



# **POLICY ADVICE ON THE BASEL III REFORMS: CREDIT RISK**

**STANDARDISED APPROACH AND IRB APPROACH**

EBA-Op-2019-09a | 2 August 2019

**EBA**

EUROPEAN  
BANKING  
AUTHORITY

# Contents

---

<b>List of figures</b>	<b>5</b>
<b>List of tables</b>	<b>7</b>
<b>Executive Summary</b>	<b>9</b>
<b>1. Introduction</b>	<b>11</b>
1.1 Standardised approach	12
1.2 IRB approach	14
1.3 Structure of this report	15
<b>2. EU-specific SA-IRB consistency issues</b>	<b>16</b>
2.1 SME definition	16
2.2 SME supporting factor	17
2.3 Infrastructure lending supporting factor	20
2.4 Treatment of equity exposures currently risk weighted under Article 49 of the CRR	22
2.5 Retail exposures	26
2.5.1 Definition of retail - use of EUR 1 million threshold	26
2.5.2 Implementation of the notion of transactors	31
2.6 Definition of commitment	33
<b>3. The Standardised Approach</b>	<b>36</b>
3.1 Due diligence and use of ratings	36
3.1.1 Enhanced due diligence requirements	36
3.1.2 Use of the external ratings approach	37
3.2 Exposures to non-central government public sector entities (PSEs)	39
3.2.1 Definition of PSEs	39
3.2.2 Reciprocity of treatment of PSEs in Article 116(4) of the CRR	39
3.3 Exposures to banks	40
3.3.1 Treatment of rated exposures to banks	40
3.3.2 Assumption of implicit government support	41
3.3.3 Definition of grades under the SCRA	43
3.3.4 Treatment of exposures to banks where the banks belong to the same institutional protection scheme (IPS)	44
3.3.5 Identification of short-term exposures to banks	45
3.4 Exposures to securities firms and other financial institutions	48
3.4.1 Reciprocity of treatment for securities firms and other financial institutions in third country jurisdictions	48
3.5 Exposures to corporates	49
3.5.1 Use of the external credit ratings approach (ECRA)	49

3.5.2	The final Basel III provisions for specialised lending	56
3.6	Subordinated debt, equity and other capital instruments	57
3.6.1	Revised RW treatment	57
3.6.2	Treatment of equity holdings made pursuant to national legislated programmes (NLP)	59
3.6.3	Treatment of equity exposures previously classified as high risk items	61
3.6.4	Treatment of equities that are recorded as a loan but arise from a debt/equity swap made as part of the orderly realisation or restructuring of the debt	62
3.6.5	Treatment of liabilities from which the return is linked to that of equities	63
3.6.6	Treatment of debt holdings	63
3.6.7	Treatment of equity exposures to central banks	63
3.6.8	Additional risk sensitivity in the equity exposure class	64
3.7	Retail exposures	65
3.7.1	Revised RW treatment	65
3.7.2	Granularity criterion and additional measures for ensuring diversification	66
3.8	Real estate exposures	68
3.8.1	Implementation of the loan splitting (LS) approach versus the whole loan approach (WL)	70
3.8.2	Implementation of hard test (HT)	73
3.8.3	Eligibility of property under construction	75
3.8.4	Valuation requirements	76
3.8.5	Cyclical effects of valuation requirements (value at origination vs current value)	78
3.8.6	Additional indicators for RW assignment	80
3.8.7	Additional guidance on underwriting policies	81
3.8.8	Condition for exclusion from IPRRE treatment	82
3.8.9	Treatment of exposures where the servicing of the loan materially depends on the cash flows generated by a portfolio of properties owned by the borrower	84
3.8.10	Land acquisition, development and construction exposures – general treatment	85
3.8.11	Conditions for the application of 100% RW for certain Land acquisition, development and construction (ADC) exposures	86
3.9	RW multiplier to certain exposures with currency mismatch	87
3.10	Off-balance sheet items	89
3.11	Other assets	93
3.11.1	Gold bullion backed by bullion liabilities	93
3.11.2	Residual value of leased assets	93
3.12	Credit risk mitigation framework (CRM)	95
3.12.1	Impact of the Basel III revisions to the current CRM framework	95
3.12.2	Targeted fixes to the current CRM framework (in line with the EBA CRM Report)	97
<b>4.</b>	<b>The Internal Ratings Based Approach</b>	<b>109</b>
4.1	Basel reform and modelling incentives	109
4.1.1	Change in the PPU philosophy	112
4.1.2	Reversal to less sophisticated approach: application of Article 149	114
4.1.3	Sovereign exposures	115

4.2	Specific recommendations	120
4.2.1	Quantitative impact study: main impacts of the different parts of the reform	120
4.2.2	Scope of modelling: migration	123
4.2.3	Impact on risk parameters – PD	130
4.2.4	Impact on risk parameters – LGD	133
4.2.5	Combined PD and LGD floors	142
4.2.6	Impact on risk parameters - CCF	144
4.2.7	Impact on risk parameters – Effective Maturity	149
4.2.8	Specialised lending exposures – High Volatility Commercial Real Estate	153
4.2.9	Credit Risk Mitigation (CRM)	156
4.3	Recommendations for improvements of the existing IRB framework	178
4.3.1	Missing and misleading definitions	178
4.3.2	1.25 scaling factor on the asset value correlation coefficient for “large financial sector entities”	187
4.3.3	Dilution risk	191
4.3.4	Exposure value – EL, IRB shortfall & excess	195
4.3.5	Calculation of realised LGD and realised CCF	197
4.3.6	Estimation of PD in the case of definitions of default applied at facility level	199
4.3.7	Continuous rating scale	201
4.3.8	Treatment of intragroup insurance	207
4.3.9	Previous opinions published by the EBA	207

## List of figures

---

Figure 1: Percentage change in exposure class RWA due to application of SME supporting factor (relative to total current SA RWA) .....	19
Figure 2: Percentage change in exposure class RWA due to application of SME supporting factor (relative to total IRB RWA) .....	20
Figure 3: Percentage change in exposures to banks SA RWA (relative to total current SA RWA), ECRA versus SCRA.....	41
Figure 4: Breakdown of exposures to banks (excluding covered bonds) by rating status (% of exposures to banks excluding covered bonds) .....	44
Figure 5: Exposure class Banks: exposure amounts/unrated/IPS (as % of total Banks exposure amounts) .....	45
Figure 6: Breakdown of SA exposure value to banks (excluding covered bonds), by sub-class and maturity (%).....	46
Figure 7: Percentage change in SA of exposure to banks (relative to total current SA RWA), by sub-class and maturity .....	46
Figure 8: Impact of switching to original maturity .....	47
Figure 9: Perceived added-value of implementing the SCRA .....	51
Figure 10: Share of rated borrowers listed on a recognised exchange .....	52
Figure 11: Breakdown of exposures to corporates (excluding SMEs) by rating status (% of exposures to corporates excluding SMEs) .....	53
Figure 12: Breakdown of exposures to corporates (excluding SMEs) by grade (% of exposures to corporates excluding SMEs) .....	53
Figure 13: Perceived added-value of implementing the hybrid approach .....	55
Figure 14: Percentage change in exposures to corporate (excluding SMEs) SA RWA (relative to total current SA RWA), ECRA versus SCRA .....	55
Figure 15: Breakdown of exposure secured by real estate by type (% of total exposures secured by real estate) .....	72
Figure 16: Percentage change in exposures secured by real estate SA RWA (relative total current SA RWA), loan splitting versus whole loan.....	73
Figure 17: Share of exposures secured by IPRRE (% of total exposures secured by real estate) ....	75
Figure 18: Percentage change in exposures secured by IPRRE SA RWA due to application of hard test to IPRRE (relative to total current SA RWA).....	75
Figure 19: Availability of information.....	88
Figure 20: Future availability of information .....	89

Figure 21: Percentage change in SA RWA due to application of revised credit conversion factors (relative to total current SA RWA) .....	91
Figure 22: Percentage change in RWA due to the application of revised CRM reform.....	96
Figure 23: Expected impacts from the main elements of the finalisation of the final Basel III framework (based on QIS results).....	123
Figure 24: Percentage change in IRB RWA per exposure class excluding migration to FIRB approach (relative to total current IRB RWA) .....	124
Figure 25: Percentage change in AIRB RWA per exposure class migrating to FIRB approach (relative to exposure class current AIRB RWA) .....	125
Figure 26: Marginal impact of the PD floors (contribution).....	130
Figure 27: Relative impact of the PD floors (split by regulatory approach: A-IRB portfolios above, F-IRB portfolios below).....	131
Figure 28: Theoretical impacts of the recalibration of regulatory LGD for corporate senior exposures (in % of current LGD and current RWA).....	134
Figure 29: Theoretical impacts of the recalibration of regulatory LGD for corporate junior exposures (in % of current LGD and current RWA).....	135
Figure 30: Marginal impact of the new regulatory LGD values (contribution) .....	136
Figure 31: Relative impact of the new regulatory LGD values (split by regulatory approach: A-IRB portfolios above, F-IRB portfolios below) .....	136
Figure 32: Marginal impact of the LGD floors (contribution).....	139
Figure 33: Relative impact of the LGD floors (split by regulatory approach: only A-IRB portfolio).....	140
Figure 34: Marginal impact of the PD and LGD floors (contribution) .....	143
Figure 35: Relative impact of the LGD floors (split by regulatory approach: only A-IRB portfolios) .....	143
Figure 36: Marginal change in exposure value by exposure class .....	144
Figure 37: Marginal impact of the new CCF (change in RWA by risk category for OBS items).....	145
Figure 38: Marginal impact of the new regulatory CCF for F-IRB institutions (contribution).....	146
Figure 39: Combined impact of the migration to regulatory CCF and new CCF regulatory values for A-IRB bank (contribution).....	147
Figure 40: Marginal impact of the CCF floors for A-IRB institutions (contribution).....	148
Figure 41: Definitions of (sub-) exposure classes in SA and IRB.....	156

## List of tables

---

Table 1: Regulatory treatment of exposures to SMEs: CRR, CRR2 and Basel III .....	17
Table 2: Percentage change in equity RWA (relative to total current SA RWA), by equity category .....	24
Table 3: The scope of application of the threshold for the definition of retail in the IRB and SA... ..	27
Table 4: Calculation of the threshold for the definition of retail exposures.....	28
Table 5: RWA increase per exposure sub-class - Retail (as % of total current SA RWA).....	33
Table 6: Exposure class Corporates (excl. SME): exposure amounts by rated/unrated .....	50
Table 7: Exposure class Corporate SMEs: exposure amounts by rated/unrated.....	50
Table 8: Exposure class Specialised Lending: exposure by sub-exposure class .....	56
Table 9: Percentage change of SA RWA per exposure sub-class – Specialised lending (relative to total SA RWA) .....	57
Table 10: Percentage change of SA RWA per exposure sub-class – Equity (relative to total SA RWA) .....	58
Table 11: Risk weights applicable to equity exposures during the phased-in implementation of the Basel standards .....	59
Table 12: Percentage change in equity RWA (relative to total current SA RWA) during the phased-in implementation period .....	59
Table 13: Exposure class Retail - exposure by sub-exposure class .....	66
Table 14: Percentage change of SA RWA per exposure sub-class – Retail (relative to total SA RWA) .....	66
Table 15: Real estate exposure class – the final Basel III framework .....	69
Table 16: Percentage change of SA RWA per exposure sub-class – Exposures secured by real estate (relative to total SA RWA) .....	70
Table 17: Scenario specification for real estate exposures.....	72
Table 18: List of changes from the final Basel III framework and applicability to central government and central bank exposures .....	117
Table 19: sample size for the marginal scenario.....	122
Table 20: observed impact of the RGLA and PSE depending on their classification.....	128
Table 21: Change of RW-function for exposures under A-IRB.....	167
Table 22: Summary of proposals related to missing or unclear definitions in the CRR.....	183
Table 23: Impact on the RW from the scaling factor on the asset value correlation coefficient ..	191

Table 24: Proposed application of the scaling factor .....	191
Table 25: Types of PD models .....	203
Table 26: Types of LGD models .....	203

---



# Executive Summary

---

The EBA welcomes and supports the final Basel III framework for credit risk. Overall, the improvements in risk sensitivity of the Standardised Approach (SA) allow for a reliable alternative to the Internal Ratings Based (IRB) Approach. At the same time, the reduction in modelling choices introduced in the IRB Approach is consistent with the shortcomings experienced during the financial crisis, where the credibility of internal models was challenged. The EBA believes that these measures, together with the bottom-up repair, will contribute to ensuring sufficiently comparable and risk-sensitive models.

This report has taken as the premise the starting point, the full implementation by the EU of the Basel III framework. Nonetheless, EBA has looked carefully at the suitability of individual reforms on EU banks and considered the impact that the implementation of the overall for the EU. The EBA has overall found the framework suitable for implementation in EU, especially as many changes in the Basel III credit risk framework considered several existing EU practices, such as the lower risk weights applicable to corporate SMEs, or the loan-splitting approach in the case of residential mortgages.

In addition to the assessment of the final Basel III framework, the EBA has drawn on the work undertaken to clarify the credit risk framework since the implementation of the CRR in 2014. Consequently, this report also puts forward a number of recommendations to improve the current EU implementation. These issues include questions raised by the industry in the context of EBA's Q&A tool<sup>1</sup>, areas identified in reports published by EBA, and modifications aimed at improve clarity and the simplicity of the framework.

This report provides in total 94 policy recommendations affecting credit risk: 39 policy recommendations specifically relevant for the SA; 48 policy recommendations for the IRB Approach; and, 7 policy recommendations applicable to both the SA and the IRB Approach. The recommendations therefore cover the full final Basel III credit risk framework in significant detail and with their implementation in the EU, the EBA is confident that the EU can retain a credible and risk-sensitive framework.

The policy recommendations that are joint for the SA and the IRB Approach include the EBA's recommendation to aligning the definition for corporate SMEs across the two approaches. Furthermore, EBA recommends to remove the existing EU supporting factors, applicable respectively to SMEs and infrastructure projects, due to the changes in the final Basel III framework, which introduces a lower risk weight (RW) for SME corporates in the SA and a more granular framework for specialised lending. Finally, the EBA recommends to maintain the current treatment of equities in Article 49 (4) of the CRR.

---

<sup>1</sup> See <https://eba.europa.eu/single-rule-book-qa>.

The EBA recommends that the final Basel III framework for SA is implemented in the EU, although adapted to EU conditions by exercising a number of options. Specifically, it is recommended that the use of the external rating based approach is continued, which ensures the highest degree of risk sensitivity. This also entails that the so-called Standardised Credit Risk Assessment (SCRA) methodology for exposures to banks and the approach for jurisdictions where external credit ratings are not allowed for exposures to corporates is not recommended for implementation in the EU, due to the risk of differences in assessment across banks. Also as regards residential mortgages, the continued use of the loan-splitting approach is recommended due to its higher risk sensitivity and alignment with existing EU practices.

In addition to the above broad considerations about the SA, this report considers a significant number of more technical amendments to the framework. These include elements such as: i) increased due diligence requirements, ii) continuation of the so-called 'hard test', iii) clarifications to the treatment of PSEs and iv) implementation of the CRM framework proposed in Basel alongside a number of targeted fixes.

The IRB Approach developed in the final Basel III is also considered appropriate for implementation in the EU. It is important for the EBA to maintain the incentives to adequate modelling of credit risk, as this facilitates and ensures the alignment between the prudential framework and sound risk management practices. The changes to the IRB Approach will result in a capital requirement increase, which will arise from changes to the A-IRB approach, as it will no longer be possible to model LGDs for institutions, large corporates and financial institutions treated as corporates (so-called 'low default' portfolios). This is an intended effect as the move to less sophisticated modelling practices for these portfolios is the consequence of the observed challenges to modelling of the credit risk of low default portfolios.

On the other hand, while the finalisation of the Basel III framework entails additional constraints on the modelling of risk parameters, it also gives additional flexibility in the use of these sophisticated approaches. As such, the final Basel III framework allows institutions to focus on the portfolios with sufficient data and risk knowledge, by giving the possibility to implement at the same time the IRB Approach for some sub-exposure classes only while using less sophisticated approaches for other sub-exposures classes. In addition to this increase in flexibility, the targeted fixes allow a general reduction in the conservatism of supervisory values, such as regulatory LGDs or the 1.06 scaling factor. Overall, these recalibrations moderate the capital impacts of the modelling constraints. Finally, the EBA is proposing a significant number of more technical changes for the IRB approach as well. These include clarifications to ensure a consistent treatment of exposures to sovereigns, regional governments and local authorities and public sector entities; more flexibility for the use of effective and regulatory maturities; and a number of new definitions, aimed at improving the clarity in the application of the IRB Approach. Lastly, the EBA recommends to keep the EU treatment of covered bonds and High Volatility Commercial Real Estate (HVCRE).

# 1. Introduction

---

1. In the past decade, a series of events in the international financial markets affecting economies across the globe (e.g. the share of bank credit to the non-financial sector-to-GDP on the (constant) rise across international markets; a worrisome crisis in 2008-2009) has affected the level of confidence in institutions' capacity to curb their risk-taking activity. It was thus more important than ever to take action and re-establish a degree of trust in institutions' business models and regulators' capacity to create a prudential framework. The main aim of this prudential framework is to limit the potential losses incurred by customers and, more generally, tax payers in the case of an event that would set restrictions to the institutions' normal operating model. As such, the Basel Committee (BCBS) has initiated a revision of its full set of standards for the prudential regulation of institutions and published the final revised text in December 2017.
2. While acknowledging that the current business environment is dominated by large financial institutions, with complex business models, and access to sophisticated systems that enable a better and more accurate assessment of the risks incurred, a significant number of institutions operate based on simpler business models, with a scope of application confined by geographic or sectoral factors.
3. In order to reflect this diversity in the business models of institutions, there are two approaches to computing regulatory capital for credit risk: the internal models-based approach (IRB) and the standardised approach (SA). The SA consists of the simplest options for calculating risk-weighted assets and ensures that a simple methodology remains available for a wide range of small and non-internationally active institutions, where the cost of compliance with more complex standards may not be warranted.
4. The reform of the credit risk framework is an integral part of the final Basel III reforms and was driven by several considerations. Firstly, the concerns about undue variability in own funds requirements stemming from banks using IRB models led the Basel Committee to introduce constraints to the IRB Approach. Secondly, given the concerns about IRB models, the SA was also improved to embed additional risk sensitivity, thus providing an alternative to IRB modelling. Finally, a number of changes were introduced in the framework, especially as regards to the use of the Credit Risk Mitigation framework.
5. All these considerations are in line with the approach taken by EU supervisors and regulators during the last decade. The EBA has consistently favoured the use of risk-sensitive approaches, as this allows an alignment between the prudential framework and sound internal risk management practices. However, at the same time, the EBA's work has shown that the undue variability has jeopardised the credibility of internal models. The EBA and the European supervisors have therefore embarked on a bottom-up repair plan, which

complements the Basel reforms. It is the overall view of the EBA that both elements of these reforms are necessary to restore the credibility of credit risk own funds requirements.

6. This report has therefore taken as a starting point that the EU should implement the final Basel III framework. Nonetheless, the EBA has looked carefully at the suitability of the reforms on EU banks and considered whether the framework is suitable for the EU. In this regard, concerns have been raised whether some elements of the final Basel III reforms are not overly based on banking models operating outside of the EU. The EBA has not found any evidence of this, quite the contrary, the credit risk framework has increased its risk-sensitivity and the calibrations, for instance of corporate SMEs, have taken into account the existing approach in the EU framework. Also in the case of residential mortgages, the loan-splitting approach is well-aligned with existing EU practices and the calibration is appropriate for the risk of this asset class.
7. Based on the analysis of the EU specificities, it is in general planned to advise the EU Commission (EU COM) that the final Basel III framework should be implemented in accordance with the international agreement. However, there are a few elements which should be adjusted in order to ensure overall consistency of the framework and to avoid unintended consequences. While in some cases the European specificities which match with deviations from the Basel framework had already been incorporated in the current regulation, there may also be new elements requiring specific considerations at the EU level.
8. In its Call for Advice (CfA) to the EBA, the EU COM has highlighted the need for technical input regarding several aspects of the Basel reform. As well as this, the EU COM called for the EBA to pinpoint 'any other issues or inconsistencies that competent authorities in the EU may have already identified in both the current EU rules [...] as well as the revised BCBS standards'. Hence, this Report includes targeted CRR fixes, an analysis of implementation of national discretions in the BCBS standards, as well as any other implementation issue identified by NCAs.
9. In particular, it should be noted that the EBA has drawn on the work undertaken to clarify the credit risk framework since the implementation of the CRR in 2014, has led the EBA to identify several areas, where the framework can be improved further. Consequently, in addition to assessment of the Basel III reform, this report also puts forth a number of recommendations to the current EU regulation. Some of these issues are a consequence of questions raised by the industry in the context of EBA's Q&A tool, others stem from reports published by EBA, such as the EBA report on the Credit Risk Mitigation framework, while others again aim at improving the simplicity in the framework, for instance by aligning the definition of SMEs across the IRB and SA framework.

