Price Performance vs. Other Instruments**

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

Source: BAML

## Appendix 2

Illustrative example showing impact to capital if a single name jumps-to-default with zero recovery, given a holding in Itraxx tranche, compared to EBA requirement

<b>Curve</b>	COMPANY_X_MMR03_CORP_SENCOMPANY X		
<b>iTraxx</b>	iTraxx S9 tranches	Jun15 expiry	CD13978
<b>Notional</b>	125,000,000	EUR portfolio notional	
<b>Single Name Proportion</b>	1,000,000	EUR notional	

Sold protection contract (long index tranche risk)

		Tranche width	Notional of tranche	Single Name Default EBA exposure measure	Single Name Default Impact on tranche value
<b>Senior</b>	22-100	78%	97,500,000	1,000,000	2,885
<b>Mezz A1</b>	12-22	10%	12,500,000	1,000,000	6,010
<b>Mezz A2</b>	9-12	3%	3,750,000	1,000,000	2,840
<b>Mezz A3</b>	6-9	3%	3,750,000	1,000,000	14,798
<b>Mezz A4</b>	3-6	3%	3,750,000	1,000,000	51,366
<b>Equity</b>	0-3	3%	3,750,000	1,000,000	944,909

Workings:

Impact on tranche value given JTD Default	Recovery Level	Rec In Dft [per recovery pt]	Addnt'l impact on tranche value assuming JTD with zero recovery
-20	40	72	-2,865
-1,237	40	119	-4,772
-2,193	40	16	-647
-6,119	40	217	-8,679
-24,721	40	666	-26,645
-556,075	40	9,721	-388,834

