EBA EUROPEAN BANKING AUTHORITY

eiopa European Insurance and Occupational Pensions Authority

esma European Securities and Markets Authority

JOINT COMMITTEE OF THE EUROPEAN SUPERVISORY AUTHORITIES

JOINT COMMITTEE ADVICE ON THE REVIEW OF THE SECURITISATION PRUDENTIAL FRAMEWORK (BANKING)

RESPONSE TO THE COMMISSION'S OCTOBER 2021 CALL FOR ADVICE TO THE JC OF THE ESAS – JC 2022 66

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Abbreviations

ABS	Asset-backed security
ARW	Average risk weight
BCBS	Basel Committee on Banking Supervision
CB	Covered bonds
CfA	Call for Advice
CMBS	Commercial mortgage-backed security
CMRP	Capital Markets Recovery Package including (EU) 2021/557 and EU 2021/558
CMU	capital markets union
CQS1	Credit quality step 1
CRR	Capital Requirements Regulation EU 575/2013
EDW	European Data Warehouse
ESAs	European supervisory authorities
GFC	Global financial crisis of 2007-2008
HQLA	High-quality liquid asset
IAA	Internal Assessment Approach
IRB	Internal ratings-based
JC	Joint Committee
LCR	Liquidity Coverage Ratio
NPE	Non-performing exposures
RMBS	Residential mortgage-backed security
RTS	Regulatory technical standards
RW	Risk weight
RWEA	Risk weighted exposure amount
SA	Standardised approach
SCRAs	Specific credit risk adjustments
SECR	Securitisation Regulation (EU) 2017/2402

SES	Synthetic excess spread
SPV	Special purpose vehicle
SSPE	Securitisation special purpose entity
STS	Simple, transparent and standardised

Executive summary

Securitisation has played a limited role in Europe since the aftermath of the global financial crisis of 2008 (GFC). The European securitisation market is smaller but of a higher quality than pre-crisis due to a number of regulatory changes made by co-legislators in response to the GFC.[1] While the pre-crisis levels were unhealthy and unsustainable and do not serve as a benchmark to be targeted, the development of the market following the introduction of the STS framework has been limited compared to the original objectives to generate between EUR 100-150bn in additional funding for the economy. One of the main priorities of the EU capital markets union is hence the revival of the EU securitisation market to improve the financing of the EU economy. Consequently, many actions have been launched, including different regulatory products from the EBA. Good examples are the extension of the STS framework to on-balance sheet securitisation and the recent report on sustainable securitisation[2].

In this context the European Commission has addressed a call for advice (CfA) to the Joint Committee (JC) of the European Supervisory Authorities (ESAs) for the review of the prudential treatment of securitisation. The CfA seeks the JC's assessment the performance of the capital requirements for institutions and insurance undertakings and the liquidity requirements for institutions compared with the framework's original objective of contributing to the sound revival of the EU securitisation market on a prudent basis.

The JC welcomes the opportunity given by the Commission to assess the capital and liquidity framework for institutions and has thoroughly reviewed the specific points on which the Commission has requested feedback.

At this stage the JC considers that re-calibrating the securitisation prudential framework for institutions would not be a solution, which alone would ensure the revival of the securitisation market. While the treatment of securitisation in the capital and liquidity framework may play a role, the prudential framework is not, in itself, the key obstacle to the revival of the securitisation market. A holistic assessment shows that the current subdued status of the securitisation market is the result of an interplay of a series of factors, including the interplay between low supply and low demand, due to a lack of inherent interest from both sides.

This lack of interest for parties is closely linked. On the one hand, investors perceive securitisation as a complex product with extensive due diligence requirements. On the other hand, originators have had access to cheaper alternative source of funding and had faced a limited investor base. In

[1] These are for example: a) the ban on resecuritisations (Article 8 SECR), b) the ban of originate-to-distribute securitisations (Article 9 SECR), c) the ban on securitisations without risk retention (Article 6 SECR), d) the ban on investments in securitisations without proper due diligence (Article 5 SECR), e) the push back on opaque and intransparent securitisations (Article 7 SECR), f) the introduction of requirements on significant risk transfer (Articles 244 and 245 CRR), g) the restrictions on investments by retail clients (Article 2 SECR) and h) the introduction of geographical requirements for SSPEs (Article 4 SECR).

[2] EBA/REP/2022/06.

this context, when assessing the effectiveness of any change in the capital framework it should be taken into consideration that investor demand may remain an issue in the foreseeable future.

However, the JC acknowledges that the capital framework may play a more important role in the significant risk transfer (SRT) market where investors demand seems less of an issue. The SRT market is a different and better regulated compared with the period before the GFC. Recently, this market has shown positive trends reflecting the trust from market participants, at least in part due to recent regulatory actions. Against this background, the JC advices to improve risk sensitivity in the capital prudential framework by acknowledging the reduction in model and agency risk associated to originators retaining senior securitisation tranches since the introduction of the new securitisation framework in EU. This improvement is achieved by recommending reducing the risk weight floor applicable to senior tranches retained by originators. The JC considers that this measure, if accompanied by appropriate safeguards, may support further growth in the SRT segment in a prudent manner. This would, in particular, promote the issuance of resilient securitisations, which qualify for a more beneficial capital treatment, without jeopardising financial stability.

The boost that may come from this targeted relaxation of the capital requirement is, however, quite limited when looking at the securitisation market as a whole, especially when compared to the boost that may come from the funding argument in a different monetary policy environment. Another area for improvement is the revision of the transparency and due diligence requirements, which are more restrictive for securitisations compared with other asset classes and seem to make securitisation a relatively costly investment. The JC therefore considers that further efforts in this area may be warranted.

The EBA has also considered whether more fundamental changes could be made to the securitisation risk weight formulas that underpin the capital framework for securitisation. At this stage, the JC would not support changes to the EU framework unilaterally. However, the EBA takes note that it is possible to increase the risk sensitivity of the framework, but this would require a more fundamental and comprehensive review before conclusive opinions can be formed. Moreover, the EBA supports to bring these considerations to the Basel Committee of Banking Supervision (BCBS) as appropriate.

As a part to the response to the CfA, the JC also suggests a set of fixes to the capital framework for institutions aimed at clarifying existing requirements, removing some inconsistencies and improving the risk sensitivity in the framework. Finally, some areas are pointed out where clarification by the Commission is welcome.

With regards to the liquidity framework, the JC considers that the current framework should be kept unchanged. Since the inception of the liquidity coverage ratio (LCR) the share of securitisations, including STS securitisations, in the LCR stress buffers has been negligible. This, in combination with LCR levels well above the minimum regulatory requirements, indicates that credit institutions do not rely on securitisations to face liquidity stress periods. Moreover, there is no new evidence on performance under a LCR stressed scenario, including the period covering the COVID-

19 pandemic, to justify any prudent recalibration of the LCR with regard to treatment of securitisation positions.

Introduction

1.1 The Commission's call for advice

As part of the capital markets union (CMU) action plan the Commission is currently engaged in a process of reviewing the EU securitisation framework. As a part of this work, the Commission should submit a report to the co-legislators under Article 519a of Regulation (EU) No 575/2013, i.e. the Capital Requirements Regulation (CRR)[3], and where appropriate, submit a legislative proposal jointly, on the application of selected provisions in Chapter 5 of Part Three Title II of the CRR in the light of developments in securitisation markets.

As part of this work, the ESAs have received a call for advice that seeks input and technical guidance for the review of the prudential treatment of securitisation. The Commission has addressed a call for advice (CfA) to the the Joint Committee (JC) of the European Supervisory Authorities (ESAs) in October 2021[4]. The CfA seeks the Joint Committee advice on the performance of the rules on capital requirements and liquidity requirements relative to the framework's original objective of contributing to the revival of the EU securitisation market on a prudent basis.

It should be recalled that the revised Basel securitisation framework was implemented in Union law through Regulation (EU) 2017/2402[5] (the Securitisation Regulation or SECR), and Regulation (EU) 2017/2401[6] which amended the securitisation capital framework set out in Part Three Title II Chapter 5 of the CRR. In parallel, the Basel Committee on Banking Supervision (BCBS) standard on STC securitisations, based on the EBA work on designing simple, transparent and standardised (STS) securitisations, was implemented in Union law through the SECR. Both of the above elements of the new EU securitisation framework became applicable on 1 January 2019. Moreover, in 2015, the Commission Delegated Regulation (EU) 2015/61 (liquidity coverage ratio (LCR) delegated regulation)[7], included certain securitisations as level 2B assets capped at 15% of the liquidity buffer, thereby expanding the category of eligible asset-backed securities (ABS), which was limited to residential mortgage-backed securities (RMBS) in the Basel framework, to the senior tranches of securitisations backed by loans to small and medium-sized enterprises (SME), auto loans and leases and consumer loans.

Given that the securitisation capital and liquidity legislative frameworks have been in force for almost four years now, albeit in challenging market conditions influenced by the COVID-19 pandemic, a thorough review of how they have performed relative to their stated prudential

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R0575.

[4] Published on the EBA website at the following link.

[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02017R2402-20210409.

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R2401.

[7] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R0061.

purpose and the objective of reviving the EU securitisation markets on a prudent basis hence appears warranted. The CfA has two main parts:

- A part related to banking, the response to which is developed by the EBA in this report, requesting:

  ✓the assessment of the prevailing market trends in the securitisation market in Europe in recent years, including origination and issuance volumes and credit performance, accompanied by a comparison with major third countries such as the US. This part is presented in Section 2 of the report.

  ✓the assessment of the regulatory capital treatment of securitisation included in Part Three Title II Chapter 5 of the CRR, which is presented in Section 3 of this report.

  ✓the assessment of the securitisation liquidity framework laid out in the LCR delegated regulation, which is presented in Section 4 of this report.

- A part related to insurance undertakings, the response to which is developed in a separate report by EIOPA[8]. This part entails the review of the capital treatment of securitisation tranches held by insurance and reinsurance undertakings in accordance with Solvency II.

Finally, in order to prepare the report mandated by Article 46 of the SECR, the Commission launched a targeted consultation on the functioning of the EU securitisation market in summer 2021[9]. The feedback given by the industry to this consultation has been thoroughly analysed by the EBA and has informed the response to this CfA. Moreover, an industry roundtable was held at the EBA premises on 30 May 2022.

1.2 State of the EU securitisation market and comparison with the US

Securitisation has played a limited role in Europe since the aftermath of the 2008 crisis, even after the introduction of the STS framework. However, issuance volumes have remained stable in the COVID crisis. The analysis based on COREP data (detailed in Section 2) suggests for a positive trend with regard to the development of the securitisation market within the last five years where cash, synthetic and ABCP outstanding amounts have increased by respectively 13%, 31% and 44% from 2016 to 2021. The high acceptance of the STS label is also visible, accounting for 21% and 45% of new issuance in 2021 for traditional and synthetic securitisation respectively.

[8] https://www.eiopa.europa.eu/sites/default/files/publications/advice/jc_2022_67_-_jc_advice_on_the_review_of_the_securitisation_prudential_framework_-_insurance.pdf.

[9] https://ec.europa.eu/info/consultations/finance-2021-eu-securitisation-framework_en#reference-documents.

The EU securitisation market is particularly concentrated in a few countries. Indeed, 75% of the outstanding amount of traditional securitisation is being issued by Spanish, French, Italian and Dutch institutions. When it comes to synthetic securitisation, the country which has the largest share is France (contributing an outstanding amount of 81 bn. in 2021).

In terms of comparison with the US, the difference in size between the US and EU market for public securitisations has widened significantly in recent years. Even carving out participation of state agencies that support mortgage financing via securitisation and student loan securitisation, which together account for almost 80% of the outstanding balances in the US, the US public securitisation market (MBSs and ABSs) amounted to 1917.9 billion dollars in December 2016, while the equivalent in the EU[10], amounted to 818.1 billion euros. From then until December 2021, the European market has declined by 8% in terms of outstanding balances, while the US market has grown by 11%. However, information regarding private securitisations is lacking in the statistics used for the comparison. The data collected in COREP indicate a growing activity in this segment in the EU.

1.3 Capital framework for securitisation

It is the JC view that the current capital framework is not a key obstacle to the revival of the securitisation market in the EU, albeit the treatment of securitisation in the capital framework may have a role, especially for SRT deals. A holistic assessment clearly shows that the current subdued status of the securitisation market is the result of an interplay of many other factors. The lack of a strong re-bound should be assessed, in particular, by looking at the interplay between low supply and low demand. Both seem to be subdued due to lack of inherent interest from both sides, where the general lack of attractiveness for investors and issuers is closely linked.

From the supply side credit institutions are lacking funding needs, which is one source of incentive for originating traditional securitisations. The monetary policy environment and abundant liquidity result in the market currently offering other forms of cheaper funding. Moreover, originators have faced a limited investor base especially for what concern traditional securitisation. In this market context institutions are using securitisation not to cover funding needs but predominantly to manage capital and risk. For these SRT deals the capital framework may have a role and acknowledging this EBA has focused its efforts to improve the risk sensitivity in the framework. The boost that may come from a targeted relaxation of the capital requirements is however limited when compared to the boost that may come from the funding argument in a different monetary policy environment. Increased proportionality in transparency requirements is also an area, where the JC considers that further efforts are warranted.

On the demand side, faced with high due diligence costs, investors seem to not have embraced the product to the extent that was originally envisaged. Here, the mandatory due diligence required to institutional investors, which seems not to be present for other asset classes, creates an "assessment premium" which makes securitisation a relatively costly investment. This is an area

[10] excluding the UK.

which is not in the scope of this CfA, but which could be reconsidered or assessed against the objective to revive the securitisation market in the future.

The EBA welcomes the opportunity given by the Commission to assess the capital framework and has reviewed thoroughly the specific points of the capital framework for institutions on which the Commission has requested feedback. Based on data provided by COREP and on feedback received by stakeholders EBA has used this opportunity to assess and, where relevant, propose amendments to clarify existing requirements, to remove inconsistencies, to ask the Commission for further clarification and to recommend more fundamental changes to improve the risk sensitivity. The recommendations resulting from this effort, included in Section 3, can be divided in three categories:

- Fixes to the prudential framework which aim at improving the clarity and consistency of the current framework, these are presented in Section 3.2. While some of them may be viewed as minor deviations from the Basel text, they are all however compliant with the underlying logic of the Basel framework.

- More substantial, but still targeted, recommendations are aimed at improving the risk sensitiveness of the framework by recognising the reduced model and agency risk associated to originators retaining senior securitisation tranches. In this regard, Section 3.3.1. elaborates on why the JC considers that a reduction of the risk weight floor for senior tranches retained by originators can provide a beneficial outcome for the SRT market, if accompanied by an appropriate set of safeguards. This proposal represents a methodological deviation from Basel which however, in the view of EBA, is substantiated by an increase in risk sensitiveness of the framework. Furthermore, it does not seem fully consistent to require originators, holding securitisation positions in their own securitisations, to set aside high capital buffers for agency and model risk. Moreover, the proposal has been calibrated to be targeted to a limited set of securitisations, and so, while being mindful of the overall compliance with Basel, the proposal also aims to ensure a positive forward-looking impact on the SRT securitisation market.

- General issues on the securitisation risk weight formulas. These are elaborated in Section 3.3.2. It should be noted that for the time being these issues should be considered as issues to be developed further in the future. The EBA needs more time to form a conclusive opinion on these issues and has the intention, if relevant, to bring the discussion to the Basel Committee on Banking Supervision.

It should however be noted, that even if the proposed changes are implemented, such changes will only have a positive effect on the supply side by giving incentives to institutions to originate more resilient securitisation. This may be enough to have a positive effect on SRT (especially synthetic) deals, where investor demand shows a positive trend lately. However, this would probably not on its own be enough to revive the securitisation market as a whole and should be coupled with other measures to increase the investor demand for securitisation. In this context, however, it does not seem to be prudentially sound to reduce capital requirements for institutions' investments in

securitisations originated by other institutions. This would indeed go against one of the main goals of securitisation, which is that of distributing risks from banks to investors outside the banking sector. Therefore, other ways of increasing investor demand from the non-banking sector are needed, which would most likely need to centre around an increase in the proportionality of the due diligence requirements for investors.

1.4 Liquidity framework for securitisation

A part of the CfA is related to the recognition of securitisation positions in the LCR, where the Commission seeks feedback on a potential amendment to the LCR Delegated Regulation as regards the treatment of securitisation positions as high-quality liquid assets (HQLA), considering their market performance during the recent years, especially during the COVID 19 pandemic.

The JC considers that any recalibration of the LCR with regard to the recognition of securitisation positions as HQLA would need to be based on new observations under a LCR stress scenario. However, no LCR stress period in the banking system has been observed during the last years, including the period covering the COVID-19 pandemic.

The share of securitisation positions, including STS securitisation positions, taken into account in the LCR stress buffers has been negligible since the inception of the LCR and remains so today. At the same time, credit institutions have had very high LCR levels, well above the minimum regulatory requirements. The EBA considers that there is a reasonable assumption that credit institutions have very small appetite to use securitisation positions as part of the LCR stress buffers or perceive a low marketability of securitisation positions during a LCR stress scenarios.

The JC has therefore concluded that the current framework should be kept in its current form. An upgrade of securitisations from level 2B to level 2A, which would mean that credit institutions would be no longer be allowed to hold securitisations only up to 15% but up to 40% of their buffer for liquidity stress periods - without a test under stress - could lead to non-prudent results and jeopardise the sound liquidity position of credit institutions for stress periods.

However, the JC recommends modifying the LCR delegated regulation to reflect the increase in the granularity of CQS under the SEC-ERBA in accordance with the amended CRR and the Commission Implementing Regulation (EU) 2022/2365[11] amending the existing ITS laid down in Implementing Regulation (EU) 2016/1801 on the mapping of ECAIs´ credit assessments for securitisation positions.

1.5 Structure of the report

In order to respond to the CfA, this advice is structured in three main sections. Section 2 gives an overview of the securitisation market in the EU. Section 3 details the assessment of the capital framework for securitisation and provides, where relevant, recommendations aimed at improving

[11] Commission Implementing Regulation (EU) 2022/2365

its clarity, its consistency and its risk sensitivity. Finally, Section 4 provides the assessment of the appropriateness of the securitisation liquidity framework.

2. Assessment of the securitisation market

This Section contains the market assessment for which the EBA has performed a market analysis exercise, in line with the request in the CfA, which considers:

(a) origination and issuance volumes in the EU securitisation markets in recent years and, in particular, with comparison between levels pre and post: i) the financial crisis of 2008, ii) the application of the new EU securitisation framework from 1st January 2019 onwards and iii) the first wave of the COVID-19 pandemic of March 2020.

(b) Effective changes in capital requirements due to the new EU securitisation framework applicable since 1st January 2019.

(c) Market trends in major third countries with special reference to the US showing relevant comparisons with the EU for both pre and post financial crisis volumes.

(d) Relevant credit performance of securitisations during the immediately preceding 5 years (including rating downgrades) and in particular in the period after March 2020 with a breakdown by asset classes.

In relation to point (c) and the specific case of the comparison with the US market (detailed in Section 2.2 of this report), granular data from the public statistics of SIFMA, on the US market, and AFME, on the European market, have been used. The performance of the EU traditional securitisation market has been compared with that of the non-agency US traditional securitisation market, given the exceptional activity of the US public agencies that support mortgage lending via securitisation, which does not happen on the same scale in the EU, where the EIF supports certain synthetic securitisations and some Member States support non-performing exposures (NPE) securitisations on a lower scale. Additionally, the specific case of the other form of ABS, the covered bonds (CB) in the EU, has also been considered by collecting data from the ECBC public statistics.

For what concerns point (a) ii) and iii) and point (b), on the impact of the new EU securitisation framework and the COVID-19 crisis, the analysis detailed in Sections 2.1 and 2.2. of this report has been developed on the basis of COREP data. This allows to perform a more granular breakdown of data, and to provide a wider perspective of the market in comparison with public data provided by different associations, by allowing to capture not only public traditional securitisations but also private traditional and synthetic securitisations, as well as the split by STS[12] label.

[12] COREP data can be used for the period starting from 31/01/2014 until now and allow a split by STS label starting from 30/03/2020.

The analysis is based on COREP data and covers the 2016 to 2021 period. The relevant COREP templates on securitisation are C14.00 and C14.01 where data are collected on a semi-annual frequency. COREP provides very granular information of securitisations originated by the banking sector and other securitisations in which credit institutions invest in. The reported transactions include public and private traditional securitisations, synthetic securitisations and ABCP transactions, no matter the country to which the underlying assets belong to. In comparison with other sources of data for securitisations in the EU, mainly AFME, there are differences in the data due to the following:

- AFME's aggregate figures cover the European market including non-EU countries (although some information is provided at the country level).
- AFME's data also cover the transactions issued in Europe but originated by non-European credit institutions.
- AFME's data mainly cover public traditional and ABCP transactions.

Finally, COREP is entirely based on the banking sector while AFME includes the non-banking sector as well (e.g. securitisations issued by the insurance sector).

As displayed in Figure 1 to Figure 3, as of December 2021, 28% of the transactions reported by originators and sponsors in COREP were publicly placed, most of them traditional securitisations. Half of the securitisations subject to private placement were traditional securitisations.

Figure 1: Transactions reported by originators and sponsors (COREP 2021 Q4)

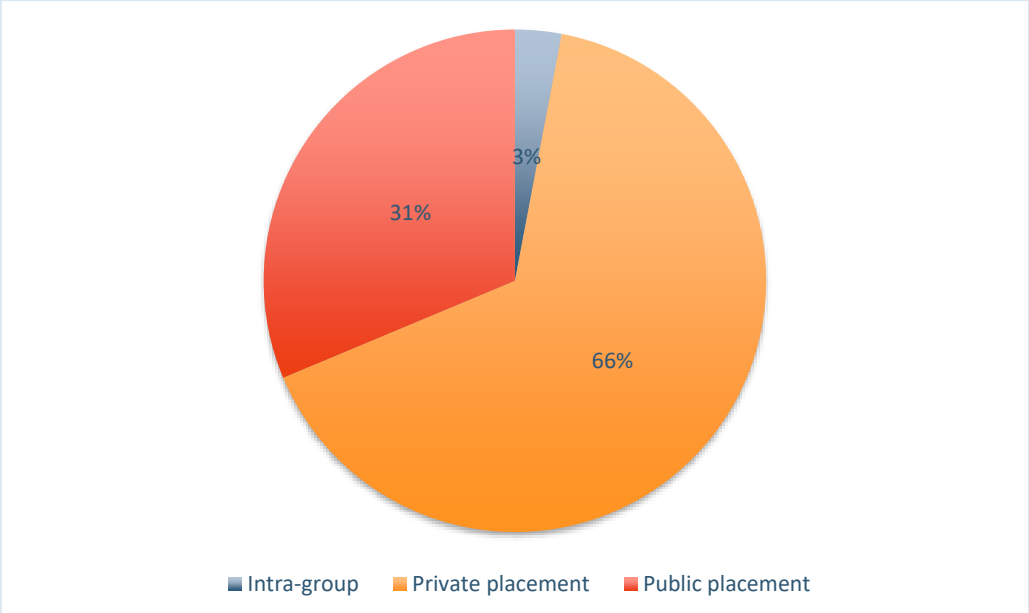


Figure 2: Transactions reported by originators and sponsors (COREP 2021 Q4) – Public placement

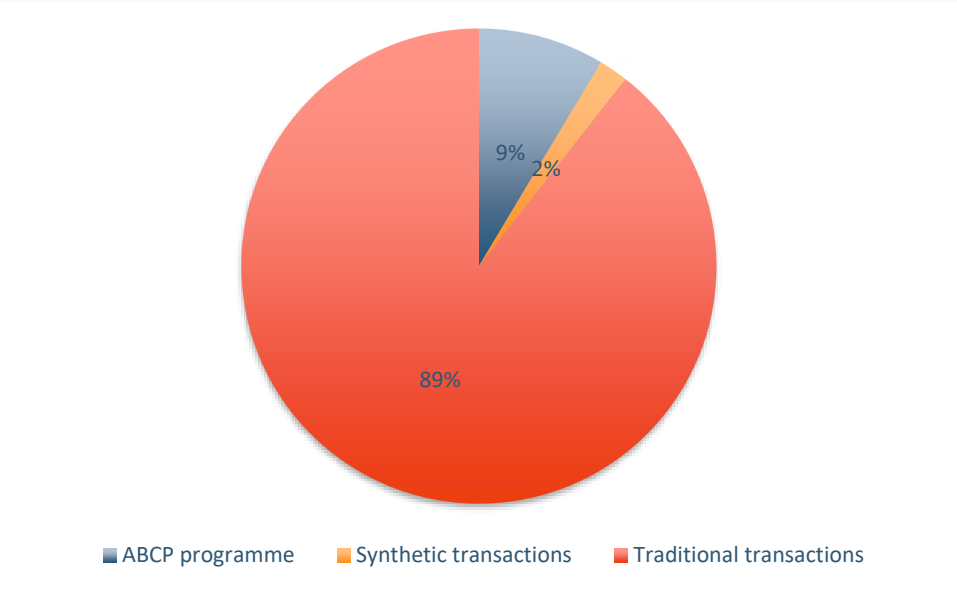
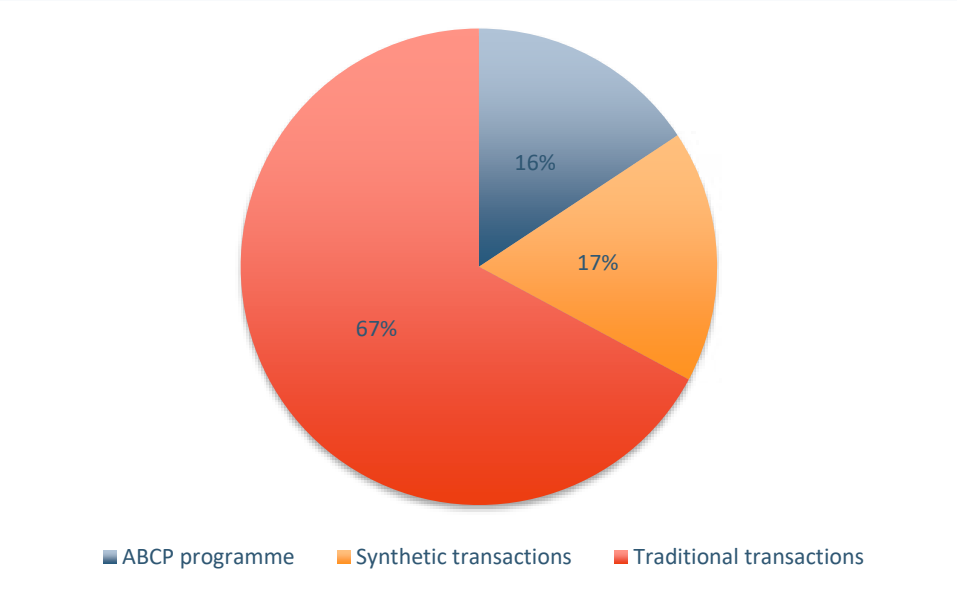


Figure 3: Transactions reported by originators and sponsors (COREP 2021 Q4) – Private placement



The analysis, which covers the 2016 to 2021 period, shows that during the COVID-19 crisis issuance volumes in the EU have remained stable. At the same time, the issuance and outstanding volumes have increased moderately since the entry into force of the Securitisation Regulation (SECR) and the revision of the prudential securitisation framework in 2019, reflecting an increasing share of STS securitisations. The outstanding amounts of traditional, synthetic and ABCP securitisations increased by 13%, 31% and 44%, respectively, from 2016 to 2021. The share of STS transactions in the traditional segment represents 14% and 21% of the outstanding amount and new issuance in traditional securitisations, respectively, in 2021. Finally, only 8 months after entry into force of the

introduction of the STS label for synthetic securitisations, the issuance of STS on-balance-sheet securitisations already represents 45% of the total issuance of synthetic securitisations in 2021.

With regards to point b) on the impact on capital requirements of the revision of the securitisation framework of Part Three Title II Chapter 5 of the CRR, a comparison of the capital requirements between 2018 and 2020 on transactions reported in both years is presented in Section 2.3. The analysis shows a very relevant impact for the institutions holding senior positions, an increase in capital requirements higher than 100%, which is aligned with the increase in the risk-weight floor from 7% to 15% for non-STS securitisations under the revised regulation. In the case of institutions holding more than one tranche in the same securitisation, the average increase in capital requirements is around 40%, which is higher than the one third increase on average expected by the revision of the Basel framework for all the tranches in the same securitisation.

For what concerns point (d) on the assessment of the credit performance of securitisations presented in Section 2.4, the ESMA has provided the credit performance of the tranches based on the evolution of their ratings, and the European Data Warehouse (EDW) has provided the data on the credit performance of the underlying exposures, measured by the evolution of the exposures with "3 months in arrears" status.

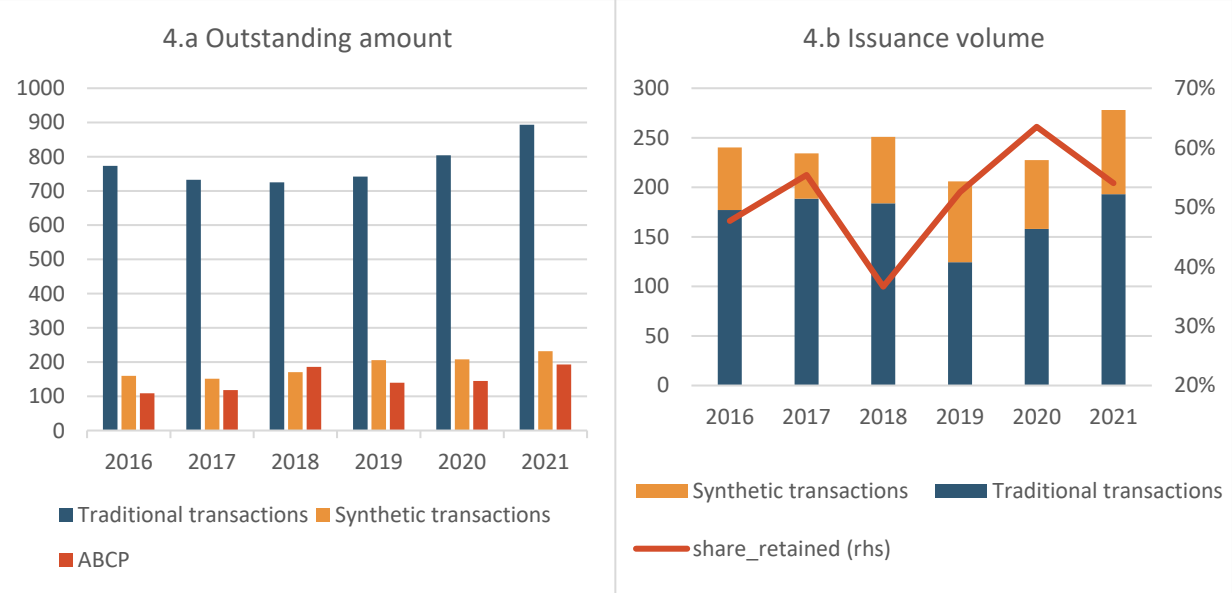
2.1 Impact of the new EU securitisation framework and the Covid-19 crisis

The results shown on outstanding amount and issuance volume (Figure 4 Charts 1.a and 1.b respectively) seem to suggest a positive trend in the securitisation market within the last years. Indeed, traditional, synthetic and ABCP outstanding amounts increased by respectively 13%, 31% and 44% from 2016 to 2021. The issuance of traditional securitisation seems to be quite stable between 2016 and 2018 while it shows a positive trend in the last three years. Moreover, during the Covid-19 crisis, which started in the first quarter of 2020, the volume of issuances in 2020 and 2021 remained stable.

