EBA Discussion Paper on simple standard and transparent securitisations

Response to the Commission’s call for advice of December 2013 related to the merits of, and the potential ways of, promoting a safe and stable securitisation market
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<td>AIFMD</td>
<td>Alternative investment fund managers directive</td>
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<td>ABCP</td>
<td>Asset backed commercial paper</td>
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<td>BoE</td>
<td>Bank of England</td>
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<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
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<td>CEREP</td>
<td>Central rating repository</td>
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<td>CDO</td>
<td>Collateralised debt obligation</td>
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<td>CLO</td>
<td>Collateralised loan obligation</td>
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<td>CMBS</td>
<td>Commercial mortgage-backed security</td>
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<td>CQS</td>
<td>Credit quality step</td>
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<td>CRR</td>
<td>Capital requirements regulation</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>ESMA</td>
<td>European Securities and Markets Authority</td>
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<td>EU</td>
<td>European Union</td>
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<td>IOSCO</td>
<td>International Organisation of Securities Commissions</td>
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<td>IRB</td>
<td>Internal ratings based</td>
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<td>LGD</td>
<td>Loss given default</td>
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<td>PCS</td>
<td>Prime Collateralised Securities</td>
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<td>PD</td>
<td>Probability of default</td>
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<td>RBA</td>
<td>Ratings based approach</td>
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<td>RBM</td>
<td>Ratings based method</td>
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<tr>
<td>RMBS</td>
<td>Residential mortgage-backed security</td>
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<tr>
<td>SA</td>
<td>Standardised approach</td>
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<td>SME</td>
<td>Small and medium size enterprise</td>
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Executive Summary

Securitisation is a funding technique converting on balance sheet exposures that are normally not tradable into tradable securities placed by the originator with the aim of raising funds in the markets. The transformation process entails the tranching of the credit risk related to the exposures being securitised; consequently, institutions also use the securitisation tool for significant risk transfer and capital relief purposes.

The transformation process may be complex to structure and operationalise: the risks arising in a securitisation transaction include, but are not limited to, the model risk, the agency risk between the various participants in the securitisation process, legal and governance risks, counterparty risks, servicing risks, liquidity risks and risks of operational nature. Against these complexities transactions may be structured so as to lack a sufficient degree of transparency towards investors and other market participants.

As documented in this paper, one of the most important lessons of the 2007-2009 crisis is that defaults and losses associated to securitisation positions have varied substantially across different asset classes and regions. The crisis has also shown that the poor performance of certain products, irrespective of the pre-crisis rating level, was associated to recurring factors, including: i) misalignment of interest between originators and investors resulting in loose underwriting standards on the underlying exposures; ii) excessive leverage; iii) maturity transformation and iv) complex structures. Complex transactions have been assessed by external rating agencies according to wrong modelling assumptions and have been placed with investors in the absence of adequate transparency standards.

The EBA acknowledges that a one-size-fits-all regulatory approach to securitisations appears to be no longer appropriate, as it may result in a too lenient treatment of transactions that are structurally risky and in an unduly conservative treatment of transactions that are simple standard and transparent, as well as being backed by less risky exposures.

The regulatory approach to securitisations should incorporate a distinction between qualifying securitisations and other securitisations. The regulatory definition of ‘qualifying’ securitisation should follow a two-stage approach whereby in order to qualify for a different treatment a securitisation transaction should first of all meet a list of criteria ensuring simplicity standardisation and transparency and, as a second step, they should meet criteria of minimum credit quality of the underlying exposures.

The proposed criteria to identify a simple standard and transparent securitisation capture and mitigate the major drivers of risk of a securitisation that are not related to the underlying exposures, as illustrated by the crisis. The proposed three pillars ensure many safeguards, including retention of economic interest, enforceable legal and economic transfer of the underlying exposures, simple payment waterfall structures, lack of maturity transformation and liquidation risk, disclosure of data on underlying exposures on a loan-by-loan level as well as disclosure to investors of underlying transaction documentation and quarterly reporting. Identifying securitisation with these characteristics would as a minimum provide more investor confidence in the securitisation products and contrast the crisis stigma which the market has attracted.
Minimum credit quality of the underlying, in the form of maximum risk weights, granularity criteria and regulatory underwriting standards, is strictly necessary to complement the qualifying securitisation framework and to support a differentiated regulatory capital treatment.

As discussed in the paper, the securitisation regulatory capital framework currently in force in the EU heavily relies on external ratings. Since 2010, the rating agencies have changed substantially their rating methodologies for certain risks (namely sovereign and macroeconomic risk) and asset classes of the securitisation market, leading to a general increase in the levels of credit enhancement required for supporting a given rating grade. Applying the CRR external ratings based approaches to post-2010 credit tranching standards, for certain asset classes, leads to a substantial departure from the neutrality of capital charges, i.e. the capital charge applicable to the totality of the securitisation transaction may be a high multiple of the charge applicable to the underlying portfolio of exposures.

The proposed criteria on simplicity, standardisation and transparency should ensure that all the risks arising in the securitisation, other than the pure credit risk related to the underlying exposures, are properly mitigated. For this reason the capital treatment proposed for the ‘qualifying’ framework should aim at limiting the extent of non-neutrality of capital charges.

In the case of the standardised approach to the capital requirements for securitisation, the current floor risk weight (20%) applicable to the most senior tranche of the transaction appears to contribute substantially to the extent of non-neutrality of the capital charges. This contributes to the uneven distribution of capital charges in favour of mezzanine tranches and to the disadvantage of both most junior tranches and most senior tranches. For these reasons capital treatment of all securitisation transactions should achieve a more even distribution of capital charges by reducing the requirement for the more junior tranche and increasing it for the more senior tranches other than the most senior.

For ‘qualifying’ securitisation positions, also in the light of the comparative review of capital charges applicable to securitisations and CRR-compliant covered bonds carried out in this paper, there is merit to propose a capital charge on the most senior tranche at the CQS1 level which more closely mimics the capital charge applicable to CRR-compliant covered bonds for the same CQS level. Despite offering investors different types of recourse, CRR-compliant covered bonds and the most senior tranches of qualifying securitisation positions are funding tools whose differences in risk profile should not be overestimated.

Lastly, since the crisis many regulatory reforms and initiatives, both at international and EU level, have been introduced or are still being proposed to address the shortcomings of the securitisation market. The risk exists that the extent of some of the differences in the regulatory treatment between certain securitisations and other investment instruments may not be fully justified, leading to unintended effects. The EBA recommends that a systematic review of the entire regulatory framework applicable to securitisations be carried out, across the different regulations and regulatory authorities, on a stand-alone basis and in comparison to the regulatory framework applicable to other investment instruments (i.e. covered bonds, whole loan portfolios).

Re-establishing a well-functioning and prudentially sound securitisation market in the EU will contribute to strengthening the resilience of the European financial system by providing an alternative funding channel to the real economy and enhanced risk-sharing. However it should also be noted that any changes to the prudential framework should be balanced against the risks
of introducing regulatory arbitrages. This may not be particularly pronounced in the current environment, but as history tells us, it is more likely to occur in periods of risk complacency.
1. State of the EU securitisation market

As shown in Figure 1, below, the European securitisation market grew dramatically in the run up to the crisis, with amount outstanding peaking in years 2008-2009 at over EUR 2 trillion in Europe. Thereafter securitisation outstanding has contracted in the EU.

Figure 1 European\(^1\) outstanding\(^2\)

![Graph showing European outstanding securitisation market from 2000 to 2013](image)

Source: SIFMA/AFME

The outstanding at the end of 2013 was about EUR 1.5 trillion, around one fifth of the US securitisation market. At the same date RMBS formed by far the largest market segment accounting for 59% of total issuance, with most of the issuance stemming from the UK and the Netherlands. SME ABSs was next largest class with around 8% of European new issuance by the end of 2013. The jurisdictions with the largest markets in EU are the UK, the Netherlands, Spain and Italy. Spain and Italy mostly securitise SME ABSs.

In 2006, virtually all primary issuance was placed with end-investors and other banks. 2008 is the year that marks a drastic change in the composition of placed vs. retained securitisation issuance (see Figure 2 below); since then, and up until the first quarter of 2014, the vast majority of issued transactions was retained by issuers themselves.

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\(^1\) European securities are defined as securitisations with collateral predominantly from the European continent, including Turkey, Kazakhstan, the Russian Federation, and Iceland.

\(^2\) Outstanding in this chart includes: ABSs (auto, consumer, credit cards, leases, other), CDOs, MBSs (CMBSs, mixed, RMBSs, SMEs, WBSs).
1.1 Historical credit performance of the securitisation market

Different classes of securitisation products performed very differently during the recent financial crisis. Figure 3 and Figure 4, below, illustrate the default performance (over a three-year horizon) of different classes of ‘AAA’ and ‘BBB’ rated securitisation products, rated by Standard & Poor’s,4 Moody’s Investor Services5 and Fitch Ratings6 between 2001 and 2010.7

Figure 3 shows that within the ‘AAA’ segment by far the highest default rates are those reached by US RMBS subprime products and US CDOs, at approximately 16% between 2007 and 2009. ‘AAA’ US RMBS excluding subprime reach, at most, a default rate of 3%. CMBS default rates are below 2% while the performance of the other asset classes considered sees almost zero default rates throughout the crisis period. The solid black line, in Figure 3, displays the performance of the securitisation segment if no distinction is made between different asset classes, the relatively high default rates reflecting the fact that ratings of US products, and in particular RMBS and CDO products, constitute the vast majority in the rating portfolio of the three credit rating agencies in the time span considered.

3 2014 represent year-to-date data.
4 Referred to as S&P hereafter.
5 Referred to as Moody’s hereafter.
6 Referred to as Fitch hereafter.
7 The source of the ratings information is the CEREP dataset held and managed by the ESMA, where all credit rating agencies certified or registered with ESMA are mandated to submit ratings data on a regular basis. The default definition used in the figures is an event of downgrade to the ‘Dsf’ rating category for S&P and Fitch and to the ‘Csf’ category for Moody’s (the latter does not use a the rating grade ‘D’ to identify defaults). At each point in time the default of outstanding tranches at that point is measured over a forward-looking horizon of three years.
In the ‘BBB’ segment, reported in Figure 4, the picture is only slightly different in that the US RMBS asset class reaches the highest default rates, at approximately 60% for subprime products and 40% for non-subprime products. US CMBS and US CDO products display default rates of approximately 20% in 2007 and 2009 respectively.

Figure 3 three-year default rates at AAA level per asset class (July 2001-Jan 2010 – S&P, Moody’s and Fitch)

Figure 4 three-year default rates at BBB level per asset class (July 2001-Jan 2010 – S&P, Moody’s and Fitch)

Source: ESMA CEREP database and EBA calculations.
Figure 5, below, compares the performance of ‘AAA’ rated EU RMBS and EU ABS products with the performance of ‘AAA’ corporate ratings, i.e. ratings assigned to corporate issuers including financial institutions and insurance undertakings. Despite being relatively low during the 2006-2009 time interval, the default rate of corporate ratings appears to be substantially higher than the default rate of EU RMBS and ABS products, the latter being close to zero.

Figure 5 three-year default rates at AAA level per asset class: Corporate vs. EU RMBS and EU ABS (July 2001-Jan 2010 – S&P, Moody’s and Fitch)

The performance of securitisations in terms of losses appears to be equally heterogeneous across classes of securitisation products. According to a report published in the second quarter of 2014 by Fitch, the worst performing asset class during the years 2000-2013, in terms of realised and expected losses, is the US structured credit segment followed, in the order, by US RMBS, US CMBS and EMEA CMBS (see Figure 6 below). The EMEA RMBS and ABS products display, according to Fitch, almost zero losses over the same reference period.

Further data break down published by Fitch (see Figure 14 in annex to this paper) shows how, within the US RMBS segment, Alt-A and subprime products are associated with total loss rates that are three to five times higher than those of prime products. The bad performance of the US structured credit segment is by far dominated by the high losses associated to CDOs (see Figure 16 in annex to this paper). Within the US ABS segment, those products that are backed by

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8 As defined in the ESMA Regulatory Technical Standards on the CEREP dataset (European Commission delegated regulation (EU) No 448/2012).

9 Fitch loss analysis assesses past write-downs on structured finance (SF) tranches and estimates future losses on tranches currently rated CCCsf or lower based on their recovery estimates.
consumer assets performed particularly well during the time period analysed by Fitch (see Figure 15 in annex to this paper).

Figure 6 Realised and expected losses: EU vs. US per asset class

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<td>Loss expected (%)</td>
<td>18.5</td>
<td>0.9</td>
<td>4.1</td>
<td>0.2</td>
<td>4.2</td>
<td>2.9</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Loss realized (%)</td>
<td>9.7</td>
<td>0.8</td>
<td>4.5</td>
<td>0.0</td>
<td>1.5</td>
<td>1.1</td>
<td>0.1</td>
<td>0.1</td>
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Source: Fitch\(^{10}\)

2. Regulatory reforms related to securitisation since 2009

Since the crisis struck, many regulations at international and EU level have been introduced to address the shortcomings of the securitisation market and more regulations are still being proposed and finalised as this discussion paper is published.

Table 1, below, summarises the most important regulatory changes impacting securitisation.

Table 1 EU and international regulation post 2009 impacting the securitisation market (holistic review)

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<th>Regulatory initiative</th>
<th>Issue description and key points to note</th>
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<td>CRD II: retention requirement (5%), disclosure and investor due diligence requirements, and significant credit risk transfer.</td>
<td>Includes a risk retention requirement and imposes new and extensive due diligence obligations on banks investing in securitisations and transaction level disclosure on new securitisations issued on or from 1 January, 2011 and, in relation to existing securitisations, from 31 December, 2014 if there is a substitution or addition of assets. Includes a new definition and rules on significant risk transfer in order for an originator to treat securitised assets as having been moved off its regulatory balance sheet.</td>
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<tr>
<td>Basel 2.5: Revised securitisation framework and further strengthening of trading book regime</td>
<td>Introduces definition of re-securitisation - Trading book positions that are not in a correlation trading book (these have the CRM measure applied) and are securitisation or re-securitisation products have a standard charge applied to them. These charges are similar to the banking book charge (rather than the trading book). The main result of this is that the capital charge for securitisations and re-securitisations has gone up considerably. Higher collateral haircut of securitisation in repo transactions. Higher RWA for securitisation liquidity facilitates and self-guaranteed exposures.</td>
</tr>
<tr>
<td>CRD III – contains new rules on re-securitisations and capital requirements for trading book exposures</td>
<td>Proposed revised securitisation framework and corresponding increased regulatory capital charges for securitisation positions for investing institutions (two consultative documents).</td>
</tr>
<tr>
<td>Basel Securitisation Framework: on-going revision of the capital requirements</td>
<td>Introduction of risk-based capital requirements for securitisation positions (defined as in the CRR) for insurance and reinsurance undertakings. Based on the technical advice provided by the EIOPA (December 2013), the Commission is expected to introduce lower capital requirements for certain qualifying securitisations.</td>
</tr>
<tr>
<td>EU Solvency II Directive: on-going revision of the capital requirements</td>
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### New liquidity coverage requirements for institutions

Only certain RMBS would be regarded as Level 2B assets (such asset class being generally capped at 15% of the total stock of high-quality liquid assets). Relevant RMBS would need to satisfy various conditions (e.g., rating of AA or above, full recourse loans, max 80% LTV, non-own name, price volatility restriction, etc.).

### EU implementing measures remain under discussion

A delegated act is expected from the European Commission. Based on the EBA’s report, under the CRR measures, it is proposed that only certain senior tranche RMBS would be regarded as high-quality liquid assets (HQLA); it is proposed that relevant RMBS would need to satisfy various conditions (e.g., to be backed by first-lien mortgages only).

