

EBA REPORT ON QUALIFYING SECURITISATION

RESPONSE TO THE COMMISSION'S CALL FOR ADVICE OF
JANUARY 2014 ON LONG-TERM FINANCING

EBA

EUROPEAN
BANKING
AUTHORITY

Contents

List of figures	2
List of Tables	3
List of Boxes	5
Abbreviations	6
Executive Summary	7
1. State of the EU securitisation market	10
1.1 The market of term securitisations	10
1.1.1 Historical credit performance of the term securitisation market	11
1.2 EU ABCP market developments: pre- to post-crisis environment	14
2. Regulatory reforms related to securitisation since 2009	17
3. Likely impediments in the post-crisis EU securitisation market	24
4. Capital treatment of securitisation positions: a comparative review of current approaches based on external ratings	28
4.1 Capital charges under the Standardised Approach of the CRR	28
4.2 CRR capital charges under the Internal Ratings Based Approach of the CRR	31
4.3 An illustrative quantitative impact study on the CRR securitisation capital requirements based on external ratings	39
5. Development of a ‘qualifying’ securitisation framework	46
5.1 The benefits of securitisation	46
5.2 Lessons from the crisis	47
5.3 EBA proposed criteria for identifying qualifying term securitisations	51
5.4 EBA-identified criteria addressing credit risk	63
5.5 Specific characteristics of the ABCP qualifying framework	65
5.6 EBA proposed criteria for identifying qualifying ABCP securitisations and qualifying ABCP programmes	68
5.6.1 Securitisation transactions within an ABCP programme: transaction level criteria	69
5.6.2 Securitisation transactions within ABCP programmes: programme-level criteria	84
6. The capital treatment of qualifying securitisations	91
6.1 The BCBS 2014 securitisation framework (the baseline)	91
6.2 The re-calibration proposal: a differentiated treatment for both senior and non-senior qualifying securitisation tranches	96
6.2.1 Proposed scope of the differentiation and technical implementation across approaches in the hierarchy	97
6.2.2 Empirical underpinnings of the re-calibration proposal	100

7. On the implementation of the ‘qualifying’ securitisation framework	110
8. EBA Recommendations	112
9. Annex	119

List of figures

Figure 1 European securitisation outstanding	10
Figure 2 - European issuance by retention	11
Figure 3 three-year default rates at AAA level per asset class (July 2001-Jan 2010 – S&P, Moody’s and Fitch)	12
Figure 4 three-year default rates at BBB level per asset class (July 2001-Jan 2010 – S&P, Moody’s and Fitch)	12
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)	13
Figure 6 Realised and expected losses: EU vs. US per asset class	14
Figure 7 European ABCP historical issuance	14
Figure 8 EMEA conduits type (% of ABCP outstanding): market evolution	15
Figure 9 EMEA conduits liquidity support: market evolution (by % outstanding balance of purchased assets)	16
Figure 10 Capital charges across regulatory approaches and capital structures: an RMBS example	41
Figure 11 Variation from neutrality of the SA on hypothetical SME corporate transactions	44
Figure 12 Variation from neutrality of the RBM on hypothetical SME corporate transactions	44
Figure 13 Variation from neutrality of the SA on hypothetical prime RMBS transactions	45
Figure 14 Variation from neutrality of the RBM on hypothetical RMBS transactions	45
Figure 15 Two-stage approach to ‘qualifying’ securitisation	50
Figure 16 ABCP-specific qualifying framework (orange arrows represent exposures to ABCP)	67
Figure 17 The revised hierarchy of approaches in the BCBS 2014 framework for securitisation exposures	92
Figure 18 Capital charges and capital multipliers – SEC-IRBA approach – Residential mortgages – per country	93
Figure 19 Capital charges and capital multipliers – SEC-ERBA & SEC-SA approaches – Residential mortgages – per country	94

Figure 20 Capital charges and capital multipliers – SEC-IRBA approach – SME Retail – per country	94
Figure 21 Capital charges and capital multipliers – SEC-ERBA & SEC-SA approaches – SME Retail – per country	95
Figure 22 Historical three-year default rate performance according to asset class partition: qualifying vs. other – AAA rating	101
Figure 23 Loss analysis: all products	102
Figure 24 Non-neutrality of securitisation capital charges	104
Figure 25 Capital surcharge of securitisation capital charges pre- and post-recalibration	105
Figure 26 Capital surcharge of securitisation capital charges pre- and post-recalibration	106
Figure 27 Distribution of the ‘p’ parameter pre- and post- recalibration	106
Figure 28 Realised and expected losses: US RMBS breakdown	119
Figure 29 Realised and expected losses: US structured credit (SC) breakdown	119
Figure 30 Realised and expected losses: US ABS breakdown (source Fitch)	120
Figure 31 De-risking process – risk-weighted assets	121
Figure 32 De-leveraging process – total assets	122
Figure 33 Customer deposits to total liabilities	122
Figure 34 Historical three-year default rate performance according to asset class partition: qualifying vs. other – BBB rating	130

List of Tables

Table 1 EU and international regulation post 2009 impacting the securitisation market (holistic review).....	18
Table 2 Capital charges (risk weight * 8%) for different exposure classes under the Standardised Approach	30
Table 3 Main constraints per exposure class under the IRB Approach	33
Table 4 Capital charges: securitisation (Ratings Based Method) vs. covered bonds (IRB foundation)‘	37
Table 5 Capital charges: residential mortgages – SME retail – qualifying retail - corporates (IRB foundation only).....	38
Table 6 Recalibration proposals applicable to ‘qualifying’ securitisations	97

Table 7 Considerations regarding excluding the SEC-ERBA approach from the hierarchy for qualifying securitisations.....	100
Table 8 Proposed re-calibration of the SEC-ERBA risk weights for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets).....	108
Table 9 Proposed re-calibration of the SEC-ERBA risk weights for short-term ratings for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets).....	109
Table 10 Recalibration proposals applicable to ‘qualifying’ securitisations	117
Table 11 Proposed re-calibration of the SEC-ERBA risk weights for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets)	118
Table 12 Proposed re-calibration of the SEC-ERBA risk weights for short-term ratings for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets).....	118
Table 13 Asset split by asset type – Multi-seller portfolios (EMEA, Q4 2014, million USD)	121
Table 14 Rating agency cumulative one-year default rates (%).....	124
Table 15 PD and LGD data used for the computation of foundation IRB capital charges in accordance with the CRR	125
Table 16 Average capital structures representative of the RMBS issuance standards pre- and post-2010.....	125
Table 17 SME CLOs representative capital structures per jurisdiction - tranche thickness.....	128
Table 18 Retail securitisation: representative capital structures per jurisdiction - tranche thickness	128
Table 19 Prime RMBS representative capital structures per jurisdiction - tranche thickness.....	128
Table 20 PD and LGD median values – per asset class / jurisdiction	129
Table 21 Historical default rate analysis based on CEREP – description of the samples.....	130
Table 22 descriptions of the INTEX and FITCH samples of tranches used for the analysis in Figure 23.....	131
Table 23 EDW sample used for the QIS analysis presented in Chapter 6: number of tranches and size by seniority and jurisdiction	132
Table 24 EDW sample used for the QIS analysis presented in Chapter 6: number of tranches and notional by asset class.....	132

List of Boxes

Box 1 Credit rating agencies' treatment of sovereign risk.....	43
Box 2 Different types of ABCP conduits	120
Box 3 CRR definition of securitisation	123
Box 4 Methodology behind the computation of IRB capital charges	123
Box 5 High level principles on the rating of EU asset backed securities	126
Box 6 Counterparty credit risk in securitisation.....	127
Box 7 Counterparty credit risk in securitisation.....	127

Abbreviations

AIFMD	Alternative investment fund managers directive
ABCP	Asset-backed commercial paper
BoE	Bank of England
BCBS	Basel Committee on Banking Supervision
CEREP	Central rating repository
CDO	Collateralised debt obligation
CLO	Collateralised loan obligation
CMBS	Commercial mortgage-backed security
CQS	Credit quality step
CRA	Credit Rating Agency
CRR	Capital Requirements Regulation
ECB	European Central Bank
ESMA	European Securities and Markets Authority
EU	European Union
IOSCO	International Organisation of Securities Commissions
IRB	Internal ratings-based
LGD	Loss given default
PCS	Prime collateralised securities
PD	Probability of default
RBA	Ratings-based approach
RBM	Ratings based method
RMBS	Residential mortgage-backed security
SA	Standardised approach
SME	Small and medium-sized enterprises

Executive Summary

Traditional 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 report, one of the most important lessons of the 2007-2009 crisis is that defaults and losses associated with securitisation positions have varied substantially across different types of securitisations and regions. The crisis has also shown that the poor performance of certain products, irrespective of the pre-crisis rating level, was associated with 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 using erroneous modelling assumptions and have been placed with investors without adequate transparency standards.

The EBA acknowledges that a one-size-fits-all regulatory approach to securitisations may no longer be appropriate, as it may result in an unduly conservative treatment of transactions that are simple, standard and transparent, as well as being collateralised by relatively 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 differential treatment, a securitisation transaction should first meet a list of criteria ensuring simplicity, standardisation and transparency and, as a second step, the underlying exposures should meet criteria of minimum credit quality of the underlying exposures.

The proposed criteria to identify simple, standard and transparent securitisations aim to 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, where proportionate, as well as disclosure to investors of underlying transaction documentation, where appropriate, and periodic reporting. Securitisations with these characteristics should, as a minimum, result in more investor confidence in securitisation products and provide a contrast to the 'post-crisis stigma' that the market has attracted.

Minimum credit quality of the underlying exposures, in the form of maximum risk weights, granularity criteria and regulatory underwriting standards, is strictly necessary to complement the simple, standard and transparent securitisation framework and to support a differentiated regulatory capital treatment for 'qualifying' transactions.

The envisaged two-stage approach and the related criteria ought to distinguish term securitisations from short-term securitisations in the context of ABCP programmes. While the two segments have many common features and should both benefit from the 'qualifying' differentiation, criteria dealing with ABCPs should incorporate several specific characteristics, including but not limited to, the different exposures that can arise at the ABCP transaction-level and ABCP programme-level, the maturity transformation, the role of full support played by credit institutions and the existence of multi-seller structures involving non-regulated corporate entities.

The framework proposed in this report does not cover synthetic securitisation transactions as the EBA acknowledges that defining a synthetic securitisation-specific qualifying framework requires further analysis and market assessment, given the different nature of synthetic transactions and the variety of market practices that currently exist in this segment. The EBA, however, stands ready to assist in the development of such a framework.

This report acknowledges the substantial improvements achieved with the BCBS 2014 revision of the framework with respect to the rules currently in force and takes that framework as a baseline to formulate re-calibration proposals applicable to 'qualifying' securitisations across the hierarchy of approaches, aimed at further increasing the risk-sensitivity of the bank capital treatment of securitisations.

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 'qualifying' transactions should aim at more appropriate levels of non-neutrality of capital charges¹. The requirements of the qualifying framework, as well as the empirical evidence on the performance of qualifying transactions, justify extending the re-calibration of risk weights to both senior and non-senior tranches of qualifying transactions.

The formulae-based approaches are re-calibrated to include a fifty percent haircut of the supervisory 'p' parameter, while the approach based on external (long-term and short-term) ratings is re-calibrated to achieve a lowering of risk weights which is consistent with the re-calibration of the former approaches. Based on prudential arguments, and on the background of empirical evidence on the realised loss performance of senior vs. non-senior tranches, the risk weight floor is re-calibrated to a value of 10% (from the original 15% value of the BCBS 2014 framework) for senior qualifying tranches only. In order to ensure that the overall securitisation capital surcharges are maintained well above the minimum levels foreseen by the BCBS 2014 framework (at least 30% higher than the capital requirements on the underlying exposures), the floor foreseen in that framework for the supervisory 'p' parameter is maintained. In addition, none of the 1250% risk weight requirements foreseen under the BCBS 2014 framework are

¹ Full neutrality of capital charges is the equality between the capital charges applying to a given portfolio of underlying assets (i.e. non-securitised assets held on the balance sheet) and the sum of the capital charges applying to all the tranches of the same portfolio in a securitised format. The non-neutrality ratio is the ratio between the total capital charge applicable to the totality of a given securitisation transaction and the capital charge that would apply to the underlying portfolio of exposures had this portfolio not been securitised. A ratio value of 1 represents fully neutral capital charges, while for increasing values larger than 1, non-neutrality increases.

modified, as it is acknowledged that such requirements are designed for securitisation tranches that are subject to particularly high risk.

The EBA gave consideration to the possibility of disapplying the external ratings-based approach for qualifying securitisation positions and discarded such proposal, acknowledging that the use of external ratings for capital requirements purposes is an issue which goes beyond the scope of this technical advice. This report summarises the different existing views on the matter.

The recommendations provided in this report in relation to the implementation of a qualifying securitisation framework in Europe will have to be revisited depending on the progress and decisions taken by the Basel and IOSCO Committees on the definition of a global Simple, Standard and Comparable (STC) securitisations framework, and on the re-calibration of the BCBS 2014 securitisation framework to provide regulatory recognition to STC securitisations. As formulated in this report, the 'qualifying' securitisation framework for term securitisations is consistent with the current status of the global STC criteria, while the proposed capital requirements re-calibration results from empirical and QIS analysis mostly based on data related to European transactions.

Since the financial 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 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).

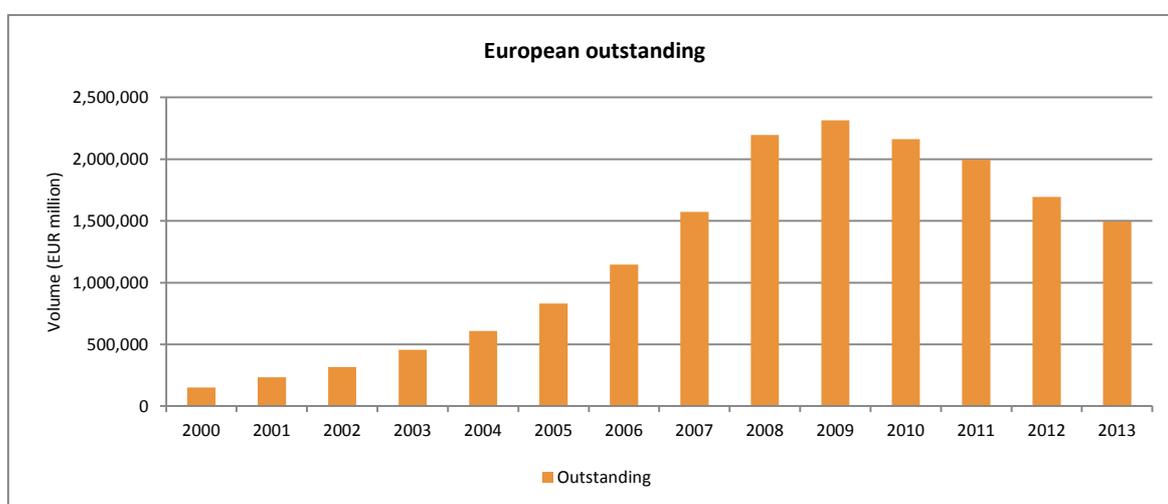
Re-establishing a well-functioning and prudentially sound securitisation market in the EU will contribute to strengthening the resilience of the European financial system by providing an alternative funding channel to the real economy and by enhanced risk-sharing. However, any changes to the prudential 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

1.1 The market of term securitisations

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

Figure 1 European² securitisation outstanding³



Sources: SIFMA/AFME

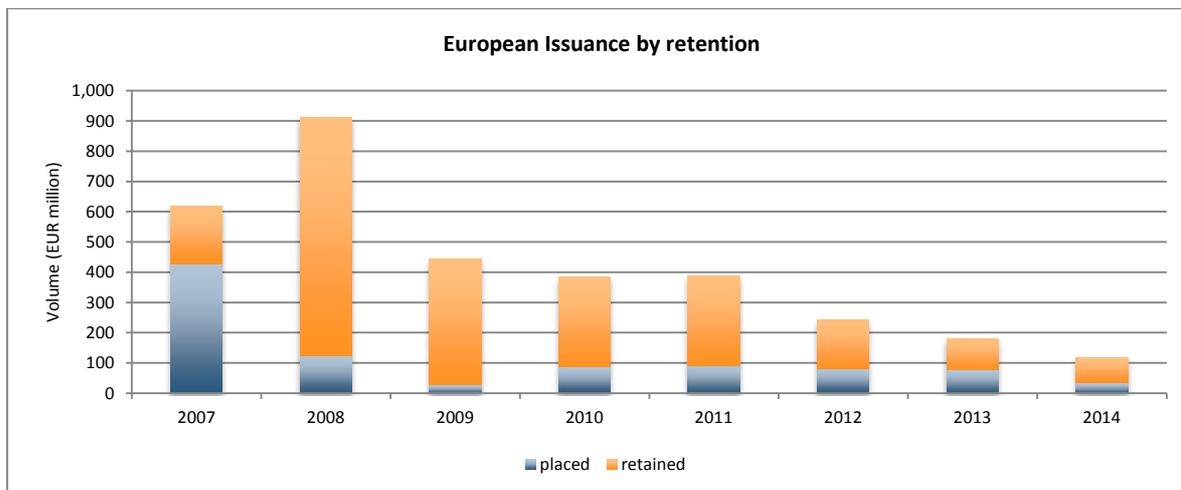
The amount outstanding at the end of 2013 was about EUR 1.5 trillion, around one fifth of the US securitisation market. At that time, RMBS formed the largest market segment by far, accounting for 59% of total issuance, with most of the issuance originating from the UK and the Netherlands. SME ABSs was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

Until 2006, virtually all primary issuance was placed with end-investors and other banks. 2008 is the year that marked 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 were retained by issuers themselves.

² European securities are defined as securitisations with collateral predominantly from the European continent, including Turkey, Kazakhstan, the Russian Federation and Iceland.

³ Outstanding in this chart includes: ABSs (auto, consumer, credit cards, leases, other), CDOs, MBSs (CMBSs, mixed, RMBSs, SMEs, WBSS).

Figure 2 - European issuance by retention⁴



Sources: SIFMA/AFME

1.1.1 Historical credit performance of the term 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 3-year horizon) of different classes of 'AAA' and 'BBB'-rated securitisation products, rated by Standard & Poor's,⁵ Moody's Investor Services⁶ and Fitch Ratings⁷ between 2001 and 2010.⁸

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 other asset classes considered observed almost zero default rates throughout the crisis period. The solid black line, in Figure 3, shows the performance of the securitisation market where no distinction is made between different classes of securitisations. The relatively high default rates reflect 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 period considered.

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 rate, at approximately 60% for subprime products and 40%

⁴ 2014 represent year-to-date data.

⁵ Referred to as S&P hereafter.

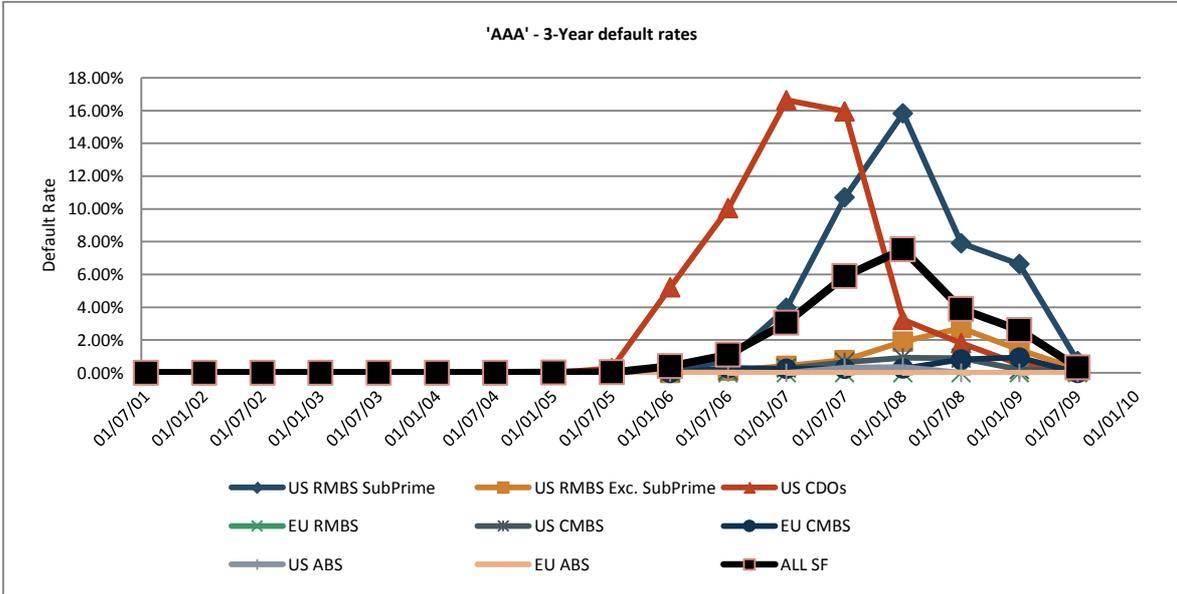
⁶ Referred to as Moody's hereafter.

⁷ Referred to as Fitch hereafter.

⁸ 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 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.

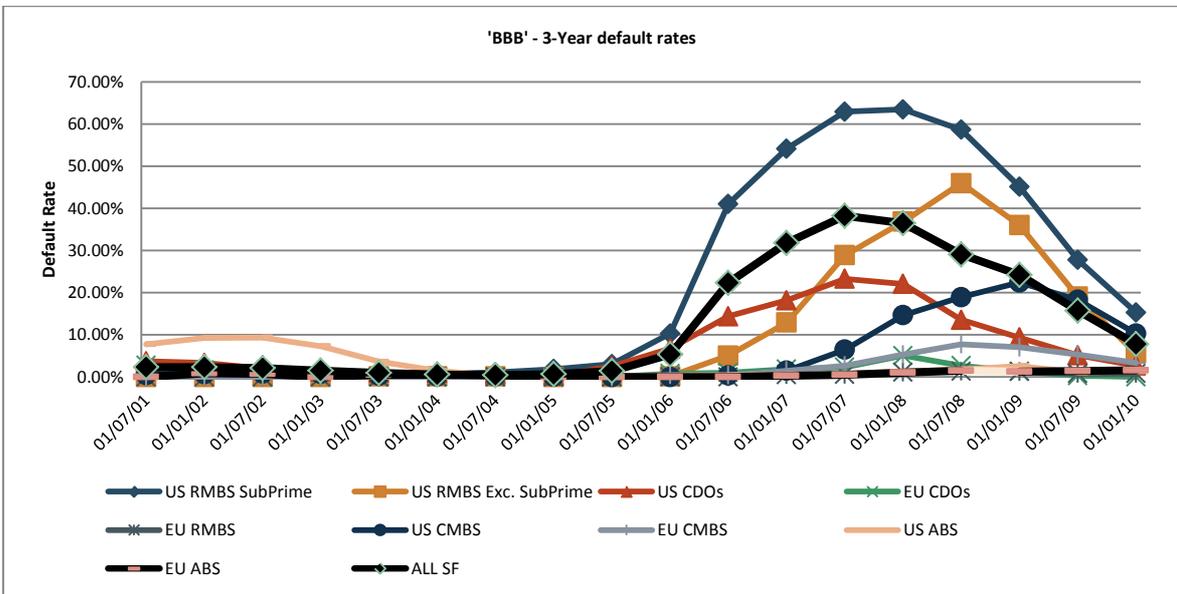
for non-subprime products. US CMBS and US CDO products display default rates of approximately 20% in 2007 and 2009 respectively.

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



Sources: ESMA CEREP database and EBA calculations.

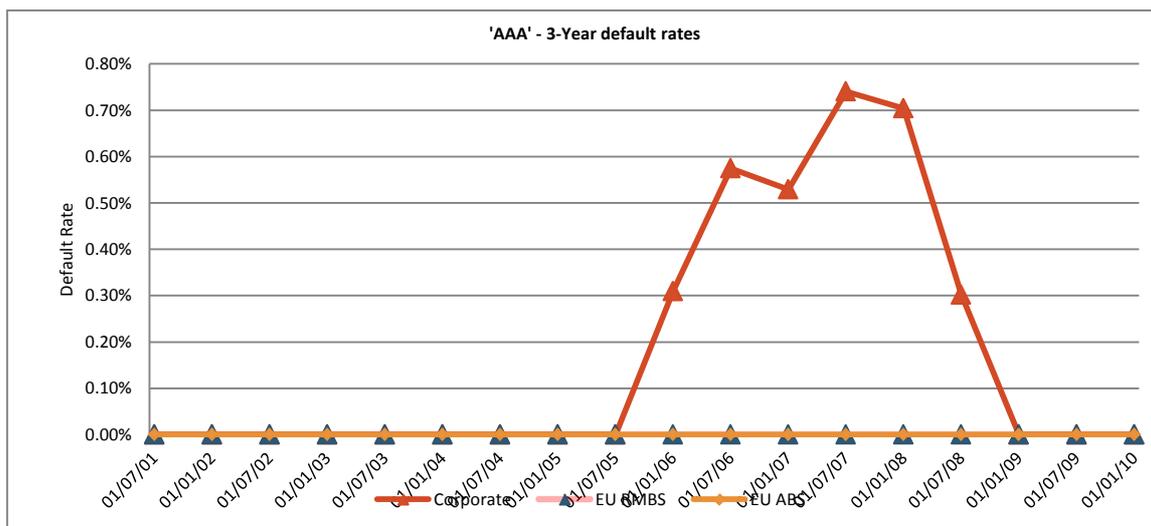
Figure 4 three-year default rates at BBB level per asset class (July 2001-Jan 2010 – S&P, Moody’s and Fitch)



Sources: 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.⁹ Despite being relatively low during the 2006-2009 time period, 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)



Sources: ESMA CEREP database and EBA calculations

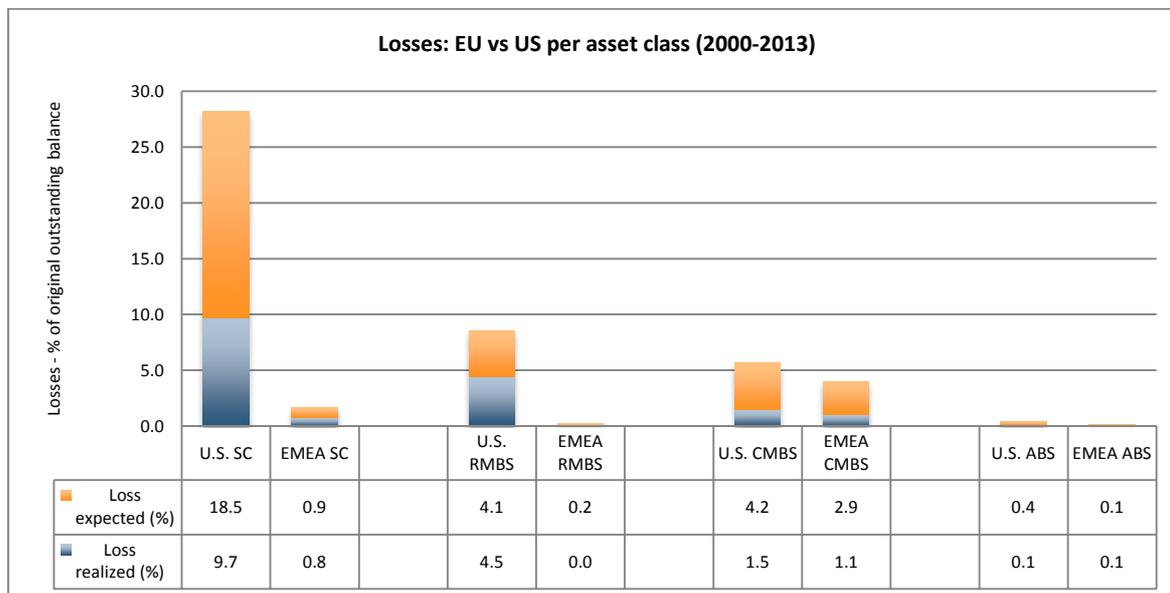
The performance of securitisations in terms of losses appears to be equally heterogeneous across classes of securitisation products. According to a report published in the second quarter of 2014 by Fitch, the worst performing asset class during the years 2000-2013, in terms of realised and expected losses¹⁰, is the US structured credit segment followed, in order, by US RMBS, US CMBS and EMEA CMBS (see Figure 6 below). According to Fitch, EMEA RMBS and ABS products displayed almost zero losses over the same reference period.

A further data break down published by Fitch (see Figure 28 in the annex to this report), 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 dominated by the high losses associated with CDOs (see Figure 29 in the annex to this report). Within the US ABS segment, those products that are backed by consumer assets performed particularly well during the time period analysed by Fitch (see Figure 30 in the annex to this report).

⁹ As defined in the ESMA Regulatory Technical Standards on the CEREP dataset (Commission delegated regulation (EU) No 448/2012).

¹⁰ 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.

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

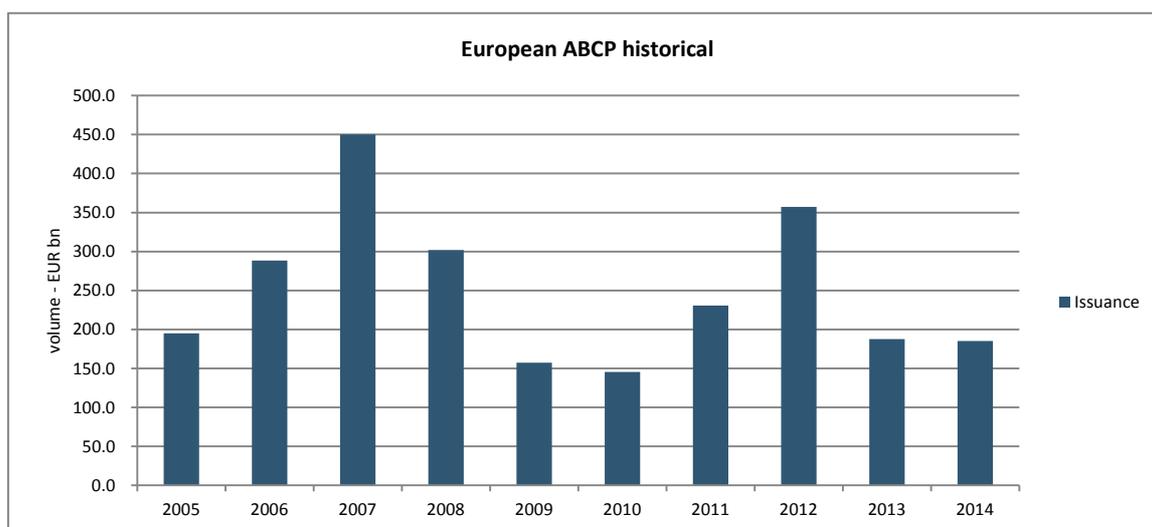


Sources: Fitch¹¹

1.2 EU ABCP market developments: pre- to post-crisis environment

Available historical data (see Figure 7 below) shows that, albeit not at the levels of its 2007 EUR 450 billion peak, issuance of European ABCPs is partially recovering from the decline observed during the 2009-2010 period.