The share of retention in traditional securitisation is instead rather stable in 2016 and 2017 while it experienced a drop in 2018[13]. This might be due to the application of the new securitisation framework in 2019 as entities might have anticipated the issuances of securitisation applying for SRT before the new framework applied.

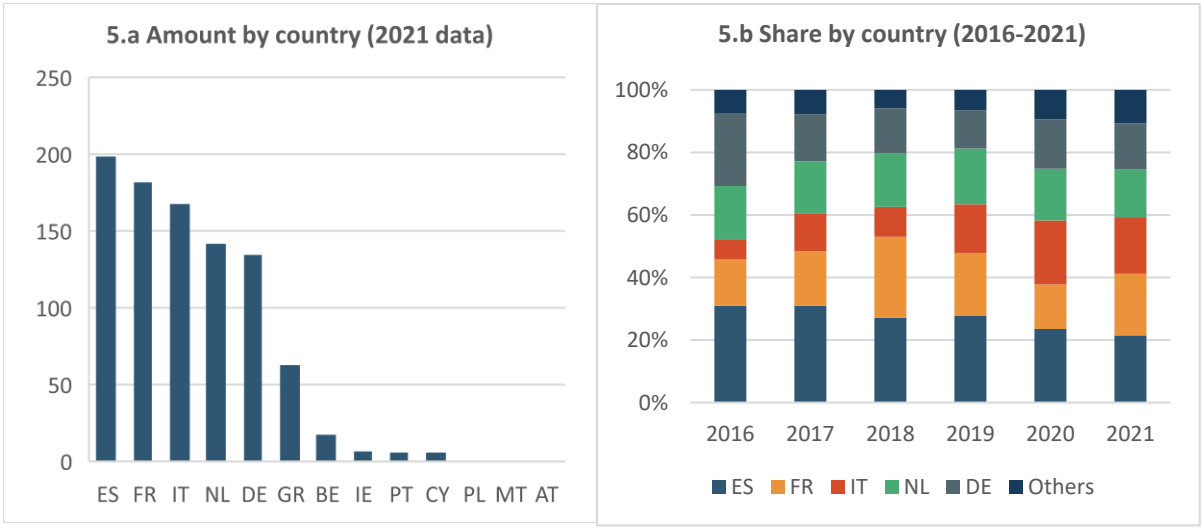
[13] The share of retention in Chart 4b refers to non-revolving traditional securitisation only. For the computation of the share retained, the revolving securitisation is not taken into account because of data issues.

Figure 4: Outstanding and issuance volumes by type of securitisation (billion Euros)[14]



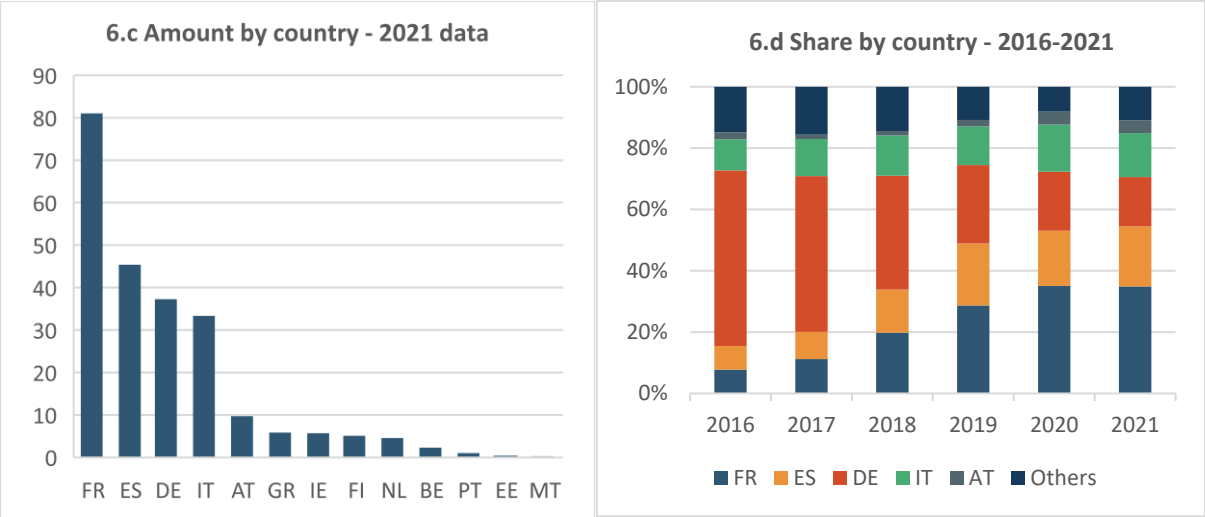
As shown in Figure 5 and Figure 6 the EU securitisation market is particularly concentrated on a few countries. Indeed, 75% of the outstanding amount of traditional securitisation is being issued by Spanish, French, Italian and Dutch credit institutions. It should be noted that the share of the outstanding amount for Spanish credit institutions, which has the greatest outstanding amount of traditional securitisation in 2021, dropped from 2016 to 2021. On the other hand, the shares of France and Italy rose during the same period.

Figure 5: Outstanding amount traditional securitisation by country of originator (billion Euros)



[14] Share retained in Figure 4 (4.b) refers to traditional securitisations.

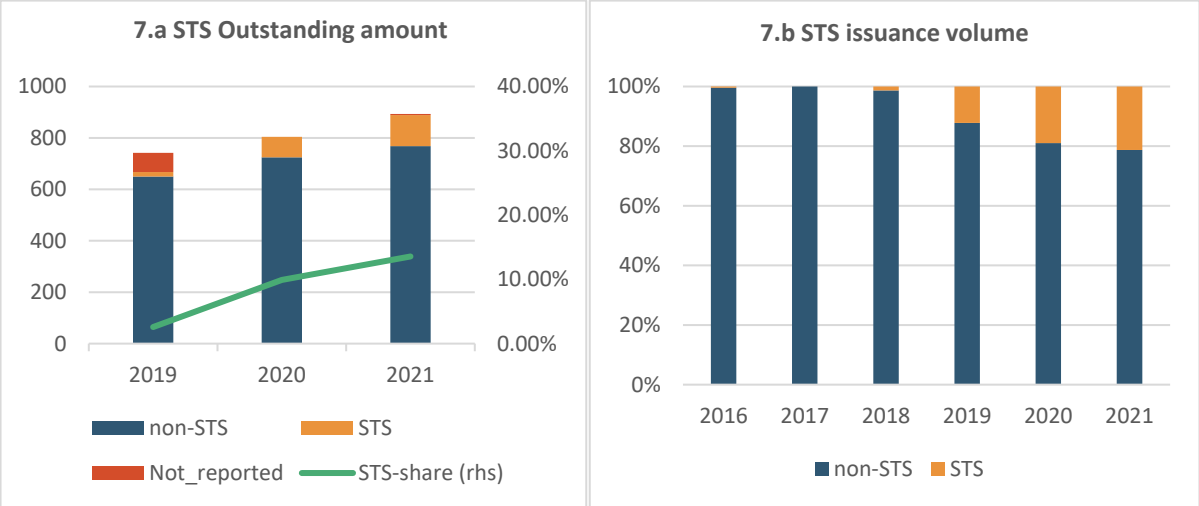
Figure 6: Synthetic securitisation outstanding amount by country of originator (billion Euros)



When it comes to synthetic securitisation, the country which has the largest share is France. Its amount increased from 12bn in 2016 to 81 bn in 2021. Germany followed an opposite trend, experiencing a large reduction from 92 bn in 2016 to 37 bn in 2021.

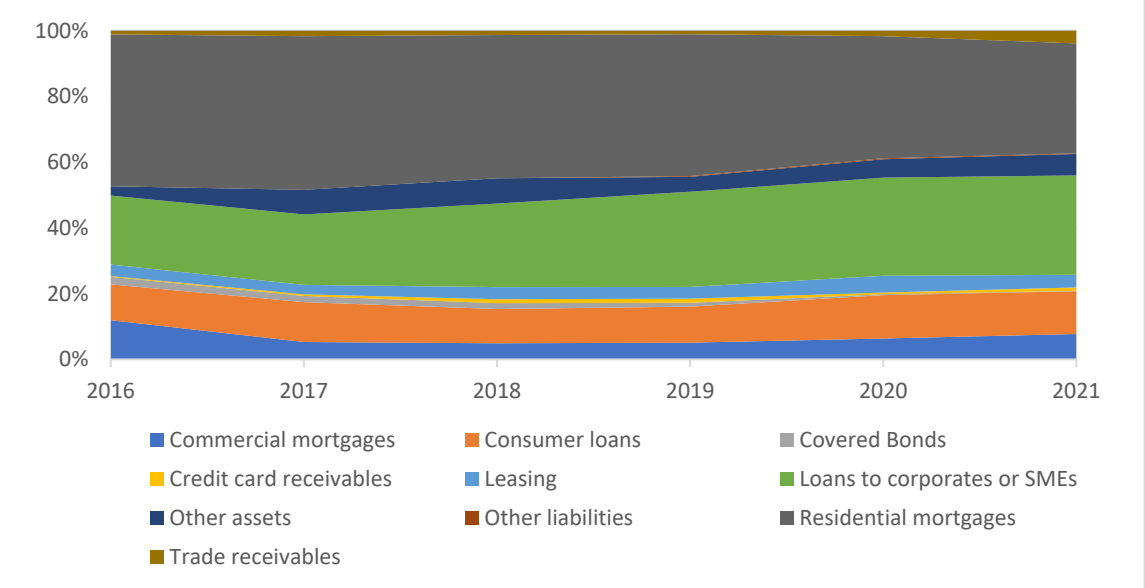
The SECR, including the STS criteria for traditional non-ABCP and ABCP securitisations, applied first in 2019 and since this year the traditional transactions with an STS label increased by around 4percentage points from 2020 to 2021 (from 9.9% to 13.7% as displayed in Figure 7). The issuance of new traditional securitisations with an STS label also increased and reached a share of 21% for an amount of € 41 bn in 2021.When it comes to synthetic securitisation, the issuance of STS transactions reached a share of 45% in 2021, after just 8 months since the introduction of the STS label for on-balance-sheet securitisations by the capital markets recovery package (CMRP).

Figure 7: STS traditional securitisation outstanding and issuance volumes[15]



As shown in Figure 8, the residential mortgages remain the main securitisation asset type in Europe even though in the last two years the amounts decreased from € 406 bn in 2019 to 300 bn in 2021. Instead, the amount of commercial mortgages securitised almost doubled in the same time period, increasing from € 48 bn to 85 bn. In 2021 the second asset type in terms of outstanding amount were the loans to corporates or SMEs. This is also the asset type which experienced the greatest increase in absolute terms, rising from € 275 bn to 336 bn.

Figure 8: Outstanding amount – by asset class (traditional and synthetic)

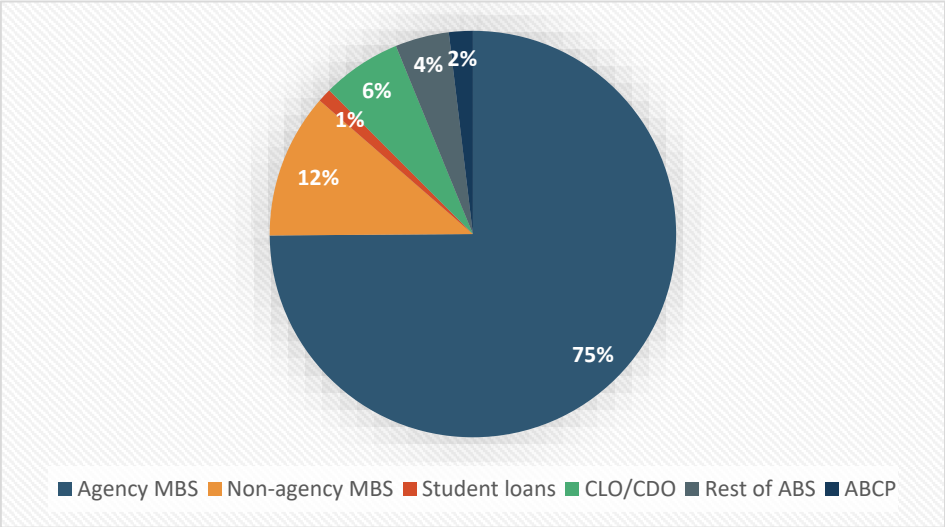


[15] The small issuance volume of STS transactions before the introduction of the STS framework in 2019 can be due to those issued in those years that meet the requirements to use the STS label in accordance with the transitional provisions in Article 43 SECR.

2.2 Comparison of the EU and US market

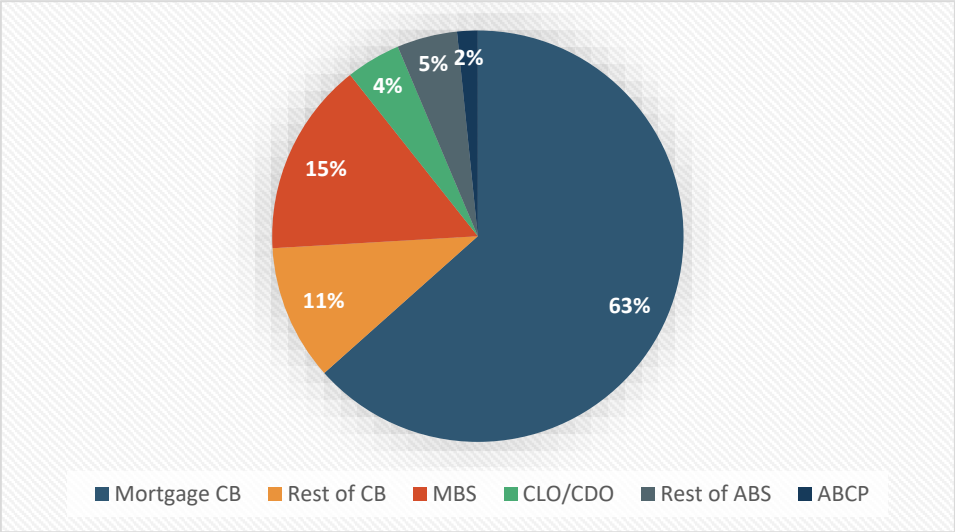
The market for public issuances of ABS in the US has different characteristics compared to the respective market in the EU. The significant participation of state agencies that support mortgage financing via securitisation, which account for 75% of the outstanding balances in the US securitisation market in 2020 (as displayed in Figure 9), represents the main difference to the European market. In the EU, some Member States are active in guaranteeing senior tranches of NPE securitisations and the EIF is involved in the synthetic securitisation market with a focus on SME securitisations. The European market for public issuances of ABS is dominated by those of CB, which also account for almost 75% of the total outstanding balances in 2020 (as displayed in Figure 10). Therefore, a parallel could be drawn in the role that agency MBS in the US and the CB in the EU play, as the latter enjoy preferential treatment in various European legislations compared to unsecured bonds.

Figure 9: US ABS market outstanding amounts 2020



Source: EBA calculations, SIFMA and US Fed

Figure 10: EU ABS market outstanding amounts 2020



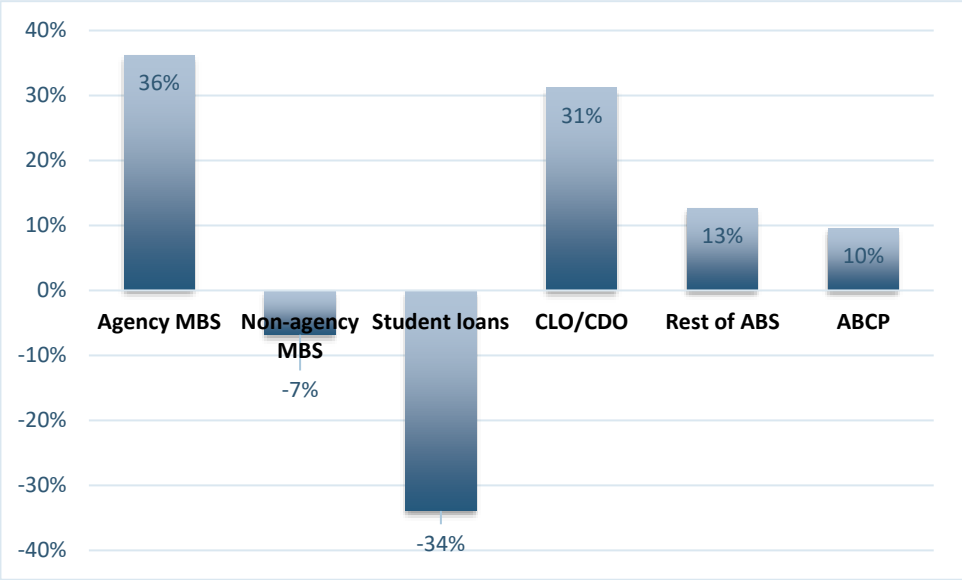
Source: EBA calculations, AFME and ECBC

However, the fundamental difference between the two public markets is their volume and their different growth in recent years. Comparing the situation of 2020 (last year for which data is available for CB) with that of 2014, the US market more than quadruples the size of the European market in 2020 (outstanding balances of 13.131 billion US dollar against 3.058 billion euro) while the US market was more than three times bigger in 2014 (outstanding balances of 10,423 billion US dollars against 3,071 billion euros), due to the 26% growth in the volume of the public market in the US since then and the stagnation of the European market during the same period.

This different evolution has, however, had a different composition. The growth of the market in the US is due to the increase in outstanding balances of agency MBS, which grew by 36% since 2014, offsetting the stagnation of the rest of the market (Figure 11). On the contrary, the stagnation of the EU market was due to the moderate growth of 12% in mortgage CB, which offset the decrease of 27% in the rest of CB (public sector, ships and others) and the 25% decrease in the outstanding balances of public securitisations (Figure 12).

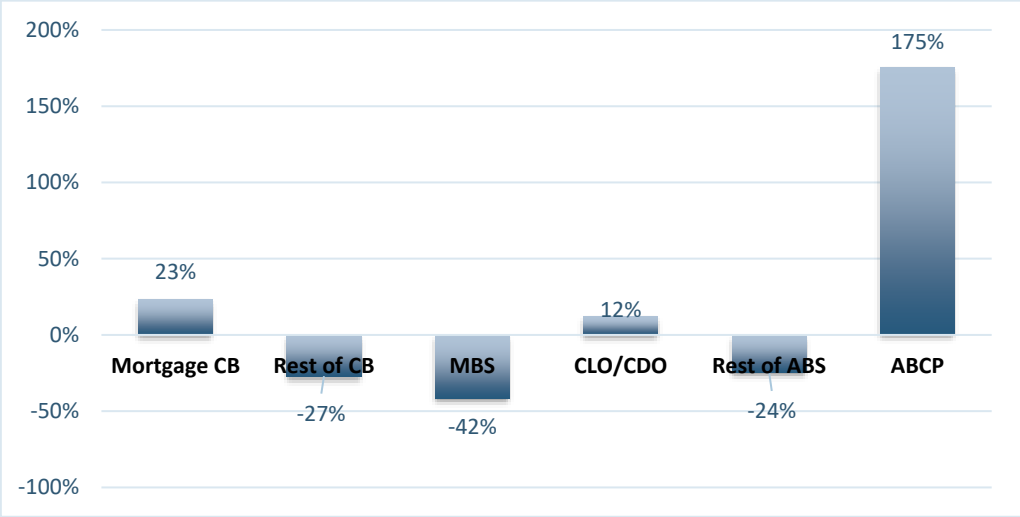
Therefore, it can be concluded that the positive evolution of the ABS markets in the US and the EU since 2014 has been due to the agency MBS in the US and the mortgage CB in the EU. Consequently, it is appropriate to carry out a more detailed analysis comparing only non-agency ABS in the US and securitisations in the EU.

Figure 11: US ABS market: growth rate between 2014 and 2020



Source: EBA calculations, SIFMA and US Fed

Figure 12: EU ABS market: growth rate between 2014 and 2020



Source: EBA calculations, AFME and ECBC

As indicated, the outstanding balances of public securitisations in the EU have decreased by 25% from 2014 to 2020, while in the US there was a growth of only 3% in the outstanding amounts of non-agency ABS. In absolute terms, the US market is also quadrupling that of the EU in 2020 in this segment (outstanding balances of 3,297 billion US dollars against 793 billion euros), while it only tripled the EU market in 2014.

In the US, this 3% growth is due to the 7% decrease in the outstanding balances of non-agency MBS and the 12% increase in the outstanding balances of CDOs/CLOs, the components with the greatest weight in non-agency ABS. In the EU, in this segment of public securitisations, the reduction in the

outstanding balances of MBS and the rest of ABS (which fell by 42% and 24%, respectively) is noteworthy, with the exception of the balances of CDOs/CLOs and ABCP (which grew by 12% and 175%, respectively).

It can be concluded, therefore, that the difference between the US and EU markets for public securitisations has widened significantly in recent years, probably due to the triple effect of the exceptional monetary policy measures, which have reduced the need for financing of credit institutions, the entry into force of the cross-sectoral Securitisation Regulation in the EU, which increased transparency requirements for originators and due diligence requirements for investors, and the implementation of the Basel III prudential framework for securitisations in the EU, unlike in the US where it has not been implemented to date.

As a disclaimer, in order to get a full picture of both markets, on the one hand, it should be noted that there is no public information private traditional securitisations available in AFME and SIFMA statistics. The data collected in COREP, as shown in Section 2.1 of this report, indicate a growing activity in this segment in the EU. On the other hand, there is also no comparative public information on the synthetic securitisation segment, for which the COREP data shows a significant increase in the EU, as shown in Section 2.1 of this report.

2.3 Effective changes in capital requirements due to the new EU securitisation framework

In order to analyse the changes in the capital requirements before and after the application of the new regulation the approach has been to match the securitisation positions retained in the same transactions with similar outstanding portfolio amounts in 2018:Q4 and 2020:Q2. The major capital impact did not occur from 2018 to 2019 but from 2019 to 2020 because of the mandatory transitional period for outstanding securitisations until 31.12.2019 (see Article 2 of Regulation (EU) 2017/2401).

In order to analyse the variation in the capital requirements, the ratio of the risk weighted exposure amount (RWEA) over the exposure amount retained in the banking book (Ret_position) has been used, in order to get the average risk weight (ARW) of the portfolio in order to control for possible amortisation and losses on the securitised positions:

$$ARW = \frac{RWEA}{Ret\_position}$$

The change in the capital requirements has then been computed as:

$$\Delta\ capital\ requirements = (ARW_{2020} - ARW_{2018})/ARW_{2018}$$

The sample of the analysis consists of 603 credit institutions where the majority (around 75%) are investors. Most of the sample consists of senior tranches (530 out of 622 securitisation positions) which explains the huge increase in capital requirements observed in the sample. The increase of the floor with the new regulation (from 7% to 15% risk weight (RW) for non-STS securitisation

tranches) implies an increase of more than 100% in capital requirement according to our computation and the senior tranches, which often hit the floor, experienced such big increase. Regarding the cases where only mezzanine tranches are retained (42 securitisation positions) the increase of capital requirements is even bigger with a median of a 281% increase. Lastly, regarding cases where only the first loss tranche is retained (4 securitisation positions) we observe an average reduction of 41% of the capital requirements[16].

The rest are cases where the institutions are reporting at least two tranches in the same securitisation. Among these cases when the senior tranches do not consist of more than 85% of the portfolio (14 observations) the change of the capital requirements has a median increase of 43%. This would be more aligned with the objective of increasing capital requirements in the Basel revision of the securitisation framework (which was calculated for the entire structure of transactions).

2.4 Credit performance analysis

As part of the response to the CfA, the EBA has performed a credit performance analysis of the EU securitisation market looking at the historical evolution of delinquencies over the past five years using data on the underlying exposures provided by the EDW. In order to give a comprehensive picture of the credit performance of the EU securitisation market, this analysis was complemented with an analysis on the historical ratings development based on the same sample of securitisation transactions using data from ESMA provided by Credit Rating Agencies. For the credit performance on the underlying exposures, EBA looked at the development of the 3 months delinquency ratio by asset class over the period of five years. For the analysis on the ratings, EBA considered the number of rating upgrades, downgrades and default events for the ISINs reported to EDW. From this analysis it can be concluded that, overall, the credit performance of European securitisations has fared well over the past five years and throughout the pandemic. More details are provided in Section 2.4.2.

2.4.1 Summary of the methodology for the credit performance analysis based on EDW and ESMA data

The data on the historical performance of delinquencies in European securitisations are based on the data reported to EDW. Initially, for the purposes of the credit performance analysis, it was proposed to consider the CRR definition of default (90D+), given that the classification of default in the EDW data (European Central Bank data templates[17]) is based on the transaction documents and

16

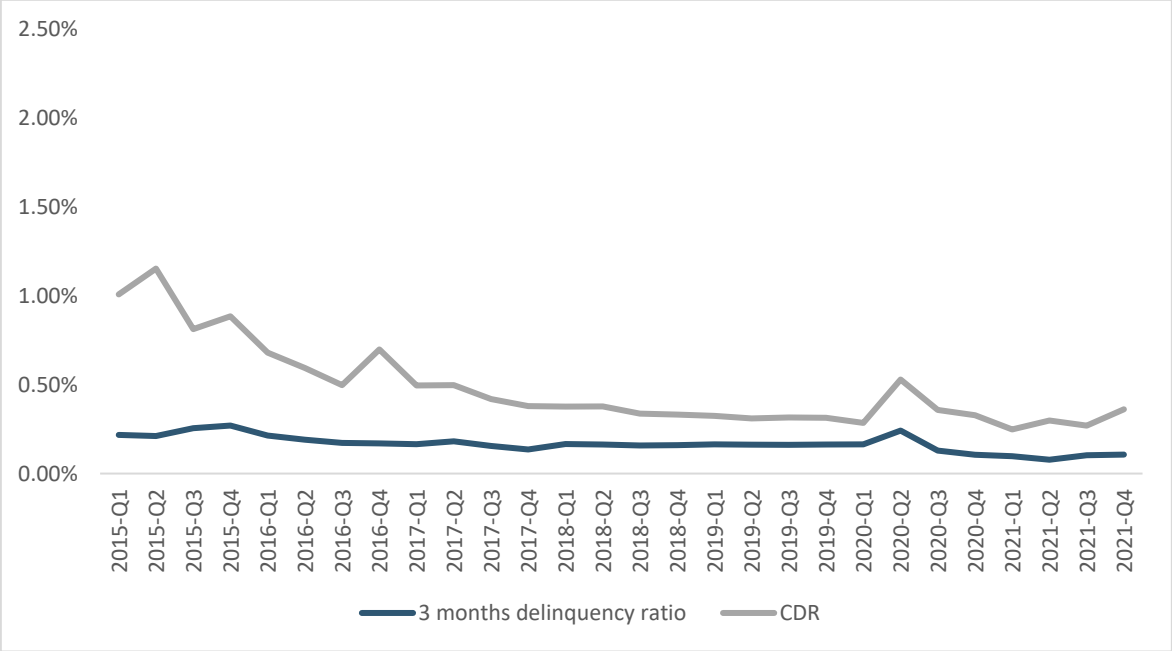
The reduction is due to the fact that, because of the change in the hierarchy of approaches, the first loss tranches that received a 1250% risk weight under the Basel II rating-based approaches, independent of their thickness, are now subject to the formulaic approaches SEC-IRBA or SEC-SA and can receive a lower risk-weight if they detach above Kirb or Ka.

17 For more information on the European Central Bank (ECB) data templates please refer to Data templates (europa.eu).

varies greatly across asset classes and jurisdictions. In that case the Constant Default Rate (CDR)[18] would be calculated based on the data provided. Thus, a thorough analysis on historical defaults would require various adjustments to the data given that the information on defaults is based on transaction-specific definitions. It was decided to proceed with a 'simplified' approach. For this purpose, the analysis was based on the "delinquency ratio", defined as the outstanding amount of loans classified with account status 'arrears' divided by the total outstanding amount of all active loans.

Based on evidence provided by EDW in the credit performance analysis on the basis of one jurisdiction, in this case Spain, and one asset class, the RMBS, it is evident that the trend of the CDR is very similar to the trend of the '3 months delinquency ratio'.

Figure 13: Constant Default Rate and 3 months delinquency ratio for Spanish RMBS[19]



Source: EDW

Therefore, this ratio is a good indicator for the period defaults which are captured in the CDR. Based on this and taking also into account the time constraints for preparing the CDR for all asset classes and jurisdictions, EBA decided to proceed with a more pragmatic approach and perform the credit performance analysis on the '3 months delinquency ratio'. When interpreting the results, it is important to consider that since March 2020 Member States have implemented a broad range of

[18] The Constant Default Rate (CDR) for the underlying exposures is calculated by EDW and refers to the percentage of new defaults during the period. It is equal to the annualised figure of the following formula: [(total outstanding balance of underlying exposures newly classified as defaulted during the period) / (total outstanding balance of non-defaulted underlying exposures at the beginning of the period)].

[19] The y axis displays the percentage of the Constant Default Rate and the 3 months delinquency ratio of the Spanish RMBS.

support measures such as e.g. payment moratoria as a policy response to the COVID-19 crisis[20] to minimise the economic impact of the pandemic.