### Risk retention and due diligence requirements

Risk retention and due diligence provisions require relevant investors to determine whether a retention arrangement is compliant and whether sufficient information is available for the requisite due diligence to be undertaken, thereby creating regulatory exposure for investors.

### Penal capital charges

Under the CRR, penal capital charges may be applied to the relevant securitisation position(s) if a national supervisor determines that the requirements have not been complied with and that the investor has been negligent or omitted to undertake the required action.

### Additional due diligence requirements

Additional due diligence requirements apply to relevant alternative investment fund managers (AIFMs) which require certain qualitative assessments to be undertaken with respect to certain credit granting, risk management and asset administration policies and procedures of the originator and sponsor; the EIOPA Guidelines on the System of Governance include similar due diligence requirements applicable to insurance and reinsurance undertakings under Solvency II.

### BCBS supervisory framework

The BCBS supervisory framework for measuring and controlling large exposures includes treatment for securitisation exposures.

### EBA final RTS on large exposures

In accordance with Article 390(8) of the CRR, the EBA final RTS specifies:

- the conditions and methodologies used to determine the overall exposure of an institution to a client or a group of connected clients in respect of exposures through transactions with underlying assets.

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- the conditions under which the structure of transactions with underlying assets does not constitute an additional exposure.

<table>
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<th>EU Money Market Funds Regulation: prohibition on securitisation investments</th>
<th>Proposed new regulatory framework for money market funds including a new prohibition on such funds to invest in securitisations (including ABCP) other than certain narrowly defined eligible securitisations (i.e. certain short-term securities backed by short-term, high quality and liquid corporate obligations) and subject to a 10% exposure limit.</th>
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<td>EU Regulation on structural measures improving the resilience of EU credit institutions: separation of certain trading activities</td>
<td>Proposed new requirement for the separation of certain trading activities from the core credit institution where specified metrics are met or if such activities are considered to pose a threat to the financial stability of the institution or to the financial system as a whole; relevant trading activities are proposed to include investing in, acting as sponsor for, or entering into derivatives with, a securitisation. Large exposure limits would also be applied to the core credit institution in respect of its exposures to certain financial entities, including certain securitisation vehicles, which may operate to further restrict activities in connection with securitisations.</td>
</tr>
<tr>
<td>EU Capital Requirements Regulation, Article 395 of the CRR.</td>
<td>Requirement for the Commission to assess, by 31 December 2015, the appropriateness and the impact of imposing limits on institution exposures to shadow banking entities which carry out banking activities outside a regulated framework. Limits on exposures to certain securitisation vehicles may impact securitisation.</td>
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<tr>
<td>EU CRA Regulation: disclosure requirements on structured finance instruments and external rating requirements.</td>
<td>The related ESMA RTS(^{14}) specifies: (i) the information that the issuer, originator or sponsor of a structured finance instrument must publish; (ii) the frequency with which this information is to be updated; (iii) the presentation of the information by means of a standardised disclosure template. With regard to private and bilateral structured finance instruments, a phase-in approach applies. ESMA plans to work with stakeholders to determine the extent to which the standardised disclosure templates included in the RTS will apply to private and bilateral transactions. Lastly, it should be noted that the CRA Regulation also requires that rated securitisations be rated by at least two credit rating agencies.</td>
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<tr>
<td>EU EMIR regulation: bilateral margining requirements and central clearing requirements.</td>
<td>As further specified in the consultation paper issued by the Joint Committee of the ESAs, a two-way margin posting requirement is proposed, under the EMIR Regulation, also on derivative transactions entered into by the securitisation</td>
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\(^{14}\) Final Draft Regulatory Technical Standards under the CRA3 Regulation, June 2014 (ESMA/2014/685).
vehicle, provided that given derivative exposure thresholds and other conditions are met.

As further specified in the two consultation papers issued by the ESMA\(^\text{15}\), a central clearing requirement is proposed, under EMIR, also on interest rate derivative transactions entered into by the securitisation vehicle, provided that certain conditions are met.

\(^{15}\) Consultation Paper Clearing Obligation under EMIR (no. 1) and Consultation Paper Clearing Obligation under EMIR (no. 2).
It should be noted that some of those reforms foresee a treatment of securitisation exposures that is markedly different from the treatment assigned to exposures in the form of covered bonds and other secured investment products. This is not only true due to the different applicable risk weighting frameworks (Basel III, Solvency II), but also for the global liquidity standards, the large exposure requirements and both the bilateral and central clearing requirements. Requirements such as those on the retention of economic interest, investors’ due diligence and disclosure apply, according to the current proposals, only to securitisations.

Securitisations and covered bonds are different instruments, not only because of their structure and inherent risks, but also due to the following factors:

- securitisations grant the investor recourse to the underlying assets, while the covered bond investor can have recourse to both the issuer and the cover pool (so-called dual recourse), where the issuer is always a credit institution (at least this is the case of CRR-compliant covered bonds);
- securitisations are characterised by the process of credit risk tranching, whereas covered bonds typically are not\(^{16}\).
- covered bonds are issued, in most of the jurisdictions, under special legal frameworks and, according to Article 54(2) of the UCITS Directive, have to be subject to special public supervision for the protection of the investor. Securitisations are mostly based on contractual mechanisms.
- covered bonds can only be used for funding while securitisations can be used for both funding and risk-transfer (i.e. capital relief) purposes.

In addition, the default and loss performance of covered bonds throughout the financial crisis is very different from the performance of certain asset classes of securitisation\(^{17}\).

Despite the mentioned main differences, which overall warrant differences in the prudential treatment, the risk exists that the extent of some of the differences in the regulatory treatment of the two instruments may not be fully justified. For instance the different scope of the disclosure requirements applicable to securitisations, on the one hand, and the covered bonds eligible for preferential risk weight treatment in accordance with the CRR, on the other hand, may be given consideration. From both an issuer and an investor perspective differences in regulatory treatment clearly have an impact on the respective incentives to issue/invest in one instrument or the other. For this reason, a review of the various regulatory provisions and proposed reforms of these provisions from a holistic perspective should be undertaken, i.e. taking into account the relative treatment of securitisations and covered bonds.

**RECOMMENDATION 1:** Recommendation for a holistic (cross-product and sector) review of the regulatory framework for securitisations and other investment products

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\(^{16}\) Senior / subordinate covered bond structures have been issued in Denmark.

\(^{17}\) As reported in the EBA Report on EU Covered Bond Frameworks and Capital Treatment (published in July 2014) covered bonds in Europe never experienced default events although at least six covered bond issuers in Europe were subject to bail-out operations with the objective of, inter alia, safeguarding the stability and well-functioning of the respective covered bond markets.
A systemic detailed review of the entire regulatory framework for securitisation across all different regulations and regulatory authorities on a stand-alone basis and in conjunction with the regulatory framework applicable to other investment products (covered bonds, whole loan portfolios) is recommended. Such a review should take into account the different objectives of the existing regulations.

Rationale

Since the crisis many regulations at international and EU level have been introduced to address the shortcomings of the securitisation market and many more are still being proposed and finalised, while limited changes have been introduced or proposed to other investment products.

The risk exists that the extent of some of the differences in the regulatory treatment between securitisation and other investment instruments may not be fully justified when being compared on a single requirement basis or on an aggregate basis considering all requirements for the respective investment products.

Major differences in regulatory treatment clearly have an impact on the respective incentives to issue or invest in one instrument or the other and can lead to unintentional effects that could destabilise the financial system as a whole. Possible unintended consequences could include: i) changes in business models of institutions to optimise regulatory capital usage, ii) the increased use of the shadow banking system for funding, iii) an increased level of asset-encumbrance for credit institutions and iv) overreliance on and substantial exposures to one investment product only.

With the increasing complexity of the regulatory framework investors, be they insurers, alternative investors, UCITS fund managers or banks need to consider many different regulatory factors, including:

i) Regulatory capital charges

ii) Liquidity regulation

iii) Operational requirements (retention, retaining entity, disclosure, due diligence including stress testing, reporting).

Each of these requirements implies both costs and benefits that investors and issuers, as appropriate, take into account when making decisions to invest or issue securitisations.
3. Likely impediments in the post-crisis EU securitisation market

Issuance of securitisations in the European market, as documented in Chapter 1, remains significantly lower than issuance observed prior to the financial crisis. While many different factors may have played a role in shaping the developments of the securitisation market in recent years, a list of crucial regulatory and non-regulatory determinants is the focus of the current debate on the revival of securitisations, including but not limited to:

a) the post-crisis stigma attached to the whole securitisation market by investors;
b) the impact of the macro-economic environment that has unfolded, in some jurisdictions, since the financial crisis;
c) the role of alternative funding instruments available to institutions in the EU, particularly the availability of central bank funding as a response to the financial crisis;
d) the tightening of the main credit rating agencies’ rating methodologies and rating policies, affecting the securitisation asset class following the negative experience of securitisation ratings during the years of the crisis;
e) the lack of a sufficient investor base;
f) the potential regulatory uncertainty resulting on issuers and investors from the numerous not yet finalised regulatory initiatives (as documented in Chapter 2), both at the EU and global level, impacting directly or indirectly the incentives to securitise and/or invest in securitisations.

Investors and regulators’ perception of securitisations as an investment class altogether has been negative since the crisis struck, due to the stigma placed on the entire investment class following the high level of defaults and high losses that characterised specific asset classes of the securitisation market, in particular US sub-prime RMBS products, US CDO products and, to a minor extent, CMBS products. The lack of sufficient transparency over the features of different securitisation structures and different classes of underlying exposures has contributed to the entire securitisation segment being perceived as opaque, complex and characterised by perverse incentives. In addition, the lack of sufficient detail in the disclosure of data on the historical performance of different securitisation instruments has contributed to the spreading of the stigma attached to bad performing asset classes also on those instruments that passed the test of the crisis with relatively good performances.

The macro-economic environment that unfolded since the financial crisis and, more recently, the sovereign crisis (affecting some EU jurisdictions more than others) is also assessed to be partly responsible for preventing the securitisation market to revert to its pre-crisis volumes. The volumes of underlying assets available to be securitised are lower with respect to pre-crisis years due to:

- lower demand for loans from both individuals and corporations, e.g. gross mortgage lending in 2013 in the Netherlands is down by 55% with respect to 2006 levels;
- a deleveraging process, i.e. the process by which banks dismiss assets and progressively shrink their balance sheets, in order to decrease their level of leverage
and to prepare compliance with upcoming prudential regulation\textsuperscript{18} and a de-risking process, i.e. the process by which banks dismiss more risky assets. According to data available from a sample of EU banks (55 banks) analysed in the EBA risk assessment report total assets decreased by 12\% between 2011 and 2013, while risk-weighted assets decreased by 7\% between December 2011 and December 2012 and by 6\% between December 2012 and December 2013 (on the trends of these two processes see Figure 17 and Figure 18 in annex to this paper).

Linked to the macro-economic scenario, is the availability for institutions of alternative funding sources at relatively lower costs, particularly in recent years, which decreases issuers’ economic incentives to securitise. This is in particular related to the extraordinary open market operations that have been put in place and are still being put in place\textsuperscript{19} by central banks, including the ECB and the BoE, to address the stall of the inter-bank funding market and the dry up of capital markets that characterised the recent financial turmoil. The availability of central bank funding in large amounts and at relatively low cost, necessary to revive banks’ funding and through the latter the funding of the real economy, today still appears to contribute to making securitisations an ‘uneconomical’ funding option for institutions which have access to central banks’ facilities\textsuperscript{20}.

The availability of alternative funding sources however goes beyond central bank funding. The covered bond, for instance, is a funding tool which is an alternative secured long-term funding option also available to institutions at costs which are lower than the costs of funding through securitisations, irrespective of the macro-economic framework. Securitisations and covered bonds are different instruments as noted earlier, not only in relation to their structures, the dual recourse granted by the covered bond instrument and the fact that the assets remain on the balance sheet of the banks when issuing covered bonds, but also in relation to the credit risk tranching which characterises securitisations. The issuance of covered bonds appears to have been the preferred secured funding tools for institutions.

The increased share of customer deposits in funding the balance sheet relative to the pre-crisis situation has also contributed to reducing the need for market-based funding. The deleveraging process has led bank balance sheets towards a more deposit-based funding structure (see Figure 19 in annex to this paper).

Among the current impediments to the securitisation business the lack of investors’ confidence in the external rating process of securitisation products may also play a role. The historical performance of ratings assigned during the years of the crisis clearly shows that pre-crisis rating methodologies failed to appropriately capture the risk inherent in certain securitisation asset classes and structures.

\textsuperscript{18} Deleveraging, per se, may also be a positive driver of securitisation due to the fact that banks can dismiss assets off their balance sheet by securitising them. However, deleveraging when carried out by means other than securitisation, results indeed in fewer assets on the balance sheet available to be securitised and, therefore, in lower levels of securitisation issuance.


\textsuperscript{20} Concerning funding with central banks the following initiatives, and related funding costs, should be considered: ECB 3-year long-term refinancing operations (LTROs) (December and February 2012) totaling EUR 1 trillion, at 1\% interest rate; BoE funding for lending scheme (FLS) (August 2012) funding at between 25 and 150 basis points (bps) over the repo rate on Treasury Bills. The ECB announced LTROs for September 2014 and December 2014 whereby interest rates would equal the prevailing Market Refinancing Operations rate plus a fixed spread of 10 bps.
Also linked to credit rating agencies, albeit from an issuer’s perspective, is the impact of tightened rating methodologies, and in particular of counterparty risk criteria, **systemic risk and sovereign risk criteria**. The treatment of counterparty risk by rating agencies impacts on the availability of counterparties to a securitisation transaction. Due to the downgrades of institutions, which have taken place during and after the financial crisis, the amount of eligible counterparties has diminished; among those institutions still eligible to act as a counterparty, certain institutions may also be reluctant to participate as counterparty in securitisation transactions due to the implied capital and/or collateral requirements and, in particular, due to the potential replacement costs in cases of downgrade in their own rating. In addition, the treatment of systemic risk and sovereign risk (see Box 1 in Chapter 6) has determined the implementation by rating agencies of several country risk overlays: the resulting adjustments and sovereign rating caps affect the credit enhancement on the positions placed with investors and make the economics of credit risk transfer less sustainable.

The **investor base** has changed since the peak of the crisis: relative value and buy-to-hold investors have since 2009 preferred to invest in more stable products, characterised by higher trade volumes, higher liquidity and less regulatory uncertainty, such as covered bonds, corporate bonds or equities. The lack of secondary market liquidity, particularly since 2009, has made it difficult for investors to sell legacy deals due to the absence of a well-functioning market. Furthermore, the lack of liquidity has additionally contributed to keeping new investors out of the market. Finally, approximately 65% of the European securitisation investor base pre-2008 was based on leveraged money21, including structured investment vehicles (SIVs) and bank sponsored arbitrage investment conduits, which made money through a maturity mismatch arbitrage of buying longer dated higher yielding assets and funding them with inexpensive short dated wholesale funding. It does not appear likely that this investor base returns to the market.