Figure 7 European ABCP historical issuance

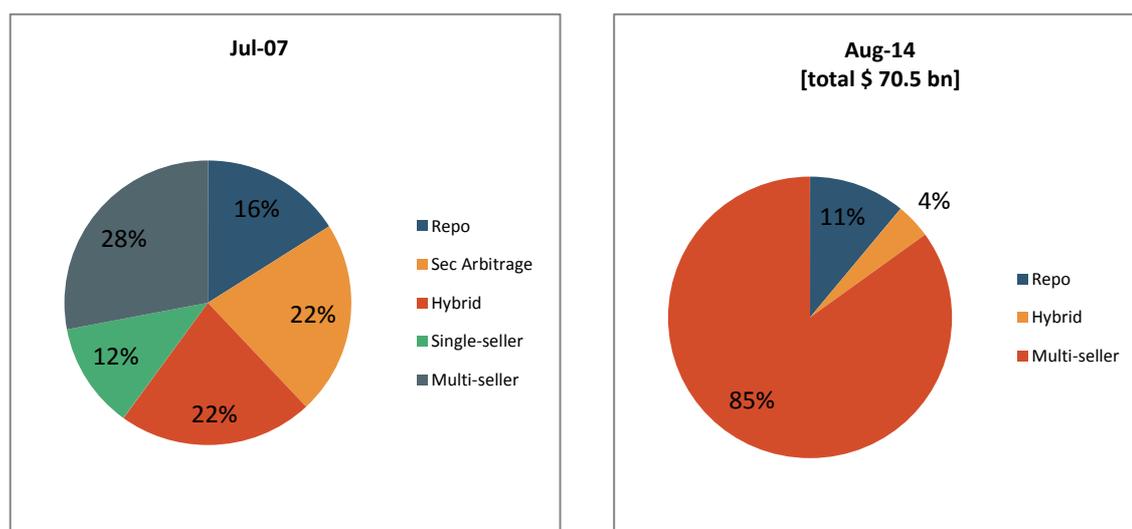


Sources: AFME website

¹¹ Global Structured Finance Losses: 2000–2013 Issuance – Special Report – Fitch Ratings (May 2014).

As shown in Figure 8 below, the European ABCP market¹² has substantially changed since its pre-crisis peak issuance levels in terms of the type of outstanding ABCP business. While the 2007 market was characterised by a large share of arbitrage and hybrid conduits, the current market is almost exclusively focused on real-economy-related exposures mostly financed by multi-seller conduits (see Box 2 in the annex for a short description of the different types of ABCP conduit).

Figure 8 EMEA conduits type (% of ABCP outstanding): market evolution



Sources: Moody's Investor Services

According to analysis by AFME¹³, 57% of the underlying exposures held by structured investment vehicles (SIVs) in early 2007 were structured finance products (the commercial paper instrument was a re-securitisation). ABS assets were also held by arbitrage conduits, 92% of which were AAA-rated securitisations. Both SIVs and arbitrage conduits were used to obtain funding by issuing commercial paper with a weighted-average life of months (5.5 months as of November 2007 for SIVs and even shorter for arbitrage vehicles), while the funded securities' maturities reached several years, contributing to the build-up of funding pressure. These conduits did not normally benefit from full liquidity/credit support and achieved de-consolidation from the sponsoring bank. As the sub-prime crisis hit, the funding risk crystallised and many of the securities held by SIVs/arbitrage vehicles were subject to fire sales on the markets, contributing to the high volatility of securitisation prices observed during the financial crisis. Many sponsoring institutions, not holding sufficient capital against the securities included in the conduit due to accounting de-recognition, were suddenly forced to take the securities back onto the balance sheet, bearing the related losses and incurring liquidity drains. The existing multi-seller programmes did not experience comparable problems.

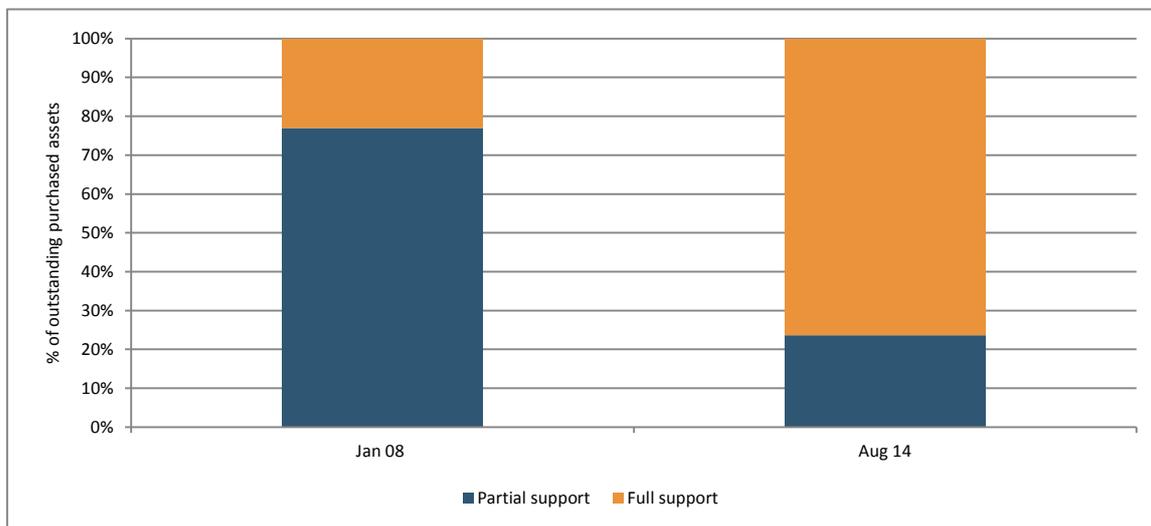
The market practice of ABCP securitisation also substantially changed with respect to the role of support played by sponsoring banks. The percentage of purchased assets that are fully supported

¹² Data reported here from Moody's refers to the EMEA region.

¹³ 'The impact of market behavior unconnected to asset quality on the price volatility of securitisations from 2007-2009' (AFME).

by a liquidity facility increased from approximately 20% to approximately 80% (see Figure 9 below).

Figure 9 EMEA conduits liquidity support: market evolution (by % outstanding balance of purchased assets)



Sources: Moody's Investor Services

Liquidity facilities are required to ensure that funds are available to repay maturing commercial paper on a timely basis and these facilities may also cover credit risk, i.e. they may cover the default of underlying exposures (asset default coverage) beyond the transaction specific credit enhancement. Full support by the liquidity facility implies coverage of both liquidity and credit risk. Liquidity facilities tend to be structured as one-year renewable facilities (commitments) and are often sized to cover slightly more than 100% (e.g. 102%) of the maximum volume of assets that can be purchased by a given transaction in the conduit. The extra coverage can, for instance, be used to cover other risks in the transaction, such as interest rate risk, seller/servicer risk (commingling risk, fraud risk, administrative risk), legal risk and currency risk. The liquidity facility is in most cases provided on a transaction specific basis; however in some cases it is provided at the programme level (i.e. for all the transactions in the conduit).

Full liquidity support gives rise to a sort of dual recourse scenario from the point of view of the commercial paper investor, as the latter benefits from both the protection provided by the liquidity facility and an ultimate claim on the assets segregated in the conduit. In some jurisdictions, particularly in Germany in the case of trade receivables, the commercial paper investor may face what can be defined as a double default protection as, in addition to the protection of the liquidity facility, the commercial paper also indirectly benefits from the fact that the liquidity facility provider receives credit risk insurance by an insurance entity.

In the current ABCP market, as of Q4 2014, multi-seller conduits mostly finance exposures with a direct link to the real economy (see Table 13 in the annex), where trade receivables is by far the most represented asset class, with slightly more than 50% of multi-seller market share, and market coverage almost reaches 90% if auto loans and leases, consumer loans, equipment leases and dealer floorplans are also taken into account.

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 report is published.

Table 1 below summarises the most important regulatory changes affecting the securitisation market.

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

Regulatory initiative	Issue description and key points to note
CRD II: retention requirement (5%), disclosure and investor due diligence requirements, and significant credit risk transfer	<p>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.</p> <p>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.</p>
<p>Basel 2.5: revised securitisation framework and further strengthening of trading book regime</p> <p>CRD III – contains new rules on re-securitisations and capital requirements for trading book exposures</p>	<p>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 that 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 facilities and self-guaranteed exposures. Originally eligible liquidity facilities, with a term under one year, benefited from a 20% CCF, while those over one year had a 50% CCF. Under the proposal, the CCF would be 50% for all eligible liquidity facilities, regardless of the term of the commitment. In addition, if an external rating of the facility itself is used for risk weighting the facility, a 100% CCF must be applied.</p>
BCBS revised securitisation framework (December 2014)	<p>Published revised securitisation¹⁴ framework: increased regulatory capital charges for securitisation positions for investing institutions and revised hierarchy of approaches to the calculation of capital requirements on securitisation positions.</p>
EU Solvency II Directive: published revision of the capital requirements	<p>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 2013¹⁵), the Commission introduced lower capital requirements for certain qualifying securitisations¹⁶.</p>

¹⁴ Basel Committee on Bank Supervision (December 2014) 'Revisions to the Basel Securitisation Framework'.

¹⁵ EIOPA Guidelines on the System of Governance (EIOPA CP 13/08).

Basel III: new liquidity standards, including the liquidity coverage ratio (LCR) requirement	<p>New liquidity coverage requirements for institutions: only certain RMBS would be regarded to be a Level 2B asset (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% loan-to-value ratio, non-own name, price volatility restriction etc.).</p>
Corresponding EU CRR implementing measures	<p>An outflow coefficient of 100% is applied to liquidity facilities provided to the benefit of ABCP transactions (i.e. the total amount of the CP outstanding that is due within the next 30 days is deemed not to be rolled and liquidity is drawn in full).</p> <p>Under the Commission's delegated act on the LCR a range of securitisations are eligible as Level 2B HQLA, including RMBS and auto receivables, consumer ABS and SME ABS. Level 2B HQLA can make up a maximum of 15% of the overall liquidity buffer. Minimum haircuts differ by securitisation asset class: 25% for RMBS and auto receivables ABS and 35% for consumer and SME ABS.</p>
EU CRR, Alternative Investment Fund Managers Directive, Solvency II Directive and UCITS Directive: risk retention and due diligence requirements	<p>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.</p> <p>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.</p> <p>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.</p>
Basel standards on large exposures	<p>BCBS supervisory framework for measuring and controlling large exposures including treatment for securitisation exposures.</p>
EU CRR: large exposures requirements	

¹⁶ Commission delegated regulation supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), October 2014.

EBA final RTS on large exposures: in accordance with Article 390(8) of the CRR, the EBA final RTS specify:

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

<p>EU Money Market Funds Regulation: prohibition on securitisation investments</p>	<p>Proposed new regulatory framework for money market funds including a new prohibition on such funds to invest in securitisations (including leasing receivables backed 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.</p>
<p>EU Regulation on structural measures improving the resilience of EU credit institutions: separation of certain trading activities</p>	<p>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.</p> <p>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.</p>
<p>EU Capital Requirements Regulation, Article 395 of the CRR</p>	<p>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.</p>
<p>EU CRA Regulation: disclosure requirements on structured finance instruments and external rating requirements</p>	<p>The European Commission Delegated Act¹⁷ 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.</p> <p>Lastly, it should be noted that the CRA Regulation also requires that rated securitisations be rated by at least two credit rating agencies.</p>
<p>EU EMIR regulation: bilateral margining requirements</p>	<p>As further specified in the consultation paper issued by the Joint Committee of the ESAs, a two-way margin posting</p>

¹⁷Commission Delegated Regulation (EU) 2015/3 (30 September 2014) supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council with regard to regulatory technical standards on disclosure requirements for structured finance instruments.



and central clearing requirements

requirement is proposed, under the EMIR Regulation, also on derivative transactions entered into by the securitisation vehicle, provided that given derivative exposure thresholds and other conditions are met.

As further specified in the two consultation papers issued by the ESMA¹⁸, 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.

¹⁸ 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 to the global liquidity standards, the large exposure requirements and both the bilateral and central clearing requirements. Pursuant to current regulation, requirements such as those on the retention of economic interest, investors' due diligence and disclosure apply 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 not¹⁹. Covered bonds can only be used for funding while securitisations can be used for both funding and risk-transfer (i.e. capital relief) purposes.
- covered bonds are issued, in most of the jurisdictions, under special legal frameworks and, in accordance with 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.

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 securitisation²⁰.

Despite the aforementioned 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 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.

¹⁹ Senior / subordinate covered bond structures have been issued in Denmark.

²⁰ 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 proper functioning of the relevant covered bond markets.

RECOMMENDATION 1: Recommendation for a holistic (cross-product and sector) review of the regulatory framework for securitisations and other investment products. Following the review, action should be taken where appropriate.

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 have been introduced at international and EU level to address the shortcomings of the securitisation market and many more are still being finalised. 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 features of and requirements for the various investment products.

Major differences in regulatory treatment clearly have an impact on the 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, for example insurance companies, managers of UCITS or AIFs, banks or other regulated investors need to consider many different regulatory factors, including:

- regulatory capital charges
- liquidity regulation
- operational requirements (retention, retaining entity, disclosure, due diligence 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 current securitisation market conditions are commonly acknowledged as subdued by both market participants and regulators, it should also be noted that around 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. Market participants and regulators broadly agree that it is neither likely nor desirable that this investor base return to the market.

While many different factors may have played a role in shaping the subdued dynamics 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 among issuers and investors as a result of 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 on to securitise and/or invest in securitisations.

The 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 lesser extent, CMBS products. The lack of sufficient transparency about 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 data on the historical performance of different securitisation instruments has contributed to the spreading of the stigma attached to poorly performing asset

²¹ Documented in 'The impact of market behaviour unconnected to asset quality on the price volatility of securitisations from 2007-2009' – AFME March 2014.

classes, including 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 debt crisis (affecting some EU jurisdictions more than others) is also partly responsible for preventing the securitisation market from reverting 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 for compliance with upcoming prudential regulation²², 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 (for the trends of these two processes see Figure 31 and Figure 32 in the annex to this report).

Linked to the macro-economic scenario, is the **availability to 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 place²³ by central banks, including the ECB and the BoE. The availability of central bank funding in large amounts and at relatively low costs today still appears to contribute to making securitisations an 'uneconomical' funding option for institutions which have access to central banks' facilities²⁴.

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 banks 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 tool for institutions.

²² 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.

²³ See for instance the ECB announcement: http://www.ecb.europa.eu/press/pr/date/2014/html/pr140703_2.en.html.

²⁴ 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.

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 33 in the annex to this report).

Among the current impediments to the securitisation business the lack of investor' 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.

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 the availability of counterparties to a securitisation transaction. Due to the downgrades of institutions, which took 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 a counterparty to securitisation transactions due to the implied capital and/or collateral requirements and, in particular, due to the potential replacement costs where there is a downgrade of their own rating. In addition, the treatment of systemic risk and sovereign risk has caused rating agencies to implement 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. Since 2009, relative value and buy-to-hold investors have 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, as noted at the beginning of this section, a large part of the pre-crisis investor base connected to SIVs and arbitrage conduits has disappeared from the market and is not likely to be re-established to any similar extent.

The wide reform of the regulatory treatment of securitisations (see Chapter 2), triggered since the crisis, both on the global and EU scale, may have generated **regulatory uncertainty** among market participants, facing several consultation rounds concerning different aspects of the regulatory treatment of securitisations, including:

- i) Capital charges on securitisation investments were/are under review in the following frameworks:
 - a) the BCBS work for the review of the securitisation framework led to consultation on higher overall capital charges than those currently in force in the EU (CRR) and resulted in a final framework being published in December 2014;

- b) the EU (EIOPA/Commission) work on securitisation capital charges on insurance companies and pension funds, differentiating between type A and type B securitisations, led to consultations on overall higher capital charges than those previously in force and resulted in a final proposal in October 2014.
- ii) The treatment of securitisations within the EU implementation of the Liquidity Coverage Ratio (LCR) led to consultation on the proposals and was finalised in October 2014. Uncertainty over this aspect of the regulation, in particular, may have impacted 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 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. AIMFD.
- 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 (CRA Regulation) may have generated uncertainty in expectations around, for instance, the scope and granularity of the rules proposed²⁵.

²⁵ As documented in the Joint-committee report on securitisation published by the Joint Committee of the ESAs on 12 May, 2015.

4. Capital treatment of securitisation positions: a comparative review of current 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 3 in the annex to this report) 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 then has 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 CRR²⁶.
- Within the class of retail exposures and corporate exposures, the present review considers exposures to SMEs separately.

²⁶ 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 Approach²⁷.

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 exposures²⁸;
- 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)²⁹;
- Article 129(4) and Article 129(5) for rated and unrated covered bonds, respectively;
- Article 251 for securitisation and re-securitisation positions.

²⁷ As an example, the capital charge of 1.6% applicable to an '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.

²⁸ In accordance with Article 123 of the CRR, exposures that are classified 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.

²⁹ 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 the purposes of Article 123 of the CRR, the SME definition to be applied is given under Article 501 of the CRR.

Table 2 Capital charges (risk weight * 8%) for different exposure classes under the Standardised Approach

External rating ³⁰	AAA-AA	A	BBB	BB	B	Below B		
Credit quality step	1	2	3	4	5	6	Unrated	
Retail exposures					6.0%			
SME retail loans					4.6%			
Residential mortgages (CRR Article 125 compliant)					2.8%			
			(2.13% for residential mortgage exposures to SMEs borrowers)					
Corporate exposures (non-SME)		1.6%	4.0%	8.0%	8.0%	12.0%	12.0%	The higher of 8% and capital resulting from sovereign risk weight
Corporate exposures (SME)		1.22%	3.05%	6.10%	6.10%	9.14%	9.14%	The higher of 8% and capital resulting from sovereign risk weight (taking into account the SME supporting factor 0.7619).
CRR compliant covered bonds		0.8%	1.6%	1.6%	4.0%	4.0%	8.0%	A function of the risk weight assigned to senior unsecured exposures to the issuer (i.e. issuer RW): min 0.8% max 8%
Securitisation		1.6%	4.0%	8.0%	28.0%	100%	100%	100% ^{31,32, 33}
Re-securitisation		3.8%	8.0%	18%	52%	100%	100%	100% ³⁴

³⁰ The CRR uses the term '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.

³¹ 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 1250% 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 1250% to the position.

³² Subject to the availability of a more favourable 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.

³³ 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.

³⁴ See footnote 31.

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 their counterparties and exposures to calculate capital requirements for credit risk³⁵. A comparison between the capital charges in the IRB approach is therefore not very 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 also use their own estimate of the 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 report 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).
- 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.

³⁵ 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 this approach.

- 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

Exposure Class	Foundation IRB	Advanced IRB
Retail Exposure	N/A	<p>PD: own estimate - at least equal to 0.03% (Article 163 of the CRR);</p> <p>LGD: own estimate;</p> <p>Where:</p> <p>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</p> <p>RW: as per Article 154 of the CRR</p>
Corporates (non-SME)	<p><u>PD</u>: own estimate - at least equal to 0.03% (Article 160 of the CRR).</p> <p><u>LGD</u>:</p> <ul style="list-style-type: none"> - senior exposures without eligible collateral: 45% (Article 161) - subordinated exposures without eligible collateral: 75% (Article 161) - secured exposures: 35% to 70% in accordance with Article 230; <p><u>RW</u>: as per Article 153 of the CRR;</p>	<p><u>PD</u>: own estimate - at least equal to 0.03% (Article 160 of the CRR);</p> <p><u>LGD</u>: own estimate;</p> <p><u>RW</u>: as per Article 153 of the CRR;</p> <p><u>Maturity</u>: 1 to 5 years (it can be less than 1 year under some exceptions).</p>

Maturity: 2.5 years (Article 162) or 0.5 years in the case of repos, securities and commodities.

Loans to SMEs – 147(5) non-compliant – as corporates	<p>As corporates</p> <p>Where:</p> <p>Corr. coeff. as per Article 153(4) of the CRR.</p>	<p>As corporates</p> <p>Where:</p> <p>Corr. coeff. as per Article 153(4) of the CRR;</p> <p>Capital requirements for credit risk to be multiplied by SME supporting factor (0.7619 as per Article 501 of the CRR).</p>
Loans to SMEs – 147(5) compliant – as retail	N/A	<p>As retail exposure;</p> <p>Capital requirements for credit risk to be multiplied by SME supporting factor (0.7619 as per Article 501 of the CRR).</p>
Residential Mortgages – 147(5) compliant – as retail	N/A	<p>As retail exposure;</p> <p>Where:</p> <p>LGD: exposure-weighted average not lower than 10% at portfolio level (Article 164(4));</p> <p>Corr. coeff. in RW: 15%.</p>
Residential Mortgages – 147(5) non-compliant – as corporates	As corporates	As corporates
Qualifying retail – 154(4) compliant	N/A	<p>As retail with:</p> <p>Corr. coeff in RW: 4%</p>

CRR-compliant covered bonds	PD (of the issuer): own estimate - at least equal to 0.03% (Article 160 of the CRR). LGD: 11.25% (Article 161); <u>Maturity</u> : 2.5 years (Article 162).	PD (of the issuer): own estimate - at least equal to 0.03% (Article 160 of the CRR); LGD: own estimate; <u>Maturity</u> : 1 to 5 years.
------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------

Securitisation

For **rated positions**: the RBM provides a look-up table according to which different CQSs (mapped to long-term and short-term ratings assigned by ECAIs) 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.

For **unrated positions stemming from ABCP programmes** the internal assessment approach (IAA) may be applied, provided that the Competent Authority grants permission to do so. Under the IAA internal rating grades may be assigned by institutions to these positions, according to methodologies that are to be similar to those of ECAIs. Institutions' internal rating grades shall be mapped into equivalent ECAIs' credit assessments. On the basis of this mapping, and using the RBM look-up table, these positions shall be assigned appropriate risk weights. 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)^{36,37}

		Securitisation position			Covered bond issuer rating								
		Senior: N>6	Non-senior: N>6	Non-senior: N<6	AAA	AA	A	BBB	BB	B			
Securitisation rating	AAA	1	0.56%	0.96%	1.70%	Covered bond rating	AAA	0.31%	0.31%	0.51%	0.99%	2.01%	N/A ³⁸
	AA	2	0.64%	1.20%	2.12%		AA						
	A+	3	0.80%	1.44%	2.97%		A+						
	A	4	1.20%	1.60%			A						
	A-	5	1.60%	2.80%	A-								
	BBB+	6	2.80%	4.00%	4.24%		BBB+						
	BBB	7	4.80%	6.00%	6.36%		BBB						
	BBB-	8	8.00%				BBB-						
	BB+	9	20.00%				BB+						
	BB	10	34.00%				BB						
	BB-	11	52.00%				BB-						
	Below BB-	All other and unrated	100.00%				Below BB-						

³⁶ For further details on how these capital charges are computed see Box 4 in the annex to this report.

³⁷ Risk-weights are multiplied by a factor of 1.06 and by the exposure value when calculating the risk-weighted exposure amount.

³⁸ 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)³⁹

Residential mortgages			SME retail - including supporting factor			Qualifying revolving			Corporates (non-SME)			SME corporate – including supporting factor		
Q3	Median	Q1	Q3	Median	Q1	Q3	WA	Q1	Q3	WA	Q1	Q3	WA	Q1
2.60%	1.80%	1.10%	3.30%	2.50%	1.80%	5.80%	4.00%	1.90%	7.90%	6.00%	3.40%	6.02%	4.57%	2.59%

³⁹ 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 4 in the annex to this report.



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 specific characteristics of the debt products.

Different regulatory capital treatments for securitisation and covered bonds are justified given the 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 the structural collateralisation mechanisms of the securitisation transaction.

4.3 An illustrative quantitative impact study on the CRR securitisation capital requirements based on external ratings

Figure 10 below compares (at a very high level) the capital requirements across the CRR regulatory approaches currently applicable to securitisation exposures. The exercise always compares the capital charges applicable to a hypothetical non-securitised pool of exposures, on the one hand, and those applicable to all the hypothetical tranches resulting from the securitisation of the same portfolio, on the other hand. Such an exercise not only illustrates how capital is distributed across the different tranches of a given securitisation transaction but also provides a clear picture of the overall extent of conservatism embedded in any approach to securitisation capital requirements, as it allows the measurement of the factor by which capital requirements on the securitisation transaction exceed the capital requirements on the underlying portfolio.

While it should be acknowledged that full neutrality of capital charges - i.e. equality between the capital charges applying to a given portfolio of underlying assets (i.e. non-securitised assets held on the balance sheet) and the sum of the capital charges applying to all the tranches of the same portfolio in a securitised format - is not prudent nor is it a desirable regulatory outcome, the resulting levels of non-neutrality of capital charges should always be taken into account when analysing capital requirements applicable to securitisations.

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 16 in the annex to this report 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 with reference to the credit quality of the median residential mortgage portfolio of a 2012 sample of EU banks (see Table 5 in section 4.2)⁴⁰.

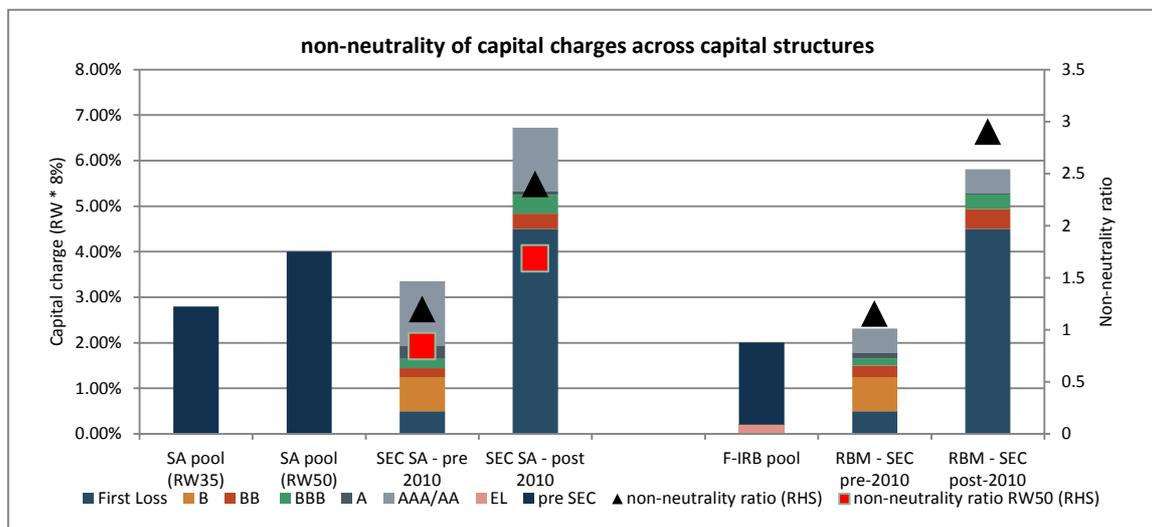
As shown in Figure 10:

- 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 standards⁴¹.

⁴⁰ See footnote 43.

⁴¹ A completely 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.

Figure 10 Capital charges across regulatory approaches and capital structures: an RMBS example^{42 43}



Sources: EBA calculations.

The example sheds light on the following aspects of the current capital requirements framework based on external credit ratings:

- 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.
- 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.
- 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.
- Since 2010, the credit rating agencies appear to have substantially changed 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

⁴² '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. Representative capital structures of the securitisation are reported in Table 16 in the annex to this report.

⁴³ 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). PD and LGD numbers used to compute IRB capital requirements are reported in Table 15 in the annex to this report.

considered in Figure 10, 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 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 throughout the rating process (Box 5 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 6 in the annex provides a short definition of counterparty credit risk in the context of securitisations) and with sovereign risk.

Figure 11 to Figure 14 indicate the 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 relevant asset class, as rated by Fitch (see the characteristics of these structures in

Table 17 to Table 19 in the annex to this report). SME pools are treated as pools of corporate SMEs: the risk weighting hence follows the approach for corporates foreseen under the SA⁴⁴ 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)⁴⁵ 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 20 in the 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 were mostly 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, and Spain and Portugal in the case of the RMBS asset class, are those jurisdictions which had a rating country ceiling imposed upon them by, among others, Fitch. As a result of the different ceilings, the Italian and Spanish SME transactions have their most senior tranche of credit risk capped at

⁴⁴ 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%.

⁴⁵ Calculations are based on an assumed conversion factor of 100%.

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-authorized 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 using new post-2010 external ratings as inputs 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.

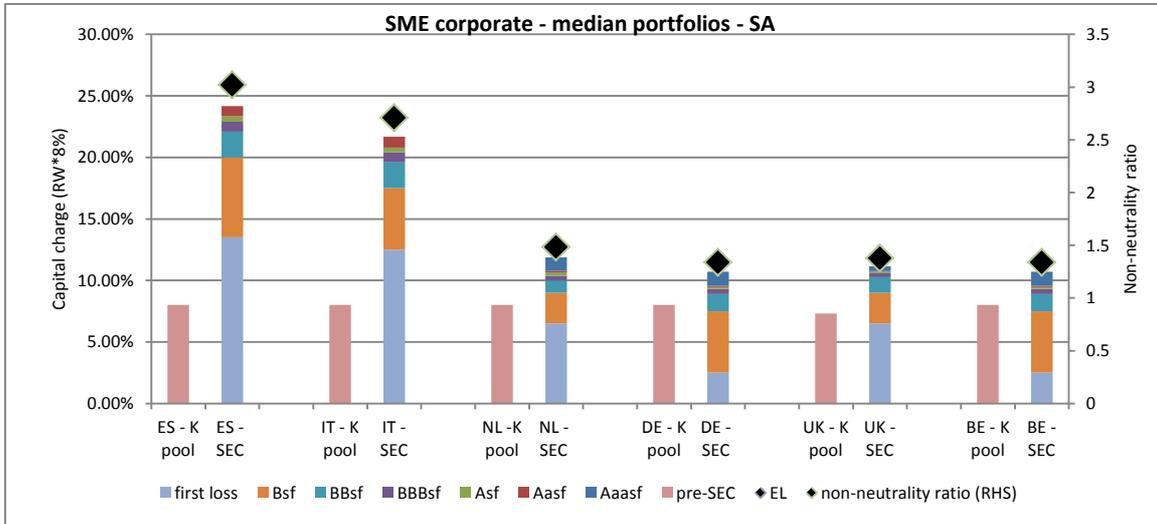
Box 1 Credit rating agencies' treatment of sovereign risk

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 credit rating agencies 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.

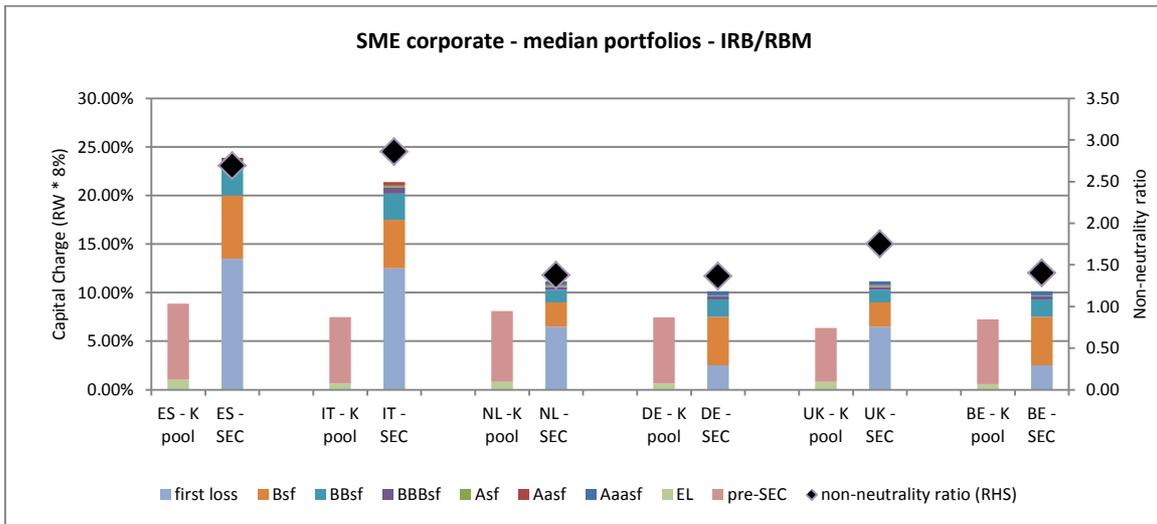
Although such ceilings and adjustments affect other rated asset classes besides ABSs, the issue is particularly relevant to ABSs given the additional credit-related safeguards that may exist in these instruments, including a waterfall structure that includes credit enhancement on the notes sold, back-up 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 11 Variation from neutrality of the SA on hypothetical SME corporate transactions⁴⁶⁴⁷



Sources: EBA calculations.