This analysis was complemented with an analysis on the historical evolution of the ratings performance of the ISINs for securitisation transactions reporting to EDW provided by ESMA using data from the RADAR[21] database. For this analysis the number of upgrades, downgrades and defaults were considered[22]. Also, the ratings drift ratio was calculated based on ESMA data in the sample of securitisations reported to EDW and the results are displayed in the following section. For this analysis, the ratings drift ratio is calculated by the total number of upgrades subtracted by the number of downgrades and divided by the number of total rating actions (upgrades, downgrades, default events) at each quarter.

2.4.2 Findings from the credit performance analysis

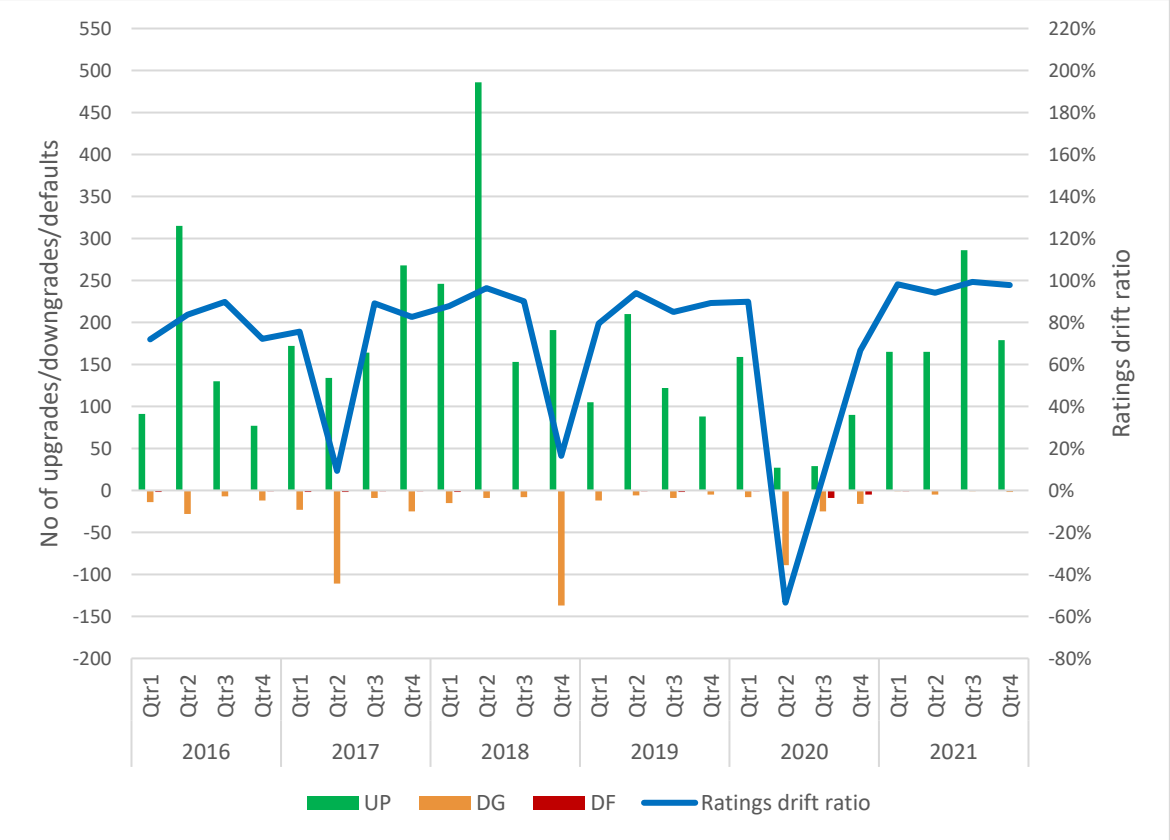
Figure 14 below shows the rating actions, including the upgrades, downgrades and defaults per quarter, and the ratings drift ratio based on ESMA data in the sample of securitisations reported to EDW.

[20] For more information on the EBA's response to COVID-19 please refer to the EBA website: Our response to Coronavirus (Covid-19) | European Banking Authority (europa.eu).

[21] For more information on the RADAR database please refer to RADAR RTS

[22] The data is compiled on an ISIN level. For each ISIN there may be more than one rating action (by more than one Rating Agency). For the purpose of this analysis, we consider the distinct count of each ISIN to avoid any double counting.

Figure 14: Rating actions and ratings drift ratio of European securitisations

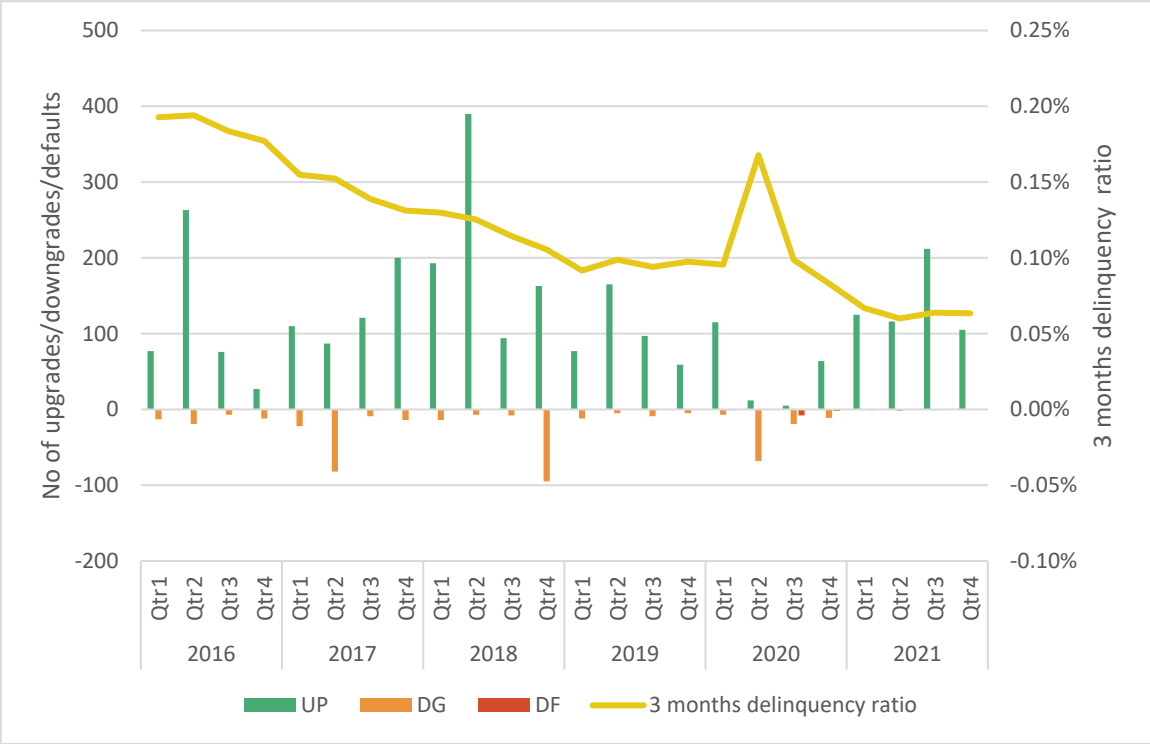


Source: ESMA

Overall, the credit performance of European securitisations has fared well over the past five years and throughout the pandemic. After experiencing a low number of upgrades in the beginning of the pandemic (Q2 2020), a significant increase in the number of upgrades from Q3 2020 has demonstrated the strong performance of the European securitisation transactions during the pandemic. The number of downgrades exceeded the number of upgrades in Q2 2020 accompanied by minimal defaults in Q3 2020.

As requested in the CfA, the credit performance analysis of European securitisations has been performed during the immediately preceding 5 years (including rating downgrades) with a breakdown by asset class. The following figures show the rating actions and the '3 months delinquency' ratio for each asset class.

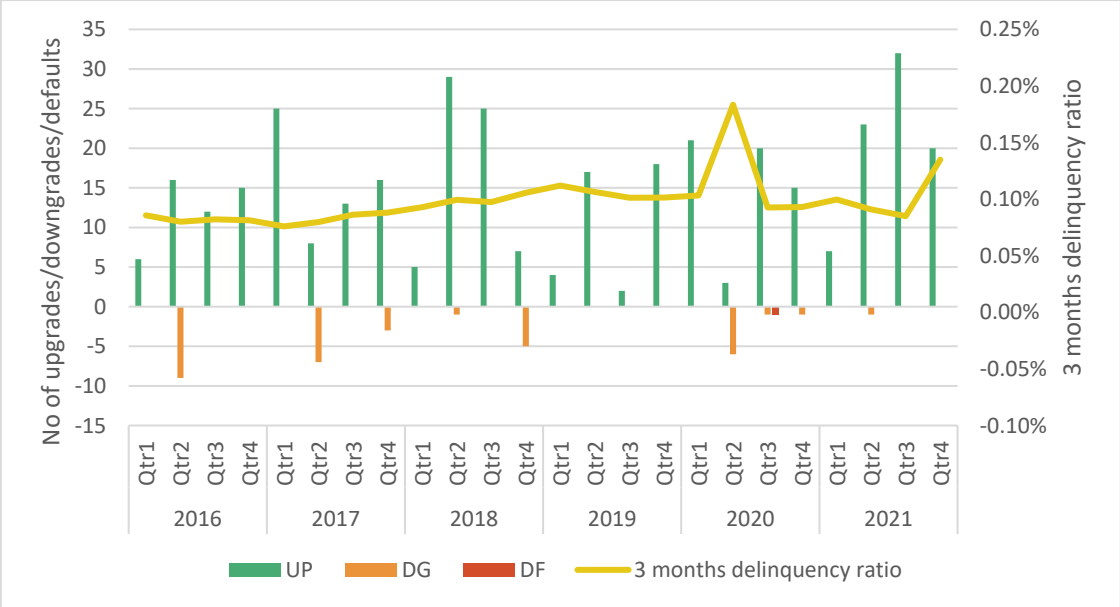
Figure 15: Rating actions and 3 months delinquency ratio of European RMBS



Source: EDW, ESMA

Overall, the 3 months delinquencies of the underlying exposures secured by residential property have remained low (between 0.06% and 0.19%) with a decreasing trend between 2016 and 2019. There was an upward trend in the 3 months delinquency ratio in Q2 2020 which was also mirrored by the increase of rating downgrades in the same period with minimal defaults in Q3 2020.

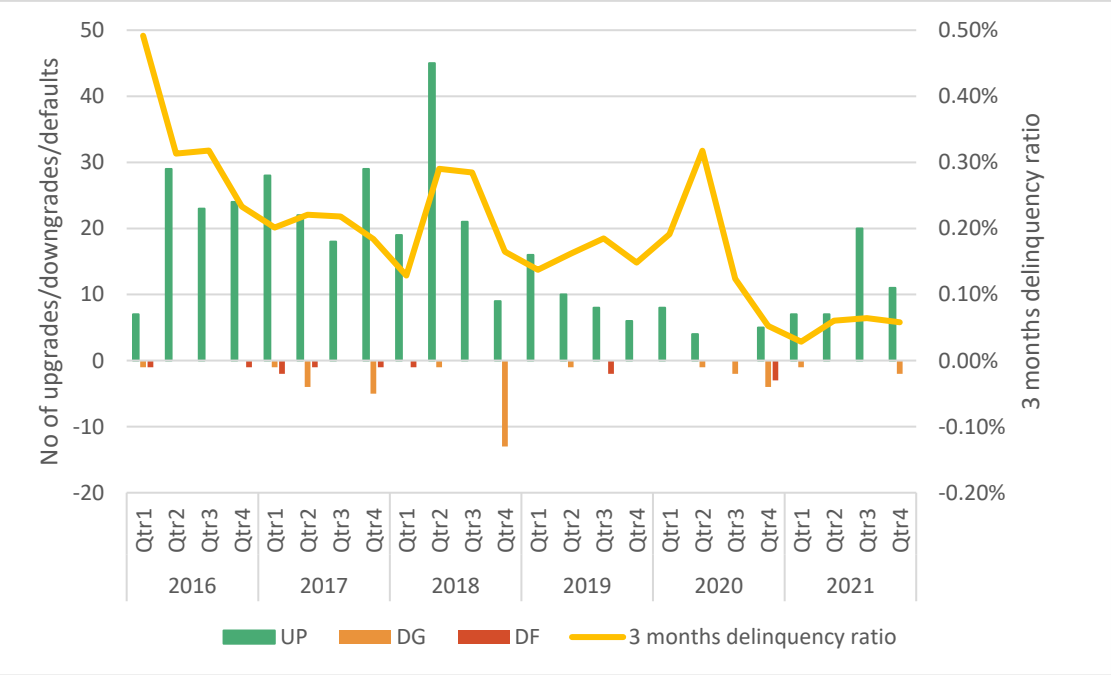
Figure 16: Rating actions and 3 months delinquency ratio of European Auto ABS



Source: EDW, ESMA

With regard to auto exposures, the 3 months delinquencies have generally remained low (between 0.08% and 0.18%) with a stable trend between 2016 and 2019. In Q2 2022, there was an increase in the 3 months delinquency ratio which was also reflected in the increase of rating downgrades in the same period. Despite the one default event in Q3 2020, the number of upgrades increased significantly demonstrating the overall strong performance of Auto ABS during the pandemic.

Figure 17: Rating actions and 3 months delinquency ratio[23] of European SME/corporate ABS

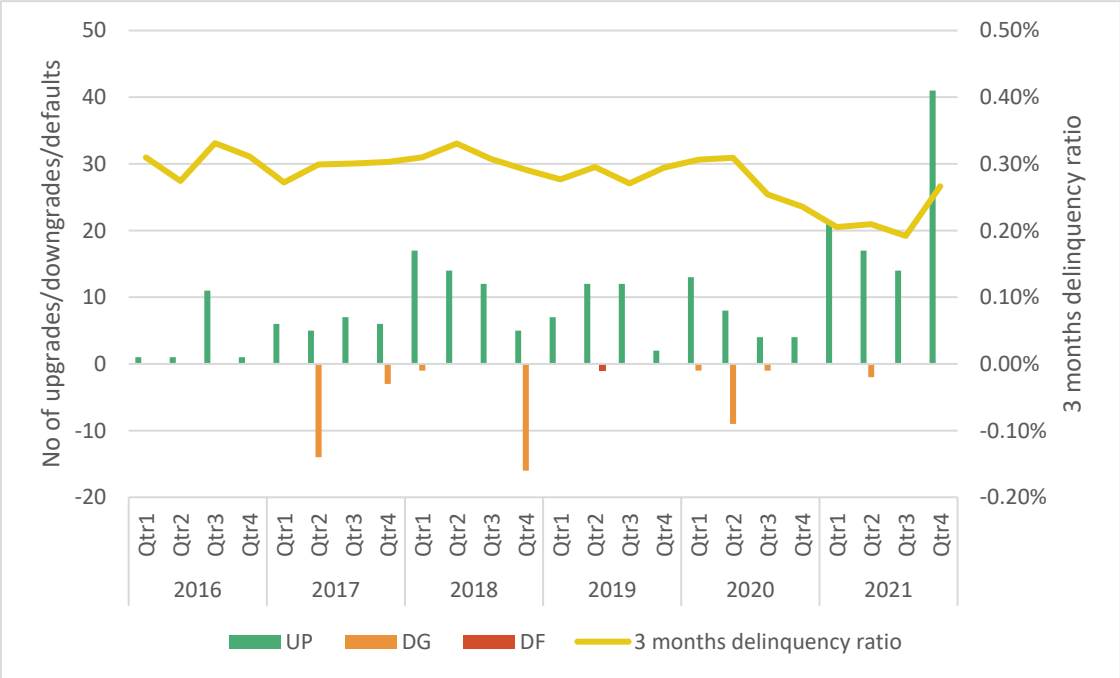


Source: EDW, ESMA

Regarding SME and corporate underlying exposures, unlike the other asset classes, the 3 months delinquencies have demonstrated higher volatility, ranging between 0.03% and 0.49%, with a decreasing trend between 2016 and 2017. In Q2 and Q3 2018, the credit performance in terms of arrears slightly deteriorated, accompanied by an increase in the number of downgrades in Q4 2018. An increase in the percentage of the loans classified as 3 months in arrears in the beginning of the pandemic was accompanied by an increase in the rating downgrades and defaults in Q4 2020. Since that period the arrears levels have trended lower and an increase in the number of upgrades was experienced throughout 2021.

[23] For the purposes of this analysis the 3 months delinquency ratio for the SME data corresponds to the 60-90 days in arrears. According to the ECB SME data template the data is reported in number of days in arrears. Please note that the template is available at the following link: Data templates (europa.eu)

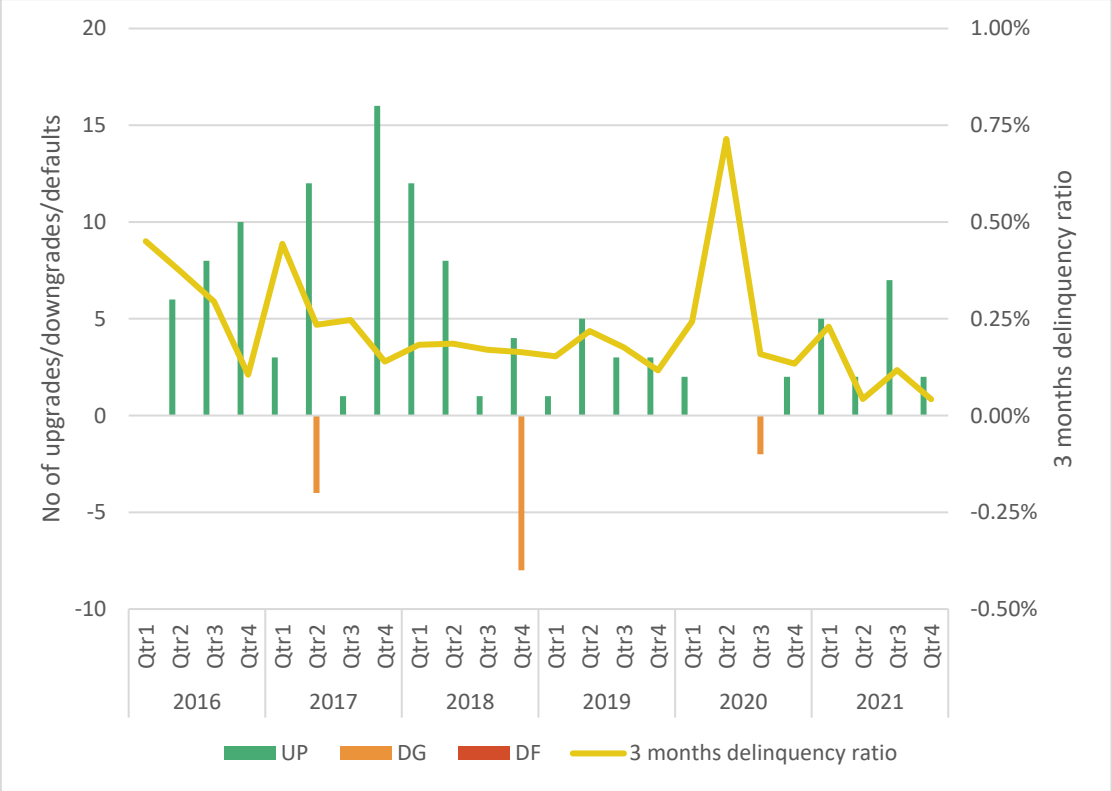
Figure 18: Rating actions and 3 months delinquency ratio of European Consumer ABS



Source: EDW, ESMA

Concerning the credit performance of the consumer exposures, the 3 months delinquency ratio has generally trended higher compared to the aforementioned types of underlying exposures (ranging between 0.19% and 0.33%). An increase in the percentage of arrears in Q2 2018 has been followed by an increase in the number of downgrades in Q4 2018. Similar to other asset classes, at the beginning of the pandemic there was an increase in the delinquencies, however the increase in the number of rating downgrades was offset by the number of rating upgrades during the same period.

Figure 19: Rating actions and 3 months delinquency ratio of European Leasing ABS



Source: EDW

Finally, the leasing exposures have shown the highest percentage of delinquencies (0.70%) in the beginning of the pandemic (Q2 2020) compared to other types of underlying exposures. However, this was accompanied by only a few rating downgrades. Even though the arrears levels have been generally high, there have been no default events in terms of rating actions during the pandemic. In Q4 2018 the number of downgrades exceeded the number of upgrades, but the 3 months delinquency ratio was trending low (0.16%).

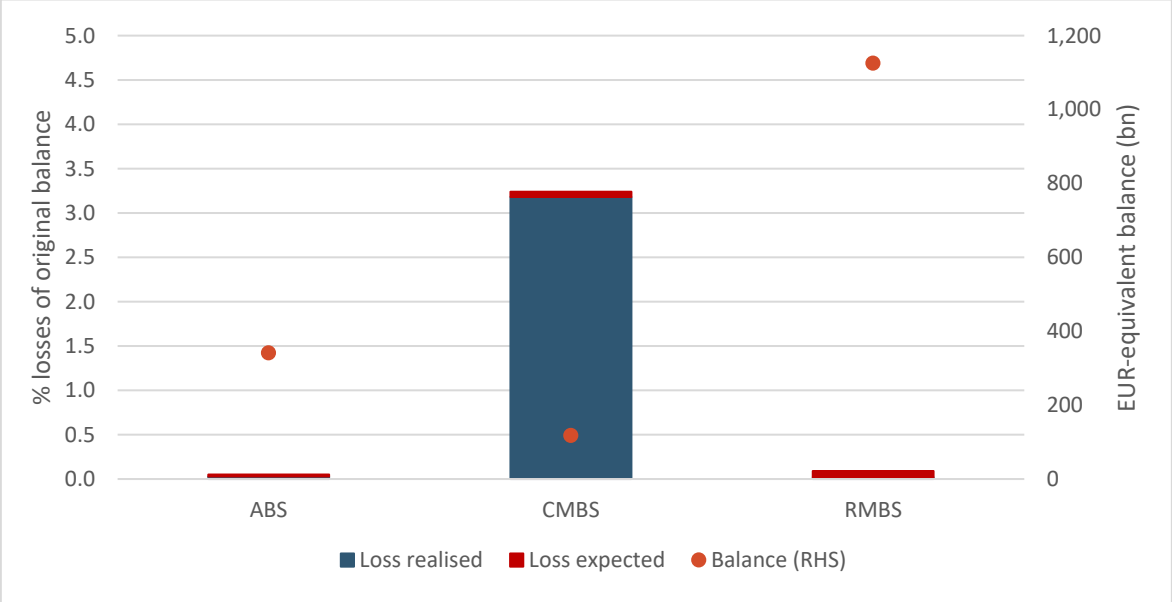
2.4.3 Analysis based on losses on rated structured finance tranches of European securitisations

There is limited research available on losses based on the underlying exposures of European securitisations. Due to differences in reporting practices such analysis may not be representative and requires complex adjustments. Fitch has performed an analysis[24] on the losses of European rated structured finance tranches, including ABS, CMBS and RMBS. According to this research, the total losses in the notes rated by Fitch issued since 2009 have been very low and are mainly driven by CMBS. With regards to European RMBS, the data from Fitch shows that all expected losses relate to tranches that are rated CCC or below (speculative grade). Finally, according to Fitch, there is only one Spanish Auto ABS tranche that was originally rated CC and is expected to incur a loss. Figure 20

[24] The report by Fitch Ratings on the Global Structure Finance Losses: 2000-2020 Issuance is available at the following link: Global Structured Finance Losses: 2000-2020 Issuance (fitchratings.com)

shows the total losses of European securitisation bonds issued between 2000 and 2020 by sector based on the EBA calculations on the data from Fitch research.

Figure 20: European securitisation total loss by sector[25]



Source: EBA calculations, Fitch Ratings

[25] Total loss is the sum of expected and realised loss. The chart is based on the 'EMEA Total Loss by Sector' and it includes the Fitch-rated ABS, CMBS and RMBS tranches issued between 1 January 2000 and 31 December 2020. The data used were as of 4 January 2021. Please note that the UK data and data from countries classified as 'Other' are excluded from the calculations.

3. Assessment of the regulatory capital treatment of securitisation under the CRR

Taking into account findings from the market assessment, EBA is requested to advise the Commission on whether the securitisation capital framework has been the main or a very significant driver for credit institutions' origination and investment activity in EU securitisation markets and which other factors had also a major impact and the reasons behind this.

In response to the consultation launched by the Commission on the functioning of the securitisation market (July 2021), stakeholders emphasised that current capital charges for securitisations might be too prohibitive, relative to comparable asset classes, and insufficiently risk sensitive. Capital non-neutrality embedded in the framework (due to the current level of the p-factor and the risk weight floors) has been considered too high in relation to the lower agency and model risk featured by securitisations post the global financial crisis thanks to several supervisory (TRIM, SREP) and regulatory initiatives (EBA IRB repair, STS framework, SECR and output floors, though the latter are not yet in force).

In this respect, a discussion on the appropriate level of conservatism embedded in the prudential framework for securitisation (where the current level of conservatism is discussed in Section 3.1) seems warranted. At the same time it is important to keep the risk sensitivity of the framework and carefully analyse the risk associated to a potential recalibration of capital rules.

The framework has therefore been reviewed holistically and the following sub-sections present:

- Empirical evidence on capital non-neutrality (Section 3.1)
- Recommendations to improve the clarity and the consistency of the securitisation capital framework (Section 3.2)
- A change to the prudential framework aimed at improving its risk sensitivity by recommending a targeted reduction of the risk weight floor for certain senior tranches retained by the originators (Section 3.3.1)
- General considerations on the appropriateness of the securitisation formula-based approaches (Section 3.3.2)

3.1 Capital non-neutrality embedded in the capital framework

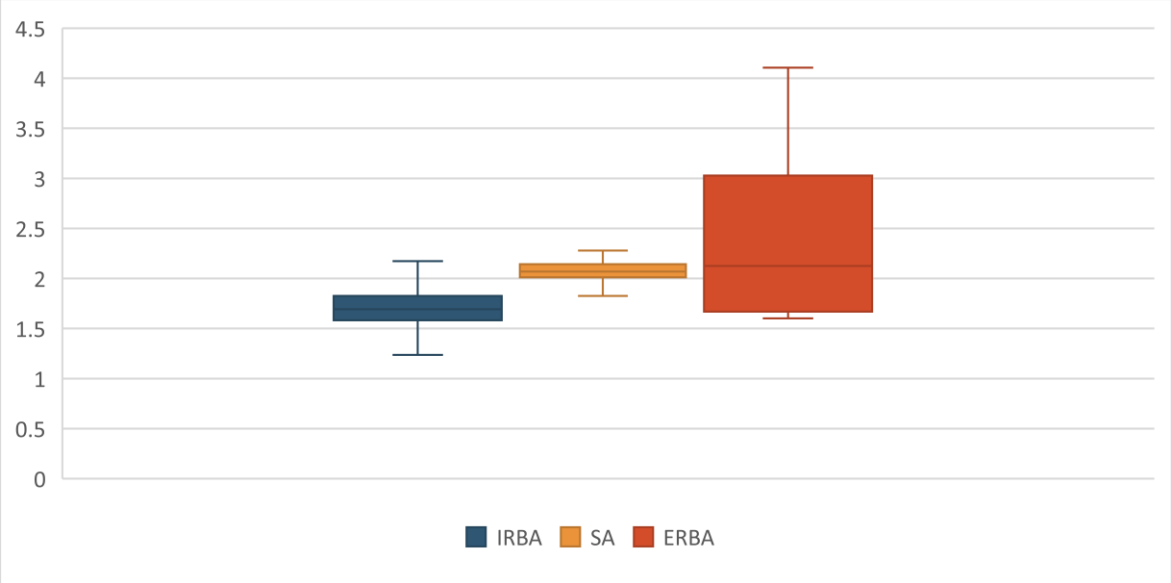
The ratio of the capital requirements applicable to all the tranches of a transaction as if held by the originator without applying any caps to the capital requirements applicable to the underlying

portfolio of exposures is the ratio considered to measure the framework capital non-neutrality. Capital charges on securitisation are defined to be non-neutral whenever this ratio is greater than 1 and defined to be neutral when this ratio is equal to 1. By construction, the SEC-IRBA and SEC-SA are capital non-neutral, which means that the securitisation framework assigns an add-on to the capital requirements under these approaches towards the securitisation tranches compared to the capital requirements of the pool of underlying exposures. Only by selling tranches to third party investors or obtaining credit protection from third party investors for certain tranches can originators achieve capital requirements which are the same or lower than what those previously held against the underlying portfolio (leaving aside any application of caps). Under the SEC-ERBA, this ratio depends on the ratings assigned to the individual tranches and can be higher or lower than 1.

Using information from COREP the presentation of the capital non-neutrality embedded in the securitisation framework is based on a breakdown by approach used to calculate the capital requirements. In particular, Figure 21 shows the capital non-neutrality on the basis of the approach under which the transaction is reported and according to the relevant input data reported. The sample consists of 117 transactions where 57 are reporting under the SEC-IRBA, 41 under the SEC-SA and 17 under the SEC-ERBA where a transaction is classified as reporting under the SEC-ERBA if at least one of the tranches is reported under the SEC-ERBA and the rest under the SEC-SA[26]. The same results would be obtained if instead of using the approach under which the transaction is reported the ratios would have been calculated under each approach in all transactions where the necessary inputs are provided.

[26] The credit quality steps of the mezzanine tranches reported in COREP relate to the most subordinated mezzanine tranches. Therefore, in order not to overestimate the non-neutrality under the SEC-ERBA transactions with only one mezzanine tranche have been distinguished from those with more than one mezzanine tranche. In cases where more than one mezzanine tranche was present, the risk weights recomputed under the SEC-SA have been used to compute the capital non-neutrality. This approach doesn't seem to lead to biased results as the senior tranches are the ones most frequently rated.

Figure 21: Capital non-neutrality for the 3 regulatory approaches



In line with the theory, the results of the analysis show that the capital non-neutrality increases following the hierarchy of the approaches. As shown in Figure 21, the capital non-neutrality median under SEC-IRBA is 1.69, under SEC-SA is 2.07 and is 2.13 for SEC-ERBA.[27]

3.2 Quick fixes aimed at improving the clarity and the consistency of the current framework

The recommendations considered in this sub-section can be divided in three categories:

- Quick fixes to the prudential framework which aim at resolving some inconsistencies and/or improve risk sensitivity. These are: carving out the tranches risk weighted 12.5% from the calculation of the overall cap for securitisation (Recommendation 1 in point b) in Section 3.2.1); the treatment of specific credit risk adjustments (SCRAs) for the purpose of calculating the exposure value of securitisation positions retained by originators (Recommendation 2.1 and 2.2 in Section 3.2.2); the calculation of Ka under the SEC-SA and of K for mixed pools (Recommendation 4 and 5 in Section 3.2.4). It should be noted that even though all these proposed changes imply a small variation from the Basel text this are however perceived as being in line with the underlying logic of the Basel framework.