The wide reform of the regulatory treatment of securitisations (see Chapter 2), triggered since the crisis and still ongoing, both on the global and EU scale, may have generated **regulatory uncertainty** among market participants concerning the expected final treatment of securitisations, related to specific aspects:

i) Capital charges on securitisation investments are under review in the following frameworks:

   a) the BCBS work for the review of the securitisation framework led to consultation on overall higher capital charges than those currently in force in the EU (CRR);

   b) the EU work on securitisation capital charges on insurance companies and pension funds, differentiated according to type A and type B securitisations.

ii) The treatment of securitisations within the EU implementation of the Liquidity Coverage Ratio (LCR). This factor is in particular likely to impact bank investors and their willingness to securitise/invest in securitisations.

iii) The work of Basel and the European implementation in the EMIR regulation on the margining requirements related to the central and bilateral clearing of derivative transactions

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may have created uncertainty over the requirements applicable to securitisation swaps and the cost impact of such margining requirements.

iv) Risk retention rules: during the drafting process of the EU rules on retention industry feedback highlighted: a) uncertainty stemming from potentially different rules related to retention in the EU and in the US; b) uncertainty stemming from a potentially different scope of application of retention rules across entities involved in the securitisation market which are subject to different EU regulations, i.e. CRR Vs. AIFMD.

v) Requirements of disclosure to investors: within the EU perimeter, the contemporaneous development of disclosure requirements within the EU regulation on investors’ due diligence (CRR) and the EU regulation on disclosure on structure finance instruments (CRA3) may have generated uncertainty in expectations around, for instance, the scope and granularity of the respective proposed rules.

| Question 1: Do you agree with identified impediments to the securitisation market? |
4. Capital treatment of securitisation positions: a comparative review of approaches based on external ratings

The argument is often presented that the treatment of securitisations is more punitive relative to comparable asset classes. This section reviews the capital charges on securitisations in comparison with the charges applicable to other main exposure classes, namely CRR-compliant covered bonds, exposures to (non-SME) corporates, retail exposures, exposures to retail SMEs and corporate SMEs and exposures secured by residential mortgages under both the Standardised Approach (SA) and the Internal Ratings Based Approach (IRB Approach) for computing capital requirements for credit risk in accordance with the CRR. In addition, the comparison focuses on securitisations as they are defined in the CRR (see Box 2 in the annex to this paper) and on those covered bonds that comply with Article 129 of the CRR, i.e. they are subject to a preferential risk weight treatment with respect to other bonds issued by institutions.

4.1 Capital charges under the Standardised Approach of the CRR

In order to calculate the amount of pillar one capital required against a given exposure, under the Standardised Approach, the (i) exposure value under consideration has to be multiplied by (ii) the risk weight assigned to that exposure. For an off-balance sheet item the exposure value has to be determined as a given percentage of its nominal value after reduction of specific credit risk adjustments in accordance with Article 111 of the CRR. The resulting risk-weighted exposure amount has then to be multiplied by the (iii) 8% minimum capital requirement.

Of the 17 exposure classes (as per Article 112 of the CRR) to be applied under the Standardised Approach those being considered in this review are: i) exposures to corporates, ii) retail exposures, iii) exposures secured by mortgages on immovable property, iv) exposures in the form of covered bonds and v) items representing securitisation positions. In particular:

- Within the class of exposures secured by mortgages on immovable property, the present review focuses on exposures fully and completely secured by mortgages on residential property, i.e. residential mortgages fulfilling the requirements of Article 125 of the CRR

22 Article 125 of the CRR specifies the criteria and conditions regarding exposures fully and completely secured by mortgages on residential properties (residential mortgages) which may receive a differentiation in the risk weight. Furthermore, Article 124 of the CRR established the treatment of those exposures that are secured by mortgages on residential properties but do not fulfil the conditions of Article 125 of the CRR.
Table 2, below, summarises the capital charges applicable to different exposure classes defined in the CRR under the Standardised Approach. The capital charge is calculated as the product of the applicable risk weight provided for under the Standardised Approach and the 8% minimum capital requirement assuming a credit conversion factor of 100% (on balance sheet item). As an example, the capital charge of 1.6% applicable to a 'A' rated CRR compliant covered bond results from the product of a risk weight of 20%, provided for in Article 129(4), and the 8% minimum capital requirement.

SME capital charges are calculated in accordance with Article 122 (assuming the corresponding exposures do not qualify for the treatment of exposures to corporates with a short-term credit assessment in accordance with Article 131 of the CRR) or 123 of the CRR depending on whether the exposures fulfill the conditions for applying Article 123 of the CRR. For SME exposures meeting the criteria provided for in Article 501 of the CRR the factor 0.7619 has to be applied to the capital requirements (and is therefore considered in the calculations presented here). Whereas institutions may use their own (plausible) SME definition for purposes of Article 123 of the CRR, the SME definition to be applied is given under Article 501 of the CRR.

While the Standardised Approach of the CRR provides that credit institutions use credit quality steps, which are mapped into external credit ratings, to determine the risk weight applicable to corporate exposures, exposures in the form of covered bonds and exposures representing securitisation positions where a credit assessment by a nominated ECAI is available, the risk weight is generally invariant to external ratings in the case of retail exposures, retail exposures to SMEs and residential mortgages.

The risk weights applied in Table 2 are those provided for in the following Articles of the CRR:

- Article 123 for retail exposures;
- Article 123 for SME retail exposures, including the application of the SME supporting factor (0.7916) provided for by Article 501(1);
- Article 125 for residential mortgages;
- Article 122(1) and 122(2) for non-SME corporate exposures;
- Article 122(1) and 122(2) for SME corporate exposures, including the application of the SME supporting factor (0.7916) provided for by Article 501(1);
- Article 129(4) and Article 129(5) for rated and unrated covered bonds, respectively;
- Article 251 of the CRR for securitisation and re-securitisation positions.

\[\text{In accordance with Article 123 of the CRR, exposures that classify as retail must comply with the following criteria:}\]
\[(a)\] the exposure shall be either to a natural person or persons or to a small or medium-sized enterprise (SME);
\[(b)\] the exposure shall be one of a significant number of exposures with similar characteristics such that the risks associated with such lending are substantially reduced;
\[(c)\] the total amount owed to the institution and parent undertakings and its subsidiaries, including any exposure in default, by the obligor client or group of connected clients, but excluding exposures fully and completely secured by residential property collateral that have been assigned to the exposure class laid down in point (i) of Article 112, shall not, to the knowledge of the institution exceed EUR 1 million. The institution shall take reasonable steps to acquire this knowledge. In addition, Article 123 of the CRR provides that securities shall not be eligible for the retail exposure class.
Table 2 Capital charges (risk-weight * 8%) for different exposure classes under the Standardised Approach

<table>
<thead>
<tr>
<th>External rating</th>
<th>AAA- AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
<th>Below B</th>
<th>Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit quality step</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>Unrated</td>
</tr>
<tr>
<td>Retail exposures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.0%</td>
</tr>
<tr>
<td>SME retail loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.6%</td>
</tr>
<tr>
<td>Residential mortgages (CRR Article 125 compliant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.8%</td>
</tr>
<tr>
<td>(2.13% for residential mortgage exposures to SMEs borrowers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate exposures (non-SME)</td>
<td>1.6%</td>
<td>4.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>12.0%</td>
<td>12.0%</td>
<td>The higher of 8% and capital resulting from sovereign risk weight</td>
</tr>
<tr>
<td>Corporate exposures (SME)</td>
<td>1.22%</td>
<td>3.05%</td>
<td>6.10%</td>
<td>6.10%</td>
<td>9.14%</td>
<td>9.14%</td>
<td>The higher of 8% and capital resulting from sovereign risk weight (taking into account the SME supporting factor 0.7619).</td>
</tr>
<tr>
<td>CRR compliant covered bonds</td>
<td>0.8%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>4.0%</td>
<td>4.0%</td>
<td>8.0%</td>
<td>A function of the risk weight assigned to senior unsecured exposures to the issuer (i.e. issuer RW): min 0.8% max 8%</td>
</tr>
<tr>
<td>Securitisation</td>
<td>1.6%</td>
<td>4.0%</td>
<td>8.0%</td>
<td>28.0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Re-securitisation</td>
<td>3.8%</td>
<td>8.0%</td>
<td>18%</td>
<td>52%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

24 The CRR uses the terminology of credit quality steps. The mapping between the rating and the credit quality step will be determined by an EBA Implementing Technical Standard. The mapping used here is the example given in the Basel text and the one used so far in the EU.

25 Originator and sponsor institutions may apply the weighted-average risk weight that would be applied to the securitised exposures under Chapter 2 of the CRR by an institution holding the exposures, multiplied by the concentration ratio. For this purpose, the institution shall know the composition of the pool of securitised exposures securitised at all times. The concentration ratio shall be equal to the sum of the nominal amounts of all the tranches divided by the sum of the nominal amounts of the tranches junior to or pari passu with the tranche in which the position is held including that tranche itself. The resulting risk weight shall not be higher than 1 250 % or lower than any risk weight applicable to a rated more senior tranche. Where the institution is unable to determine the risk weights that would be applied to the securitised exposures under Chapter 2, it shall apply a risk weight of 1 250 % to the position.

26 Subject to the availability of a more favorable treatment for unrated liquidity facilities under Article 255 an institution may apply to securitisation positions in a second loss tranche or better in an ABCP programme the risk weight that is the greater of 100 % or the highest of the risk weights that would be applied to any of the securitised exposures under Chapter 2 of the CRR by an institution holding the exposures, provided that the conditions of Article 254 of the CRR are met.

27 Institutions may apply a conversion factor of 50 % to the nominal amount of an unrated liquidity facility in order to determine its exposure value when the conditions in Article 255(1) are met. The risk weight to be applied shall be the highest risk weight that would be applied to any of the securitised exposures under Chapter 2 of the CRR by an institution holding the exposures.
4.2 CRR capital charges under the Internal Ratings Based Approach of the CRR

The IRB Approach for credit risk relies on credit institutions’ own credit risk assessment of its counterparties and exposures to calculate capital requirements for credit risk. A comparison between the capital charges in the IRB approach is therefore not as straightforward.

To use this approach, credit institutions must take two major steps:

- categorise their exposures into one of the seven classes of exposures provided for in Article 147 of the CRR;
- estimate the risk parameters: while institutions generally have to use own estimates of PD, LGD and conversion factors when applying the IRB Approach to their retail exposures, with regard to their exposures to corporates, institutions, central governments and central banks institutions can be authorised to use either only their own estimate of the one-year probability of default (under what is commonly defined as the foundation IRB Approach) or they can be authorised to use as well their own estimate of the loss given default (LGD), and the conversion factors (under what is commonly defined as the advanced IRB approach) that are inputs to risk-weight functions to be applied for each asset class to arrive at the risk-weighted exposure amount (commonly referred to as RWA) for the corresponding exposures.

The regulatory capital for credit risk is then calculated as 8% of the total IRB RWA.

As summarised in Table 3, below, the asset classes considered in this discussion paper are treated in the IRB Approach in accordance with the following approaches:

- Retail exposures, including exposures to SMEs qualifying as retail, are subject to the advanced IRB Approach, which imposes a specific risk weight formula as specified in Article 154 of the CRR. In particular, within the retail class:
  - Exposures secured by immovable property, including residential mortgages, are assigned a flat correlation coefficient equal to 15%;
  - qualifying revolving exposures (i.e. compliant with Article 154(4)) are assigned a flat correlation coefficient equal to 4%;
  - in any case the estimated PD cannot be lower than 0.03%;
  - exposures to retail SMEs benefit from the so called SME supporting factor (0.7619 as per Article 501 of the CRR).

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28 See footnote 25.

29 Permission is needed from the relevant competent authorities to use the IRB Approach, as the IRB approach allows for more flexibility, hence requiring substantial expertise at the institution using the IRB approach.
Corporate exposures, including exposures to SMEs which do not qualify as retail, are subject to either a foundation or an advanced IRB Approach, which imposes a specific risk weight formula as specified in Article 153 of the CRR. Also for corporates:

- in any case the estimated PD cannot be lower than 0.03%;
- exposures to SME corporates benefit from the so called SME supporting factor (0.7619 as per Article 501 of the CRR).
- corporates with total annual sales/total assets of less than EUR 50 million may benefit from reduced correlation assumption in accordance with Article 153(4) of the CRR.

Securitisations: the treatment differs depending on whether the securitisation positions are rated (Ratings Based Method under Article 261) or unrated (supervisory formula and specific cases under Article 262).

Covered bonds: within the IRB Approach covered bonds are exposures to institutions. In using an own estimate of the issuer’s probability of default institutions are constrained by a floor (0.03%). Covered bonds which are Article 129 compliant receive a preferential treatment under the foundation IRB Approach, in that the related LGD can be set to a substantially lower value (11.25%) than for other senior exposures without eligible collateral to institutions (45%).

Table 3 Main constraints per exposure class under the IRB Approach

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Foundation IRB</th>
<th>Advanced IRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Exposure</td>
<td>N/A</td>
<td>PD: own estimate - at least equal to 0.03% (Article 163 of the CRR);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LGD: own estimate;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exposure-weighted LGD not lower than (Article 164(4)): i) 15% at portfolio level for exposures secured on commercial immovable property; ii) 10% at portfolio level for exposures secured on residential immovable property</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RW: as per Article 154 of the CRR</td>
</tr>
<tr>
<td>Corporates (non-SME)</td>
<td>PD: own estimate - at least equal to 0.03% (Article 160 of the CRR).</td>
<td>PD: own estimate - at least equal to 0.03% (Article 160 of the CRR);</td>
</tr>
<tr>
<td></td>
<td>LGD:</td>
<td>LGD: own estimate;</td>
</tr>
<tr>
<td></td>
<td>- senior exposures without eligible collateral: 45% (Article 161)</td>
<td>RW: as per Article 153 of the CRR;</td>
</tr>
<tr>
<td></td>
<td>- subordinated exposures without eligible collateral: 75% (Article 161)</td>
<td>Maturity: 1 to 5 years (it can be lower than 1 year under some exceptions).</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>PD</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-----</td>
</tr>
<tr>
<td>Loans to SMEs – 147(5) non-compliant – as corporates</td>
<td>As corporates</td>
<td>As corporates</td>
</tr>
<tr>
<td>Loans to SMEs – 147(5) compliant – as retail</td>
<td>N/A</td>
<td>As retail exposure;</td>
</tr>
<tr>
<td>Residential Mortgages – 147(5) compliant – as retail</td>
<td>N/A</td>
<td>As retail exposure;</td>
</tr>
<tr>
<td>Residential Mortgages – 147(5) non-compliant – as corporates</td>
<td>As corporates</td>
<td>As corporates</td>
</tr>
<tr>
<td>Qualifying retail – 154(4) compliant</td>
<td>N/A</td>
<td>As retail with:</td>
</tr>
<tr>
<td>CRR-compliant covered bonds</td>
<td>PD (of the issuer): own estimate - at least equal to 0.03% (Article 160 of the CRR).</td>
<td>PD (of the issuer): own estimate - at least equal to 0.03% (Article 160 of the CRR); LGD: own estimate;</td>
</tr>
</tbody>
</table>
Securitisation

For rated positions: the ‘Ratings Based Method’ (RBM) provides a look-up table according to which different CQSs (mapped to long-term and short-term ratings assigned by ECAs) correspond to different risk weights, where the treatment is differentiated according to the seniority of the securitisation position and the granularity of the underlying pool. In addition, under the RBM, risk weights must be multiplied by a factor of 1.06 and by the exposure value when calculating the risk-weighted exposure amount, subject to a maximum risk-weighted exposure amount of 12.5 times the exposure value.

For unrated transactions: a ‘supervisory formula method’ may be used, provided that PD, LGD and exposure value (as applicable) are available to the institution. Unrated positions stemming from ABCP programmes are subject to specific requirements. Where the supervisory formula or the ABCP treatment cannot be applied the positions receive a 1250% risk weight.