Figure 12 Variation from neutrality of the RBM on hypothetical SME corporate transactions

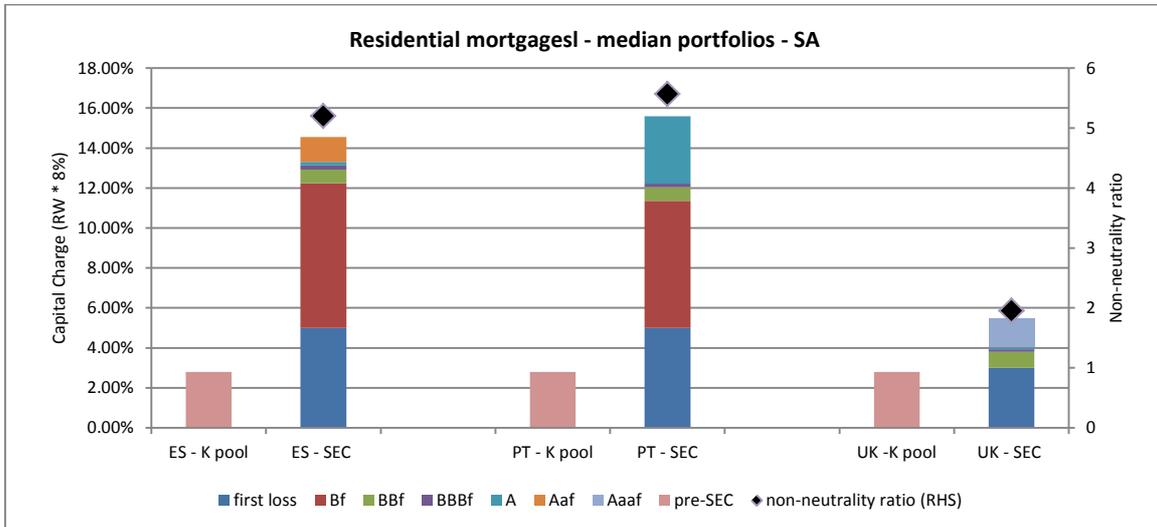


Sources: EBA calculations.

⁴⁶ 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).

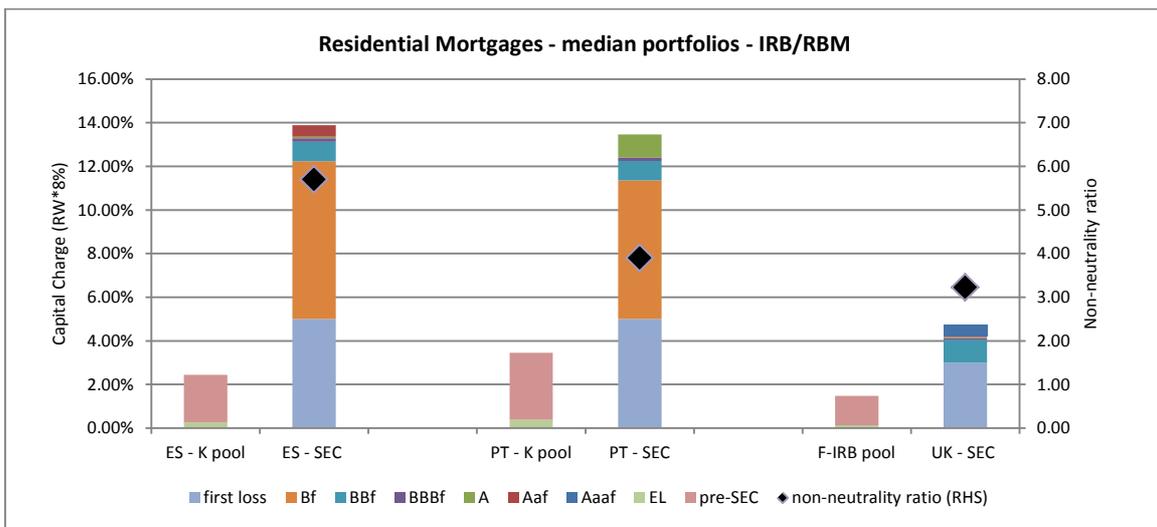
⁴⁷ PD and LGD data used to compute IRB capital requirements in Figure 11 to Figure 14 are reported in Table 20 in annex to this report. Representative capital structures are reported in Table 17 to Table 19 in the annex to this report.

Figure 13 Variation from neutrality of the SA on hypothetical prime RMBS transactions



Sources: EBA calculations.

Figure 14 Variation from neutrality of the RBM on hypothetical RMBS transactions



Sources: EBA calculations.

5. Development of a ‘qualifying’ securitisation framework

5.1 The benefits of securitisation

A well-functioning and prudentially sound securitisation market in the EU supports the real economy and strengthens the resilience of the financial system 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 Commission to identify which characteristics would be the most appropriate to designate ‘high quality’ securitisation products for funding the real economy in Europe, and to assess from a prudential perspective if there is merit in providing a 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 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, the BCBS and IOSCO committees have established an international task force on securitisation markets with the aim of identifying impediments hindering investors from participating in the recovery of sustainable securitisation markets. The task force has carried out a public consultation of global market participants and, as this report is being drafted, is finalising a set of criteria defining simple transparent and comparable (STC) term securitisations.

The Basel RSW group, which has published in December 2014 a revised securitisation framework is, as this report is being drafted, considering whether and how to incorporate STC securitisations identified by the BCBS/IOSCO task force into the newly published capital requirements framework to implement some degree of differentiation within global prudential regulation applicable to term securitisation.

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. Erroneous 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:

- Limited 'originate to distribute' model;
- Granular and diverse loan pools;
- High levels of credit enhancement;
- 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 the external rating.

The differentiation between Type A securitisations and Type B securitisations is 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) Association⁴⁸ 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:

- **Originate to distribute model:** many securitisations whose underlying assets were originated by financial institutions that ran an 'originate to distribute' model performed poorly. 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 with 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 a substantial impact 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 credit rating agencies, 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: SIVs (see section 1.2 on ABCPs) 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

⁴⁸ 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

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 ‘qualifying’ securitisations

A ‘qualifying’ securitisation framework should be defined in accordance with what can be called a two-stage approach, as follows:

- **Stage 1 – Simple, standard and transparent securitisations (SST) should be identified:** Criteria defining SST securitisations should ensure that the securitisation process does not add excessive additional risk and complexity on top of the credit risk of the assets being securitised: this process should be fully transparent to investors, should not embed excessive leverage, should not engage in excessive maturity transformation and should provide all the entities involved with the right incentives, so as not to replicate the so called ‘originate-to-distribute’ model observed in the run-up to the crisis.
- **Stage 2 – SST ‘Qualifying’ for lower capital requirements:** Criteria aimed at limiting the credit risk of the exposures to be securitised should be fulfilled, in addition to the requirements of the SST framework, in order to consider a given securitisation instrument qualifying for a differentiated (lower) capital treatment. Credit risk criteria on the underlying exposures are needed to prevent very risky/volatile assets (e.g. sub-prime mortgage loans) from entering an SST securitisation structure. Risky/volatile assets could noticeably increase the uncertainty and margin of error of the credit tranching and repackaging process, resulting in overall riskier securitisation investments.

Figure 15, below, summarises the proposed two-stage approach to qualifying securitisation.

Rationale

Simple, standard and transparent securitisations should:

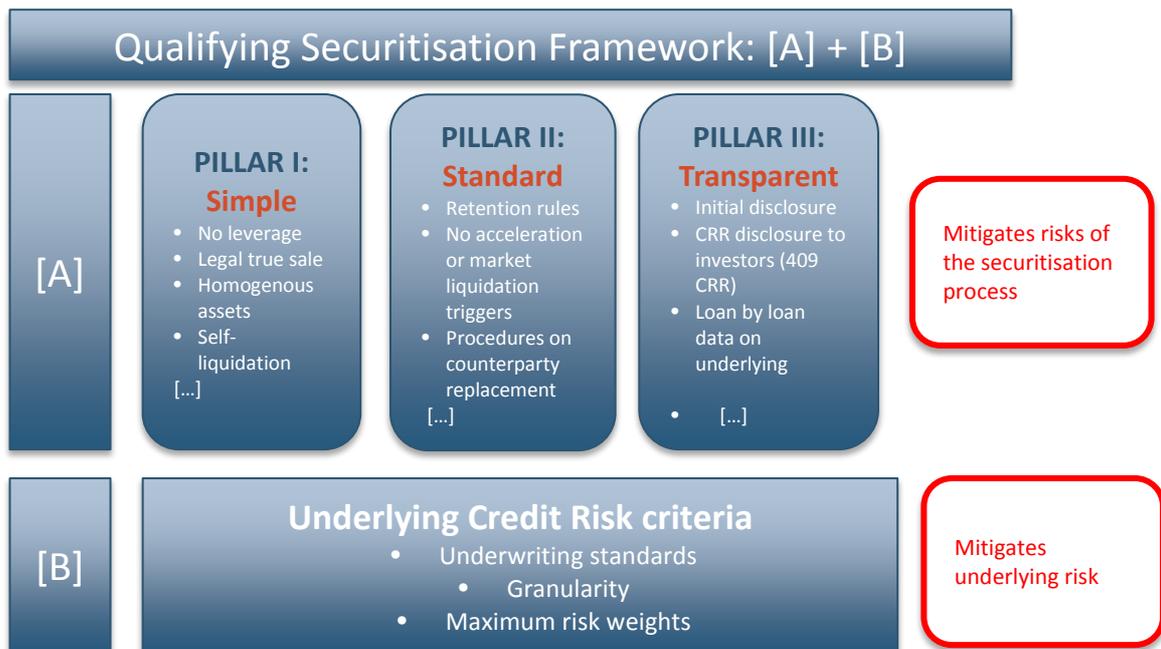
- i) raise the minimum standards for securitisations transactions and lead to more standardised products and harmonised practices in the securitisation market;
- ii) contribute to the re-establishment of investors’ confidence in the securitisation instrument and, potentially, contribute to broadening the investor base for securitisations;
- iii) pave the way to a more risk-sensitive regulatory framework that can differentiate between different securitisation products with different risks and historical performance.

Qualifying securitisations, recognised within the regulatory capital framework, will enhance the sensitivity of capital requirements applicable to securitisation positions and will maintain a risk-based regulatory playing field for securitisation products vis-à-vis comparable financial instruments.

In addition, a two-stage approach to defining qualifying securitisations lends itself to extending the ‘qualifying’ concept to frameworks of prudential regulation other than bank capital requirements. The first stage of the framework, i.e. the identification of SST securitisations, could in fact easily form the basis for a common definition across regulatory chapters on securitisation, ranging from bank capital requirements to banks’ liquidity requirements and insurance companies’ capital requirements and, where necessary, other regulations. The second stage, which in the case of bank capital regulation takes the form of credit risk criteria on the underlying exposures, could instead include different sector-specific requirements needed to determine eligibility for a ‘qualifying’ regulatory treatment related to the type of prudential regulation under consideration, i.e. liquidity regulation, insurance capital regulation etc.

Such a cross-sectoral implementation of the SST criteria and the two-stage approach should be taken into consideration in order to simplify and streamline the regulatory treatment of securitisations across prudential regulations.

Figure 15 Two-stage approach to ‘qualifying’ securitisation



5.3 EBA proposed criteria for identifying qualifying term securitisations

RECOMMENDATION 3: : Recommendation on criteria defining ‘qualifying’ term securitisations

Simple, standard and transparent (SST) term securitisations should be defined by means of criteria as defined under Pillars I, II and III in this section of this report.

Minimum credit quality of underlying exposures within ‘qualifying’ term securitisation transactions should be defined by means of criteria as defined under Stage 2 in this section of the report.

The criteria proposed in this report apply to traditional term securitisations; synthetic term securitisations, while meeting the CRR definition of securitisation, are out of the scope of the criteria proposed in this report as the features of simplicity, standardisation and transparency of such instruments cannot be appropriately considered on the basis of the criteria applicable to traditional securitisations.

In the context of Criterion 7 (Pillar II below), it is considered essential that the effectiveness of EU retention rules, particularly with respect to issues related to the definition of ‘originator’, be re-considered in line with the EBA advice on EU retention rules included in the EBA Report published in December 2014.

It should be noted that the maximum risk weight requirements proposed under Stage 2 on the credit quality of the underlying exposures are based on the currently applicable Standardised Approach to Credit Risk provided for in the CRR; these requirements should be reviewed as the Basel reform of the Standardised Approach is finalised and implemented.

Rationale

SST criteria 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 recourse to leverage, iii) the exposure of investors to substantial refinancing risk and iv) the lack of transparency.

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, limited re-financing risk 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.

In order to ensure that the pool of underlying exposures meets standards of minimum credit quality it is necessary to make sure that: i) the loans from which the exposures arise are underwritten according to standards recognised by EU prudential regulation as prudent; ii) the pool of underlying exposures itself is not characterised by excessive concentration, whereby the

credit quality of the exposures towards a specific obligor would drive the credit quality of the whole pool of exposures exposing the securitisation investment to excessive idiosyncratic risk, iii) the maximum riskiness of each underlying exposure is capped through the backstop measure of the maximum risk weight. The latter is important to ensure the minimum credit quality of all underlying exposures under all those aspects that cannot be captured by underwriting standards. It is particularly relevant for those types of underlying exposures whose underwriting process is less regulated and standardised and hence more difficult to control by means of qualitative criteria.

Pillar I: simple securitisations

Criterion 1:

The securitisation should meet the following conditions:

- It should be a securitisation as defined in the CRR (as per Article 4(1) point (61));
- It should not be a 're-securitisation' as defined in the CRR (as per Article 4(1) point (63)).

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.

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 transfer of exposures into the securitisation pool should at all times be subject to predetermined and clearly defined eligibility criteria. After the closing date the securitisation should not be characterised by an active portfolio management on a discretionary basis including the sale of transferred exposures. Exposures transferred into the securitisation after the closing should meet eligibility criteria that are no less strict than those applied when structuring the securitisation. Substitution of exposures that are in breach of representations and warranties should in principle not be considered as active portfolio management.

Rationale

When investing in simple securitisations investors should be in a position to identify in a clear and consistent fashion under which criteria exposures are selected for/transferred into the securitisation. The selection and transfer of exposures should not be opaque processes. The payments of simple securitisations should depend exclusively on the performance of the underlying exposures: active portfolio management adds a layer of complexity and increases the agency risk arising in the securitisation by making the securitisation's performance dependent on both the performance of the underlying exposures and the performance of the management of the transaction. Active management is deemed to arise whenever the manager of the portfolio sells one or more exposures which had initially been transferred to the securitisation SSPE. Replenishment practices and practices of substitution of non-compliant exposures in the transaction should not be considered active management of the transaction provided that they

do not result in any form of cherry-picking. Revolving periods and other structural mechanisms resulting in the introduction of exposures into the securitisation after the closing of the transaction may introduce the risk that exposures of lesser quality can be transferred into the pool. For this reason it appears important to ensure that any exposure transferred into the securitisation after the closing meets standards, i.e. eligibility criteria, which are similar to those used to structure the initial pool of the securitisation.

Criterion 3: The securitisation should be characterised by legal true sale or effective assignment of the securitised exposures, and should not include severe clawback provisions, so as to ensure that these exposures are beyond the reach of the seller (originator, sponsor, original lender) and its creditors including in the event of the seller's insolvency. A legal opinion provided by an independent third-party should confirm the true sale or effective assignment and the enforceability of the transfer of assets under the applicable law(s).

Where the transfer of assets is perfected at a later stage than at the closing of the transaction, the triggers to effect this perfection should, at a minimum, incorporate the following events:

- severe deterioration in the seller's credit quality;
- seller default or insolvency; and
- unremedied breaches of contractual obligations by the seller.

In addition, the originator, sponsor or original lender should provide, at transaction closing and to the best of its knowledge, representations and warranties that assets being included in the securitisation are not otherwise encumbered or in a condition that can be foreseen to adversely affect enforceability in respect of collections due.

Rationale

Simple securitisations should achieve economic transfer of the securitised exposures either through transfer of ownership to an SSPE or through sub-participation by an SSPE. The transfer of the exposures ensures effective ring-fencing and segregation of the exposures to be securitised from the insolvency estate of the seller. Only an effective segregation can ensure that the rights of the securitisation investors over the securitised exposures can be enforced should the seller become insolvent, and that ultimately the payment obligations towards the investors can be duly fulfilled. Such ring-fencing and segregation are commonly achieved through a process of legal true sale of the exposures to be securitised to an SSPE, although in some instances/jurisdictions, they may also result from an effective assignment of those exposures to an SSPE.

The sale/assignment should not be characterised by severe clawback provisions, including rules under which the sale of the exposures 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, 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. The legal opinion is deemed an important element for substantiating the confidence of investors regarding the segregation of the assets. It should, where possible, provide an assessment of clawback risk issues, as well as issues related to re-characterisation risk and set-off risk.

In the instances/jurisdictions where segregation is initially achieved through an effective assignment, the perfection of the transfer of ownership is realised by notifying borrowers of the transfer upon the occurrence of certain events subsequent to closing. In such situations, to minimise legal risks related to unperfected transfers, a minimum set of perfection events should be pre-defined. Examples of credit quality thresholds related to the financial health of the seller, originator, sponsor or other related party (in the case of unrated sellers) which would trigger perfection include a seller's failure to perform its contractual duties as well as other measures of

financial health that may be used and recognised by market participants.

For the investor to acquire a sufficient degree of confidence over the segregation/ring-fencing of the underlying exposures, it appears relevant that the securitisation transaction include representations and warranties about the conditions of encumbrance of those exposures.

Criterion 4: The securitisation should be backed by exposures that are homogeneous in terms of asset type, currency and legal system to which they are subject.

In addition, the exposures should meet the following criteria:

- i) They arise from obligations with contractually defined periodic payment streams 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 originated in the ordinary course of the originator's/original lender's business pursuant to underwriting standards that are no less stringent than those the originator/original lender applies to the origination of similar exposures not securitised.**
- iii) They contain a legal, valid and binding obligation of the obligor, enforceable in accordance with its terms, 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 obligations of the securitisation positions was not intended 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 be such that investors would not need to analyse and assess materially different credit risk factors and risk profiles when carrying out risk analysis and due diligence checks. As the type of risk analysis required for different asset types can vary substantially it is deemed appropriate that securitisation pools include homogenous assets. Homogeneity in terms of asset type should be assessed on the basis of common parameters, including risk factors and risk profiles.

Simple securitisations should include underlying exposures that are standard obligations, in terms of rights to payments and/or income from assets and that result in a periodic and well-defined stream of payments to investors. Credit card facilities should be deemed to result in a periodic and well-defined stream of payments to investors for the purposes of this criterion.

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 in which the originator may have less expertise and/or interest at stake. The quality of the securitised exposures should not be dependent on any significant changes in underwriting standards and only exposures underwritten to broadly consistent standards should be in the pool. In any case, all relevant changes in underwriting standards over time should not be material and should be fully disclosed to investors.

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 exposures to be securitised should be self-liquidating. 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 refinancing or re-sale of the asset securing the exposure may occur provided that re-financing is sufficiently distributed within the pool and the residual values on which the transaction relies are sufficiently low and that the reliance on refinancing is thus not substantial.

Explanatory note

The following auto loan examples can be used to interpret (for auto loans) and extrapolate (for other asset classes) what is meant by homogeneity.

Examples of a homogeneous auto loan pool would include, as of the securitisation closing date:

- loans originated in the same currency;
- loans subject to the same legal framework for origination, transfer, and enforcement;
- loans that are retail instalment sale contracts secured by a mix of new and used cars, trucks and utility vehicles; and
- loans that have level monthly payments that fully amortise the amount financed over its original term, except that the payment in the first or last month during the life of the loan may be minimally different from the level payment.

Examples of a non-homogeneous auto loan pool would include:

- collateral mix of auto loans with fleet assets or rental car assets;
- collateral mix of auto loans with corporate/floorplan/dealer assets;
- collateral mix of auto loans with auto leases.

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

- i) Any disputes between original lender and borrower regarding the underlying assets to the best of the originator's, sponsor's or original lender's knowledge;**
- ii) Any exposures which are non-performing. An exposure is considered to be non-performing if either or both of the following conditions are satisfied:**
 - 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 obligor. For these purposes, a borrower should be deemed as credit-impaired where, to the best of the originator's, sponsor's or original lender's knowledge:**
 - a. the obligor has been the subject of an insolvency or debt restructuring process due to financial difficulties within the three years prior to the date of origination; or**
 - b. the obligor 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**

c. the obligor 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.

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. While it can be the case that the existence of the aforementioned conditions may not be in the knowledge of the originator, sponsor or original lender, it should be ensured that these entities take all reasonable steps to acquire that knowledge.

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.

Explanatory note

Significant risk of default normally rises as rating grades or other scores are assigned indicating highly speculative credit quality and high likelihood of default, i.e. the possibility that the obligor is not able to meet its obligations becomes a real possibility.

'At the time of inclusion' for the purposes of this criterion and other criteria, should be read as the date the securitisation vehicle is entitled to the cash flows of the transferred exposures.

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 revolving securitisations backed by personal overdraft facilities, credit card receivables, trade receivables and dealer floorplan finance loans.

Rationale

Simple securitisations should be structured so as to avoid assets being 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. For similar operational reasons, the one payment requirement should not apply to trade receivables.

Pillar II: standard securitisations

Criterion 7: The securitisation should provide for the retention of a net economic interest in accordance with the CRR retention rules (Article 405 of the CRR) or any non-EU rules assessed as equivalent.

Rationale

Standard securitisations should ensure that the 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 report, is one of the features that mostly contributed to the poor performance of certain securitisation products.

Criterion 8: Interest rate and currency risks arising in the securitisation should be appropriately mitigated (i.e. hedged or appropriately offset) at all times; any mitigation measures should be explicitly documented. Only derivatives used for hedging the asset liability mismatch should be allowed and they should be documented according to standard industry master agreements.

Rationale

Mitigating and/or hedging interest rate and currency risks arising in the transaction enhances the simplicity of the latter since it facilitates the modelling of those risks and of their impact on the credit risk of the securitisation investment by investors. Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally interest rate and currency risks can be mitigated, where mitigating measures could include use of interest rate caps and floors or the use of excess spread or reserve funds. The appropriateness of the mitigation of interest rate risk and foreign currency risk throughout the life of the transaction must be demonstrated by making available to actual and potential investors, on a timely and periodical basis, quantitative information including the fraction of notional amounts that are hedged, as well as a sensitivity analysis that illustrates the effectiveness of the hedge under extreme but plausible scenarios. In principle, these mitigating measures should be funded and specifically allocated to address one or more risk drivers (e.g. specific allocation for covering interest rate risk exposure). All parties exposed to the credit risk of a securitisation transaction's underlying exposures should be in a position to clearly identify and assess hedging/mitigation measures. For this reason, it is essential that these measures be documented in a clear and standardised fashion.

Explanatory note

The term 'appropriately mitigated' should be understood as not necessarily requiring a completely perfect hedge. Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally interest rate and currency risks can be mitigated, where mitigating measures could include the use of interest rate caps and floors or the use of excess spread or reserve funds. The term should not necessarily be understood from an accounting point of view, but rather from an economic perspective.

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. Interest payments on assets of the securitisation may include sectoral rates reflective of a lender's cost of funds.

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.

Explanatory note

Examples of 'commonly encountered market interest rates' would include:

- a) interbank rates and rates set by monetary policy authorities, such as the LIBOR, EURIBOR, and Central Bank's discount rates; and
- b) sectoral rates reflective of a lender's cost of funds, such as internal interest rates that are directly reflecting the market costs of funding of a bank or a sub-set of institutions.

Criterion 10: The transaction documentation of those transactions featuring a pool of revolving exposures should include the following triggers to prevent the acquisition of additional exposures:

- a) the occurrence of an insolvency-related event with regards to the originator as well as the servicer;
- b) a deterioration in the credit quality of the underlying exposures to or below a pre-determined threshold;
- c) the unavailability of exposures that meet the pre-determined credit quality;

The transaction documentation of such transactions should also include the following triggers to provide for early amortisation of the securitisation positions, in order of seniority:

- i) the occurrence of an insolvency-related event with regards to the originator as well as the servicer.
- ii) a deterioration in the credit quality of the underlying exposures to or below a pre-determined threshold;
- iii) the fall in the value of the underlying exposures held by the securitisation below a required threshold.

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 triggering the termination of the revolving period at the occurrence of adverse events such as those mentioned under (a) to (c). In all such transactions, irrespective of the nature of the revolving mechanism, investors should be protected by early amortisation triggers whenever deterioration of underlying credit quality or insolvency events related to the originator occur.

However, it is also important that early amortisation is not automatically triggered in the event that the originator cannot generate sufficient new underlying exposures that meet the pre-determined credit quality criteria. This is because the existing securitisation pool could still be performing soundly and the issuer paying securitisation investors as anticipated.

Criterion 11: Following the occurrence of 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, 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 automatic liquidation of the underlying assets at market value.

In addition, performance-related triggers should be present in transactions which feature non-

sequential priority of payments, including at least the deterioration in the credit quality of the underlying exposures to below a pre-determined threshold.

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. Should the transaction feature conditions of non-sequential payment priority, it is essential to ensure that performance-related triggers are included determining the shift to sequential priority of payments.

The performance of standard securitisations should not rely, due to contractual triggers, on the automatic 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. While this criterion targets automatic contractual provisions, it should not be read as ruling out investors' votes providing for the liquidation of assets.

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:

- i) the default or insolvency of the current servicer does not lead to a disruption to the servicing of the underlying assets;**
- ii) 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**
- iii) upon default and specified events, the replacement of the liquidity facility provider and account bank is provided for in any liquidity facilities or bank account 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 should clearly specify the duties of an 'identified person' with fiduciary responsibilities, who acts 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'. Voting rights should be clearly defined and allocated to noteholders.

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 the decision-making process more effective, 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 can be resolved 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 and there should be strong systems and reporting capabilities in place. All these elements should be substantiated by a third-party review for entities not subject to prudential regulation.

The originator and original lender should have sufficient experience in originating exposures similar to those securitised.

Rationale

Ensuring that all the conditions are in place for the proper functioning of the servicing function is crucial given the central nature of this function within any securitisation transaction. Moreover, given that the performance of the securitisation depends in principal on the quality of the origination, the two parties involved in the origination of underlying exposures – originator and original lender – should have sufficient experience in originating such assets.

Pillar III: transparent securitisations

Criterion 15: Securitisation transactions should meet the disclosure requirements of Regulation (EC) No 809/2004 implementing the Prospectus Directive, with respect to the minimum information that the prospectus should contain, as provided for in Annexes VII and VIII of that Regulation. Securitisations with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

Compliance with the Prospectus Directive or equivalent law or regulations of a non-EEA jurisdiction ensures that, at issuance, the investors have access to all the information that is necessary to make an informed investment decision at the closing date. It is important that both public and private deals are treated equally if they offer investors the minimum amounts of transparency and information required by the Prospectus Directive. Private placement securitisations should also be able to qualify as securitisations meeting the SST criteria to the extent that they offer their investors the minimum amount of information that the Prospectus Directive requires for public deals.

Criterion 16: The securitisation should meet the requirements of Article 409 of the CRR and Article 8(b) of the CRA Regulation (disclosure to investors). Alternatively, securitisations with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction

Rationale

The CRR and CRA Regulation 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 on an ongoing basis, directly addressing the opaqueness and analytical complexity which have characterised investors' perception of securitisations in recent years.

Criterion 17: Final offering documents should be available from the closing date. Where legally possible, investors should have access to all underlying transaction documents, at the latest 15

days after the closing of the transaction.

Initial offering and draft underlying transaction documentation should be made available before the pricing of the securitisation.

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, which is fundamental in a scenario of default of any of the parties involved in the transaction or other relevant events.

Explanatory note

‘Final offering documents’ are meant to be the final version of the offering documents, including all the information determined at the pricing of the transaction.

‘Initial offering documents’ should be understood to reference either:

- initial offering material made public as required for publicly registered/offered transactions, consistent with applicable laws and regulation, or
- privately documented initial offering material (for non-publicly registered/offered transactions), provided they contain essentially the same level of transparency and disclosure to investors as initial offering material for publicly registered/offered transactions.

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, losses, charge offs, recoveries and other asset performance remedies. The transaction documents should clearly specify the priority of payments, triggers, changes in the 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, directly or via third parties, a liability cash flow model, both before the pricing of the securitisation and on an ongoing basis. Where such model is provided via third parties, the process should remain within the full responsibility and control of the originator or sponsor.

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 the event that 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 investors to model payment obligations and price the securitisation accordingly.

Criterion 19: A sample of underlying assets should be subject to external verification prior to issuance by an appropriate and independent party or parties, other than a credit rating agency, to verify (applying a confidence level of at least 95%) that the data disclosed to investors in any formal offering document in respect of the underlying exposures is accurate. Confirmation that this verification has occurred should be included in the offering circular or in the transaction documentation.

Rationale

A high quality of disclosure to investors and prospective investors is ensured by the fact that an external entity, not affected by a potential conflict of interest within the transaction, is mandated

to carry out checks on the data to be disclosed to investors on the underlying exposures of the securitisation. The confirmation that the verification has occurred should indicate which parameters, e.g. loan size, LTV, interest rate, etc. have been subject to the verification.

Criterion 20: Investors and prospective investors should have readily available access to data on static and dynamic historical default and loss performance, such as delinquency and default data, for substantially similar exposures to those being securitised, covering a historical period of, at least, a complete economic cycle and, in any case, no shorter than a period of seven years for non-retail exposures. For retail exposures, the minimum performance history should be five years. 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 concerning the static and dynamic 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 reducing uncertainty regarding 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.

The minimum number of periods covered by the historical data should at least meet the corresponding minimum data history requirements under the IRB Approach in accordance with the CRR.

Criterion 21: Investors and prospective investors should have readily available access to data on the underlying individual assets at a loan-by-loan level as per Article 8(b) of the CRA Regulation before the pricing of the securitisation, and on an ongoing basis. Cut-off dates for 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 assess the quality of the underlying in a timely manner. 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 delinquency and default of underlying debtors, debt restructuring, debt forgiveness, forbearance, repurchases, payment holidays, losses, charge offs, recoveries and other asset performance remedies 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 triggers implying changes in the priority of payments or replacement of any counterparties.

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 with 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 these different components and are in a position to monitor the risks related to the cash flow dynamics, such as pre-payment risk.

5.4 EBA-identified criteria addressing credit risk

Stage 2: criteria on the credit risk of underlying exposures

Criterion A: Any underlying exposures should be originated in accordance with sound and prudent credit granting criteria as required under Article 79 of the CRDIV. Such criteria should include at least an assessment of the borrower's creditworthiness in accordance with Articles 18, 19 and 20 of Directive 2014/17/EU (Mortgage Credit Directive) or Article 8 of Directive 2008/48/EC (Directive on credit agreements for consumers), to the extent that such standards would, according to their terms, in any case apply to the individual underlying exposures. Underlying exposures originated outside the EEA should be underwritten according to rules assessed as equivalent.