- Issues which should be flagged in the report to provide clarity and to request further clarification on the rationale underlying certain provisions of the current regulatory

[27] Please note that the capital non-neutrality is displayed after the application of the cap for senior tranches of Article 267.

framework. These include: clarifying the cases under which SEC-SA may not be used and also the scope of use of the Internal Assessment Approach under Article 254 (Recommendation 3.1 and 3.2 in point a. and c. in Section 3.2.3 respectively); clarifying the intention behind the hierarchy of the approaches (point b. in Section 3.2.3) and the treatment of State guarantees which are transformed from a credit risk mitigation (CRM) covering the State-guaranteed exposures to a guarantee covering a securitisation position (Section 3.2.6).

- Cross-cutting issues between CRR requirements applicable to securitisations and the requirements applicable to exposures under the credit risk framework of the CRR. including the treatment of portfolio guarantees and the calculation of the maturity of the credit protection in case of a call option for the protection buyer (Recommendation 6 in Sections 3.2.7 and section 3.2.5 respectively).

3.2.1 Caps for securitisation

a. Have caps operated as effective backstops?

The CfA requests the JC to consider whether "*the securitisation caps have operated as an effective backstop to the conservatism of the hierarchy of methods*". The caps for securitisations include a "look-through approach" for the most senior securitisation position (Article 267 of the CRR) and an "overall cap" on capital requirements for all tranches (Article 268 of the CRR).

The analysis of the caps' effectiveness has been carried out based on COREP data. The sample excludes NPE securitisations and the observations which do not refer to SRT transactions. Furthermore, several quality checks and additional cleaning of the data have been conducted [28]. The cleaned sample consists of 345 observations and for 31 of them either Article 267 or 268 may be applied.

The scope of application of Article 267, which implies the application of a "look-through approach" for the most senior securitisation tranche, can be seen from two perspectives:

- As a backstop to more conservative approaches lower in the hierarchy of methods.
- As a backstop to the conservatism of the risk weight floor and, therefore, applying for transactions characterised by a low level of Kirb or Ka.

The second effect seems to be the most prevalent in COREP and, in particular, for credit institutions using the SEC-IRBA and the SEC-SA. This result seems straightforward as on one side low values of Kirb/Ka imply a low weighted-average implied RW of the underlying pool and on the other hand

[28] This included removing those observations where tranches retained were reported (in C14.01) but the same tranche was not reported in the structure of the securitisation (in C14.00). Also, if the percentage of retention for each tranche was 0, the observation was dropped as well.

low values of Kirb/ka imply a low RW for the senior tranche below the risk weight floor, especially under SEC-IRBA.

EBA observes that Article 267 was used particularly by credit institutions applying the SEC-IRBA for the respective securitisation when the RW of the senior tranche is lower than the risk weight floor. In the sample Article 267 is applied 22 times and in 55% of the cases the entity adopts the SEC-IRBA and in 9 out of these 12 cases the RW of the senior tranche is below the RW floor. In the remaining cases, Article 267 is applied 6 times by entities reporting under the SEC-ERBA and 4 times under the SEC-SA. For entities reporting under the SEC-SA, similarly to the SEC-IRBA, Article 267 applies when the RWs of the senior tranche are lower than the RW floor. Instead, under the SEC-ERBA the RWs of senior tranches falling under the scope of Article 267 are higher (ranging between 20% and 505%). Therefore, whereas for tranches risk weighted under the SEC-IRBA and the SEC-SA Article 267 solves the issue of a too penalising risk weight floor, for senior tranches risk weighted under the SEC-ERBA it serves to mitigate the high RW of the senior tranches implied by the SEC-ERBA table in line with the hierarchy of the approaches.

In terms of retention, the application of the "look through approach" for the most senior tranches of Article 267 works also in line with the expectations where a retention of thick senior tranches connected to a low level of retention of mezzanine and first losses is observed.

To conclude, the cap pursuant to Article 267 seems to work according to its original aim while the analysis seems to suggest an assessment on the mechanics and a potential targeted review of the risk weight floor (tackled in Section 3.2 of this report).

For what concerns the overall cap for securitisation according to Article 268, the analysis of the sample shows that it works consistently with the hierarchy of the approaches, having a low frequency of application for less conservative approaches (around 2% for SEC-IRBA and SEC-SA versus a higher 6% for SEC-ERBA). However, it is the JC's view that the application of Article 268 could be further improved to better take into account the case of fully capitalised tranches. This issue is analysed in the Section b. below.

b. Treatment of fully capitalised tranches for the purpose of the overall cap on capital requirements of Article 268 of the CRR

Recommendation 1: Carve out fully capitalised tranches from the calculation of V in Article 268(3) of the CRR
The JC recommends allowing institutions the discretion to carve out from the calculation of V (i.e. the largest proportion of interest that the institution holds in the relevant tranches) under Article 268(3) of the CRR any tranche in full to which the originator applies a 1 250 % RW or which is deducted from CET 1 items in accordance with point (k) of Article 36(1) of the CRR. The maximum capital requirement should be the sum of the capital requirements calculated under Chapter 2 or 3 on the "net underlying exposures", i.e. total underlying exposure net of the exposure value relative to the carved-out tranche , multiplied by the revised V and the sum of the exposure values (which

equal the capital requirements after securitisation) of the securitisation positions which are carved out from the calculation of V. Article 268(3)(b) could be adjusted to include such optionality without raising a prudential concern, making it more risk-sensitive and applicable to a wider range of securitisations.

$$maximum\ capital\ requirement = [sum(capital\ requirements\ of\ net\ underlying\ exposures) * revised\ V + sum(exposure\ value\ of\ carved\ out\ positions)]$$

The overall cap in Article 268 of the CRR is calculated by multiplying the capital requirements that would be calculated under Chapter 2 or 3 in respect of the underlying exposures had they not been securitised by the highest share of investment the institutions have in each relevant tranche (the so-called V parameter).

The parameter V affects how the cap applies and could be subject to a targeted change for being more risk sensitive. Independently from the approach used by the institution, the calculation of V could take into account better the institution's investment structure in the transaction and, in particular, the cases where the institution fully capitalises (part of the) first loss tranche (either by applying a 1250% RW or by deducting it from CET1 items in accordance with point (k) of Article 36(1) of the CRR). This tranche can be carved out from the calculation of V which will be based then on the retaining structure of senior and mezzanine tranches. The remaining exposure of the institution to the senior and the mezzanine is less risky than a pro rata V% share of the whole pool of underlying exposures[29] and therefore the proposed amendment does not raise concerns from a prudential point of view. Under this proposal the maximum capital requirement should be the sum of the capital requirements of the net underlying exposures, i.e. total underlying exposure net of the exposure value relative to the carved-out tranche, calculated under Chapter 2 or 3, multiplied by the updated V and the sum of the exposure values (which equal the capital requirements after securitisation) of the securitisation positions which are carved out from the calculation of V.

The following example illustrates the logic and mechanics of this proposal:

- total exposure value of the tranches = 1000 mn € where 90% is senior tranche, 9% is mezzanine tranche and 1% is junior tranche;
- use of the Standardised Approach (SA) for the underlying exposures;
- RW of all the underlying exposures equal to 100%;
- capital requirement (CR) = 80 mn € (8% * RW * total exposure value);
- w= 0, therefore KA = KSA = 8%.

According to the retention structure for the originator, as displayed in

Table 1, the total capital requirement (CR) for the originator would be equal to 17.5 mn €.

[29] Where V is calculated according to the highest share of retention of the senior or mezzanine.

Table 1: retention by originator according to the example

	Senior	Mezzanine	Junior	Sum
Exposure value	900 mn €	90 mn €	10 mn €	1000 mn €
Thickness	90%	9%	1%	100%
Retention by originator	5%	5%	100%	
RW under SEC-SA	86.5%	1218%	1250%	
CR	62.3 mn €	87.7 mn €	10 mn €	160 mn €[30]
of which: originator (retention share*CR)	3.1 mn €	4.4 mn €	10 mn €	17.5 mn €

In this example, Article 268 is of no use for the originator, as "the largest proportion of interest that the institution holds in the relevant tranches (V)" is 100% and hence the current "capital requirement for the securitisation position [the originator] holds" (17.5 mn €) is already lower than "the capital requirements that would be calculated under Chapter 2 or 3 in respect of the underlying exposures had they not been securitised" (80 mn € * V of 100% - 10 mn €[31] = 70 mn €).

However, the originator fully capitalises the first loss tranche, so that this tranche could be carved out from the calculation of V. The remaining exposure of the originator to the senior and the mezzanine (5%, hence V = 5%) is less risky than a 5% pro rata share of the originator of the whole pool of underlying exposures net of the exposure relative to the carved-out tranche, which would receive a CR of ((1000 -10) mn € * 8% * 5%= 79.2 mn € *5% = 3.96 mn €[32]) according to the SA, which will be the cap for the CR of the senior and mezzanine. Under this proposal, the 3.96 mn € act de facto as the cap for the sum of the CR for the retained share of the mezzanine and of the senior tranches, i.e. EUR 3.1 mn €+ 4.4 mn € = 7.5 mn € after carving out the junior tranche (as per Table 1).

Hence, Article 268 could be adjusted to include such optionality for the originator without raising a prudential concern, making it more risk-sensitive and applicable to a wider range of securitisations. In the example above, the first loss tranche is carved out, but likewise any other tranche receiving a RW of 1250% or being deducted could be carved out at the discretion of the originator.

As the possibility of applying the maximum capital requirement given in Article 268(1) is optional for originators, so should be the option to carve out fully capitalised tranches discussed in this proposal, i.e. originators may choose to do so, but don't have to. Moreover, the example deals with the case of an originator, but the scope of the proposal should be as broad as the scope of Article

[30] Twice as much as pre-securitisation since p=1.

[31] 10 mn € are deducted from the maximum capital requirements in accordance with Article 253(2).

[32] The exposure value of the first loss which is carved-out from the calculation of V, here 10 mn €, is deducted from the exposure value of the pool of underlying exposures for the purpose of calculating the maximum capital requirements for the tranches which are not carved-out.

268(1) and, therefore, apply to originators or sponsors and for the case of investors only if they apply SEC-IRBA.

According to COREP data the EBA could not identify any case that could be impacted by this proposal. However, this change will render the overall cap applicable to a wider range of future securitisations when this is warranted from a risk perspective and, therefore, contributes to making the overall cap for securitisation more risk sensitive.

3.2.2 Treatment of specific credit risk adjustments (SCRAs)

Article 248(1)(d) of the CRR allows originators to deduct from the exposure value of a securitisation position which is assigned a 1250% RW the amount of specific credit risk adjustments (SCRAs) on the underlying exposures of the pool. The rationale behind this provision is to avoid having both SCRAs and capital requirements on a tranche that is already fully deducted.

The JC has discussed the treatment of SCRAs in securitisation and concluded that the rationale behind the deduction of SCRAs could be generalised to other tranches retained by the originator (Recommendation 2.1 described in the Sub-Section a. below) and also that SCRAs should be taken into account in the calculation of the cap for securitisation as prescribed for NPE exposures (Recommendation 2.2 described in the Sub-Section b. below). Finally, it is also recommended to delete the mandate given to EBA to develop draft RTS to specify what constitutes an appropriately conservative method for calculating the nominal amount for the undrawn part of a liquidity facility (Recommendation 2.3 described in the Sub-Section c. below).

a. Treatment of SCRAs for calculating capital requirements post securitisation

Recommendation 2.1: extend the possibility to net SCRAs up to the entire portion of the securitisation positions risk weighted 1250%
The JC recommends amending Article 248(1)(d) of the CRR such that to extend the possibility to deduct SCRAs also to tranches that have been assigned a RW lower than 1250% provided that they have an attachment point A smaller than K_{IRB} or K_A. If this condition is satisfied, in fact, the securitisation position may be treated as two securitisation positions: the more senior position with A equal to K_{IRB} or K_A and the junior position with A below K_{IRB} or K_A and detachment point D equal to K_{IRB} or K_A. In this case SCRAs will be allowed to be deducted only from the exposure value of this more junior position which would be assigned a RW of 1250%.

Article 248(1)(d) gives the benefit to originators to deduct the SCRAs from the securitisation position only if the tranche is assigned a RW exactly equal to 1250%. This happens when the detachment point of the first loss tranche is equal to or lower than K (where K refers to K_{IRB} or K_A depending on whether SEC-IRBA or SEC-SA is used). However, a first loss tranche detaching above the K, and therefore getting a RW lower than 1250%, can always be seen from a prudential perspective as two tranches, one with detachment point at K, and therefore getting a 1250% RW,

and a second one with attachment point at K and detachment point above K, therefore getting a RW lower than 1250%.

This split into two tranches is already reflected in paragraph 215 of the EBA report on significant risk transfer[33] where it is suggested that "*it would be very relevant for the SRT assessment to adopt a new provision whereby positions attaching below KIRB or KA, and detaching above KIRB or KA, would be treated as two positions with attachment equal to KIRB or KA for the more senior of the positions, as in the repealed Article 266(3)(c) of the CRR under the supervisory formula approach that position, as set out in Article 248(1)(d) of the CRR*." It seems therefore reasonable to extend this interpretation not only for SRT purposes but also for RWEA calculation purposes and modify Article 248(1)(d) in accordance with the repealed Article 266(3)(c) of the CRR. This forms the basis of the proposal in Recommendation 2.1.

The Recommendation 2.1 allowing the split also for RWEA purposes has many advantages as: i) it does not create any issue on the side of Basel compliance as SCRAs are deducted only up to the portion of the tranche which is risk weighted 1250%; ii) it is aligned to the accounting rationale based on which SCRAs are built against expected credit loss, which are in a sense ´contained ´ in the portion of a tranche that is 1250% risk weighted; iii) it is aligned with previous EBA recommendations.

It is important to note that this proposal would be applicable to any tranche with an attachment point A smaller than K. In other words, SCRAs could be allowed to be deducted also from mezzanine tranches if they attach below K and, therefore, have a portion of the tranche which is risk weighted 1250% and up to which SCRAs can be deducted.

The EBA has also discussed the possibility to generalise the option given to originators to deduct SCRAs from securitisation positions risk weighted 1250% also to any other securitisation position held by the originator (alternative proposal hereinafter). According to the current framework, in fact, an originator retaining only the senior tranche may not reduce the exposure value of the retained securitisation position and, therefore, the capital requirements, to take into account the SCRAs already put aside[34]. However, the rationale behind the deduction of Article 248(1)(d) could be extended and there should not be any prudential concern in proposing to extend the deduction of the SCRAs from exposure value of more senior securitisation positions with an attachment point A above K which are retained by the originator.

The rationale behind this alternative proposal could be explained by the use of an example. Consider the case of two originators structuring a securitisation on an identical pool of exposures which is therefore characterised by the same amount of SCRAs. One originator retains the first loss tranche of this transaction risk weighted 1250% and is able, therefore, to offset this securitisation position by the SCRAs obtaining a decrease in the exposure value and hence also a decrease in

[33] EBA SRT report.

[34] The risk weight of the senior tranche is calculated, in fact, in accordance with Article 255 where under paragraph 2 Kirb includes both EL and UL but does not consider SCRAs that are already put aside from the originator and, under paragraph 6 Ksa is calculated by considering a gross exposure value of the underlying exposures.

RWEA. The other originator instead is retaining only the senior tranche and notwithstanding exposed to a much lower risk, could not make use of the SCRAs put already aside for the underlying exposures to offset the exposure value of the retained senior securitisation position. Allowing the deduction of SCRAs also in this second case would produce the same reduction in exposure value, but a relatively lower reduction in RWEA for the same amount of SCRAs put aside by the originators and seems therefore not to raise any prudential concerns. Another argument in favour of the alternative proposal is its broad application to all approaches. While the baseline proposal is only applicable to tranches risk-weighted under the SEC-SA and the SEC-IRBA (since a rating on a tranche under the SEC-ERBA cannot be split into two new virtual ratings), tranches risk-weighted under the SEC-ERBA can also be netted by SCRAs under the alternative proposal.

However, this alternative proposal also comes with some disadvantages. First and foremost, it creates a potential deviation from Basel. Moreover, it violates the accounting logic if SCRAs might additionally be used to offset the exposure value of tranches (e.g. the senior tranche) which are structured in a way to conceptually cover unexpected losses rather than expected losses.

To inform the discussion the impact of both proposals has been considered by EBA and is summarised in Table 2. The sample of transactions used for the impact is the same that has been used for evaluating the proposal of reducing the risk weight floor (described in Section 3.3.1). In particular:

- Under SEC-IRBA, the number of observations included in the whole sample is 202 while the number of those reporting also SCRAs is 106 (52%).
- For the SEC-SA, the number of observations included in the sample is 59 while the number of those reporting also SCRAs is only 16 (27%), which should be taken into account when assessing the impact of the proposals

Table 2 below shows the impact on the full portfolio (total sample column) and the impact on the specific subset of securitisations for which SCRAs are greater than zero (SCRAs > 0 sample column).

Table 2: impact of baseline vs alternative proposal for SCRA reduction

SEC-IRBA	Total sample	SCRAs>0 sample
Proposal under Recommendation 2.1	-1.33%	-3.30%
Alternative option	-1.71%	-4.24%
SEC-SA	Total sample	SCRAs>0 sample
Proposal under Recommendation 2.1	-0.13%	-0.27%
Alternative option	-0.17%	-0.35%

Total (SA + IRB)	Total sample	SCRAs>0 sample
Proposal under recommendation 2.1	-0.41%	-1.03%
Alternative option	-0.53%	-1.33%

For the SEC-IRBA, the impact of the proposal in accordance with Recommendation 2.1 compared to the current CRR framework results in a reduction in RWEA equal to -1.33% for the total sample and a reduction equal to -3.3% RWEA for the SCRAs>0 sample. In evaluating this impact, it is important to note that the benefit that is already given in the current framework to originators by allowing for the deduction of SCRAs from the exposure value of the tranches risk weighted 1250% entails already a significant reduction in RWEA equal to -3.32% for the total sample and equal to -8.25% for the sample of transactions where SCRAs are reported.

For the alternative option, the impact is marginally higher, equal to -1.71% RWEA for the total sample and equal to -4.24% RWEA for the SCRAs>0 sample. As expected, the impact of recommendation 2.1 and the alternative scenario on the RWEA calculated under the SEC-SA is minimal. The impact for the alternative proposal for transactions under SEC-ERBA (please note that recommendation 2.1 is not applicable to SEC-ERBA) is even smaller and equal to a reduction in RWEA of -0.01% for the total sample and of -0.02% on the sample characterised by SCRAs greater than zero.[35]

The JC considered pros and cons of the proposal according to Recommendation 2.1 and of the alternative proposal as well as the impact of both proposals. Considering the only marginal impact associated with the alternative proposal which however seems to create a methodological deviation from Basel, ultimately the proposal set out under Recommendation 2.1 has been considered as preferred option.

b. Treatment of SCRAs for calculating the overall cap for securitisation (i.e. capital requirement pre securitisation)

Recommendation 2.2: amend Article 268(1) of the CRR to align the treatment of SCRAs for calculating the overall cap for all securitisations with the respective treatment for NPE securitisation.
The JC recommends to align the calculation of the overall cap of Article 268 of the CRR with the recent legislative change made for NPE securitisations as per Article 269a(5) of the CRR. This means that originators using the SEC-IRBA shall deduct SCRAs from the expected loss amounts also when calculating the capital requirements for the underlying exposures in case of securitisations other than NPE securitisations.

[35] For SEC-ERBA the number of observations in the sample is 52 while the number of those reporting also SCRAs is 15 (27%).

Whereas Recommendation 2.1 focuses on the treatment of SCRAs to calculate capital requirements post securitisation, EBA has discussed also how to ensure consistency with the IRB Approach when calculating the capital requirements pre securitisation and, therefore, the maximum capital requirements in accordance with Article 268. In particular, it has been noted that in accordance with Article 269a(5) for NPE securitisation for the purposes of calculating the cap under Article 268(1) the "*expected losses associated with exposures underlying a qualifying traditional NPE securitisation shall be included after deduction of the non-refundable purchase price discount and, where applicable, any additional specific credit risk adjustments*". Whereas the non-refundable purchase price discount (NRPPD) is a concept which is NPE specific the logic behind the deduction of SCRAs from the expected loss should also be generally applicable to, even if possibly less relevant for, non-NPE securitisation.

In this respect, it is proposed that as for NPE securitisation, originators using SEC-IRBA should deduct the SCRAs from the expected loss component of K_{IRB} for the purposes of the calculation of the overall cap in accordance with Article 268.

c. Deletion of the mandate to develop draft RTS in accordance with Article 248(1) of the CRR

Recommendation 2.3: delete the mandate for EBA to develop RTS in accordance with Article 248(1) of the CRR
The JC recommends to delete the mandate given to EBA in Article 248(1) of the CRR to develop draft RTS to specify what constitutes an appropriately conservative method for calculating the nominal amount for the undrawn part of a liquidity facility and clarifying the text of this part of the Article.

Article 248 determines how to calculate the exposure value of a securitisation position. Point (b) of paragraph 1 of this Article deals with the exposure value of off-balance sheet securitisation positions and, in particular, with the exposure value of the undrawn portion of cash advance facilities.

Specifically, it sets out that '*the exposure value of an off-balance sheet securitisation position shall be its nominal value less any relevant specific credit risk adjustments on the securitisation position in accordance with Article 110, multiplied by the relevant conversion factor as set out in this point. The conversion factor shall be 100 %, except in the case of cash advance facilities. To determine the exposure value of the undrawn portion of the cash advance facilities, a conversion factor of 0 % may be applied to the nominal amount of a liquidity facility that is unconditionally cancellable provided that repayment of draws on the facility are senior to any other claims on the cash flows arising from the underlying exposures and the institution has demonstrated to the satisfaction of the competent authority that it is applying an appropriately conservative method for measuring the amount of the undrawn portion*.

The text of the Article is unclear, because the '*conservative method for measuring the amount of the undrawn portion'* seems to refer to the nominal amount, as there are no other references to 'amount' other than to the 'nominal amount' in the Article, which deals with the nominal value and the exposure value post application of the conversion factor.

As the calculation of the nominal amount of the undrawn portion (the off-balance sheet item) is straight forward, because it can be determined as the difference between the total nominal amount of the liquidity facility and the nominal amount of the drawn portion (an on-balance sheet item), the JC recommends amending point (b) of paragraph 1 of Article 248 by deleting the last part: '*'and the institution has demonstrated to the satisfaction of the competent authority that it is applying an appropriately conservative method for measuring the amount of the undrawn portion.'*

In the last three subparagraphs of paragraph 1 EBA is also given a mandate to "*develop draft regulatory technical standards to specify what constitutes an appropriately conservative method for measuring the amount of the undrawn portion referred to in point (b) of the first subparagraph*". The JC recommends to delete this mandate as no further clarification on the calculation of the nominal amount of the drawn portion seems to be needed beyond what is already set out in the Level 1 text.

3.2.3 The hierarchy of the approaches

The CfA requests the JC to review whether "*the inversion of the hierarchy of methods that allows banks to apply the SEC-ERBA as per paragraphs (2) and (3) of Article 254 of the CRR has met its purpose to mitigate the conservatism of the SEC-SA in certain cases*". The EBA has discussed this and isolated the following three related issues:

- Issue 1: Lack of clarity under which circumstances an institution should not be able to apply SEC-SA under Article 254(1)(c), discussed in Sub-Section a. below;
- Issue 2: Non-homogeneous application by institutions and possibly NCAs of paragraph 2 of Article 254 under which conditions institutions should switch from SEC-SA to SEC-ERBA and need to clarify the original intention underlying this requirement. This is discussed in Sub-Section b. below;
- Issue 3: Lack of clarity in the scope of application of the Internal Assessment Approach under Article 254(5) discussed in Sub-Section c. below.

The EBA notes that the analysis presented in this section also serves as the EBA response to the Commission mandate under Article 254(8) to monitor the impact of this Article on capital requirements. Further analysis will be performed in 2023 according to notifications received.

a. Conditions in Article 254(1)(c) of the CRR under which SEC-SA may not be used

Recommendation 3.1: amend Article 254(1)(c) of the CRR to clarify what are the conditions under which SEC-SA may not be used.

The JC recommends to amend Article 254(1)(c) of the CRR to clarify that the only cases, where the SEC-SA may not be used, are specified in paragraphs 2 and 4 of the same Article which specify respectively the conditions for a mandatory switch to SEC-ERBA and the cases where the use of the SEC-SA is being prohibited by the relevant competent authority.

Paragraph 1 of Article 254 defines the hierarchy of the approaches where an institution shall use SEC-IRBA, and, if this is not possible according to the conditions of Article 258, the institution shall use the SEC-SA and, finally, if the SEC-SA "*may not be used*" the institution shall use SEC-ERBA for rated transactions. However, the conditions under which SEC-SA may not be used are not well specified, unless the co-legislators' intention was to exclusively refer to cases set out in paragraph 2, which specifies the conditions for a mandatory switch to SEC-ERBA, and cases where the use of the SEC-SA is prohibited by the relevant competent authority in accordance with the criteria specified in paragraph 4 of the same Article. In this case, the intended treatment should be clarified by including explicit references to these two specific cases in point (c) of paragraph 1 in order to improve the clarity of the requirement and to ensure a uniform application of the requirement by all institutions and competent authorities.

This view seems to be corroborated by the presumption in the CRR that an institution should always be able to run the SEC-SA formula. Both investors and originators are expected to know W (i.e. the delinquency ratio), in fact, according to Article 261(2), where an institution does not "*know the delinquency status for more than 5 % of underlying exposures in the pool, the position in the securitisation must be risk-weighted at 1.250 %.*" In connection with the limited flexibility that Article 261(2) provides in terms of calculating W in cases where the delinquency status is known for at least 95% of the exposures this implies that not knowing the parameter W cannot be a reason to switch to SEC-ERBA. Finally, to calculate the other SEC-SA key parameter K_{SA} the institution just needs to be aware of the composition of the underlying pool in order to apply correctly the SA RWs.

b. Conditions in point (a) and (b) of Article 254(2) of the CRR under which institutions shall switch to SEC-ERBA

The prudential rationale of paragraph 2 of Article 254 on the quantitative rules to switch to SEC-ERBA may be further clarified by the co-legislators, where a lack of clarity has led to a non-homogenous interpretation and application of the requirement by competent authorities and institutions across the Union (see analysis below).

The current text imposes the use of SEC-ERBA on rated positions or positions in respect of which an inferred rating may be used when (inter alia): i) for STS securitisation positions, the SEC-SA provides a RW above 25% or ii) for non-STS securitisation positions, the SEC-SA provides a RW above 25% or the application of SEC-ERBA results in a RW above 75%.

Analysis of the current application of Article 254(2) of the CRR

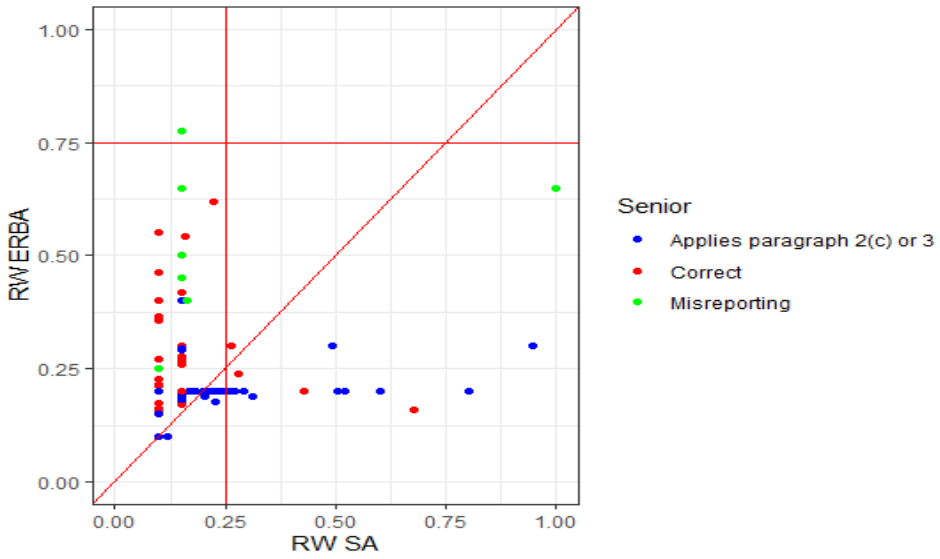
The starting point of the EBA analysis has been that of checking the current application of paragraph 2 of Article 254 by institutions on the basis of COREP data and taking into consideration the

notifications that EBA received from the relevant competent authorities in accordance with paragraph 8 of the same Article on the application of paragraph 3 under which an institution may decide to apply the SEC-ERBA instead of the SEC-SA to all of its rated securitisation positions.

Article 254(2) defines conditions under which the entities shall revert the hierarchy of the approaches in accordance with paragraph 1 and apply the SEC-ERBA instead of the SEC-SA. The purpose of the analysis has been to a) understand to which extent paragraphs 2 and 3 of Article 254 have been correctly interpreted by the institutions and b) to provide a comparison on the conservatism of SEC-SA and SEC-ERBA under the current framework of the CRR.