## 1.1 Standardised approach

10. The SA for determining the minimum own funds requirements for credit risk assigns RWs to be applied to the exposure amount based on the exposure class of a given exposure. In the

current European regulatory framework, the exposure classes relevant for the SA are laid down in Article 112 of Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR), whereas the provisions regarding the regulatory treatment of each exposure class is further presented in Chapter 2 (Standardised Approach) of Title II (Capital Requirements for Credit Risk), Part Three in the CRR. Moreover, elements pertaining to the credit risk mitigation (CRM) framework are addressed in Chapter 4 of Title II, Part Three, while allocation of OBS items is presented in Annex I to the CRR and other selected aspects are addressed throughout the CRR (e.g. deduction for credit risk on exposures to SMEs – Article 501 of the CRR).

11. The EBA has carried out several projects meant to add clarity to the functioning of the SA and connected frameworks, amongst which:
  - a) Extensive work regarding the External Credit Assessment Institutions (ECAIs) framework<sup>2</sup>;
  - b) ESAs' report on mechanistic references to credit ratings in the ESAs' guidelines and recommendations (published in 2014);
  - c) Opinion on mortgage-lending value (published in 2015);
  - d) Report on SMEs and SME supporting factor (published in 2016);
  - e) Report on CRM Framework (published in 2018);
  - f) Guidelines on specification of types of exposures to be associated with high risk (published in 2019).
12. With a clear objective to see the capital charge under the SA based on easily verifiable and objective variables, the EBA analysed one of the main source of changes in the final Basel III framework: the modification of certain RW calibration methodologies. This is particularly relevant when discussing the use of external ratings in general (enhanced due diligence requirements), as well as specifically for exposures to institutions and corporates (external credit ratings approach vs standardised credit ratings approach). In addition, there is a revised approach to real estate exposures, which heavily relies on the LTV as an indicator for RW allocation (loan splitting approach vs. whole loan approach). Moreover, the valuation methodology for the real estate collateral is based on the value of the property at origination. Finally, the methodology for ensuring the diversification of the retail portfolio is amended.
13. The analysis of the final Basel III framework outlined the fact that, in order to achieve higher risk sensitivity and lower RWA variability, new sub-asset classes were introduced and the RW treatment has been revised across all asset classes (with the exception of sovereign exposures – sovereigns, PSEs, MDBs). Nonetheless, this does not come without challenges,

particularly since, under the SA, there is a constant trade-off between simplicity and risk sensitivity.

14. Aware that the final Basel III framework was calibrated as a whole and recognising that further revisions need to be analysed in order to ensure a balanced outcome, technical discussions concluded the following with regard to the treatment OBS items, the revised CRM framework and the newly introduced RW multiplier for exposures with a currency mismatch between the currency of the loan and the currency of the income of the borrower.

## 1.2 IRB approach

15. In the dynamic business environment of the financial sector, where strategies and products are often adapted to meet the changing demand and to gain the competitive advantage, the regulation needs to be sufficiently flexible to allow the necessary adjustments. As a result, Basel II framework introduced the concept of own funds requirements based on internal models, with a view to increasing risk sensitivity of own funds requirements and ensuring their adaptability to changing market conditions.
16. The IRB Approach designed to address credit risk constitutes a complex framework that allows institutions to model risk and specify risk appetite in a more precise and granular manner than the SA, which consequently should lead to a more accurate calculation of own funds requirements. The extensive flexibility in developing the internal models has consequently been justified in order to allow a high degree of risk sensitivity that is more adapted to institutions' portfolios. The flexibility of the framework makes it superior as a risk management tool, which should be closely integrated into the risk management practices of the institution.
17. The underlying premise for the IRB Approach is therefore that the differences in RWs of various exposures should ideally reflect the differences in the underlying risk of those exposures, including the structure of the portfolios, the characteristics of the clients and transactions, as well as the internal risk management and collection processes at the institutions. Given this premise, the model outcome of the IRB Approach should ideally lead to similar own funds requirements across institutions with similar portfolios, and the differences in the models' output should be justified by the differences in risk profiles.
18. The actual implementation of the IRB models has however often led to a lack of comparability and substantial divergences across institutions in terms of model outcomes, where not all differences appear to be justified by risk-based drivers. A substantial share of the variation in model outcomes and subsequently RWA (RWA) is caused by non-risk based drivers, such as differences in definitions and modelling choices. This lack of comparability results largely from the high degree of flexibility embedded in the CRR, accompanied by different supervisory practices for assessing the adequacy of internal models and different use of supervisory measures.

19. In response to these challenges the EBA has undertaken a broad review of the IRB Approach, based on the so called “IRB roadmap”, with a view to addressing all identified sources of non-risk based variability, while keeping the overall premise of preserving the risk sensitivity of own funds requirements. The objective of this work was to further improve the quality of risk management practices at the institutions supported by adequate incentives stemming from own funds requirements and to ensure comparability of RWAs between institutions functioning in a Single Market.
20. This work follows three parallel tracks. Firstly, the EBA pursued its role of developing regulation - technical standards and guidelines - on key aspects of the IRB Approach, either as mandated by the CRR or through issuing guidelines on its own initiative. This work has now been finalised and the necessary changes in the rating systems should be implemented by the end of 2021<sup>3</sup>. Secondly, the EBA engaged in monitoring supervisory practices in a broader scope and promoting increases in convergence, including through regular benchmarking exercises, which then translate into larger comparability of IRB own funds requirements and supervisory measures. This is an on-going work and the EBA constantly improves the tools used for this purpose in dialogue with national competent authorities and the ECB. Lastly, the EBA will seek to enhance transparency around IRB models, in particular through adequate Pillar 3 disclosures and well-designed supervisory reporting.

### 1.3 Structure of this report

21. This report is structured in three parts. Section 2 gives an overview of the EBA’s recommendations, which applies to both the SA and the IRB Approach. Section 3 describes in more detail the recommendations related to the SA. Finally, Section 4 provides the policy recommendations for the IRB Approach.

---

<sup>3</sup> As an exemption to this implementation date, the standards only apply to LGD and CCF models for low default portfolios in 2023.

## 2. EU-specific SA-IRB consistency issues

22. The calculation of own funds requirements for credit risk can be performed either through the use of the Standardised Approach (SA) or the Internal Ratings-Based (IRB) Approach. The two approaches take a different perspective on how risks are factored into the calibration of the risk parameters: most importantly the SA does not explicitly embed the expected loss (EL) and unexpected loss (UL) concept. Despite these differences, there is nonetheless a need to ensure that the SA constitutes a suitable alternative to and complement the IRB Approach, and, at the same time, is ensuring that there is little room left for regulatory arbitrage between the two approaches. Hence, there is a need to ensure a consistent treatment of certain elements under the two approaches which the following recommendations aim to account for.

### 2.1 SME definition

#### Recommendation CR 1 : SME definition

The EBA considers that, in order to achieve better implementation and consistency in the regulation and comparability of data on small and medium-sized enterprises (SME) the introduction of a uniform SME definition for both the SA and the IRB Approach should be recommended. This definition should be based on the definition already provided in Article 501(2) of the CRR, but only referring to the criterion of annual turnover in the Commission Recommendation 2003/361/EC.

23. Currently, a definition of the term “SME” is only provided for the purposes of the application of Article 501 of the CRR (i.e. application of the SME supporting factor), while there is no definition for the purposes of the application of Articles 123 and 147(5) (retail definition) of the CRR. What is more, the final Basel III framework for CR-SA introduces the application of an 85% RW (RW) for unrated SMEs that qualify as corporates, where SMEs are defined as “corporate exposures where the reported annual sales for the consolidated group of which the corporate counterparty is a part is less than or equal to €50 million for the most recent financial year” (see paragraph 43 in the final Basel III text for CR-SA).
24. As already presented in the EBA Report on SMEs and SME supporting factor published in 2016<sup>4</sup>, the EBA considers that the harmonisation of the SME definition would lead to a better implementation and enhanced consistency in the regulation and comparability of data on SMEs, and hence could be used for the monitoring of SME lending, riskiness and the impact of the application of other related regulatory measures (for instance, for the SME supporting

<sup>4</sup> <https://eba.europa.eu/-/eba-publishes-the-report-on-smes-and-the-sme-supporting-factor>



factor if maintained in the EU framework, see further details in section 2.2). This would also allow building a more comprehensive data set on SME riskiness.

25. When discussing the recommendation, the potential impact of the change in the scope of the SME definition was considered. Hence, an impact analysis was carried out based on EBA supervisory data for both the SA and the IRB Approach, where the current scope of the SME portfolio was compared to the reported scope of the SME exposures subject to the SME supporting factor as per Article 501 of the CRR. The conclusion of the analysis showed a marginal reduction in the potential scope of institutions' SME portfolios based on the proposed harmonisation.
26. Finally, footnote 31 of the final Basel III framework for CR-SA includes, the possibility to apply, a more conservative definition of SME "(e.g. based on a lower level of sales)" where deemed relevant. The EBA considers there is no need for the implementation of this footnote.

## 2.2 SME supporting factor

### Recommendation CR 2 : SME supporting factor

The EBA considers that, due to the already more favourable treatment introduced via the final Basel III framework for CR-SA (an 85% RW for unrated corporate SMEs and a 75% RW for retail SMEs), the removal of the SME supporting factor is recommended. Instead, the final Basel III framework should be implemented without any further adjustments. The risk sensitivity of the IRB Approach already implies a differentiation of the risk weighting of the SME exposures, and any further adjustment leads to a "double counting" in the reduction of own funds requirements without any further risk-based justification.

27. While the final Basel III framework for the SA provides two different sets of treatments (preferential compared to unrated corporates) for exposures to SMEs depending on their characteristics – 1) Retail SMEs receive a flat 75% RW on all their exposures, and 2) Unrated corporate SMEs receive a flat 85% RW on all their exposures; the CRR currently applies a preferential treatment in the form of an SME Supporting Factor (SME-SF) which applies, subject to conditions, to SME exposures in the corporate, real estate and retail exposure classes under both the SA and the IRB Approach.

Table 1: Regulatory treatment of exposures to SMEs: CRR, CRR2 and Basel III

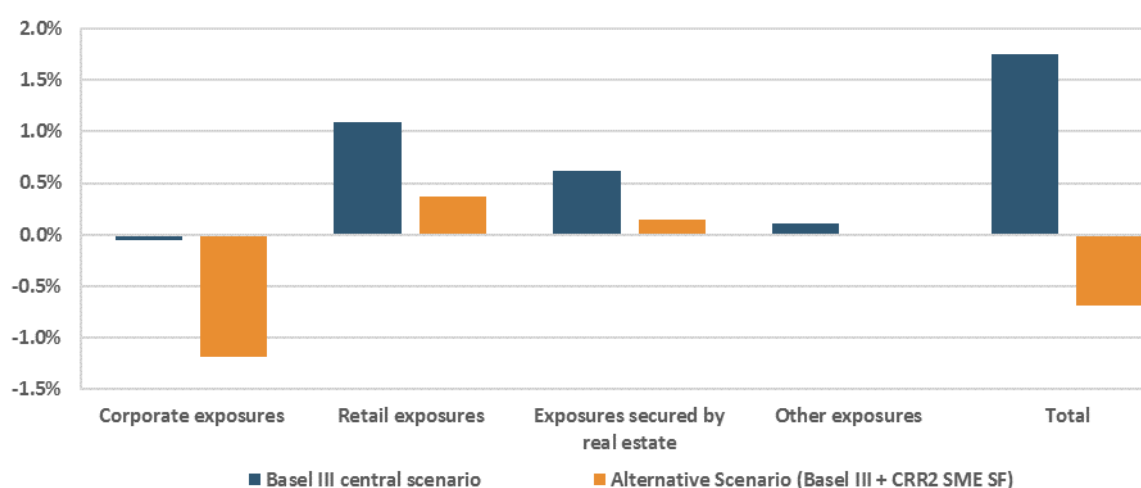
	CRR	CRR2	Basel III standards for CR-SA		Basel III standards for CR-IRB	
Capital treatment	0.7619 factor applied to capital requirement	0.7619 factor applied to RWA on part of exposure to SME up to EUR 2.5 mln  0.85 factor applied to RWA on part of exposure to SME exceeding EUR 2.5 mln	85% RW (instead of 100%)	75% RW	Corporate RW function with reduced correlation coefficient based on the value of sales	Retail RW function with correlation coefficient lower than for corporate exposures
Eligible exposures	Exposures to SMEs up to EUR 1.5 mln	All exposures to SMEs	All unrated exposures to corporate SMEs under SA	All retail SME exposures under SA	All exposures to corporate SMEs up to EUR 50 mln sales	All exposures to retail SMEs which are not secured by immovable property

28. Removing the SME supporting factor is the most appropriate recommendation from a prudential perspective. This is due to a number of factors:

- a) The SME supporting factor was introduced under the CRR to increase lending to SMEs which cannot easily get funding on the capital markets. Since the Basel III framework introduces a specific preferential RW for SME corporate exposures of 85%, EBA is of the view that the SME supporting factor is no longer necessary. The EBA Report on SMEs and SME supporting factor published in 2016 shows that the reduced own funds requirements do not reflect the underlying credit risk of SME exposures being part of different asset classes, particularly with regards to the retail portfolio under the IRB Approach. The 85% RW was introduced in the final Basel III framework for CR-SA in order to align with the treatment of corporate SMEs under the measure already incorporated in the IRB Approach: there, a lower asset value correlation (R) with the systematic risk factor is used in the RW function for exposures to SMEs with total annual sales up to EUR 50 million. This reduction of the correlation based on the total annual sale of the consolidated group is also included in paragraph 54 of the final Basel III framework, which directly reduces the RW applied to smaller counterparties. Overall, by introducing the specific preferential risk-weight for SME corporate exposures, the SME supporting factor is no longer necessary.
- b) With regard to retail SMEs the preferential treatment is already incorporated in both SA and IRB Approach, recognising typically higher diversification of such portfolios. Under the SA, retail SMEs receive a preferential RW of 75%, whereas under the IRB Approach a specific RW function is used with lower correlation coefficient than in the case of corporate exposures, leading directly to lower RWs.

- c) Furthermore, removing the SME factor would avoid a “double counting” in the reduction of own funds requirements for SME exposures under the IRB Approach without any further risk-based justification. As a matter of fact, any potential lower level of risk for these type of exposures would already be captured via the rating of the counterparty.
- d) Finally, as also shown in the EBA Report on SMEs and SME supporting factor<sup>5</sup> published in 2016, the introduction of the SME supporting factor had not resulted, at that time, in a clear and marked decrease in SMEs’ probability to be credit constrained, despite this being its specific objective.
29. Another option, which would not be fully-compliant with the final Basel III framework for the SA, could be to maintain the SME supporting factor, together with its extension included in the CRR2 text (see Figure 1 for the impact of this scenario on SA risk weighted amounts (RWA)). The regulatory revision to the CRR presents a fine-tuned implementation of the SME supporting factor, which consists of a 0.7619 coefficient applied to the RWA amount for exposures or parts of exposures up to EUR 2.5 million and a 0.85 coefficient applied to the RWA corresponding to exposures exceeding EUR 2.5 million. Under this option, the new 85% RW for exposures to unrated corporate SMEs should not be transposed in the EU. This treatment would effectively translate into an additional, non-risk-based capital relief for exposures up to EUR 2.5 million made up of the decreased RW of 85% on top of the 0.7619 coefficient introduced by the CRR2. However, also under this option, the application of the supporting factor remains unjustified for SME exposures under the IRB Approach, where preferential treatment is incorporated through correlation coefficients.

**Figure 1:** Percentage change in exposure class RWA due to application of SME supporting factor (relative to total current SA RWA)

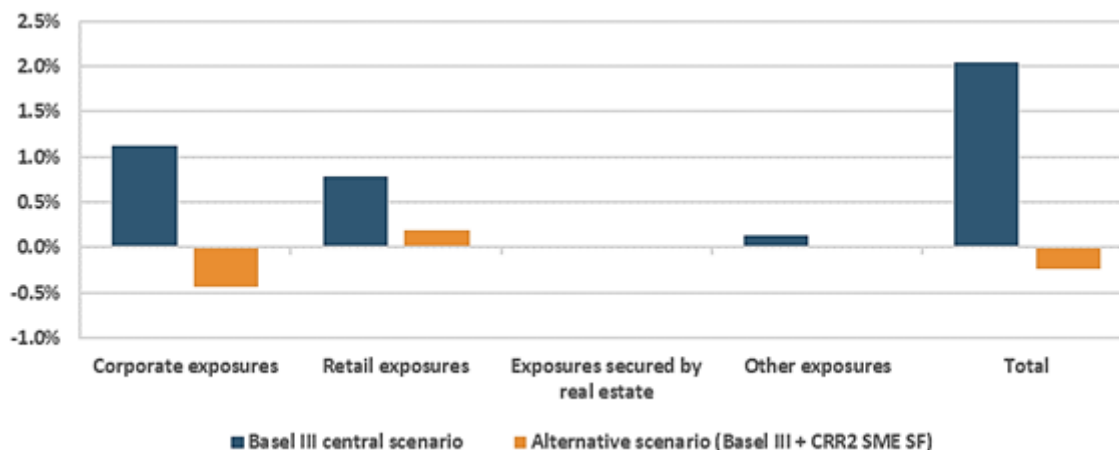


Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 94 banks. SME SF, SME supporting factor.

<sup>5</sup> <https://eba.europa.eu/-/eba-publishes-the-report-on-smes-and-the-sme-supporting-factor>

Figure 2: Percentage change in exposure class RWA due to application of SME supporting factor (relative to total IRB RWA)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 47 banks. SME SF, SME supporting factor.

## 2.3 Infrastructure lending supporting factor

### Recommendation CR 3 : Infrastructure lending supporting factor

The EBA recommends that, given that the Basel III proposal for specialised lending-project finance is a similar mechanism to the CRR2 supporting factor for infrastructure lending, the final Basel III framework for specialised lending be implemented. Similarly as for the SME supporting factor, the risk sensitivity of the IRB Approach already implies a differentiation of the weighting of infrastructure lending exposures, hence no further adjustment is needed.

30. Under the final Basel III framework for the SA, specialised lending exposures (SLE) are classified as a separate sub-exposure class of the corporate exposure class, with the following subcategories: object finance and commodities finance (both with a flat 100% RW for unrated exposures), and project finance (with a 130% RW during the pre-operational phase and a 100% RW during operational phase if the exposure is unrated<sup>6</sup>). Moreover, unrated project finance exposures in the operational phase deemed to be of high quality may receive an 80% RW. Where a specialised lending exposure is externally rated, the RW is determined based on the external rating as for any other corporate exposure.
31. Under the final Basel III framework for the IRB Approach, SLE are classified as well as a separate sub-exposure class of the corporate exposure class. As such, all changes applicable to corporate exposures apply also to SLE, including new constraints on model inputs,

<sup>6</sup> operational phase is defined as the phase in which the entity that was specifically created to finance the project has (i) a positive net cash flow that is sufficient to cover any remaining contractual obligation, and (ii) declining long term debt

discussed further in section 4.2.3(i) and in section 4.2.4(iii), with the exception of the migration to the F-IRB Approach. In addition, given the potential difficulties in quantifying the level of risk for this type of exposures, an alternative approach is available in the IRB framework: the so-called “slotting approach”, introduced in Article 153(5) of the CRR (and maintained in the final Basel III framework, in paragraph 56). While the final RW applicable to each risk category and the risk factors to take into account are prescribed, the risk differentiation and the assignment of the exposures to the correct risk category is made via an internal model. Hence, the slotting approach is considered as a model approach and is in particular subject to the approval of the CA.

32. The revised CRR framework introduces a new infrastructure supporting factor. Subject to criteria presented in Article 501a of the CRR2, infrastructure projects in the pre-operational and operational phase can benefit from a 25% reduction of the associated own funds requirements. However, although the introduction of the infrastructure supporting factor (ISF) has already been agreed by the co-legislators, it can be identified as a clear deviation from the final Basel III framework. Several arguments support the proposed policy recommendation from a prudential perspective.
33. Firstly, the introduction of a specific treatment for SLE (particularly for unrated exposures), calibrated on default rates for project finance loans worldwide over 20 years, provides a structured prudential framework under the SA that is better adapted to those specific projects than the current CRR framework and the CRR2 ISF. The supporting factor is less risk-sensitive than the final Basel framework: it does not take into account the various phases of a project and applies the same capital relief irrespective of the risk levels for a given operation.
34. Moreover, the ISF applies also to rated exposures under the SA and to exposures under the IRB Approach, where the underlying credit quality of the project should already be reflected in the credit assessments of ECAs or institutions, so that the additional application of a supporting factor in these cases would be redundant.
35. In addition, at the Basel table, the high quality category was introduced at the EU’s request to enable a preferential treatment similar to the one proposed by the ISF and based on the same arguments. The decision to top-up this already preferential treatment under the final Basel III framework with the CRR2 supporting factor without further risk-based justifications could have an additional negative impact on the EU’s credibility to implement international agreements into its regulatory framework.

Infrastructure projects, to which the supporting factor applies, are a subset of project finance exposures: therefore, not all project finance exposures would benefit from the supporting factor. In terms of impact assessment, the data from the quantitative impact study (QIS) sample shows that very few exposures from the SA corporate and specialised lending portfolios are compliant with the eligibility criteria of the infrastructure projects supporting factor – 0% and 1% compliant exposures respectively. In relation to the overall specialised lending portfolios, 10% of exposures

were found to be compliant with the respective eligibility criteria. When implemented as part of the Basel III revised framework the infrastructure projects supporting factor would decrease the average impact of the reform for the portfolios under consideration. Results are not shown in this report, and should be interpreted with caution, as they are exclusively driven by 4 institutions that identified compliant exposures within their portfolios. For the same reason additional analysis using CRR2 as a baseline scenario was not conducted.