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: At inclusion the aggregated exposure value of all exposures to a single obligor in the pool do not exceed 1% of the exposure values of the aggregate outstanding exposure values of the pool of underlying exposures at that point in time. For the purposes of this calculation, loans or leases to a group of connected clients, as referred to in Article 4(1) point (39) of the CRR, should be considered as exposures to a single obligor.

Rationale

A minimum level of granularity should be ensured to address idiosyncratic risk in the pool of exposures to be securitised. 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: At the time of inclusion the underlying exposures should fulfil each of the following conditions:

- i) 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 an exposure value-weighted average basis for the portfolio where the exposures are loans secured by residential mortgages or fully guaranteed residential loans, as referred to in paragraph 1(e) of Article 129 of the CRR;
 - b. 50% on an individual exposure basis where the exposure is a loan secured by a commercial mortgage;
 - c. 75% on an individual exposure basis where the exposure is a retail exposure;
 - d. or, for any other exposures, 100% on an individual exposure basis.
- ii) 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.
 - iii) Under (a) no loan in the securitised portfolio should be characterised by a loan-to-value ratio higher than 100%, measured in accordance with paragraph 1(d)(i) of Article 129 and paragraph 1 of Article 229 of the CRR.

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. When determining the risk weights of exposures for assessing compliance with this criterion, all available credit assessments of ECAs and export credit agencies may be considered according to the provisions of Part 3 Title II Chapter 2 of the CRR based on the assumption that all corresponding ECAs and export credit agencies have been nominated for the relevant class of items.

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.

For the calculation of the exposure value-weighted average in (i) (a), the exposure value should be the exposure value before the application of credit risk mitigation and the risk weight should be that after the application of credit risk mitigation.

5.5 Specific characteristics of the ABCP qualifying framework

While the ABCP securitisation business has several features in common with that of term securitisation, which justifies defining qualifying ABCP securitisations on the basis of criteria very similar to those used for term securitisations, the ABCP qualifying framework needs to be defined separately to recognise and address, inter alia, the following specificities of multi-seller ABCPs:

- a) Within a multi-seller structure several **different transactions (i.e. pools) of exposures, each related to a specific seller, are pooled into one conduit** and contribute to collateralising the commercial paper (CP) issued.
- b) In the current market practice of multi-seller conduits **the liquidity and credit risk arising from the commercial paper are in the first instance borne by a fully supporting liquidity facility provider** (a credit institution, often the sponsor of the ABCP conduit) rather than by the CP investor. The liquidity facility is in most cases provided on a transaction (pool) level, hence there tends to be as many liquidity facilities as there are transactions (pools) in the conduit. Full support implies that the liquidity facility does not only cover potential timing mismatches between the collection of payments from underlying assets and the payment of maturing CP liabilities (liquidity risk), but also potential underlying assets deterioration and underlying assets' defaults, that may otherwise undermine the ability of the conduit to repay CP investors (credit risk). While maturing CP liabilities can usually be repaid by issuing new CP (rolling CP on the markets), in the case of investor base withdrawal the liquidity facility would be drawn upon to replay the maturing CP.
- c) **The commercial paper issued by the ABCP conduit in which the market investor invests has predominantly a maturity equal to or less than one year** (see definition of ABCP in the CRR).
- d) **The sellers involved in ABCP issuance are often non-financial entities (corporates)**, rather than (regulated) financial institutions.
- e) Given the one-year capped maturity of the CP instrument (much shorter in the general market practice), against the financing of longer term credit claims/receivables, **issuance of CP can give rise to maturity transformation**, which needs to be specifically addressed in the framework.

As a consequence of the liquidity support practice (point (b) above), a sponsor providing a liquidity facility for a particular transaction is directly exposed to the credit risk of the pool of exposures of that transaction to which a seller is transferring its receivables or credit claims. The credit risk assumed by the sponsor is therefore similar to the credit risk assumed by an investor in a common term securitisation, as in both cases such party is directly exposed to the credit risk of the pool of underlying exposures.

This explains the proposal to first of all define 'qualifying' ABCP criteria at the level of the individual transaction, which is the level where the provider of a transaction-specific liquidity

facility (or other party providing support at transaction level e.g. a credit risk insurance provider, a swap provider, etc.) assumes exposures to the ABCP transaction. At this level it is proposed that: **in order to be a 'qualifying transaction within an ABCP programme', a transaction within an ABCP programme should comply with transaction-level criteria that are broadly in line with the criteria developed for qualifying term securitisations (i.e. SST criteria and underlying credit risk criteria).**

By contrast, ABCP investors (and other parties providing support at ABCP programme level, e.g. guarantee providers, swap providers, etc.) hold a securitisation position at programme level in an ABCP programme, i.e. they invest in the CP instrument issued by the conduit (or assume other securitisation positions at ABCP programme level), which provides for full support by the liquidity facility provider including for the credit risk of the underlying exposures of all securitisation transactions conducted within the ABCP programme. Hence investors (and those other parties) are primarily exposed to the credit risk of the liquidity facility provider and recourse to the underlying exposures will only be required in those cases where the liquidity facility provider does not meet its contractual obligations.

Given this set up, it is therefore proposed that in order to issue 'qualifying' CP an ABCP conduit should meet the following conditions:

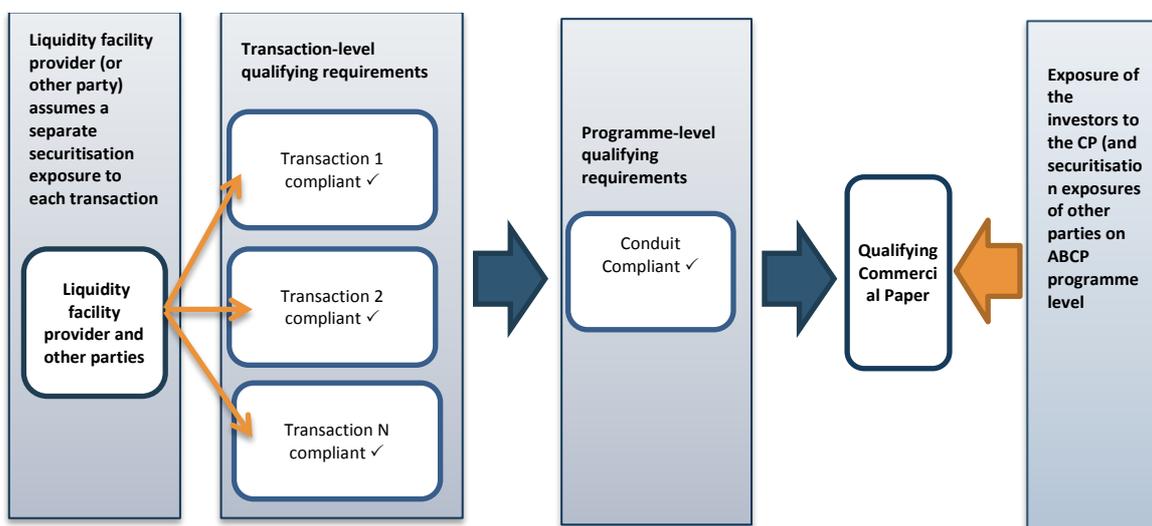
- The ABCP programme should provide for full liquidity support at the transaction level, i.e. each transaction in the conduit should be fully liquidity-supported, also in light of the short-term nature of the investment in commercial paper.
- The ABCP programme should be such that each and every transaction in the conduit is a 'qualifying transaction within an ABCP programme', i.e. complies with all the transaction-level qualifying requirements (as mentioned above).
- The ABCP programme should comply with certain additional programme-level criteria taking into account the specificity of the programme-level exposure - i.e. the exposure of the investor to the CP (and of those other parties exposed to credit risk at ABCP programme level) - allowing for differences for example between disclosure requirements applicable to securitisation positions held at transaction level and at programme level.

The above description of the proposed framework for qualifying ABCP securitisations is summarised in Figure 16, below. The capital treatment resulting from the framework would be such that:

- i) The transaction-specific liquidity facility provider and any other parties assuming an exposure at the transaction level can apply capital charges for 'qualifying' securitisation exposures on any given liquidity facility they provide or any other exposure they assume at the transaction level, depending on whether the transaction under consideration is compliant or not with transaction-level requirements.

- ii) For the ABCP investor, and other parties becoming exposed to a securitisation position at the ABCP programme level, to be able to apply capital charges for ‘qualifying’ ABCP exposures on the commercial paper or on other securitisation exposures held at programme level, not only each and every transaction in the conduit has to be a ‘compliant transaction within an ABCP programme’ but also all additional programme-level requirements have to be met.
- iii) The transaction-level criteria, and the related risk weights for ‘qualifying’ exposures, can apply only to securitisation positions held at a single transaction level within an ABCP programme (e.g. transaction-specific liquidity facility).

Figure 16 ABCP-specific qualifying framework (orange arrows represent exposures to ABCP)



As mentioned above, the vast majority of both the transaction-level criteria and the programme-level criteria proposed for ABCP securitisations replicate the principles applied in the framework for term securitisations. It should however be noted that a series of amendments are deemed necessary to reflect the specificities of the ABCP segment already mentioned.

In particular, the maturity of the underlying exposures and the eligibility of certain underlying exposures should be given consideration as they relate to the **maturity transformation activity performed by the ABCP securitisation transaction**, i.e. the fact that ABCP conduits fund medium term underlying exposures or long term underlying exposures by issuing commercial paper whose maturity is capped at 1 year.

While trade receivables may often be characterised by maturities shorter than one year, auto loans and leases can reach legal final maturities of 5 to 7 years. Mortgages, which represent a very minor percentage of underlying in the current ABCP market practice, are characterised by longer maturities.

The criteria on the underlying exposures at the transaction-level were drafted to address the maturity transformation.

The 1-year cap on the maturity of the underlying exposures ensures that, should the liquidity facility cease to exist, the CP investor and other parties assuming an exposure at ABCP programme level do not have to face exposures to longer maturities.

5.6 EBA proposed criteria for identifying qualifying ABCP securitisations and qualifying ABCP programmes

RECOMMENDATION 4: Recommendation on criteria defining ‘qualifying’ ABCP securitisations and qualifying ABCP programmes

‘Qualifying’ ABCP securitisations should be defined by means of the criteria presented in section 5.6.1 of this report.

‘Qualifying’ ABCP programmes should be defined by means of the criteria presented in section 5.6.2 of this report.

Rationale

Securitisation in the context of ABCP programmes has many features in common with term securitisation, which justifies using a two-stage approach based on very similar regulatory criteria. However, the ‘qualifying’ framework for securitisations in the context of ABCP programmes should recognise many specific characteristics of the ABCP segment, including:

- the possibility of becoming exposed to an ABCP securitisation either at the transaction level or at the programme level, for which different sets of requirements ought to be envisaged;
- the existence of multi-seller programmes, where several different ‘non-regulated’ counterparties sell exposures into a conduit;

- the existence of full support liquidity facilities provided by credit institutions to the beneficiaries in ABCP programmes;
- the capped maturity of the liability issued by the ABCP conduit (as per CRR) and the transformation activity embedded in the ABCP programme's assets and liabilities structure.

The aforementioned differences justify designing a 'qualifying' framework that uses, as a basis, the criteria for qualifying term securitisations while distinguishing qualifying exposures at the ABCP transaction level from qualifying exposures at the ABCP conduit level and adjusting the criteria, where appropriate, to recognise technical specific characteristics of the securitisation mechanism in the context of ABCP programmes.

5.6.1 Securitisation transactions within an ABCP programme: transaction level criteria

In order to be considered as a simple, standard and transparent securitisation transaction within an ABCP programme, a single securitisation transaction has to fulfil all the criteria on simplicity, standardisation and transparency listed in this section. These criteria apply only to securitisation positions held at a single transaction level of an ABCP programme such as a transaction-specific liquidity facility.

In order for a securitisation position held on ABCP programme level (e.g. an ABCP exposure) to qualify as a simple, standard and transparent securitisation position, it is required that: i) the programme-level criteria are met (see next section) and ii) all the underlying securitisation transactions of that ABCP programme qualify as simple, standard and transparent securitisation transactions within an ABCP programme.

Pillar I: simple transactions

Criterion 1:

A simple securitisation transaction within an ABCP programme should meet each of the following conditions:

- It should be a securitisation as defined in the CRR (as per Article 4(1) point (61)).
- It should be a securitisation within an 'asset-backed commercial paper programme' or 'ABCP programme' as defined in the CRR (as per Article 242 point (9)).
- It should not be a 're-securitisation' as defined in the CRR (as per Article 4(1) point (63)).

Rationale

Simple securitisation transaction within an ABCP programme 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.

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 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 within an ABCP programme.

Where a company uses a co-funding structure to refinance a pool of receivables or credit claims, i.e. a structure where those receivables or credit claims are first sold to an SPV and this SPV then transfers part of the credit risk of these underlying exposures to two or more ABCP programme(s) by issuing notes (or another comparable funding instrument), such co-funding structure should not be regarded as 're-securitisation' provided the inherent credit risk of the underlying portfolio is only tranching once (either through a purchase price discount on the primary level or through a tranching of the notes on the secondary level).

Criterion 2:

The transfer of exposures into the securitisation transaction pool should at all times be subject to predetermined and clearly defined eligibility criteria, which should be disclosed in the offering document to all parties becoming exposed to the securitisation transaction other than the sponsor. After the closing date the securitisation should not be characterised by an active portfolio management on a discretionary basis including the sale of transferred exposures. Exposures transferred into the securitisation after the closing should meet eligibility criteria that are no less strict than those applied when structuring the securitisation. Substitution of exposures that are in breach of representations and warranties should in principle not be considered as active portfolio management.

Rationale

When becoming exposed to the credit risk of a securitisation transaction within an ABCP programme all parties should be in a position to identify in a clear and consistent fashion under which criteria exposures are selected for/transferred into the securitisation transactions. The selection/transfer of exposures should not be opaque processes. For this reason, it is important that those eligibility criteria are disclosed to all parties who, unlike the sponsor, have not been directly involved in setting such eligibility criteria. Active portfolio management adds a layer of complexity and increases the agency risk arising in the securitisation by making the securitisation's performance dependent on both the performance of the underlying exposures and the performance of the management of the transaction. Active management is deemed to arise whenever the manager of the portfolio sells one or more exposures which had initially been transferred to the securitisation SPV. Replenishment practices and practices of substitution of non-compliant exposures in the transaction should not be considered active management of the transaction provided that they do not result in any form of cherry-picking. Revolving periods and other structural mechanisms resulting in the introduction of exposures into the securitisation after the closing of the transaction may introduce the risk that exposures of lesser quality can be transferred into the pool. However, it is acknowledged that ABCP programmes are backed primarily by revolving pools of assets. For this reason it is important to ensure that any exposure transferred into the securitisation after the closing meets standards, i.e. eligibility criteria, which are similar to those used to structure the initial pool of the securitisation transaction.

Criterion 3: The securitisation should be characterised by legal true sale or effective assignment of the securitised exposures, and should not include severe clawback provisions, so as to ensure that these exposures are beyond the reach of the seller and its creditors, including in the event of the seller's insolvency. A legal opinion provided by an independent third-party should confirm the true sale or effective assignment and the enforceability of the transfer of assets under the applicable law(s).

Where the transfer of assets is perfected at a later stage than at the closing of the transaction, the triggers to effect such perfection should, at a minimum, incorporate the following events:

- severe deterioration in the seller's credit quality;

- seller or servicer default or insolvency; and
- unremedied breaches of contractual obligations by the seller or servicer.

In addition, the seller should provide, at transaction closing and to the best of its knowledge, representations and warranties that assets being included in the securitisation are not otherwise encumbered or in a condition that can be foreseen to adversely affect enforceability in respect of collections due.

Rationale

Simple securitisation transactions within an ABCP programme should achieve the economic transfer of the securitised exposures either through transfer of ownership to an SPV or through sub-participation by an SPV. The transfer of the exposures ensures effective ring-fencing and segregation of the exposures to be securitised from the insolvency estate of the seller. Only an effective segregation on securitisation at transaction level can ensure that the rights of the sponsor and other parties becoming exposed to the credit risk of the securitisation transaction over the securitised exposures can be enforced should the seller become insolvent, and that ultimately the payment obligations towards the sponsor and those other parties can be duly fulfilled. Should the sponsor, as the liquidity facility provider, not meet its contractual obligations, effective segregation at the level of each of the underlying transactions is also crucial at ABCP programme level to ensure that the rights of the ABCP investors concerning the securitised exposures can be ultimately enforced in such cases. Such ring-fencing and segregation are commonly achieved through a process of legal true sale of the exposures to be securitised to an SPV although, in some instances/jurisdictions, they may also result from an effective assignment of those exposures to an SPV.

The sale/assignment should not be characterised by severe clawback provisions, including rules under which the sale of the exposures 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, 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 at the time of the sale. The legal opinion is deemed an important element for substantiating the confidence of all parties becoming exposed to the credit risk of the securitised exposures including the sponsor as liquidity facility provider and ultimately the ABCP investors concerning the segregation of the assets. It should, where possible, provide an assessment of clawback risk issues, as well as issues related to re-characterisation risk and set-off risk.

In the instances/jurisdictions where segregation is initially achieved through an effective assignment, the perfection of the transfer of ownership is realised by notifying borrowers of the transfer upon the occurrence of certain events subsequent to closing. In such situations, to minimise legal risks related to unperfected transfers, a minimum set of perfection events relating to the seller and servicer should be pre-defined. Examples of credit quality thresholds related to the financial health of the seller which would trigger perfection include the seller's failure to perform its contractual duties, as well as other financial health measures that may be used and recognised by market participants.

In the case of co-funding structures, where an SPV purchases receivables or credit claims and then passes on the risk inherent to these receivables or credit claims through the issuance of debt instruments, which are then purchased by one or more other SPV(s) so that the SPV purchasing the receivables or credit claims is not the SPV ultimately issuing the ABCPs. ABCP investors or other parties holding a securitisation position at ABCP programme level should be considered as

having 'direct recourse to the underlying or securitised exposures' for the purpose of this criterion provided the securitised exposures are transferred to the SPV purchasing the receivables by a legal true sale or effective assignment in accordance with the requirements of this criterion and the provisions of all relevant contracts ensure that the rights over the securitised exposures can be enforced by ABCP investors or those other parties if the liquidity provider should not meet its obligations to cover all credit risk-related losses.

Considering that at transaction level the exposures to be securitised can be transferred by the seller either directly to an SPV, or first in an intermediary step to the sponsor or other third parties to be held on their balance sheet before transfer to the transaction SPV, in the latter case the sponsor or any other third-party should demonstrate that the exposures to be securitised are appropriately segregated in the case of an insolvency proceeding so that they are ultimately beyond the reach of the sponsor's or the third-party's creditors other than the investors, including in the event of the sponsor's insolvency. A legal opinion should confirm that the assets are appropriately segregated in such cases.

For all parties becoming exposed to the credit risk of the securitised exposures to acquire a sufficient degree of confidence over the segregation/ring-fencing of these underlying exposures, it appears relevant that the securitisation transaction includes representations and warranties about conditions of encumbrance of those exposures. Exposures being subject to an extended reservation of title may be included in simple securitisation transactions within an ABCP programme provided this kind of encumbrance is taken into account in the analysis required under credit risk criterion A below and the risks resulting from any extended reservation of title are appropriately mitigated.

Criterion 4: The securitisation transaction should be backed by exposures that are homogeneous in terms of asset type.

In addition, the exposures should meet the following criteria:

- i) They arise from obligations with contractually defined payment streams 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 originated in the ordinary course of the seller's business pursuant to underwriting standards that are not less stringent than those the seller applies to origination of similar exposures not securitised.**
- iii) They contain a legal, valid and binding obligation of the obligor, enforceable in accordance with its terms, to pay the sums of money specified in it (other than an obligation to pay interest on overdue amounts) and any material dilution risk inherent to the securitised exposures is considered in the analysis required in accordance with credit risk criterion A below and is appropriately mitigated.**
- 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 obligations of the securitisation positions was not intended 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.**
- v) They have a remaining maturity of no longer than one year.**

Rationale

Simple securitisation transactions within an ABCP programme should be such that the sponsor as liquidity facility provider and other parties becoming exposed to the credit risk of the securitised exposures at transaction level would not need to analyse and assess materially different credit

risk factors and risk profiles when carrying out risk analysis and due diligence checks. This also facilitates risk analysis and due diligence checks to be ultimately performed by ABCP investors at ABCP programme level. As the type of risk analysis required for different asset types can vary substantially it is deemed appropriate that securitisation pools include homogenous assets. Homogeneity in terms of asset type should be assessed on the basis of common parameters, including risk factors and risk profiles.

Particularly with regard to the securitisation of trade receivables, sellers (and the more so in the case of smaller sellers) may often be unable to generate a sufficiently large pool of trade receivables that is homogenous in terms of the currency of those trade receivables and/or the legal system under which those receivables have been originated. As heterogeneity with regard to the currency and the relevant legal system is, however, common practice with regard to such receivables and is therefore being considered when setting the required credit enhancement levels and other required risk mitigation measures for a transaction, requiring homogeneity in terms of currency and legal systems at the transaction level for ABCP programmes is not deemed appropriate.

Simple securitisation transactions within an ABCP programme should include underlying exposures that are standard obligations, in terms of rights to payments and/or income from assets and that result in a periodic and well-defined stream of payments to the parties becoming exposed to the credit risk of such exposures. Credit card facilities and other receivables should be deemed to result in a periodic and well-defined stream of payments for the purposes of this criterion.

The exposures that are to be securitised should not belong to an asset class that is outside the ordinary business of the seller, i.e. an asset class over which the seller may have less expertise and/or interest at stake. The quality of the securitised exposures should not be dependent on any significant changes in underwriting standards and only exposures underwritten to broadly consistent standards should be in the pool. In any case, all relevant changes in underwriting standards over time should not be material and should be fully disclosed to all parties becoming exposed to the securitisation transaction at transaction level such as the sponsor providing the liquidity facility.

Simple securitisation transactions within an ABCP programme 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. Any material dilution risk inherent to the securitised exposures should be appropriately mitigated in order to not expose the parties holding a securitisation position in the securitisation transaction to this risk and to facilitate the due diligence to be conducted by these parties.

In addition, in order to mitigate refinancing risk and the extent to which the securitisation transaction embeds maturity transformation, the exposures to be securitised should be self-liquidating and should not have a remaining maturity of more than one year. Simple securitisation transactions within an ABCP programme 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 transaction more difficult to model and assess from an investor's perspective. Partial reliance on refinancing or re-sale of the asset securing the exposure may occur provided that re-financing is sufficiently distributed within the pool and that the residual

values on which the transaction relies are sufficiently low and that the reliance on refinancing is thus not substantial.

Explanatory note

The following auto loan examples can be used to interpret (for auto loans) and extrapolate (for other asset classes) what is meant by homogeneity.

Examples of a homogeneous auto loan pool would include, as of the securitisation closing date:

- loans that are retail instalment sale contracts secured by a mix of new and used cars, trucks and utility vehicles; and
- loans that have level monthly payments that fully amortise the amount financed over its original term, except that the payment in the first or last month during the life of the loan may be minimally different from the level payment.

Examples of a non-homogeneous auto loan pool would include:

- collateral mix of auto loans with fleet assets or rental car assets;
- collateral mix of auto loans with corporate/floorplan/dealer assets;
- collateral mix of auto loans with auto leases.

Criterion 5: At the time of inclusion in the securitisation transaction, i.e. at the time of the transfer of the securitised exposures from the seller to the SPV, the underlying exposures should not include:

- i) **Any disputes between the seller and borrower regarding the underlying assets, to the best of the seller's knowledge;**
- ii) **Any exposure that, to the best of the seller's knowledge, is void or nullified;**
- iii) **Any exposures which are non-performing. An exposure is considered to be non-performing if either or both of the following conditions are satisfied:**
 - 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.**
- iv) **Any exposures to a credit-impaired obligor. For these purposes, an obligor should be deemed as credit-impaired where, to the best of the seller's knowledge:**
 - a. **The obligor has been the subject of an insolvency or debt restructuring process due to financial difficulties within the three years prior to the date of origination; or**
 - b. **The obligor is, 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**
 - c. **The obligor has a credit assessment by an ECAI or a credit score indicating significant risk of default.**
- v) **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 transaction.**

Rationale

At the time when they are structured, simple securitisation transactions within an ABCP programme should not be characterised by underlying exposures 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 all parties becoming exposed to the credit risk of the underlying exposures become more complex

whenever the securitisation includes exposures subject to ongoing negative credit risk developments. For the same reasons, simple securitisation transactions within an ABCP programme should not include underlying exposures to borrowers that have a history of credit impairment. While it can be the case that the seller may not be aware that the aforementioned conditions exist, it should be ensured that the seller takes all reasonable steps to acquire that knowledge. In the case where, for operational reasons, the receivables or credit claims transferred by a seller to a securitisation transaction may also include non-performing exposures but where those non-performing exposures are then being filtered out and considered as a deduction when determining the purchase price discount, such non-performing exposures should not be considered as underlying exposures for the purposes of this criterion.

There are cases where the debtor is allowed, under applicable commercial or customer protection law, to renounce the goods or services provided by the servicer during a certain period of time, with the effect that the corresponding receivable is void. The seller, to the best of its knowledge, should only include receivables or claims in the pool that, to the best of its knowledge at the time of inclusion, are still valid. This would reduce the complexity for all parties becoming exposed to the credit risk of the underlying exposures when modelling dilution risk.

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 all parties becoming exposed to the credit risk of the underlying exposures. 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 those parties becoming exposed to the credit risk of the underlying exposures to engage in the modelling of currency and interest rate risks.

Where a company uses a co-funding structure to refinance a pool of receivables or credit claims, i.e. a structure where those receivables or credit claims are first sold to an SPV and this SPV then transfers part of the credit risk of these underlying exposures to two or more other ABCP programme(s) by issuing notes (or another comparable funding instrument), such a note (or other comparable funding instrument) may be included in a simple securitisation transaction within an ABCP programme provided the inherent credit risk of the underlying portfolio (i.e. the receivables or credit claims) is only tranching once (either through a purchase price discount on the primary level or through a tranching of the notes at the secondary level).

Explanatory note

Significant risk of default normally rises as rating grades or other scores are assigned, indicating highly speculative credit quality and high likelihood of default, i.e. the possibility that the obligor is not able to meet its obligations becomes a real possibility.

At the time of inclusion, for the purposes of this criterion and other criteria, should be read as the date the securitisation vehicle is entitled to the cash flows of the transferred exposures.

Criterion 6: At the time of inclusion, the underlying exposures are such that at least one payment has been made by the obligor, except in the case of revolving securitisation transactions backed by personal overdraft facilities, credit card receivables, trade receivables, dealer floor plan finance loans or any other receivables with only one contractual payment.

Rationale

Simple securitisation transactions within an ABCP programme should be structured so as to avoid assets being 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 securitisation

transactions within an ABCP programme should minimise the extent to which all parties becoming exposed to the credit risk of the underlying exposures 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. For similar operational reasons, the one payment requirement should not apply to trade receivables or any other receivables with only one contractual payment.

Pillar II: standard transactions

Criterion 7: The securitisation transaction should provide for the retention of a net economic interest in accordance with the CRR retention rules (Article 405 of the CRR) or any non-EU rules assessed as equivalent.

Rationale

Standard securitisation transactions within an ABCP programme should ensure that the sellers' and sponsors' (i.e. 'liquidity providers') and other parties' 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 report, is one of the features that mostly contributed to the poor performance of certain securitisation products.

Criterion 8: Interest rate and currency risks arising in the securitisation transaction should be appropriately mitigated (i.e. hedged or appropriately offset) at all times; any mitigation measures should be explicitly documented. Only derivatives used for hedging the asset liability mismatch should be allowed and they should be documented according to standard industry master agreements.

Rationale

Mitigating and/or hedging interest rate and currency risks arising in the securitisation transaction enhances the simplicity of the latter since it facilitates the modelling of those risks and of their impact on the credit risk to which the sponsor or any other party is exposed at the securitisation transaction level.

Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally, interest rate and currency risks can be mitigated, where mitigating measures could include use of interest rate caps and floors or the use of excess spread or reserve funds. The appropriateness of the mitigation of interest rate and foreign currency through the life of the transaction must be demonstrated by making available to all parties potentially becoming exposed to the credit risk of the securitisation transaction, on a timely and periodical manner, quantitative information including the fraction of notional amounts that are hedged, as well as sensitivity analysis that illustrates the effectiveness of the hedge under extreme but plausible scenarios. In principle, these mitigating measures should be funded and specifically allocated to address one or more risk drivers (e.g. specific allocation for covering interest rate risk exposure).

All parties exposed to the credit risk of a securitisation transaction's underlying exposures should be in a position to clearly identify and assess hedging/mitigation measures. For this

reason, it is essential that these measures be documented in a clear and standardised fashion.

Explanatory note

The term ‘appropriately mitigated’ should be understood as not necessarily requiring a completely perfect hedge. Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally interest rate and currency risks can be mitigated, where mitigating measures could include use of interest rate caps and floors or the use of excess spread or reserve funds. The term should not necessarily be understood from an accounting point of view, but rather from an economic perspective.

Criterion 9: Any referenced interest payments under the securitisation transaction’s 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. Payments on assets of the securitisation transaction may include sectoral rates reflective of a sponsor’s cost of funds.

Rationale

Standard securitisation transactions within an ABCP programme 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 all parties becoming exposed to the credit risk of the underlying exposures 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. Such a market practice may include the use of interest rates that are subsidised by the manufacturer of the various goods or services in certain market segments where such subsidies are appropriately taken into account by the level of purchase price discounts for the various receivables, or by other means.

Explanatory note

Examples of ‘commonly encountered market interest rates’ would include:

- interbank rates and rates set by monetary policy authorities, such as the LIBOR, EURIBOR, and Central Banks’ discount rates; and
- sectoral rates reflective of a lender’s cost of funds, such as internal interest rates that are directly reflecting the market costs of funding of a bank or a sub-set of institutions.

Criterion 10: The transaction documentation of those securitisation transactions featuring a pool of revolving exposures should include the following triggers to prevent the acquisition of additional exposures:

- a) **The occurrence of an insolvency-related event with regards to the seller as well as the servicer.**
- b) **A deterioration in the credit quality of the underlying exposures to or below a pre-determined threshold.**
- c) **The unavailability of exposures that meet the pre-determined credit quality.**

Rationale

Standard securitisation transactions within an ABCP programme should ensure that, in the presence of a revolving period mechanism, all parties becoming exposed to the credit risk of the underlying exposures are sufficiently protected from the risk that principal amounts may not be fully repaid. Sufficient protection should be ensured by the inclusion of provisions triggering the termination of the revolving period at the occurrence of adverse events such as those mentioned under (a) to (c). The event mentioned under (c) should not trigger the termination of the revolving period in cases where the unavailability of appropriate exposures is only temporary and not caused by any changes with respect to the credit quality of the seller or the transferred assets, but by non-credit risk-related issues like the actual funding needs of

the seller or seasonal variations in the demand for certain products or services.

Criterion 11: Following the occurrence of an event of seller's default or an acceleration event at the transaction level:

- i) **The securitisation positions are repaid in accordance with a sequential payment priority, whereby the seniority of the tranches determines the sequential order of payments.**
- ii) **There are no provisions requiring automatic liquidation of the underlying assets at market value.**

In addition, performance-related triggers should be present in transactions which feature non-sequential priority of payments, including at least the deterioration in the credit quality of the underlying exposures to below a pre-determined threshold.

Rationale

Standard securitisation transactions within an ABCP programme should be such that the risk analysis and due diligence, to be conducted by the liquidity facility provider or any other party becoming exposed at the transaction level within that ABCP programme, does not have to factor in complex and difficult-to-model structures of the payment priority.