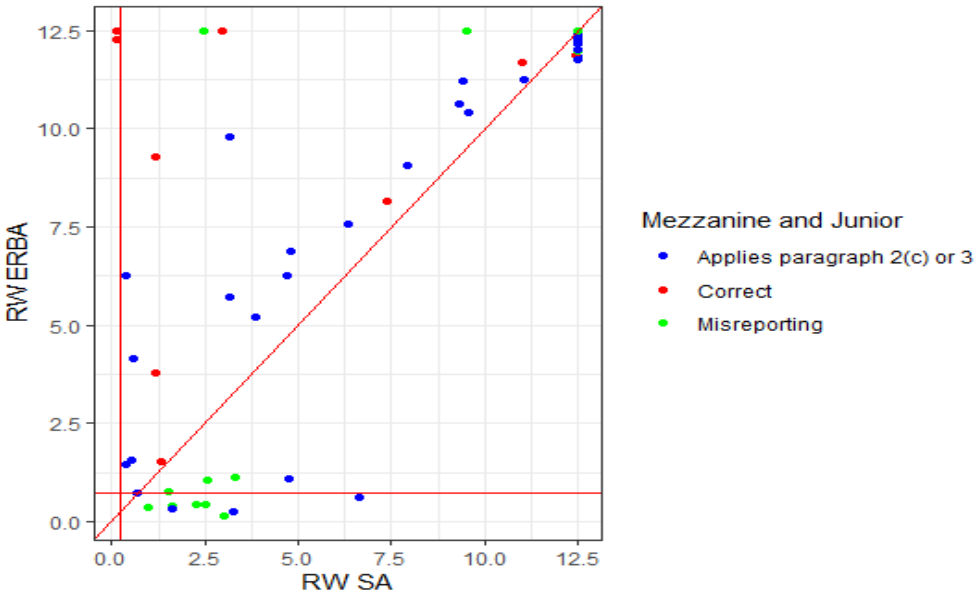
The following comparison is based on securitisation positions held in 221 senior tranches and 51 non-senior tranches which are reported either under SEC-SA or under SEC-ERBA. Figure 22 and Figure 23 compare the RWs of the tranches for which all the inputs to run the formulas and to calculate the RWs were available under both the SEC-SA and the SEC-ERBA. In both figures the vertical and horizontal lines identify broadly the quantitative limits of paragraph 2 according to which institutions should adopt the SEC-ERBA where the RW under SEC-SA is greater than 25% (vertical line) or in the case the SEC-ERBA the RW is greater than 75% (horizontal line). Below, a further breakdown for securitisation positions held in senior and non-senior tranches is provided to analyse to which extent Article 254(2) is correctly implemented by the reporting institutions. In particular, the figures show: i) institutions which follow the hierarchy correctly (points in red), ii) institutions exempted as outlined in point (c) of paragraph 2 and in paragraph 3 of Article 254 (points in blue) and iii) the institutions misreporting, i.e. not applying paragraph 2 correctly (points in green).

Figure 22: Application of Article 254(2) for senior tranches



The sample refers to investors' securitisation positions for 48% of the tranches. Of these, 56% apply point (c) of paragraph 2 or paragraph 3 of Article 254 and 49% seem to be misreporting. Regarding misreports, investors tend to report their securitisation positions under the SEC-ERBA even when the SEC-SA is applicable and renders a more favourable RW – one possible reason could be the difficulties in obtaining the inputs for the SEC-SA formula, in particular the delinquency ratio. Looking at the whole sample instead, the percentage of tranches applying point (c) of paragraph 2 or paragraph 3 of Article 254 is 31% while 35% seem to be subject to a misreporting according to Article 254(2).

Figure 23: Application of Article 254(2) for mezzanine and junior tranches



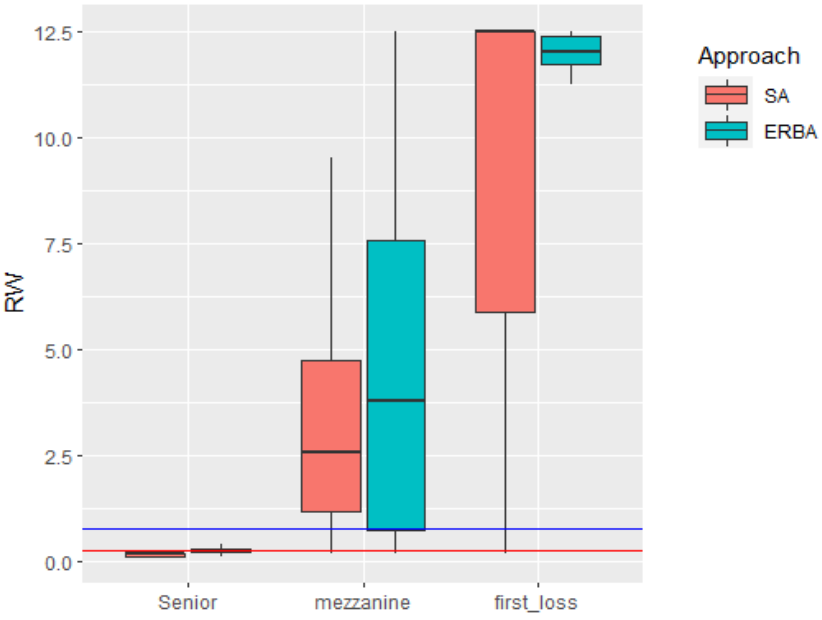
The application of Article 254(2) by construction affects much more often securitisation positions held in the junior and mezzanine tranches rather than those held in the senior tranches. Figure 24 below reports the dispersion of the RWs split by type of tranche while the associated table reports the RWs on the same sample split by type of tranche and approach.[36] It is clear that only a very limited portion of the securitisation positions held in senior tranches is affected by Article 254 and would be subject to the application of the SEC-ERBA (in fact 88% of the tranches have a SA RW < 25% and only 10% have an ERBA RW > 75%). The picture is different for securitisation positions held in non-senior tranches. Indeed, 96% of the mezzanine securitisation positions are assigned a SEC-SA RW above 25% and 75% of them are associated with a SEC-ERBA RW above 75%. When it comes to securitisation positions held in the junior tranches, the share of securitisation positions with a SEC-SA RW above 25% is 91% while 95% have a SEC-ERBA RW above 75%. Therefore, securitisation positions held in mezzanine and junior tranches end up with applying the SEC-ERBA almost systematically.

[36] The sample covers all the transactions for which the EBA could recalculate the RW under SEC-ERBA and SEC-SA and which are also reported under either of these approaches (however the breakdown does not follow the reported approach here).

The analysis points out that the securitisation positions which follow an erroneous approach are particularly those held in the mezzanine and the junior tranches – while a minority of such cases could be due to the fact that SEC-ERBA produces a greater RW, the majority of those cases are the result of an erroneous application of the SEC-SA implying the application of higher RWs than those applied under SEC-ERBA. Moreover, for the misreported securitisation positions held in senior tranches, the institutions adopt the SEC-ERBA even though the capital requirements would be lower when applying the SEC-SA to those securitisation positions, which may suggest, in some cases, a non-homogenous interpretation of Article 254(2).

Taking into account all the above, the JC considers it important for the Commission to clarify the underlying rationale of the Article and the intended scope of application of the requirement.

Figure 24: SEC-SA vs SEC-ERBA (split by tranche)



Values (RW %)			
Tranche	per15	median	per85
Senior SA	10%	15%	22%
Senior ERBA	19%	20%	42%
Mezz SA	60%	256%	657%
Mezz ERBA	42%	377%	923%
Junior SA	256%	1246%	1250%
Junior ERBA	1007%	1200%	1250%

Elaboration on possible rationale underlying the requirements of Article 254(2) of the CRR

For non-STS securitisation positions, the purpose of the Article may be the need of allowing the inversion of the Basel original hierarchy in order not to penalise rated transactions structured in Member States where the sovereign ceiling is relevant. In these Member States, indeed, the use of SEC-ERBA in the context of sovereign rating "capped" securitisations would result in a more conservative treatment than the one implied by the risk profile of the securitised exposures.

One possible interpretation is that the co-legislators wanted to create a limited scope regime to reduce the materiality of the divergence from Basel. Indeed, the Article implies that:

- only well-structured securitisation positions (i.e. with sufficient credit enhancement and good portfolio quality) will be in scope, as embedded in the condition of an absolute SEC-SA RW below 25%, applicable to both STS and non-STS transactions;

- for non-STS transactions the possibility to use the SEC-SA is subject to the additional condition that the RW determined by the SEC-ERBA be lower than 75%. One possible rationale supporting the choice of this threshold by the co-legislators might be the following: in 2017 (the time when the Regulation was approved) the lowest rating assigned to Member States' long term debt was (on average) B, which (based on the EBA ITS on ECAI mapping for securitisation positions) corresponds in the SEC-ERBA look up table of Article 263 to a credit quality step (CQS) of 14 or 15 (depending on the agency releasing the assessment). Also, in that period, several ECAIs publicly reported their policy to cap the securitisations ratings to a maximum of six notches above the sovereign rating; by applying this capping method to the above example, using the SEC-ERBA table one would end up with a CQS of 8 or 9, with the former having a RW for the senior tranche (with a maturity of 1 year) of exactly 75%.

- For securitisations characterised by a higher risk profile (and generally for mezzanine and junior tranches), the RW thresholds under a) and/or b) will likely be exceeded, and the RW produced by the SEC-ERBA will be considered to be predominantly driven by the risk profile of the transaction (and not by the ´ceiling´) and so regularly will have to be used.

This rationale has its consistency, as the measure would be beneficial for well-structured transactions (e.g. senior tranches with sufficient credit enhancement and good underlying portfolio) issued both in Member States with high ratings, and – subject to the additional condition described above – in Member States historically characterised by lower rating levels. All in all, the Article is aimed at avoiding the mandatory use of SEC-ERBA in relation to transactions for which the sovereign ceiling - and not the risk profile of the transaction - is the prevalent driver in determining the RW under this approach.

c. Unclarity on the scope of application of the Internal Assessment Approach under Article 254(5) of the CRR

Recommendation 3.2: clarify in Article 254(5) of the CRR that the Internal Assessment Approach (IAA) cannot replace the mandatory application of SEC-IRBA
The JC recommends to amend Article 254(5) of the CRR by additionally clarifying that the IAA cannot replace the mandatory application of SEC-IRBA, but rather only may be used as an alternative to the application of the other approaches, i.e. the SEC-SA, the SEC-ERBA or the application of a 1250% RW. It is suggested to align the wording of Article 254(5) of the CRR in this regard to the wording of the respective Basel III provision pursuant to CRE 40.44.

The JC has also noticed the lack of clarity of paragraph 5 of Article 254 where it is unclear whether the Internal Assessment Approach (IAA) can be used also instead of the SEC-IRBA and so "without prejudice" to all approaches included in paragraph 1 or whether the use of IAA does only apply "without prejudice" to the application of the other approaches (SEC-SA, SEC-ERBA and application of a 1250% RW) and thus of only points (b) and (c) or paragraph 1 of that Article. In line with Basel

III, it should explicitly be clarified that the IAA cannot replace the mandatory application of the SEC-IRBA.

3.2.4 Calculation of K_A in Article 261(2) of the CRR within the application of the SEC-SA

Recommendation 4: K_{SA} should only account for the capital requirements determined for the non-defaulted exposures in the pool of underlying exposures.
The JC recommends to amend Article 255(6) of the CRR by additionally clarifying that K_{SA} should be calculated on the basis of the capital requirements of the non-defaulted exposures in the pool of underlying exposures only in order to avoid a double counting of those exposures in the calculation of K_A in accordance with Article 261(2) of the CRR. The JC also recommends to clarify in the second subparagraph of Article 255(6) of the CRR that K_{SA} should be calculated on the basis of the exposure value of the underlying exposures gross of any specific credit risk adjustments and additional value adjustments on such underlying exposures.

According to Article 261(2) of the CRR, specifying the use of the SEC-SA, institutions should calculate K_A as:

$$K_A = (1 - W) * K_{SA} + W * 0.5$$

Where:

- K_{SA} is "*the capital charge of the underlying pool as defined in Article 255*" and Article 255(6) of the CRR refers to Chapter 2 for K_{SA} calculation, which shall be obtained by "*multiplying the risk-weighted exposure amounts that would be calculated under Chapter 2 in respect of the underlying exposures as if they had not been securitised by 8 % divided by the value of the underlying exposures*". This means that defaulted assets are currently also captured in the calculation of K_{SA}.

- W is the delinquency ratio calculated as the ratio of the sum of the nominal amount of underlying exposures in default, to the sum of the nominal amount of all underlying exposures.

The calculation of the parameter K_A used for the purposes of calculating the RW under the SEC-SA in accordance with Article 261(2) of the CRR has been the subject of several comments by various stakeholders:

- The High-Level Forum on Capital Markets Union (HLF) addressed a report to the Commission on 10 June 2020 (the "HLF Report") where it has been suggested to amend Article 261(2) of the CRR. In particular, it has been noted that in the formula for K_A, the portion of the portfolio in default W is effectively subjected to a risk-weight of 625% (0.5*1250%), whereas similar unsecuritised defaulted exposures are subject to a 100% or

150% RW under the SA, adding considerably to the extent of capital non-neutrality. The HLF therefore suggested that W should be multiplied by a lower factor of [0.1-0.2] instead of 0.5;

- Some industry participants noted that defaulted assets are already captured in K_{SA} with a 100% or a 150% RW but the application of the W takes into account again defaulted assets. Hence the impact of defaulted assets is counted twice which leads to overly conservative results.

Following up comments raised by the industry the EBA explored the need to provide clarity around the joint application of Article 255(6) of the CRR on the calculation of K_{SA} and Article 261(2) of the CRR on the calculation of the K_A parameter for the purposes of calculating the RW under the SEC-SA.

Given the formulation of K_A in Article 255(6) what seems to be unclear is whether the K_{SA} should be calculated including all exposures in the pool or only the non-defaulted ones. In particular, the portion of defaulted exposures is already taken into account by W. This seems to suggest that the K_{SA} used to calculate the capital requirements for those exposures that are not in default (i.e. multiplied by (1-W)) should only account for the capital requirements determined for the non-defaulted exposures. Otherwise, the effect of the defaulted exposures would be counted twice, via W and via K_{SA}.

It is therefore proposed to modify Article 255(6) by removing this double counting and considering only non-defaulted exposures for the purpose of the K_{SA} calculation. It should be noted also that to ensure consistency between the formula for K_A and the calculation of K_{SA}, the definition of 'defaulted exposure' used for the purpose of the calculation of W given in Article 261(2)[37] should also be used for the purpose of the calculation of K_{SA}.

A second comment pointed to an alternative interpretation of the "0.5*W" in the K_A formula to the one put forward by the industry. Interpreting this as a RW of 625% is one possibility and in that case a RW of 625% for defaulted exposures is indeed counterintuitive, being much higher than the 100% or 150% applicable under the credit risk SA. However, an alternative explanation which seems more intuitive is to interpret the 0.5 as an LGD of 0.5, so that 0.5*W is a proxy for the EL under the SA, in which case such value of 0.5 is broadly aligned with certain provisions of the credit risk framework. The EBA follows this alternative interpretation, the application of which seems to confirm further the need to clarify that the remaining part of the formula (1-W)*K_{SA} should reflect only the EL and UL of non-defaulted exposures.

Therefore, it is proposed to clarify by amending Article 255(6) that K_{SA} should be understood as the ratio of the RWEA of all the non-defaulted exposures divided by the sum of the exposure values of

[37] In Article 261(2) it is clarified that for the purposes of calculating the delinquency ratio W "*an exposure in default shall mean an underlying exposure which is either: (i) 90 days or more past due; (ii) subject to bankruptcy or insolvency proceedings; (iii) subject to foreclosure or similar proceeding; or (iv) in default in accordance with the securitisation documentation*."

all the non-defaulted exposures multiplied by 8% and that for the purposes of such calculation the default definition applied in Article 261(2) should be used.

In the context of this discussion, doubts have been raised on whether K_{SA} should be calculated on the basis of the exposure value of the underlying exposures ´gross´ or ´net´ of any specific credit risk adjustments and additional value adjustments on those underlying exposures. It is important to note that it is the JC understanding that in accordance with the second subparagraph of Article 255(6) K_{SA} should be calculated on the basis of the exposure value of the underlying exposures ´gross´ of any specific credit risk adjustments and additional value adjustments. Therefore, it is proposed to clarify this topic in order to have full clarity on the K_{SA} determination.

Calculation of K for mixed pools under Article 259(7) of the CRR

Recommendation 5: replacement of the reference to K_{SA} by a reference to K_A in Article 259(7) of the CRR for the purposes of the calculation of K for mixed pools
The JC recommends to amend Article 259(7) of the CRR by replacing K_{SA} with K_A as the latter reflects the capital requirements to be used in the formula for exposures in a mixed pool which are treated under the SEC-SA.

Article 259(7) of the CRR specifies the calculation of K_{IRB} in case of mixed pools. In particular, according to that Article, where the credit institution is able to calculate K_{IRB} on at least 95% of the underlying exposures, the institution shall calculate the capital requirements for the pool of underlying exposure amounts as $d \cdot K_{IRB} + (1-d)K_{SA}$[38]. The current CRR text is taken literally from Basel, CRE 40.46 of the consolidated version.[39]

To calculate the RW associated to a securitisation position under the SEC-SA, the capital input K_{SA} is transformed into K_A according to the formula provided in Article 261(2). Therefore, it is the EBA's view that K_A is also the relevant input parameter for the formula referred to in Article 259(7) with regard the share of underlying exposures in the pool to which the SA is applied. In other words, the JC recommends to amend Article 259(7) of the CRR by replacing K_{SA} with K_A. It is moreover the EBA intention to send a message to Basel with a request to also rectify CRE 40.46 accordingly.

3.2.5 Maturity adjustments in accordance with Article 252 of the CRR

In the context of the work of the CfA, EBA has discussed some comments received from the industry around the interpretation of Article 252 of the CRR on maturity mismatches in connection with Article 238 of the CRR which governs the determination of the maturity of a credit protection and, in a securitisation context, is of particular relevance in case of the existence of an originator time call. The contentious issue is around the interpretation of the term "positive incentive", as referred to in Article 238 of the CRR, for the originator to exercise the option to terminate the unfunded

[38] where d is the percentage of the exposure amount of underlying exposures for which the institution can calculate K_{IRB} over the exposure amount of all underlying exposures.

[39] https://www.bis.org/basel_framework/chapter/CRE/40.htm?inforce=20191215&published=20191215.

credit protection before its regular contractual maturity which, if present, would force the originator to set the maturity of the unfunded credit protection to "the earliest date at which that option may be exercised". The position of the industry is that the existence of an originator time call should not entail by itself a "positive incentive" and thus a maturity mismatch for the purposes of Article 252 unless the contractual terms themselves impose a penalty on the originator if it chooses not to exercise the call.

The current prudential framework sets out the following approach with regard to the determination and treatment of maturity mismatches:

- Article 238 determines when a maturity mismatch arises such that to ensure that uniform criteria are applied in this regard irrespective of whether the assessment of a maturity mismatch is being conducted within or beyond a securitisation context.
- Once a maturity mismatch has been determined according to Article 238, (including the interpretation of the concept of ´positive incentive´ also to be used for the purposes of securitisations) Article 252 further specifies how to adjust the RWEA in such cases.
- Finally, the EBA report on SRT[40] (Recommendation 3) proposes to limit the possibility of exercising time calls in SRT synthetic transactions to guarantee the effectiveness and the efficiency of SRT during the lifetime of the transaction[41].

These three elements should be read together to ensure an appropriate and consistent treatment of maturity mismatches in securitisation. The following sections elaborate on the interpretation of the term maturity mismatches and complement this interpretation with some securitisation-specific concerns around the use of time calls.

Interpretation of the term 'positive incentive' in Article 238 of the CRR

The following principles have been used to interpret how to assess the presence of positive incentives in accordance with a reading of Article 238:

- Any positive incentive should be the result of specific contractual clauses at origination of the credit protection. This implies that everything happening after origination or that is related to varying economic conditions should not be included in the assessment of the existence of a positive incentive;

[40] EBA/Rep/2020/32.

[41] According to Recommendation 3 of the EBA report on SRT originator time calls may only be included in synthetic securitisations seeking the recognition of SRT, where such time calls are only "exercisable after a time period measured from the closing date of a transaction corresponding to the initial WAL [weighted average life] of a transaction or that are exercisable after a time period measured from the end of the replenishment period of a transaction corresponding to the WAL at the end of that replenishment period. The WAL should be calculated according to the methodology specified in the EBA GL on weighted average maturity (WAM) for the asset model"

- In order to qualify for a positive incentive the contractual clauses related to the time call should imply some sort of advantage for the originator as a result of exercising the time call.

Whereas including a time call option in a synthetic securitisation provides in an economic sense always a positive incentive this is not the case from a contractual point of view. Therefore, rather than on the basis of a holistic economic assessment, the presence of positive economic incentives should be evaluated in accordance with the contractual conditions at origination.

In this respect, the presence of a time call per se (without any condition attached in the terms of the credit protection agreement) should not create a positive incentive according to Article 238(2). Otherwise, the co-legislators would have banned such call options directly without introducing the concept of positive incentive.

Taking into consideration all the above, the JC has concluded that a positive incentive is present only when at origination the contract includes terms in respect of which it can be expected that such provisions have been included in the transaction documentation in order to increase the advantageousness of exercising the time call option (such as a step-up in the coupon, the possibility to exercise a time call option less frequently than on an annual basis after the first eligible time call date, or the release of collateral securing the claims of the protection buyer at or after the first eligible time call date).

Securitisation-related considerations around the risk associated with time calls

Beyond the interpretation proposed for the term ‘positive incentive’ in Article 238 there are some considerations that are important in the context of securitisation. These are for example cases where the call may be exercised before the WAL by the originator a) in case of deterioration of the pool for reputational concerns or b) to reduce costs where securitisation is used on an ad-hoc basis to manage capital at individual reporting dates.

These cases while not related to the interpretation of time calls in Article 238 may be a source of concerns. These concerns would however be mitigated if the recommendations included in the EBA report on SRT and, in particular, the requirement to set this time call only after the initial transaction WAL has elapsed, would be adopted. Therefore, in case the SRT requirements would not be followed up by a delegated act or such delegated act does not include a respective requirement on the eligibility of time calls, and so also time calls would be allowed which may be exercised before the initial WAL of the pool of underlying exposures has elapsed, the mere application of a strict interpretation of the term ‘positive incentive’ as referred to in Article 238 would not be sufficient to mitigate the risks associated to the use of time calls in securitisation. Otherwise, a time call set before the WAL would trigger for securitisations the need for an assessment with respect to an add-on for maturity adjustments along the line of an holistic assessment on the economics of the transaction and on the use of this calls by the originator in past transactions. In that case, the JC sees the need to include some derogations in Article 252 aimed at including in Article 252 a

clarification that a time call set before WAL would be interpreted as being characterised by positive incentives.

3.2.6 Securitisation of state-guaranteed exposures

The considerations of this Section refer to structures in which state-guaranteed exposures (in the following reference is also being made to loans that are the main subject of state guarantees) are pooled together from different originating credit institutions, for the purpose of carrying out one or more traditional securitisations using exclusively such state-guaranteed exposures as an underlying.

To take an example, where all loans in the pool are equally partially guaranteed (i.e. pari passu guarantee contract for 80% of the nominal amount of each loan including principal and interests) with no overall portfolio cap and where there is no maturity mismatch between any underlying exposure and the guarantee (being the latter enforceable throughout the life of each exposure). This means that all losses from each loan defaulting will be covered by the guarantor for a share of 80%. The guarantee contract is between the guarantor and the originating credit institutions.

The originating credit institutions will then sell their loans to the issuer of the traditional securitisation(s), and each securitisation would pool together homogeneous state-guaranteed exposures (i.e., by pooling together exposures guaranteed by a certain state for the same specified percentage of credit risk, e.g. 80% of their nominal amount). The issuer of the securitisation would fund the purchase price of the portfolio by issuing tranched ABS. Since the issuer has bought the guaranteed loans from the originating credit institutions it is the new beneficiary of the guarantees.

The tranched ABS, in turn, would reflect - from a portfolio perspective - the economic substance of the securitised receivables (i.e., the state-guaranteed exposures) as follows:

- the principal amount of the most senior notes would equal the guaranteed portion of the state-guaranteed exposures included in the portfolio (i.e. 80%); while
- the principal amount of the mezzanine and junior notes would equal the remaining portion of the purchase price of the securitised exposures paid by the issuer (i.e. 20%).

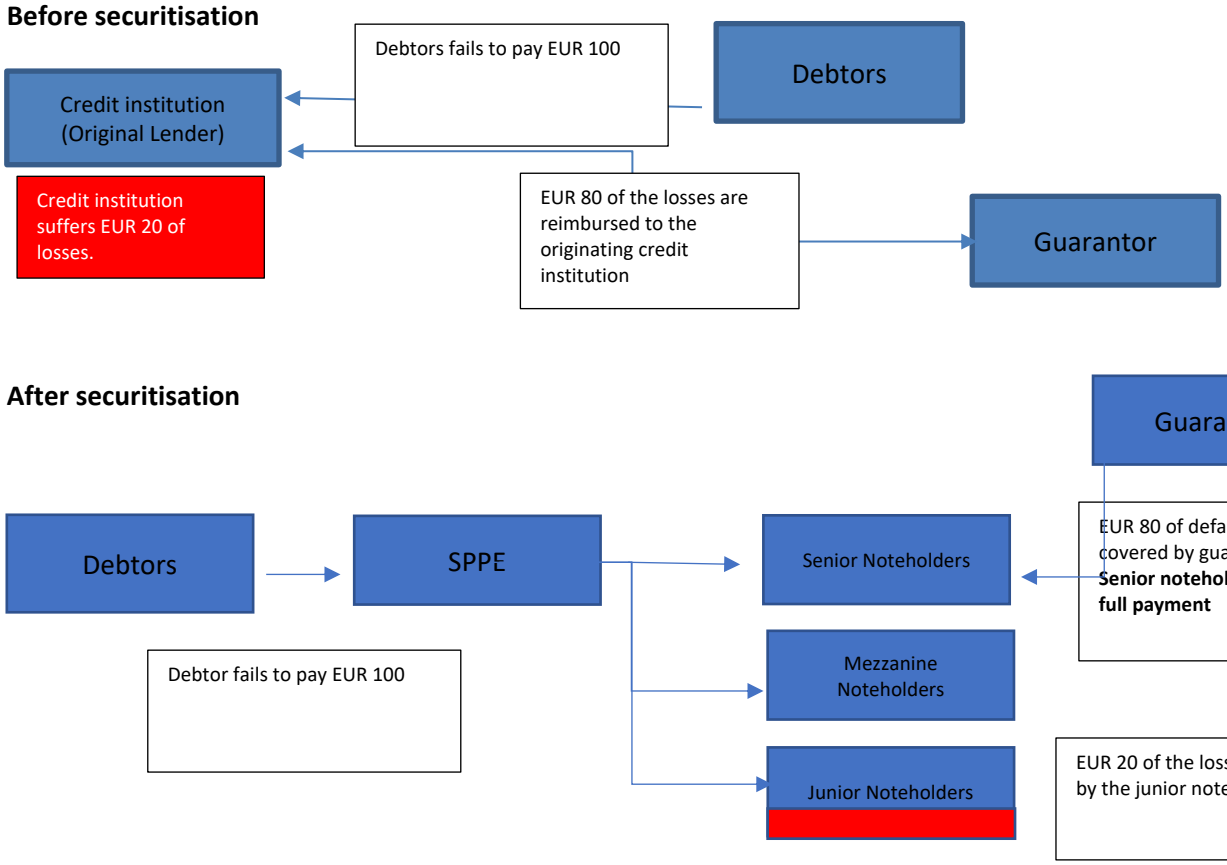
Payment mechanism

This particular securitisation will feature legally binding contractual arrangements concluded at inception between the issuer, the state and the senior noteholders (acting through their trustee) according to which the issuer, as original creditor under the state guarantee will request the guarantor (i.e. the state), to pay directly to the senior noteholders from time to time any defaulted amount, up to the amounts due and payable under the state guarantees. This inter-creditor agreement will transform the state guarantee from a guarantee covering the underlying exposures to a guarantee covering the senior notes.

Clarifications

- **Avoidance of double counting**: the inter-creditor agreement implies that the sole beneficiaries of the guarantee will be the senior noteholders. The holders of the other (mezzanine and first loss) tranches will have to treat the notes as non-guaranteed and will not be able to recognise the effect of the state guarantee on the underlying exposures for the purpose of calculating K under the formula-based approaches. Appropriate disclosure in this regard needs to be given to all noteholders in the transaction documentation.

Figure 25: Flow of funds before and after securitisation



- **Eligibility of the protection after the inter-creditor agreement**: the inter-creditor agreement shall not contain any clause that prevents the guarantees from fulfilling the rules set out in the CRM framework. [42]

- **Priority of payments (PoP):** the PoP implies that, after the payment of costs and expenses, interest will be paid on the senior notes, followed by interest on the mezzanine notes, principal on the senior notes and principal on the mezzanine notes. All the payments to the junior notes (both variable return and principal) will be entirely subordinated to the full repayment of the more senior notes. In addition, the senior notes will receive payments

[42] For the sake of clarity, it is worth noting that the CRM rules set out under Part Three Title II Chapter 4 of the CRR should be interpreted coherently with the structure of the specific operation (e.g. the reference to "lending institution" in Art. 215 (1)(a) of the CRR should be read as reference to "senior noteholder").

from the guarantor in case there is a default on the underlying loans (the guaranteed amount). In addition, the payments from the guarantor, referring to the principal share of the loan, will trigger an immediate repayment of the principal of the senior notes for the same amount. The losses on the underlying loans not covered by the guarantee will be allocated in reverse sequence to the junior and mezzanine notes.

- **Clarification around the use of recoveries:** In the example, the state guarantee covers for 80% of the defaulted amount, and not for 80% of the loss amount and, therefore, it must be clarified who receives the cash flow in case a loan defaults but is fully or partially recovered afterwards. The amount of the recoveries, at the end of the workout processes, will be distributed pari passu, in the example 80% to the guarantor and 20% to the non-senior noteholders.
- **Risk retention requirement for originating credit institutions**: the originating credit institutions shall satisfy risk retention requirements in accordance with Art. 6 of SECR.

Conclusions

As set out in the previous paragraphs, such scheme will realise the effective transformation of the state guarantee from an unfunded credit protection covering the state-guaranteed exposures to a guarantee covering a securitisation tranche. Therefore, under a structure referred to above, the institution that receives credit protection on its senior tranche shall calculate risk-weighted exposure amounts in accordance with Part Three Title II Chapter 4 of the CRR for the protected portion (in accordance with Article 249(6)(b)) whereas the institution that invests in mezzanine or junior notes should not recognise the effect of the state guarantee on the underlying exposures for the purpose of calculating the K under the formula-based approaches.[43] In the example presented above this would imply a RW equal to zero for securitisation positions held in the senior tranche where exposures to the respective central government are risk-weighted at 0%. This scheme will imply a RW equal to zero for the senior tranche only when the underlying exposures are covered by a state-guarantee and all the other above conditions are met.[44]

3.2.7 Treatment of portfolio guarantees in the securitisation framework

Recommendation 6: The upcoming legislative banking framework should include a mandate to the EBA to assess the treatment of portfolio guarantees

[43] In case of SEC-ERBA the effect of the guarantee will be embedded in the ratings of the senior notes.