36. An alternative for the proposed policy recommendation would be to implement only the 100% and 130% RWs for the pre-operational and operational phases of project finance, but not the 80% RW for unrated high quality project finance exposure in the operational phase as set out in the final Basel III text, and to apply the ISF for the high quality exposures, irrespective of the phase they are in. This treatment should however be limited to unrated exposures, as when an external rating is available, it should accurately reflect the risk of the transaction and therefore no reduction of the RW should be needed through the ISF.
37. This approach would maintain a deviation from the Basel framework, as the ISF could still be applied in the pre-operational phase (thus leading to a RW of roughly 98% instead of 130% for exposures which qualify for the ISF). However, for infrastructure projects in the operational phase, own funds requirements would broadly be in line with the final Basel III framework as the RW would only be reduced to 75% compared to 80% under the revised SA. In addition, the scope of the exposures that can benefit from the ISF is narrower than those that would qualify as high quality project finance exposure under the final Basel III framework, as infrastructure projects are only a subset of project finance exposures, which reduces the impact of the deviation. An adverse side-effect, however, would be that other high quality financing in the operational phase would receive higher RWs than required by the final Basel III capital framework, which might be perceived as too conservative gold-plating.
38. Under the final Basel III framework for the IRB, for the same reasons as for the SME supporting factor, any potential lower level of risk for these type of exposures would already be captured via the estimates of risk parameters or slotting to an appropriate risk category. Therefore, any additional adjustment to the outcomes of the models introduce a “double counting” in the reduction of own funds requirements.

## 2.4 Treatment of equity exposures currently risk weighted under Article 49 of the CRR

### **Recommendation CR 4 : Treatment of equity exposures currently under Article 49 of the CRR**

It is the EBA’s view that, given the specific typology of these exposures, it should be recommended to maintain the treatment currently provided in Article 49(4) of the CRR and align the applicable RWs with the RW provided by the final Basel III framework for equity exposures under the CR SA (i.e. 250% or 400% as applicable).

39. In the context of the revisions brought to the equity exposure class (i.e. move from the IRB Approach to the SA and revised RWs under the SA), the EBA has been requested via the CfA to assess the impact of the revised treatment of equity exposures in conjunction with the current exemptions from deduction from own funds of certain equity instruments, in line with provisions of Article 49 of the CRR (49(1) – intra-conglomerate insurance holdings, 49(2) – intra-(banking) group holdings and 49(3) – intra-network exposures to institutions part of the same institutional protection scheme – IPS). The Basel framework requires deduction from own funds of the above-mentioned instruments, except for exposures below certain thresholds. In this section, the EBA i) analysed the impact of maintaining the current European regime and ii) sought to determine the most suitable RW treatment of the instruments exempted from deduction, provided certain conditions are met.
40. When discussing the exemptions from deduction from own funds, the first thing that needs to be clarified is the level of application (which has also been problematic from the QIS perspective). While, at the consolidated level of the group, some of these exemptions are less visible – intra-(banking) group holdings in line with Article 49(2) of the CRR do not appear on the consolidated balance sheet of a group – the RW treatment is relevant at solo level. This is mainly due to the potential ‘double gearing’ of the own funds provided to an entity within the banking group, financial conglomerate or IPS (via the investment of the parent into own funds instruments issued by this subsidiary), and the still existing contribution of the value of this investment to own funds of the parent entity at solo level (or at the consolidated level of the banking group for holdings in non-consolidated insurance undertakings or banks within an IPS), where 1 EUR capital could be used more than once throughout the group or IPS.
41. Even in the context of maintaining provisions in Article 49 of the CRR, and based on the conservative assumption that the RW treatment of these exposures would be in line with the RW treatment for other equity exposures under CR-SA (i.e. 250% or 400% as applicable), the capital impact of increasing the RW for intra-conglomerate insurance holdings, intra-(banking) group and intra-IPS equity exposures under the SA is significant. The QIS results for exposures that are currently treated according to Article 49(4) of the CRR already indicate an increase of 2.8% in total RWA, if the RW was increased to 250% (see Panel B in Table 2):

Table 2: Percentage change in equity RWA (relative to total current SA RWA), by equity category

Panel A Equity categories classified according to the revised Basel III	Change (%)	Panel B Equity categories classified according to current CRR	Change (%)
Exposures to certain legislative programmes	0	Equity exposures classified as 'high-risk items' under Article 128	0.7
Other	2.6	Holdings of own funds instruments that are currently risk-weighted in accordance with Article 49(4)	0.8
Speculative unlisted	0.2	of which: holdings in insurance companies	0.7
		of which: exposures to institutions part of the same institutional protection scheme	0.1
		Other equity exposures	1.3
<b>Total equity</b>	<b>2.8</b>	<b>Total equity</b>	<b>2.8</b>

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks.

42. However, this estimate does not include the effect on intra-(banking) group equity holdings where the institution is also subject to own funds requirements at solo level, which cannot be assessed due to the collection of the data at the highest level of consolidation (i.e. after netting out intra-(banking) group effects). Assuming that the vast majority of intra-conglomerate insurance, intra-(banking) group or intra-IPS equity holdings is currently subject to a 100% RW, the overall impact of removing the status-quo treatment is therefore likely to be significant. On the other hand, the own funds requirements for these types of equity exposures which are currently under the IRB Approach may significantly decrease, at least for those banks that apply the simple approach to RW equity exposures in line with Article 155(2) of the CRR. In this case, the RWs would change from 370% or 290% (where traded) to 250%<sup>7</sup>.
43. The increase in RW for intra-conglomerate insurance, intra-(banking) group or intra-IPS equity holdings requires more capital, both at solo level of the group member having this equity holding<sup>8</sup> and from the consolidated perspective of the group<sup>9</sup>. However, it should be noted that, unlike for intra-conglomerate insurance and intra-IPS equity holdings (which, in most cases, directly increase own funds requirements at the consolidated basis of the group), the increased RW for intra-(banking) group holdings will only have an effect in case of

<sup>7</sup> While in theory there could be an increase for private equity exposures in sufficiently diversified portfolios, for which a simple IRB risk weight of 190% applies, this should not be relevant in practice for intra-conglomerate insurance, intra-(banking) group or intra-IPS equity exposures, which typically do not qualify as private equity exposures.

<sup>8</sup> Unless a capital waiver applies at solo level, in which case the additional capital is only required at the consolidated level.

<sup>9</sup> The increased RW for intra-conglomerate and intra-IPS equity holdings increases directly the consolidated requirements, though this could be covered for the consolidate basis by the additional capital required at solo level where the capital instruments are also recognised for the consolidated basis. The increased RW for intra-(banking) group exposures does not increase the consolidated requirements, because intra-group exposures are disregarding for the consolidated basis, but the additional capital at solo basis need to be held in addition to that for the consolidated requirements, thus this increases the total need of capital of the group.



subsidiaries for which own funds requirements have not been waived (because the additional need for capital in the group does not arise from an increase in consolidate requirements, but, under certain conditions, from a need for additional capital at solo level for intra-group exposures). The increased need for capital, both at solo level and for the group, might trigger unexpected decisions to reallocate capital within the group, or even to consider disinvestments where the parent would otherwise have no longer sufficient own funds - though all this needs to be seen as relating mostly to those own funds that are anyway no longer available for absorbing losses due to double gearing. The effects resulting from changing the current RWs might also have significant unintended consequences on existing structures.

44. Based on the above-mentioned considerations and despite the expected impact, the EBA considers it prudent to align the treatment of non-deducted equity exposures included in the scope of article 49(4) of the CRR with the revised “Subordinated debt, equity and other capital instruments” treatment in the final Basel III framework and apply to all these different types of exposures a 250% RW (or 400%, should that be the case). In addition, for addressing a potential double gearing issue that might arise in some situations, certain conditions might be envisaged.
45. The EBA has identified the following alternative that might help mitigating the impact, though the EBA does not recommend this alternative because this is not explicitly in line with the Basel standards. The CRR recognises, provided criteria are met, the specific circumstances of non-equity exposures to counterparties that are included in the same banking group or an IPS. Both the CRR<sup>10</sup> and the final Basel III framework<sup>11</sup>, for example, allow applying a 0% RW for intra-(banking) group and intra-IPS credit exposures provided that certain conditions are met. Applying a 0% RW also to equity exposures is however not permitted by final Basel III framework where footnote 14 explicitly excludes exposures giving rise to Common Equity Tier 1, Additional Tier 1 and Tier 2 items from this treatment<sup>12</sup>. One option to mitigate the impact could be that for intra-conglomerate insurance, intra-(banking) group and intra-IPS equity exposures, a RW of 100% is applied under the same conditions as for the 0% RW for other intra-group and intra-IPS exposures.
46. A lower RW than 250% might be justified, should sufficient extra own funds be available in the group/IPS to cover the loss risk of these equity exposures. While the equity holding itself might not have sufficient value anymore when needed for supporting the troubled entity, additional own funds could be maintained at the group/IPS level that are available when needed for prompt transfer or for repayment of liabilities of a troubled member. Applying a 100% RW could partly cover the risk at the level of the individual entity holding the equity

<sup>10</sup> See Article 113(6) and (7) CRR.

<sup>11</sup> See footnote 14 of BCBS/2017/D424.

<sup>12</sup> The exclusion under Basel standards might be driven by concerns about wrong way risk for such equity exposures. Once these own funds instruments absorb losses of the subsidiary, the value of the equity holdings on the parent’s balance sheet could deteriorate. This could hamper the parent’s ability to ensure the subsidiary’s liquidity and solvency to avoid bankruptcy just when such support becomes necessary, thus the condition for a lower RW in footnote 14 would not be met for these specific exposures.

exposure and thereby might help ensure own funds are distributed adequately between the members of the group/IPS.

47. In case such a lower RW be applied to non-deducted intra-(banking) group, intra-IPS or intra-conglomerate insurance holdings, it should be further explored under which conditions this should take place.

## 2.5 Retail exposures

### 2.5.1 Definition of retail - use of EUR 1 million threshold

#### Recommendation CR 5 : Definition of retail – EUR 1 million threshold

The EBA recommends that the calculation of the threshold under both the SA and the IRB Approach be aligned by specifying that for this purpose the total amount owed should exclude exposures secured by residential real estate (RRE) up to the value of the property, with the clarification that under the IRB Approach the same property valuation should be used as under the SA. The EBA believes that this solution would achieve the alignment objective and at the same time will have limited impact in terms of RWA. The wording referring to “the total amount owed to the institution” should also be aligned, explicitly referring to “exposures in default” rather than “past due exposures”.

48. Under both regulatory approaches, the assignment of an exposure to an exposure class is a key step in order to compute the own fund requirements: for example, it leads to a different RW granularity in the SA and to a different RW curve under the IRB Approach. For some exposures, the allocation between the retail and the corporate exposure class is not obvious, and the regulatory text had to clarify the criteria for this allocation.
49. In particular, the CRR and the Basel standards specify a threshold on the total amount owed by an SME or a private individual to be included in the retail exposure class. The scope and the calculation of these thresholds have been specified differently under the SA and IRB Approach:
- a) Scope as specified in the Basel capital frameworks and in the current CRR: under the SA both private individuals and SMEs need to have a sufficiently low exposure value to qualify for the retail treatment. Under the IRB Approach, only SMEs need to have a sufficiently low exposure value, whereas private individuals automatically qualify as retail exposures. Furthermore, the definition of an SME is different: for the IRB Approach, the institutions can use internal definitions<sup>13</sup>, while for the SA, the definition has been clarified under the final Basel III framework and further discussed in section 2.1. The scope of application is summarised in the following Table 3:

<sup>13</sup> the exact wording being “small businesses and managed as retail exposures”

Table 3: The scope of application of the threshold for the definition of retail in the IRB and SA

	Basel II	Basel III	CRR
<b>IRB</b>	<p>“small businesses and managed as retail exposures” <b>only</b> (internal definition)</p> <p><i>Private individuals automatically qualify as retail exposures</i></p>		
<b>SA</b>	SME (no clear definition) <b>and</b> private individuals	SME (sales <€50 million) <b>and</b> private individuals	SME (no clear definition) <b>and</b> private individuals

- b) Calculation under the current CRR: under the SA the total amount owed is calculated excluding exposures fully and completely secured by residential immovable property collateral, whereas under the IRB Approach the total amount owed excludes exposures secured on residential property collateral, where such amount is independent from any loan-to-value (LTV) criterion. As a result, the threshold under the SA is more restrictive than the threshold under the IRB Approach. In addition, under the SA it remains unclear whether defaulted exposures secured by mortgages are also excluded from the calculation of the threshold. Last, there is a slight misalignment between the wording in the SA, which refers to the total amount owed including any “exposures in default” under Article 123(c), and the IRB which refers to the total amount owed including any “past due exposures”.
- c) Calculation under the Basel II framework: both under the SA and under the IRB Approach the threshold applies to the gross aggregated exposure amount, without any exclusions.
- d) Calculation under the final Basel III capital framework: the calculation of the threshold under the IRB Approach remains unchanged compared to the Basel II framework: there are no exclusions from the total exposure amount. However, the framework for the SA has evolved under the final Basel III framework, where an exemption of exposures secured by RRE is defined in footnote 32. That said, the final text of the Basel III capital framework is subject to different interpretations:
- i) On the one hand, this exemption defined in footnote 32 applies to the “granularity criterion” and not to the threshold for the “low value of individual exposures”; therefore a strict interpretation of the text implies that the full exposure is subject to the 1 million € threshold.
  - ii) On the other hand, the wording of the footnote 32 defines the concept of “aggregated exposure” (which excludes RRE exposures); this is the same concept that is used for both “low value of individual exposures” and “granularity criterion”. It should also be noted that under the Basel II framework the granularity criterion is introduced before

the threshold on the exposure value, which also supports the interpretation that the concept of aggregated exposure is the same<sup>14</sup>.

Table 4: Calculation of the threshold for the definition of retail exposures

	Basel II	Basel III	CRR
<b>IRB</b>	Total exposure		Amount owed minus RRE exposures
<b>SA</b>	Total exposure	Total exposure (minus RRE exposures?)	Amount owed minus exposures fully and completely secured by RRE

50. Given the text of the final Basel III capital framework and the current implementation of the threshold, there seems to be four possible calculation methods:

a) Method 1 (the least strict with full exclusions): calculation method as currently performed under the IRB Approach in CRR

According to this method, the full value of an exposure secured by immovable property would be deducted from the calculation of the aggregated exposure, even if the property provides only partial protection.

b) Method 2 (exclude the value of the RRE): exposures secured by RRE excluded up to the value of the property

According to this method, the amount deducted from the calculation of the aggregated exposure would be the minimum of the exposure value and the value of the property. This method is stricter than the method currently applied under the IRB Approach and helps in avoiding potential regulatory arbitrage as described above. It is also less strict than the current method in the SA, allowing to recognise the full value of the property, instead of only the fully and completely secured part of the exposure.

c) Method 3 (partial exclusion of RRE): calculation method as currently under the SA

According to this method only the fully and completely secured part of the exposure would be deducted from the calculation of the aggregated exposure. Based on the current CRR this means 80% of the value of the RRE, but would go down to 55% under the revised framework.

d) Method 4 (no exclusions): total aggregated exposure amount would be used with no exclusions

<sup>14</sup> Since it makes sense to define a concept only once, it is possible that a first drafting of the revised Basel framework introduced the footnote 32 with an intention to define the “aggregated exposure” concept for both criteria, and then the order of the two criteria has been inverted (the two criteria have been exchanged between the Basel II framework and the revised Basel III framework) without changing the place of the footnote, producing the current inconsistency.

According to this method the amount compared with the threshold would include all credit obligations of the obligor, as required by the final Basel III framework. As under the SA the threshold applies not only to SMEs but also to private individuals this would in practice mean that many obligors using mortgage loans would be treated as corporates.

51. The EBA has considered the possible calculation methods as described above both in the context of the SA and of the IRB Approach. While it is not possible to assess the impact of these methods in a precise quantitative manner, some qualitative considerations about advantages and disadvantages and potential implications of the methods are presented below.
52. When assessing the impact of the calculation methods it has to be kept in mind that under the final Basel III framework the concept of the value of the property is changing. The revised SA requires that the property value used for prudential purposes is more conservative than the pure market value, and, in particular, that it must exclude expectations on price increases. The requirement to have such a conservative property value does not apply to the IRB Approach, where institutions continue to have flexibility with regard to which type of valuation they use and how they reflect this value in their internal models.
53. Considerations on Method 1:
  - a) In extreme cases, application of Method 1 could lead to a situation where large exposures are treated as retail only because immovable property collateral is provided for a small part of the exposure. However, this risk of regulatory arbitrage is mitigated by other criteria that have to be met in order to classify exposures as retail (such as lack of individual management). The advantage of Method 1 is that it does not require using the value of the property. However, it does require a specification of the concept of “facility” which can be understood in different ways by institutions leading to inconsistent application (further elements are discussed in section 4.3.1).
  - b) While Method 1, as currently applied only to SMEs, has not led to any issues under the IRB Approach, it is considered not appropriate for the SA, where the difference in risk due to larger exposure values and hence decreased diversification cannot be properly reflected. If this method was applied under the SA, it would lead to the preferential RW of 75% being eligible to a much broader scope of exposures.
54. Considerations on Method 2:
  - a) Method 2 offers a middle ground between the solutions currently applied under the SA and the IRB Approach. This is hence the only method which envisages exclusion of exposures secured by RRE and which could be meaningfully applied both under the SA and under the IRB Approach. The advantage of this method would be the alignment of the calculation of the threshold and classification of SME exposures as retail between the approaches, which is considered particularly beneficial in the context of implementation of the output floor and the necessity for IRB institutions to also calculate own funds

requirements in accordance with the SA. However, the recognition of obligors as retail would depend on the valuation approach to real estate collateral, which in this case would have to be further clarified not only for the SA but also for the IRB Approach. One proposed solution to this would be to use the common and harmonised SA valuation approach (for retail classification only); this would not create additional burden for institutions using the IRB Approach, given the necessity to compute the own fund requirements according to the SA for all exposures for the purpose of the output floor.

- b) In terms of the impact of Method 2 on the SA it may seem that it is less conservative than the current application. However, due to the changes to the SA introduced in the final Basel III capital framework as described above, it seems that Method 2 would give results closer to the current status than Method 3. It is however not possible based on existing data to assess this potential impact in a more precise manner.

55. Considerations on Method 3:

- a) Method 3, as currently applied in the SA, is much stricter. It has to be noted that in case the text of the CRR in this aspect remains unchanged, it would become even more restrictive than currently due to changes in the treatment of exposures secured by mortgages introduced in the revised SA. In particular, according to the LTV thresholds included in the final Basel III framework the fully and completely secured part of the exposure would decrease from 80% to only 55% of the value of the property. In addition, where currently the market value is used, the value of the property would decrease due to stricter valuation requirements. As a result, Method 3 would lead to the retail treatment being applied to much smaller scope of exposures both under the SA and under the IRB Approach.
- b) In addition, Method 3 is considered unsuitable for the IRB Approach not only because of the impact but also because of its construction, as it would introduce the concept of “fully and completely secured part of exposure” which is currently not included in the IRB Approach while at the same time evolving in the SA (from 80% of the residential mortgage to 55% in the revised framework). Furthermore, the retail classification would depend on the valuation approach, which is not harmonised under the IRB Approach and hence may lead to unjustified variability of RWAs. In a similar manner than for method 2, one potential way to mitigate this effect would then be to use the common and harmonised SA valuation approach.

56. Considerations on Method 4:

- a) This option could also be applied technically to both the SA and the IRB Approach, while at the same time being independent from the value of the property, as all credit obligations regardless of the collateral would be taken into account in calculation of the value compared with the threshold.

- b) While it is clearly the most restrictive of the possible methods, it is unclear how significant the impact would be in terms of the RWA increase. Under the SA the secured part of the exposures would still benefit from the same preferential RWs, and only the unsecured part of the exposures to the obligors which exceeds the threshold would be risk weighted as corporates (for an individual person, the 100% RW of the “other retail” category defined in paragraph 57 of the final Basel III framework would apply to the unsecured part). Under the IRB Approach the threshold applies only to SMEs and hence the outflow of exposures from the retail to the corporate exposure class would be less significant. However, the RW function applicable to corporate exposures as specified in Article 153 of the CRR would apply to the whole exposure value and not only to the unsecured part, which in a general manner leads to overall higher RWs.
57. Taking into account the above considerations there are two possible options for the way forward: either alignment of the calculation methods between the SA and the IRB Approach or keeping the discrepancy considering it justified.
58. The EBA believes that there is merit in aligning the method for the calculation of the threshold between the SA and the IRB Approach and in this way keeping consistency in the overall framework. In particular, the EBA suggests to adopt method 2. This alignment is particularly appropriate in the context of the output floor, as institutions using the IRB Approach will also have to calculate RWAs in accordance with the SA. The alignment of the calculation method would therefore avoid the operational burden of recognising retail exposures based on two different methods. It has to be noted however that the alignment of classification as retail will not be complete and will only refer to SMEs treated as retail, as the scope of application of the threshold remains different.
59. In addition, in case the SME supporting factor specified in Article 501 of the CRR is retained in the revised framework, the same calculation method should be applied also for this purpose, even though the level of the threshold specified for this purpose may differ.