The performance of standard transactions within an ABCP programme should not rely, due to contractual triggers, on the automatic 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 parties becoming exposed to the credit risk of the securitisation transaction. While this criterion targets automatic contractual provisions, it should not be read as ruling out those parties' votes providing for the liquidation of assets.

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

- i) **the default or insolvency of the current servicer does not lead to a disruption to the servicing of the underlying exposures;**
- ii) **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 at transaction level; and**
- iii) **upon default and specified events, the replacement of the account bank of any SPV acting at the transaction level is provided for in any bank account agreements entered into for the benefit of the securitisation.**

Rationale

Standard securitisation transactions within an ABCP programme should provide all parties becoming exposed to the credit risk of the securitisation transaction 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 exposures, the hedging through derivative instruments of risks arising in the securitisation transaction as well as roles of support to the securitisation transaction, such as bank account providers.

Criterion 13: The management of the servicer of the securitisation transaction should demonstrate expertise in servicing the underlying receivables or credit claims, 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. All these elements should be substantiated by a sponsor review for non-regulated entities.

The seller should have sufficient experience in originating exposures similar to those securitised.

Rationale

Ensuring that all the conditions are in place for the proper functioning of the servicing function is crucial given the central nature of this function within any securitisation transaction. Moreover, given that the performance of the securitisation transaction depends in principal on the quality of the origination, the seller should have sufficient experience in originating such exposures.

Pillar III: transparent transactions

Criterion 14: Securitisation transactions should meet the disclosure requirements of Regulation (EC) No 809/2004 implementing the Prospectus Directive, with respect to the minimum information that the prospectus should contain, as provided for in Annex VIII to that Regulation, where applicable. Securitisation transactions with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

Compliance with the Prospectus Directive or equivalent law or regulations of a non-EEA jurisdiction ensures that, at issuance, the sponsor or any other parties becoming exposed to the risks of a securitisation transaction within an ABCP programme have access to all the information that is necessary to make an informed investment decision at the closing date. It is important that both public and private deals are treated equally with regard to providing all parties becoming directly exposed to the credit risk of the underlying exposures on securitisation transaction level with the minimum level of transparency and information required by the Prospectus Directive. Private placement securitisations should also be able to qualify as securitisations meeting the SST criteria to the extent that they offer parties holding a securitisation position within an ABCP programme at securitisation transaction level the minimum amount of information that the Prospectus Directive requires for public deals.

Criterion 15: The securitisation transaction should meet the requirements of Article 409 of the CRR and any applicable requirements under Article 8(b) of the CRA Regulation. Alternatively, securitisation transactions with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

The CRR requirements on disclosure ensure that all parties becoming exposed to the credit risk of a securitisation transaction within an ABCP programme 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 on an ongoing basis, directly addressing the opaqueness and analytical complexity which have characterised investors' perception of securitisations in recent years. As soon as disclosure requirements in accordance with Article 8(b) of the CRA Regulation become applicable for securitisation positions in the context of ABCP programmes all transparent securitisation transactions within an ABCP programme should also fulfil such requirements. With regard to securitisation transactions within an ABCP programme, these comprehensive

disclosure requirements are relevant to any party which is holding a securitisation position within an ABCP programme at single securitisation transaction level and is thus directly exposed to the credit risk of the securitised exposures (such as the liquidity facility provider). This is in contrast to ABCP investors in a simple ABCP programme, which are fully protected by a liquidity facility.

Criterion 16: Final offering documents should be available from the closing date. Where legally possible, all transaction parties, holding a securitisation position in a securitisation transaction within an ABCP programme, should have access to all essential transaction documents, at the latest 15 days after the closing of the transaction.

Initial offering and draft underlying transaction documentation should be made available to all parties becoming exposed to the credit risk of the underlying exposures at transaction level other than the sponsor before the pricing of the securitisation.

Rationale

Documentation on the agreements and procedures underlying the transaction should be disclosed to all parties holding a securitisation position in a securitisation transaction within an ABCP programme, who are, unlike the sponsor, not directly involved in establishing and managing the ABCP programme and its underlying securitisation transactions, in order to allow those parties to get comprehensive information on the functioning of the transaction in all of its components, which is fundamental in a scenario of default of any of the parties involved in the transaction or other relevant events. This may be relevant for parties such as credit risk insurance providers, guarantee providers or swap providers.

Explanatory note

‘Final offering documents’ are meant to be the final version of the offering documents, including all the information determined at the pricing of the transaction.

Initial offering should be understood to reference either:

- initial offering material made public as required for publicly registered/offered transactions, consistent with applicable laws and regulation; or
- privately-documented initial offering material (for non- publicly registered/offered transactions), provided they contain essentially the same level of transparency and disclosure to investors as initial offering material for publicly registered/offered transactions.

Criterion 17: 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, losses, charge offs, recoveries and other asset performance remedies. The transaction documents should clearly specify the priority of payments, triggers, changes in the 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.

Rationale

Any party holding a securitisation position in a securitisation transaction within an ABCP programme should be in a position to know, as they receive the transaction documentation, what procedures and remedies are foreseen in the event that adverse credit events affect the underlying assets of the securitisation. Transparency of remedies and procedures, in this respect, allows all parties (including the sponsor) becoming exposed to model the credit risk of the underlying exposures of a securitisation transaction within an ABCP programme 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 those parties to correctly price the securitisation position.

Criterion 18: A sample of the underlying assets of the securitisation transaction should be subject to external verification when the liquidity facility is granted or renewed, by an appropriate and independent party or parties, other than a credit rating agency, to verify that the data disclosed to the parties holding a securitisation position in a securitisation transaction within an ABCP programme in respect of the underlying exposures is accurate. Confirmation that this verification has occurred should be included in the transaction documentation.

Rationale

A high quality of disclosure to all parties holding a securitisation position in a securitisation transaction within an ABCP programme (including the sponsor) is ensured by the fact that an external entity, not affected by a potential conflict of interest within the securitisation transaction, is mandated to carry out checks on the data to be disclosed on the underlying exposures of the securitisation transaction. Such checks should, as a minimum, be carried out before the transaction-specific liquidity facility is granted or renewed.

Criterion 19: All parties holding a securitisation position in a securitisation transaction within an ABCP programme should have readily available access to data on static and dynamic historical default and loss performance, such as delinquency and default data, for substantially similar exposures to those being securitised, covering a complete economic cycle and, in any case, no shorter than a period of 5 years for retail exposures and 7 years for all other exposures. The basis for claiming similarity to exposures being securitised should also be disclosed.

Rationale

Eligible securitisation transactions should be transparent to the extent that they always allow all parties, holding a securitisation position in a securitisation transaction within an ABCP programme, to rely on evidence concerning the historical performance of the assets to be securitised. This evidence is not only necessary for those parties to carry out proper risk analysis and due diligence, but it also contributes to building confidence and reducing uncertainty regarding 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 all parties holding a securitisation position in a securitisation transaction within an ABCP programme (including the sponsor) have appropriate tools and knowledge to carry out proper risk analysis.

Criterion 20: All parties holding a securitisation position in a securitisation transaction within an ABCP programme should have readily available access to data on the underlying exposures, including any applicable requirements under Article 8(b) of the CRA Regulation, before the pricing of the securitisation, and on an ongoing basis. Cut-off dates for this disclosure should be aligned with those used for other reporting purposes.

Rationale

Disclosure of sufficiently detailed data on the underlying exposures ensures that all parties holding a securitisation position in a securitisation transaction within an ABCP programme at transaction level have access on a regular basis 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 assess the quality of the underlying in a timely manner. The cut-off dates used to disclose the underlying exposures' performance data should be aligned with the dates used for the purposes of regular reporting to facilitate the analysis by all parties becoming exposed to the credit risk of the underlying exposures at transaction level. As soon as disclosure requirements in accordance with Article

8(b) of the CRA Regulation become applicable for securitisation positions in the context of ABCP programmes, all transparent securitisation transactions within an ABCP programme should also fulfil such requirements. The availability of initial offering and draft underlying transaction documentation is important for all parties becoming exposed to the credit risk of the underlying exposures at transaction level other than the sponsor who is directly involved in preparing such documentation.

Criterion 21:

Reporting to any party holding a securitisation position in a securitisation transaction within an ABCP programme should occur at least on a monthly basis.

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

- **All materially relevant data on the credit quality and performance of underlying exposures, including data allowing any party holding a securitisation position in a securitisation transaction within an ABCP programme to clearly identify debt restructuring, debt forgiveness, forbearance, repurchases, payment holidays, delinquencies and defaults in the pool;**
- **The breach of any triggers implying changes in the priority of payments or replacement of any counterparties.**

Rationale

Transparent securitisation transactions should ensure all parties holding a securitisation position in a securitisation transaction within an ABCP programme at transaction level have access to all material information that is needed to perform a comprehensive and well-informed analysis of the risks arising in the securitisation transaction, where this analysis also takes the form of stress tests on the cash flows and collateral values supporting the underlying exposures.

Regular reporting, together with sufficient disclosure of performance data, is instrumental to allowing all parties holding a securitisation position in a securitisation transaction within an ABCP programme to carry out, on a regular basis, appropriate risk analysis and due diligence checks.

Stage 2: criteria on the credit risk of underlying exposures – transaction level

Criterion A: The sponsor should verify that the seller’s underwriting standards, servicing capabilities and collection processes meet standards as stringent as those defined in the requirements specified in points (i) to (m) of Article 259(3) of the CRR.

Rationale

A minimum level of credit quality of the underlying exposures can only be ensured if such exposures are underwritten according to sufficiently prudent standards. In addition, it is crucial that the collection policies of the securitisation transaction allow for proper servicing of the underlying assets and that the securitisation transaction provides for an appropriate mitigation of all material risks resulting from a seller’s insufficiently stringent underwriting standards, servicing capabilities or collection processes.

Criterion B: At the time of inclusion the underlying exposures should fulfil each of the following conditions:

- i) The underlying exposures should not include any loans secured by residential or commercial mortgages or any fully guaranteed residential loans, as referred to in paragraph 1(e) of Article 129 of the CRR.**
- ii) The underlying exposures 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. 75% on an individual exposure basis where the exposure is a retail exposure;**
 - b. for any other exposures, 100% on an individual exposure basis.**

Rationale

Any party becoming exposed to a simple, standard and transparent securitisation transaction within an ABCP programme should not be exposed to any underlying exposures with an original maturity that is significantly longer than one year. For this reason, the underlying exposures of such securitisation transactions should not include any loans secured by residential or commercial mortgages or any fully guaranteed residential loans, as referred to in paragraph 1(e) of Article 129 of the CRR.

In conjunction with the requirement that each individual exposure be underwritten in accordance with sufficiently prudent underwriting standards, the requirement that a maximum risk weight be assigned to the individual exposures ensures that, in any simple, standard and transparent securitisation transaction considered for differentiated regulatory treatment, the credit risk stemming from underlying exposures 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. When determining the risk weights of exposures for assessing compliance with this criterion, all available credit assessments of ECAs and export credit agencies may be considered in accordance with the provisions of Part 3, Title II in Chapter 2 of the CRR based on the assumption that all corresponding ECAs and export credit agencies have been nominated for the relevant class of items.

5.6.2 Securitisation transactions within ABCP programmes: programme-level criteria

In order to be considered as simple, standard and transparent an ABCP programme should fulfil all the following criteria on simplicity, standardisation and transparency. With regard to such simple, standard and transparent ABCP programmes, any securitisation position held at ABCP programme level (such as a commercial paper) qualifies as a simple, standard and transparent securitisation position at ABCP programme level.

Pillar I: simple ABCP programmes

Criterion 1: All securitisation transactions within a simple ABCP programme should fulfil the requirements of simple securitisation transactions within an ABCP programme.

Rationale

In order for an ABCP programme to qualify as simple, all securitisation transactions underlying that ABCP programme should be simple securitisation transactions. Like for all other criteria with regard to the fulfilment of the simplicity criteria, a differentiation between the securitisation transaction level and the ABCP programme level is required. While in cases where some, but not all, of the underlying transactions qualify as simple securitisation transactions, the ABCP programme may not be considered a simple ABCP programme, any securitisation positions held in a particular securitisation transaction (e.g. a liquidity facility provided on transaction level) meeting all simplicity criteria would still qualify for the treatment applicable to simple securitisation transactions. By contrast, the corresponding ABCPs issued by such an ABCP programme would not qualify as simple securitisation positions.

Criterion 2: The ABCP programme should not be a ‘re-securitisation’ as defined in the CRR (as per Article 4(1) point (63)). No ABCP programme-wide exposures such as a programme-wide credit enhancement should establish a second layer of tranching above and beyond the tranching on the transaction-level (e.g. through a refundable purchase price discount).

Rationale

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 ABCP programmes.

As a consequence of the above, there should also be only one class of pari passu notes.

Criterion 3: Support provided to securitisation positions at transaction level (e.g. liquidity facilities or refundable purchase price discounts) should cover all liquidity and credit risks and any material dilution risks of the securitised exposures, as well as any other transaction costs and programme-wide costs (i.e. there should be ‘full support’ for ABCP investors). The sponsor of the ABCP programme should also be the unique liquidity facility provider by providing liquidity facility support to all transactions of a simple ABCP programme.

Rationale

Within a simple ABCP programme the risk of a securitisation position at ABCP programme level (e.g. the risk of commercial paper) should primarily depend on the performance or risk profile of the sponsor or any other third-party contributing to the full support at transaction level. In order to facilitate the risk analysis to be performed by ABCP investors, there should be only one party providing liquidity support to all transactions within a simple ABCP programme.

In addition, in order to minimise potential agency problems between the sponsor and liquidity facility provider and thereby further increase simplicity, the two functions should be carried out by the same entity.

Criterion 4: The sponsor of the ABCP programme should meet the requirements of the sponsor definition provided in the CRR (as per Article 4(1) point (14)). The sponsor should be a credit institution, which is supervised under Directive 2013/36/EU. Sponsors situated in any non-EEA jurisdiction should meet requirements equivalent to those applicable in the EEA as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

In order for an ABCP programme to qualify as simple, it is important that the sponsor providing a major share of the ‘full support’, as defined under Criterion 3 above by the provision of transaction-specific liquidity facilities, is subject to uniform and sufficient prudential requirements as the performance of an ABCP programme and the risk of a securitisation position at ABCP programme level (e.g. the risk of commercial paper) usually depend primarily on the performance of such sponsor participating in the provision of ‘full support’. To ensure that the party providing full support to each transaction of the programme is in a position to meet its obligations at any time, it should also be subject to adequate supervision of its liquidity risk position.

Criterion 5: Any asset-backed commercial paper issued by an ABCP programme should not include any call options, extension clauses or other clauses, which would have an effect on the final maturity of the asset-backed commercial paper.

Rationale

Asset-backed commercial paper issued under a simple ABCP programme should be simple and not include any complex features such as call options or extension clauses.

Criterion 6. The ABCP programme should meet the requirements of Article 409 of the CRR. Alternatively, ABCP programmes with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

The CRR requirements on disclosure ensure that all parties becoming exposed to the credit risk of a securitisation position 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 on an ongoing basis, directly addressing the opaqueness and analytical complexity which have characterised investors’ perception of securitisations in recent years. As soon as disclosure requirements in accordance with Article 8(b) of the CRA Regulation become applicable for securitisation positions in the context of ABCP programmes, all transparent securitisation transactions within ABCP programmes should also fulfil such requirements. With regard to securitisation positions held at ABCP programme level, less comprehensive disclosure requirements may apply compared to the disclosure requirements for securitisation positions held at single transaction level as ABCP investors in a simple ABCP programme are fully protected by a liquidity facility, as required by programme level Criterion 3.

Pillar II: standard ABCP programmes

Criterion 7: All securitisation transactions within a standard ABCP programme should fulfil the requirements of standard securitisation transactions within an ABCP programme.

Rationale

In order for an ABCP programme to qualify as a standard ABCP programme, all securitisation transactions underlying that ABCP programme should be standard securitisation transactions. Like for all other criteria with regard to the fulfilment of the standardisation criteria, a differentiation between securitisation transaction level and ABCP programme level is required. While in cases where some, but not all, of the underlying transactions qualify as standard securitisation transactions, the ABCP programme may not be considered a standard ABCP programme, any securitisation positions held in a particular securitisation transaction (e.g. a liquidity facility provided on transaction level) meeting all standardisation criteria would still qualify for the treatment applicable to standard securitisation transactions. By contrast, the corresponding ABCPs issued by such an ABCP programme would not qualify as standard securitisation positions.

Criterion 8: The transaction documentation with regard to all commercial papers issued under a standard ABCP programme should clearly specify the duties of an ‘identified person’ with fiduciary responsibilities, who acts in the best interest of the ABCP investors to the extent permitted by applicable law and in accordance with the terms and conditions of the securitisation transaction in cases where the sponsor does not meet its obligations.

Rationale

The identified person may be the trustee of the securitisation, including the ABCP investors’ trustee. Standard ABCP programmes 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 especially when the sponsor as provider of the liquidity facility does not meet its obligations and problems occur regarding the timely replacement of the liquidity provider. Consultation of market participants has highlighted that, particularly in the EU, the role currently played by the ABCP investors’ 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 the decision-making process more effective, for instance in circumstances where enforcement rights on the underlying exposures are being exercised, it is also proposed that the legal documentation provides clear information on how such disputes between ABCP investors are solved in a timely manner, in accordance with national law.

Criterion 9: Interest rate and currency risks arising at ABCP programme level should be appropriately mitigated (i.e. hedged or appropriately offset); any mitigation measures should be explicitly documented. Only derivatives used for hedging the asset liability mismatch should be allowed and they should be documented in accordance with standard industry master agreements.

Rationale

Mitigating and/or hedging interest rate and currency risks arising at ABCP programme level enhances the simplicity of an ABCP programme since it facilitates the modelling of those risks and of their impact on the credit risk of the securitisation investment by ABCP investors. Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally, interest rate and currency risks can be mitigated, where mitigating measures could include the use of interest rate caps and floors or the use of excess spread or reserve funds. In principle, these mitigating measures should be funded and specifically allocated to address one or more risk drivers (e.g. specific allocation for covering interest rate

risk exposure).

ABCP investors should be in a position to clearly identify and assess hedging/mitigation measures. For this reason, it is essential that these measures be documented in a clear and standardised fashion.

Explanatory note

The term 'appropriately mitigated' should be understood as not necessarily requiring a completely perfect hedge. Hedging (through derivative instruments) is only one possible way of addressing the risks mentioned. More generally, interest rate and currency risks can be mitigated, where mitigating measures could include the use of interest rate caps and floors or the use of excess spread or reserve funds. The term should not necessarily be understood from an accounting point of view, but rather from an economic perspective.

Criterion 10: The documentation for all securitisation positions at ABCP programme level should clearly specify the contractual obligations, duties and responsibilities of the sponsor, trustee, servicer and other ancillary service providers, as well as the processes and responsibilities necessary to ensure that:

- i) the default or insolvency of the current servicer does not lead to a disruption to the servicing of the underlying exposures;**
- ii) 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 at ABCP programme level;**
- iii) upon default and specified events, the replacement of the account bank of any SPV acting at ABCP programme level is provided for in any account bank agreements entered into for the benefit of the securitisation; and**
- iv) upon downgrade, default and other specified event affecting the sponsor, the trustee or other party with fiduciary responsibilities will take remedial steps to achieve, as appropriate, collateralisation of the funding commitment or replacement of the liquidity facility provider. Should the liquidity facility provider not renew the funding commitment within 30 days of its expiry, the liquidity facility should be drawn down, the maturing commercial paper should be repaid and the transaction should cease to purchase exposures while amortising the existing one.**

Rationale

Standard ABCP programmes should provide ABCP investors with certainty regarding the replacement of counterparties involved in the securitisation in crucial roles which impact the credit risk of the securitisation positions held at ABCP programme level, including the servicing of the underlying exposures, the hedging through derivative instruments of risks arising in the ABCP programme, as well as roles of support to the ABCP programme, such as those of liquidity facility providers and bank account providers.

Criterion 11: The ABCP programme sponsor/administrative agent should have a proven track record and a structuring management team experienced in credit underwriting. 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 in place for the proper functioning of the underwriting of the ABCP programme and for the correct and complete implementation of all policies, procedures and risk management controls is crucial given the central nature of these factors within any ABCP programme. Moreover, in order to ensure the proper functioning of collections policies and processes and comprehensive and timely reporting to ABCP investors, it is also important that, in standard ABCP programmes, strong systems and reporting capabilities are in place.

Pillar III: transparent ABCP programmes

Criterion 12: All securitisation transactions within a transparent ABCP programme should fulfil the requirements of transparent securitisation transactions within an ABCP programme.

Rationale

In order for an ABCP programme to qualify as a transparent ABCP programme, all securitisation transactions underlying that ABCP programme should be transparent securitisation transactions. Like for all other criteria with regard to the fulfilment of the transparency criteria, a differentiation between securitisation transaction level and ABCP programme level is required. While in cases where some, but not all, of the underlying transactions qualify as transparent securitisation transactions, the ABCP programme may not be considered a transparent ABCP programme, any securitisation positions held in a particular securitisation transaction (e.g. a liquidity facility provided on transaction level) meeting all transparency criteria would still qualify for the treatment applicable to transparent securitisation transactions. By contrast, the corresponding ABCPs issued by such an ABCP programme would not qualify as transparent securitisation positions.

Criterion 13: The ABCP programme should meet disclosure requirements equivalent to Regulation (EC) No 809/2004 implementing the Prospectus Directive, with respect to the minimum information that the offering document should contain, as provided for in Annex VII to that Regulation, where applicable. The offering document should also specify the predetermined eligibility criteria on the basis of which exposures have been transferred into each transaction of the programme and should certify the existence of a legal opinion confirming the legal true sale or effective assignment of the exposures into each transaction of the programme. ABCP programmes with underlying exposures originated in any non-EEA jurisdiction should meet equivalent requirements as set out in the law or regulations of that non-EEA jurisdiction.

Rationale

Compliance with the relevant requirements of Annex VII to Regulation (EC) No 809/2004 implementing the Prospectus Directive or the equivalent law or regulations of a non-EEA jurisdiction ensures that, at issuance, ABCP investors have access to the material information that is necessary to make an informed investment decision at the closing date. It is important that both public and private deals are treated equally if they offer investors the minimum amounts of transparency and information required by the Prospectus Directive. Private placement securitisations should also be able to qualify as securitisations meeting the SST criteria to the extent that they offer parties, holding a securitisation position at ABCP programme level, the minimum amount of information that Annex VII to Regulation (EC) No 809/2004 implementing the Prospectus Directive or the equivalent law or regulations of a non-EEA jurisdiction requires for public deals.

Criterion 14: The sponsor of an ABCP programme should disclose to ABCP investors or any other parties holding a securitisation position at ABCP programme level that the ABCP programme provides for the retention of a net economic interest in accordance with the CRR retention rules (Article 405 of the CRR) or any non-EU rules assessed as equivalent. Sponsors should also ensure that any current or prospective ABCP investor and any other party holding a securitisation position at ABCP programme level has readily available access to all materially relevant data on the credit quality and performance of the underlying securitisation transactions including information on the securitised exposures on a sufficiently detailed (at least stratified) basis and on all other risk factors influencing the risk

profile of a securitisation position at ABCP programme level. Such disclosure should include all information that is necessary to conduct a comprehensive analysis of all risks associated with the ABCP programme and should be conducted both, before ABCP investors or any other parties become exposed to the credit risk of a securitisation position at ABCP programme level, and on an on-going basis thereafter .

Rationale

In principle, the risk of an individual securitisation position at ABCP programme level (e.g. commercial paper) should primarily depend on the performance or risk profile of the sponsor or any other party providing the ‘full support’ as required for any simple ABCP programme. However, requirements applicable to all securitisation positions as stipulated in Part Five of the CRR, including those specified in the corresponding regulatory technical standards, should also apply to all simple, standard and transparent ABCP or similar positions at ABCP programme level. Therefore, all information necessary to conduct a comprehensive risk analysis at ABCP programme level before investing in any securitisation position at that level should be available, including information about risk retention clauses and on the securitised exposures at least on a stratified basis.

Criterion 15:

Investor reports to any party holding a securitisation position at ABCP programme level should occur at least on a monthly basis.

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

- **all materially relevant data on a sufficiently detailed (at least stratified) basis on the credit quality and performance of exposures in the underlying pools, including data allowing any party holding a securitisation position at ABCP programme level to clearly identify debt restructuring, debt forgiveness, forbearance, repurchases, payment holidays, delinquencies and defaults in the underlying pools;**
- **the breach of any triggers implying changes in the priority of payments or replacement of any counterparties.**

Rationale

Transparent ABCP programmes should ensure all parties holding a securitisation position at ABCP programme level have access to all material information that is needed to perform a comprehensive and well-informed analysis of the risks arising in the ABCP programme, where this analysis may also take the form of stress tests on the cash flows and collateral values supporting the underlying exposures.

Regular reporting, together with sufficient disclosure of performance data, is instrumental to allowing ABCP investors and other parties holding a securitisation position at ABCP programme level to carry out, on a regular basis, appropriate risk analysis and due diligence checks. Investor reporting is also beneficial to the prospective investor on the secondary market and, therefore, to the liquidity of the transaction.

Criterion 16: Where legally possible, investors in an ABCP programme should have access to all essential programme level transaction documents at least in a draft form prior to the transaction pricing and in final form at the latest 15 days after the closing of the transaction.

Programme level documentation such as offering documents including terms and conditions related to the notes should be made available to ABCP investors in due time in order to allow them to conduct the appropriate due diligence analysis.

Stage 2: criteria on the credit risk of underlying exposures – programme level

Criterion A: All securitisation transactions within a simple, standard and transparent ABCP programme should fulfil the credit risk criteria for simple, standard and transparent securitisation transactions within an ABCP programme.

Rationale

In order for an ABCP programme to be considered to be meeting the credit risk criteria, all securitisation transactions underlying that ABCP programme should fulfil the corresponding credit risk criteria. Like for all other criteria with regard to the fulfilment of the credit risk criteria, a differentiation between securitisation transaction level and ABCP programme level is required. While in cases where some, but not all, of the underlying transactions meet the credit risk criteria of simple, standard and transparent securitisation transactions, the ABCP programme may not be considered as fulfilling such credit risk criteria any securitisation positions held in a particular securitisation transaction (e.g. a liquidity facility provided on transaction level) meeting the credit risk criteria, as well as the criteria for simple, standard and transparent securitisation transactions would still qualify for the treatment of securitisation transactions fulfilling all those criteria. By contrast, the corresponding ABCPs issued by such an ABCP programme would not meet the additional credit risk criteria and would therefore not benefit from any preferential treatment granted for securitisation positions at ABCP programme level, where the corresponding ABCP programme meets all simplicity, standardisation, transparency, and credit risk criteria.

Criterion B: At inclusion, the aggregated exposure value of all exposures to a single obligor in the combined pool of underlying exposures of all underlying securitisation transactions within the ABCP programme does not exceed 1% of the aggregate exposure value of all exposures included in such combined pool at that point in time. For the purposes of this calculation, loans or leases to a group of connected clients, as referred to in Article 4(1) point (39) of the CRR, should be considered as exposures to a single obligor. Where, in the case of trade receivables, the credit risk of the part of the underlying exposures remaining after consideration of any purchase price discount, if applicable, is completely covered by appropriate credit insurance provided by a regulated entity, the first sentence of this criterion should not apply.

Rationale

A minimum level of granularity should be ensured to address idiosyncratic risk in the total pool of exposures to be securitised at ABCP programme level. It is important that, in fulfilling the granularity requirement, exposures related to groups of connected clients be considered a single source of idiosyncratic risk.

However, in cases where appropriate credit insurance exists for the part of all underlying exposures in the form of trade receivables which is remaining after consideration of any purchase price discount and where this credit insurance ensures timely payment and is available until all payment obligations resulting from the underlying exposures have been served, a minimum level of granularity is not a material issue as the underlying exposures' credit risk not covered by the purchase price discount is effectively mitigated. As an additional safeguard, the provider of the credit insurance should be subject to EU regulation or any equivalent regulation.

6. The capital treatment of qualifying securitisations

6.1 The BCBS 2014 securitisation framework (the baseline)

On 11 December 2014, the Basel Committee published the revised securitisation framework, which aims to address a number of shortcomings in the Basel II securitisation framework and to strengthen the capital standards for securitisation exposures held in the banking book.

The crisis highlighted several weaknesses in the Basel II securitisation framework, including concerns that it could generate insufficient capital for certain exposures. This led the Committee to decide that the securitisation framework needed to be reviewed. The Committee identified a number of shortcomings relating to the calibration of risk weights and a lack of incentives for good risk management, namely:

- i) mechanistic reliance on external ratings;
- ii) excessively low risk weights for highly-rated securitisation exposures;
- iii) excessively high risk weights for low-rated senior securitisation exposures;
- iv) cliff effects; and
- v) insufficient risk sensitivity of the framework.

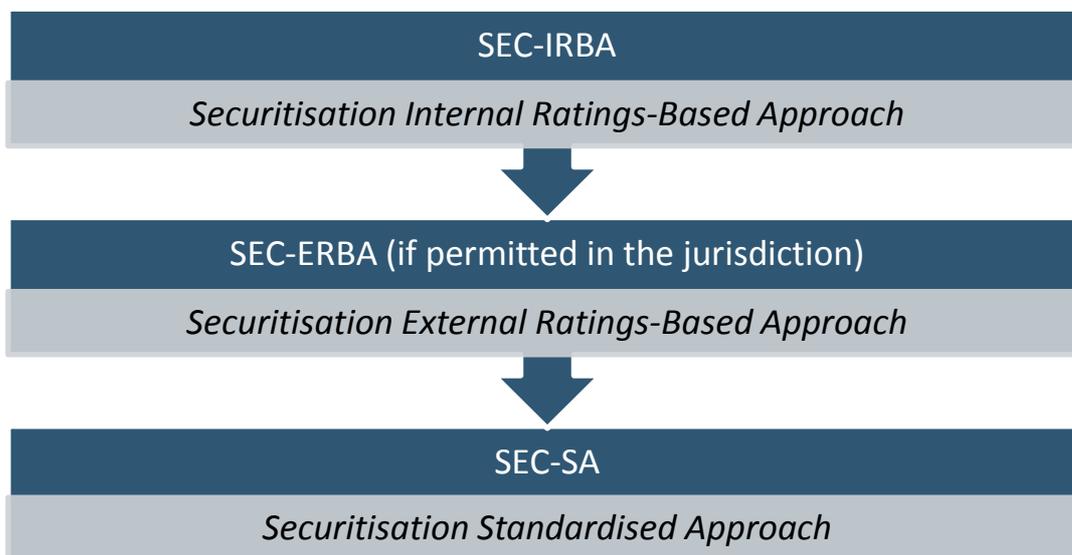
The above shortcomings translate into specific objectives that the revision of the framework seeks to achieve: reduce mechanistic reliance on external ratings; increase risk weights for highly-rated securitisation exposures; reduce risk weights for low-rated senior securitisation exposures; reduce cliff effects; and enhance the risk sensitivity of the framework.

The revised Basel III securitisation framework represents a significant improvement to the Basel II framework in terms of reducing the complexity of the hierarchy and the number of approaches. Under the revisions there are only three primary approaches, as opposed to the multiple approaches and exceptional treatments allowed in the Basel II framework.

Furthermore, the application of the hierarchy no longer depends on the role that the bank plays in the securitisation – investor or originator; or on the credit risk approach that the bank applies to the underlying exposures. Rather, the revised hierarchy of approaches relies on the information that is available to the bank and on the type of analysis and estimations that it can perform on a specific transaction.