[44] This is without prejudice to the possibility for market participants to organise schemes with similar inter-creditor agreements, tranching structures and/or priority of payment mechanisms, in which underlying exposures are not covered by state-guarantees but by commercial guarantees. While this report is not intended to cover these possible alternative structures, it is worth clarifying that should the provider of the guarantee on the underlying exposures be a credit institution, in the perspective of the latter the scheme would be economically different from a guarantee for the senior tranche. The guarantee, indeed, will be enforced at the default of every single underlying exposure, without the benefit in terms of credit enhancement coming from non-senior tranches. In view of this, therefore, the credit institution, in its role of guarantor, for the purpose of determining the capital requirement will continue to treat these guarantees as pro-rata guarantees for each of the securitised exposures.

The upcoming securitisation legislative framework review by the Commission is a good opportunity to assess if portfolio guarantees are correctly addressed under the current regulation (both CRR and SECR) and, if not, how the framework could be clarified. In particular, the JC welcomes to receive the mandate to develop a report to:

- clarify the conditions under which these portfolio guarantees lead to tranching and should therefore be treated under Part Three Title II Chapter 5 of the CRR;

- clarify, in case of tranching, whether the full SECR and CRR requirements for securitisation positions should be applied. There are different views among competent authorities on whether portfolio guarantees, leading to tranching and, therefore, falling under the treatment of Part Three Title II Chapter 5 as synthetic securitisation, should comply with the full requirements of the SECR. This issue creates divergent supervisory practices and an uneven playing field, and therefore should be addressed in the review of the securitisation framework;

- clarifying the treatment of single loans covered by a guarantee that constitutes a tranching of risk.

The treatment of guarantees which feature caps or floors that are defined at the level of a portfolio of exposures (hereinafter portfolio guarantees) was debated at length in the context of public guarantee schemes (PGS) introduced in light of the COVID-19 pandemic.

In the absence of a common understanding of the prudential treatment to be applied to portfolio guarantees, the upcoming securitisation legislative framework review may represent a good opportunity to assess if portfolio guarantees, either if leading or not leading to tranching, are correctly addressed under the current regulation (both CRR and SECR) and, if not, how the framework could be clarified. Clarification is also sought for the treatment of single loans covered by a guarantee that constitutes a tranching of risk (hereinafter tranched single loans).

The following Sub-Section discusses the main issues related to the treatment of portfolio guarantees which boils down to clarifying the treatment of portfolio guarantees that do not lead to tranching under Part Three Title II Chapter 4 of the CRR (hereinafter Chapter 4; issue 1); clarifying criteria under which they should fall under Part Three Title II Chapter 5 (hereinafter Chapter 5; issue 2) and how they should be treated accordingly if they are in the scope of that Chapter 5 (issue 3); finally, clarifying the treatment of tranched single loans in accordance with Article 234 of the CRR (issue 4).

Issue 1: treatment of portfolio guarantees which do not lead to tranching

The treatment of portfolio guarantees that do not lead to tranching, and so that would not qualify as securitisation, poses a problem which goes clearly beyond the scope of this CfA, but should nevertheless be addressed also in consideration of the relevance of this feature in the COVID-19 PGS. The absence of dedicated provisions on the treatment of portfolio guarantees in Chapter 4 CRR could be misleading and lead to these exposures being referred back to Chapter 5 CRR (by

default), or to treat the exposures according to Part Three Title II Chapter 4 as if they were not covered by any guarantee.

Issue 2: what kind of portfolio guarantees leads to tranching?

Q&A 4184 clarifies that Chapter 5 of the CRR shall apply when the credit protection leads to tranching, as defined in Article 4(1)(67) of the CRR referring to the definition in point (6) of Article 2 of SECR, and gives as example of tranching the case of a guarantee that covers indistinctly any amount above the first loss amount stemming from the covered pool.

What is not clarified in the Q&A and remains unclear is what kind of portfolio guarantees qualifies as "risk tranching". It should be clarified, for example, whether only the application of portfolio guarantees with portfolio caps on total losses of the portfolio shall qualify as a "securitisation" as per the definition of point (1) of Art. 2 of the SECR, contrarily to the application of caps on total overdue claims in the portfolio. In this second case, in fact, as the effect of the cap amount is only to terminate the guarantee for those exposures defaulting after the cap is exhausted, the cap may be regarded as a condition subsequent of the guarantee and so could be regarded as not qualifying as a "securitisation" as per the definition of point (1) of Art. 2 of the SECR.[45]. Once the cap is exceeded, the fact that the non-covered part of the exposures keeps its level of performances/recoveries separate from each other precludes the existence of any degree of subordination between the various exposures that may be drawn under a given public credit line granted by a credit institution. [46]

Issue 3: In case of tranching, should all requirements concerning securitisations pursuant to the Securitisation Regulation and CRR be applied?

There are different views among different stakeholders on whether portfolio guarantees, leading to tranching and, therefore, falling under the treatment of Chapter 5 as synthetic securitisation, should comply with all requirements of the SECR. This issue creates divergent supervisory practices and an uneven playing field, and therefore should be addressed in the review of the securitisation framework.

What should be discussed are the merits and the risk to introduce a certain backstop regime in the CRR, which would allow to recognise a risk mitigation effect of first loss portfolio guarantees without applying the securitisation framework, and in particular the SECR, in full. Some stakeholders have advocated that portfolio guarantees should at least be added to the list of private securitisations that should not be subject to the transparency requirement if there are no investors other than a public body (such as the European Investment Bank, the European Investment Fund, or a State providing a Public Guarantee Scheme). Similar considerations have been extended also

[45] This is for the reason that the segments under the guarantee are not subordinated as required under point (1)(b) of Article 2 of the SECR.

[46] In other words, by not incorporating the recovered amounts from individual loans, it does not act as a *divisor* capable of assuring that the losses borne by the guaranteed portion of the pool throughout the lifetime of the transaction are greater than the losses borne by the non-protected part of the pool – therefore precluding the assimilation of the amount guaranteed up to the cap as a first loss tranche.

to the risk retention requirements where in case of the absence of private investors other than the credit institutions originating the protected exposures the argument of the alignment of interest may be less relevant.

Issue 4: Treatment of tranched single loans in accordance with Article 234 of the CRR

Article 234 of the CRR covers the case of tranched single loans, i.e. individual loans where the underlying credit risk has been segmented in subordinated tranches of different credit risk profiles and such subordination of the tranches determines the distribution of the recoveries during the work-out of the loan, which shall be subject to Chapter 5 of the CRR. The rationale underlying Article 234 does not seem entirely clear and, also in this case, the merits and risk of introducing a backstop regime for the case of tranched single loans which are, by definition, less complex (e.g. there is no need to model the default correlation between the exposures towards different obligors) could warrant a discussion and has been the target of comments by the industry.

3.3 Targeted changes to make the capital framework more risk sensitive

The effectiveness of any change in the capital framework should take into consideration that investor demand will remain an issue in the foreseeable future. This is due to many factors, including i) the lack of interest of most undertakings in this asset type, ii) the due diligence cost in light of the comprehensive transparency requirements, which according to the industry are making securitisation a very costly ("assessment premium") investment, are out of scope of this CfA[47] and, finally iii) the EBA stance so far targets the originators, i.e. the supply side, considering the risk sharing objective.

In this context, the JC advice aims at improving risk sensitivity in the framework by acknowledging the reduced model and agency risk associated to originators. This is achieved by recommending a reduction in the risk weight floor applicable to senior tranches retained by originators, elaborated in Section 3.3.1 below. The EBA has also considered whether more fundamental changes should be made to the framework to increase the risk sensitivity further. While at this stage, the JC does not support making these changes to the framework, general considerations on the appropriateness of the securitisation RW formulas are discussed as working areas in Section 3.3.2. These are issues where the EBA needs more time to form conclusive opinions, but EBA will consider bringing these considerations to the Basel Committee of Banking Supervision once those conclusive opinions have been established.

3.3.1 Reducing the risk weight floor for originators of resilient transactions

[47] this issue is now under the remit of ESMA which, according to the Commission report, has been mandated to review the disclosure templates for underlying exposures to align them more closely with investors' needs.

Recommendation 7: reduction of the risk weight floor for originators of resilient transactions meeting certain eligibility criteria
A lower risk weight floor should be applied to securitisation positions held in senior securitisation tranches which: - are retained by credit institutions acting as **originators** in accordance with point (3)(a) of Article 2 of the SECR; - satisfy a set of **eligibility criteria** (as defined in Table 4) at the origination date and on an ongoing basis thereafter. These eligibility criteria coupled with the role of the credit institution as originator in accordance with point (3)(a) of Article 2 of the SECR would ensure a low agency and model risk, robust buffers on losses for the senior tranches and no concerns in terms of a sufficient granularity of the pool of underlying exposures**.** Those strict conditions warrant to **lower the risk weight floor to 12% for securitisation positions held in senior tranches of non-STS transactions under all approaches and to 7% for securitisation positions held in senior tranches of STS transactions risk weighted under the SEC-IRBA while the risk weight floor under the SEC-SA and the SEC-ERBA should remain at 10% for those senior STS securitisation positions.**

Industry participants have often advocated the need to reduce the capital non-neutrality in the framework by reducing the p-factor used in the formulas as well as the risk weight floor.[48] Both possibilities have been evaluated by EBA but with exclusively targeting originators rather than securitisation investors in general such that to acknowledge the reduced agency and model risk in case of originators.

It is the EBA view that neither of these measures, when targeted to originators, would have a role in reviving the traditional securitisation market if not accompanied by other measures that would boost the demand in the product or changes in liquidity conditions that would trigger the emergence of funding needs for credit institutions, i.e. changes in the relevance of the main incentives for credit institutions to issue traditional securitisation.

For synthetic securitisation the situation is different. The SRT market is dominated by synthetic transactions where the main incentive of these operations is that of optimising capital[49] and where investors' demand seems less of an issue. The investors in synthetic deals, i.e. the sellers of credit protection, in the current market are not credit institutions. According to a survey conducted by IACPM, investment funds are dominant sellers of credit protection but have lost some market share

[48] Capital non-neutrality, as defined in Section 3.1, arises from the fact that tranches detaching below K_{IRB}/K_{SA} receive a RW of 1250% and that tranches detaching above K_{IRB}/K_{SA} receive also a risk weight that is lower than 1250% but higher than 0%. In the formula-based approaches, non-neutrality is controlled directly, by the parameter p (the p-factor) and is increased afterwards by the risk weight floor and, in the case of the SEC-SA, the delinquency parameter W that adjusts the underlying K_{SA} capital requirement feeding into the formula.

[49] Traditional securitisations account for a lower share, originated by very few big players, with a significant share issued in third countries due to foreign investors demand for specific products (CMBS).

over the past three years at the benefit of pension funds (generally investing in junior tranches) and credit insurers (investing in mezzanine tranches).[50] In general, synthetic transactions are executed faster and at a lower cost compared to cash deals which fall under the Prospectus Regulation. Moreover, synthetic deals allow the originator to have a bilateral relationship with the investor due to their bespoke nature and to keep the securitised exposures on its balance sheet so that the business relationship with its obligors is not affected by the securitisation.

Considering this, even in the absence of measures that would boost the investor demand[51], a targeted change to the capital framework for institutions originating SRT deals, given its pivotal role for these operations as capital optimization tools, has more chances to be effective. Among the measures evaluated the reduction of the risk weight floor for originators retaining securitisation positions in resilient transactions is in the EBA's view the:

- most impactful/effective recommendation: originators' retained senior tranches of both traditional and synthetic SRT deals will be in the scope of the measure. However, the expectation is that the majority of transactions benefitting from the measure will be synthetic deals which are commonly used by credit institutions for risk management and capital optimisation purposes. Here, in general the capital framework could have a more central role and in particular the risk weight floor reduction. In these transactions credit institutions retain the senior tranche and possibly the first loss tranche, contrary to SRT traditional securitisations where due to the underlying funding purpose of those securitisation the comparably large senior tranche is usually sold. Considering this retention structure, where the mezzanine tranche is usually transferred to non-banks investors, and that the retained first loss tranche risk weight is 1250%, the reduction of the p-factor for originator would have an effect on the RW of the retained senior tranche only. This reduction of the senior risk weight, and so the potential impact of the proposal, would be anyway constrained by the risk weight floor. In this respect, it is the JC view that reducing the risk weight floor for the originator, under certain conditions, may be better able to boost the use of synthetic securitisations by originators and thereby the supply side of the market.

- the proposal with the least unintended consequences. Contrary to a potential reduction of the p-factor, which has the drawback of increasing cliff effects (as elaborated in Section 3.3.2 in this report), a reduction of the risk weight floor if accompanied by robust eligibility criteria may contribute to a prudentially sound structuring of transactions by giving the originators an incentive to engage in more resilient transactions (e.g. based on granular pools) and increasing the risk sharing through a transfer of thicker junior and/or mezzanine tranches. As a consequence, the higher capital relief achieved and the higher transfer of risk that this measure would entail should be considered in the assessment of the commensurateness of the transfer

[50] The credit insurance provided by an insurer is not subject to the market risk requirements for investments in securitisations under Solvency II, as this is a liability in the insurer balance sheet.

[51] Where, for example, investors demand may benefit from an increase in proportionality of the due diligence requirements also in the case of synthetic deals.

of credit risk to third parties for the purpose of recognition of significant risk transfer under both Articles 244 and 245 of the CRR.

- Prudentially sound where this measure, together with the new capital requirements for synthetic excess spread (SES) under the CRR as further specified in the consultation paper for the RTS on the exposure value of SES, will make the framework more risk sensitive on both ends of the transaction structure (i.e. senior tranches and first losses).

EBA considers that this measure, if accompanied by appropriate safeguards (detailed in Table 4), may support the SRT segment of the securitisation market in a prudent manner, and in particular may promote the issuance of resilient securitisations qualifying for a more beneficial capital treatment, without jeopardizing financial stability.

Rationale and details of the proposal

The formula-based methodology used to calculate capital requirements for securitisation exposures accompanied by the current risk weight floor are not able to account for three key elements:

- the resilience of SRT transactions: formula-based methodologies do not provide enough room to factor in safeguards which ensure a more robust risk weighting, such as the type of amortisation or the presence of cash collateral, impairing partially the risk sensitivity.

- Moreover, the thickness of the non-senior tranches does not feed in all cases into the final risk weight assigned to a securitisation position in an adequate manner due to the relatively high-risk weight floor. In fact, the buffer of the attachment point of the senior tranches on the K affects the risk weight assigned to the senior securitisation position. However, this is from a certain point neutralised by the RW floor making the final RW of securitisation position not sufficiently risk sensitive.

- the degree of exposure to agency and model risk[52] in case of originators: drawing on the lessons of the GFC, new methodologies set out a stricter prudential approach in order to control for the respective risks due to the capital non-neutrality (via the p factor and the RW floor). The framework does not make a distinction on the profile of the party investing in the securitisation position, i.e. there is no distinction between cases where the originator holds a tranche in a securitisation or a third party investor. However, an originator meeting point (a) of the originator definition pursuant to point (3) of Article 2 of the SECR may however be subject to a lower model and agency risk than a third-party investor which may

[52] Agency risk is the risk arising from the multiple relationships between the agents of a securitisation structure, and related information asymmetries. Modelling risk arises from models and assumptions made on the underlying pool and structural features, used to estimate the loss distribution which is impactful for the waterfall.

be reflected by a reduction in the applicable risk weight floor where certain safeguards are met.[53].

Against this background, the JC proposes that the reduction of the risk weight floor should be targeted to:

- originators only and, in particular, only to those involved in the origination of the underlying exposures as referred to in point (3)(a) of Article 2 of the SECR[54]. This ensures that exclusively those originators are within the scope of application of the measure in respect of which a reduced agency and model risk compared to investors can be assumed. This would also exclude any originator that according to point b) "purchases a third party's exposures on its own account and then securitises them" to avoid that credit institutions would expand beyond core businesses just for the purpose of securitising the respective exposures in order to benefit from the reduction in the risk weight floor under the measure. Nevertheless, in case of M&A between credit institutions, mixed portfolios acquired by the merged credit institution should be considered as having been originated through related entities and so should still benefit from this measure.

- Transactions that respect a set of eligibility criteria specified in Table 4 which are aimed at ensuring a more robust SRT and that the released capital associated to a reduced risk weight floor is warranted by an adequate reduction in the credit risk of the underlying exposures retained by the originator.

- Securitisation positions held in senior tranches of both STS and non-STS transactions in the case of SEC-IRBA and securitisation positions held in senior tranches of non-STS transactions only in the case of less sophisticated approaches (SEC-SA and SEC-ERBA). A risk weight floor below 10% (which is the current risk weight floor for senior tranches of STS transactions) should only apply for the SEC-IRBA as a more sophisticated approach because this is in line with the treatment of similar financial instruments such as CB, where under the SA such other instruments rated CQS 1 (AAA and AA) receive a RW of 10%, whereas under the IRB Approach RWs below 10% may be assigned to such financial instruments.

To reflect these conclusions, the JC is of the view that, subject to a set of eligibility criteria specified in Table 4, institutions acting as originator should be allowed to apply a lower risk weight floor of 12% for senior tranches of non-STS transactions under all approaches and a risk weight floor of 7% for senior tranches of STS transactions risk weighted under the SEC-IRBA. Instead, under the SEC-

[53] Though model risk is still there. In case of an originator investing in an own securitisation, this risk is reduced to the model risk implicit in securitisation where inputs from IRB rating systems are used to determine capital requirements for retained securitisation positions. Here, the supervisors have more room to address the model risk inherent to the IRB rating systems via targeted supervisory programs (IRB repair, TRIM) and may even prohibit the use of SEC-IRBA or reject the SRT due to the low quality of an IRB rating system.

[54] i.e. any originator that according to point (a) "itself or through related entities, directly or indirectly, was involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the exposures being securitised".

SA and the SEC-ERBA the 10% risk weight floor for such senior tranches of STS transactions should remain unchanged as displayed in Table 3.

Table 3: Reduction in the risk weight floor

	STS senior tranche		Non-STS senior tranche	
	SEC-SA/SEC-ERBA	**SEC-IRBA**	**SEC-SA/SEC-ERBA[55]**	**SEC-IRBA**
Current framework	10%	10%	15%	15%
Proposal	**10%**	**7%**	**12%**	**12%**

The level of the risk weight floor reduction has been assessed in the first place on the basis of its impact (elaborated in the next sub-section) but also has been selected such that to:

- Ensuring, as explained above, that a RW below 10% would be allowed only under the SEC-IRBA in line with the treatment of similar financial instruments such as CB in the credit risk SA.

- Ensuring that the risk weight floor under the SEC-IRBA would not be lower than the 7% Basel II risk weight floor for senior, granular securitisation exposures under the former IRB securitisation framework.

- Keeping the current 5% RW differential between the STS and non-STS risk weight floors under the SEC-IRBA (where securitisation positions held in STS senior tranches may be assigned a 7% risk weight floor versus a floor of 12% for non-STS senior securitisation positions).

The proposal has the advantage to include in its scope the use of less sophisticated approaches (SEC-SA and SEC-ERBA) by institutions in case of non-STS transactions in line with the rationale that the originator's reduced agency and model risk applies to originators independently from the approach used for calculating capital requirements for securitisation positions. However, credit institutions using the SEC-SA or the SEC-ERBA and originating STS transactions already being subject to the current 10% floor would not have any incentive to also meet the safeguards of the measure

[55] For SEC-ERBA the risk weight associated to credit quality step 1 (CQS1) for non-STS would require a corresponding amendment in Article 263 of the CRR.

due to the constraint under the measure of aligning the adjusted risk weight floor with the respective floor used for risk weighting CB under the credit risk SA. An alternative option where the scope of the measure is reduced only to originators using the SEC-IRBA has been evaluated by the EBA and discarded as such a measure would introduce a disproportionality in the framework, which provides already for a considerable level of conservativeness under the less sophisticated approaches.

Table 4: Eligibility criteria

Drivers for lower risk	Eligibility criteria
1) Amortisation	**Sequential amortisation or non-sequential amortisation** provided that the **transaction includes performance-related triggers to switch to a sequential amortisation** which should be compliant with the EBA RTS on performance-related triggers[56].
2) [For synthetics only]: **counterparty credit risk**	The credit protection agreement by which the transfer of risk is achieved **shall comply with the criteria specified in paragraphs 8 to 10 of Article 26e SECR for STS synthetic securitisation**. As a way of derogation from paragraph 10, the third and the fourth subparagraphs, and the minimum credit quality step of the originator, or one of its affiliates, for collateral in the form of cash on deposit with them, as set out in the second subparagraph, shall not apply for synthetic securitisations other than STS on-balance-sheet securitsations.
3) **Thickness of the sold non-senior tranches**	The thickness of the sold non-senior tranche is captured by the **RW assigned to securitisation positions held in senior securitisation tranches by the formulas**. The latter should be **below 50% of the STS and non-STS RW floors** (i.e. the senior RW is below 5% for STS and below 7.5% for non-STS).[57]
4) Good granularity	The exposures in the pool shall comply with a concentration limit of 0.5% determined in accordance with point (a) of Article 243(2) CRR. This will imply that, at origination, the minimum effective number of exposures N[58] requested will be 200 or more, depending on the distribution of the exposures.

[56] EBA/RTS/2022/08.

[57] In case the transaction falls under the SEC-ERBA, the originator should have the capacity to run the calculations under the SEC-SA to check if the resulting risk weight satisfies criterion 3 for the thickness of the protected tranche. If this is the case and all other criteria are satisfied, then the RW associated to senior non-STS securitisation positions characterised by CQS1 of Articles 263 could be set to 12% and would remain at 10% for STS senior securitisation positions.

[58] As calculated in accordance with Article 259(4) of the CRR.

The role of the four eligibility criteria set out in Table 4 is crucial to ensure that the released capital (by means of the reduced risk weight floor) does not uncover an undercapitalisation of the underlying risk of the respective securitisation positions retained by the originator. In particular:

- **Criterion 1 on the amortisation mechanism**. Sequential amortisation ensures a conservative credit enhancement for the senior tranches over the life of the transaction, however restricting the measure only to this type of amortisation would add costs of protection that may neutralise the effectiveness of the measure. Therefore, the scope of the measure also includes transactions providing for performance-related triggers to switch from an initial non-sequential to a subsequent sequential amortisation. Considering the recently published draft RTS which clarify for the purposes of STS on-balance-sheet securitisations how to specify these triggers and where relevant how to calibrate them, in fact, mitigates the model risk associated with the cash flow analysis required in case of initial pro-rata amortisation and ensures that tranches subordinated to the senior tranche will not be amortised when back-loaded losses occur.

- **Criterion 2 on the counterparty credit risk.** Collateral pledged in favour of the originator[59] and/or guarantees provided by sovereigns or supranationals (i.e. entities listed in points (a) to (d) of Article 214(2) of the CRR) reduce the counterparty credit risks associated with the credit protection to which the originator is exposed. This safeguard is key as it permits the originators to compensate quickly the losses incurred in SRT structures. In the absence of such a safeguard the protection buyer (i.e. the originator which retains the senior note) risks to bear losses on the subordinated protected tranche. Though the losses on the senior tranche are not affected by this criterion if the guarantor defaults, this feature is nevertheless deemed beneficial for lowering the risk weight floor associated to the senior tranche as it contributes to the effectiveness of the risk transfer. A few remarks are worth noting: a) the criterion is focused on protecting the originator from counterparty credit risk of the protection seller. Therefore, only the criteria specified in Article 26e (8) to (10) of the SECR for STS synthetic securitisation which are relevant for this purpose should apply. This implies that, for example, in case of cash collateral deposited with the originator the requirement of a minimum credit quality standing of the originator should not apply; b) the criterion understands “collateral” broadly to include, also, under point (a) of the first subparagraph of paragraph 10 collateral in the form of 0 % risk-weighted debt securities meeting certain conditions; c) the credit protection should be covering the full amount of the protected tranche for the full duration of the transaction including any coverage of the credit protection commitment of the protection provider through additional collateral.

- **Criterion 3 on the thickness of the sold protected tranche**. Thick sold non-senior tranches cushion the senior tranche against potential losses. The thickness of the subordinated non-senior tranche(s) and, therefore, the credit enhancement supporting the senior tranche act as the main driver for the RW assigned to the senior tranche by the formula which is

[59] I.e. either be held with a third party credit institution or in the form of cash on deposit with the originator.

therefore used as a criterion. Whether a sufficient share of the non-senior tranches is sold or transferred to investors and not retained by the originator is not taken into account under this criterion but will be checked in the SRT assessment of the corresponding securitisations. This safeguard is indeed closely interlinked with the SRT criteria under which a significant portion of the non-senior tranches should be placed with external investors. It is worth noting that synthetic transactions with SES, which has recently become subject to capital requirements under the CRR, will benefit easier from this feature due to the additional cushion provided by the excess spread to the senior tranches (i.e. SES complements the first loss tranche and increases the attachment point of the senior tranche).

- **Criterion 4 on granularity.** A granular pool characterised by a high number of effective exposures facilitates a higher risk diversification, reducing generally the probability of correlated defaults. As elaborated in more details in Sub-section b. of Section 3.3.2 below, in case of a diversified pool, the senior tranche is better insulated from the risk of losses.

In the EBA view, in order to avoid arbitrage, the eligibility criteria should be met at origination and also on an ongoing basis in order to qualify for the beneficial treatment, but clearly this has a different implication for each criterion:

- Criteria 1 and 2 should be checked at origination only, as they are part of the credit protection agreement which specifies the type of amortisation and the arrangements around the credit protection and any additional, collateral, where applicable. Therefore, those criteria should hold by definition throughout the life of the transaction;

- Criterion 3 on the thickness of the sold protected tranche should be checked on an ongoing basis to safeguard against the potential deterioration in the credit quality of the pool underlying the securitisation which could expose the senior to losses and so increase the RW of the senior tranche. Not checking this condition on an ongoing basis would yield a paradoxical situation where two senior tranches characterised by the same RW produced by the formulas could be assigned a different RW because of this measure[60].

- Condition 4 on granularity gold plates the concentration limit specified for STS transactions from 2% to 0.5% but the same logic should be used to check if this requirement is met on an ongoing basis. The requirement implies that “at the time of inclusion in the securitisation” the total exposure to a single obligor should not exceed 0.5% of the total pool exposure value. This implies that at origination the minimum effective number of exposures N requested will be 200 or more, depending on the distribution of the exposures

[60] Take the example where an STS senior tranche to which the SEC-IRBA was applied was within the scope of the measure at origination, i.e. respecting criterion 3 as being characterised by a RW pre floor of 4.5% and hence being eligible for the 7% RW floor, which however sees K_{IRB} increasing a few years later due to a worsening of the credit risk moving the RW pre-floor produced by the formula to 8%. If the eligibility criteria would be checked only at origination this tranche would be assigned a RW of 8% because the 7% RW floor would apply and not the 10% RW floor. Another STS senior tranche characterised by the same RW pre-floor produced by the formula equal to 8%, and not having fulfilled criterion 3 at origination, would be assigned a RW equal to 10%.

across different obligors, but during the life of the transaction N could go down because of amortisation or defaults of the exposures. What is requested is that in case of dynamic pools (e.g. during replenishment, rise up or refill periods) if a new exposure is included in the pool it should not represent more than 0.5% of the exposure value of the securitised exposures at the time of inclusion.

To summarise, these criteria together with the role of the credit institution as originator would ensure low agency and model risk, robust buffers on losses for the senior tranche and no concerns in terms of a sufficient granularity of the pool of underlying exposures. Some aspects ensure lower risk, while other aspects target SRT resilience and shaping the future market. Finally, in a forward-looking perspective, these criteria will help to promote the issuance of transactions characterised by a more robust SRT and to increase the risk sharing with external investors.

The possible unintended consequences of this measure mainly relate to the risk of cannibalisation of the STS label through the proposed measure because originators may prefer to structure their transactions according to this measure (meeting 4 criteria) instead of targeting to obtain an STS label (meeting 100+ criteria) as a benefit in terms of a reduced risk weight floor could be achieved at lower costs. However, this is mitigated by:

- the new level of the floor that has been chosen such that eligible senior tranches of non-STS transactions under this measure would get the new risk weight floor of 12% which is higher than the risk weight floors of 7% and 10% that senior tranches of STS transactions eligible under this measure would get. Therefore, the STS label will continue to set an additional benefit of lower risk weight floors. In the case of the SEC-IRBA an absolute difference of 5 percentage points has been maintained as per the current risk weight floors, for the other approaches the absolute difference is 2%.

- Two out of four of the eligibility criteria for the reduction of the floor (criterion 3 and 4) are gold plating the STS requirements, i.e. they add stricter criteria and thereby also additional costs for the credit institution to meet them.

Impact of the proposal

In order to quantify the impact of this measure in terms of RWEA reduction in the banking system as a whole, a sample of 261 traditional and synthetic transactions corresponding to 36 originating institutions that obtained SRT, for which sufficient information is available to calculate RWEAs, has been obtained from COREP. The RWEAs corresponding to the securitisation positions originated and retained by them represent only 0.8% of their total RWEAs (for securitisation and non-securitisation exposures) reported by these institutions, and that of the retained senior tranches only represents 0.06% of that total. This sample could be considered as representative of the banking system.

Of these securitisations, only 146 senior tranches (115 under SEC-IRBA and 31 under SEC-SA) are subject to the current floor, which are the ones which would potentially benefit from the proposed measure. However, once all the proposed conditions for the implementation of the RW floor

reduction are applied[61], the number is reduced to only 17 securitisations (14 under SEC-IRBA and 3 under SEC-SA). Furthermore, the risk-weight cap of the senior tranche under Article 267 would apply to 2 of the senior tranches of SEC-SA securitisations, which reduces the number of transactions to which the measure would apply to only 15 (14 under the SEC-IRBA and 1 under the SEC-SA), all of them non-STS synthetic deals.

Therefore, because of the very small weight of senior tranche exposures retained by originators in their total exposures, the impact on the banking system would be quite limited, as would be the potential deviation from the Basel standard. However, the impact in the currently affected transactions would be significant, which is relevant from a forward-looking perspective. Taking these 15 securitisations into account, it would mean a joint reduction of RWEAs[62] of 7.26% and 20%, under the SEC-IRBA and the SEC-SA[63], respectively. Moreover, if this reduction is calculated with respect to the senior tranches affected by the measure, a joint reduction of RWEAs of 20% for both the SEC-SA and the SEC-IRBA can be observed which is driven by the 20% reduction in the RW floor for non-STS transactions from 15% to 12%.

As said, the proposed measure is forward looking and aims at promoting more resilient SRT transactions, as explained in the previous section. Taking SEC-IRBA transactions as an example and considering the recent transactions for which the senior tranche is retained (69 transactions originated in 2020 and 2021), 68% are impacted by the current risk weight-floor, 38% show a risk-weight of the senior tranche pre-floor fulfilling safeguard 3 and 39% show a granularity fulfilling safeguard 4[64]. Although the joint application of safeguards 3 and 4 reduces the impact to 20%[65] of the transactions (the 14 transactions mentioned above, for which a 7.26% RWEA reduction would be achieved), it is expected that this share would increase in the future as institutions would have an incentive to structure transactions to benefit from the proposed measure.