## 2.5.2 Implementation of the notion of transactors

### Recommendation CR 6 : Implementation of the notion of transactors

The EBA considers that the split in the regulatory retail exposure class under the SA between transactors and non-transactors is one of the components which increases the risk sensitivity in the SA, and therefore should also be introduced in the EU regulatory framework. Equally, the distinction between transactors and revolvers under the IRB Approach for the qualifying revolving retail exposure class should also be implemented.

60. The final Basel III framework introduces under the SA a new sub-asset class for retail exposures: transactors. In accordance with paragraph 56 of the part of the final Basel III framework dedicated to the SA “transactors are obligors in relation to facilities such as credit cards and charge cards where the balance has been repaid in full at each scheduled

repayment date for the previous 12 months. Obligors in relation to overdraft facilities would also be considered as transactors if there has been no drawdowns over the previous 12 months”. This sub-asset class benefits from a reduced RW of 45% on account of the regular repayment schedule required in order to qualify for the preferential treatment, compared to the 75% RW applied to other retail exposures.

61. This notion is also introduced in the IRB Approach, for the qualifying retail revolving exposures (QRRE)<sup>15</sup>. The final Basel III framework introduces in paragraph 121 two different input floors for the probability of default (PD) estimates: for QRRE revolvers, a 0.1% input floor is applied, while QRRE transactors benefit from the lower 0,05% input floor that applies to all other exposures. It should be noted that the terms “revolvers” and “qualifying retail revolving exposures” belong only to the IRB Approach.
62. It should be noted that the calibration by the BCBS was carried out using US data, which is not consistent with empirical evidence in the EU. Moreover, the split into transactors and revolvers is a new concept that currently does not exist in the databases of the institutions. As a consequence, from the feedback received on the occasion of the QIS, several jurisdictions pointed out that the identification of these exposures was not straightforward, thus resulting in proxies being informed in the QIS templates. While the EBA does not see any reason for not aligning with the final Basel III framework for retail exposures under the SA, it does flag potential difficulties in implementation, which may outweigh the benefits of the added risk sensitivity. Lastly, it should also be noted that the distinction between transactors and revolvers may introduce cyclicity of the computation of own funds requirements (since the RWs would increase from 45% to 75% where borrowers do not repay as scheduled, for instance in downturn periods).
63. However, the EBA believes that the introduction of this split between transactors and revolvers increases significantly the risk sensitivity of the overall framework. Furthermore, it is the EBA’s understanding that, where the implementation costs are considered too high for the institutions, they will be allowed to apply stricter measures as fall-back and apply other more restrictive treatments as specified under the SA or the IRB Approach. This would give institutions incentives to improve their data and IT infrastructure.
64. During the impact assessment, the newly defined sub-category of “Transactors” is found to represent only around 4% of the total retail EU portfolio. Data on transactors was only reported by four institutions, therefore results in Table 5 on this sub-category should be interpreted with caution:

---

<sup>15</sup> These exposures benefit from a preferential correlation coefficient of 4% in the RW function. In order to be treated as QRRE the exposures have to meet a set of criteria as specified in Article 154(4) of the CRR



Table 5: RWA increase per exposure sub-class - Retail (as % of total current SA RWA)

	Other retail	Regulatory retail - non-transact	Regulatory retail - transactors	Total Retail
All	0.1%	1.7%	-0.1%	1.7%
Large	0.1%	1.8%	-0.1%	1.8%
of which: G-SII	0.0%	2.1%	-0.3%	1.8%
of which: O-SII	0.2%	1.6%	0.0%	1.7%
Medium	0.0%	1.4%	-0.1%	1.2%
Small	0.6%	1.6%	0.6%	2.8%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks: Large (98), of which G-SIIs (7), of which O-SIIs (61); Medium (59); Small (24).

## 2.6 Definition of commitment

### Recommendation CR 7 : Definition of commitment

It is recommended to implement the final Basel III definition of commitment, as well as the exemptions mentioned in footnote 53 of the final Basel III text for CR-SA. Moreover, Annex I of the CRR should be completed by a language on undrawn credit facilities, and should be clarified in order to include both commitments agreed-upon by both parties, as well as those where the client has not yet provided its agreement. Lastly, for consistency reasons, the same definition of commitment should be used under the IRB Approach.

65. The definition of commitment is one of the main concepts defining the applicability of the credit risk framework to off-balance sheet (OBS) items and has been discussed at the Basel table also in the context of the consistency between the SA and the IRB Approach.
66. Commitments are explicitly defined in paragraph 78 of the CR-SA text in the final Basel III framework to mean “any contractual arrangement that has been offered by the bank and accepted by the client to extend credit, purchase assets or issue credit substitutes. It includes any such arrangement that can be unconditionally cancelled by the bank at any time without prior notice to the obligor. It also includes any such arrangement that can be cancelled by the bank if the obligor fails to meet conditions set out in the facility documentation, including conditions that must be met by the obligor prior to any initial or subsequent drawdown under the arrangement”. This definition is new compared to the Basel II framework, and it now explicitly includes unconditionally cancellable commitments (UCC). However, a national discretion is also included in footnote 53 of the final Basel III framework to exempt specific arrangements from the definition of commitments. This discretion is limited to certain arrangements for corporates and SMEs, where a number of conditions have to be met.
67. As the current regulatory framework does not include a definition for commitment, the inclusion of the final Basel III definition would represent an element of clarification of the scope of OBS items. Moreover, the exemptions allowed through the implementation of

footnote 53 in the final Basel III text for CR-SA are in line with the conditions mentioned in EBA Q&A 2017/3246<sup>16</sup> regarding the treatment of uncommitted lines. This Q&A states that when the conditions are fulfilled, this uncommitted line does not constitute an OBS exposure and therefore is not included in Annex I.

68. The EBA enquired about the perceived impact of implementing the final Basel III definition of commitment via the qualitative survey circulated to banks on the occasion of the CfA. Around 50% of the respondents expected a variation of less than 5% of their OBS exposures following the implementation of the new definition.
69. A discussion on the scope of the definition of commitment has highlighted the fact that, in the final Basel III framework, the definition includes only those contractual arrangements that have been offered by the institution and accepted by the client. This means that, in the absence of an acceptance by the client, the offer by the bank cannot be considered a commitment; nevertheless, it has to be considered as an OBS item according to the first sentence of paragraph 78 in the final Basel III framework for CR-SA and therefore also has to be multiplied by a CCF. Under the current regulatory framework, Annex I of the CRR also includes undrawn credit facilities, which also refer to offers that are binding for institutions, but have not yet been accepted by the clients.
70. The definition of commitments does not refer to an offered amount or limit, but refers more generally to the contractual arrangement accepted by the client. The extent of the commitment is determined by the total amount to which the institution is committed under the contractual arrangement. This could go beyond the advised limit, e.g. where the contractual arrangement explicitly permits overdrafts and specifies the interest rate for such overdrafts but without quantifying the maximum possible overdraft. Such included overdraft facilities have been accepted by the client when accepting the offered contractual arrangement. The extent of a commitment should therefore be further specified, as already currently in the definition of conversion factor (CCF) in Article 4(1)(56) CRR, as being determined by the advised limit, unless the unadvised limit is higher. This would also clarify that, despite the limited scope of commitments to offers accepted by the client, the reference point for IRB CCF estimates for such commitments remains unchanged.
71. Another aspect to take into consideration in the context of the definition of commitments is the consistency of its application across the approaches. In the part of the final Basel III framework dedicated to the IRB Approach it is clearly required that the definition of commitment as specified in the SA applies to the F-IRB Approach. However, the text is not explicit on whether the same definition of commitment applies also to the Advanced IRB (A-IRB) Approach and the supervisory slotting criteria approach (SSCA) for SLE. The EBA is of the view that, in order to avoid inconsistent application, when incorporating the final Basel III framework in the EU legislation, it should be made clear that the same definition of

---

<sup>16</sup> [https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017\\_3246](https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017_3246)

commitments is applicable, regardless of the approach used for calculating the own funds requirements.

72. Moreover, the notion of commitment directly affects the scope of modelling of the CCF<sup>17</sup>, it is therefore acknowledged that the change of definition proposed under the SA indirectly reduces the possibility to model the CCF. However, the EBA believes a deviation from the final Basel III framework is not needed on this aspect, as it would imply further complexity in the text, for a very limited expected impact in practice (as discussed in section 4.2.5, the final Basel III framework already greatly reduces the scope of modelling of the CCF).

---

<sup>17</sup> Paragraph 125 of the revised Basel III framework, “Institutions must use their own estimates of EAD for undrawn revolving commitments”

## 3. The Standardised Approach

### 3.1 Due diligence and use of ratings

73. The Basel III standardised approach puts increased emphasis on the due diligence requirements at the time of loan origination, but also as part of the ongoing monitoring of loans. Furthermore, given the global efforts to avoid overreliance on external ratings, the Basel Committee introduces two approaches: 1) the External Credit Risk Assessment (ECRA) and 2) the Standardised Credit Risk Assessment (SCRA). This section evaluates these two elements in this section.

#### 3.1.1 Enhanced due diligence requirements

##### Recommendation CR-SA 1: Enhanced due-diligence requirements

The EBA considers that the language in paragraph 4 of the final Basel III text for CR-SA should be included in the level 1 text. Moreover, a mandate should be granted to the EBA in order to specify a proportionate methodology for institutions' assessment of whether the RWs applied are appropriate and prudent.

74. The due diligence requirements in the final Basel III text, in line with requirements in Basel II, ask, in paragraph 4 of the CR SA section, for “due diligence to ensure that they [i.e. institutions] have an adequate understanding, at origination and thereafter on a regular basis (at least annually), of the risk profile and characteristics of their [i.e. institutions'] counterparties”. As well as this, it is required that institutions “take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty”. Moreover, “institutions must be able to access information about their counterparties on a regular basis to complete due diligence analyses”. In other words, beyond the case where external credit ratings are used for exposures to sovereigns and PSEs, institutions are required to carry out an internal analysis of whether the regulatory RWs used for the different exposure classes are appropriate and prudent.
75. With regard to the European framework, while the CRD-IV does provide some guidance via Article 79, this is limited to due diligence in relation to risk management requirements:

*Competent authorities shall ensure that:*

- a) credit-granting is based on sound and well-defined criteria and that the process for approving, amending, renewing, and re-financing credits is clearly established;*

- b) institutions have internal methodologies that enable them to assess the credit risk of exposures to individual obligors, securities or securitisation positions and credit risk at the portfolio level. In particular, internal methodologies shall not rely solely or mechanistically on external credit ratings. Where own funds requirements are based on a rating by an External Credit Assessment Institution (ECAI) or based on the fact that an exposure is unrated, this shall not exempt institutions from additionally considering other relevant information for assessing their allocation of internal capital;*
- c) the ongoing administration and monitoring of the various credit risk-bearing portfolios and exposures of institutions, including for identifying and managing problem credits and for making adequate value adjustments and provisions, is operated through effective systems;*
- d) diversification of credit portfolios is adequate given an institution's target markets and overall credit strategy.*

76. The level 1 text should be amended to include the language in paragraph 4 of the final Basel III text for CR-SA. This would require institutions to design a rigorous internal process for challenging the credit assessments provided by ECAIs. However, it would hardly be proportional to require SA institutions to put in place internal models for analysing whether the RWs are appropriate and prudent for a given exposure or whether the rating provided by an ECAI is coherent with the actual risk posed by a counterparty. Further detailed guidance on what institutions are actually required to do would be necessary, but providing said guidance was not feasible to develop within the timeline for this Report.
77. Therefore, the EBA considers a mandate for a level 2 regulatory product necessary in order to specify the methodology for institutions' assessment of whether the RW applied are appropriate and prudent. As well as this, the EBA is aware of the need to provide regulatory technical input, which is also proportionate to the level of sophistication and risk profile of different institutions.

### 3.1.2 Use of the external ratings approach

#### Recommendation CR-SA 2: Use of the external ratings approach

The EBA recommends continued implementation of the external ratings approach, given:

- the established methodological and regulatory frameworks for the European system of CRAs;
- the lack of European evidence of systematic deficiencies of rating methodologies;
- the established process of continuous monitoring of the adequacy of the credit ratings issued by CRAs for regulatory purposes;
- institutions' significant investments in infrastructures incorporating external credit ratings.

78. The final Basel III text for CR-SA formalises two different approaches for the treatment of exposures to institutions, covered bonds and corporates (including specialised lending): i) the External Credit Risk Assessment Approach (ECRA) – the approach currently used in the Union, and ii) the Standardised Credit Risk Assessment Approach (SCRA) for CR-SA. In the European Union (EU), the use of external credit ratings is a current and widespread practice for a majority of institutions. While External Credit Assessment Institutions (ECAI) may have played a prominent role in the crisis by underestimating the risks associated with certain products and entities, steps have been taken in the EU with regard to the set-up of regulatory and supervisory frameworks that brought clarity and transparency to the functioning of ECAIs and their methodologies for providing credit ratings:
- a) Credit Rating Agencies (CRA) Regulation - Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009 on credit rating agencies<sup>18</sup>;
  - b) An exhaustive list of registered and authorised CRAs in the EU at any point in time<sup>19</sup>;
  - c) Mapping of CRAs credit assessments to the Credit Quality Steps (CQSs) provided in the CRR - Commission Implementing Regulation (EU) 2016/1799 of 7 October 2016 laying down implementing technical standards with regard to the mapping of credit assessments of external credit assessment institutions for credit risk in accordance with Articles 136(1) and 136(3) of Regulation (EU) No 575/2013 of the European Parliament and of the Council<sup>20</sup>.
79. Overall, the improvements brought to the methodological and regulatory sides of the ecosystem of CRAs have helped building a reliable framework for ECRA in Europe. Moreover, there is no European evidence about systematic deficiencies of rating methodologies for sovereigns, institutions and corporates and there is a continuous monitoring of the adequacy of the credit ratings issued by CRAs for regulatory purposes (see EBA ongoing work on monitoring of adequacy in the ECAI-specific section<sup>21</sup>).
80. Given the extensive attention CRAs have received from regulators over the past years as well as the fact that institutions have already invested significantly in infrastructures for incorporating external credit ratings into their day-to-day practices, the EBA believes there is enough evidence, from a prudential perspective, to continue the use of ECRA.

---

<sup>18</sup> <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:146:0001:0033:EN:PDF>

<sup>19</sup> <https://www.esma.europa.eu/supervision/credit-rating-agencies/risk>

<sup>20</sup> <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32016R1799>

<sup>21</sup> <https://eba.europa.eu/regulation-and-policy/external-credit-assessment-institutions-ecai>

## 3.2 Exposures to non-central government public sector entities (PSEs)

### 3.2.1 Definition of PSEs

#### Recommendation CR-SA 3: Definition of PSEs

It is the EBA's view that amendments need to be brought to the definition of PSEs in Article 4(1)(8) of the CRR in order to bring further clarity to the identification process for PSEs across jurisdictions.

81. The EBA has, throughout the years, dealt with a number of Q&As concerning exposures to PSEs and a technical analysis has pointed out the fact that a clarification of the definition of PSE provided in Article 4(1)(8) 22 of the CRR would bring clarity to the features enabling an entity to be classified as a PSE. While the proposed amendments would not bring material changes in the treatment of PSEs, the clarification should contribute to the harmonisation of the treatment of PSEs across the EU.

82. As such, a streamlined version of the definition in Article 4(1)(8) of the CRR is proposed as follows:

“public sector entity” means (i) a non-commercial administrative body responsible to central governments, regional governments or local authorities, or to authorities that exercise the same responsibilities as regional governments and local authorities, or (ii) a non-commercial undertaking that is owned by or set up and sponsored by central governments, regional governments or local authorities and that has explicit guarantee arrangements. **This second type of public sector entities** may include self-administered bodies governed by law that are under public supervision;

### 3.2.2 Reciprocity of treatment of PSEs in Article 116(4) of the CRR

#### Recommendation CR-SA 4 : Reciprocity of treatment of PSEs

It is the EBA's opinion that the publication of a list of PSEs that are subject to preferential treatment in line with Article 116(4) will contribute to increased transparency, which will in turn enable the reciprocity of treatment regarding these specific PSEs.

83. The EBA considers that an equivalent treatment of exposures to PSEs in different national jurisdictions requires transparency regarding the PSEs that can be treated similar to the

<sup>22</sup> “public sector entity” means a non-commercial administrative body responsible to central governments, regional governments or local authorities, or to authorities that exercise the same responsibilities as regional governments and local authorities, or a non-commercial undertaking that is owned by or set up and sponsored by central governments, regional governments or local authorities, and that has explicit guarantee arrangements, and may include self-administered bodies governed by law that are under public supervision;

central government, regional government or local authority in whose jurisdiction they are established. Since, according to Article 116(4) of the CRR, the competent authority of the jurisdiction in which the respective PSE is established has to make an assessment about the appropriate treatment of the PSE, it was proposed to introduce a requirement for the EBA to maintain a publicly available database on all PSEs that qualify for the preferential treatment, similar to the requirement in Article 115(2) of the CRR. More specifically, this list should include the name of each individual entity/group of similar entities qualifying for preferential treatment in line with provisions in Article 116(4) of the CRR.

84. The proposed addition to Article 116(4) of the CRR should be the following, in line with the similar requirement for the EBA in Article 115(2) of the CRR:

*EBA shall maintain a publicly available database of all public-sector entities within the Union which competent authorities in the jurisdiction where the public-sector entity is established consider as having no difference in risk as exposures to the central government, regional government or local authority in whose jurisdiction the public-sector entity is established.*

### 3.3 Exposures to banks

#### 3.3.1 Treatment of rated exposures to banks

##### **Recommendation CR-SA 5: Treatment of rated exposures to banks**

It is the EBA's opinion that, given the significant steps taken towards improving the reliability of the external credit ratings methodology and associated regulatory framework, as well as the lack of systematic deficiencies caused by this approach with respect to exposures to banks, the external credit rating approach should be maintained for rated exposures to banks.

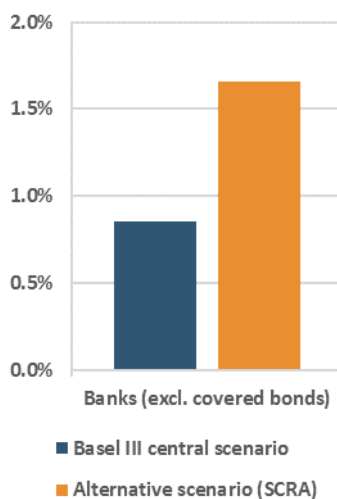
85. The current CRR framework provides, under the SA, a hierarchy for computing own funds requirements for credit risk for exposures to institutions:
- a) where a credit assessment by a nominated ECAI is available, the risk-weight shall be determined by the corresponding credit quality step;
  - b) where a credit assessment by a nominated ECAI is not available, the risk-weight shall be assigned according to the credit quality step of the central government of the jurisdiction in which the institution is incorporated (one category less favourable than the one assigned to exposures to sovereign);
  - c) for exposures to unrated institutions incorporated in countries where the central government is also unrated, the risk-weight shall be 100%.
86. The final Basel III framework for CR SA, while also proposing a similar approach based on external credit risk assessment approach (ECRA), also provides an alternative by introducing the Standardised Credit Risk Assessment approach (SCRA). The SCRA requires the



segmentation of the portfolio of exposures to institutions into grades based on a series of quantitative and qualitative criteria. Moreover, with the intent to reduce over-reliance and mechanistic application of external credit ratings, the final Basel III text re-emphasises the due diligence requirements already introduced with the revision of paragraph 733 in the 2011 Basel III framework. This ensures that the own funds requirements appropriately and conservatively reflect the creditworthiness of the institutions' counterparties regardless of whether the exposures are externally rated or not. Finally, with the objective of breaking the link between institutions and their sovereigns, the revised SA requires both the exclusion of the government support from the institutions' external ratings used for regulatory capital purposes and the elimination of the option of risk-weighting bank exposures based on their sovereigns' ratings from the current framework.

87. Building on the arguments presented in section 3.1.2 above, the recommended way forward is to maintain the implementation of the ECRA, keeping in mind that for unrated exposures, the only available treatment is, in any case, the SCRA. In addition, the implementation of the ECRA would be less disruptive and results in more granular RWs than the SCRA, which, in turn, increases risk sensitivity. Finally, this conclusion is also supported by the difference in capital impact of the two approaches, as presented in Figure 3.

Figure 3: Percentage change in exposures to banks SA RWA (relative to total current SA RWA), ECRA versus SCRA



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 67 banks.

### 3.3.2 Assumption of implicit government support

#### Recommendation CR-SA 6: Assumption of government implicit support

It is the EBA's opinion that government support assumptions should be excluded from institutions' credit ratings and that competent authorities should allow institutions to use

external ratings which incorporate assumptions of implicit government support for up to a period of five years from the date of the implementation of the revised European regulatory framework.