The mechanistic reliance on external ratings has been reduced, mainly because the RBA is no longer at the top of the hierarchy but also because other relevant risk drivers have been incorporated into the SEC-ERBA (i.e. maturity and tranche thickness for non-senior exposures).

Figure 17 The revised hierarchy of approaches in the BCBS 2014 framework for securitisation exposures



In terms of risk sensitivity and prudence, the revised framework also represents a step forward relative to the Basel II framework. The capital requirements have been significantly increased, commensurate with the risk of securitisation exposures and the risk weight floor has been set at 15% for senior exposures.

Although the revised securitisation framework is a major improvement compared to the Basel II securitisation framework, it does not take into account the structural complexity of securitisations. The revised securitisation framework has been calibrated for all types of securitisations according to a one-size-fits-all approach and based mainly on the underlying credit risk in a securitisation.

As illustrated in this report, securitisations can be structured to be simple standard and transparent and can be collateralised by assets whose credit risk is less volatile than the average. In addition, historical performance has shown that, in the absence of certain adverse mechanisms and structural drawbacks, securitisation defaults and losses remained at materially lower levels for both senior and non-senior tranches during a period of severe market stress.

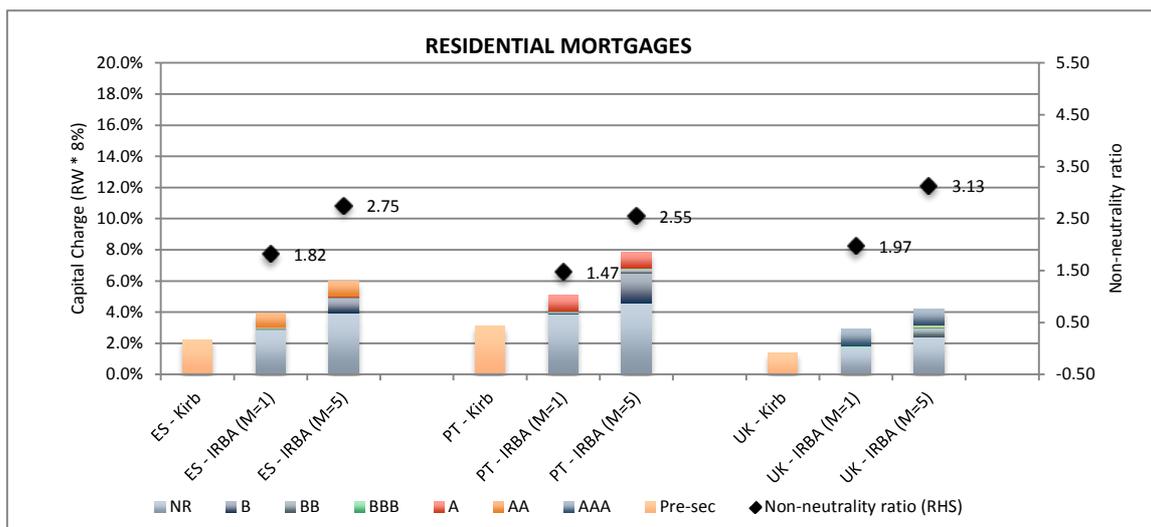
The approach to regulatory capital applicable to securitisations can therefore incorporate a distinction between ‘qualifying’ SST securitisations and other securitisations, as described in Chapter 5. The proposed features of ‘qualifying’ transactions, and the resulting enhanced expected stability of their performance, should justify re-assessing and reducing some of the conservatism built into the BCBS 2014 securitisation framework. This conservatism has taken the form of, inter alia, risk weight floors and risk weight adjustments for maturity, aimed at

addressing modelling/agency risks introduced by the securitisation process as well as addressing credit quality deterioration and instability concerns. Capital charges in the BCBS revised securitisation framework have assumed, on average, a marked non-neutral nature.

While it should be acknowledged that full neutrality of capital charges - i.e. equality between the capital charges applying to a given portfolio of underlying assets (i.e. non-securitised assets held on the balance sheet) and the sum of the capital charges applying to all the tranches of the same portfolio in a securitised format - is not prudent nor is it a desirable regulatory outcome, the resulting levels of non-neutrality of capital charges should always be taken into account when setting capital requirements for securitisations.

Figure 18 to Figure 20 illustrate the extent of hypothetical non-neutrality of capital requirements under the BCBS 2014 securitisation framework on a jurisdiction-specific and asset class-specific basis, including the SME and RMBS asset classes. The QIS exercise presented below uses the same inputs and assumptions adopted in section 4.3 for the analysis of the current CRR capital requirements on securitisation positions.

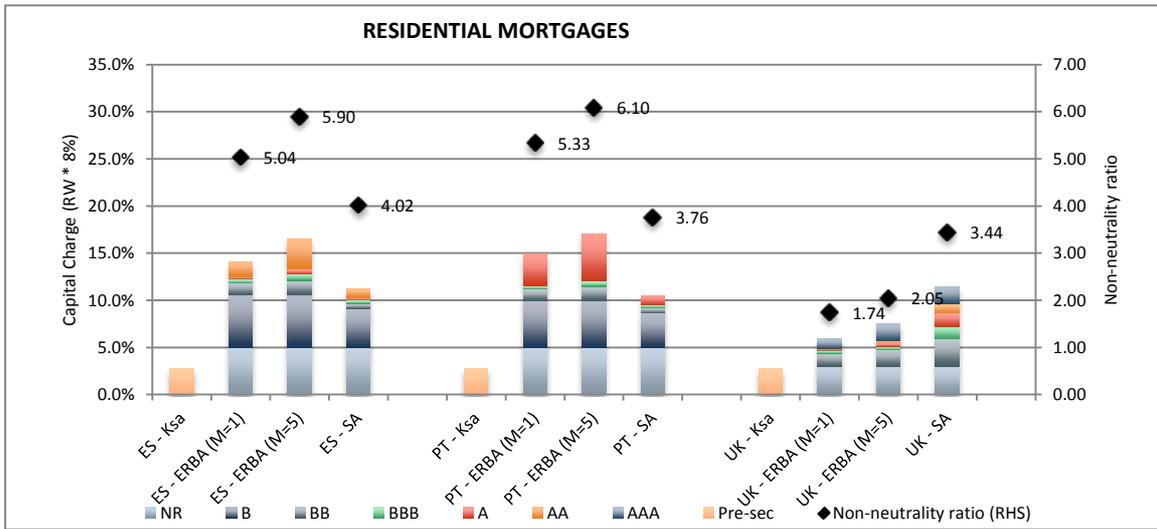
Figure 18 Capital charges and capital multipliers – SEC-IRBA approach – Residential mortgages – per country⁴⁹



Sources: EBA calculations

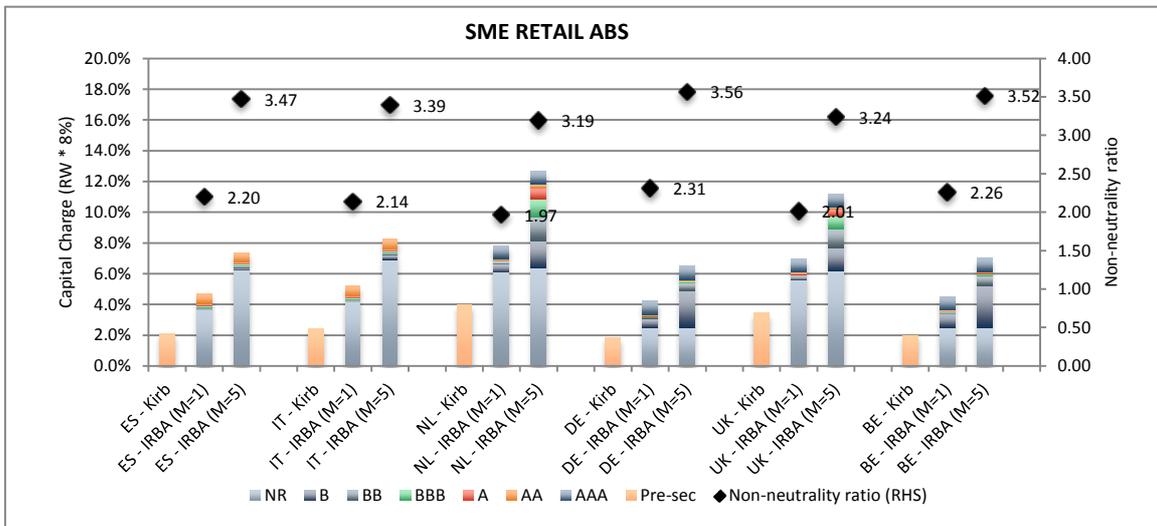
⁴⁹ PD and LGD data used to compute IRB capital requirements in Figure 18 to Figure 21 are reported in Table 18 in the annex to this report. Representative capital structures are reported in Table 15 to Table 17 in the annex to this report.

Figure 19 Capital charges and capital multipliers – SEC-ERBA & SEC-SA approaches – Residential mortgages – per country



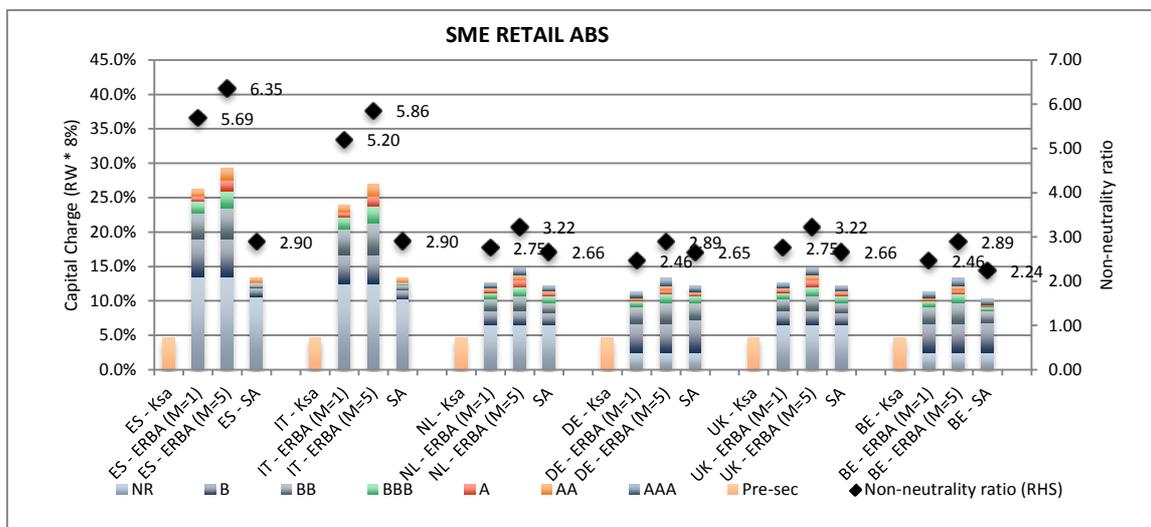
Sources: EBA calculations

Figure 20 Capital charges and capital multipliers – SEC-IRBA approach – SME Retail – per country



Sources: EBA calculations

Figure 21 Capital charges and capital multipliers – SEC-ERBA & SEC-SA approaches – SME Retail – per country



Sources: EBA calculations

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. The following outcomes, however, have been consistently observed across applications:

- i) capital allocation to senior tranches due to the newly-introduced risk-weight floor of 15% has contributed to increasing non-neutrality of securitisation capital charges;
- ii) for lower credit risk portfolios (i.e. low levels of Kirb), the level of capital non-neutrality increases due to the formulae determining 'p' as a function of inputs (N, Kirb, LGD and M). This is particularly the case for good quality residential mortgages; and
- iii) the influence of the maturity as an input for determining the p factor in the SEC-IRBA results in a substantial capital increase for the mezzanine tranches.

Furthermore, it appears that the hierarchy of approaches does not hold in those jurisdictions upon which a rating country ceiling is imposed by rating agencies, i.e. the framework fails to provide increasing capital charges as approaches with a lower priority in the hierarchy of approaches are applied. As a result of the different ceilings, the Italian 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'.

Consequently, the charges resulting from the ERBA approach appear to be far higher than those resulting from the application of the SEC-SA approach, where the latter ranks lower in the hierarchy and was designed so as to provide capital charges that should not be lower than those resulting from approaches ranking higher in the hierarchy.

The above-mentioned factors contribute to widening the wedge (by several multiples in some cases) between the capital requirements applicable to the securitisation transaction and the capital requirements applicable to the corresponding underlying portfolios.

Considering the publication of the revised securitisation framework by the Basel committee in December 2014, and taking into account the shortcomings in the Basel II securitisation framework, the EBA believes that the revised securitisation framework is the most appropriate baseline for introducing a regulatory definition and recognition of ‘qualifying’ securitisations.

6.2 The re-calibration proposal: a differentiated treatment for both senior and non-senior qualifying securitisation tranches

RECOMMENDATION 5: Recommendation on the re-calibration of the BCBS 2014 framework applicable to ‘qualifying’ securitisation positions

Capital requirements for ‘qualifying’ securitisation positions should be re-calibrated downwards in a consistent fashion across the hierarchy of approaches foreseen by the BCBS 2014 securitisation framework, i.e. the internal ratings-based approach (SEC-IRBA), the external ratings-based approach (SEC-ERBA) and the standardised approach (SE-SA). The re-calibration proposals are summarised in Table 10 below. Specific re-calibrations of the SEC-ERBA for both long-term and short-term ratings are reported in Table 11 and Table 12 below.

Rationale

The re-calibration should, to the extent possible, maintain the consistency of capital charges applicable across the BCBS 2014 hierarchy of approaches to minimise potential distortions of regulatory incentives: re-scaling the supervisory ‘p’ parameter was considered as striking the best balance between ensuring a clear and transparent implementation of the adjustment and avoiding unintended distortions. Re-scaling the SEC-ERBA approach for both short-term and long-term ratings on the basis of the SEC-IRBA and SEC-SA re-calibrations was also deemed the best option to maintain consistency of resulting capital charges along the hierarchy.

The prudential floor of 0.3 for the supervisory ‘p’ parameter was maintained as in the original BCBS 2014 framework so as to ensure, following the re-calibration, a minimum prudential capital surcharge on the securitisation, hence recognising that full neutrality of securitisation capital charges is neither desirable nor prudent. Also for prudential reasons, the re-calibration across approaches has not modified any of the 1250% risk weighting requirements foreseen by the original BCBS 2014 framework, recognising that such requirements apply to conditions of relatively higher risk attached to the tranche.

The 10% value chosen for the risk weight floor applicable to senior tranches has been chosen to recognise a materially better historical performance of qualifying senior tranches with respect to non-senior qualifying tranches, while maintaining a level of capital that more than covers historical losses of qualifying senior tranches;

The overall re-calibration across approaches recognises that qualifying securitisation transactions are expected to be relatively less risky across the capital structure but maintains regulatory capital on levels of non-neutrality that are, as evidenced by impact assessment analysis, comfortably

higher than the minimum levels foreseen by the BCBS 2014 original framework.

Table 6 Recalibration proposals applicable to ‘qualifying’ securitisations

BCBS 2014 Framework	Re-calibration proposal
SEC-IRBA	The ‘p’ parameter is re-scaled by a factor of 0.5 while preserving the prudential 0.3 floor value: $P_{\text{qualifying}} = \max[0.3; 0.5 \times (A+B \cdot (1/N) + C \cdot \text{Kirb} + D \cdot \text{LGD} + E \cdot \text{Mt})]$
SEC-SA	The supervisory parameter p is rescaled from 1 to 0.5.
SEC-ERBA (long-term ratings)	Risk weights of the ERBA look-up table for each long-term rating grade are re-scaled to maintain consistency with the re-scaled average risk weights in the SEC-SA approach resulting from the proposal above. The 1250% requirements of the BCBS 2014 framework remain unchanged (see below).
SEC-ERBA (short-term ratings)	Risk weights of the ERBA look-up table for each short-term rating grade are re-scaled to maintain consistency with the re-scaling proposed for the SEC-ERBA approach for long-term ratings. The 1250% requirements of the BCBS 2014 framework remain unchanged (see below).
Risk weight floor	For <u>senior</u> qualifying tranches only: SEC-IRBA and SEC-SA: the risk weight floor is lowered from 15% to 10% SEC-ERBA: the one-year and five-year risk weight floors are reduced from 15% to 10% and from 20% to 15%, respectively.

The next section elaborates on the empirical underpinnings of the proposed re-calibration, illustrating in more detail the following main findings:

- i) **empirical evidence on defaults and losses supports a differentiation in capital requirements applicable to ‘qualifying’ vs. ‘non-qualifying’ transactions, for both European and global transactions;**
- ii) **empirical evidence on losses confirms that senior qualifying tranches perform materially better than non-senior qualifying tranches, in both European and global transactions; in particular, the proposed 10% risk weight floor for senior qualifying tranches adequately covers the losses observed on those tranches;**
- iii) **the proposed recalibration of the SEC-IRBA and SEC-SA approaches, based on European securitisation data, leaves the transactions included in the sample with a securitisation capital surcharge which is substantially higher than the minimum surcharge foreseen by the BCBS 2014 framework.**

6.2.1 Proposed scope of the differentiation and technical implementation across approaches in the hierarchy

The EBA discussion paper on simple, standard and transparent securitisations elaborated on the conceptual elements of rationale and some empirical underpinnings for a differentiation in the regulatory capital treatment of qualifying securitisations.

From a conceptual perspective, the following elements should be considered:

- i) Simple, standard and transparent securitisation structures are defined so as to limit the non-asset risk of the securitisation position, i.e. the agency risks due to the multiplicity of parties involved in the transaction, the model risk, as well as broader operational and legal risks in the transaction. SST criteria ensure that the securitisation process only adds a limited amount of extra risk on top of the risk embedded in the quality of the underlying portfolio, resulting in reduced riskiness of the whole transaction, i.e. of all the tranches that are part of it.
- ii) The proposed criteria on the credit quality of the underlying exposures ensure that the volatility of underlying credit risk and the tail risk embedded therein are limited, further reducing the overall riskiness of the securitisation. Limited underlying risk also justifies the expectation of a reduced model risk within the credit risk tranching process, as well as a reduced risk of failing to properly capitalise, from a regulatory model perspective, the individual senior and non-senior tranches.

Points (i) and (ii) above support differentiating the capital treatment for 'qualifying' tranches not only at the senior level, but also to the benefit of mezzanine tranches.

While there is merit in advocating lower capital charges across the capital structure (i.e. for senior and non-senior tranches) of a qualifying transaction, a lower risk weight floor is only proposed to apply to *senior* qualifying tranches. From a conceptual perspective, the proposal on the re-calibration of the risk weight floor acknowledges the specific prudential nature of the risk weight floor within the securitisation framework and seeks to strike the right balance between the overall prudence of the framework and the differentiation in treatment warranted by the qualifying nature of the transactions.

As relates to the specific methodology for re-calibrating the three approaches of the BCBS 2014 hierarchy, the following conceptual elements should be considered:

- i) Recalibrating the SEC-SA and SEC-IRBA capital requirements by simply re-scaling the supervisory 'p' parameter, therein, was considered as striking the best balance between ensuring a clear and transparent implementation of the adjustment and avoiding unintended distortions in the securitisation framework. Alternative approaches, as for instance applying percentage haircuts directly to the resulting risk weights applicable to qualifying transactions, were also considered although eventually discarded.
- ii) Recalibrating the risk weights of the ERBA approach so as to maintain consistency with the outcomes of the re-calibration of the SEC-SA approach, i.e. in a residual fashion, allows consistency of capital requirements among the SEC-SA and SEC-ERBA approaches to be maintained, as intentionally designed by the BCBS, and hence ensures an overall consistency of requirements along the hierarchy of approaches foreseen by the new framework.

- iii) The re-calibration of the capital charges, reflecting the qualifying nature of the positions, should in any case not result in an overall prudentially insufficient supervisory surcharge. When discussing the non-neutral nature of the capital charges on securitisation, the EBA DP had already flagged that, although there is merit in reducing the non-neutrality of the requirements for qualifying securitisations, capital charges too close to neutrality should not be considered desirable, nor should they be seen as prudent. For these specific reasons, it is proposed that the floor to the supervisory surcharge of capital requirements (i.e. the floor value of 0.3 to the supervisory parameter 'p') still applies within the re-calibration proposals for the SEC-SA and SEC-IRBA (and is consequently reflected in the residual re-calibration of the SEC-ERBA).
- iv) The 1250% risk weight requirements provided for in the BCBS 2014 framework across the three approaches of the hierarchy are maintained within the re-calibration proposals so as to ensure that a euro-per-euro capital requirement continues to apply in all those circumstances initially foreseen by the BCBS 2014 framework. This requirement applies in particularly high risk conditions, such as very low credit quality as assessed by external ratings (see BCBS 2014 SEC-ERBA table) or low levels of subordination of the tranche (e.g. first loss tranche), and in any cases where the tranche starts absorbing losses for levels of the latter which are equal to or lower than the losses that would be absorbed by the capital requirement on the underlying portfolio.

Lastly, the EBA also gave some consideration to the proposal to allow the disapplication of the SEC-ERBA approach within the hierarchy of approaches for qualifying securitisations. Having given consideration to this proposal from different angles, which highlighted the existence of differing views, and acknowledging that the removal of external ratings from the regulatory framework is a broader issue with respect to the scope of this technical advice, the EBA concluded that the proposal be discarded.

When considering the proposal, the views listed in the table below were discussed, inter alia:

Table 7 Considerations regarding excluding the SEC-ERBA approach from the hierarchy for qualifying securitisations

Views in faavor	Views against
The regulatory capital framework for securitisation positions becomes less reliant on external ratings, promoting the EU and G20 general regulatory objective of reducing such reliance. The reduced reliance on external ratings would be undertaken in a prudent manner, as securitisations with low underlying credit quality would not qualify as STC.	Enhanced complexity for less sophisticated investors, as the formulae-based approach (SEC-SA) is operationally more complex than the look-up table approach (SEC-ERBA).
The high non-neutrality of securitisation capital charges due to sovereign rating ceilings is addressed, improving the level playing field for issuers belonging to those sovereigns and helping re-establish the principle that approaches which rank lower in the hierarchy cannot lead to lower capital charges than approaches ranking higher.	The overall risk-sensitivity of the framework may be reduced as sovereign risk and other risks taken into account within ECAIs' rating methodologies, but not fully addressed by the 'qualifying' requirements, are likely to affect the credit risk of the securitisation tranche in a number of ways.
Regulatory level playing field is enhanced between EU and US securitisation markets; in the latter, the use of the external ratings for regulatory capital purposes is already banned by regulation.	Overall prudence of the capital requirements framework may be reduced if the use of external ratings is materially reduced as the rating activity constitutes a third-party analysis of the features of riskiness of the transaction, analysis which would be left to issuers and investors (and regulators).
Potential double counting of the 'qualifying' features of the transaction would be avoided: ECAI's rating methodologies take into account many of the features that the SST framework is setting in rules. A better rating resulting from the assessment of these features by the ECAI would result in a better risk weight treatment, where the transaction has already been assigned a relatively better risk weight treatment due to the proposed differentiation in the rules. The double counting would not result from formulae-based approaches (i.e. SEC-IRBA, SEC-SA) to capital requirements;	<p>The overall risk-sensitivity of the framework may be reduced to the extent that issuers/originators will not be able to use the IRBA (due to a lack of necessary information and data inputs). They will have to adopt the SEC-SA approach, which is designed to be the least risk-sensitive.</p> <p>Increased use of the SEC-SA may also result in:</p> <ul style="list-style-type: none"> • transactions backed by lower quality portfolios receiving lower capital charges as the conservative credit enhancement levels structured to address such risk, lower the capital charges in the formulae of the SEC-SA; • an amplification of the potential deficiencies of the standardised approach of the credit risk framework, upon which the SEC-SA is based.
The consistency of capital requirements should increase, as SEC-IRBA and SEC-SA are based on a similar formulae-based approach and result in limited dispersion of risk weights, while the look-up table approach of SEC-ERBA results in more dispersed capital requirements, versus both SEC-SA and SEC-IRBA.	

6.2.2 Empirical underpinnings of the re-calibration proposal

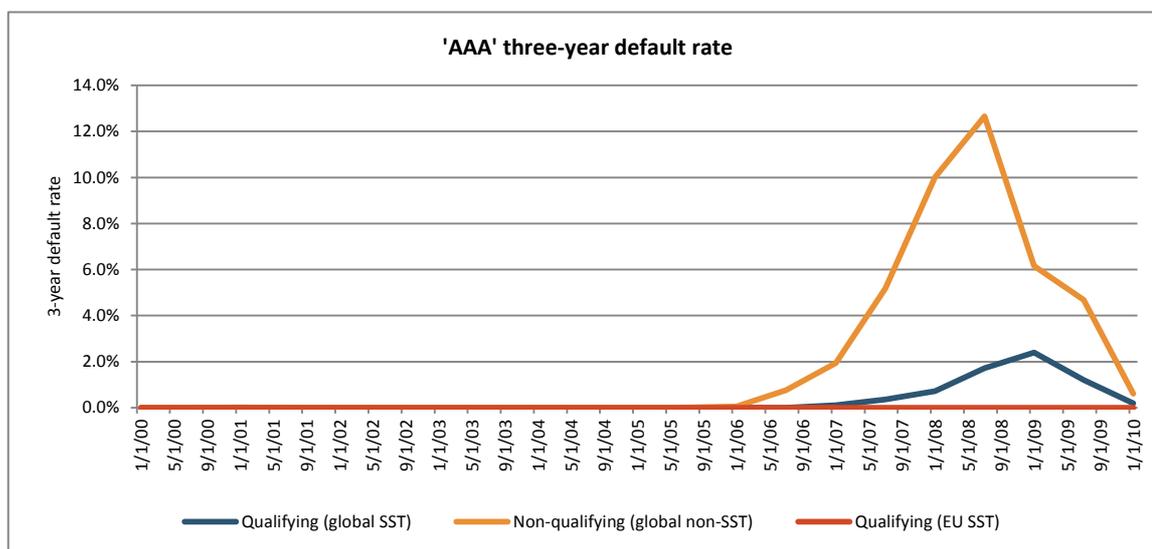
The EBA discussion paper on simple, standard and transparent securitisations included evidence on the historical default and loss performance of different securitisation sub-asset classes. The analysis has been extended to cover the following:

- i) The (CEREP) historical default analysis has been extended to compare the 2000-2013 default rate performance of *global qualifying* tranches, *EU qualifying* tranches and *global non-qualifying* tranches.

- ii) Historical loss analysis was substantially extended to disentangle: i) the performance of qualifying vs. non-qualifying tranches within an EU as well as a global sample of transactions, ii) the performance of senior vs. non-senior tranches within the qualifying segment.

A markedly different default rate performance can be observed across, global qualifying and global non-qualifying tranches respectively, confirming that an empirical basis supporting a differentiated regulatory treatment, based on observed default behaviour, exists even outside the perimeter of the EU market. The analysis also confirms the very positive default performance of EU qualifying tranches, even when that is compared to the performance of a broader global portfolio of qualifying tranches. Figure 22, below, presents the outcome of the analysis for AAA-rated tranches⁵⁰.

Figure 22 Historical three-year default rate performance according to asset class partition: qualifying vs. other – AAA rating



Sources: CEREP dataset and EBA calculations

Historical loss analysis was undertaken on an Intex global (mostly US) sample of securitisation tranches as well as on a Fitch European (EMEA) sample of tranches. The following outcomes can be observed in Figure 23 below:

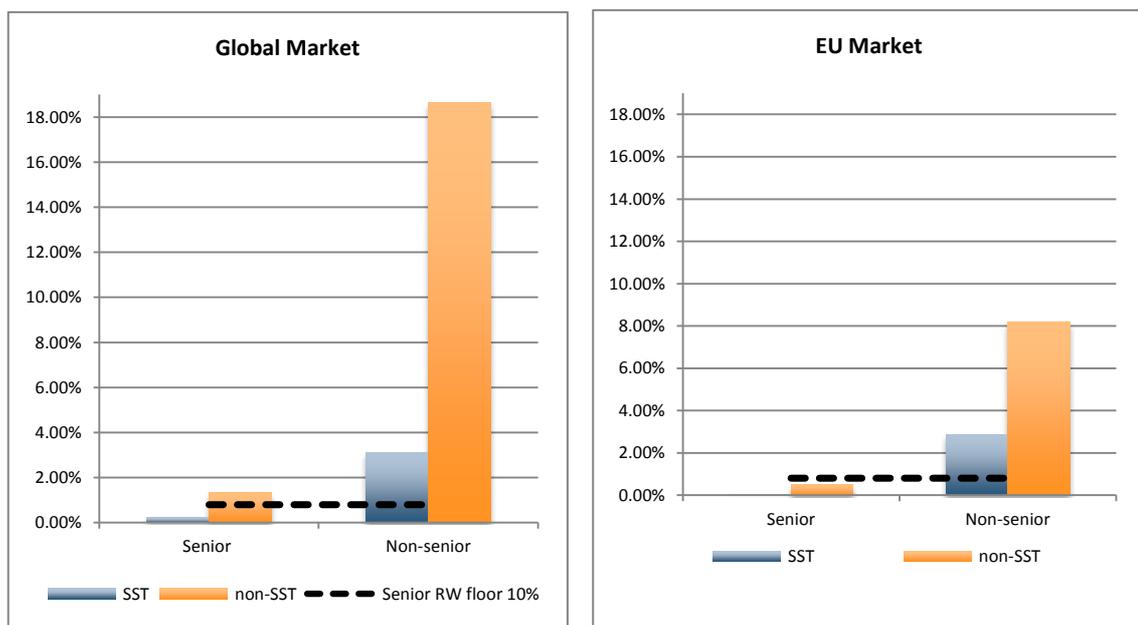
- i) Within the global market, a marked different loss performance can be observed between qualifying and non-qualifying transactions, both at the senior and non-senior level. At the senior level, losses of qualifying transactions amount to 0.2% while losses of such tranches of non-qualifying transactions rates reach 1.3%. At the non-senior level losses of qualifying transactions amount to 3% while losses of non-qualifying reach 19%. Overall losses stemming from non-qualifying

⁵⁰ Further evidence on BBB-rated tranches is presented in Figure 34 in the annex to this report. Table 21 in the annex also presents a description of the data sample used and the proxy partition of tranches among qualifying and non-qualifying.

transactions in senior and non-senior levels seem to be approximately six times larger than losses of the corresponding tranches in qualifying transactions.

- ii) Also within the European market, a different loss performance can be observed between qualifying and non-qualifying transactions, both at the senior and non-senior level. At the senior level, losses of SST s amount to 0.03% while losses of non-qualifying SSTs reach 0.5%. At the non-senior level, losses of qualifying transactions amount to 2.9% while losses of non-qualifying transactions reach 8.2%. Overall losses stemming from non-qualifying transactions seem to be approximately six times larger than losses stemming from qualifying transactions. The difference is more marked in the case of senior tranches than non-senior tranches.
- iii) The global and European samples confirm that senior tranches always perform materially better than non-senior tranches in terms of losses, the difference being particularly large within the EU sample.

Figure 23 Loss analysis: all products⁵¹



Sources: Intex, Fitch Ratings – EBA calculations

Implications for the calibration of floor levels

On the basis of the empirical analysis on loss historical performance, it should be noted that a proposed risk weight floor of 10% for senior tranches of qualifying transactions would be sufficient to cover more than three times the losses observed on global senior tranches of

⁵¹ Global data reflects realised loss data while European data reflects total loss (realised plus expected) data. See Table 22 in the annex for a description of the samples used and the SST partition.

qualifying transactions and more than 25 times the losses observed on European qualifying senior tranches over the 2000-2014 time period⁵².