Table 4 and Table 5, below, summarise the capital charges applicable to securitisations, CRR-compliant covered bonds, residential mortgages, loans to corporate SMEs, loans to retail SMEs, ‘qualifying revolving’ exposures and (non-SME) corporate exposures.

The IRB capital charges for CRR-compliant covered bonds, computed in Table 4, are presented so as to allow a broad comparison with those applicable to securitisations across credit quality steps (and hence across external rating grades). While the requirements do not depend on the external rating grade assigned to the covered bond, Table 4 is based on the assumption that, on average, a given covered bond may benefit, at the time of issuance, from an external rating uplift of up to four to five notches with respect to the external rating of the issuing institution.
Table 4 Capital charges: securitisation (Ratings Based Method) vs. covered bonds (IRB foundation)\textsuperscript{30,31}

<table>
<thead>
<tr>
<th>Securitisation position</th>
<th>Covered bond issuer rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securitisation rating</td>
<td>AAA</td>
</tr>
<tr>
<td>Long-term rating</td>
<td></td>
</tr>
<tr>
<td>Credit Quality Step</td>
<td></td>
</tr>
<tr>
<td>Senior: N&gt;6</td>
<td>0.56%</td>
</tr>
<tr>
<td>Non-senior: N&gt;6</td>
<td>0.64%</td>
</tr>
<tr>
<td>Non-senior: N&gt;6</td>
<td>0.80%</td>
</tr>
<tr>
<td>A+</td>
<td>1.20%</td>
</tr>
<tr>
<td>A</td>
<td>1.60%</td>
</tr>
<tr>
<td>BB+</td>
<td>2.80%</td>
</tr>
<tr>
<td>BBB</td>
<td>4.80%</td>
</tr>
<tr>
<td>BBB-</td>
<td>8.00%</td>
</tr>
<tr>
<td>BB+</td>
<td>20.00%</td>
</tr>
<tr>
<td>BB</td>
<td>34.00%</td>
</tr>
<tr>
<td>BB-</td>
<td>52.00%</td>
</tr>
<tr>
<td>Below BB-</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

\textsuperscript{30} For further details on how these capital charges are computed see Box 3 in annex to this paper.
\textsuperscript{31} Risk-weights are multiplied by a factor of 1.06 and by the exposure value when calculating the risk-weighted exposure amount.
\textsuperscript{32} Capital charges for the long-term ratings could not be calculated due to missing issuer’s PD data.
Table 5 Capital charges: residential mortgages – SME retail – qualifying retail - corporates (IRB foundation only)

<table>
<thead>
<tr>
<th>Residential mortgages</th>
<th>SME retail - including supporting factor</th>
<th>Qualifying revolving</th>
<th>Corporates (non-SME)</th>
<th>SME corporate – including supporting factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>Median</td>
<td>Q1</td>
<td>Q3</td>
<td>Median</td>
</tr>
<tr>
<td>2.60%</td>
<td>1.80%</td>
<td>1.10%</td>
<td>3.30%</td>
<td>2.50%</td>
</tr>
</tbody>
</table>

In this table: ‘Q1’ stands for first quartile, ‘Q3’ stands for third quartile and ‘WA’ stands for weighted average. For further details on how these capital charges are computed see Box 3 in annex to this paper.
The EBA believes that the capital requirements for securitisation and covered bonds should be calibrated to reasonably conservative standards and related to the risk of the corresponding exposures. The capital requirements should also be broadly consistent with the capital requirements for the underlying portfolio while taking into account the different structural, transparency and risk specifics of the debt products.

Different regulatory capital treatments for securitisation and covered bonds are justified given the major differences in the risk characteristics of the two different products, however, the regulatory capital for the senior tranche of a securitisation transaction should never be higher than the capital charge for the corresponding underlying portfolio. The senior tranche benefits from structural collateralisation mechanisms of the securitisation transaction.
5. Development of a simple, standard and transparent securitisation market

5.1 The benefits of securitisation

A well-functioning and prudentially sound securitisation market in EU helps the real economy and strengthens the resilience of the financial system to banking crises by:

- opening an alternative funding channel to fund the economy, the cost of which becomes less dependent on the state of the banking sector;
- realising increasing levels of credit risk transfer and hence risk sharing in the financial system.

The first benefit is particularly relevant for the EU economy, where the current bank-growth nexus is such that close to 85% of European financing is provided by banks, leaving the economy with little alternative to bank credit in order to fund growth.

The second benefit is also particularly helpful in relation to the current deleveraging and de-risking processes in which EU banks have engaged, in that securitisation facilitates those processes without triggering an excessive contraction of the real economy.

In this context, the EBA has been requested by the European Commission to identify which characteristics would be the most appropriate to designate simple and transparent securitisation products for funding the real economy in Europe, and to assess from a prudential perspective if there is merit in providing a preferential/differential regulatory capital treatment to certain ‘qualifying’ securitisation products.

The important role securitisation can play for banks and the economy as a whole has also been recognised at the global level. In April 2014, the G20 Finance Ministers and Central Bank Governors agreed to examine ways to enhance the capacity of financial markets to channel more long-term finance, including to small and medium-sized enterprises. To reach this objective, the G20 has launched a specific working group, the Investment and Infrastructure Working Group, tasked with carrying out work for rebuilding confidence in securitisation markets for infrastructure financing purposes.

Furthermore, an international task force has been established by the IOSCO and the BCBS. The task force has to identify impediments hindering investors from participating in the recovery of sustainable securitisation markets. This group will also develop criteria to identify and assist in the development of simple and transparent securitisation structures by the financial industry. The task force aims at submitting a final report to the BCBS and IOSCO Committees by the end of the first quarter of 2015.

The criteria proposed in this discussion paper refer to term securitisations only. Therefore, while the CRR definition of securitization has a wider scope that encompasses ABCP, ABCP are excluded from the scope of these criteria.
5.2 Lessons from the crisis

One of the most important lessons of the 2007-2008 crisis is that risk and losses of securitisation products have been substantially different between products and regions. Most of the US subprime RMBSs and structured credit products (CDOs) performed poorly during the crisis (see Chapter 1), irrespective of the pre-crisis rating level, due to a number of factors including:

i. misalignment of interest between originators and investors resulting in very loose underwriting criteria of underlying loans in securitisation transactions;
ii. wrong modelling assumptions from rating agencies and investors;
iii. the complexity of transactions, and
iv. the lack of sufficient transparency towards investors and investor’s due diligence.

At the same time, it should be noted that most EU securitisation products performed well with almost zero losses before, during and after the crisis.

The EIOPA’s report on long-term funding states that respondents identified the following contributing factors to the strong performance of European securitisations in terms of low number of downgrades and of actual defaults over the recent years:

• No ‘originate to distribute’ model;
• Granular and diverse loan pools;
• High levels of credit enhancements;
• No use of leverage;
• No maturity transformation (i.e. matching of underlying assets and liability side).

EIOPA in its report acknowledges the differences among securitisation products and becomes the first regulator in the world to distinguish between capital charges for Type A securitisation and Type B securitisation regardless of external rating.

The differentiation between Type A securitisations and Type B securitisations has been done based on a set of proposed criteria related to i) structural features, ii) asset class eligibility and related collateral characteristics, iii) listing and transparency features and iv) underwriting process criteria.

The Prime Collateralized Securities (PCS) Association in its response to the BCBS Consultation Paper ‘Revision to the Basel Securitisation Framework’ (issued in December 2012) and to the EBA’s questionnaire on the potential development of a ‘high quality’ securitisation market in the EU (issued March 2014), identifies four specific elements in securitisation transactions that ran into difficulties during the 2007-2008 crisis. These four elements are:

34 The Prime Collateralised Securities initiative (PCS) established in June 2012, is an independent, not-for-profit initiative set up to reinforce the asset-backed securities market in Europe as a key to generating robust and sustainable economic growth for the region. At the heart of the PCS initiative is the PCS Label designed to enhance and promote quality, transparency, simplicity and standardisation throughout the asset-backed market.
• **Originate to distribute model**: many securitisations whose underlying assets were originated by financial institutions that ran an ‘originate to distribute’ model performed badly. This has now been recognised as the consequence of the dramatic decline in underwriting criteria that can be generated by this model. Such declines resulted from the replacement, within some financial institutions, of a long term funding credit analysis by a short term Value-at-Risk analysis.

• **Leverage**: many securitisations which contained high levels of leverage failed (CDOs of ABS, CDOs squared, CPDOs, etc.). Leverage implies that very small changes in the credit performance of the underlying assets have substantial impacts on the credit performance of the securitisation. As such, these securitisations relied on a purported degree of accuracy in the measurement of the credit risk (including issues of correlation) that proved highly illusory. Put differently, highly leveraged securitisations are very vulnerable to model risk and the CRAs, as well as the market, placed unwarranted faith in the capacity of models based on limited data sets to gauge credit outcomes.

• **Embedded maturity transformation**: securitisations are, in the majority, ‘pass through’ structures. The obligation to pay the holders of the securitisation bonds only arises when the debtors in respect of the underlying assets pay interest and/or principal. As such, they do not rely on capital market refinancing to meet their principal obligations. A limited sub-set of securitisations did have embedded maturity transformation: structured investment vehicles and, to a substantial extent, CMBS products. Securitisations relying on refinancing within a narrow window of time are vulnerable to market liquidity risks that are difficult to model – if such modelling is even theoretically possible. As such they present specific credit risks that are very difficult to quantify. Such securitisations also reported a negative performance during the crisis.

• **Transparency**: During the crisis it became clear that many investors did not have at their disposal sufficient information on the credit risk of their asset-backed holdings to perform a reasonable assessment. This led to massive and uncontrolled disposals (or attempted disposals) generating substantial mark-to-market losses for financial institutions. Lack of transparency can come either in the form of an absence of necessary data or in the form of complexity. When related to complexity, the data is available but either its quantity or the underlying complexity of the securitisation structure is such that even a sophisticated investor cannot derive a reasonable assessment of the risks of the instrument.

**RECOMMENDATION 2**: Recommendation to create a framework for simple, standard and transparent securitisations

Creating simple, standard and transparent securitisations will address many of the drawbacks and risks observed during the financial crisis. It tackles complexity and opaqueness and many inherent risks of the securitisation processes, most notably model and agency risk.

**Rationale**

Simple, standard and transparent securitisations will i) raise the minimum standards for securitisations transactions and lead towards more harmonisation of securitisation products, ii) contribute to the re-establishment of investors’ confidence towards the securitisation instrument and could broaden the investor base for securitisations, and iii) pave the way to a more risk-sensitive regulatory framework that can differentiate between different securitisation products.
with different risks and historical performance.

A well-functioning prudentially sound securitisation market based on simple, standard and transparent securitisations in the EU helps the real economy and strengthens the resilience of the financial system to banking crises by:

   i) opening an alternative funding channel to fund the economy, the cost of which becomes less dependent on the state of the banking sector;

   ii) realising increasing levels of credit risk transfer and hence risk sharing in the financial system.

   iii) facilitating the investors’ analysis of risks inherent to the corresponding securitisation positions and thereby investing in such securitisation positions

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**RECOMMENDATION 3: Recommendation on criteria defining simple, standard and transparent securitisations**

*The criteria to identify a simple, standard and transparent securitisation should capture and reduce the major non-credit related risks of a securitisation that were identified during the crisis including i) the use of an ‘originate to distribute’ model, ii) the use of leverage, iii) the exposure of investors to substantial refinancing risk and iv) the lack of disclosure. The recommended criteria are listed in Pillar I, II and III of section 5.3.*

**Rationale**

Securitisation is a financing technique that converts illiquid loans or assets that are normally not tradable into tradable securities that have the ability to raise finance in the financial markets. Furthermore, securitisations enable an institution to reduce its capital requirements by transferring a significant part of the credit risk of the underlying exposures to third parties.

This transformation process is complex, of a technical nature and reduces transparency to investors. The non-credit related risks inherent in a securitisation transaction stem from the features of the securitisation process including amongst others the modelling, structuring and servicing risks as well as the risk of insufficient disclosure of material information to investors.

Introducing simple, standard and transparent securitisations helps disentangle securitisation transactions where the major non-credit related risks arising in the securitisation transformation process are mitigated from those securitisations where a sufficient mitigation of these non-credit related risks cannot be assumed.

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**5.3 EBA proposed criteria for identifying a simple, standard and transparent securitisation**

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The criteria proposed in this section identify three main pillars on which securitisation transactions should be structured and managed, namely simplicity, standardisation and transparency. The proposed features capture and mitigate the major drivers of risk, as highlighted by the recent financial crisis, that do not directly relate to the riskiness of the underlying exposures. The proposed three pillars ensure many safeguards, including but not limited to retention of economic interest, enforceable legal and economic transfer of the underlying exposures, simple payment waterfall structures, lack of maturity transformation and liquidation risk, disclosure of data on underlying exposures on a loan-by-loan level as well as disclosure to investors of underlying transaction documentation and quarterly reporting.

Identifying securitisation with these characteristics should, as a minimum, enhance investor confidence in the securitisation products and contrast the crisis stigma which the market has attracted. In addition it should ensure that a sufficiently broad investor base is able to carry out, with confidence, the necessary due diligence assessments and risk modelling analysis.

**Pillar I: simple securitisations**

<table>
<thead>
<tr>
<th>Criterion 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The securitisation should meet the following conditions:</td>
</tr>
<tr>
<td>- It should be a securitisation as defined in the CRR (as per Article 4 (61));</td>
</tr>
<tr>
<td>- It should be a ‘traditional securitisation’ as defined in the CRR (as per Article 242(10));</td>
</tr>
<tr>
<td>- It should not be a ‘re-securitisation’ as defined in the CRR (as per Article 4 (63)).</td>
</tr>
</tbody>
</table>

**Rationale**

Simple securitisations should only include those transactions that are referred to in the EU regulation as ‘securitisations’, i.e. those transactions for which: i) payments depend on the performance of underlying assets and, ii) the tranching of credit risk determines the distribution of losses during the on-going life of the transaction. As mentioned previously, the criteria proposed in this paper regard term securitisations only; ABCP, while meeting the CRR definition of securitisation, are out of the scope of the criteria proposed in this paper.

In addition, simple securitisations should be traditional securitisations, i.e. they should imply a legal and economic transfer of the securitised assets either through transfer of ownership to an SSPE or through sub-participation by an SSPE. The transfer of the assets to be securitised ensures that securitisation investors have recourse to those assets should the SSPE not fulfil its payment obligations. Such recourse cannot be granted in non-traditional transactions, i.e. synthetic transactions, due to the fact that only the credit risk associated with the underlying assets, rather than the ownership of such assets, is transferred to the SSPE. In addition, most synthetic structures add to the complexity of the securitisation in terms of counterparty credit risk and risk modelling.

Re-securitisations have been structured in the past into highly leveraged structures where lower credit quality notes could be re-packaged and credit enhanced, resulting in transactions where small changes in the credit performance of the underlying assets severely impacted on the credit quality of the re-securitisation bonds. The modelling of the credit risk arising in these bonds proved very difficult, also due to high correlations arising in the resulting structures. For these reasons re-securitisations should not be considered as simple securitisations.
Criterion 2: The securitisation should not be characterised by an active portfolio management on a discretionary basis. Assets transferred to a securitisation should be whole portfolios of eligible exposures or should be randomly selected from those satisfying eligibility criteria and may not be actively selected or otherwise cherry-picked. Substitution of exposures that are in breach of representations and warranties should in principle not be considered as active portfolio management.