In this regard, institutions would have to adjust upwards the attachment point of the senior tranche, by increasing the size of the subordinated tranches, and securitise more granular portfolios to benefit more from the proposed measure, as the market is moving in the direction of adopting the other two safeguards as their practice. A recent survey on the synthetic securitisation market conducted by IACPM[66] shows that most of the synthetic securitisation issued between 2016 and 2021 were fulfilling the safeguard on the collateralisation of the protection agreement (84% of

[61] Only transactions originated in 2020 and 2021 are selected because all the requirements should be checked at origination, and conditions 1 and 2 are assumed to be met, given the current lack of information in COREP.

[62] Please note that the reduction in RWEA is calculated as a % with respect to the total RWEA retained by the originator in the transaction and not just with respect to the RWEA of the senior tranche.

[63] In the case of the SEC-SA, the 20% reduction is due to the fact that only one transaction is affected in which the originator is only retaining the senior tranche, while in the SEC-IRBA transactions the retention of the senior and the first loss tranche in the same transaction prevails.

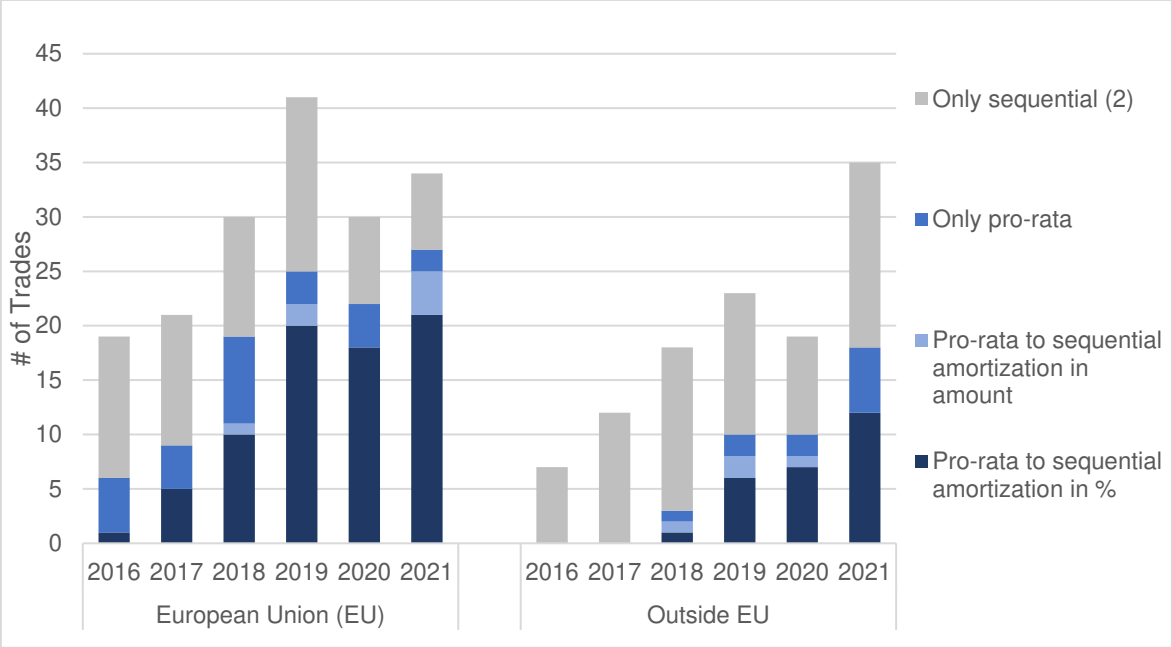
[64] The effective number of exposures (N in Article 259 CRR) equal to 200 has been used as a proxy of the 0.5% granularity requirement, as the former is the only one available in COREP. However, the 0.5% maximum exposure value with respect to the aggregate outstanding exposure values of the pool of underlying exposures could imply an N higher than 200.

[65] The impact would increase to 23% or 26% of the transactions if the granularity requirement were relaxed to an effective number of exposures above 100 or 50, respectively.

[66] http://iacpm.org/research/risk-mitigation-tools/

those featuring only a first loss tranche protected, and 61% of those featuring a mezzanine tranche protected), and the safeguard on the amortisation system of the tranches (only 13.5% of the transactions would clearly not be fulfilling the safeguard as they were featuring only pro-rata amortisation as shown in Figure 26).

Figure 26: Synthetic securitisation – amortisation types



Source: IACPM 2022 Synthetic Securitization Market Volume Survey

3.3.2 Medium to long term considerations on the formula-based approaches

This section identifies aspects of the formula-based approaches SEC-IRBA and SEC-SA which the EBA thinks warrant further discussion. It should be noted that for the time being these should be considered as issues where the EBA needs more time to form conclusive opinions and that may be brought for discussion to the Basel Committee once those conclusive opinions have been established.

Four main issues are laid out in detail in the respective sub-sections:

- Sub-section a: Explanatory introduction on the current design of the formula-based approaches, which does not achieve all three regulatory goals;
- Sub-section b: Supervisory concerns related to the securitisation of non-granular pools;
- Sub-section c: Enabling the framework to better account for the reduced agency and model risk in case of originators;
- Sub-section d: Concerns regarding the fit of the current shape of the RW function to the distribution of losses.

The four issues above are all interrelated and together support the conclusion that an open discussion of the RW function used in the current framework should be taken at the Basel table. The current framework's ability to account for non-granular pools is constrained by the current design of the RW formula where p could not be increased too much to avoid excessive capital non-neutrality at the same time. Similarly, a possible reduction of capital non-neutrality for originators (beyond the reduction of the risk weight floor currently proposed) is constrained by the risk of creating cliff effects given the dual role of the p-factor as smoothing parameter and as driver of the capital non-neutrality. An alternative design of the RW formula might remove these constraints while ideally also reducing cliff effects and increasing capitalisation in the mezzanine area. A better fit to actual distributions of losses could also be set as an aim for the new design.

a. Explanatory introduction and conflicting goals of current regulation

Factual description of the current formula-based approaches via an illustrative example

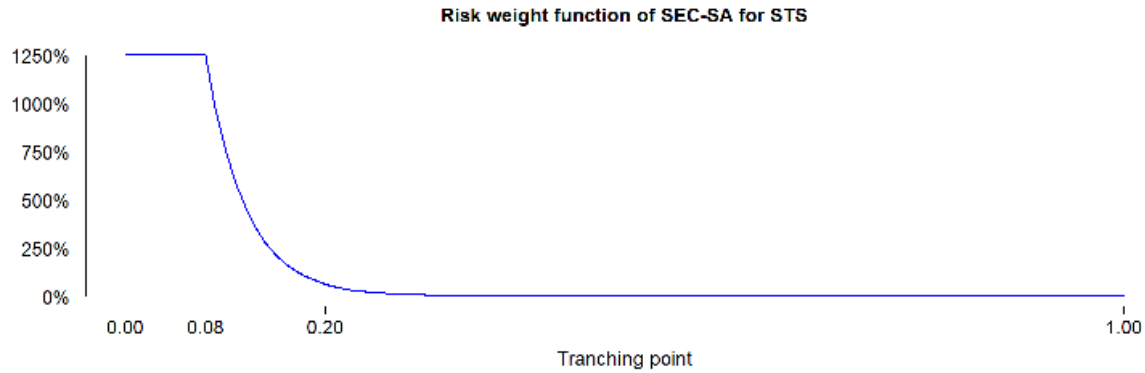
Common "halfpipe" shape. The formula-based approaches SEC-IRBA and SEC-SA share a common rationale and methodology (namely a combination of an area of **capital deduction** and an area where a common formula (the so called simplified supervisory formula approach **SSFA** in Basel working papers) is applied, resulting in a "halfpipe function"). Only the input parameters (K_{irb} vs. K_A) and the calibration of the p factors differ. It therefore suffices to discuss in this section the rationale and methodology for one approach exemplarily.

Illustrative example: STS SEC-SA. In the following the SEC-SA for STS securitisations is discussed due to the simplicity and level of the p factor employed (i.e. p is set to the fixed value of 0.5, which is well within the typical range of p parameters observed or prescribed in the SEC-SA and SEC-IRBA[67]). This section assumes a **performing pool of exposures to large corporates having a RW of 100%** under the credit risk SA. This results in a capital requirement of 0.08 or 8% prior to securitisation, which equals K_A used as input parameter for the SEC-SA[68]. The following Figure 27 visualises the RW curve under the SEC-SA for this illustrative pool, with infinitesimally thin tranches ("tranching points") at the horizontal axis.

[67] Ranging from as low as 0.3 under the SEC-IRBA, up to 1 for the SEC-SA for non-STS and even higher than 1 under the SEC-IRBA for certain securitisations.

[68] Since the pool is performing, W as defined in Art. 261 (2) CRR is 0 and hence K_{SA} equals K_A.

Figure 27: Example of a SEC-SA RW curve for an STS transaction



Capital allocation. A **RW** for a tranche is given by the area under the RW function between the attachment and detachment point, then divided by the thickness of the tranche. Tranches up to K_A (the **cliff point**) receive a RW of 1250% (i.e. effectively a capital deduction). At K_A, **the RWs of the tranches begin declining exponentially** (i.e. the higher the attachment point of the tranche, the lower the RW and the decrease in RWs is very steep initially and flattens out higher up the capital structure). For tranches with high attachment points, the RW is almost 0%. After determining the RW under the SEC-SA formula, a floor RW of 10% for senior tranches and 15% for non-senior tranches is applied and a cap may be used on the RW of the senior tranche or on the capital requirement of the entire pool, but the focus of this section is on the pure formula ignoring any subsequent overrides.

Relevant parameters. Within this halfpipe design, the shape of the RW curve is determined solely by two parameters: **K_A and p**. The **location parameter** is K_A, meaning that increasing (decreasing) K_A will move the cliff point at K_A to the right (left). The **shape parameter** is K_A*p, meaning that increasing (decreasing) K_A*p will result in a flatter (steeper) RW curve after the cliff point K_A. To simplify, as K_A is given for a certain pool, one can also regard p as the sole shape parameter driving the shape of the RW curve. **The higher (lower) p, the flatter (steeper) the RW curve and the higher (lower) RWs for tranches attaching above K_A.**

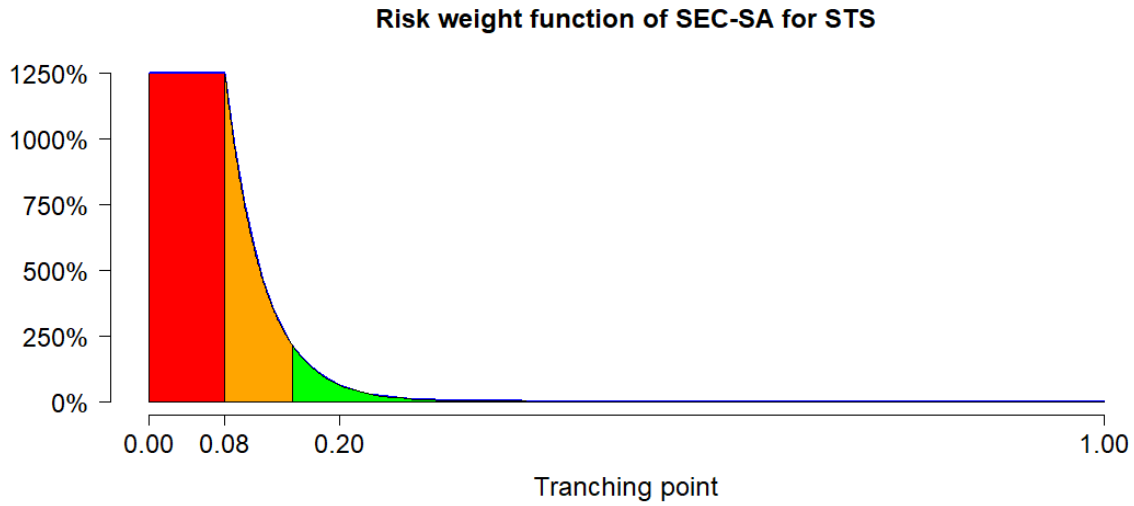
Interpreting p. The impact of the parameter p can be interpreted from at least three different angles. First, p measures the degree of **capital non-neutrality** after securitisation (defined as capital on all tranches after securitisation divided by the capital on the pool before securitisation), as one can show mathematically that the capital requirement across all tranches is approximately K_A*(1+p) see footnote [69]. Second, p determines the **steepness of the RW curve and hence the steepness of the cliff effect** as explained above. Third, p determines **the capital allocation** across different tranches, in particular across mezzanine and senior tranches, since the steeper (flatter) the RW

[69] For performing pools, this is almost exactly true, while for pools with higher shares of NPEs this is only true approximately. In the above example, the pool receives a capital requirement of 8% before securitisation, and the securitisation tranches receive a capital requirement of 12% (as p = 50%).

curve, the faster (slower) the horizontal line of very low RWs is reached and the less (more) capital is assigned to tranches above K_A.

Focus on the tranches. To simplify, there are three different areas across the tranche structure: tranches which will certainly take losses (**first loss tranches**), tranches which will likely take no losses (**senior tranches**) and tranches at risk (**mezzanine tranches**). Assuming that a first loss tranche is structured up to the cliff point at K_A (which is also the attachment point for the mezzanine tranche) while the attachment point of the senior tranche is chosen to produce a low RW[70], and a mezzanine tranche in between, Figure 28 looks as follows:

Figure 28: SEC-SA RW function for an STS transaction with tranching points



Important regulatory considerations

Cliff effect. From a risk and regulatory point of view, the risks and corresponding RWs of the mezzanine tranche(s) are crucial. Obviously, changing the attachment and detachment point of (the) mezzanine tranche(s) can have a significant impact on the RW. This is known as a **cliff effect** (defined as a situation where comparably small changes in input parameters[71] result in comparably large changes in RWs)[72]. Cliff effects can arise at the cliff point as well as after the cliff point (see orange tranche above). The lower p, the more pronounced the cliff effect. Cliff effects raise strong concerns over financial stability, capital volatility as well as the impact of model uncertainties. Cliff effects should be avoided and mitigated.

Conflicting goals within the halfpipe design. It is understood that legislators targeted different goals and effects with the formula-based approaches. First, to reduce cliff effects. Second, to ensure a deduction of capital as high as the capital before securitisation. Third, to avoid an unreasonable

[70] In the illustrative example, A is chosen as 0.1509 to produce a senior RW of exactly 10%, the applicable floor RW.

[71] In the example this is K_A but in general this refers to adverse changes to a factor used to assign regulatory capital such as K_{IRB}, K_{sa}, LGD, rating, etc.

[72] For example, a mezzanine tranche attaching at 0.11 and detaching at 0.12 with K_A = 0.08 receives a RW of 522%. If 4% of the securitised exposures default, K_A increases to 0.1 and the RW increases to 927%, almost doubling.

level of capital non-neutrality. This represents a **conflict of objectives**, as one can only achieve two out of these three goals within the current halfpipe design. All three goals cannot be reached simultaneously: The second goal of capital deduction in combination with a low level of capital non-neutrality (third goal) leaves only a small mass to be distributed under the RW function beyond the capital deduction, which necessarily leads to a steeply falling RW function, which in turn violates the first goal of reduced cliff effects. Hence there is a trade-off between these three goals and their importance has to be carefully assessed for a meaningful prioritisation. The importance of the second goal of capital deduction is discussed below in Sub-section d. This finding of the conflicting three goals suggests for an open discussion on the shape of the RW function.

b. Concerns about the framework's ability to account for non-granular pools

Leveraging on the experience of the GFC, while non-senior tranches' performance depends on pool losses, performance of the senior tranche can depend on correlation risk (risk of correlated defaults). Risk of correlated defaults increases during periods of stress. A diversified pool decreases the likelihood of correlated defaults since credit quality increases via a pooling effect. This implies that a high number of exposures drives a better credit quality at portfolio level compared to credit quality of individual borrowers. In case of a diversified pool, the senior tranche is better insulated from the risk of losses. In opposition, non-granular pools have a higher risk of correlated defaults and losses might hit severely senior tranches throughout the life of the transaction. According to supervisors' experience, when N is sufficiently high (i.e. linking to the safeguards included to reduce the risk weight floor N greater than 200 could be considered), concentration/correlation might raise only marginal issues.

Low granularity pools drive supervisory concerns especially in case of traditional or synthetic transactions where the originator keeps in full the senior tranche bearing implicitly a high exposure to the risk of correlated defaults. If the losses over the life of the transaction are higher compared to the loss scenario under which the SRT was granted (Kirb/Ksa), the originator will have to bear part of the losses. In particular, pools consisting of corporate exposures are affected by a low granularity while pools of retail exposures in substance feature a high granularity.

Supervisory concerns are compounded by the limitations of the regulatory tools to address low granularity. Ideally, the loss estimates (Kirb/Ksa) under which the SRT is granted should cater for this. In other words, when running the SRT tests, the loss estimates of the underlying portfolio should be a conservative proxy for the risk of correlated defaults. However, under the credit risk framework, the standardised methodology is not risk sensitive enough while the IRB Approach assumes full granularity through the Asymptotic Risk Factor[73]. Kirb/Ksa feeding into the SRT tests

[73] The single systematic risk factor needed in the ASRF model may be interpreted as reflecting the state of the global economy; all borrowers are linked to each other by this single risk factor which is asset class dependent and shapes the IRB formula. Asset correlation decreases with increasing PD and increases with asset size. The asset correlation function is built of two limit correlations of 12% and 24% for very high and very low PDs (100% and 0%, respectively). Correlations between these limits are modelled by an exponential weighting function that displays the dependency on PD: the exponential function decreases rather fast; its pace is determined by the so-called "k-factor", which is set at 50 for corporate exposures.

are a function of these methodologies and do not account for low granularity explicitly. As a result, SRT might be granted underestimating transaction losses.

As far as the **securitisation framework** is concerned, the parameter ''p'' under the SEC-IRBA has limitations in addressing non-granularity depending on specific asset classes. The p-factor distinguishes only between retail and non-retail while non-retail encompasses a broad spectrum of asset classes, spanning from project finance, wholesale to large corporates. Nevertheless, N is also an input parameter for determining the p factor within the SEC-IRBA.

In terms of **historical experience**, the EBA noticed in mid-2021 an increasing number of securitisations claiming SRT for large corporate or project finance pools featuring a low number of exposures. Since the originator retains the senior tranche, in the light of the losses incurred during the GFC due to correlated defaults, the framework's ability to account for non-granular pools is perceived by the EBA as a prudential concern that needs to be tackled in the future in order to minimise the probability of losses hitting the senior tranche throughout the life of the transaction.

Considering the low sensitivity of the SEC-IRBA to the granularity of the pool, the RW of the senior tranche produced under this formula might underestimate the correlation and concentration risk. In the current framework **the competent authorities have the power to decline the use of the SEC-IRBA under Article 258 (2) CRR in case of complex transactions with significant correlation and concentration risk, but this does not give the room to further refine the SEC-IRBA sensitivity but rather to oblige the credit institutions to apply in a mandatory manner the approach further down the hierarchy**. Therefore, it is the EBA view that a discussion at the Basel table on the framework's ability to account for non-granular pools should take place.

c. Better accounting for the role of the originator and the associated reduced agency risk

The securitisation capital framework for credit institutions does not differentiate between the roles of credit institutions as investors or originators in a transaction. However, the agency and model risk of a credit institution investing in securitisations originated by other credit institutions or retaining tranches of its self-originated securitisation may be quite different.

When an originator retains tranches in its securitisations (i.e. securitisation of exposures originated during the regular lending activity of the originator), the agency risk is marginal. Moreover, model risk, in case of an originator, is reduced to the model risk implicit in securitisation which uses inputs from credit risk models, whereas for investors to this it is added the risk of dealing with external data and, in case they use SEC-IRBA of developing ad-hoc models.

The idea to recognise this reduced risk in case of tranches retained by the originator is at the basis of the JC's targeted recommendation to reduce the risk weight floor on a prudent basis. However, in order to complete the picture, the possibility to reduce the capital non-neutrality for the originator via a targeted reduction of the p-factor has been evaluated, but not supported due to

the unintended consequences of increasing the risk of cliff effects. As explained thoroughly in Sub-section a., the p-factor incorporates the capital non-neutrality but also serves as a smoothing parameter to avoid cliff effects. This dual role limits considerably the room of manoeuvre for a revision of the capital non-neutrality for the originator based on prudential considerations.

On the supply side, an excessive conservatism reduces the capital relief that originators get when achieving significant risk transfer, making many transactions uneconomical. In this respect, a discussion on the appropriate level of conservatism embedded in the prudential framework for originators seems warranted and should be performed at the Basel table. A potential reduction of the capital non-neutrality targeted for originators would not influence the investment by credit institutions in securitisation, but rather make more economical for an originator to structure a transaction and so supply securitisation to non-credit institution market participants.

d. Concerns regarding the fit of the current shape of the RW function to the distribution of losses

Introduction: Academic research as well as empirical data suggest that the RW curve should not feature a structural turning point (cliff point) at K_A. Intuitively, economic reality does not feature such a structural drop in risk and capital, since there should be no reason why losses should always realise at least as high as K_A. **Realised losses in reality are typically rather smooth over the capital structure**. Exemplary distributions of losses are plotted below in Figure 29. Hence, the Basel table could be open to consider alternative designs to the current halfpipe design. **Scaling K_A** downwards (and **possibly p simultaneously** upwards) is one option within the current halfpipe design which has been advocated by the industry[74] and which could be analysed further in the future. Another option is **considering another design scheme** without having a cliff point at K_A. The industry claims that these two options better achieve the targets of a moderate capital non-neutrality and still achieve high RWs for lower tranches. The first option still has a cliff effect at the cliff point K_A, whereas the other option can be designed without cliff effects. Both options have the drawback of possible undercapitalisation of the first loss tranches (see below for a discussion of the importance of complete capital deduction). Simply lowering p as suggested by some industry participants comes with the drawback of worsening the cliff effects. One Basel paper[75], as well as available research, discussed e.g. an inverted s-curve (looking like mirror-images of distribution functions, see below), which could provide a smooth RW function without cliff effects, a moderate level of non-neutrality as well as high (but still below 1250% up to K_A) RWs for more subordinated tranches.

Methodology: pool EL and UL not sufficient. Institutions investing in securitisation tranches must be capable of dealing with expected (EL) and unexpected portfolio losses (UL), but this is hardly all. One cannot simply take the capital charge under the SA or the EL and UL provided by the IRB Approach at face value to be the risk of the tranches. To begin with, the first problem of such a literal approach would mean that tranching points up to EL + UL would receive a RW of 1250%,

[74] https://www.riskcontrollimited.com/wp-content/uploads/2022/07/Reviving-Securitisation-in-Europe-by-Scaling-Inputs-to-Capital-Formulae-22-113a-04-07-22-v3.pdf

[75] BCBS Working Paper No. 22, Foundations of the Proposed Modified Supervisory Formula Approach, Chart 5

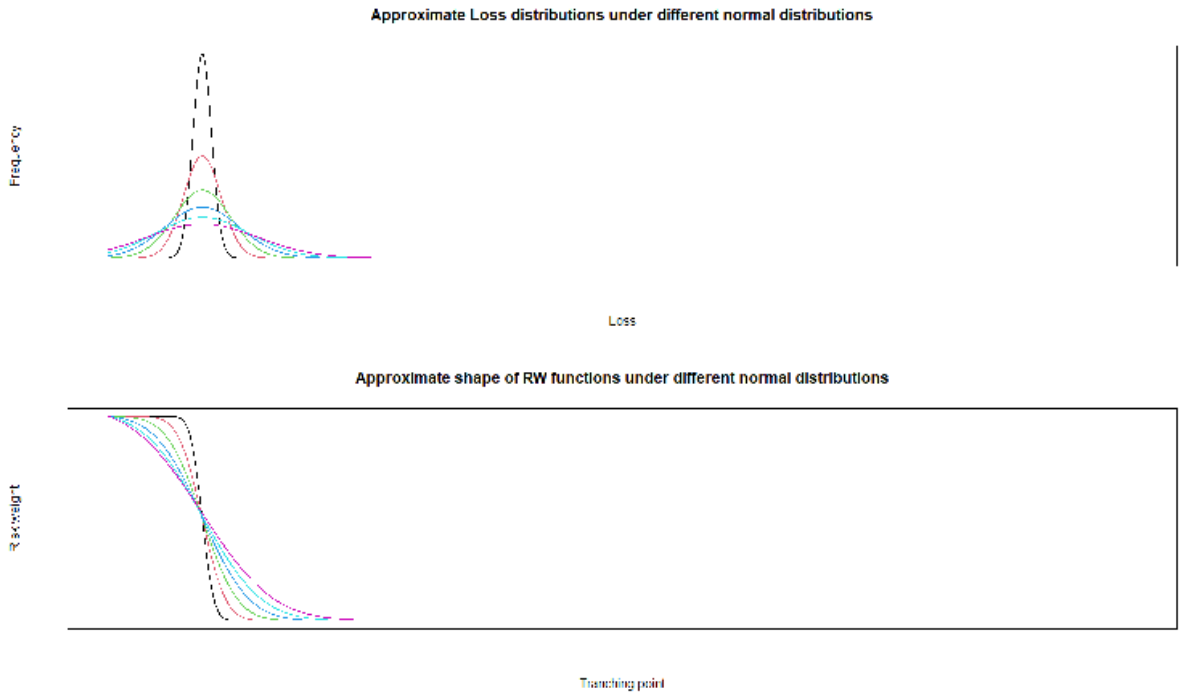
while tranching points above EL + UL would receive a RW of 0%. Therefore, a RW function with a step, i.e. a very extreme cliff effect, would be the result. This naïve approach does not make too much sense for a securitisation. Second, there is the problem of disregarding correlation as explained in the paragraph on the "potential undercapitalisation in case of high correlation" below. Third, one needs to consider additional effects caused by the securitisation on top of the capital charges of the pool, including at least agency risk (information asymmetry between different parties), model risk (different amortisation mechanism, exercise of calls, time and size of amortisation, defaults, repayments) and granularity as discussed in Sub-sections b and c above.

Methodology: Motivation of RW function by loss distributions. Using realised or estimated portfolio losses provides a rough guess how the RW function per tranching point for such a portfolio loss distribution could look like. To simplify, if lifetime portfolio losses are allocated according to a normal distribution, an illustrative RW curve could look something as displayed in Figure 29. The chart on top shows the probability densities of different loss distributions (ex-ante view), while the lower chart depicts the probability that a tranching point is hit by losses. Whereas the lower chart is just a rough motivation for the shape of the RW function, a more complete derivation of EL and UL per tranching point can be found here[76].

Methodology: inverted s-curve: Hence, the design of the RW curve under such (naïve and simplified) normal distributions results in an inverted s-curve. Such design is not too far away from the current halfpipe designs but mitigates the cliff effects and eliminates the cliff point at K_A with the drawback of possible undercapitalisation of junior tranches. A proper calibration is able to consider granularity and correlation (see below) and more advanced distribution functions than the normal distribution could also be explored at Basel level. To note, these illustrative RW functions could also be roughly approximated under the current halfpipe design by reducing K_A and increasing p.

[76] Lectures-on-securitisation-20-68a-14-2-20-v24.pdf (riskcontrollimited.com); see page 56

Figure 29: Exemplary distributions of normally distributed losses and associated RWs



Methodology: granularity and correlation. The impacts of granularity and correlation on the loss and RW curves are essential. For very granular pools with low correlation and concentration (black curve), the loss curve is very compact and the RW curve very steep (close to a step function with a major cliff effect). For non-granular pools of high correlation, the loss curve is spread out and the RW curve rather flat (pink curve). Obviously, for securitisations, both extreme scenarios – and everything in between – can be observed in practice. The effect of different levels of correlation is analysed by Risk Control Limited[77], where this is shown in page 42 for an exemplary pool of ten assets, and on page 58 for the EL and UL amounts per tranching point on a general capital structure. Correlation, granularity and concentrations (systemic, geographical, vintage) are interdependent and impact all the loss distribution curves. There is currently already a consideration of granularity on the RWs under the SEC-IRBA (on which we have expressed concerns in Sub-section b). Nevertheless, long-term considerations to further refine the Basel framework should carefully reconsider the impact of granularity, correlation and concentration on the overall shape of the RW curve (and not simply on the part after the cliff point). Different calibrations are possible.

Potential undercapitalisation in case of high correlation: A limitation of the credit risk approaches CR-SA and IRB Approach is that they do not fully reflect correlation between exposures, as they simply sum up the capital requirements of several exposures. E.g., in the IRB Approach, though having a uniform correlation parameter, the PDs of two exposures are independent. However, in a portfolio of positively correlated exposures (as most portfolios are) the first default increases the PD of the other exposures. CR-SA and IRB Approach do not reflect these increased PDs in case of

[77] Lectures-on-securitisation-20-68a-14-2-20-v24.pdf (riskcontrollimited.com)

the first default. This would require a complete credit portfolio model incorporating the correlation structure, which seems overly complicated for regulation, since e.g. the purchase of new exposures influences the PDs of the positions already held and would require a complete recalculation. This shortcoming of disregarding correlation may be acceptable in credit risk, as on credit institution level the entire portfolio is usually sufficiently diversified over all exposure classes. However, this limitation is more severe in the regulation of securitisation, as losses are assigned specifically to individual tranches by subordination. A correlated pool in a securitisation typically does not experience losses at K_A or K_{IRB}, but losses may vary widely and being either lower or higher than K_A or K_{IRB}, since correlation typically implies either few or many defaults. Such a loss distribution is shown above exemplarily by the pink curve. Hence, assumed losses are often above K_A or K_{IRB} and frequently hit mezzanine tranches above the capital deduction, requiring sufficient regulatory capital. Thus, the halfpipe design with a low or considerate level of p has the risk of capital underestimation in the mezzanine area.