88. The final Basel III framework requires that the credit assessments to be used within the SA for credit risk must not incorporate assumptions of implicit government support, unless the rating refers to a public bank owned by its government (paragraph 18 of the final Basel III text for CR-SA). Implicit government support is defined as the notion that the government would act to prevent bank creditors from incurring losses in the event of a bank default or bank distress.
89. In order to study the feasibility of this requirement, the EBA has circulated a qualitative questionnaire in November 2018 to all ECAs in the EU. The response rate was relatively high at 75%, which represent around 98% of market share<sup>23</sup>. Out of the 6 ECAs that did not reply to the questionnaire, 4 do not issue bank credit assessments and are therefore outside the scope of this exercise. Overall, the qualitative survey can be considered as representative for the current population of ECAs. Most of the surveyed ECAs with a bank credit rating methodology would not face implementation issues with respect to the new provision in the Basel III framework, as around 70% of the ECAs in the sample currently issue bank credit assessments without implicit government support assumptions. This covers both cases of ECAs that do not take into account implicit government support at all (around 30%) and ECAs that do simultaneously issue bank credit assessments with and without government support assumptions (nearly 40%).
90. Implementation risks seem overall limited for the five ECAs that currently exclusively issue bank credit assessments including implicit government support assumptions. Three of these ECAs report that it would be feasible for them to start producing credit assessments without implicit government support. Another ECA did not comment on the feasibility of adjusting to the Basel III requirement but noted that it produces de facto bank credit assessments without government support as an input into its analytical process, which suggests implementation should be feasible given the procedures and processes are already in place. Finally, one ECA considers it would be difficult to adjust its approach given the investment needed with regard to procedures, IT and approval of mappings for the new credit assessment.
91. Other regulatory measures than the elimination of government support assumption in ECAs' bank credit assessments taken in the aftermath of the crisis also help mitigate the interlinkage between institutions and sovereign, in particular the introduction of resolution regimes. The survey shows that the impact of implicit government support tends to vary by

---

<sup>23</sup> Market share calculated with reference to annual turnover generated from credit rating activities and ancillary services, according to the ESMA's Market Share Calculation Report, 30 November 2018, ESMA 33-9-281: <https://www.esma.europa.eu/press-news/esma-news/esma-reports-annual-market-share-credit-rating-agencies>

jurisdiction, with no or minimum uplift in those jurisdictions with resolution regimes in place, such as the European Union. The regulatory and legal frameworks in place are indeed mentioned by ECAIs as main drivers of implicit government support assumptions. Regarding bank specificities, the systemic importance of the bank is also a factor reported by ECAIs. The overall impact of including implicit government support assumptions into credit assessments of banks across the sample of surveyed ECAIs is limited, currently reported at slightly below one notch uplift for the average counterparty.

92. A number of ECAIs indicated that removing government support assumptions may potentially reduce the risk-sensitivity of the framework in jurisdictions with no resolution regimes in place, as the likelihood of government support is higher. Another potential negative effect reported is that it could create confusion in the market to present two different credit assessments addressed to the same institution, one with and one without implicit government support, although the survey reveals that around 40% of ECAIs issuing bank credit assessments already do so without any negative implication reported.
93. The five years implementation window, where supervisors should continue to allow institutions to use external ratings which incorporate assumptions of implicit government support, should further alleviate implementation risks, both from the methodological and IT point of view but also from the regulatory side. In particular it would enable timely recognition of the newly produced credit assessments with respect to the ECAIs mapping under the Capital Requirements Regulation, which is a process mandated to the Joint Committee of the European Supervisory Authorities and therefore subject to an extended joint approval process.

### 3.3.3 Definition of grades under the SCRA

#### Recommendation CR-SA 7: Definition of grades under the SCRA

It is the EBA's view that, with regard to the criteria for classification of unrated exposures to bank into grades under the SCRA, it should be clarified that:

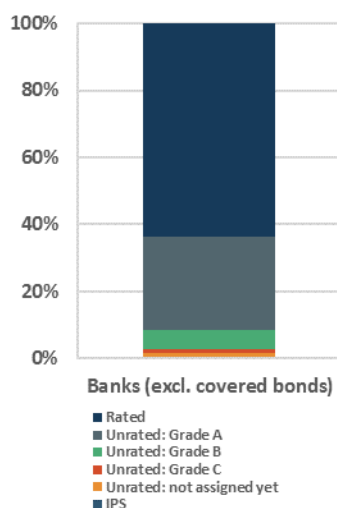
- a) the most recent information available to the lending bank should be used;
- b) regulatory minimum requirements under Pillar I higher than the Basel minima should be taken into account, where implemented in the jurisdiction of the counterparty bank, including any applicable buffers;
- c) where binding minimum own funds requirements under Pillar II exist in the jurisdiction of the counterparty bank, these should also be taken into account.

94. The implementation of the SCRA results in a segmentation of the portfolio of exposures to institutions to different grades according to quantitative and qualitative criteria (see also Figure 4). While it was agreed that the information required is sufficient for an accurate classification into grades, it was highlighted that there is a need for clarification with regard to the publicly available information (i.e. *'a counterparty bank must meet or exceed the*

*published minimum regulatory requirements and buffers established by its national supervisor*):

- a) the most recent information available to the lending bank should be used;
- b) regulatory minimum requirements under Pillar I higher than the Basel minima should be taken into account, where implemented in the jurisdiction of the counterparty bank, including any applicable buffers;
- c) where binding minimum own funds requirements under Pillar II exist in the jurisdiction of the counterparty bank, these should also be taken into account (in the EU, the recent revisions to the CRR provide for a harmonised disclosure framework for Pillar II requirements, which should help alleviate concerns regarding an unlevel playing field across Member States).

Figure 4: Breakdown of exposures to banks (excluding covered bonds) by rating status (% of exposures to banks excluding covered bonds)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 67 banks.

### 3.3.4 Treatment of exposures to banks where the banks belong to the same institutional protection scheme (IPS)

#### Recommendation CR-SA 8: Exposures to banks where banks belong to the same IPS

The EBA recommends the alignment of the treatment of exposures to banks belonging to the same institutional protection scheme with the final Basel III framework, which is also in line with the current CRR provisions in Article 113(7).

95. Footnote 14 in the final Basel III text allows a preferential treatment for exposures to institutions belonging to the same institutional protection scheme (such as mutual, cooperatives or savings institutions), where institutions can apply a RW lower than that

indicated by ECRA or SCRA to their intra-group or in-network exposures, provided they are members of the same effective institutional protection scheme. This sub-class of exposures to banks currently represents around 27% of the total exposures to banks (see Figure 5) and the final Basel III treatment is in line with the current treatment in Article 113(7) of the CRR.

Figure 5: Exposure class Banks: exposure amounts/unrated/IPS (as % of total Banks exposure amounts)

Institutions	IPS	Rated exposures	Unrated exposures	Total Banks
All	27.04%	50.30%	22.66%	100%
Large	27.22%	49.26%	23.52%	100%
of which: G-SII	0.00%	77.95%	22.05%	100%
of which: O-SII	38.11%	38.41%	23.48%	100%
Medium	23.18%	62.18%	14.65%	100%
Small	43.11%	50.08%	6.81%	100%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks: Large (98), of which G-SIIs (7), of which O-SIIs (61); Medium (59); Small (24).

### 3.3.5 Identification of short-term exposures to banks

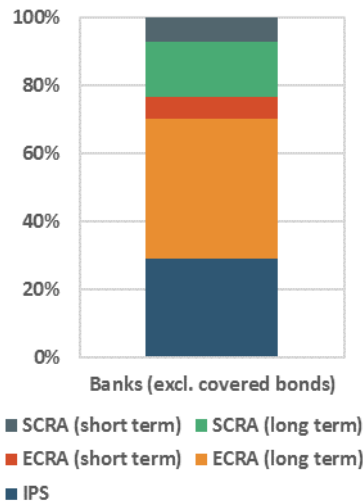
#### Recommendation CR-SA 9: Identification of short-term exposures to banks

In the EBA's opinion, the regulatory framework should be aligned with the final Basel III framework and the original maturity should be used for the identification of the short-term exposures to banks.

96. The final Basel SA framework uses the original maturity to apply a preferential RW for short-term interbank exposures, so that all bank exposures with an original maturity of three months or less can benefit from a preferential RW. This treatment was also included in the Basel II text, with the intention not to hinder the exchange of short-term liquidity between institutions by imposing restrictive RWs to such interbank exposures, but it was not implemented under the current CRR.
97. For identifying the short-term exposures to institutions, Articles 119(2) and 120(2) of the CRR use the residual maturity of exposures, so that all types of interbank exposures, regardless of their original maturity, can benefit from a lower RW in the last three months of the life of the exposure. This deviation from Basel could have been introduced to reduce the RW in the last months of the life of the exposures- when the uncertainty of the lending and the risk of default is lower-, or to further prevent any negative impact on market liquidity in interbank markets.
98. Based on data provided by QIS participants, short-term exposures to banks account for around 15% of the exposure amounts in this particular asset class (see Figure 6), when the

original maturity is used. The impact on own funds requirements of the switch from residual to original maturity is of roughly 0.17% of total SA RWA (see Figure 7).

Figure 6: Breakdown of SA exposure value to banks (excluding covered bonds), by sub-class and maturity (%)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Note: Based on a sample of 181 banks.

Figure 7: Percentage change in SA of exposure to banks (relative to total current SA RWA), by sub-class and maturity

IPS	ECRA (long term)	ECRA (short term)	SCRA (long term)	SCRA (short term)	Total bank exposure
0.0	0.0	0.0	0.8	0.2	0.9

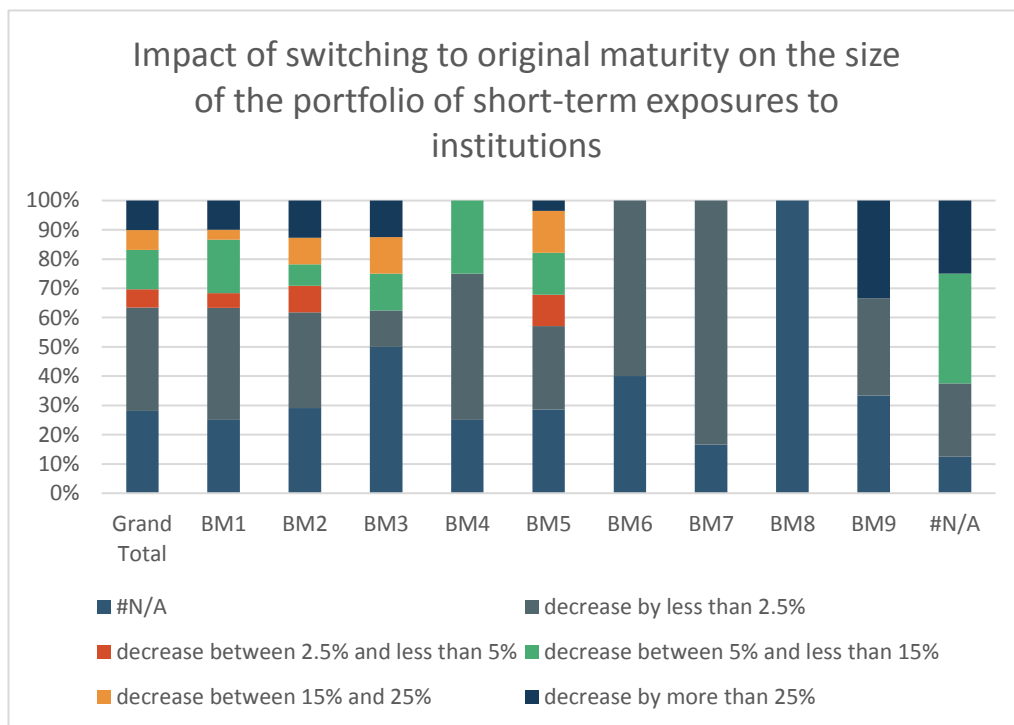
Sources: EBA 2018-Q2 QIS data and EBA calculations.

Note: Based on a sample of 181 banks.

99. The EBA has studied the impact of aligning with the final Basel III provisions via the qualitative questionnaire circulated to institutions participating in the CfA QIS exercise. More precisely, the questions asked were the following:
  - a) What maturity do you currently use for identifying short-term exposures to institutions?, and
  - b) If you currently use the residual maturity to identify short-term exposures to institutions, what impact do you consider it would have on the size of your short-term exposures portfolio switching to the original maturity criterion?
  
100. The qualitative survey had, for the first question, a response rate of 92%. Out of those who provided a response, 84% currently use the residual maturity in line with the CRR requirements, which was to be expected. This outcome does not depend on the size of the institutions and only marginally on the business model.

101. With regard to the impact of aligning with Basel on this issue, the rate of response was of 78%. Around 60% of the respondents consider that the short term portfolio would decrease by less than 5%, while 24% of the sample consider that the short term portfolio would decrease by more than 15%. The impact varies marginally in function of the size of the institution, with more small institutions expecting a small variation of the size of the short-term portfolio than large institutions (69% for small institutions as compared to 51% for large institutions). However, the business model<sup>24</sup> has a more direct influence on the impact expected by institutions. These results are also shown in the graph below, where the highest impact on the size of short term portfolio are presented in the upper parts of the bars in dark blue and orange.

Figure 8: Impact of switching to original maturity



Source: CfA Qualitative Questionnaire  
 Sample size: 178 institutions

102. While both approaches to the identification of short term exposures to banks rely on relevant arguments and considering the limited impact the switch from residual maturity to original maturity is expected to have (based on responses from participants to the CfA qualitative survey), the EBA considers that there are no significant issues with the alignment with the final Basel III framework.

<sup>24</sup> BM1 – Cross-border universal institutions; BM2 – Local universal institutions; BM3 – Automotive, consumer credit institutions; BM4 – Building societies; BM5 – Locally active savings and loan associations/ cooperative institutions; BM6 – private institutions; BM7 – Custody institutions; BM8 – CCPs; BM9 – Merchant institutions; BM10 – Leasing and factoring institutions; BM11 – Public development institutions; BM12 – Mortgage institutions including pass-through financing mortgage institutions; BM13 – Other specialised institutions

## 3.4 Exposures to securities firms and other financial institutions

### 3.4.1 Reciprocity of treatment for securities firms and other financial institutions in third country jurisdictions

#### Recommendation CR-SA 10: Reciprocity of treatment for securities firms and other financial institutions in third country jurisdictions

The EBA recommends that Article 107(3) of the CRR be amended in order to further align the scope of application of the reciprocity treatment to also include financial institutions, in line with the final Basel III framework for exposures to securities firms and other financial institutions. However, this should be limited to cases where those financial institutions are subject to prudential and supervisory requirements that are at least equivalent to those in the EU.

103. Paragraph 37 of the final Basel III text for CR-SA states that ‘Where the regulatory and supervisory framework governing securities firms and other financial institutions is determined to be equivalent to that applied to institutions in a jurisdiction, other national supervisors may allow their institutions to RW such exposures to securities firms and other financial institutions as exposures to institutions’. Article 107(3) of the CRR addresses a similar issue. More specifically, it states that ‘exposures to third country investment firms and exposures to third country credit institutions and exposures to third country clearing houses and exchanges shall be treated as exposures to an institution only if the third country applies prudential and supervisory requirements to that entity that are at least equivalent to those applied in the Union’.
104. The treatment proposed by the final Basel III framework is similar to the current CRR provisions, although in the CRR only investment firms are considered (this is in line with the Basel II text). In order to align the two frameworks, it would be necessary to amend Article 107(3) to also include financial institutions. However, it is important to provide clarity in the level 1 text with regard to which financial institutions should be included, as there is currently no harmonised regime for financial institutions in the EU. Hence, the level 1 text should specify that those third country financial institutions considered for equivalence should only be those which have a prudential treatment equivalent to that of institutions in that jurisdiction.
105. Consequently, the following amendment to Article 107(3) of the CRR is proposed:
- For the purposes of this Regulation, exposures to third country investment firms and exposures to third country credit institutions and exposures to third country clearing houses and exchanges, **as well as exposures to third country financial institutions authorised and supervised by third country authorities and subject to prudential requirements comparable to those applied to institutions in terms of robustness**, shall be treated as exposures to an institution only if the third country applies prudential and supervisory requirements to that entity that are at least equivalent to those applied in the Union.



## 3.5 Exposures to corporates

### 3.5.1 Use of the external credit ratings approach (ECRA)

#### Recommendation CR-SA 11: Use of the ECRA for exposures to corporates

It is the EBA's opinion that, given the significant steps taken towards improving the reliability of the external credit ratings methodology and associated regulatory framework, as well as the lack of systematic deficiencies caused by this approach with respect to exposures to corporates, the external credit rating approach should be maintained for exposures to corporates.

106. According to the final Basel III framework for CR-SA, the treatment of corporate exposures depends on whether the use of external ratings for regulatory purposes is allowed or not in a specific jurisdiction:
- a) In jurisdictions that do not allow the use of external ratings, institutions will assign a 100% RW to all corporate exposures, except for "investment grade" corporates (RW of 65%) and corporate SMEs (RW of 85%). The definition provided for "investment grade" is broadly equivalent to exposures rated BBB or higher and limited to entities which have securities outstanding on a recognised securities exchange.
  - b) In jurisdictions allowing the use of external ratings for regulatory purposes, institutions assign a base RW varying between 20% and 150% determined by the external rating provided by an ECAI. To reduce the mechanistic reliance on ratings, however, institutions must perform due diligence requirements. In case the internal due diligence shows that the risks are underestimated, institutions must assign a higher RW to reflect the creditworthiness of the exposure. Unrated corporates receive a 100% RW (except for unrated corporate SMEs, where the RW is 85%).
107. In line with the current CRR provisions, exposures to corporates are treated depending on whether external rating exists or not. Exposures which benefit from an external credit assessment are assigned a RW varying between 20% and 150%. Exposures without an available external credit assessment are assigned a 100% RW or the RW of exposures to the central government of the jurisdiction under which the entity is incorporated, whichever is the highest.
108. According to the information provided by the participants to the CfA QIS, the share of rated and unrated exposures to corporates SME and non-SME are in line with the numbers provided in Table 6 and Table 7 below:

Table 6: Exposure class Corporates (excl. SME): exposure amounts by rated/unrated

Institutions	Rated exposures	Unrated exposures	Total Corporate (ex. SME)
All	25.15%	74.85%	100.00%
Large	26.13%	73.87%	100.00%
of which: G-SII	33.49%	66.51%	100.00%
of which: O-SII	14.59%	85.41%	100.00%
Medium	15.40%	84.60%	100.00%
Small	49.70%	50.30%	100.00%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks.

Table 7: Exposure class Corporate SMEs: exposure amounts by rated/unrated

Institutions	Rated exposures	Unrated exposures	Total Corporate SME
All	20.90%	71.04%	100.00%
Large	22.48%	69.77%	100.00%
of which: G-SII	30.83%	52.53%	100.00%
of which: O-SII	4.29%	91.28%	100.00%
Medium	6.12%	82.16%	100.00%
Small	1.57%	98.43%	100.00%

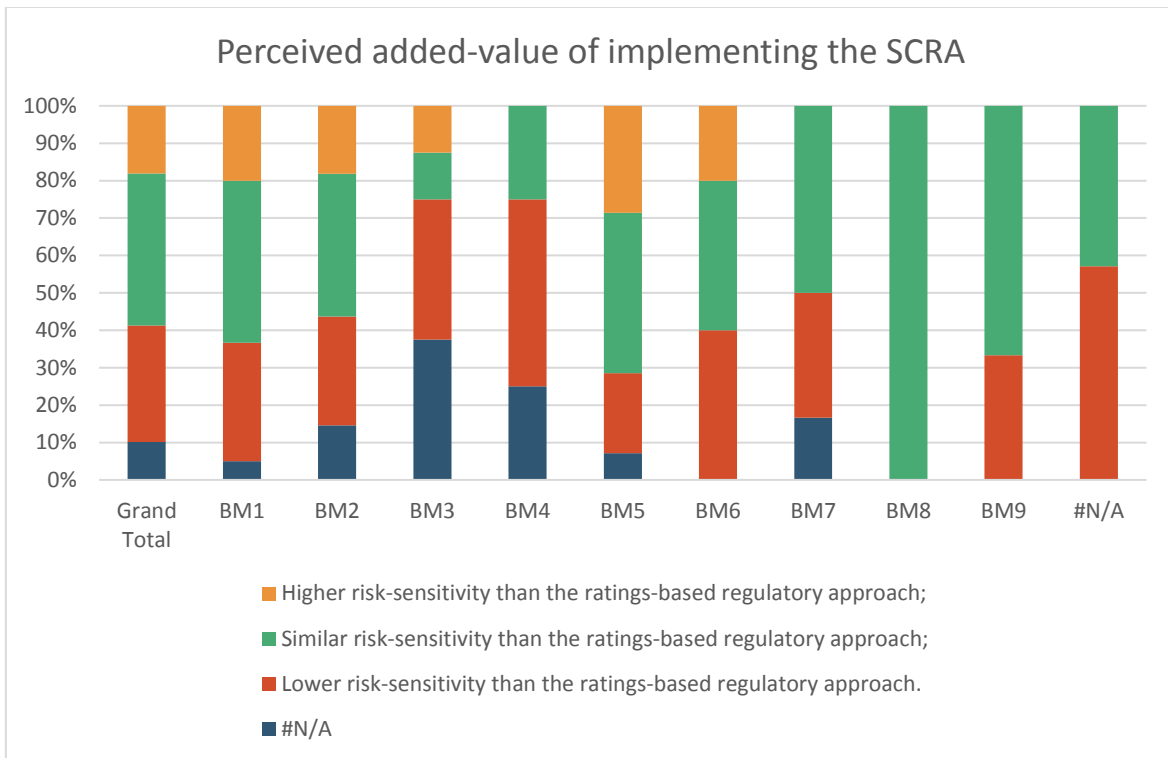
Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks.