Implications for the calibration of risk weights across the capital structure

Since qualifying securitisations incurred significantly lower losses both on an aggregate basis and for each seniority level compared to non-qualifying securitisations, lowering of capital charges across the entire capital structure – i.e. for senior and non-senior tranches – is justified for qualifying securitisations.

In order to assess the impact of the proposed recalibration of the BCBS 2014 framework to the benefit of qualifying transactions, a quantitative impact study was carried out on a large population of securitisation tranches included in the European Data Warehouse (EDW)⁵³, including over 2000 securitisation tranches stemming from RMBS, SME ABS or auto loans transactions and issued in 9 EU Member States⁵⁴, for a total notional value of over EUR 500 billion.

This population of securitisation tranches was taken as representative of the European ‘qualifying’ securitisation segment.

Implementation on the chosen population of European transactions of each regulatory approach, recalibrated as indicated in the EBA proposal for qualifying securitisations, would reduce the average aggregate capital charges and the weighted-average risk weights as follows:

- i) SEC-IRBA approach: approximate average 29% reduction
- ii) SEC-ERBA approach: approximate average 7% reduction⁵⁵
- iii) SEC-SA approach: approximate average 28% reduction

⁵² According to granular time series data on realised losses, only available for the European sample of securitisation transactions, a 10% risk-weight floor would cover equivalent losses that are approximately 4 times larger than the maximum loss recorded by European RMBS and ABS at the peak of the crisis (2007-09).

⁵³ The European DataWarehouse (EDW) is the first central data warehouse in Europe for collecting, validating and making available for download detailed, standardised and asset class specific loan level data (LLD) for asset-backed securities (ABS) transactions. The EDW is developed, owned and operated by the market, and endorsed by the Eurosystem. An overview of the sample used is provided in Table 23 and Table 24 in Annex to this report.

⁵⁴ Jurisdictions included are: BE, DE, ES, FR, IE, IT, NL, PT, UK.

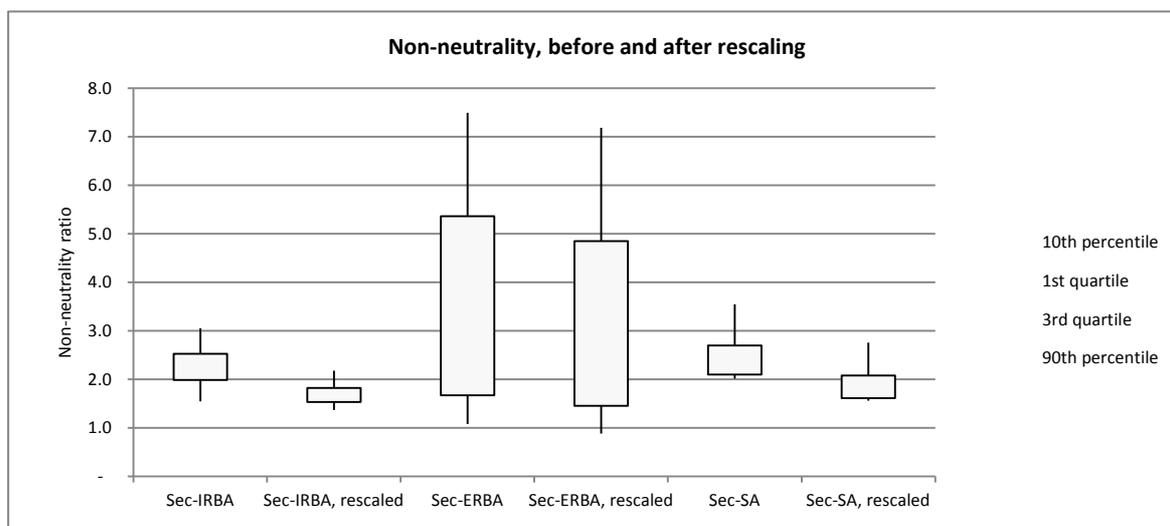
⁵⁵ It should be noted that considering the impacts of the SEC-ERBA recalibration on a sub-population of transactions issued prior to the crisis (i.e. before 2008) would result in an approximately double capital relief (circa 14%), while it would result in about a 26% and 22% reduction in capital charges under SEC-IRBA and SEC-SA, respectively. As already shown in the EBA DP, since 2008 (i.e. since the crisis hit) the vast majority of securitisation transactions issued in Europe were retained securitisations, i.e. transactions very often structured and issued with the sole aim of repoing their senior tranche with the European Central Bank for liquidity purposes. These transactions were typically structured to only have a senior tranche and a (relatively large) first loss unrated position. On these structures, the capital relief resulting from the proposed re-calibration of SEC-ERBA is lower as the 1250% requirements of the ERBA approach were not modified by the re-calibration. Transactions issued prior to 2008 are instead characterised by lower first loss (unrated) tranches and are optimised to also feature mezzanine tranches to be placed with market investors. Under the assumption that institutions will be allowed to use the SEC-SA approach for the unrated first-loss positions, rather than the SEC-ERBA, the reduction in capital charges following the recalibration of the SEC-ERBA approach would approximate 24%, instead of the 7% reported in the text.

The average relative decrease in the risk weights for the senior tranches are higher than the average aggregate capital charges reductions under all three approaches. The proposed recalibrations of each approach to regulatory capital requirements would lower the non-neutrality of capital charges⁵⁶, as measured by non-neutrality ratios⁵⁷ in Figure 24 below. In particular:

- the average non-neutrality ratio decreases from 2.3 to 1.7 in the SEC-IRBA approach;
- the average non-neutrality ratio decreases from 3.8 to 3.5 in the SEC-ERBA approach;
- the average non-neutrality ratio decreases from 2.5 to 2.0 in the SEC-SA approach.

The very high dispersion of the non-neutrality ratio under SEC-ERBA is due, inter alia, to the impact of sovereign rating caps and equivalent methodologies, preventing senior tranches of securitisations issued in periphery countries from achieving maximum ratings and imposing on these securitisations higher levels of credit enhancements. Both factors lead to higher capital charges under SEC-ERBA.

Figure 24 Non-neutrality of securitisation capital charges



Sources: ECB EDW data and EBA calculations

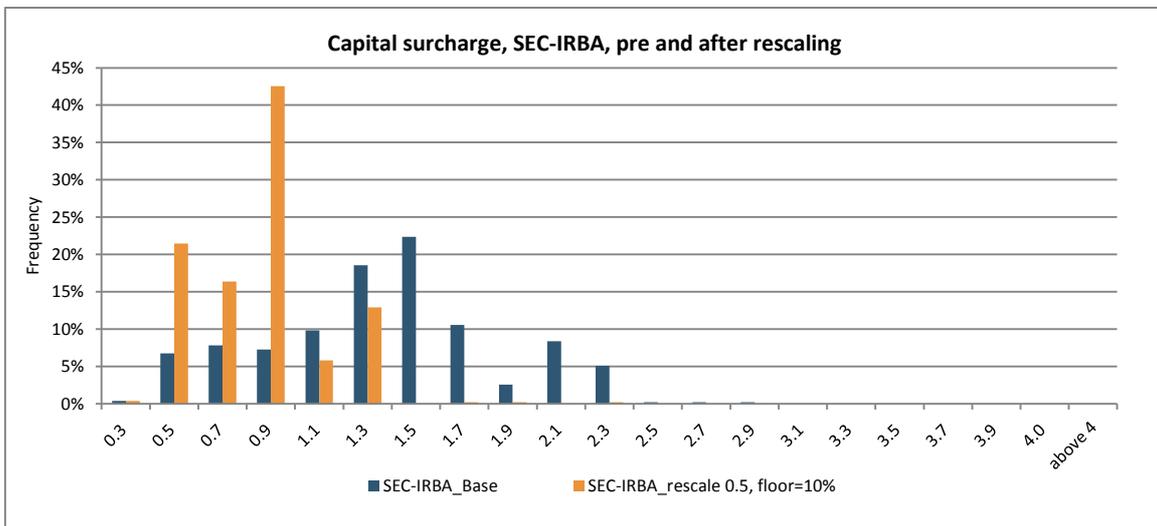
⁵⁶ Capital charges on securitisation are defined to be non-neutral whenever the sum of the capital charges on all the tranches of a given transaction is larger than the capital requirements that would apply to the underlying portfolio of exposures had this portfolio not been securitised.

⁵⁷ Non-neutrality ratio is the ratio between the total capital charge applicable to the totality of a given securitisation transaction and the capital charge that would apply to the underlying portfolio of exposures had this portfolio not been securitised. A ratio value of 1 represents fully neutral capital charges, while for increasing values larger than 1, non-neutrality increases.

Figure 25 and Figure 26, below, provide the frequency distribution of the capital surcharge ratios⁵⁸, showing that the capital surcharge remains, for the vast majority of the transactions in the sample, well above a minimum floor level of 30% (built-in within the SEC-IRBA through the 0.3 floor value of the supervisory ‘p’ parameter) and above a minimum floor of 50% (built-in within the SEC-SA through the 0.5 value of the supervisory ‘p’ parameter) in the case of SEC-SA, following the implementation of the recalibration. The overall prudence of the framework is therefore maintained, as the capital surcharges remain above the floors foreseen by the original BCBS 2014 framework.

The capital surcharges are often higher than those implied by the minimum values of the supervisory ‘p’ parameter due to the impact of the risk weight floors and, in the case of the SEC-SA only, to the impact of adjusting capital requirements for the delinquencies in the underlying pool.

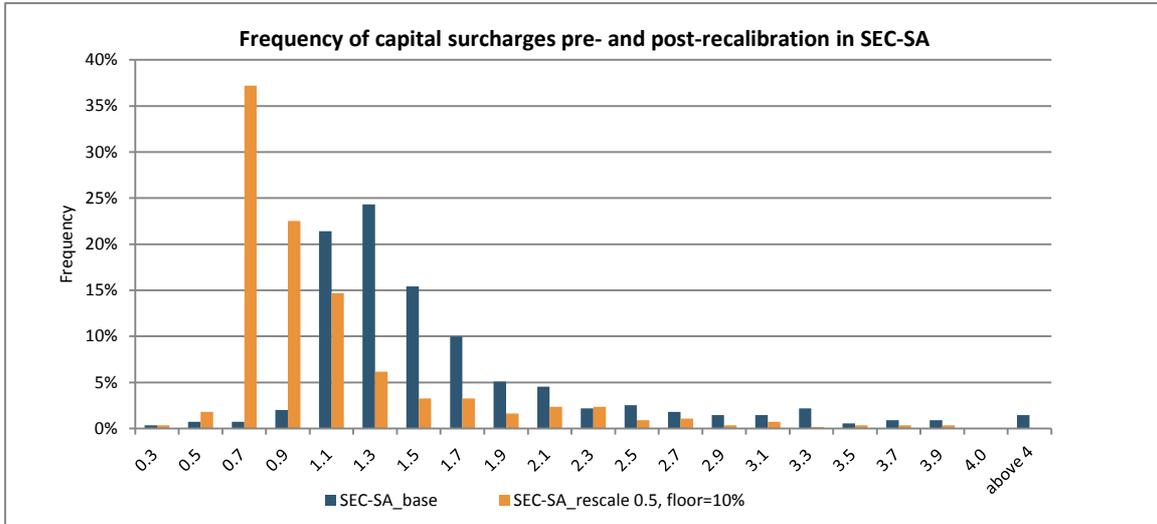
Figure 25 Capital surcharge of securitisation capital charges pre- and post-recalibration



Sources: ECB EDW data and EBA calculations

⁵⁸ The capital surcharge ratio is equal to the non-neutrality ratio less 1. A capital surcharge ratio of 1 is equivalent to a non-neutrality ratio of 2, i.e. the capital charged on the securitisation liabilities is 100% higher (or double) than the capital charges on the underlying securitisation assets.

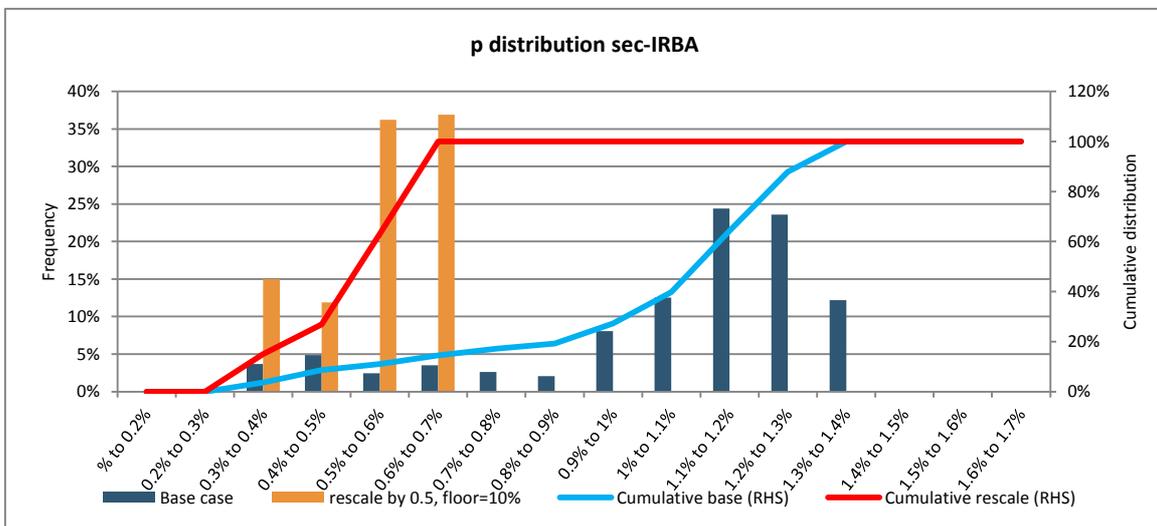
Figure 26 Capital surcharge of securitisation capital charges pre- and post-recalibration



Sources: ECB EDW data and EBA calculations

QIS analysis (see Figure 27 below) also shows that, following the implementation of the proposed SEC-IRBA re-calibration, the ‘p’ parameter assumes values included between 0.3 (the floor value foreseen for ‘p’ in the BCBS 2014 framework) and 0.7, whereas it would be mostly distributed between 0.9 and 1.4 under the BCBS 2014 calibration of the SEC-IRBA approach.

Figure 27 Distribution of the ‘p’ parameter pre- and post- recalibration



Sources: ECB EDW and EBA calculations

The SEC-ERBA risk weight look-up table for long-term ratings has been adjusted for each rating grade by applying a predetermined scalar, determined relative to SEC-SA. The scalar – corresponding to the average risk weight reduction - was determined separately for each rating and maturity combination as the ratio of risk weights following the rescaling of the ‘p’ parameter under the SEC-SA and the risk weights pre-rescaling. The risk weights for non-senior tranches rated CCC+/CCC/CCC- and below, and for all unrated tranches, would remain at 1250% (i.e. they

would not be rescaled). The floor risk weight for senior qualifying tranches would be decreased for both 1-year and 5-year maturities. This would yield a 'qualifying' SEC-ERBA risk weight look-up table applicable to exposures determined to meet the criteria.

The ERBA table including re-calibrated risk weights for long-term ratings is shown below, where the risk weights in brackets reflect the original BCBS 2014 calibration, applicable under this proposal to non-qualifying securitisations.

Table 8 Proposed re-calibration of the SEC-ERBA risk weights for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets)

Long-term rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	10% (15%)	15% (20%)	15% (15%)	50% (70%)
AA+	10% (15%)	20% (30%)	15% (15%)	55% (90%)
AA	15% (25%)	25% (40%)	20% (30%)	75% (120%)
AA-	20% (30%)	30% (45%)	25% (40%)	90% (140%)
A+	25% (40%)	35% (50%)	40% (60%)	105% (160%)
A	35% (50%)	45% (65%)	55% (80%)	120% (180%)
A-	40% (60%)	45% (70%)	80% (120%)	140% (210%)
BBB+	55% (75%)	65% (90%)	120% (170%)	185% (260%)
BBB	65% (90%)	75% (105%)	155% (220%)	220% (310%)
BBB-	85% (120%)	100% (140%)	235% (330%)	300% (420%)
BB+	105% (140%)	120% (160%)	355% (470%)	440% (580%)
BB	120% (160%)	135% (180%)	470% (620%)	580% (760%)
BB-	150% (200%)	170% (225%)	570% (750%)	650% (860%)
B+	210% (250%)	235% (280%)	755% (900%)	800% (950%)
B	260% (310%)	285% (340%)	880% (1050%)	880% (1050%)
B-	320% (380)	355% (420%)	950% (1130%)	950% (1130%)
CCC+/CCC/CCC-	395% (460%)	430% (505%)	1250% (1250%)	1250% (1250%)
Below CCC-	1250% (1250%)	1250% (1250%)	1250% (1250%)	1250% (1250%)

The SEC-ERBA risk weight look-up table for short-term ratings has been adjusted for each rating grade in order to maintain consistency with the re-scaling proposed for the SEC-ERBA approach for long-term ratings. The 1250% requirements of the BCBS 2014 framework remain unchanged.

The ERBA table including re-calibrated risk weights for short-term ratings is shown below, where the risk weights in brackets reflect the original BCBS 2014 calibration, applicable under this proposal to non-qualifying securitisations.

Table 9 Proposed re-calibration of the SEC-ERBA risk weights for short-term ratings for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets)

Short-term rating	
A-1/P-1	10% (15%)
A-2/P-2	35% (50%)
A-3/P-3	70% (100%)
All other ratings	1250% (1250%)

Lastly, QIS analysis was carried out in order to assess the extent to which the 15% floor currently foreseen by the BCBS 2014 framework binds for senior tranches within the considered sample of EU transactions, leading to the following outcomes:

- 87% of the senior tranches hit the floor under the SEC-IRBA approach;
- 43% of the senior tranches hit the risk weight floor under the SEC-SA approach.

Despite the large amount of transactions affected by the proposed lowering of the risk weight floor for senior exposures, QIS analysis shows that the aggregate capital decrease resulting from the implementation of the risk weight floor change in isolation, i.e. not combined with the rescaling of the ‘p’ parameter, would be approximately equal to 4% under SEC-IRBA and 1% under SEC-SA. This is due to the fact that the senior tranches account for only a relatively small amount of the total capital charges of a securitisation transaction and thus a relative reduction in the capital charges for senior tranches has only a small overall impact on the total securitisation capital charges.

7. On the implementation of the ‘qualifying’ securitisation framework

The introduction of a ‘qualifying’ securitisation framework (‘the framework’), based on regulatory criteria and embedded within the regulatory bank capital framework, raises the question of which entity (or entities) should be responsible for determining and/or proving compliance of securitisation transactions with the framework, particularly with a view to ensuring its smooth implementation for investors, originators, competent authorities and other entities involved.

In developing recommendations and criteria for the framework proposed in this report, the EBA has given consideration to this aspect and the related industry feedback and proposals. While providing a conclusive recommendation on this fundamental issue would require further analysis, this report simply highlights for the Commission a list of relevant considerations that should be made when designing an implementation set-up for the proposed ‘qualifying’ securitisation framework.

To the extent possible, there should be an ex-ante determination of the compliance status as early as inception. At least six different settings could be envisaged for the determination of transactions’ compliance with the framework, as follows:

1. Each and every transaction is certified as compliant by an independent private third-party.
2. Each and every transaction is certified as compliant by a public authority/supervisor.
3. Each and every transaction is certified as compliant by originator institutions.
4. Each and every transaction is certified as compliant by investors.
5. The onus of determining and proving compliance is shared by originator institutions and investors.
6. Compliance is determined under some combination of settings (1) to (5) above, envisaging a role for all the entities mentioned therein.

The following implications should be considered:

- Any setting excluding a role for the investor in determining/attesting compliance is likely to lead to over-reliance by the investor on other parties’ attestations and certifications, potentially implying excessive risk-taking relative to the investor’s risk appetite and uninformed investment decisions. A lack of appropriate due diligence has already been observed in the history of some securitisation segments.

- Any setting excluding a role for the originator institution in determining compliance is likely to lead to a more burdensome implementation process, as originator institutions in most of the cases hold the information and data that are needed to determine compliance with the framework.
- Putting the onus of determining compliance exclusively on investors is likely to imply substantial effort, since other parties' contribution is necessary to determine compliance with most of the criteria. It is also likely to generate widespread uncertainty over whether a given securitisation is ultimately compliant or not, as different investors may have different assessments of a given transaction's compliance;
- Competent authorities should in any case be involved in the supervision of compliance, as they normally are whenever investors claim they can apply a given regulatory capital requirement to an investment instrument they hold. In addition, it may be useful to consider designing a system of penalty requirements for originators and investors if they do not fulfil the obligations attached to their eventual role in determining/attesting compliance of transactions with the framework.
- It should also be considered that the proper functioning of the new regulatory framework in the securitisation market, as well as the liquidity of the qualifying securitisations on the secondary market, given in particular the frequency with which issuance and investment decisions are normally taken, may be facilitated by envisaging some role for third parties. This role may extend to, inter alia, the monitoring of transactions' compliance with the requirements of the framework, through the publication of information on transactions' characteristics and compliance status, and the provision of the infrastructure needed to collect and process all the data and information that market participants will have to consider when assessing such compliance. Envisaging a similar role for third parties should not imply shifting the liability associated with non-compliance onto these parties. It appears important that, irrespective of the role that a third-party or parties may play in assisting issuers and investors to attest compliance with the qualifying framework, issuers and investors retain responsibility for the ultimate compliance with the criteria and, in the case of investors, carry out the appropriate due diligence analysis.

The eventual design of a compliance setting will have to strike the right balance between the objective of clearly defining the system of duties and obligations of investors and originators in determining/proving compliance, so as to ensure prudent and incentive-compatible implementation of the framework, with the need to provide securitisation markets with the means of achieving timely and un-controversial compliance determinations.

8. EBA Recommendations

SPECIAL CONSIDERATIONS

It should be noted that the recommendations provided in this report in relation to the implementation of a qualifying securitisation framework in Europe will have to be revisited depending on the progress and decisions taken by the Basel and IOSCO Committees on the definition of a simple transparent and comparable securitisations framework, at the global level, and the re-calibration of the BCBS 2014 securitisation framework to provide regulatory recognition to STC securitisations.

In particular:

- *The criteria proposed in this report for the definition of qualifying securitisations may have to be amended based on the final STC framework adopted at the global level.*
- *The parameter values chosen within the re-calibration proposals put forward in this report may have to be changed if global standard setters choose to implement equivalent re-calibration proposals. The parameters proposed in this report result from empirical analysis and QIS analysis carried out, for the most part, on European securitisation transactions and, as such, may be substantially different from the numbers that would result from a global application of the analysis.*

RECOMMENDATION 1: Recommendation for a holistic (cross-product and sector) review of the regulatory framework for securitisations and other investment products. Following the review, action should be taken where appropriate.

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

The risk exists that the extent of some of the differences between the regulatory treatment of 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 features of and requirements for the respective investment products.

Major differences in regulatory treatment clearly have an impact on the incentives to issue or invest in one instrument or the other and may 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) increased use of the

shadow banking system for funding, iii) an increased level of asset-encumbrance for credit institutions and iv) over-reliance on, and substantial exposures to, one investment product only.

With the increasing complexity of the regulatory framework investors, or example insurance companies, managers of UCITS or AIFs, banks or other regulated investors 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.

RECOMMENDATION 2: Recommendation to create a framework for ‘qualifying’ securitisations

A ‘qualifying’ securitisation framework should be defined in accordance with what can be called a two-stage approach, as follows:

- **Stage 1 – simple standard and transparent securitisations (SST) should be identified:** *Criteria defining SST securitisation processes/structures should ensure that the securitisation process does not add ‘excessive’ additional risk and complexity on top of the credit risk of the assets being securitised: this process should be fully transparent to investors, should not embed excessive leverage, should not engage in excessive maturity transformation and should provide all the entities involved with the right incentives, not to replicate the so called ‘originate-to-distribute’ model observed in the run-up to the crisis.*
- **Stage 2 – SST ‘qualifying’ for lower capital requirements:** *Criteria aimed at limiting the credit risk of the exposures to be securitised should be fulfilled, in addition to the requirements of the SST framework, in order to consider a given securitisation instrument qualifying for a differentiated (lower) capital treatment. Credit risk criteria on the underlying exposures are needed to prevent very risky/volatile assets (e.g. sub-prime mortgage loans) from entering an SST securitisation structure. Risky/volatile assets could sensibly increase the uncertainty and margin of error of the credit tranching and repackaging process, resulting in overall riskier securitisation investments.*

Figure 15, in the report, summarises the proposed two-stage approach to qualifying securitisation.

Rationale

Simple, standard and transparent securitisations should:

- i) raise the minimum standards for securitisations transactions and lead to more

standardised products and harmonised practices in the securitisation market;

- ii) contribute to the re-establishment of investors' confidence in the securitisation instrument and, potentially, contribute to broadening the investor base for securitisations;
- iii) pave the way to a more risk-sensitive regulatory framework that can differentiate between different securitisation products with different risks and historical performance.

Qualifying securitisations, recognised within the regulatory capital framework, will enhance the sensitivity of capital requirements applicable to securitisation positions and will maintain a risk-based regulatory playing field for securitisation products vis-à-vis comparable financial instruments.

In addition, a two-stage approach to defining qualifying securitisations lends itself to extending the 'qualifying' concept to chapters of prudential regulation other than bank capital requirements. The first stage of the framework, i.e. the identification of SST securitisations, could in fact easily form the basis for a common definition across regulatory chapters on securitisation, ranging from bank capital requirements to banks' liquidity requirements and insurance companies' capital requirements and, where necessary, other regulations. The second stage which, in the case of bank capital regulation, takes the form of credit risk criteria on the underlying exposures, could instead include different sector-specific requirements needed to determine eligibility for a 'qualifying' regulatory treatment related to the type of prudential regulation under consideration, i.e. liquidity regulation, insurance capital regulation, etc.

Such a cross-sectoral implementation of the SST criteria and the two-stage approach should be taken into consideration in order to simplify and streamline the regulatory treatment of securitisations across prudential regulations.

RECOMMENDATION 3: Recommendation on criteria defining 'qualifying' term securitisations

Simple, Standard and Transparent (SST) term securitisations should be defined by means of criteria as defined under pillars I, II and III in section 5.3 of this report.

Minimum credit quality of underlying exposures within 'qualifying' term securitisation transactions should be defined by means of criteria as defined under Stage 2 in section 5.3 of the report.

The criteria proposed in this report apply to traditional term securitisations; synthetic term securitisations, while meeting the CRR definition of securitisation, are out of the scope of the criteria proposed in this report as features of simplicity, standardisation and transparency of such instruments cannot be appropriately considered on the basis of the criteria applicable to traditional securitisations.

In the context of Criterion 7 (Pillar II, below) it is considered essential that the effectiveness of EU retention rules, particularly with respect to issues related to the definition of 'originator', be re-considered in line with the EBA advice on EU retention rules included in the EBA report published in December 2014.

It should be noted that the maximum risk weight requirements proposed under Stage 2 on the

credit quality of the underlying exposures are based on the currently applicable standardised approach to credit risk provided for in the CRR; these requirements should be reviewed as the Basel reform of the standardised approach is finalised and implemented.

Rationale

SST criteria 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 recourse to leverage, iii) the exposure of investors to substantial refinancing risk and iv) the lack of transparency.

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, limited re-financing risk and liquidation risk, disclosure of data on underlying exposures at 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.

In order to ensure that the pool of underlying exposures meets standards of minimum credit quality it is necessary to make sure that: i) the loans from which the exposures arise are underwritten in accordance with standards recognised by EU prudential regulation as prudent; ii) the pool of underlying exposures itself is not characterised by excessive concentration, whereby the credit quality of the exposures towards a specific obligor would drive the credit quality of the whole pool of exposures exposing the securitisation investment to excessive idiosyncratic risk; iii) the maximum riskiness of each underlying exposure is capped through the backstop measure of the maximum risk weight. The latter is important to ensure the minimum credit quality of all underlying exposures under all those aspects that cannot be captured by underwriting standards. It is particularly relevant for those types of underlying exposures whose underwriting process is less regulated and standardised and hence more difficult to control by means of qualitative criteria.

RECOMMENDATION 4: Recommendation on criteria defining ‘qualifying’ ABCP securitisations

‘Qualifying’ ABCP securitisations should be defined by means of the criteria presented in section 5.6.1 of this report.

‘Qualifying’ ABCP programmes should be defined by means of the criteria presented in section 5.6.2 of this report.

Rationale

Securitisation in the context of ABCP programmes has many common features with term securitisation, which justifies using a two-stage approach based on very similar regulatory criteria.

However, the 'qualifying' framework for securitisations in the context of ABCP programmes should recognise many specific characteristics of the ABCP segment, including:

- the possibility of becoming exposed to an ABCP securitisation either at the transaction level or at the programme level, for which different sets of requirements ought to be envisaged;
- the existence of multi-seller programmes, where several different 'non-regulated' corporate entities sell exposures into a conduit;
- the existence of full support liquidity facilities provided by credit institutions to the benefit of investors in ABCP programmes;
- the capped maturity of the liability issued by the ABCP conduit (as per CRR) and the maturity transformation activity embedded in the ABCP assets and liabilities structure.

The differences mentioned justify designing a 'qualifying' framework that uses, as a basis, the criteria for qualifying term securitisations while distinguishing qualifying exposures at the ABCP transaction level from qualifying exposures at the ABCP conduit level and adjusting the criteria, where appropriate, to recognise technical specific characteristics of the securitisation mechanism in the context of ABCPs.

RECOMMENDATION 5: Recommendation on the re-calibration of the BCBS 2014 framework applicable to 'qualifying' securitisation positions

Capital requirements for 'qualifying' securitisation positions should be re-calibrated downwards in a consistent fashion across the hierarchy of approaches foreseen by the BCBS 2014 securitisation framework, i.e. the Internal ratings based approach (SEC-IRBA), the external ratings-based approach (SEC-ERBA) and the standardised approach (SE-SA). The re-calibration proposals are summarised in Table 10 below. Specific re-calibrations of the SEC-ERBA for both long-term and short-term ratings are reported in Table 11 and Table 12 below.

Rationale

- The re-calibration should, to the extent possible, maintain the consistency of capital charges applicable across the BCBS 2014 hierarchy of approaches to minimise potential distortions of regulatory incentives: re-scaling the supervisory 'p' parameter was considered as striking the best balance between ensuring a clear and transparent implementation of the adjustment and avoiding unintended distortions. Re-scaling the SEC-ERBA approach for both short-term and long-term ratings on the basis of the SEC-IRBA and SEC-SA re-calibrations was also deemed the best option to maintain the consistency of the resulting capital charges along the hierarchy.
- The prudential floor of 0.3 for the supervisory 'p' parameter was maintained as in the original BCBS 2014 framework so as to ensure, following the re-calibration, a minimum prudential capital surcharge on the securitisation, hence recognising that full neutrality of securitisation capital charges is neither desirable nor prudent. Also for prudential reasons the re-calibration across approaches has not modified any of the 1250% risk weighting requirements foreseen by the original BCBS 2014 framework, recognising that such requirements apply to conditions of relatively higher risk attached to the tranche;
- The 10% value chosen for the risk weight floor applicable to senior tranches has been

chosen to recognise a materially better historical performance of qualifying senior tranches with respect to non-senior qualifying tranches, while maintaining a level of capital that more than covers historical losses of qualifying senior tranches;

- The overall re-calibration across approaches recognises that qualifying securitisation transactions are expected to be relatively less risky across the capital structure but maintains regulatory capital on levels of non-neutrality that are, as evidenced by impact assessment analysis, comfortably higher than the minimum levels foreseen by the BCBS 2014 original framework.