The importance of capital deduction up to K_A or K_{IRB} could be questioned: The idea behind a capital reduction up to K_A or K_{IRB} is to ensure that capital requirements for first-loss tranches cover EL and UL from the credit risk approaches before securitisation. Note that this covers EL and UL of the entire portfolio. In credit risk (SA and IRB Approach) this is sufficient to cover the credit risk of the entire pool. The same holds true post-securitisation by the option of the portfolio cap of Art. 268 CRR. An investor (or originator) holding a first-loss tranche up to K_A or K_{IRB} faces less risk compared to an investor holding the entire pool (be it securitised or not): Whenever the losses exceed K_A or K_{IRB} he will only lose his tranche (i.e. K_A or K_{IRB}), whereas the other investor will lose more, theoretically up to the entire pool, thus all tranches. However, both investors face the same regulatory capital of K_A or K_{IRB}. Another reason why the complete capital deduction could be questioned is the following: the previous paragraph discussed that high correlation leads to losses which vary widely around K_A or K_{IRB} (see e.g. the pink graph above). So either losses are far above K_A or K_{IRB} as described in the previous paragraph, or they are far below K_A or K_{IRB}. The latter case questions, if the full K_A or K_{IRB} must always be deducted completely for first-loss tranches. An alternative would be to spread the amount of K_A or K_{IRB} over the subordinated tranches into the mezzanine area and not requiring a RW of 1250% up to K_A or K_{IRB}. In the view of the three conflicting regulatory goals, this could suggest deprioritising the goal of capital deduction in order to achieve less cliff effects and a desired level of capital non-neutrality.

Summary of Sub-section d: Real-world realised portfolio losses seem to suggest a smooth loss distribution over the capital structureThe flatter is its curve the higher the correlation between single defaults. The current halfpipe design has a different shape: capital deduction up to the cliff point. This comes with the drawbacks of cliff effects at the cliff point and beyond and the potential undercapitalisation of mezzanine tranches in highly-correlated pools. Furthermore, and more debatable, given the reasoning of the previous paragraph, it could be questioned, if a complete capital deduction is always necessary, or if high RWs for lower tranches might also be sufficient. These issues could potentially be fixed by a different shape of RW curve. For example, an inverted S-shape seems to be more suitable to model tranche RWs. Such a RW curve has reduced cliff effects while still providing high RWs for lower tranches, higher capitalisation in the mezzanine area, and

the level of capital non-neutrality can be better set to a desired level without re-introducing cliff effects. A drawback would be that for tranches up to K_A or K_{IRB} capital might not be completely deducted, since the amount K_A or K_{IRB} is spread more widely into the mezzanine area.

4. Assessment of the liquidity framework for securitisation

The liquidity coverage ratio (LCR) seeks to ensure that institutions hold a liquidity buffer to meet net outflows under severe idiosyncratic and market wide stress conditions. Any calibration of LCR items, high quality liquid assets, inflows and outflows, needs to be done with information/data observed during these liquidity stress periods.

In December 2013 the EBA published a report with recommendations to the European Commission on the definition of high-quality liquid assets for the LCR following the mandate in Article 509(3) and (5) of the CRR[78]. The report built on data for the period 1 January 2008 to 30 June 2012 in order to provide a thorough coverage of the liquidity characteristics of the assets during the financial crisis and the period thereafter. The analysis covered asset trades and the repo market during the crisis. The analysis was comprehensive and encompassed trading cost measures as well as those related to frequency on trading and turnover.

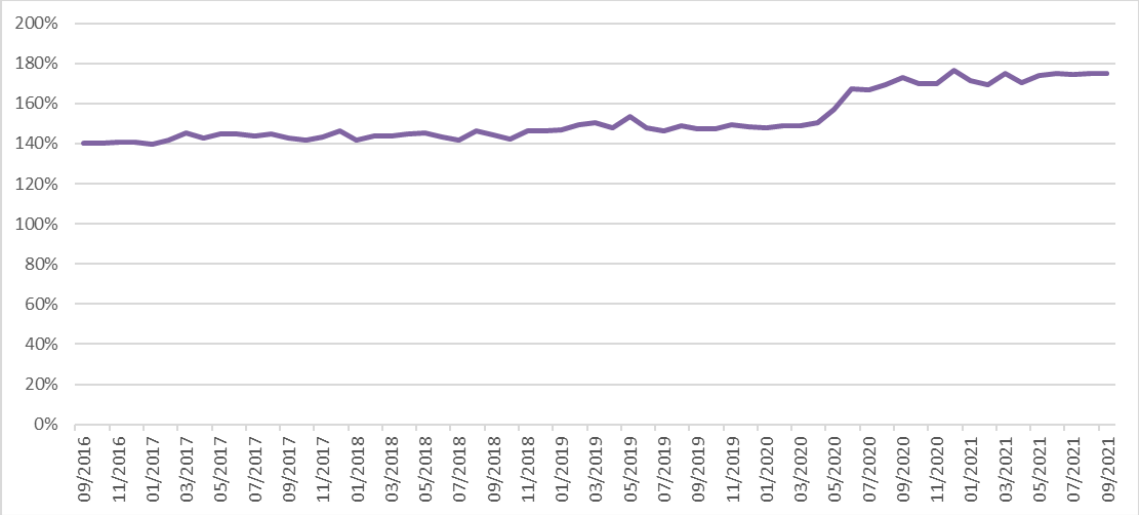
No other liquidity stress period has taken place in the EU for LCR calibration since the 2008 financial crisis. The COVID pandemic has not triggered a liquidity stress period for the purposes of a LCR recalibration. The calibration/development of a general rule in the LCR Regulation needs to build on observations during liquidity stress periods. In this context, in the absence of a liquidity stress period, an analysis of the marketability of assets from a pure quantitative perspective of their liquidity characteristics does not seem possible.

However, some qualitative assessment might be made to infer the expected marketability of assets for stress periods. The marketability of an asset under stress is a key element for its eligibility as liquid asset in the LCR.

Credit institutions need to ensure that their liquidity buffer will cover 100% of their stressed net outflows. A general observation since the LCR implementation is that credit institutions have not held liquid assets just to meet this minimum requirement, or even to also create some safety margin above it (for contingency actions, recovery plans or simply comfort levels), but clearly have built up much higher surplus levels of marketable liquid assets in the LCR (as detailed in Figure 30). At these levels it could be argued that the definition of high-quality liquid assets should be less relevant for credit institutions' choices on portfolio optimisation.

[78] "EBA Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA) and high quality liquid assets (HQLA) and on operational requirements for liquid assets under Article 509(3) and (5) CRR" (link)

Figure 30: LCR values in EU



EBA COREP sample: around 165 credit institutions until Nov 2020 and more than 4000 credit institutions (including those 165) from Dec 2020

4.1 Securitisations in the LCR

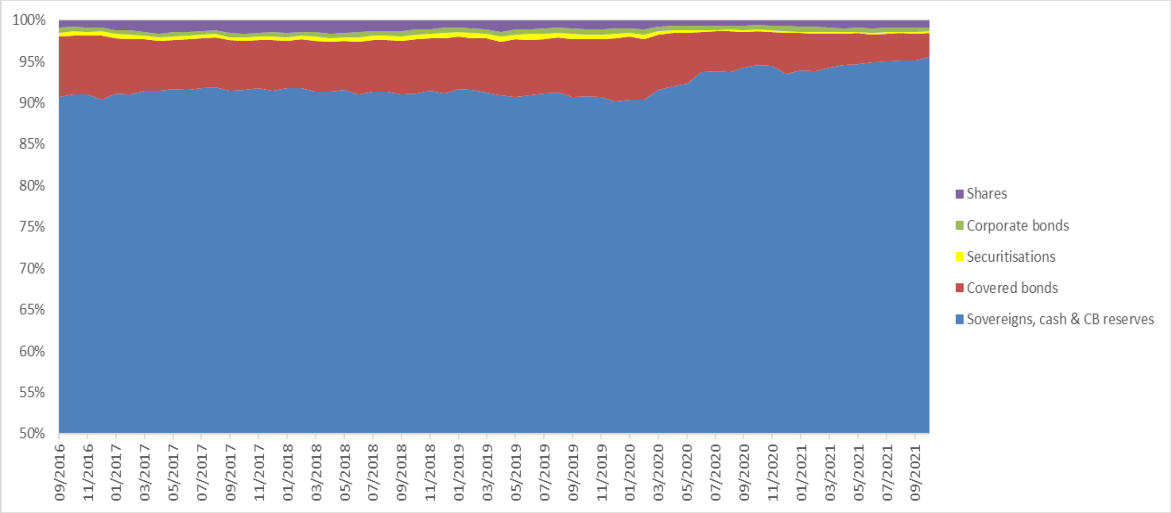
In 2015, the LCR Regulation in the EU included securitisations as level 2B assets capped at 15% of the liquidity buffer but deviated from Basel and the 2013 EBA report by expanding the category of eligible ABS which was limited to RMBS in Basel[79]. This deviation is flagged as a finding in the 2017 EU LCR RCAP. In addition to securitisations with underlying mortgages, in the EU, securitisations with underlying auto loans, consumer loans and SME loans were considered eligible. This expansion of eligible ABS in the EU was motivated by the expectation that it would increase diversification of credit institutions' liquid assets.

Since the introduction of the LCR, the share of ABS in credit institutions' liquid assets has been negligible, ranging from a minimum 0.2% to a maximum 0.7% as detailed in Figure 31, while credit institutions regularly hold very high LCR levels above the minimum required. Credit institutions' appetite to hold marketable assets for liquidity stress periods and reinforce their LCR buffers at levels well above the minimum requirement has not led to an increased holding of securitisations. This means that in the context of these very high stress liquidity buffers, well above the minimum regulatory requirement, and therefore even aside of the LCR, the negligible share of securitisations in them appears to demonstrate that credit institutions themselves do not consider securitisations to be effectively marketable during stress or even attractive enough to diversify into. The result is that securitisations have not contributed to liquid assets diversification, in spite of being the reason

[79] In a comparative manner, in the EU securitisations are Level 2B HQLA whereas in the US no securitisation is HQLA eligible as such. In addition to this, in the EU, and as clarified by Q&A 2019 4786, securitisations, including NPL securitisations, that are explicitly guaranteed by the central government of a Member State can qualify as level 1 liquid assets in the LCR in accordance with Article 10(1)(c)(i) of Delegated Regulation (EU) 2015/61 (LCR DA). In the US, securities issued by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) can be treated as HQLA eligible as Level 2A because they receive a guarantee from the US Government and, as such, they are treated as securities guaranteed by the US Government.

for the Basel deviation. Importantly, all these findings apply equally to STS securitisations since they are already introduced as eligible in the LCR and included in the calculation since 2018[80].

Figure 31: HQLA by asset classes



	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	30/09/2021
Shares	0.9%	1.4%	0.9%	1.0%	0.7%	0.9%
Corporate bonds	0.5%	0.5%	0.6%	0.6%	0.6%	0.5%
Securitisations	0.5%	0.5%	0.7%	0.6%	0.2%	0.2%
Covered bonds	7.7%	6.1%	6.6%	7.7%	4.9%	3.3%
Sovereigns, cash & CB reserves	90.4%	91.5%	91.2%	90.1%	93.6%	95.1%

EBA COREP sample: around 165 credit institutions until Nov 2020 and more than 4000 credit institutions (including those 165) from Dec 2020[81]

Since December 2020 the EBA sample was increased with all other smaller entities in the EU. The same conclusion can be drawn in view of the high LCR levels and composition of HQLA considering only these new credit institutions added to the sample as shown in Figure 32 and Figure 33.

[80] Actually, the Commission Delegated Regulation (EU) 2015/61 (LCR DR) already anticipated in 2015 the STS features as requirements for eligible securitisations. In 2018, the Commission Delegated Regulation (EU) 2018/1620 amending Delegated Regulation (EU) 2015/61 (LCR amending act) simply replaced those features for the STS "label" since the Regulation on STS (with those features) applied from 1 January 2019.

[81] The results are very similar either by considering the amounts of liquid assets before or after haircuts.

Figure 32: LCR values in EU new EBA sample

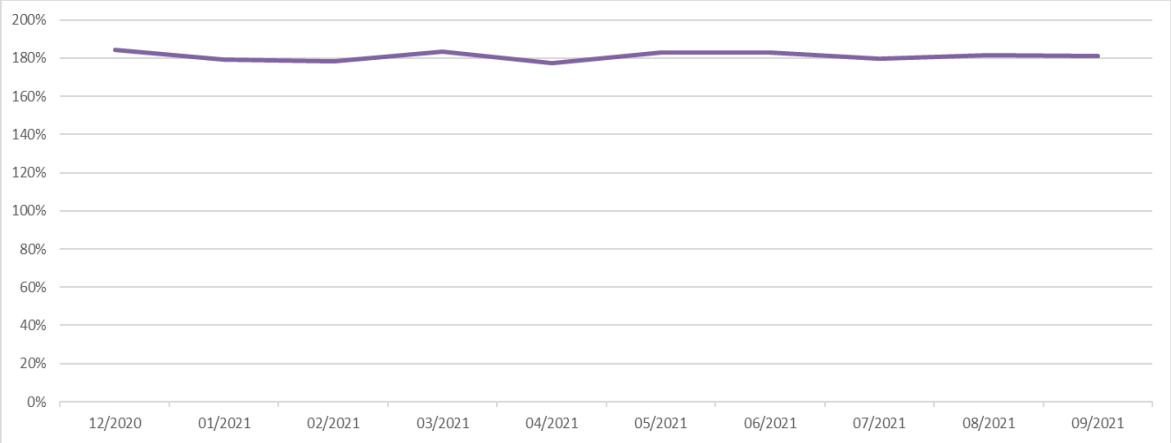
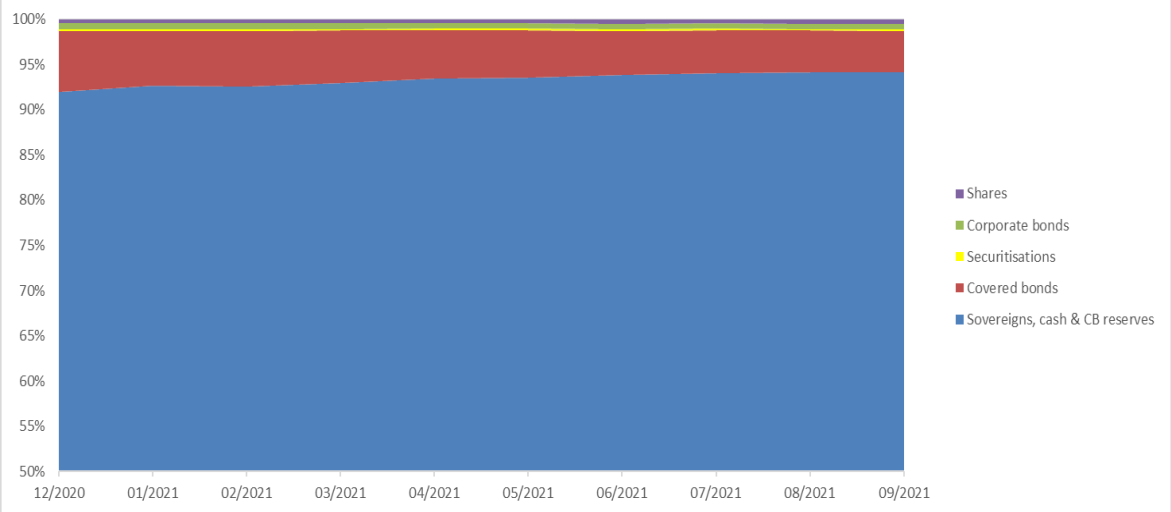


Figure 33: HQLA by asset classes new EBA sample



Sample: Around 4000 credit institutions in COREP

An upgrade of securitisations from level 2B to level 2A would mean that credit institutions would be allowed to hold securitisations from 15% to up to 40% of their buffer for liquidity stress periods. As explained, there is a reasonable assumption of a very small appetite or perception of marketability in credit institutions for these assets to be part of the LCR stress buffers where their presence is negligible even when it comes to levels well above the minimum requirements. Securitisations have not contributed to diversification of buffers. The EBA report from 2013 was comprehensive and built on a liquidity stress period. Since then no other liquidity stress period that could be relevant for LCR calibration has taken place that could inform a potential recalibration/redrafting of LCR rules. Considering these aspects there is no basis that could justify the mentioned upgrade of securitisations in the LCR buffer, apart from the fact that it would enlarge the deviation from Basel in spite of the conclusions of the 2017 EU LCR RCAP.

4.2 Main feedback submitted by the industry to the Commission consultation and EBA analysis

Some respondents argued that, in view of their performance during the last years, including during the COVID pandemic, STS securitisations and ABCPs should be upgraded as liquid assets in the LCR at a comparable level with covered bonds. These respondents added that this would also contribute to a higher liquidity of the full LCR buffer by ensuring further diversification of liquid assets.

As mentioned, the EBA considers that the (re)calibration of any LCR related item needs to build on observed market data during a LCR like severe idiosyncratic and market wide stress scenario. Such stress scenario has not been observed since the crisis starting in 2008, not even during the COVID 19 pandemic[82]. Any (re)calibration of LCR related items considering other than the cited LCR like stress scenarios would not ensure a proper performance and resilience of the LCR buffer under stress jeopardizing the prudential target of the Pillar 1 requirement. As mentioned in the report, the deviation from Basel in exceeding the scope of eligible ABS in the LCR DR has not contributed to diversification since the share of securitisations in the liquid assets held by credit institutions is negligible whereas, on the contrary, in some credit institutions and jurisdictions the presence of covered bonds is significant.

More specifically, one respondent (the Association for Financial Markets in Europe - AFME) referred to an upcoming related analysis of liquidity performance between covered bonds and securitisations. This analysis was published in February 2022[83]. The analysis covers the observation of historical bid-ask price data and flags as key findings that "while covered bonds (CB) were generally more liquid in the early 2010s, since 2016, senior asset backed securities (ABS) have been consistently and generally more liquid even in the 2020 Covid-19 crisis." The report argues that "the current bank regulatory rules which, in the case of the Liquidity Coverage Ratio eligibility conditions, strongly favour CB over ABS should be reconsidered."

The EBA would like to highlight the following aspects:

Liquidity stress period for LCR (re)calibration

The analysis in the December 2013 EBA report on HQLA definition for LCR combined price and volume related metrics and considered the period between January 2008 to June 2012 to ensure that the full liquidity stress period during the financial crisis would be covered. This period includes the years where the analysis by AFME concludes that covered bonds were generally more liquid than senior ABS, the early 2010s. It is precisely that period of time, from 2008 to 2012, the one that, under a liquidity stress scenario, needs to be considered for a (re)calibration of any LCR related

[82] This is indeed the case when looking at the indicators of stress as envisaged in Article 5 of the LCR DR, for example in terms of run-off of a significant proportion of retail deposits, a partial or total loss of unsecured wholesale funding capacity or a partial or total loss of secured, short-term funding, among others.

[83] https://www.afme.eu/Portals/0/DispatchFeaturedImages/Comparing%20ABS%20and%20Covered%20Bond%20Liquidity%2021-134a%2030-10-2021%20v22%20(003).pdf

item. As mentioned in the report, the Covid 19 period has not been a LCR like liquidity stress period and cannot be considered for a (re)calibration of the LCR.

It is also to be noted that in the 2013 EBA report, the best potential definition of each asset class from the perspective of its liquidity performance under stress was sought. This means that any potential STS like structure at that time would have been captured in such best potential definition and hence was taken into account for the identification of HQLA under stress.

It is to be recalled that before the 2008 crisis, securitisations were traded at relatively low spreads and markets seemed to be somehow liquid under normal conditions. But as the stress increased markets dried up immediately. No LCR recalibration should be made without reflecting factual experience under severe idiosyncratic and market liquidity stress.

Sample of credit institutions considered

AFME analysis considers data from France, Germany, Netherlands, Ireland and Spain. The outstanding amount of covered bonds in these countries represents 48% of the total outstanding amount in the EU[84]. Specifically, covered bonds from countries like Denmark, Finland, Norway and Sweden are not included in AFME analysis and indeed the presence of covered bonds in the LCR liquidity buffers of the credit institutions in these four countries, for the purposes of facing liquidity stress periods, is very material and the most significant one in the EU. Moreover, the outstanding amount of covered bonds from these countries represents 36% of the total in the EU.

Repo markets

In addition to this, it should be noted that repo markets played a key role as a source of liquidity during the financial crisis from 2008. This is why the LCR eligibility for liquid assets looks at their power to be repoed as well as to be sold without significant losses under stress. Indeed, the EBA report also took very much into account the liquidity performance of the different asset classes in the repo market under stress. This is a key aspect in the calibration of the definition of HQLA. However, this is something that is not assessed in the AFME analysis.

We have looked at the half yearly ICMA (the International Capital Market Association) surveys since December 2017[85]. As mentioned, they would not cover stress period for any LCR (re)calibration but we would like to confront the observations in repo markets with the results provided by AFME for the periods following 2016 on sales transactions. ICMA surveys very much focus on European tri-party repo markets. As explained by ICMA[86], the volume of tri-party repo market represents only 10% of the outstanding volume of European repo markets. It also states that "*European tri-party repo is normally used to manage non-government bonds and equity*". It is explained that "*On the other hand, the lower post-trade overheads of tri-party repo also makes it economic to use non-government securities as collateral. These less liquid securities trade in smaller amounts than government securities, which can make bilateral transfers across securities settlement systems*

[84] Data from 2020 published by the European Covered Bond Council (link)

[85] ICMA Repo Survey » ICMA - International Capital Market Association (icmagroup.org)

[86] Repo-FAQs-January-2019-050221.pdf (icmagroup.org)

prohibitively expensive. ***Consequently, repos of equity, corporate bonds, MBS, ABS and other structured securities are concentrated in tri-party repo.***" The following observations are made when looking in a comparative manner at securitisations and covered bonds in the European tri-party repo market:

Figure 34: Distribution of repos by collateral (covered bonds and ABS)

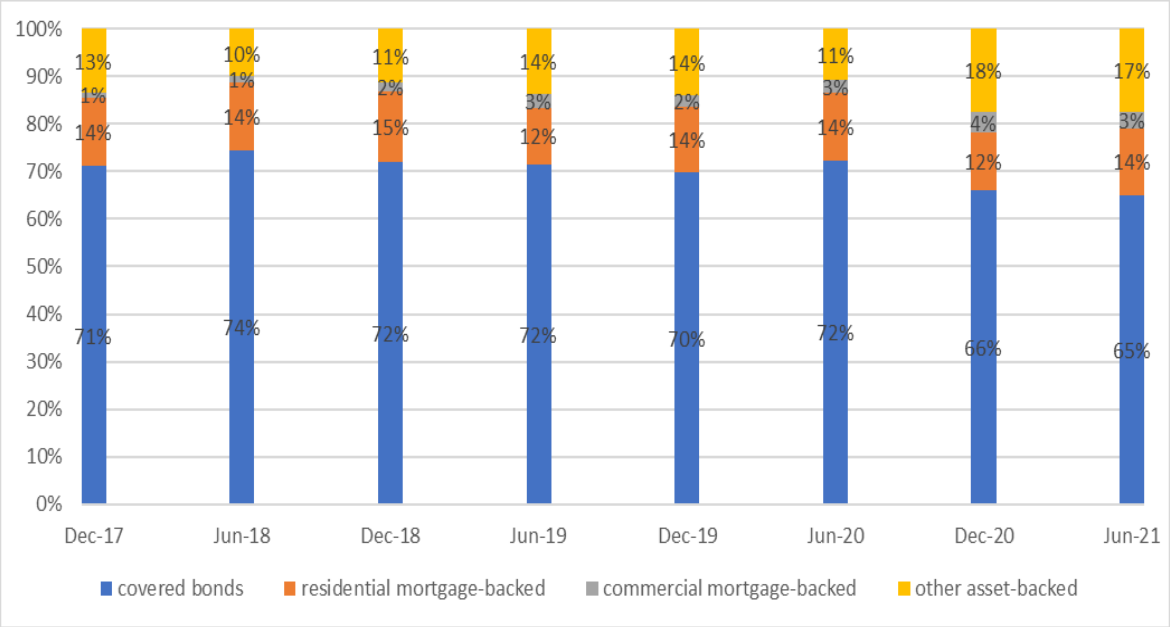
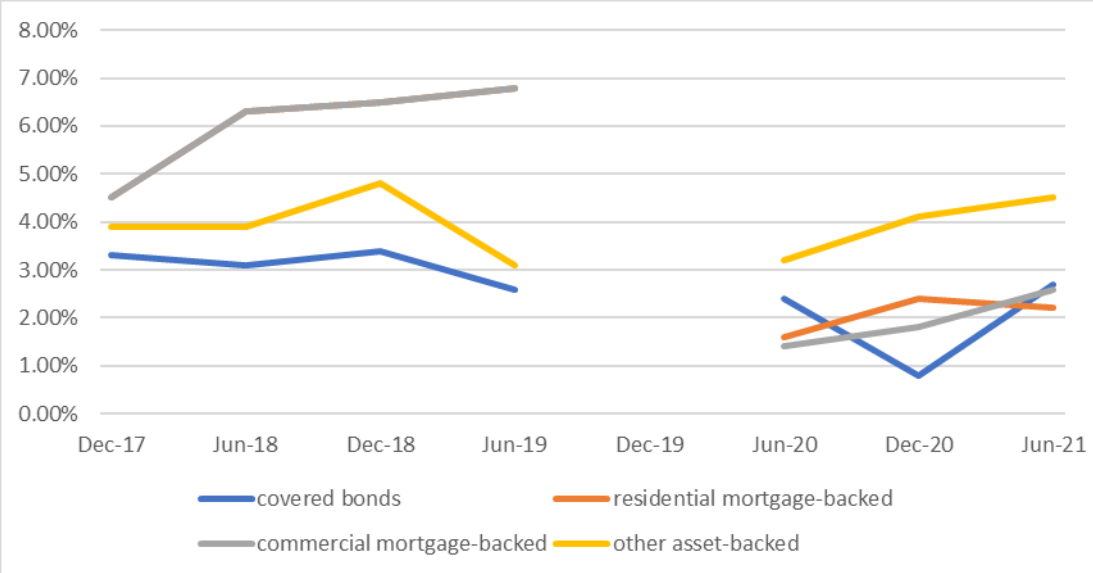


Figure 35: Evolution of haircuts in repos by collateral (covered bonds and ABS)



*ICMA: Figures not published for December 2019 as insufficient data was received in the survey.

In Figure 34, the volume of repos collateralised by covered bonds is persistently and significantly larger, more than double generally, than those using securitisations as collateral.

In Figure 35, the haircut in covered bonds repos is also generally lower than in the case of securitisations repos over time. Still haircuts from 2020 should be read with caution due to the potential influence in this market of the large volume of central bank operations at that time. It should be noted that until June 2019 repo haircuts are provided for the cases of residential and commercial mortgage-backed securitisations in an aggregated manner. Once the data is disaggregated, from June 2020, repo haircuts from residential mortgage-backed securitisations seem generally slightly higher than if commercial mortgage-backed.

Both metrics would indicate that covered bonds proved to be more liquid in repo markets during the period since December 2017 contrary to the conclusions in the AFME analysis on sales. Again, this is only for illustrative purposes of performance since 2016 under normal times and not for any re(calibration) purposes which would necessitate observations under LCR like stress periods.

Furthermore, it should be recalled again the persistent negligible share of securitisation in the LCR buffers for stress periods in credit institutions, including STS, since the first reporting of the LCR in September 2016 with credit institutions showing very high LCR levels, well above 100%, and therefore showing poor interest in holding these assets for a liquidity stress period.

Furthermore, some respondents state, along the following lines, that “As a general rule ABCPs as a short-term instrument are held to maturity and convert to cash based on the agreed tenor (commonly up to 60 days); they are typically not actively traded.” The EBA would like to recall that liquid assets, for the purposes of LCR, are required to be actively traded (Article 7(6) LCR DR).

4.3 Updated ITS on ECAIs’ mapping for securitisation and the relevant amendment of LCR DR

Recommendation 8: amend the LCR Delegated Regulation to reflect the increased granularity of CQS under the amended CRR
The JC recommends modifying the LCR Delegated Regulation by changing the reference from CQS1 to CQS 1 to 4 in its Article 13(2) regarding the long-term rating to reflect the increase in granularity of CQS under the amended CRR and the related amendment to the Implementing Regulation on the mapping of ECAIs´ credit assessments for securitisation positions (Implementing Regulation (EU) 2016/1801) as per Commission Implementing Regulation (EU) 2022/2365.

A draft amendment to the existing ITS on the mapping of ECAIs´ credit assessments for securitisation positions under the CRR was sent to the COM in May 2022 and has been adopted on 2 December 2022 via Commission Implementing Regulation (EU) 2022/2365. The amendment updates the Implementing Regulation (EU) 2016/1801 because of the amendments introduced in

Chapter 5 of the CRR by Regulation (EU) 2017/2401, which changed the rating-based approaches and introduced more granularity in the credit quality steps (CQS) for calculating risk-weights.

The LCR Delegated Regulation makes a cross-reference to CQS1 in accordance with Article 264 CRR to be eligible as Level 2B. Because of the increased number of CQS, the cross-references to the CRR need to be updated, otherwise STS securitisation tranches with a rating of between AA+ to AA- would not to be eligible as Level 2B securitisations.

This is because a literal reading of Article 13(2)(a) of the LCR Delegated Regulation, as amended in 2018 after taking into consideration the SECR and the accompanying CRR amendment, implies that only STS securitisation tranches that have been assigned a credit assessment of CQS 1 in accordance with Article 264 of the CRR[87] qualify as level 2B securitisation bonds.

However, in the previous CRR because of the reference to former Article 251 and Article 261[88] qualifying securitisation tranches with a rating from AAA to AA- have been qualifying as level 2B securitisations under the Standardised Approach (Article 251) while only qualifying securitisation tranches with a rating of AAA have been qualifying as level 2B securitisations under the Ratings Based Method (Article 261). Hence, in the previous framework the eligibility of a securitisation tranche rated AA as level 2B depended on the approach the credit institution used (SA vs. IRB Approach).

The JC is of the view that the amendment to the LCR Delegated Regulation in 2018 did not intend to limit the eligibility of STS securitisation tranches to tranches having a AAA rating. Therefore, there is the need to modify the LCR Delegated Regulation to solve this problem by changing the reference from CQS1 to CQS 1 to 4 in its Article 13(2) for long-term ratings.

It is moreover important to ensure the same date of application for the updated ITS and the relevant amendment of LCR DR in order to avoid a temporary situation where securitisations could be required in the LCR to be single A (if the amendment to the LCR DR applied earlier) or AAA (if the mapping ITS applied earlier).

[87] This Article considers 17 CQS and CQS 1 and CQS 4 imply a AAA and a AA- rating, respectively, following the new draft ITS on the mapping of ECAIs´ credit assessments for securitisation positions under the CRR.

[88] This Article only considered 4 CQSs for the Standardised Approach and CQS 1 meant from AAA to AA- rating following the Implementing Regulation (EU) 2016/1801

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