109. To add to the multitude of arguments presented by the EBA in section 2.2.1 supporting the continued use of the external credit ratings, the alternatives for the external credit rating approach to be used for exposures to corporates have been studied via the qualitative questionnaire circulated to institutions participating in the CfA QIS exercise. More precisely, the question asked was the following:
- a) On the basis of actual corporate portfolios, do you believe that the implementation of the non-ratings based regulatory approach (see paragraphs 41 to 43 in the final Basel text for CR-SA) would result in [Higher/Similar/Lower] risk-sensitivity than the ratings-based regulatory approach?
110. There was a response rate of 90% for this question. Out of those who provided a response, 80% consider that the implementation of SCRA would result in a similar or lower risk sensitivity as compared to the continued use of the ECRA. This result varies marginally in function of the size of the institution, with 71% for small institutions as compared to 83% for medium-sized institutions. These results are also robust with regards to the classification into business models<sup>25</sup>. Results by business model are also shown in the graph below, where the expected impact on risk-sensitivity of using the SCRA is.

<sup>25</sup> BM1 – Cross-border universal institutions; BM2 – Local universal institutions; BM3 – Automotive, consumer credit institutions; BM4 – Building societies; BM5 – Locally active savings and loan associations/ cooperative institutions; BM6 – private institutions; BM7 – Custody institutions; BM8 – CCPs; BM9 – Merchant institutions; BM10 – Leasing and

Figure 9: Perceived added-value of implementing the SCRA

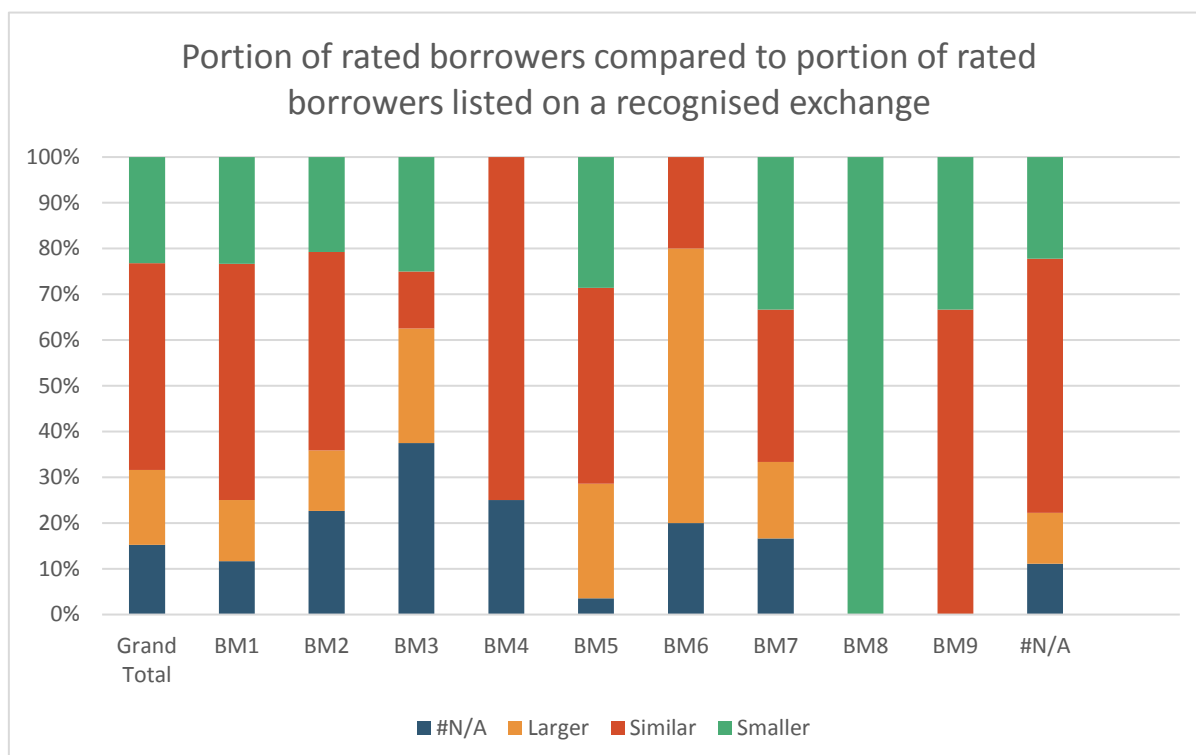


Source: CfA Qualitative Questionnaire  
 Sample size: 177 institutions

111. Furthermore, institutions were asked via the qualitative questionnaire whether, based on their actual corporate lending portfolio, they expect that the portion of rated borrowers (when compared to the portion of borrowers – or their parent companies – listed on a recognised exchange) to be [Larger/Similar/Smaller]. The EBA wished to analyse this point as in the proposed treatment of corporate exposures in jurisdictions that do not allow the use of external ratings for regulatory purposes (see paragraphs 41 to 43 in the final Basel text for the SA), corporate counterparties – or their parent companies – must have securities listed on a recognised exchange in order to be eligible for the ‘investment grade’ classification.
112. There was an 85% response rate for this question, of which 73% considered that the current portion of rated borrowers currently in their corporate lending portfolio is larger or similar than the portion of borrowers listed on a recognised exchange. This result is robust with regard to the results by size of the institution, but responses vary significantly according to the classification by business models, as presented in the chart below.

factoring institutions; BM11 – Public development institutions; BM12 – Mortgage institutions including pass-through financing mortgage institutions; BM13 – Other specialised institutions

Figure 10: Share of rated borrowers listed on a recognised exchange



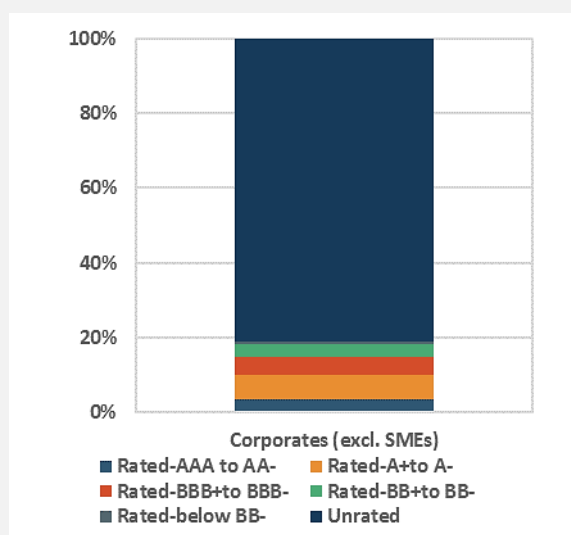
Source: CfA Qualitative Questionnaire  
Sample size: 177 institutions

113. On top of this, the qualitative questionnaire also included a question on the availability of information that serves to assign counterparties to the “investment grade” category. This question is relevant because the supervisory credit risk assessment is based on an “investment grade” determination which complements and extends the due diligence requirements. “Investment grade” means that the entity to which a bank is exposed has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity should have adequate capacity to meet financial commitments if the risk of its default is low and the full and timely repayment of principal and interest should be expected. Although the entity’s repayment capacity may weaken during adverse economic or business conditions, it is expected to maintain its ability to meet its financial commitments. If the entity’s repayment capacity is dependent on stable or favourable economic or business conditions, the exposure is considered to be non-investment grade. Institutions have to assess the counterparty’s creditworthiness on their own, and each bank may have a specific definition of investment grade, which would increase RWA variability and make comparisons difficult.
114. During the QIS exercise, institutions have expressed the view that the definition of investment grade is very broad and leaves room for interpretation. This implies that institutions do not classify investment grade corporate exposure consistently. Institutions also expressed that they did not find the definition of investment grade particularly operational. The same feedback was received via the qualitative questionnaire. To the

question asking whether institutions consider that the necessary information to assign counterparties to ‘investment grade’ category is readily available to the institution, only 39% of respondents considered that information was readily available. This percentage dropped to 29% in the case of small institutions (compared to 44% for large institutions and 35% for medium institutions). These results vary significantly across business models, with 19% of locally active savings and loans associations/cooperative institutions (BM5), while this percentage increases to 50% for building societies (BM4). Based on all the information analysed, it is clear that there are several issues concerning the definition of “investment grade” that must be resolved, notably the clarification of the definition and guidance with regard to what is expected from institutions during the classification process, which effectively asks for the set-up of an internal rating system.

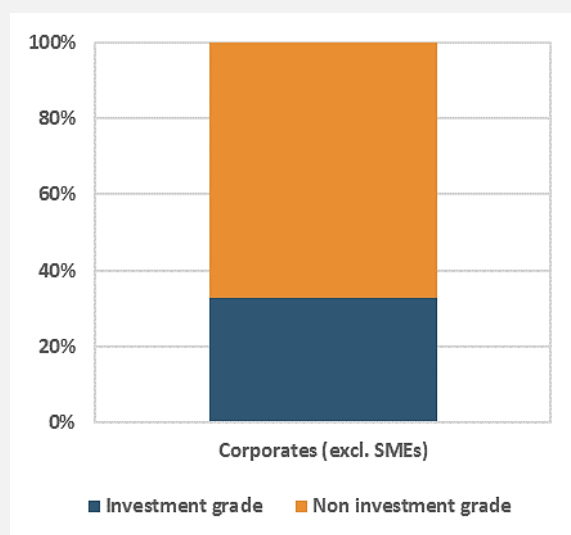
- 115. On top of this, and in line with the conclusions presented above, based on the replies to the qualitative questionnaire section on the implementation of the final Basel III framework, 64% of respondents perceive the implementation of the CR-SA assuming the use of external ratings for regulatory purposes is not allowed as challenging.
- 116. In light of this outcome from the qualitative questionnaire, it is clear that the numbers provided in the CfA QIS need to be cautiously analysed, particularly in what concerns the ‘investment grade’ classification and the associated impact on SA RWAs.

Figure 11: Breakdown of exposures to corporates (excluding SMEs) by rating status (% of exposures to corporates excluding SMEs)



Sources: EBA 2018-Q2 QIS data and EBA calculations.  
Notes: Based on a sample of 58 banks.

Figure 12: Breakdown of exposures to corporates (excluding SMEs) by grade (% of exposures to corporates excluding SMEs)



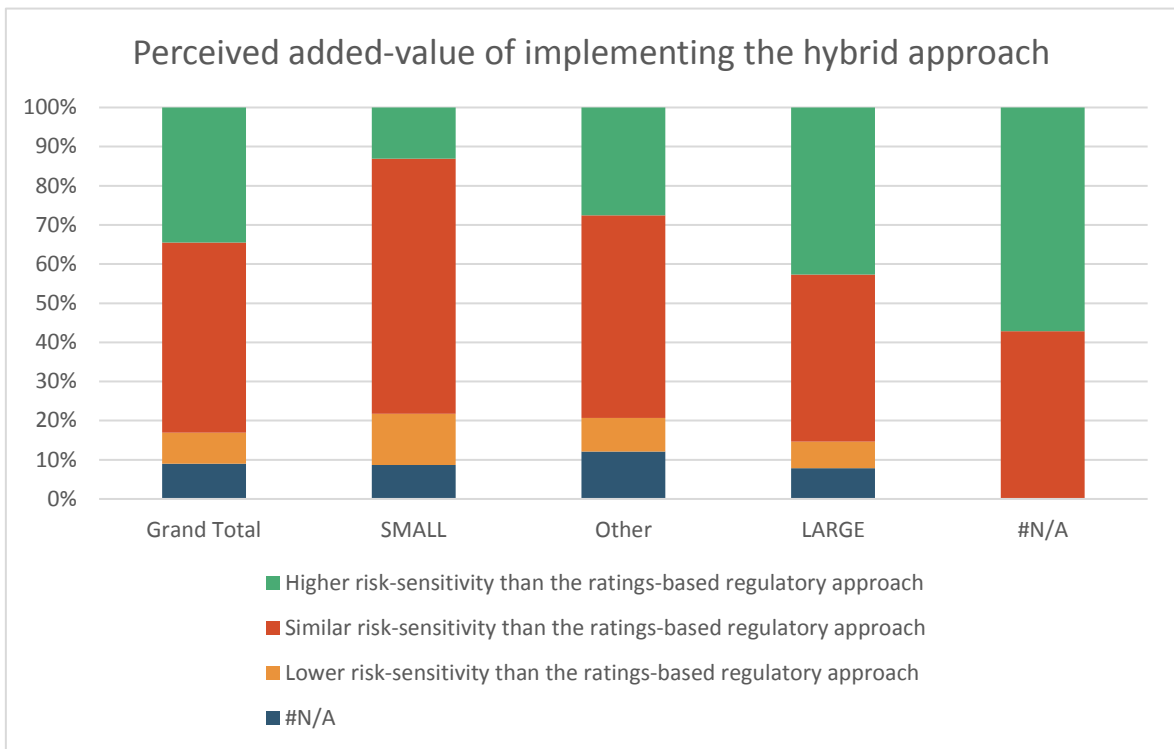
Sources: EBA 2018-Q2 QIS data and EBA calculations.  
Notes: Based on a sample of 58 banks.

- 117. To add to the analysis, the EBA has assessed the rationale for the different calibrations proposed by the BCBS. It was pointed out that the “investment grade” assessment was designed to also enable institutions in jurisdictions that do not allow the use of external

ratings (i.e. US institutions) to assign RWs<100% to entities that (typically) have an external rating. This should be achieved by requiring that the counterparty has securities outstanding on a recognized exchange, assuming that such entities will in most cases also be externally rated. In this sense, a hybrid approach would not be a significant improvement for unrated exposures as those exposures qualifying for a 65% RW would already have an external rating and those exposures that would not qualify (i.e. which are unrated and where the borrower does not have securities outstanding on a recognized exchange) would receive a 100% RW under both approaches anyway.

118. Despite the fact that the final Basel III framework clearly states that these two approaches (i.e. the external credit ratings-based approach and the approach where external credit ratings are not allowed) cannot be used in parallel, one alternative explored in the Commission's Call for Advice is the possibility to combine the use of the external ratings for regulatory purposes for exposures to rated corporates and the application of a 65% RW for exposures to "investment grade" unrated corporates.
119. Consequently, the EBA has studied the impact of potentially implementing a hybrid approach as described above via the qualitative questionnaire circulated to institutions participating in the CfA QIS exercise. More precisely, the question asked was the following: "On the basis of actual corporate portfolios, do you believe that the implementation of a combined approach (ratings-based for rated exposures and non-ratings based for unrated exposures) would result in [Higher/Similar/Lower] risk-sensitivity than the ratings-based regulatory approach?"
120. There was a 91% response rate to this question. Only 38% of the respondents consider that implementing a hybrid approach for exposures to unrated corporates would result in a higher risk sensitivity as compared to the exclusive implementation of the ECRA. The results by size of the institution present a significant asymmetry in the responses tilted towards large institutions (46% as compared to 14% for small institutions), for which the identification of "investment grade" corporates is more easily achievable due to the already existing internal rating systems (institutions have informed in the qualitative questionnaire that the definition of Investment grade was based on a proxy to the internal PDs). The results are also present in the graph below. These results also maintain the observed asymmetry when analysed by business models.

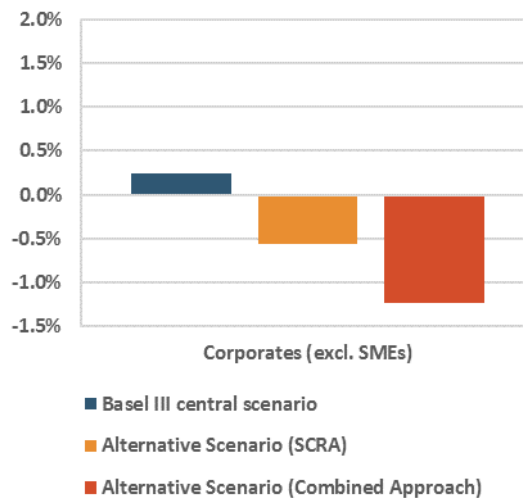
Figure 13: Perceived added-value of implementing the hybrid approach



Source: CfA Qualitative Questionnaire  
 Sample size: 177 institutions

121. Based on this information and in conjunction with the rationale for not relying on the ‘investment grade’ classification, the impact assessment information obtained via the CfA QIS is to be analysed with caution:

Figure 14: Percentage change in exposures to corporate (excluding SMEs) SA RWA (relative to total current SA RWA), ECRA versus SCRA



Sources: EBA 2018-Q2 QIS data and EBA calculations.  
 Notes: Based on a sample of 58 banks.

122. Lastly, the technical discussion pointed out that in any case the condition to have securities listed on an exchange should not be removed because this would mean a significant deviation from Basel and would result in the external ratings for regulatory purposes and SCRA for corporates being no longer comparable in terms of own funds requirements, which was the calibration target in Basel. Not only would this be problematic from a competition point of view (SMEs might be tempted to choose those banks that are more willing to classify them as ‘investment grade’), but would effectively require setting up a whole new range of mechanisms to supervise and monitor banks’ ability to handle what would concretely be an IRB-like approach within the SA.

### 3.5.2 The final Basel III provisions for specialised lending

#### Recommendation CR-SA 12: The final Basel III provisions for specialised lending

The EBA recommends the implementation of the final Basel III provisions for specialised lending in the European regulatory framework.

123. Since the corporate exposure class was considered too heterogeneous, the final Basel III framework introduces additional granularity in order to reflect risk more accurately and improve consistency with the IRB Approach. For this reason, but also due to the fact that empirical evidence shows that specialised lending generally exhibits higher risk and losses than other types of corporate lending, the specialised lending category was introduced as a sub-set of the corporate exposure class, step which also enhances consistency with the IRB Approach.
124. This step was taken despite the possibility that introducing these categories might result in a significant increase in the capital charge for exposures that may currently receive a lower RW under the unrated corporate treatment (especially for exposures in the pre-operational phase). This can be seen in the structure of the specialised lending exposure amounts:

Table 8: Exposure class Specialised Lending: exposure by sub-exposure class

	Commodity finance	Object finance	Project finance	Rated exposures	Total Specialised lending
<b>All banks</b>	<b>5.6%</b>	<b>9.3%</b>	<b>81.5%</b>	<b>3.6%</b>	<b>100.0%</b>
Large	6.0%	9.9%	80.2%	3.9%	100.0%
of which: G-SIIs	14.7%	1.6%	80.9%	2.8%	100.0%
of which: O-SIIs	0.0%	16.7%	79.0%	4.3%	100.0%
Medium	0.0%	2.1%	97.9%	0.0%	100.0%
Small	0.0%	0.0%	97.9%	2.1%	100.0%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks.



125. However, based on the impact assessment carried out via the CfA QIS, it appears that the impact of the newly introduced provisions on specialised lending in CR-SA is very limited, accounting for the limited amounts this specific type of transactions represent in the SA book:

Table 9: Percentage change of SA RWA per exposure sub-class – Specialised lending (relative to total SA RWA)

	Commodity finance	Object finance	Project finance: operational	Project finance: high quality	Project finance: pre-operational	Rated exposures	Total Specialised lending
<b>All banks</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>
Large	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
of which G-SIIs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of which O-SIIs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Medium	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%
Small	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 119 banks (only banks reporting “full template”)

126. In terms of calibration of the prudential treatment, it was recognised that the RWs for specialised lending need to account for rather complex specificities of structure and terms of the transaction. While issue-specific rated projects benefit from the corporate risk-weights, the treatment for unrated specialised lending exposures was calibrated on default rates for project finance loans worldwide over 20 years and provides a risk-sensitive framework under the CR-SA that is adapted to those specific projects (different risk-weights for different types of operations) and their life-cycles.
127. Nonetheless, considering the specific risk profile of transactions in this sub-asset class, it is prudent to align the regulatory treatment to the one introduced by the final Basel III framework. Furthermore, it should be pointed out that the implementation of this sub-exposure class should be further analysed from the perspective of the interaction with the CR-SA CRM provisions on recognition of physical collateral.

## 3.6 Subordinated debt, equity and other capital instruments

### 3.6.1 Revised RW treatment

#### Recommendation CR-SA 13: Revised RW treatment for subordinated debt, equity and other capital instruments

The EBA recommends the implementation of the final Basel III RW treatment for subordinated debt, equity and other capital instruments in the European regulatory framework, recognising that the overall conservative calibration of the RWs for this exposure class reflects its risk profile.