**Rationale**
The payments of simple securitisations should depend exclusively on the performance of the underlying assets: active portfolio management adds a layer of complexity and increases the agency risk arising in the securitisation by making the securitisation’s performance depending on both the performance of the underlying assets and the performance of the management of the transaction. Replenishment practices and practices of substitution of non-compliant exposures in the transaction do not configure as active management of the transaction provided that they do not result in any form of cherry-picking.

Criterion 3: The securitisation should be characterised by legal true sale of the securitised assets and should not include any severe insolvency clawback provisions. A legal opinion should confirm the true sale and the enforceability of the transfer of assets under the applicable law(s). Severe clawback provisions should include rules under which the sale of cash flow generating assets backing the securitisation can be invalidated by the liquidator solely on the basis that it was concluded within a certain period (suspect period) before the declaration of insolvency of the seller (originator/intermediary), or where such invalidation can only be prevented by the transferees if they can prove that they were not aware of the insolvency of the seller (originator/intermediary) at the time of the sale.

**Rationale**
Simple securitisations should achieve ring-fencing and segregation of the securitised assets from an insolvent originator’s estate through a true sale process; furthermore no provisions should be incorporated which facilitate the reversion of the true sale. Risk analysis and due diligence analysis by investors become too complex in the presence of severe clawback provisions threatening the enforceability of the investors’ claims over the underlying assets.

Criterion 4: The securitisation should be backed by exposures that are homogeneous in terms of asset type, currency and legal system under which they are subject. In addition, the exposures should meet the following criteria:

i) They arise from obligations with defined terms relating to rental, principal, interest or principal and interest payments, or are rights to receive income from assets specified to support such payments;

ii) They are consistently originated in the ordinary course of the original lender’s business pursuant to uniform and non-deteriorating underwriting standards;

iii) They contain a legal, valid and binding obligation of the obligor, enforceable in accordance with its terms against any third party, to pay the sums of money specified in it (other than an obligation to pay interest on overdue amounts);

iv) They are underwritten: (a) with full recourse to an obligor that is an individual or a corporate and that is not a special purpose entity, and (b) on the basis that the repayment necessary to repay the securitisations was not intended, in whole or in part, to be substantially reliant on the refinancing of the underlying exposures or re-sale value of the assets that are being financed by those underlying exposures.

**Rationale**
Simple securitisations should include underlying exposures that are standard obligations, in terms of rights to payments and/or income from assets.

The exposures that are to be securitised should not belong to an asset class that is outside the ordinary business of the originator, i.e. an asset class over which the originator may have less expertise and/or interest at stake. The quality of the securitised exposures should not be dependent on changes in underwriting standards and only exposures underwritten to consistent standards should be in the pool.

Simple securitisations should only rely on underlying assets arising from legally enforceable obligations: as such, they should not include assets arising from obligations vis-à-vis special purpose entities, against which enforceability is more complex.

In addition, in order to mitigate refinancing risk and the extent to which the securitisation embeds maturity transformation, the assets to be securitised should be self-liquidating assets. Simple securitisations should mainly rely on the principal and interest proceeds from the securitised assets to repay investors. Reliance on refinancing and/or asset liquidation increases the liquidity and market risks to which the securitisation is exposed and makes the credit risk of the securitisation more difficult to model and assess from an investor’s perspective. Partial reliance on re-financing (future borrowing) or re-sale of the asset securing the exposure may occur provided that re-financing is sufficiently staggered within the pool and the residual values over which the transaction relies are sufficiently low.

**Criterion 5: At the time of inclusion in the securitisation, the underlying exposures should not include:**

i) Any disputes between original lender and borrower on the underlying assets;

ii) Any exposures which are in default. An exposure is considered to be in default if:
   a. it is more than 90 days past-due;
   b. the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due.

iii) Any exposures to a credit-impaired borrower. For these purposes, a borrower should be deemed as credit-impaired where he has been the subject of an insolvency or debt restructuring process due to financial difficulties within three years prior to the date of origination or he is, to the knowledge of the institution at the time of inclusion of the exposure in the securitisation, recorded on a public credit registry of persons with adverse credit history, or other credit registry where a public one is not available in the jurisdiction, or he has a credit assessment by an ECAI or a credit score indicating significant risk of default;

iv) Any transferable securities, as defined in Directive 2004/39/EC (MIFID) or derivatives, except derivatives used to hedge currency and interest rate risk arising in the securitisation.

In addition, the original lender should provide representations and warranties that assets being included in the securitisation are not subject to any condition or encumbrance that can be foreseen to adversely affect enforceability in respect of collections due.

**Rationale**
At the time when they are structured, simple securitisations should not be characterised by underlying assets whose credit risk has already been affected by negative events such as lender/borrower disputes or default events, as identified by the EU prudential regulation. Risk analysis and due diligence assessments by investors become more complex whenever the securitisation includes exposures subject to ongoing negative credit risk developments. For the same reasons, simple securitisations should not include underlying exposures to borrowers that have a history of credit impairment.

Transferable financial instruments add to the complexity of the transaction and to the complexity of the risk and due diligence analysis to be carried out by the investor. The same applies to derivative instruments, except in the case where these instruments provide genuine hedging of the interest and currency risks arising in the transaction. Hedging derivatives enhance the simplicity of the transaction since hedged transactions do not require investors to engage in the modelling of currency and interest rate risks.

**Criterion 6: At the time of inclusion, the underlying exposures are such that at least one payment has been made by the borrower, except in the case of securitisations backed by personal overdraft facilities and credit card receivables**

**Rationale**

Simple securitisations should be structured so as to avoid that assets are included that are affected by fraud or operational problems. It is relevant to ensure that at least one payment has already been made by each underlying borrower, since this reduces the likelihood of the loan being subject to fraud or operational issues. Simple securitisations should minimise the extent to which investors are required to analyse and assess fraud and operational risk.

In the case of personal overdraft facilities and credit cards, where the inclusion of numerous new balances/card accounts (for which no payment has been made as of the time of inclusion) may be inherent to a common way of structuring and managing the securitisation transaction in a dynamic fashion, exposures with no payment are the common practice and should not be excluded as a safeguard against operational/fraud risks.

**Question 2:** Should synthetic securitisations be excluded from the framework for simple standard and transparent securitisations? If not, under which conditions/criteria could they be considered simple standard and transparent?

**Question 3:** Do you believe the default definition proposed under Criterion 5 (ii) above is appropriate? Would the default definition as per Article 178 of the CRR be more appropriate?

**Question 4:** Do you believe that, for the purposes of standardisation, there should be limits imposed on the type of jurisdiction (such as EEA only, EEA and non-EEA G10 countries, etc): i) the underlying assets are originated and/or ii) governing the acquisition process of the SSPE of the underlying assets is regulated and/or iii) where the originator or intermediary (if applicable) is established and/or iv) where the issuer/sponsor is established?

**Pillar II: standard securitisations**
**Criterion 7:** The securitisation should fulfill the CRR retention rules (Article 405 of the CRR).

*Rationale*
Standard securitisations should ensure that originators’/sponsors'/original lenders’ and investors’ interests are aligned, i.e. the securitisation does not follow an originate-to-distribute model. The originate-to-distribute securitisation model, as highlighted in this discussion paper, is one of the features that mostly contributed to the bad performance of certain securitisation products.

**Criterion 8:** Interest rate and currency risks arising in the securitisation should be appropriately mitigated and any hedging should be documented according to standard industry master agreements. Only derivatives used for genuine hedging purposes should be allowed.

*Rationale*
Mitigating and/or hedging interest rate and currency risks arising in the transaction enhances the simplicity of the latter since it does not require investors to engage in the modelling of those risks and of their impact on the credit risk of the securitisation investment.

**Criterion 9:** Any referenced interest payments under the securitisation assets and liabilities should be based on commonly encountered market interest rates and may include terms for caps and floors, but should not reference complex formulae or derivatives.

*Rationale*
Standard securitisations should not make reference to interest rates that cannot be observed in the commonly accepted market practice. The credit risk and cash flow analysis which investors must be able to carry out should not involve atypical rates or variables which cannot be modelled on the basis of market experience and practice.

**Criterion 10:** The transaction documentation of those transactions featuring a revolving period should include provisions for appropriate early amortisation events and/or triggers of termination of the revolving period, which should include, at least, each of the following:

i) A deterioration in the credit quality of the underlying exposures;

ii) A failure to generate sufficient new underlying exposures of at least similar credit quality; and

iii) The occurrence of an insolvency-related event with regards to the originator or the servicer.

*Rationale*
Standard securitisations should ensure that, in the presence of a revolving period mechanism, investors are sufficiently protected from the risk that principal amounts may not be fully repaid. Sufficient protection should be ensured by the inclusion of provisions that trigger amortisation of all payments at the occurrence of adverse events such as those mentioned under (i) to (iii).

**Criterion 11:** Following the occurrence of a performance-related trigger, an event of default or an acceleration event:

i) The securitisation positions are repaid in accordance with a sequential amortisation payment priority, whereby the seniority of the tranches determines the sequential order of payments. In particular, a repayment of noteholders in an order of priority that is ‘reverse’ with respect to their seniority should not be foreseen;

ii) There are no provisions requiring immediate liquidation of the underlying assets at market value.

*Rationale*
Standard securitisations should be such that the required investor’s risk analysis and due diligence does not have to factor in complex and difficult to model structures of the payment priority; nor should the investor be exposed to complex changes in such structures throughout the file of the transaction.
The performance of standard securitisations should not rely, due to contractual triggers, on the liquidation at market price of the underlying collateral: market risk on the underlying collateral constitutes an element of complexity in the risk and due diligence analysis to be carried out by investors.

**Criterion 12:** The transaction documentation should clearly specify the contractual obligations, duties and responsibilities of the trustee, servicer and other ancillary service providers as well as the processes and responsibilities necessary to ensure that:

1. the default or insolvency of the current servicer does not lead to a termination of the servicing of the underlying assets;
2. upon default and specified events, the replacement of the derivative counterparty is provided for in all derivative contracts entered into for the benefit of the securitisation; and
3. upon default and specified events, the replacement of the liquidity facility provider or account bank is provided for in any liquidity facilities or account bank agreements entered into for the benefit of the securitisation.

**Rationale**

Standard securitisations should provide investors with certainty over the replacement of counterparties involved in the securitisation transaction in crucial roles which impact the credit risk of the securitisation, including the servicing of the underlying assets, the hedging through derivative instruments of risks arising in the securitisation as well as roles of support to the securitisation, such as those of liquidity facility providers and bank account providers.

**Criterion 13:** The transaction documentation contains provisions relating to an ‘identified person’ with fiduciary responsibilities, who acts on a timely basis and in the best interest of investors in the securitisation transaction to the extent permitted by applicable law and in accordance with the terms and conditions of the securitisation transaction. The terms and conditions of the notes and contractual transaction documentation should contain provisions facilitating the timely resolution of conflicts between different classes of noteholders by the ‘identified person’. In order to facilitate the activities of the identified person, voting rights of the investors should be clearly defined and allocated to the most senior credit tranches in the securitisation.

**Rationale**

The identified person may be the trustee of the securitisation, including the noteholders’ trustee. Standard securitisations should ensure that an entity is available to take effective decisions, in all circumstances and in accordance with applicable law, and where necessary to appoint third parties. Consultation of market participants has highlighted that, particularly in the EU, the role currently played by the noteholders’ trustee often results in sub-optimal outcomes and in a lack of alignment of interest with investors, particularly as adverse events materialise.

With a view to making more effective the decision-making process, for instance in circumstances where enforcement rights on the underlying assets are being exercised, it is also proposed that the legal documentation provides clear information on how such disputes between noteholders are solved in a timely manner, in accordance with national law.

**Criterion 14:** The management of the servicer of the securitisation should demonstrate expertise in servicing the underlying loans, supported by a management team with extensive industry experience. Policies, procedures and risk management controls should be well documented. There should be strong systems and reporting capabilities in place.
Rationale
Ensuring that all the conditions are there for the well-functioning of the servicing function is crucial given the central nature of this function within any securitisation transaction.

Question 5: Does the distribution of voting rights to the most senior tranches in the securitisation conflict with any national provision? Would this distribution deter investors in non-senior tranches and obstacle the structuring of transactions?

Pillar III: transparent securitisations

Criterion 15: The securitisation should meet the requirements of the Prospectus Directive.

Rationale
Compliance with the Prospectus Directive ensures that, at issuance, the investors have access to all the information that is necessary to make an informed investment decision.

Criterion 16: The securitisation should meet the requirements of Article 409 of the CRR and Article 8b of the CRA (disclosure to investors).

Rationale
The CRR and CRA requirements on disclosure to investors and prospective investors ensure that these parties have access to the data which is relevant for them to carry out the necessary risk and due diligence analysis with respect to the investment decision, directly addressing the opaqueness and analytical complexity which have characterised investors’ perception of securitisations in recent years.

Criterion 17: Where legally possible, investors should have access to all underlying transaction documents.

Rationale
Documentation on the agreements and procedures underlying the transaction should be disclosed to investors and prospective investors in order to allow them to get comprehensive information on the functioning of the transaction in all of its components, particularly in a scenario of default of any of the parties involved in the transaction or other relevant events.

Criterion 18: The transaction documentation should provide in clear and consistent terms definitions, remedies and actions relating to delinquency and default of underlying debtors, debt restructuring, debt forgiveness, forbearance, payment holidays and other asset performance remedies. The transaction documents should clearly specify the priority of payments, triggers, changes in waterfall following trigger breaches as well as the obligation to report such breaches. Any change in the waterfall should be reported on a timely basis, at the time of its occurrence. The originator or sponsor should provide investors a liability cash flow model, both before the pricing of the securitisation and on an ongoing basis.

Rationale
Investors and prospective investors should be in a position to know, as they receive the transaction documentation, what procedures and remedies are foreseen in case adverse credit events affect the underlying assets of the securitisation. Transparency of remedies and procedures, in this respect, allow investors to model credit risk of the underlying exposures with less uncertainty. Clear timely and transparent information on the characteristics of the waterfall determining the payment priorities is necessary for the investor to correctly price the securitisation position. A cash flow model related to the liabilities of the securitisation enables
**Criterion 19:** The transaction should be subject to mandatory external verification on a sample of underlying assets (confidence level of at least 95%) at issuance, by an appropriate and independent party or parties, other than a credit rating agency. Confirmation that this verification has occurred should be included in the transaction documentation.

**Rationale**

Increased transparency towards investors and prospective investors is ensured by the fact that an external entity, not affected by potential conflict of interest within the transaction, is mandated to carry out checks on the underlying exposures of the securitisation.

**Criterion 20:** Investors and prospective investors should have readily available access to data on the historical default and loss performance, such as delinquency and default data, for substantially similar exposures to those being securitised, covering a historical period representing a significant stress or where such period is not available, at least 5 years of historical performance. The basis for claiming similarity to exposures being securitised should also be disclosed.

**Rationale**

Eligible securitisations should be transparent to the extent that they always allow investors to rely on evidence around the historical performance of the assets to be securitised. This evidence is not only necessary for investors to carry out proper risk analysis and due diligence, but it also contributes to building confidence and reduce uncertainty over the market behaviour of the underlying asset class. New asset classes entering the securitisation market, for which a sufficient track record of performance has not yet been built up, may not be considered transparent in that they cannot ensure that investors have appropriate tools and knowledge to carry out proper risk analysis.

**Criterion 21:** Investors and prospective investors should have readily available access to data on the underlying individual assets on a loan-by-loan level, at inception, before the pricing of the securitisation, and on an ongoing basis. Cut-off dates of this disclosure should be aligned with those used for investor reporting purposes.