Table 10 Recalibration proposals applicable to ‘qualifying’ securitisations

BCBS 2014 Framework	Re-calibration proposal
SEC-IRBA	The ‘p’ parameter is re-scaled by a factor of 0.5 while preserving the prudential 0.3 floor value: $P_{\text{qualifying}} = \max[0.3; 0.5 \times (A+B * (1/N)+C*Kirb+D*LGD+E*Mt)].$
SEC-SA	The supervisory parameter p is rescaled from 1 to 0.5.
SEC-ERBA (long-term ratings)	Risk weights of the ERBA look-up table for each long-term rating grade are re-scaled to keep consistency with the re-scaled average risk weights in the SEC-SA approach resulting from the proposal above. The 1250% requirements of the BCBS 2014 framework remain unchanged (see below).
SEC-ERBA (short-term ratings)	Risk weights of the ERBA look-up table for each short-term rating grade are re-scaled to keep consistency with re-scaling proposed for the SEC-ERBA approach for long-term ratings. The 1250% requirements of the BCBS 2014 framework remain unchanged (see below).
Risk weight floor	For <u>senior</u> qualifying tranches only: SEC-IRBA and SEC-SA: the risk weight floor is lowered from 15% to 10% SEC-ERBA: the one-year and five-year risk weight floors are reduced from 15% to 10% and from 20% to 15%, respectively.

Table 11 Proposed re-calibration of the SEC-ERBA risk weights for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets)

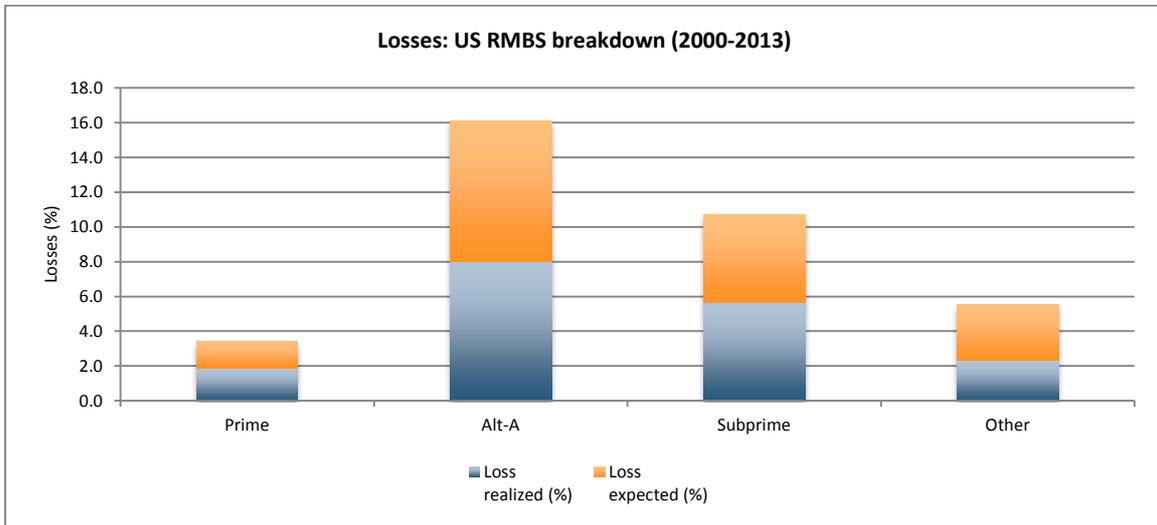
Long-term rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	10% (15%)	15% (20%)	15% (15%)	50% (70%)
AA+	10% (15%)	20% (30%)	15% (15%)	55% (90%)
AA	15% (25%)	25% (40%)	20% (30%)	75% (120%)
AA–	20% (30%)	30% (45%)	25% (40%)	90% (140%)
A+	25% (40%)	35% (50%)	40% (60%)	105% (160%)
A	35% (50%)	45% (65%)	55% (80%)	120% (180%)
A–	40% (60%)	45% (70%)	80% (120%)	140% (210%)
BBB+	55% (75%)	65% (90%)	120% (170%)	185% (260%)
BBB	65% (90%)	75% (105%)	155% (220%)	220% (310%)
BBB–	85% (120%)	100% (140%)	235% (330%)	300% (420%)
BB+	105% (140%)	120% (160%)	355% (470%)	440% (580%)
BB	120% (160%)	135% (180%)	470% (620%)	580% (760%)
BB–	150% (200%)	170% (225%)	570% (750%)	650% (860%)
B+	210% (250%)	235% (280%)	755% (900%)	800% (950%)
B	260% (310%)	285% (340%)	880% (1050%)	880% (1050%)
B–	320% (380)	355% (420%)	950% (1130%)	950% (1130%)
CCC+/CCC/CCC–	395% (460%)	430% (505%)	1250% (1250%)	1250% (1250%)
Below CCC–	1250% (1250%)	1250% (1250%)	1250% (1250%)	1250% (1250%)

Table 12 Proposed re-calibration of the SEC-ERBA risk weights for short-term ratings for ‘qualifying’ transactions (original BCBS 2014 risk weights in brackets)

Short-term rating	
A-1/P-1	10% (15%)
A-2/P-2	35% (50%)
A-3/P-3	70% (100%)
All other ratings	1250% (1250%)

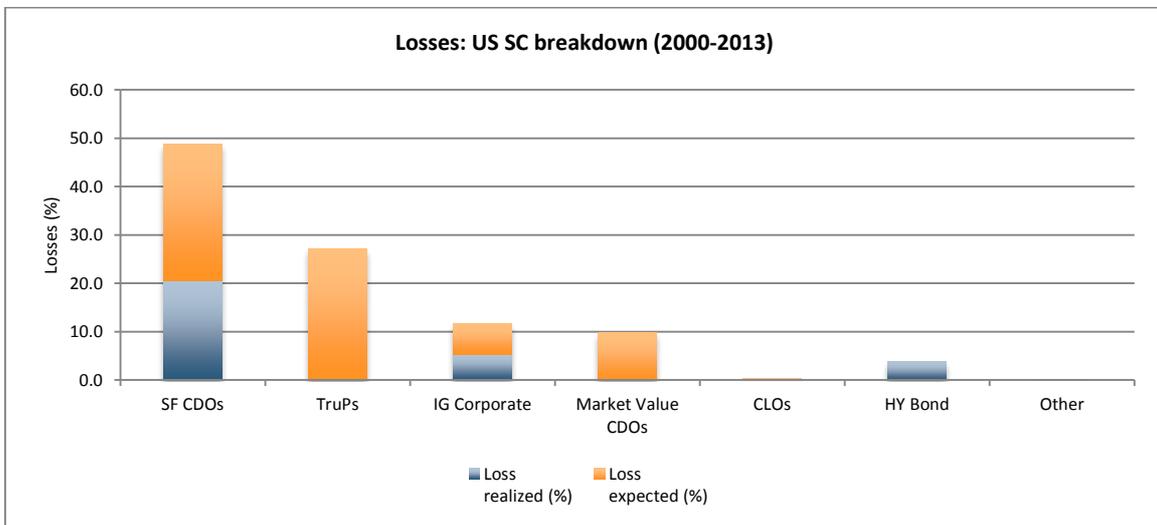
9. Annex

Figure 28 Realised and expected losses: US RMBS breakdown



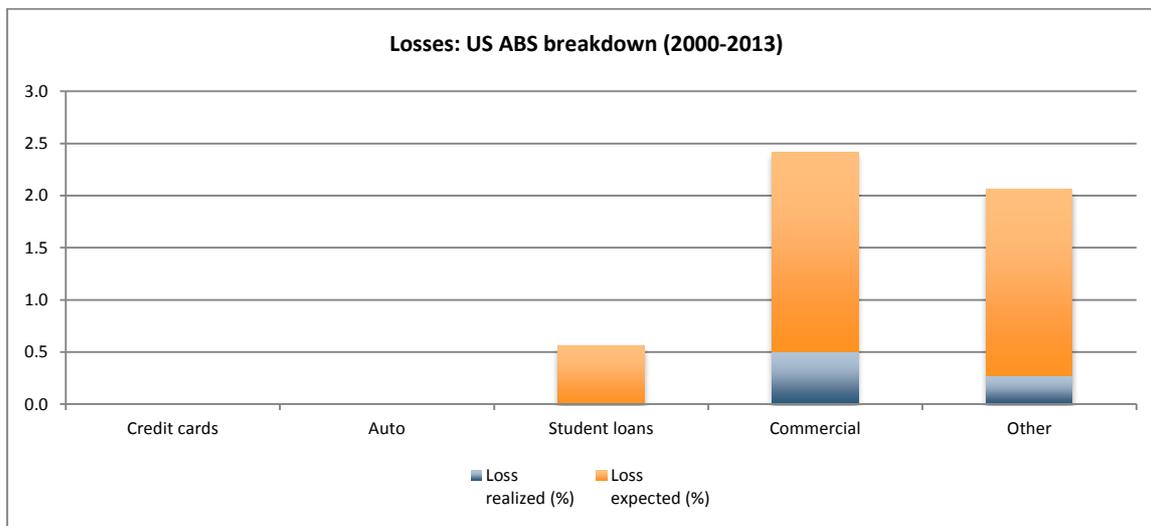
Sources: Fitch

Figure 29 Realised and expected losses: US structured credit (SC) breakdown



Sources: Fitch

Figure 30 Realised and expected losses: US ABS breakdown (source Fitch)



Sources: Fitch

Box 2 Different types of ABCP conduits

Securities Arbitrage Conduits and Hybrid Conduits: The so-called ‘structured investment vehicles’ (SIVs), ‘credit arbitrage conduits’ and ‘hybrid conduits’ are conduits that were exclusively (SIVs and arbitrage) or partially (hybrid) set up by banks in order to finance the purchase of highly rated securities (typically AAA or AA), including bonds and ABS securities, in an off-balance-sheet fashion, i.e. via the issuance by the conduit of short dated maturity commercial paper, so as to achieve lower regulatory capital costs and collect the spread wedge between long-date assets and short-dated liabilities. Due to the high rating of the financed securities, the sponsor banks did not use to provide conduits with material levels of credit enhancement. SIVs are market value programmes that purchase highly-rated securities (ABS, corporate debt) and seek to benefit from spread differentials between longer maturity assets and short-term funding. Credit arbitrage conduits expose investors to the credit risk of the purchased securities, rather than to the market risk.

Single-seller and Multi-seller conduits: A single-seller conduit is a limited-purpose, bankruptcy-remote vehicle that provides funding to a single seller in exchange for interests in its pool of receivables. In the case of multi-seller conduits, several disconnected sellers/originators transfer different pools of assets into a given conduit that finances them through the issuance of commercial paper. Both single- and multi-seller conduits typically finance real-economy-related exposures, such as auto loans and leases, trade and consumer receivables, as well as, less often, mortgage loans. ABCP conduits are in some circumstances used as temporary warehousing vehicles, i.e. they temporarily re-finance exposures which are then transferred to the term securitisation (ABS) market. Multi-seller conduits are often sponsored by large commercial banks and typically provide financing to those banks’ corporate clients.

Repo conduits: Repo conduits issue commercial paper that is secured against, and has the same maturity of, collateral provided by highly rated credit institutions, including bonds, equities and whole loans.

Table 13 Asset split by asset type – Multi-seller portfolios (EMEA, Q4 2014, million USD)

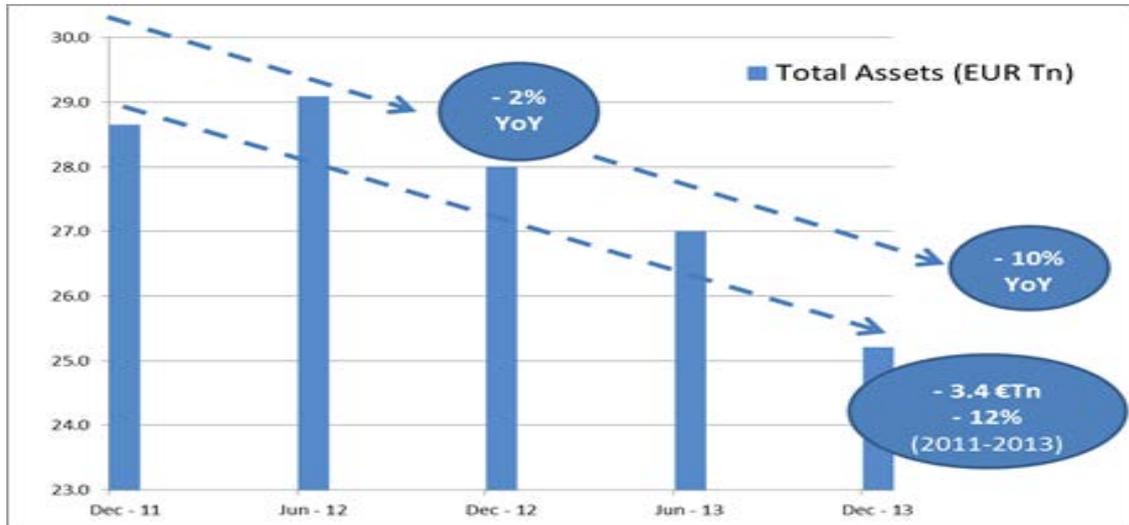
Asset Type	Amount in Q4	% of Total
Trade Receivables	35729	51.9%
Auto Loans	9639	14.0%
Auto Leases	8466	12.3%
Consumer Loans	3625	5.3%
Equipment Leases	2432	3.5%
Floorplan financed	1960	2.8%
Insurance Premiums	1648	2.4%
Credit card receivables	1446	2.1%
Residential Mortgage Loans	960	1.4%
Other	661	1.0%
Future Flow	545	0.8%
Commercial loans	497	0.7%
Commercial leases	495	0.7%
Leverage Fund	365	0.5%
CBO & CLO	361	0.5%
Commercial mortgage loans	24	0.0%

Sources: Moody's investor services

Figure 31 De-risking process – risk-weighted assets

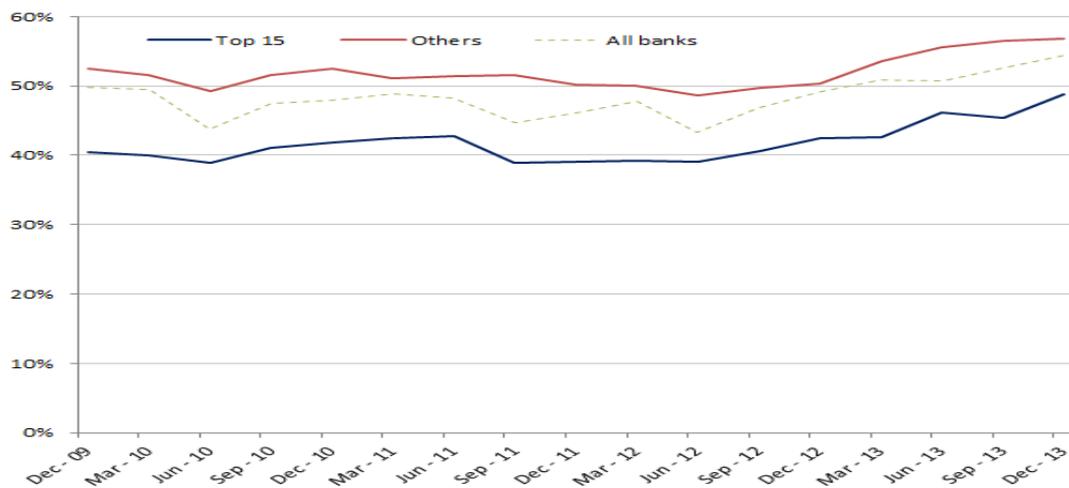
Sources: EBA Risk Assessment Report, 55 EU banks.

Figure 32 De-leveraging process – total assets



Sources: EBA Risk Assessment Report, 55 EU banks.

Figure 33 Customer deposits to total liabilities



Sources: EBA risk dashboard – data Q1 2014.

Box 3 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 tranching, 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 exposures being securitised remain exposures of the originator institution

Box 4 Methodology behind the computation of IRB capital charges

Methodology behind the computation of IRB capital charges in Table 4 and Table 5 in section 4.2

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 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 14 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 to issuers rated 'A-' or 'A+' as well. 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 15 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 15 in this annex);

Table 14 Rating agency cumulative one-year default rates (%)

	S&P (1981-2010)	Moody's (1983-2010)
AAA/Aaa	0	0
AA/Aa	0.02	0.02
A/A	0.08	0.06
BBB/Baa	0.25	0.2
BB/Ba	0.95	1.2

Table 15 PD and LGD data used for the computation of foundation IRB capital charges in accordance with the CRR

Residential mortgages			Retail SME			Qualifying revolving			Corporates (non-SME)		
(*)	PD	LGD	(*)	PD	LGD		PD	LGD		PD	LGD
1st Q	2.17%	15.29%	1st Q	4.69%	35.04%	1st Q	4.18%	63.69%	1st Q	2.38%	34.95%
Median	1.52%	13.30%	Median	3.70%	20.95%	W. Ave	2.31%	66.07%	W. Ave	1.88%	28.61%
3rd Q	0.91%	11.05%	3rd Q	2.51%	26.81%	3rd Q	1.37%	45.38%	3rd Q	0.64%	23.45%

(*) Source: EBA Third interim report on the consistency of risk weighted assets (published in December 2013 – cut-off date Dec 2012);

(**) Source: EBA risk Dash Board Q1 2014.

Table 16 Average capital structures representative of the RMBS issuance standards pre- and post-2010⁵⁹

Pre-2010					Post-2010				
	A point	D point	Thickness			A point	D point	Thickness	
AAA/AA	11.75%	100.00%	88.25%	Senior	AAA/AA	13.00%	100.00%	87.00%	Senior
A	4.50%	11.75%	7.25%	Non-Senior	A	10.80%	13.00%	2.20%	Non-Senior
BBB	1.95%	4.50%	2.55%	Non-Senior	BBB	5.70%	10.80%	5.10%	Non-Senior
BB	1.25%	1.95%	0.70%	Non-Senior	BB	4.50%	5.70%	1.20%	Non-Senior
B	0.50%	1.25%	0.75%	Non-Senior	B	/			Non-Senior
First Loss	0.00%	0.50%	0.50%		First Loss	0.00%	4.50%	4.50%	Non-Senior

Sources: S&P and EBA calculations

⁵⁹ 'A point' stands for attachment point. 'D point' stands for detachment point.

Box 6 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 categorised 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 categories⁶⁰. 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 rating⁶¹, replacement commitments⁶², and remedy periods⁶³. 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 investment instruments in which cash on the issuer account bank can be invested, whereas the other CRAs provide less detail⁶⁴.

Box 7 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 categorised 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 categories⁶⁵. 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 rating⁶⁶, replacement commitments⁶⁷, and remedy periods⁶⁸. 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

⁶⁰ Including bank accounts, liquidity facility providers, commingling risk, guarantors, and derivative providers.

⁶¹ For instance, for a bank account provider with 'limited' exposure, the minimum eligible counterparty rating corresponding to a 'AAA' maximum potential rating on supported security is 'A'.

⁶² A bank account provider that commits to replacing itself with an eligible counterparty within the remedy period will enable a supported security to achieve the maximum potential rating.

⁶³ From the date that the rating on the 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.

⁶⁴ 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.

⁶⁵ Including bank accounts, liquidity facility providers, commingling risk, guarantors, and derivative providers.

⁶⁶ 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'.

⁶⁷ A bank account provider that commits to replacing itself with an eligible counterparty within the remedy period will enable a supported security to achieve the maximum potential rating.

⁶⁸ From the date that the rating on the 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.

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.⁶⁹

Table 17 SME CLOs representative capital structures per jurisdiction - tranche thickness

	BE/DE	NL/UK	IT	ES
AAAsf	72.5%	67.5%		
AAsf	6.0%	8.0%	55.0%	51.5%
Asf	4.0%	7.0%	10.0%	11.0%
BBBsf	5.0%	5.0%	10.0%	10.0%
BBsf	5.0%	3.5%	7.5%	7.5%
Bsf	5.0%	2.5%	5.0%	6.5%
First Loss	2.5%	6.5%	12.5%	13.5%

Sources: Fitch Ratings

Table 18 Retail securitisation: representative capital structures per jurisdiction - tranche thickness

	Auto UK	Auto Non-UK	Unsecured	Credit Card
AAAsf	80.0%	88.0%	70.0%	85.0%
AAsf	4.0%	2.0%	5.0%	3.0%
Asf	4.0%	2.5%	5.0%	2.0%
BBBsf	4.0%	2.0%	6.0%	3.0%
BBsf	2.0%	1.5%	5.0%	2.5%
Bsf	2.0%	1.5%	3.0%	1.5%
First Loss	4.0%	2.5%	6.0%	3.0%

Sources: Fitch Ratings

Table 19 Prime RMBS representative capital structures per jurisdiction - tranche thickness

	Spain	Portugal	UK
AAAsf	0	0	87.7%
AAsf	78.6%	0	2.5%
Asf	4.0%	84.0%	2.3%
BBBsf	2.7%	2.2%	1.6%
BBsf	2.5%	2.5%	2.9%
Bsf	7.2%	6.4%	
First loss	5.0%	5.0%	3.0%

Sources: Fitch Ratings

⁶⁹ 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.

Table 20 PD and LGD median values – per asset class / jurisdiction

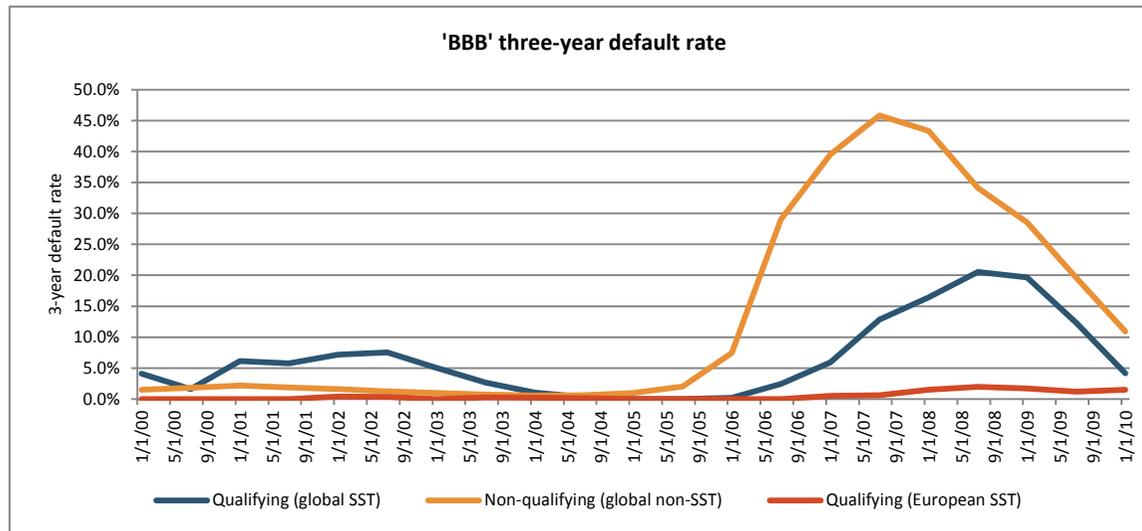
Retail: Residential mortgages (median values)			Retail: SME (median values)			Retail: Unsecured and auto loans (average values)			Retail: credit cards (average values)		
	PD	LGD		PD	LGD		PD	LGD		PD	LGD
ES	2.03%	13.03%	BE	3.23%	21.85%	EU	3.20%	31.60%	EU	2.30%	66.10%
PT	2.16%	17.70%	DE	3.65%	19.64%	UK	3.80%	60.00%	UK	2.00%	75.80%
UK	1.17%	11.37%	ES	5.08%	22.20%						
			IT	4.23%	25.87%						
			NL	2.50%	45.36%						
			UK	3.15%	38.03%						

Sources: EBA TCOR report and EBA risk dashboard.

Table 21 Historical default rate analysis based on CEREP – description of the samples

Label	CEREP asset classes	Jurisdictions
Qualifying (Global SST)	Prime RMBS, ABS Auto, ABS Credit Cards, ABS other	EU, US, Asia
Qualifying (EU SST)	Prime RMBS, ABS Auto, ABS Credit Cards, ABS other	EU
Non-qualifying (Global non-SST)	All others	EU, US, Asia

Figure 34 Historical three-year default rate performance according to asset class partition: qualifying vs. other – BBB rating



Sources: CEREP dataset and EBA calculations

Table 22 descriptions of the INTEX and FITCH samples of tranches used for the analysis in Figure 23

	INTEX sample	FITCH sample
Time coverage	All deals since Jan 2000 / losses as of 3/31/2015	2000-2014
Asset Classes	RMBS, CMBS, Auto loans/leases, Equipment leases	Consumer ABS, Commercial ABS, RMBS, CMBS, Structured Credit
Jurisdictions	EU, US, JP, AU, Other (90% US tranches, approximately 7% EU tranches)	EMEA Region
Tranches included	<p>All that meet the following criteria:</p> <ul style="list-style-type: none"> i) issued after 1 Jan 2000; ii) not considered an equity tranche, initial reported AP>1, supported by at least another tranche; iii) Reported original attachment point, AP, is within valid range, i.e. $1 < AP < 100$; iv) Reported original detachment point, DP, is within valid range, i.e. $0 < DP < = 125$; v) $AP < DP$; vi) Have an initial rating; 	Fitch internal criteria
SST designation	<ul style="list-style-type: none"> • RMBS - designated SST if collateral type is prime mortgage; • CMBS - all bonds are designated Non-SST; • US ABS - designated SST if issuer is considered a captive issuer; • Non US Auto Loans - designated Non-SST if collateral type is subprime (currently no non-US deals are listed as subprime); • Non US Equipment - all bonds are designated SST 	<p>SST:</p> <ul style="list-style-type: none"> • Prime RMBS • All ABS <p>Non-SST:</p> <ul style="list-style-type: none"> • CMBS • Structured Credit
Total notional	DOL 8966 bn	EUR 3075 bn

Sources: EDW/ECB

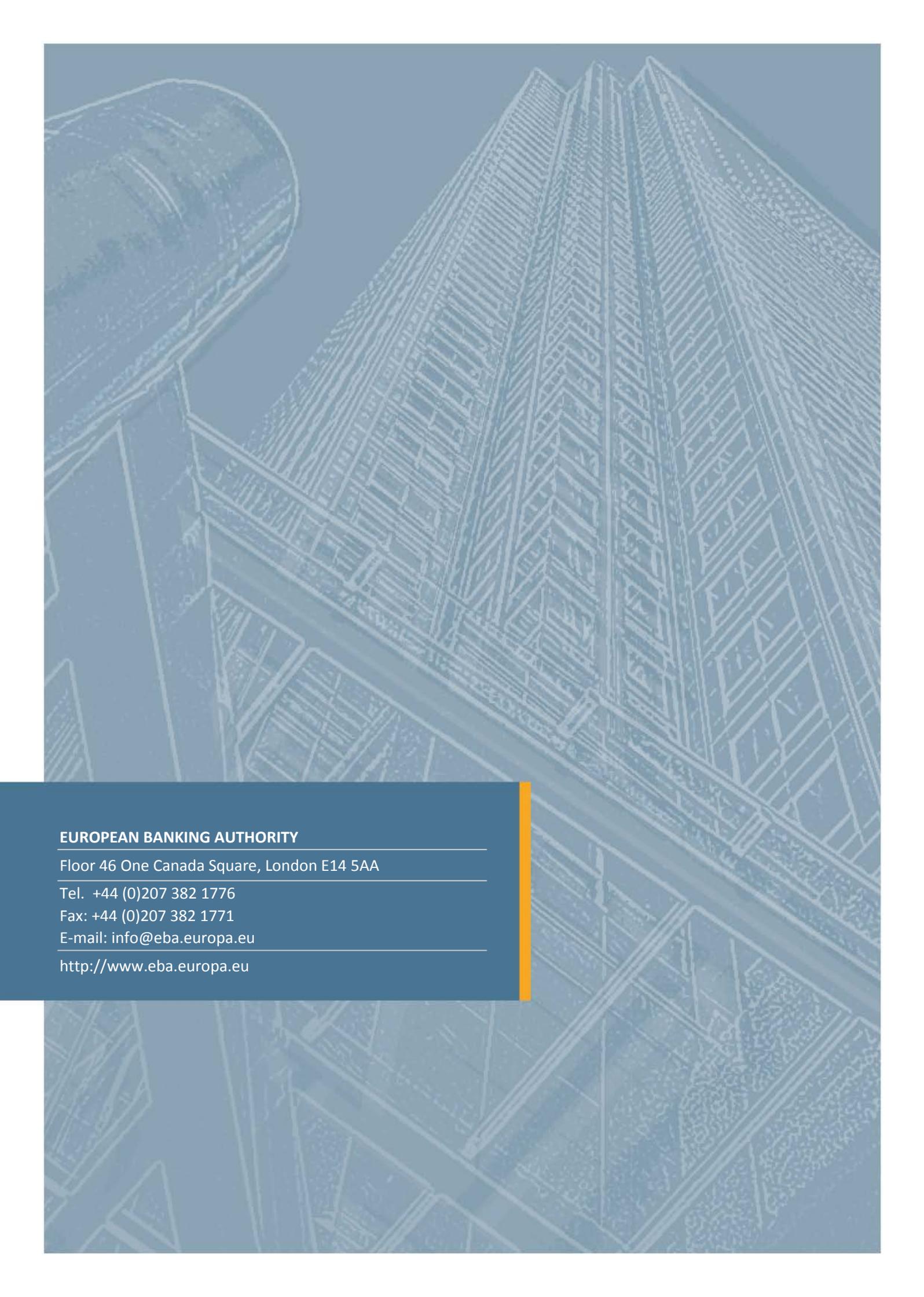
Table 23 EDW sample used for the QIS analysis presented in Chapter 6: number of tranches and size by seniority and jurisdiction

Number of tranches										
	BE	DE	ES	FR	IT	NL	PT	IE	UK	Grand Total
Senior	12	69	244	19	152	152	21	30	104	803
Mezzanine	11	4	310	3	62	157	53	7	18	625
First Loss	9	54	215	11	216	78	21	15	38	657
Grand Total	32	127	769	33	430	387	95	52	160	2085

Size (EUR)										
	BE	DE	ES	FR	IT	NL	PT	IE	UK	Grand Total
Senior	28,011,330,935	24,743,156,900	105,598,137,638	8,081,441,871	62,674,279,537	109,973,152,064	13,235,743,147	16,640,331,616	42,401,781,552	411,359,355,259
Mezzanine	3,634,500,000	78,900,000	14,714,930,029	80,000,000	6,602,362,554	7,545,836,758	3,483,159,026	2,426,152,042	2,819,962,588	41,385,802,997
First Loss	4,632,796,746	7,744,551,557	17,202,421,318	540,827,726	21,025,493,771	7,296,116,821	606,447,654	5,940,224,756	11,391,624,251	76,380,504,600
Grand Total	36,278,627,681	32,566,608,457	137,515,488,985	8,702,269,597	90,302,135,862	124,815,105,642	17,325,349,827	25,006,708,414	56,613,368,391	529,125,662,856

Table 24 EDW sample used for the QIS analysis presented in Chapter 6: number of tranches and notional by asset class

Capital charges, by rating category	No tranches	Notional (EUR bn)
SME	349	66.1
RMBS	1537	415.3
Auto	199	47.7
Total	2085	529.1



EUROPEAN BANKING AUTHORITY

Floor 46 One Canada Square, London E14 5AA

Tel. +44 (0)207 382 1776

Fax: +44 (0)207 382 1771

E-mail: info@eba.europa.eu

<http://www.eba.europa.eu>