128. The revised Basel III framework significantly amends the regulatory treatment of subordinated debt, equity and other capital instruments by i) requiring all such exposures be treated under the CR-SA (including exposures in this class currently treated under the IRB Approach) and ii) amending the RW treatment to better reflect the degree of risk instruments in this class carry.
129. Therefore, under the final Basel III framework for CR-SA, the standard RW for equity exposures increases from 100% to 250%, to reflect the higher loss risk an institution incurs from holding, for example, an equity exposure as compared to holding a senior loan to the same entity. This increase in RWs follows from one of the major aims of the revision of the CR-SA, which is to increase the risk sensitivity of the framework.
130. An even higher RW of 400% is assigned to “speculative unlisted equity exposures [...] that are invested for short term resale purposes or are considered venture capital or similar investments [...] and are acquired in anticipation of significant future capital gains”. However, according to footnote 30 of the final Basel III text for CR-SA, exposures where “the bank has or intends to establish a long-term business relationship [...] would be excluded”. Arguably, the Basel category of “speculative unlisted equity exposures” should be broadly equivalent to investments in private equity or venture capital firms, which under the current rules are treated as high risk items<sup>26</sup>.
131. As an exception, equity holdings made pursuant to national legislated programmes may receive a RW of 100% subject to meeting certain qualifying criteria and the absolute amount of these holdings not exceeding 10% of a bank’s own funds.

Table 10: Percentage change of SA RWA per exposure sub-class – Equity (relative to total SA RWA)

	Exposures to certain legislative	Other	Speculative unlisted	Total Equity
<b>All banks</b>	<b>0.0%</b>	<b>2.6%</b>	<b>0.2%</b>	<b>2.8%</b>
Large	0.0%	2.1%	0.2%	2.3%
of which G-SIIs	0.0%	0.5%	0.2%	0.7%
of which O-SIIs	0.0%	2.6%	0.2%	2.7%
Medium	0.0%	6.9%	0.7%	7.5%
Small	0.0%	2.0%	0.0%	2.0%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks

132. Moreover, for institutions under the IRB Approach currently applying the simple RW approach according to article 155(2) of the CRR (i.e. the majority of institutions), own funds requirements for equity exposures will be lower, as in an overwhelming majority the RWs under the revised SA are lower than the ones currently prescribed under the simple RW approach.

<sup>26</sup> In the revised Capital Requirements Regulation (CRR2), Article 128 as has been amended to only include those investments in venture capital and private equity that are not treated in accordance with Article 132 of the revised CRR.

133. Finally, the final Basel III framework includes a 5 year phase-in period for implementing the amended regulatory treatment for this exposure class, as stated in footnote 29 of the final Basel text for CR-SA. During the phase-in period, the RW treatment would be applied according to the schedule in Table 11 and the associated RWA increase is presented in Table 12:

Table 11: Risk weights applicable to equity exposures during the phased-in implementation of the Basel standards

Equity category	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Speculative unlisted</b>	100%	160%	220%	280%	340%	400%
<b>Exposures to certain legislative programmes</b>	100%	100%	100%	100%	100%	100%
<b>Other</b>	100%	130%	160%	190%	220%	250%

Table 12: Percentage change in equity RWA (relative to total current SA RWA) during the phased-in implementation period

Equity Category	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Speculative unlisted	0.0	0.0	0.1	0.1	0.2	0.2
Exposures to certain legislative programs	0.0	0.0	0.0	0.0	0.0	0.0
Others	-1.6	-0.8	0.0	0.8	1.7	2.5
<b>Total equity exposures</b>	<b>-1.6</b>	<b>-0.8</b>	<b>0.1</b>	<b>1.0</b>	<b>1.8</b>	<b>2.7</b>

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks.

134. However, given the significant difference between the RWs equity exposures would incur during the phase-in schedule as compared to the current RW used either under the SA or under the IRB Approach, it would be advisable to prevent any undue temporary fluctuation in own funds requirements, as well as to maintain consistency with the IRB Approach on the implementation of the phase-in period, and align to the recommendation on the phase-in period made in the IRB section.

### 3.6.2 Treatment of equity holdings made pursuant to national legislated programmes (NLP)

#### Recommendation CR-SA 14: Treatment of equity holdings made pursuant to NLPs

In the EBA's opinion, the RW treatment of equity holdings made pursuant to national legislated programmes should be aligned with the RW associated to other equity holdings, i.e. 250%.

135. For equity holdings in legislated programmes, the Basel II framework provided a national discretion for an unlimited use of the SA, irrespective of how material these exposures were for an IRB bank<sup>27</sup>. This provision under the Basel II framework for CR-SA resulted in applying the same 100% RW for equity holdings in legislated programmes as for senior-ranking

<sup>27</sup> This discretion has been transposed in Article 150(1)(h) of the CRR.

exposures to corporates, compared to the 400% RW applied to non-traded equity exposures under the simple RW approach being part of the IRB Approach. The explicit purpose of this provision was to promote specific sectors of the economy, more precisely equity investments of US institutions in corporations or projects that are primarily designed to promote community welfare (e.g. the redevelopment of lower-income areas and services to support lower-income populations<sup>28</sup>).

136. The national discretion has ceased to exist under the Basel III framework, and was replaced by a mandatory rule to apply the CR-SA to all types of equity exposures. Moreover, the SA now accounts for the higher risk of equity exposures compared to senior-ranking exposures to corporates by introducing a 250% RW as a baseline for equity exposures. However, a new national discretion has been introduced which allows to reduce the SA RW to 100% for equity exposures in legislated programmes.
137. In contrast to the national discretion under Basel II, which solely permitted to not consider whether such equity holdings make the equity exposure class material for the bank (which would prevent permanent partial use) but did not result in a lower SA RW than for other equity exposures, exercising the new national discretion should be justified by lower risk compared to other equity exposures.
138. One example, which may be relevant to consider, is that the existing legislated programmes in the US do not suggest that the risk is reduced compared to other equity exposures<sup>29</sup>. The condition under Basel III capital framework of “significant subsidies for the investment to the bank” could be met solely by tax abatement and limited distributions to the owner of the project. This would not, however, mitigate the credit risk for the investing institution where taxes or distributions to owners depend on the profitability of the project. If the project does not generate profit, the effective subsidies would be zero, thus the credit risk would not be mitigated at all. Furthermore, the condition of “restrictions on the equity investments” could solely be met by a limited list of permissible investments which, however, is not designed to ensure lower risk. On the contrary, investments in lower-income areas or with lower in-come population might be relatively risky investments, and the restrictions to permissible investments solely restrict such riskier investments to those where this is in the public interest. Also the condition of “government oversight” could be met solely by requiring notification or approval for such rather risky equity investments. None of this contributes to mitigating the credit risk of such equity investments.

<sup>28</sup> Detailed descriptions are published by the Federal Reserve System ([https://www.federalreserve.gov/consumerscommunities/cdi\\_regover.htm](https://www.federalreserve.gov/consumerscommunities/cdi_regover.htm)); applicable regulation is published by the Federal Reserve System (and by the OCC (<https://www.ecfr.gov/cgi-bin/text-idx?SID=4e00be9da29f2e03db73a39cbebd1af6&mc=true&node=pt12.1.24&rgn=div5>))

<sup>29</sup> E.g. in the US the discretion has been exercised for equity investments of in corporations or projects that are primarily designed to promote community welfare, such as the redevelopment of lower-income areas and services to support lower-income populations. US regulation determines which investments are permissible and requires notice and approval, in some instances even prior approval. The rules for permissible investment allow to invest e.g. into “projects to construct or rehabilitate low- or moderate-income housing which is financed or assisted by direct loan, tax abatement, or insurance under provisions of State or local law, [...] provided that, with respect to all such projects, the owner is, by statute, regulation, or regulatory authority, limited as to the rate of return on his investment in the project [...]” [U.S. Regulation Y, 12 C.F.R. §225.127(c)].

139. Consequently, the conditions in final Basel III framework appear to not be sufficiently specific for ensuring a lower risk under all legislative programmes that formally meet these conditions. Subsequently, the EBA recommends to apply a 250% RW to this type of equity exposures. Should the EU exercise the discretion and apply a 100% RW, this would require ensuring that the conditions for the lower RW under the revised Basel III framework are met by the legislative programme in a way that indeed effectively reduces the loss risk to justify a 100% RW instead of the 250% RW for other equity exposures. In this case, in order to ensure consistent and prudent application of the requirements, a mandate could be granted for the EBA to develop Regulatory Technical Standards (RTS) specifying how the conditions to apply a 100% RW shall be met.

### 3.6.3 Treatment of equity exposures previously classified as high risk items

#### Recommendation CR-SA 15: Treatment of equity exposures previously classified as high risk items

In the EBA's opinion, given that:

- a) the final Basel III framework deletes the previously existing exposure class for items associated with high risk;
- b) restructures the treatment of equity exposures; and
- c) introduces higher risk categories within the real estate exposure class (i.e. Income Producing Real Estate exposures and Land Acquisition, Development and Construction exposures),

The RW treatment for the equity exposures which were classified as high risk items in line with Article 128 of the CRR should be aligned with the RW associated to other equity holdings, i.e. 250% or with the RW associated to speculative unlisted equity exposures where applicable, i.e. 400%.

140. Under the CRR, items associated with high risk are treated in line with Article 128. The high risk exposure class under the CRR represents the implementation of the discretion that national supervisors are granted in paragraph 80 of the current Basel II standard which states that national supervisors may decide to apply a 150% (or higher) RW to reflect 'the higher risks associated with some other assets, such as venture capital and private equity investments'.
141. Additional guidance with regard to the identification of high risk items has been provided by the EBA through the EBA Guidelines on specification of types of exposures to be associated with high risk<sup>30</sup>. Despite the fact that the final Basel III framework for CR-SA no longer includes provisions on 'high risk items', the EBA considered it beneficial to issue these guidelines in order to ensure the detection of high risk within institutions before the

<sup>30</sup> <https://eba.europa.eu/regulation-and-policy/credit-risk/guidelines-on-specification-of-types-of-exposures-to-be-associated-with-high-risk>

transposition of Basel III into the EU legislative framework, as well as a harmonised and consistent application of Articles 128 (2) and (3) of the CRR<sup>31</sup> until any revision of these provisions has to be applied by institutions, noting the BCBS timeline for the implementation of the revised framework.

142. As well as this, the EBA Guidelines introduce, for their specific purpose, definitions for private equity and venture capital, as these concepts were not defined in the CRR. It could be discussed whether there is merit in maintaining these definitions and include them in the level 1 text.
143. In terms of impact, as shown in Table 2 in section 2.4. above, the revised RWs provided by the final Basel III framework for the equity exposures class lead to a total increase of 2.8% of SA RWA, of which 0.8% represent the impact of the revised RWs for the exposures previously categorised as high risk.

#### 3.6.4 Treatment of equities that are recorded as a loan but arise from a debt/equity swap made as part of the orderly realisation or restructuring of the debt

##### **Recommendation CR-SA 16: Treatment of equities that are recorded as a loan but arise from a debt/equity swap**

In the EBA's opinion, the RW treatment for the equity exposures that are recorded as a loan, but arise from a debt/equity swap made as part of the orderly realisation or restructuring of the debt, should be aligned with the RW associated to other equity holdings, i.e. 250% or with the RW associated to speculative unlisted equity exposures where applicable, i.e. 400%. Moreover, it should be clarified that this type of instruments should always be treated as equity and that they may never attract a lower capital charge than would apply if the holdings remained in the debt portfolio.

144. The final Basel III text clarifies in footnote 26 that 'equities that are recorded as a loan but arise from a debt/equity swap made as part of the orderly realisation or restructuring of the debt' are included in the definition of equity holdings. However, these instruments may not attract a lower capital charge than would apply if the holdings remained in the debt portfolio', which would happen if the RW would be 150% if treated as rated debt exposure but solely 100% for a qualified equity exposure if introduced. The discussion at technical level has focused on the general treatment for this type of exposures and concluded that they should be treated as equity at all times. Moreover, it should be highlighted that the wording should be slightly amended in order to clarify that the last part of the footnote is not a national discretion, but a floor relative to how to set the capital charge for these instruments. Thus the verb 'may' should be replaced with 'should'.

<sup>31</sup> CRR2 amends Article 128 to exclude those types of equity exposures that are treated in line with the amended Article 132.

### 3.6.5 Treatment of liabilities from which the return is linked to that of equities

#### **Recommendation CR-SA 17: Treatment of liabilities from which the return is linked to that of equities**

In the EBA's opinion, since the treatment of liabilities from which the return is linked to that of equities has not been included in the current CRR provisions regarding equity exposures, neither under the SA, nor under the IRB Approach, the revised Basel III provisions regarding this item should not be included in the revised European regulatory framework

145. In the revised Basel III text, footnote 27 states that 'supervisors may decide not to require that such liabilities [i.e. liabilities from which the return is linked to that of equities] be included [i.e. in the exposure class] where they are directly hedged by an equity holding, such that the net position does not involve material risk'.
146. It was concluded at the technical discussion that, given that this treatment has not been included in the CRR IRB provisions so far (despite it being included in the Basel II text) and there is no indication of the existence of cases where this treatment is necessary or relevant, there is no reason to implement this footnote.

### 3.6.6 Treatment of debt holdings

#### **Recommendation CR-SA 18: Treatment of debt holdings**

In the EBA's opinion, given that the treatment of debt holdings proposed by the final Basel III framework for CR SA is already aligned with the current CRR provisions (i.e. Article 133 of the CRR), this treatment should be maintained in the revised European regulatory framework.

147. In the final Basel III text for CR-SA, footnote 28 allows a national discretion for supervisors with regard to the treatment of debt holdings. More specifically 'the national supervisor has the discretion to re-characterise debt holdings as equities for regulatory purposes and to otherwise ensure the proper treatment of holdings under Pillar 2'. This treatment is already applied in the CRR via Article 133 and is in line with the Basel II provisions. Therefore, it is advisable to continue applying this treatment.

### 3.6.7 Treatment of equity exposures to central banks

#### **Recommendation CR-SA 19: RW for equity exposures to central banks**

The EBA considers that the RW for equity exposures to central banks could be maintained at the current level of 100%.

148. The equity exposures to central banks is a specific instrument used in several jurisdictions in the EU, which has not been recognised in the final Basel III framework due to its uncommon nature. However, the Basel III revisions do not change the RW treatment of sovereign exposures. Therefore, it is considered appropriate to continue to apply the current treatment of equity exposures to entities classified as sovereigns, at least until different policy decisions regarding the sovereign topic are made.
149. By applying the RW of 100% the treatment of equity exposures to entities classified as sovereigns will remain unchanged also for institutions applying the IRB Approach. This is in line with the provisions in Article 150(1)(g) of the CRR, according to which '*equity exposures to entities whose credit obligations are assigned a 0 % risk weight under Chapter 2 including those publicly sponsored entities where a 0 % risk weight can be applied*' can currently be treated, via the PPU, under the SA.

### 3.6.8 Additional risk sensitivity in the equity exposure class

#### Recommendation CR-SA 20: Additional risk sensitivity in the equity exposure class

It is the EBA's opinion that, given the high risk profile of equity and subordinated debt instruments, as well as the SA's role to ensure that a simple methodology remains available for a wide range of jurisdictions, singling out additional equity instruments for a more diversified RW treatment is not advisable under the SA for CR.

150. In the CfA, the EBA is asked to "...consider whether further clarification or refined criteria are needed to adequately reflect the riskiness of different types of equity holdings existing in the EU". Under the current rules, any equity exposure which does not have to be deducted in the calculation of own funds of the institution is risk-weighted at 100% according to article 133 of the CRR. The two exceptions to this rule are significant investments in financial sector entities, which are not deducted according to article 48 of the CRR and are risk-weighted at 250%, as well as investments in private equity or venture capital firms, which under current rules are mandatorily risk-weighted at 150% as high risk items in line with Article 128 of the CRR.
151. While acknowledging that the revisions in the equity exposure class are the biggest driver of impact with regard to the implementation of the final Basel III framework (as presented in Table 10 in Section 2.6.1.), from a prudential perspective it appears difficult to motivate any further preferential treatment beyond what has already been analysed in the sections above. This also prevents further elaborating on a sensitivity analysis of the RW associated with this exposure class, which does not provide any additional insight in the absence of a detailed rationale on which to base a different calibration of the RWs.
152. In line with the requirements to move all equity exposures from the IRB Approach to the SA, the general RW of 250% under final Basel III framework, compared to 100% for unrated senior exposures, maintains the Basel II calibration under the PD/LGD approach for IRB



exposures to the same obligor. An IRB RW of 100% (after the 1.06 scaling factor) for senior claims would require an estimated Probability of Default (PD) of 1.06% (due to 45% Loss Given Default (LGD) and 2.5 years maturity under the F-IRB Approach), whereas the same estimated PD results in a RW of 267% for equity exposures (due to 90% LGD and 5 years remaining maturity under the PD/LGD approach). Thus, the new SA RW is even slightly lower.

153. Under the Basel II framework own LGD estimates for equity exposures were not allowed, instead a mandatory 90% LGD applied across all equity exposures under the PD/LGD approach, reflecting the high loss risk in case of default of the issuer due the subordination to all debt liabilities. Nevertheless, differentiation of IRB RWs was still possible due to different PDs. However, such differentiation for CR-SA RWs is not available under Basel III capital framework. While further risk distinction for equity exposures could be based on a multiplier to the SA RW for senior claims to the same obligor, e.g. a multiplier of 2 based on the relation of LGDs under the F-IRB Approach and the PD/LGD approach for equity (45% LGD for senior exposures compared to 90% LGD for equity exposures), this approach was not adopted for Basel III capital framework. The Basel discussions concluded that debt cannot be directly compared with the RW of equities and hence introduction of the multiplier was considered inadequate.
154. This also holds true for equity exposures under Article 49 of the CRR, where the CRR allows such holdings to be risk weighted according to the rules for equity exposures under the SA or IRB Approach. If this exceptional treatment was maintained, the new RWs for equity exposures should also be applied to these exposures. It should however be noted that applying the new RWs could lead to a substantial increase of own funds requirements for these holdings under the SA whereas under the IRB Approach this could result in a significant decrease of own funds requirements in cases where an institution currently applies the simple RW approach to equity exposures.

## 3.7 Retail exposures

### 3.7.1 Revised RW treatment

#### **Recommendation CR-SA 21: Revised RW treatment for retail exposures**

The EBA recommends the implementation of the revised Basel III RW treatment for retail exposures in the revised European regulatory framework.

155. The final Basel III framework introduces a differentiation between ‘transactors’ (i.e. revolving facilities like credit cards where the outstanding balance is repaid every period) from other revolving facilities i.e. ‘revolvers’ (where the lines of credit are typically drawn upon), applying a 45% RW to the former and leaving unchanged the 75% RW applicable to the latter. The reform also increases to 100% (from 75%) the RW applicable to ‘other retail’, which do not meet the criteria of regulatory retail exposures. These amendments introduce granularity in the retail exposure class, which under the current CRR receives a flat 75% RW.

Table 13: Exposure class Retail - exposure by sub-exposure class

Institutions	Other retail	Regulatory retail - non-transact	Regulatory retail - transactors	Retail
All	2.10%	93.51%	4.39%	100.00%
Large	1.69%	94.16%	4.15%	100.00%
of which: G-SII	0.07%	96.50%	3.43%	100.00%
of which: O-SII	3.16%	94.00%	2.85%	100.00%
Medium	6.71%	89.13%	4.16%	100.00%
Small	2.48%	65.29%	32.22%	100.00%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks: Large (98), of which G-SIIs (7), of which O-SIIs (61); Medium (59); Small (24).

156. In terms of impact on the SA RWAs, the reform in the retail exposure class accounts for up to 1.7% of the SA RWA (see Table 14). The increase in RWAs stems mostly from the sub-category of revolvers, which represents more than 90% of the European retail portfolio, and is to be driven by policy changes other than the risk weighting, most notably the introduction of a 10% credit conversion factor for unconditionally cancellable commitments. RWAs decrease for ‘transactors’ and increase for ‘other retail’, although on average these two portfolios do not affect significantly the EU-wide impact on retail.

Table 14: Percentage change of SA RWA per exposure sub-class – Retail (relative to total SA RWA)

	Other retail	Regulatory retail - non-transact	Regulatory retail - transactors	Total Retail
<b>All banks</b>	<b>0.1%</b>	<b>1.7%</b>	<b>-0.1%</b>	<b>1.7%</b>
Large	0.1%	1.8%	-0.1%	1.8%
of which G-SIIs	0.0%	2.1%	-0.3%	1.8%
of which O-SIIs	0.2%	1.6%	0.0%	1.7%
Medium	0.0%	1.4%	-0.1%	1.2%
Small	0.6%	1.6%	0.6% <sup>32</sup>	2.8%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks

### 3.7.2 Granularity criterion and additional measures for ensuring diversification

#### Recommendation CR-SA 22: Measures for ensuring diversification of the retail portfolio

It is the EBA’s opinion that the proposed granularity criterion of 0.2% of the overall regulatory retail portfolio is neither necessary, nor sufficient for ensuring adequate diversification of institutions’ regulatory retail portfolios. Instead, the current CRR provisions in Article 123 should be maintained in the revised European regulatory framework and further supplemented by guidance regarding appropriate diversification methods via a mandate granted to the EBA on this topic.

<sup>32</sup> QIS findings show a positive impact for the Retail category of transactor for small banks which however only stems from a very limited number of institutions and should therefore be interpreted with caution.