**Rationale**

Disclosure of loan-by-loan data on the underlying assets ensures that investors have, on a regular basis, access to timely and accurate information on the composition and performance of the underlying pool, necessary to carry out risk analysis and due diligence checks. Regular disclosure of accurate information on composition and performance is also instrumental to the liquidity of the transaction on the secondary market, where each prospective buyer of the transaction has to be able to timely assess the quality of the underlying. The cut-off dates used to disclose loan-by-loan performance data should be aligned with the dates used for the purposes of regular investors’ reporting to facilitate the investors’ analysis.

**Criterion 22:**

Investor reporting should occur at least on a quarterly basis.

As part of investor reporting the following information should also be disclosed:

- All materially relevant data on the credit quality and performance of underlying assets, including data allowing investors to clearly identify debt restructuring, debt forgiveness, forbearance, payment holidays, delinquencies and defaults in the pool;
- Data on the cash flows generated by underlying assets and by the liabilities of the securitisation, including separate disclosure of the securitisation’s income and disbursements, i.e. scheduled principal, scheduled interest, prepaid principal, past due...
interest and fees and charges;
- The breach of any waterfall triggers and the changes in waterfall that this entails.

**Rationale**

Transparent securitisations should ensure that investors have access to all material information that is needed to perform a comprehensive and well-informed analysis of the risks arising in the securitisation, where this analysis also takes the form of stress tests on the cash flows and collateral values supporting the underlying exposures.

Investor reporting, together with loan-by-loan disclosure of performance data, is instrumental to allowing investors to carry out, on a regular basis, appropriate risk analysis and due diligence checks. As the loan-by-loan disclosure, investor reporting is also beneficial to the prospective investor on the secondary market and, therefore, to the liquidity of the transaction.

Transparent securitisations should ensure that investors can identify and disentangle, at all times, the cash flow components of the transaction, are able to reconcile all such different components and are in a position to monitor the risks related to the cash flow dynamics, such as pre-payment risk.

**Question 6:** Do you believe that, for the purposes of transparency, a specific timing of the disclosure of underlying transaction documentation should be required? Should this documentation be disclosed prior to issuance?

5.4 **EBA-identified criteria addressing credit risk**

The criteria proposed in this section identify both qualitative conditions (e.g. regulatory underwriting standards) and quantitative conditions (e.g. maximum risk weights) ensuring that the underlying assets of a securitisation transaction meet minimum levels of credit quality. In the context of a qualifying securitisation framework these criteria ensure that simple standard and transparent securitisation structures are not put in place to finance extremely risky underlying exposures.

**Credit risk criteria**

**Criterion A:** Underlying exposures should be originated in accordance with sound and prudent credit granting criteria. Such criteria should include at least an assessment of the borrower’s creditworthiness in accordance with paragraphs 1 to 4, 5(a) and 6 of Article 18 of Directive 2014/17/EU or Article 8 of Directive 2008/48/EC, as applicable.

**Rationale**
A minimum level of credit quality of underlying exposures can only be ensured if such exposures are underwritten according to the prudential requirements applicable under EU regulation to different exposure types.

**Criterion B:** The pool of exposures to be securitised should be such that the largest aggregated exposure to a single obligor does not exceed 1% of the value of the aggregate outstanding balance. For the purposes of this calculation, loans or leases to a group of connected clients, as referred to in Article 4(39) of the CRR, should be considered as exposures to a single obligor.

**Rationale**

A minimum level of credit quality of the securitisation can only be achieved in those cases where the pool is sufficiently granular, i.e. the impact of idiosyncratic risk is minimised by the fact that none of the securitised exposures represents a too large portion of the pool of underlying exposures. It is important that, in fulfilling the granularity requirement, exposures related to groups of connected clients be considered a single source of idiosyncratic risk.

**Criterion C:** The underlying exposures should fulfil each of the following criteria:

1. They have to be exposures to individuals or undertakings that are resident, domiciled or established in an EEA jurisdiction, and
2. At the time of inclusion they have to meet the conditions for being assigned, under the Standardised Approach and taking into account any eligible credit risk mitigation, a risk weight equal to or smaller than: a) [40%] on a weighted average basis where the exposure is a loan secured by a residential mortgage or fully guaranteed residential loan, as referred to in paragraph 1(e) of Article 129 of the CRR; (b) [50%] on an individual loan basis where the exposure is a loan secured by a commercial mortgage (c) [75%] on an individual loan basis where the exposure is a retail exposure (d) [100%] on an individual loan basis for any other exposures.

3. Under (a) and (b) loans secured by lower ranking security rights on a given asset should only be included in the securitisation if all loans secured by prior ranking security rights on that asset are also included in the securitisation. Under (a) no loan in the securitised portfolio should be characterised by a loan-to-value ratio higher than 100%.

**Rationale**

In conjunction with the requirement that each individual exposure be underwritten in accordance with underwriting standards compliant with prudential regulation, the requirement of a maximum risk weight to be assigned to the individual exposures ensures that in any simple standard and transparent securitisation considered for differentiated regulatory treatment the credit risk stemming from underlying assets is duly contained. A differentiated regulatory treatment particularly in the area of own fund requirements may not be considered for transactions that, despite being simple standard and transparent are characterised by very high levels of credit risk with regard to all or some of the underlying exposures. Maximum risk weights, as well as a maximum LTV ratio in the case of residential mortgage loans, ensure that the riskiness of the securitised exposures is prudentially limited.

**Question 7:** Do you agree that granularity is a relevant factor determining the credit risk of the underlying? Does the threshold value proposed under Criterion B pose an obstacle to the structuring of securitisation transactions in any specific asset class? Would
another threshold value be more appropriate?

**Question 8:** Do you agree with the proposed criteria defining simple standard and transparent securitisations? Do you agree with the proposed credit risk criteria? Should any other criteria be considered?

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**RECOMMENDATION 4: Recommendation on the criteria defining ‘qualifying’ securitisations**

In order to introduce the identified ‘simple, standard and transparent’ securitisations framework into the capital requirements for a potential differentiation of the latter, it is necessary to ensure that both the credit risk on the underlying and the risks of the securitisation process are addressed by regulatory provisions and criteria.

‘Qualifying’ securitisation positions (i.e. positions that qualify for a potential differentiated regulatory treatment) should be defined as securitisation positions that meet both the simple, standard and transparent criteria and the credit risk criteria.

**Rationale**

Securitisations only fulfilling the criteria for simple, standard and transparent securitisations do not justify any differentiation in prudential treatment as they do not have to fulfil any explicit criteria directly limiting the credit risk of the underlying exposures because the overarching criteria for simple, standard and transparent securitisations mainly address the model and agency risk resulting from the securitisation process.

For this reason, qualifying securitisation positions also have to fulfil additional criteria on credit risk that aim to ensure a minimum level of credit quality of the underlying assets. Credit risk was one of the main risks identified during the crisis where the very loose underwriting criteria of underlying loans both led to severe losses on the corresponding securitisation positions.
6. Analysis on the capital treatment of qualifying securitisation positions

Due to the multitude of securitisation transactions across the globe ranging from plain vanilla structures and underlying assets to very complex structures and underlying assets, with varying rating methodologies modelling assumptions and variances in historical rating performance, market participants and some public authorities commented that the limited risk-sensitivity of the regulatory framework to securitisation positions may not be fit for purpose anymore.

On 10 April 2014, the BoE and the ECB issued a joint statement ‘The impaired EU securitisation market: causes, roadblocks and how to deal with them’ supporting a ‘high-quality’ securitisation market and mentioning that standard-setters and legislators being responsible for the regulatory treatment can change incentives for investors to participate in the ABS market and that it’s important that the authorities seek to ensure that new regulations at global and EU levels do not act to the detriment of the securitisation market.

The joint-statement was followed up by a joint discussion paper ‘The case for a better functioning securitisation market in the European Union’ published on 30 May 2014 which included more detail around how a ‘qualifying’ securitisation market could be defined with the help of building blocks (principles for standardisation, simplicity, and transparency) and modules (criteria for credit risk, liquidity risk).

A regulatory defined ‘qualifying’ securitisation framework can be used to better differentiate between different securitisation products and to enhance the risk-sensitivity of prudential regulation applicable to securitisation products, including in the areas of capital, liquidity and large exposure regulation. In addition, the identification of ‘qualifying’ securitisations is likely to support regulators and market participants in reducing the reliance on external credit ratings.

The main objective of this discussion paper is to define a framework for ‘qualifying’ securitisations that may form the basis of a change in the regulatory approach to securitisations. For the purposes of this report qualifying securitisations are those securitisations meeting the proposed criteria of simplicity, transparency and standardisation (see section 5.3) and, in addition, fulfilling the proposed credit risk criteria on the underlying (see section 5.4). Based on the call for advice received from the European Commission, the regulatory use of the qualifying securitisation framework is limited, for the purposes of this discussion paper, to the prudential framework defining institutions’ own funds requirements for credit risk.

Within Chapter 1, historical evidence has been presented showing the substantially different performance of different asset classes of the securitisation market during the years of the crisis,
both in terms of observed defaults and of realised and expected losses, as reported by the major
credit rating agencies. The proposal of a regulatory framework that factors in qualitative criteria
on the simplicity, standardisation and transparency of the securitisation transaction as well as
credit risk criteria on the quality of the underlying assets should ensure that the most important
risk drivers of the securitisation are addressed and mitigated, apart from the credit risk of the
underlying assets.

It should be noted that it is not feasible to identify with precision within available historical
datasets those securitisation products that fulfilled all the qualitative and credit risk criteria being
proposed in this paper, in order to compare their performance with that of all the other products.
It is, however, possible to partition the available asset classes for which rating default
performance is available (see Figure 3 and Figure 4 in Chapter 1 based on the ESMA CEREP
dataset) according to a ‘qualifying’ vs. ‘other’ break down based on the assumption that certain
asset classes are more likely to have been structured according to main principles which resemble
the criteria proposed here.

By taking into account the principles of alignment of net economic interest between originators
and investors, the absence of re-securitisation products as well as the lack of material embedded
maturity transformation as discriminating principles, Figure 7 and Figure 8 propose comparing
historical performance, at the levels of ‘AAA’ and ‘BBB’ rating, according to the following break
down:

- ‘Qualifying’ securitisation positions: EU RMBS and EU ABS products;

Figure 7 Historical three-year default rate performance according to asset class partition: qualifying vs. other – AAA
rating

![Figure 7](image-url)

Source: CEREP data and EBA calculations.
**Figure 8** Historical three-year default rate performance according to asset class partition: qualifying vs. other – ‘BBB’ rating

![Graph showing 'BBB' three-year default rates for qualifying and other securitisation positions]

Source: CEREP data and EBA calculations.

**RECOMMENDATION 5: Recommendation on a differentiated capital requirements treatment for ‘qualifying’ securitisation positions vs. other securitisation positions.**

Introducing qualitative and quantitative criteria for a ‘qualifying’ securitisation framework should help increase the risk sensitivity of capital requirements and potentially reduce reliance on external ratings. A different capital treatment should be envisaged for these transactions.

**Rationale**

If capital requirements were calibrated following an insufficiently risk-sensitive approach, this could result in too high capital requirements for securitisation products that performed relatively well (with almost zero losses) throughout the crisis and/or in too low capital requirements for securitisation products that performed relatively bad throughout the crisis.

**Question 9:** Do you envisage any potential adverse market consequences of introducing a qualifying securitisation framework for regulatory purposes?

One consideration for the calibration of capital requirements applicable to securitisation positions could be the capital requirement applicable to the underlying pool of assets. However, as the securitisation process (i.e. the process of packaging and slicing loans into securitisation bonds) creates additional model risk and agency risk, the global regulatory approach taken so far has recognised that the so-called neutrality (i.e. equality) between the capital charges applying to the
underlying assets (i.e. non-securitised assets held on the balance sheet) and the capital charges applying to all securitisation bonds of a transaction (i.e. the same assets in a securitised format) is not prudent nor is it a desirable regulatory outcome.

Figure 9, below, compares at a very high level the capital requirements across regulatory approaches applicable to a hypothetical non-securitised pool of assets, on the one hand, and to the hypothetical tranches resulting from the securitisation of the mortgage portfolio, on the other hand. The example applies the SA and RBM securitisation capital requirements to two generic RMBS capital structures, representing respectively the pre-2010 and post-2010 generic credit tranching in the share of the RMBS market rated by S&P (see Table 8 in annex to this paper for a detailed description of the two RMBS capital structures used). The capital charges applicable to the hypothetical underlying pool of mortgage loans under the SA are computed under two different scenarios: in one case all the loans in the pool are assumed to be eligible to receive a risk weight of 35%, with no adjustments for delinquency (SA RW35), while in the other case it is assumed that the portfolio of mortgage loans is only eligible to receive a risk weight of 50% (SA RW50). The capital charges applicable to the underlying pool of mortgage loans under the F-IRB approach are computed by reference to the credit quality of the median residential mortgage portfolio of a 2012 sample of EU banks (see Table 5 in Section 4.3).35

As shown in Figure 9:

- With reference to the capital structure that represents post-crisis structuring standards, the application of the SA results in non-neutral requirements under both the low underlying risk scenario (risk weight equal to 35%) and high underlying risk scenario (risk weight equal to 50%). The non-neutrality ratio, i.e. the ratio between the capital requirement applicable to the total tranches and the capital requirement applicable to the underlying pool equals 2.4 and 1.7 respectively.

- When applied to the capital structure that represents pre-crisis structuring standards, the SA for securitisation results in overall capital charges which appear to be lower than those applicable to the underlying pool under the high underlying risk scenario (risk weight equal to 50%), the multiplier being equal to 0.84 in the latter case.

- The application of the RBM to compute capital requirements on securitisation results in non-neutral requirements where the underlying pool risk equals the risk of the median residential mortgage portfolio of a sample of EU institutions. The non-neutrality ratio equals 1.1 when the RBM is applied to the capital structure that represents pre-crisis structuring standards and 2.9 when it is applied to post-crisis structuring standards.36

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35 See footnote 38.

36 A fully fair comparison should also take into account that the residential mortgage credit risk median parameters used for the exercise reflect risk in the post-2010 phase of financial markets, and therefore are more compatible with the post-2010 average capital structure.
The example sheds light on the following aspects of the current capital requirements framework based on external credit ratings:

a) When applied to the pre-crisis structuring standards, the securitisation capital requirements based on external ratings do not depart materially from neutrality, with reference to both the SA and F-IRB charges applicable to the underlying portfolios;

b) An important portion of the capital requirements of the tranches is due to the effect of the floor when applying the SA (i.e. the risk weight of 20% applicable to the most senior AAA rated tranche under the SA). Also, non-neutrality of the overall capital amount is due, in large part, to the capital requirements applicable to the mezzanine and junior tranches;

c) Under the RBM, the capital attributable to the most senior tranche represents a lower proportion of the overall capital requirement on all tranches, as the floor (the risk weight of 7% applicable to the most senior AAA rated tranche) is lower than the SA floor.

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37 ‘SA pool’: capital requirements on the underlying portfolio according to the Standardised Approach. ‘SEC SA’: capital requirements on the tranches of the securitisation according to the Standardised Approach of the securitisation framework. ‘F-IRB pool’: capital requirements on the underlying portfolio according to the Foundation Internal Ratings Based Approach. ‘RBM SEC’: capital requirements on the tranches of the securitisation according to the Ratings Based Method of the securitisation framework.

38 The calculation of the hypothetical non-neutrality ratio is implemented with reference to the capital charge computed under the Foundation IRB Approach on the underlying portfolio augmented by a capital charge add-on equal to the 1 year expected loss (EL in the figures).
d) Since 2010, the credit rating agencies appear to have changed substantially their rating methodologies applicable to some asset classes and certain risks, leading to a general increase in credit enhancement levels, given a certain rating grade (in the RMBS example considered in Figure 9, above, the thickness of the first loss tranche increases from 0.5% pre-2010 to 4.5% post-2010). The application of the capital requirements currently in force to the new structuring standards of the RMBS segment leads to a material departure from the neutrality of the capital requirements. However, it is noted that:

- Rating agency methodologies have and will change over time.
- The creation of securitisation structures changes the risk profile of the assets and can introduce material additional risks not present in the underlying portfolio.

Following the performance of certain securitisation products during the financial crisis the major credit rating agencies have implemented substantial changes in the rating methodologies and rating assumptions applicable to those products. While these changes have occurred all along the rating process (Box 4 in the annex illustrates the high level principles behind the rating process by the major credit rating agencies), substantial focus has been put on the way credit rating agencies deal with counterparty credit risk (Box 5 in annex provides a short definition of counterparty credit risk in the context of securitisations) and with sovereign risk.

Figure 10 to Figure 13 indicate extent of hypothetical non-neutrality of capital requirements on a jurisdiction-specific and asset class-specific basis, including the SME and prime RMBS asset classes. The exercise uses hypothetical capital structures that are representative of the current (post-crisis) structuring standards in the respective asset class, as rated by Fitch (see the characteristics of these structures in Table 9 to Table 11 in annex to this paper). SME pools are treated as pools of corporate SMEs: the risk weighting hence follows the approach for corporates foreseen under the SA 39 and F-IRB approach of the CRR. Also, for the purposes of the computations illustrated below it is assumed that the securitised exposures towards corporate SMEs do not meet the requirements of Article 501 of the CRR and hence do not benefit from the SME supporting factor. The credit risk parameters (PD and LGD) 40 related to the underlying portfolios, by asset class and jurisdiction, are taken to represent median and / or weighted average credit risk from different available samples of EU institutions (see Table 9 and Table 11 in annex for an illustration of the underlying data and their sources).

The extent to which capital requirements for the hypothetical securitisations differ from those of their hypothetical underlying portfolios varies substantially across jurisdictions and asset classes, with those jurisdictions that mostly were in the focus of sovereign risk analysis by the rating agencies showing the greatest difference. Italy and Spain in the case of the SME asset class, Spain and Portugal in the case of the RMBS asset class, are those jurisdictions over which a rating country ceiling was imposed by, among others, Fitch. Due to the respective ceilings, the Italian

39 Within the SA for corporates exposures the SME portfolios assumed for the purposes of this exercise are assumed to comprise of unrated SME corporate borrowers that attract a risk weight of 100%.

40 Calculations are based on an assumed conversion factor of 100%.
and Spanish SME transactions have their most senior tranche of credit risk capped at the ‘AA’ rating grade. The same is true for Spanish RMBS transactions. In the case of Portuguese RMBS transactions, the most senior tranche’s rating is capped at ‘A’.

It should be noted that the pre-securitisation capital requirement is based on observed PDs and LGDs. The post-securitisation capital requirement is based on the typical tranching for the specific asset class and the jurisdiction. The securitisation tranching derives from the application of the rating agencies methodologies, whereby:

- Post-2010 ‘base scenario’ PD and LGD inputs are likely to take on more conservative values than those observed in the regulatory framework, i.e. used by IRB-authorised institutions.
- The LGD is likely to be positively correlated to PD (i.e. for a given rating level, the LGD is stressed as the PD is increased) whereas, according to the IRB regulatory framework, in the formula enabling the computation of the capital charge PD and LGD values are separate inputs that are not correlated.
- For specific jurisdictions certain additional stresses apply and/or macro-issues are added according to the credit rating agencies’ approach to macroeconomic and sovereign risk (see Box 1 below).

The combination of those three factors can explain why, by using as inputs new post-2010 external ratings into a pre-2010 regulatory mapping to calculate capital requirements for all tranches leads to material departure (by several multiples in many cases) from the capital requirement for the corresponding underlying portfolio. For some asset classes such as auto-loans or credit-cards, the rating methodology pre-2010 and post-2010 has hardly changed, and using new post-2010 external ratings with the pre-2010 regulatory mapping does not lead to material changes in securitisation capital requirements.

Box 1 Credit rating agencies’ treatment of sovereign risk

The major Credit rating agencies apply a country/macro and also sovereign risk assessment in order to incorporate elements of country/sovereign risk that might not be captured in their basic structured finance methodologies. This includes the transfer and convertibility risk linked to the risk of an exit from a monetary zone such as the euro area (redenomination risk), the impact of a banking system collapse, a disorderly default of a sovereign, and/or extreme macroeconomic stress. These assessments lead to rating caps/ceilings and/or adjustments in the probability of default and loss distribution for the underlying assets. The CRAs justify the country risk overlay on the basis that their general methodology does not take these risks into account and that the sovereign/banking/macro stress scenarios are so severe that the standard modelling and analytical approaches break down. This approach has been applied in the euro area on a number of recent occasions, mirroring the sovereign debt crisis.

Although such ceilings and adjustments affect other rated asset classes besides ABSs, the issue is particularly relevant to ABs given the additional credit-related safeguards that may exist in these instruments, including a waterfall structure that includes credit enhancement on the notes sold, back-up servicing arrangements, and broader stand-by arrangements to mitigate counterparty risks. The difficulty in accurately modelling the impact of systemic risks also gives rise to the possibility of double counting, increases the level of capital non-neutrality pre- and post-securitisation and makes the transfer of credit risk uneconomical.
Figure 10 Variation from neutrality of the SA on hypothetical SME corporate transactions

Source: EBA calculations.

Figure 11 Variation from neutrality of the RBM on hypothetical SME corporate transactions

Source: EBA calculations.

41 The SME corporates underlying the securitisation are assumed to be non-rated and hence attract a capital charge of 8% under the SA approach applicable to corporate exposures (K pool in the chart).
Figure 12 Variation from neutrality of the SA on hypothetical prime RMBS transactions

Source: EBA calculations.

Figure 13 Variation from neutrality of the RBM on hypothetical RMBS transactions

Source: EBA calculations.

RECOMMENDATION 6: Principles on the implementation of a regulatory treatment for ‘qualifying’ securitisation positions
A ‘qualifying’ securitisation framework should envisage:

- risk weights for qualifying positions that are lower, in relative terms, than the risk weights applicable to non-qualifying positions;
- a flat risk weight floor to the most senior tranches of ‘qualifying’ securitisation positions of [15%] at the CQS 1 level.

Rationale

The proposed ‘qualifying’ securitisation framework, due to the proposed criteria on simplicity, standardisation and transparency, should ensure that all the risks arising in the securitisation (e.g. modelling risk, agency risk, legal risk etc.), other than the pure credit risk related to the underlying exposures, are properly mitigated. The proposed criteria on minimum credit quality of the underlying exposures ensure that underlying credit risk is also adequately addressed. For these reasons the capital treatment proposed for the ‘qualifying’ framework should aim at limiting the extent of non-neutrality of capital charges.

In the case of the SA to capital requirements for securitisation, the current floor risk weight (20%) applicable to the most senior tranche of the transaction at CQS1 level appears to contribute substantially to the extent of non-neutrality of the capital charges. In addition, as shown in the paper, the historical credit risk performance of ‘AAA’ rated tranches classified as ‘qualifying’ positions is characterised by very low levels of defaults and losses. At the same time, the floor also ensures a sufficient level of prudence.

**Question 10:** How should capital requirements reflect the partition between qualifying and non-qualifying?

**Question 11:** What is a reasonable calibration across tranches and credit quality steps for qualifying securitisations? Would reallocating across tranches the overall capital applicable to a given transaction by reducing the requirement for the more junior tranche and increasing it for the more senior tranches other than the most senior tranche be a feasible solution?

**Question 12:** Considering that rating ceilings affect securitisations from certain countries, how should the calibration of capital requirements on qualifying and non-qualifying securitisations be undertaken while also addressing this issue?
RECOMMENDATION 1: Recommendation for a holistic (cross-product and sector) review of the regulatory framework for securitisation and other investment products

A systemic detailed review of the entire regulatory framework for securitisation across all different regulations and regulatory authorities on a stand-alone basis and in conjunction with the regulatory framework applicable to other investment products (covered bonds, whole loan portfolios) is recommended. Such a review should take into account the different objectives of the existing regulations.

Rationale

Since the crisis many regulations at international and EU level have been introduced to address the shortcomings of the securitisation market and many more are still being proposed and finalised, while limited changes have been introduced or proposed to other investment products.

The risk exists that the extent of some of the differences in the regulatory treatment between securitisation and other investment products instruments is not fully justified.

Major differences in regulatory treatment clearly impact on the respective incentives to issue or invest in one instrument or the other and can lead to unintentional effects that could destabilise the financial system as a whole. Possible unintended consequences could include: i) change in business model of institutions to optimise regulatory capital usage, ii) increased use of shadow banking system for funding, iii) increased level of asset-encumbrance for credit institutions and iv) overreliance and substantial exposures to one product only.

With the increasing complexity of the regulatory framework investors, be they insurers, alternative investors, UCITS fund managers and banks need to consider many different regulatory factors, including:

- Regulatory capital charges
- Liquidity regulation
- Operational requirement (retention, retaining entity, disclosure, due diligence including stress testing, reporting).

Each of these requirements implies both costs and benefits that investors and issuers, as appropriate, take into account when making decisions to invest or issue securitisations.

RECOMMENDATION 2: Recommendation to create a framework for simple, standard and transparent securitisations

Creating simple, standard and transparent securitisations will address many of the drawbacks and risks observed during the financial crisis. It tackles complexity and opaqueness and many inherent
**Rationale**

Simple, standard and transparent securitisations will i) raise the minimum standards for securitisations transactions and lead towards more harmonisation of securitisation products, ii) contribute to the re-establishment of investors’ confidence towards the securitisation instrument and could broaden the investor base for securitisations, and iii) pave the way to a more risk-sensitive regulatory framework that can differentiate in regulatory between different securitisation products with different risks and historical performance.

A well-functioning prudentially sound securitisation market based on simple, standard and transparent securitisations in the EU helps the real economy and strengthens the resilience of the financial system to banking crises by:

i) opening an alternative funding channel to fund the economy, the cost of which becomes less dependent on the state of the banking sector;  

ii) realising increasing levels of credit risk transfer and hence risk sharing in the financial system.  

iii) facilitating the investors’ analysis of risks inherent to the corresponding securitisation positions and thereby investing in such securitisation positions.

**RECOMMENDATION 3: Recommendation on criteria defining simple, standard and transparent securitisations**

The criteria to identify a simple, standard and transparent securitisation should capture and reduce the major non-credit related risk of a securitisation that were identified during the crisis including i) no “originate to distribute” model, ii) no use of leverage, iii) no refinancing risk and iv) lack of disclosure. The recommended criteria are listed in Pillar I, II and II of section 5.3.

**Rationale**

Securitisation is a financing technique that converts loans or assets that are not normally tradable into tradable securities that have the ability to raise finance in the financial markets.

This transformation process is complex, of a technical nature and reduces transparency to investors. The risks inherent in a securitisation transaction stem from the features of the securitisation process include amongst other modelling, structuring, servicing and disclosure risks.

Introducing simple, standard and transparent securitisations helps disentangle securitisation transactions where the major non-credit related risks arising in the securitisation transformation process are mitigated from those securitisations where a sufficient mitigation of these non-credit related risks cannot be assumed.

**RECOMMENDATION 4: Recommendation on the criteria defining ‘qualifying’ securitisations**
In order to introduce a regulatory use of the identified ‘simple standard and transparent’ in the capital requirements framework, and in particular a regulatory use which may differentiate capital requirements, it is necessary to ensure that the both type of risks (credit and non-credit risk) are address by regulatory provisions and criteria.

‘Qualifying’ securitisations (i.e. positions that qualify for a differentiated regulatory treatment) should be defined as securitisation positions that meet both the simple, standard and transparent criteria and the credit risk criteria.

Rationale

Simple, standard and transparent securitisations do not justify any differentiation in prudential treatment and should be seen as an overarching framework for simple, standard and transparent securitisations.

The criteria on credit risk intent to ensure a minimum level of credit quality on the underlying assets. Credit risk was one of the main risk identified during the crisis where the very loose underwriting criteria of underlying loans and low credit quality of the underlying loans and the in securitisation transaction resulting sever losses in securitisation.

RECOMMENDATION 5: Recommendation on a differentiated capital requirements treatment for ‘qualifying’ securitisation positions vs. other securitisation positions.

Introducing qualitative and quantitative criteria for a ‘qualifying’ securitisation framework should help increase the risk sensitivity of capital requirements and reduce reliance on external ratings. A different capital treatment should be envisaged for these transactions.

Rationale

If capital requirements were calibrated following an insufficiently risk-sensitive approach, this could result in too high capital requirements for securitisation products that performed relatively well (with almost zero losses) throughout the crisis and/or in too low capital requirements for securitisation products that performed relatively bad throughout the crisis.

RECOMMENDATION 6: Principles on the implementation of a regulatory treatment for ‘qualifying’ securitisation positions

A ‘qualifying’ securitisation framework should envisage:

- risk weights for qualifying positions that are lower, in relative terms, than the risk weights applicable to non-qualifying positions;
- a flat risk weight floor to the most senior tranches of ‘qualifying’ securitisation positions of [15%] at the CQS 1 level.
Rationale

The proposed ‘qualifying’ securitisation framework, due to the proposed criteria on simplicity, standardisation and transparency, should ensure that all the risks arising in the securitisation (e.g. modelling risk, agency risk, legal risk etc.), other than the pure credit risk related to the underlying exposures, are properly mitigated. The proposed criteria on minimum credit quality of the underlying exposures ensure that underlying credit risk is also adequately addressed. For these reasons the capital treatment proposed for the ‘qualifying’ framework should aim at limiting the extent of non-neutrality of capital charges.

In the case of the SA to capital requirements for securitisation, the current floor risk weight (20%) applicable to the most senior tranche of the transaction at CQS1 level appears to contribute substantially to the extent of non-neutrality of the capital charges. In addition, as shown in the paper, the historical credit risk performance of ‘AAA’ rated tranches classified as ‘qualifying’ positions is characterised by very low levels of defaults and losses.
8. Overview of questions for consultation

Question 1: Do you agree with identified impediments to the securitisation market?

Question 2: Should synthetic securitisations be excluded from the framework for simple standard and transparent securitisations? If not, under which conditions/criteria could they be considered simple standard and transparent?

Question 3: Do you believe the default definition proposed under Criterion 5 (ii) above is appropriate? Would the default definition as per Article 178 of the CRR be more appropriate?

Question 4: Do you believe that, for the purposes of standardisation, there should be limits imposed on the type of jurisdiction (such as EEA only, EEA and non-EEA G10 countries, etc): i) the underlying assets are originated and/or ii) governing the acquisition process of the SSPE of the underlying assets is regulated and/or iii) where the originator or intermediary (if applicable) is established and/or iv) where the issuer/sponsor is established?

Question 5: Does the distribution of voting rights to the most senior tranches in the securitisation conflict with any national provision? Would this distribution deter investors in non-senior tranches and obstacle the structuring of transactions?

Question 6: Do you believe that, for the purposes of transparency, a specific timing of the disclosure of underlying transaction documentation should be required? Should this documentation be disclosed prior to issuance?

Question 7: Do you agree that granularity is a relevant factor determining the credit risk of the underlying? Does the threshold value proposed under Criterion B pose an obstacle to the structuring of securitisation transactions in any specific asset class? Would another threshold value be more appropriate?

Question 8: Do you agree with the proposed criteria defining simple standard and transparent securitisations? Do you agree with the proposed credit risk criteria? Should any other criteria be considered?

Question 9: Do you envisage any potential adverse market consequences of introducing a qualifying securitisation framework for regulatory purposes?
<table>
<thead>
<tr>
<th>Question 10: How should capital requirements reflect the partition between qualifying and non-qualifying?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 11: What is a reasonable calibration across tranches and credit quality steps for qualifying securitisations? Would re-allocating across tranches the overall capital applicable to a given transaction by reducing the requirement for the more junior tranche and increasing it for the more senior tranches other than the most senior tranche be a feasible solution?</td>
</tr>
<tr>
<td>Question 12: Considering that rating ceilings affect securitisations from certain countries, how should the calibration of capital requirements on qualifying and non-qualifying securitisations be undertaken, while also addressing this issue?</td>
</tr>
</tbody>
</table>
9. Annex – Additional material

Figure 14 Realised and expected losses: US RMBS breakdown (source Fitch)

![Image showing losses for Prime, Alt-A, Subprime, and Other categories]

Source: Fitch.

Figure 15 Realised and expected losses: US AB breakdown (source Fitch)

![Image showing losses for Credit cards, Auto, Student loans, Commercial, and Other categories]

Source: Fitch.
Figure 16 Realised and expected losses: US Structured Credit breakdown

![Losses: US SC breakdown (2000-2013)](image)

Source: Fitch.

Figure 17 De-risking process - risk weighted assets

![RWA (EUR Trn)](image)

Figure 18 De-leveraging process – total assets


Figure 19 Customer deposits to total liabilities

Box 2: CRR definition of securitisation

**CRR definition of securitisation**

Article 4(61) of the CRR: ‘securitisation’ means a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, having both of the following characteristics:

a) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; and
b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

The CRR also defines ‘traditional’ securitisations as opposed to ‘synthetic’ securitisations: both types of securitisation are however subject to the same capital requirements.

Article 242(10) of the CRR: ‘traditional securitisation’ means a securitisation involving the economic transfer of the exposure being securitised. This shall be accomplished by the transfer of ownership of the securitised exposures from the originator institution to an SSPE or through sub-participation by an SSPE. The securities issued do not represent payment obligation of the originator institution.

Article 242(11) of the CRR: ‘synthetic securitisation’ means a securitisation where the transfer of risk is achieved by the use of credit derivatives or guarantees and the exposure being securitised remain exposures of the originator institution.

Box 3 Methodology behind the computation of IRB capital charges in Table 4 and Table 5 in section 4.3

**Methodology behind the computation of IRB capital charges in Table 4 and Table 5 in section 4.3**

In this respect, for instance, an issuer rated ‘B’ is expected to issue covered bonds which may receive a rating varying from the BBB range of values to the A range of values. Based on the external rating assigned to the issuer of the covered bond the capital charges presented in Table 4 were computed by using the following inputs:

- the 1-year probability of default of financial institutions associated to each issuer’s rating grade, as assessed in published Credit Rating Agencies’ statistics (see Table 6 in this annex). In the case of highly rated issuers the 1-year probability of default has been capped, as mandated by the CRR, at a value of 0.03%. Furthermore, due to lack of granular PD data on covered bond issuers, the PD estimated by rating agencies for an issuer rating grade of, for instance, ‘A’ has been assigned as well to issuers rated ‘A-’ or ‘A+’. The same applies to issuers rated ‘BBB’ and ‘BB’;
- a maturity value fixed at 2.5 years, as specified under the foundation IRB;
- a loss given default value of 11.25%, as allowed by the IRB Approach to capital requirements on CRR-compliant covered bonds.

The foundation IRB capital charges presented in Table 5 are computed in accordance with the following inputs:

- one-year PD and LGD estimates for residential mortgages and retail exposures to SMEs representing median and quartile values of exposure at default-weighted average PDs and LGDs across a sample of EU institutions, as assessed and published in the EBA ‘Third interim report on the consistency of risk-weighted assets’ (see Table 7 in this annex);
- one-year PD and LGD estimates for qualifying retail exposures and corporate exposures representing exposure at default-weighted average PDs and LGDs across a sample of EU institutions, as assessed and published in the EBA ‘Risk Dashboard Q1 2014’ (see Table 7 in this annex);
### Table 6 Rating agency cumulative one-year default rates (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA/Aaa</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AA/Aa</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>A/A</td>
<td>0.08</td>
<td>0.06</td>
</tr>
<tr>
<td>BBB/Baa</td>
<td>0.25</td>
<td>0.2</td>
</tr>
<tr>
<td>BB/Ba</td>
<td>0.95</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Table 7 PD and LGD data used for the computation of foundation IRB capital charges in accordance with the CRR

<table>
<thead>
<tr>
<th></th>
<th>Residential Mortgages</th>
<th>Retail SME</th>
<th>Qualifying revolving</th>
<th>Corporates (non-SME)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*)</td>
<td>PD</td>
<td>LGD</td>
<td>PD</td>
<td>LGD</td>
</tr>
<tr>
<td>1st Q</td>
<td>2.17%</td>
<td>15.29%</td>
<td>1st Q</td>
<td>4.69%</td>
</tr>
<tr>
<td>Median</td>
<td>1.52%</td>
<td>13.30%</td>
<td>Median</td>
<td>3.70%</td>
</tr>
<tr>
<td>3rd Q</td>
<td>0.91%</td>
<td>11.05%</td>
<td>3rd Q</td>
<td>2.51%</td>
</tr>
</tbody>
</table>

Median

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>LGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Q</td>
<td>4.18%</td>
<td>63.69%</td>
</tr>
<tr>
<td>2nd Q</td>
<td>2.31%</td>
<td>66.07%</td>
</tr>
<tr>
<td>3rd Q</td>
<td>1.37%</td>
<td>45.38%</td>
</tr>
</tbody>
</table>

W. Ave

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>LGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Q</td>
<td>2.38%</td>
<td>34.95%</td>
</tr>
<tr>
<td>2nd Q</td>
<td>1.88%</td>
<td>28.61%</td>
</tr>
<tr>
<td>3rd Q</td>
<td>0.64%</td>
<td>23.45%</td>
</tr>
</tbody>
</table>


Table 8 Average capital structures representative of the RMBS issuance standards pre- and post-2010

<table>
<thead>
<tr>
<th></th>
<th>Pre-2010</th>
<th>Post-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A point</td>
<td>D point</td>
</tr>
<tr>
<td>AAA/AA</td>
<td>11.75%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A</td>
<td>4.50%</td>
<td>11.75%</td>
</tr>
<tr>
<td>BBB</td>
<td>1.95%</td>
<td>4.50%</td>
</tr>
<tr>
<td>BB</td>
<td>1.25%</td>
<td>1.95%</td>
</tr>
<tr>
<td>B</td>
<td>0.50%</td>
<td>1.25%</td>
</tr>
<tr>
<td>First Loss</td>
<td>0.00%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

Source: S&P and EBA calculations

42 A point stands for attachment point. D point stands for detachment point.
Box 4 High level principles on the rating of EU asset backed securities

Although the precise formulation will differ, the four largest Credit Rating Agencies’ (CRAs) ratings are defined in terms of ABS payments to investors. The rating definition of DBRS, Fitch and S&P are based on the likelihood of timely payments of interest and principal to the investor by the legal final maturity date, in accordance with the terms and conditions of the note obligations (i.e. the definition addresses probability of default). In contrast, Moody’s focuses on the expected losses of the ABS notes, i.e. attempts to measure not just the probability of default, but the likelihood of ultimate recovery on the amount due.

At a high level, the four major CRAs essentially follow the same rating process for EU ABSs, even if the actual methodology applied in each stage of the process may differ (for each CRA, as well as for each ABS asset type, country, and other distinctions). The process consists of eight ‘components’, each of which involve more or less quantitative analysis and qualitative judgement (in some cases, little quantitative judgement, and in some cases, such as cash flow modelling, almost entirely quantitative analysis). These are illustrated in the figure below:

The eight components are the following:

Component 1: Portfolio analysis: a credit risk analysis of the underlying portfolio based inter alia on loan characteristics and performance data provided by the originator, as well as the historical performance of the relevant market.

Component 2: Cash flow analysis: modelling projected cash flows and the transaction waterfall using various assumptions, such as the level and timing of default, recoveries, prepayments and interest rates.

Component 3: Originator and servicer review: an examination of the quality (operational risk, financial strength, and experience in the credit market) of the originator and servicer of the underlying asset pool.

Component 4: Counterparty risk analysis: An assessment of counterparty risk with particular emphasis on the robustness of risk mitigants.

Component 5: Legal risk assessment: Legal aspects of the transaction are assessed including the fulfillment of the true sale criteria as well as set-off, commingling and claw-back risk.

Component 6: Country/sovereign risk assessment: Capping the maximum achievable rating for the tranche in order to account for aspects possibly not fully captured elsewhere (e.g. redenomination risk; the impact of country-specific aspects on the underlying pool performance) are included.

Component 7: Rating committee review: The above analysis is reviewed and a final rating assigned.

Component 8: Surveillance: The transaction is monitored to ensure the rating remains appropriate.
Box 5 Counterparty credit risk in securitisation

Counterparty risk arises when an ABS relies (operationally or financially) on third-parties, also known as counterparties. Counterparties are typically categorized into three groups: direct support counterparties (e.g. issuer account banks, liquidity facility providers, guaranteed investment contract providers), derivative counterparties (e.g. swap providers), and indirect support counterparties (e.g. collection account banks or servicers).

Conceptually, all of the four major CRAs link the final ABS tranche rating with their assessment of a variety of counterparty risks. The clarity of this linkage varies by CRA however. For example, one major CRA establishes a fixed link between a rating on a security and the minimum eligible counterparty rating for at least five counterparty risk categories. If a counterparty rating falls below the minimum and the downgrade is not remedied, the ratings on the supported securities will likely be lowered (alternatively, additional credit enhancement or pledging greater collateral at issuance may compensate). For each category of counterparty risk, specific criteria are set out, such as the minimum acceptable counterparty rating, replacement commitments, and remedy periods. In the case of this CRA, the specific criteria are then mapped, using publicly-provided tables, to the corresponding rating on the ABS notes relative to that particular counterparty risk.

Other CRAs appear to be less explicit in terms of the link between specific counterparty risks and the final rating on the notes. Indeed, the published details of the methodologies differ significantly. For example, regarding swap counterparty risks, one CRA publishes detailed descriptions on i) the amount and type of collateral required and ii) the qualified investments instruments in which cash on the issuer account bank can be invested, whereas the other CRAs provide less detail.

Table 9 SME CLOs: representative capital structures per jurisdiction - tranche thickness

<table>
<thead>
<tr>
<th></th>
<th>BE/DE</th>
<th>NL/UK</th>
<th>IT</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAsf</td>
<td>72.5%</td>
<td></td>
<td>67.5%</td>
<td></td>
</tr>
<tr>
<td>AAsf</td>
<td>6.0%</td>
<td>8.0%</td>
<td>55.0%</td>
<td>51.5%</td>
</tr>
<tr>
<td>Asf</td>
<td>4.0%</td>
<td>7.0%</td>
<td>10.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>BBAsf</td>
<td>5.0%</td>
<td>5.0%</td>
<td>10.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>BBsf</td>
<td>5.0%</td>
<td>3.5%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Bsf</td>
<td>5.0%</td>
<td>2.5%</td>
<td>5.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>First Loss</td>
<td>2.5%</td>
<td>6.5%</td>
<td>12.5%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Source: Fitch

Table 10 Retail securitisation: representative capital structures per jurisdiction - tranche thickness

<table>
<thead>
<tr>
<th></th>
<th>Auto UK</th>
<th>Auto Non-UK</th>
<th>Unsecured</th>
<th>Credit Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAsf</td>
<td>80.0%</td>
<td>88.0%</td>
<td>70.0%</td>
<td>85.0%</td>
</tr>
<tr>
<td>AAsf</td>
<td>4.0%</td>
<td>2.0%</td>
<td>5.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

43 Including bank accounts, liquidity facility providers, commingling risk, guarantors, and derivative providers.
44 For instance, for a bank account provider with a “limited” exposure the minimum eligible counterparty rating corresponding to a ‘AAA’ maximum potential rating on supported security is ‘A’.
45 A bank account provider that commits to replace itself with an eligible counterparty within the remedy period will enable a supported security to achieve the maximum potential rating.
46 From the date that the rating on counterparty is lowered below the minimum eligible counterparty rating, there is a remedy period of usually 30 or 60 days that is consistent with a supported security achieving the maximum potential rating.
47 Another major CRA, for example, models set-off risk and commingling risk directly in the cash flow modelling phase, whereas swap counterparty risk, operational disruption risk and the risk of default on issuer bank accounts are addressed outside the cash flow model.
### DP ON SIMPLE STANDARD AND TRANSPARENT SECURITISATIONS

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Portugal</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAsf</td>
<td>0</td>
<td>0</td>
<td>87.7%</td>
</tr>
<tr>
<td>AAsf</td>
<td>78.6%</td>
<td>0</td>
<td>2.5%</td>
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<tr>
<td>Asf</td>
<td>4.0%</td>
<td>84.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>BBBsf</td>
<td>2.7%</td>
<td>2.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td>BBsf</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>BsF</td>
<td>7.2%</td>
<td>6.4%</td>
<td></td>
</tr>
<tr>
<td>First loss</td>
<td>5.0%</td>
<td>5.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Source: Fitch

### Table 11 Prime RMBS: representative capital structures per jurisdiction - tranche thickness

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Portugal</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asf</td>
<td>4.0%</td>
<td>2.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>BBBsf</td>
<td>4.0%</td>
<td>2.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>BBsf</td>
<td>2.0%</td>
<td>1.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>BsF</td>
<td>2.0%</td>
<td>1.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>First Loss</td>
<td>4.0%</td>
<td>2.5%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Source: Fitch
Table 12: PD and LGD median values – per asset class / jurisdiction

<table>
<thead>
<tr>
<th>Retail: Residential mortgages (median values)</th>
<th>Retail: SME (median values)</th>
<th>Retail: Unsecured and auto loans (average values)</th>
<th>Retail: credit cards (average values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td>LGD</td>
<td>PD</td>
<td>LGD</td>
</tr>
<tr>
<td>ES</td>
<td>2.03%</td>
<td>13.03%</td>
<td>BE</td>
</tr>
<tr>
<td>PT</td>
<td>2.16%</td>
<td>17.70%</td>
<td>DE</td>
</tr>
<tr>
<td>UK</td>
<td>1.17%</td>
<td>11.37%</td>
<td>ES</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>IT</td>
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<td>NL</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>UK</td>
</tr>
</tbody>
</table>

Source: EBA TCOR report and EBA risk dashboard.
Figure 20 Variation from neutrality of the SA approach on hypothetical SME retail transactions

Source: EBA calculations

Figure 21 Variation from neutrality of the RBM approach on hypothetical SME retail transactions

Source: EBA calculations.
Figure 22 Variation from neutrality of the SA approach on hypothetical credit card transactions

Source: EBA calculations.

Figure 23 Variation from neutrality of the RBM approach on hypothetical credit card transactions

Source: EBA calculations.
**Figure 24 Variation from neutrality of the SA approach on retail unsecured transactions**

Source: EBA calculations.

**Figure 25 Variation from neutrality of the RBM approach on retail unsecured transactions**

Source: EBA calculations.
Figure 26 Variation from neutrality of the SA approach on auto loans transactions

Source: EBA calculations.

Figure 27 Variation from neutrality of the RBM approach on auto loans transactions

Source: EBA calculations.