157. According to the final Basel III framework, a retail exposures may be assigned a 75% RW associated with regulatory retail exposures when it meets three criteria: i) product criterion - revolving credits and lines of credit (including credit cards, charge cards and overdrafts), personal term loans and leases (e.g. instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments; ii) criterion on low value of individual exposures - the maximum aggregated exposure to one counterparty cannot exceed an absolute threshold of €1 million; and iii) granularity criterion: no aggregated exposure to one counterparty can exceed 0.2% of the overall regulatory retail portfolio, unless national supervisors have determined another method to ensure satisfactory diversification of the regulatory retail portfolio.
158. Under the CRR, Article 123 provides a series of elements that serve for the identification of those exposures that should be included in the retail portfolio, including a requirement for ensuring diversification; point (b) of Article 123 clearly specifies that ‘the exposure shall be one of a significant number of exposures with similar characteristics such that the risks associated with such lending are substantially reduced’.
159. This issue has also been analysed via the qualitative questionnaire. It was first investigated what institutions are currently doing to ensure the diversification of their retail portfolios and questions were aimed at understanding the quantitative and qualitative criteria used, if any.
160. There was a 90% rate of response for the question on the current use of a hard threshold for ensuring diversification in the retail portfolio. 71% of respondents do not use a granularity criterion, while 24% of respondents use a threshold smaller than the 0.2% criterion. Based on the replies to the questionnaire, the other quantitative criteria used by institutions for ensuring diversification are either complying with the 1 MEUR threshold (the majority) or falling under one of the following two categories: i) exposure to retail customer limited to a level below that of CRR (50 KEUR /250 KEUR/ size of exposure cannot exceed 3% of own funds, 750 KEUR/300 KEUR/ maximum amounts defined by internal policies depending on products – for example 5 KEUR for credit cards), or ii) internal “sub-classification”, based on counterparty’s characteristics, defined by various forms (micro-retail / small retail / for SMEs, entity turnover must be below 5 MEUR/ SMEs whose assets are below 43 MEUR and turnover below 50 MEUR/ for SME, operating output below 5 MEUR).
161. There was a high 81% response rate to the questions about qualitative criteria for portfolio diversification. Of these, 41% of respondents use a criterion based on the absolute size of exposure, while 24% use the type of exposures as a criterion. Other criteria include: nature of counterparty, aggregated exposure, exclude from retail the SAE code for corporates, sectoral classification, score models and minimum number of obligors in the retail portfolio. Only 8% of respondents use the geographic diversification as a criterion.
162. Recognising that the granularity criterion as a stand-alone does not ensure sufficient diversification (e.g. the granularity criterion could be met by a large number of small loans to

all the employees of a big specialised company, which however does not ensure any diversification in case all the employees becomes unemployed at the same time due to insolvency of this company and no available alternative employer), the proposed way forward would be to use the national discretion and develop another method to ensure satisfactory diversification of the regulatory retail portfolio, for which the EBA should get a mandate for drafting the RTS.

163. The alternative would be represented by the implementation of the the “hard” granularity criterion. Based on the feedback on the qualitative questionnaire this may likely introduce significant burden for institutions to implement it and may result in a significant increase of own funds requirements for the smallest institutions in particular. However, a hard granularity criterion may be a necessary (though not sufficient) condition from a risk perspective as the composition of the retail portfolio may be more aligned with the overall size of the balance sheet of an individual institution.

### 3.8 Real estate exposures

164. The final Basel III framework introduces further granularity in the real estate exposure class, which has been judged as not risk sensitive enough with regard to the inherent risk posed by different types of real estate transactions and loans. The new proposed RW treatment maintains the distinction between residential and commercial real estate, but further adds granularity according to the type of financing of the loan (dependent or not on income streams generated by the collateralised property) and according to the phase the property is in (construction phase vs. finalised property).

Table 15: Real estate exposure class – the final Basel III framework

<b>Residential real estate exposures</b>								
<i>LTV bands</i>	<b>Below 50%</b>	<b>50% to 60%</b>	<b>60% to 70%</b>	<b>70% to 80%</b>	<b>80% to 90%</b>	<b>90% to 100%</b>	<b>above 100%</b>	<b>Criteria not met</b>
<i>General RRE</i>								
Whole loan approach RW	20%	25%	30%	40%	50%	70%		RW of counterparty
Loan-splitting approach <sup>2</sup> RW	20%	RW of counterparty						RW of counterparty
<i>Income-producing residential real estate (IPRRE)</i>								
Whole loan approach RW	30%	35%	45%	60%	75%	105%		150%
<b>Commercial real estate (CRE) exposures</b>								
<i>General CRE</i>								
Whole loan approach	<i>LTV ≤ 60%</i>			<i>LTV &gt; 60%</i>			<i>Criteria not met</i>	
	Min (60%, RW of counterparty)			RW of counterparty			RW of counterparty	
Loan-splitting approach <sup>2</sup>	<i>LTV ≤ 55%</i>			<i>LTV &gt; 55%</i>			<i>Criteria not met</i>	
	Min (60%, RW of counterparty)			RW of counterparty			RW of counterparty	
<i>Income-producing commercial real estate (IPCRE)</i>								
Whole loan approach	<i>LTV ≤ 60%</i>		<i>60% &lt; LTV ≤ 80%</i>		<i>LTV &gt; 80%</i>		<i>Criteria not met</i>	
	70%		90%		110%		150%	
<i>Land acquisition, development and construction (ADC) exposures</i>								
Loan to company/SPV	150%							
Residential ADC loan	100%							

Source: BIS

165. In light of the proposed amendments brought about by the final Basel III framework, the CfA QIS has analysed the impact of aligning with these provisions:

Table 16: Percentage change of SA RWA per exposure sub-class – Exposures secured by real estate (relative to total SA RWA)

	General commercial real estate	General residential real estate	Income producing commercial real	Income producing residential rea	Land acquisition, development and construction	Exposures secured by real estate
<b>All banks</b>	<b>0.6%</b>	<b>-0.5%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.5%</b>	<b>1.1%</b>
Large	0.6%	-0.5%	0.4%	0.1%	0.5%	1.0%
of which G-SIIs	0.7%	0.1%	0.2%	0.1%	0.7%	1.9%
of which O-SIIs	0.3%	-0.8%	0.6%	0.1%	0.3%	0.5%
Medium	1.0%	-0.2%	0.2%	0.6%	0.9%	2.4%
Small	0.5%	-0.9%	0.0%	0.3%	3.9%	4.0%

Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 181 banks

### 3.8.1 Implementation of the loan splitting (LS) approach versus the whole loan approach (WL)

#### Recommendation CR-SA 23: Loan splitting approach vs. whole loan approach

The EBA considers that, in line with the current approach to real estate exposures, the loan splitting approach reflects the two independence criteria that “general” real estate exposures have to meet: independence of the value of the property from the credit quality of the borrower and independence of the risk of the borrower from the performance of the underlying property or project. Hence, the EBA recommends the implementation of the loan splitting approach for real estate exposures where the repayment does not materially depend on cash flows generated by the property in the revised European regulatory framework.

166. According to the Basel III final framework, the loan splitting approach, which can be applied to both RRE and CRE exposures where the repayment does not materially depend on cash flows generated by the property, makes a distinction between a secured and an unsecured part of an exposure secured by real estate collateral, which also reflects the two independence criteria that properties falling into general real estate have to meet:

- a) The secured part of the exposure is identified by part of the exposure up to 55% of the property value and receives a flat RW that is lower than the RW for the unsecured part, but higher than 0. This calibration of the RW for the secured part (set at 20% for RRE and 60% for CRE) addresses the situation where the bank may incur additional unexpected losses even beyond the haircut that is already applied to the value of the collateral when selling the collateral in case of a default of the borrower.

- b) The unsecured part of the exposure is identified by any remaining part of the exposure going beyond 55% of the property value and receives a RW that is similar to that of a comparable exposure to the same obligor not secured by mortgages on real estate. This approach is based on the consideration that credit risk of the unsecured part does not depend on being secured by real estate, but rather on the independent capacity of the borrower to repay the exposure from other income sources.
167. The Basel standards propose another approach for dealing with real estate exposures, which understands real estate exposures as a specific type of exposures. According to this so-called whole loan approach, a mortgage loan is a specific product where the amount of the loan is high relative to the yearly income of the borrower, maturity is long and interest rate is lower than for other types of loans. This is why, in terms of risk, its behaviour is specific and also requires a specific treatment in terms of risk weighting these exposures. The whole loan approach assigns regulatory RWs for mortgages based on their loan to value ratio (LTV). The approach is based on two assumptions: (i) that the LTV is an indicator of the risk of default and (ii) that the risk of default increases disproportionately as the LTV increases (hence the use of different RWs based on LTV buckets). LTV is used as a simple proxy for assessing the default risk of an exposure that is also assumed to reflect a range of additional factors influencing default risk, including the loan to income (LTI) ratio.
168. Under the LS approach, collateral is always recognised only up to 55% of the property value. This means that any part of a lien or a junior lien, which exceeds 55% of the property value, will be fully risk weighted as a comparable exposure to the same obligor not secured by mortgages on real estate. Because of this mechanism, LS, in contrast to the WL approach, is fully reflective of the higher risk that junior liens (which give access only to the remaining property value after satisfying more senior liens) pose to a lending bank. In addition, by applying the counterparty RW to the part of the exposure exceeding 55% LTV, it is also sensitive to the type of borrower that pledges real estate collateral to the bank, resulting in higher own funds requirements for SMEs or corporates than for individuals. This illustrates the second independence criterion, which requires that the credit risk for general real estate must not depend on the characteristics of the property and, depending on the LTV and the type of the borrower, leads to lower or higher own funds requirements for the exposures under the LS compared to the WL, which also reflects a higher degree of risk sensitivity of the LS.
169. Moreover, concerning the LS approach, since the identification of the secured and the unsecured part is always based on the property value, this preserves the dependency of RWs on LTV, but is nevertheless more risk-sensitive than the WL approach, where:
- a) In case of CRE, mortgages are no longer recognised under the WL approach as securing the exposure where the LTV is higher than 60%, and in case of RRE they are recognised only to a very limited extent (70% RW for LTV >100%). In case of CRE, this increases the RW for the whole exposure, i.e. including the part fully secured by real estate collateral after a substantial haircut, to that of a completely unsecured loan – which inappropriately

ignores that the credit risk of a partially secured exposure is always lower than that of a completely unsecured exposure, especially since we require that the value of the property is independent from the creditworthiness of the borrower.

- 170. As explained above, technical arguments in favour of the whole loan approach claim that real estate exposures are specific products with long maturities and comparably high exposure values in relation to the income of the borrower, thus requiring a specific regulatory approach. However, it should be noted that in all other parts of the SA framework, RWs are not adjusted for the amount and the maturity of the exposure. There could be an argument that a large loan could lead to an increase in the loss risk for a given income and assets of a borrower, however this again depends in the individual case and can only be appropriately assessed by including explicit income related indicators into the framework, which was not done by the BCBS when the revised SA was finalised. Moreover, for externally rated obligors the available income should already be considered for the applicable RW.
- 171. According to the QIS, the results shown in Figure 15 provide the structure of the real estate portfolio under the CR-SA, while Table 17 provides an overview of the main scenarios tested during the QIS:

Figure 15: Breakdown of exposure secured by real estate by type (% of total exposures secured by real estate)

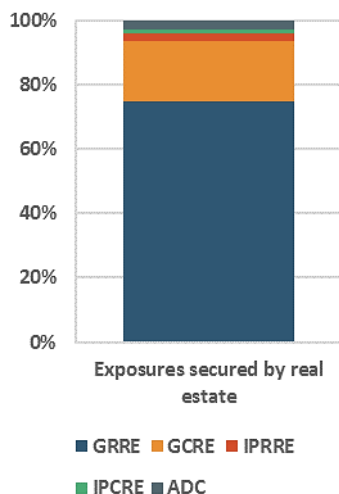


Table 17: Scenario specification for real estate exposures

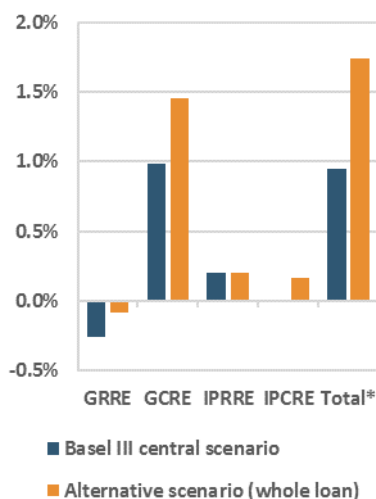
	Basel III central reform scenario	Alternative scenario (whole loan)
GRRE	Loan Splitting	Whole Loan
GCRE	Loan Splitting	Whole Loan
IPRRE	Whole Loan	Whole Loan
IPCRE	Loan Splitting if hard test passed otherwise whole loan	Whole Loan

Sources: EBA 2018-Q2 QIS data and EBA calculations.  
 Notes: Based on a sample of 96 banks. GRRE, general residential real estate, GCRE, general commercial real estate, IPRRE, income-producing residential real estate, IPCRE, income-producing commercial real estate, and ADC, land acquisition, development and construction

- 172. Based on the QIS, the impact on the SA RWAs of the different approaches is the following:



Figure 16: Percentage change in exposures secured by real estate SA RWA (relative total current SA RWA), loan splitting versus whole loan



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 96 banks. GRRE, general residential real estate, GCRE, general commercial real estate, IPRRE, income-producing residential real estate, IPCRE, income-producing commercial real estate, and ADC, land acquisition, development and construction.

\* Total exposures secured by real estate excluding ADC.

### 3.8.2 Implementation of hard test (HT)

#### Recommendation CR-SA 24: Implementation of the hard test

The EBA considers that the use of hard test has been successful in providing an incentive for institutions to reflect real estate market deteriorations in the property values that are recognised for regulatory purposes in a timely and forward-looking manner and thus recommends maintaining its implementation to both Income Producing Commercial real estate exposures as well as Income Producing Residential real estate exposures.

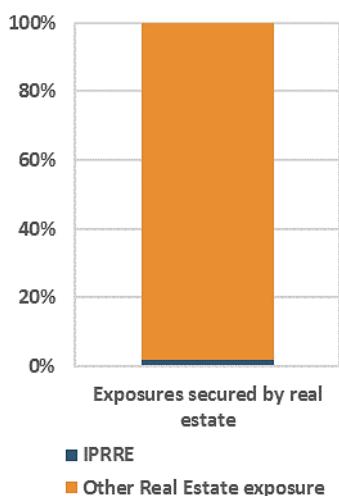
173. The CRR currently allows the application of the “hard test” (HT) to both CRE and RRE where the competent authority of that Member State has published evidence showing that a well-developed and long-established property market is present in that territory with yearly loss rates (including income producing real estate exposures, IPRE) which do not exceed certain thresholds. Where a property market passes the HT, this allows applying for IPRE exposures the same preferential RWs as for exposures where the risk of the borrower does not materially depend on the performance of the property, provided the properties backing the exposures are situated within the territory of a Member State.. Moreover, to ensure the reliability and high quality of the evidence published by competent authorities, Article 101 of the CRR introduced binding requirements for institutions to report losses on exposures secured by real estate. The hard test thresholds provide incentives for institutions to correct property values downwards as soon as possible in order to reflect market deterioration up-front. It allows property markets to still meet the loss-thresholds in a downturn with falling

real estate prices by banks reducing the property values that are recognised for regulatory purposes in a timely and forward-looking manner. By doing so, the part of the exposure that is treated as secured (before or after haircut) is reduced, while the unsecured part increases, which increases the overall own funds requirements. As a consequence, realised higher losses (if any), will be absorbed by the increased part of the exposure that is treated as being unsecured and therefore no longer benefits from the preferential RW for the fully and completely secured part.

174. Since the hard test is applied to a real estate market as a whole, there could be a free-rider problem, where an individual bank would bet on all other banks reducing their property valuations, while keeping its own levels. However, by design the hard test enforces a system of mutual discipline on all institutions within the market: when individual banks start free riding by not adjusting property values, this increases the risk for the system as a whole that the hard test will not be met and that all banks going forward will be subject to higher own funds requirements. Therefore it is in the mutual interest of all institutions that property values are corrected downwards also by each individual institution as soon as possible in order to reflect a deterioration in market values. In addition it would be easy for the supervisor to identify any free-riding by individual institutions and to address this under Pillar II if necessary, as the realised loss rates have to be reported according to Article 101 of the CRR on an institution-by-institution basis.
175. Under the Basel framework, a different regulatory treatment under the SA is introduced for real estate exposures where the repayment of the loan materially depends on cash flows generated by the property and exposures where this is not the case. However, as under the CRR, also under Basel III institutions are not required to assess cash flow independence for real estate collateral located in jurisdictions where the hard test is met and in this case may treat IPRE exposures in the same way as general real estate ones. The arguments set out above equally apply to IPCRE and IPRRE. Therefore the limitation of the hard test to IPCRE as foreseen under the Basel framework does not seem justified and as a consequence the EBA recommends maintaining its application to both Income Producing Commercial real estate exposures as well as Income Producing Residential real estate exposures as under the current CRR. However, footnote 46 to paragraph 67 of the final Basel III text for CR-SA does allow regulators to provide further guidance for IPRRE setting out criteria on how material dependence on the cash flows generated by the property should be assessed for specific exposure types, which could be used for specifying this under the same hard test conditions as for IPCRE. Therefore both types of properties should be treated consistently in the EU with regard to the hard test.
176. Regarding the calibration of the hard test, it should be noted that in the current CRR the same loss threshold of 0.3% is used for both CRE and RRE in the first part of the test although the threshold applies to different LTV ranges (50/60% in the case of CRE and 80% in the case of RRE). A rationale for applying the same loss threshold for different LTV ranges is not evident and this could be used as an argument for requiring a recalibration of the hard test itself. However, this difference between CRE and RRE will be eliminated with the implementation

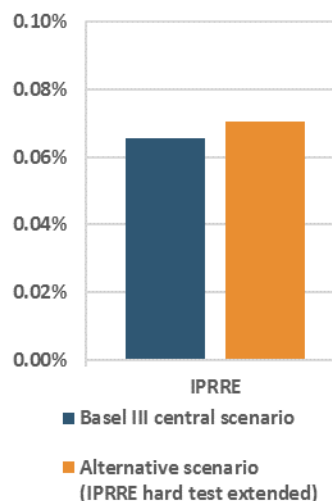
of Basel III in case the EU opts for the loan splitting approach, as for both types of real estate, the split between the secured and the unsecured part of the exposure is done at 55% of the property value. As a consequence, the loss threshold of 0.3% in the first part of the HT should refer to 55% for both RRE and CRE to still exclusively capture the part that receives the preferential RW for the part fully and completely secured by immovable property. In order to ensure that high quality data to carry out the hard test remain available to NCAs, the reporting requirements in Article 101 of the CRR need to be adjusted accordingly.

Figure 17: Share of exposures secured by IPRRE (% of total exposures secured by real estate)



Sources: EBA 2018-Q2 QIS data and EBA calculations. Notes: Based on a sample of 148 banks.

Figure 18: Percentage change in exposures secured by IPRRE SA RWA due to application of hard test to IPRRE (relative to total current SA RWA)



Sources: EBA 2018-Q2 QIS data and EBA calculations. Notes: Based on a sample of 148 banks. IPRRE, income-producing residential real estate

### 3.8.3 Eligibility of property under construction

#### Recommendation CR-SA 25: Eligibility of property under construction

It is the EBA’s opinion that the national discretion to recognise residential property under construction as eligible collateral under the conditions mentioned in paragraph 60 of the revised SA should be exercised. A sufficiently low threshold for the number of residential housing units that could be considered eligible as residential property under this discretion should be implemented and that 4 is an acceptable number for this threshold.

177. In the final Basel III rules text, in order to benefit from the preferential RW based on the LTV ratio, the property securing the exposure must be ‘fully completed’ (paragraph 60 in the CR SA section). In the Basel framework, subject to national discretion, supervisors may however apply a preferential RW based on an LTV ratio for ‘loans to individuals that are secured by

residential property under construction, provided that the property under construction is a one-to-four family residential housing unit that will be the primary residence of the borrower (this does not include apartments within a larger construction project); or where the sovereign or PSEs have the legal powers and ability to ensure that the property under construction will be finished’.

178. The rationale for introducing this criterion in the Basel framework was that owner-occupied real estate is supposed to have a lower credit risk, since the owner will be more motivated to repay the loan if he loses his roof otherwise. To take account of the situation that sometimes people build houses with separate units for themselves but also their family, the number of housing units within a property that could already be recognised as collateral during the construction phase was increased to four, which is considered a sensible threshold in this regard. Moreover, in the case of larger complex buildings under construction, an institution is not only exposed to the risk of the borrower defaulting but also to the risk that the developer of the project defaults and therefore the construction will not be finished as planned. Therefore, such properties are not eligible as collateral during the construction phase. Technical discussions regarding this issue highlighted agreement with the rationale behind the threshold, as well as no objections to a specific, sufficiently low value of said threshold. As such, there are no major objections to the ‘1-4’ value.

### 3.8.4 Valuation requirements

#### Recommendation CR-SA 26: Valuation requirements

The EBA considers that the revised European regulatory framework concerning valuation of real estate collateral should be aligned with the final Basel III capital framework.

179. The Basel II framework for commercial real estate and the CRR for both residential and commercial real estate distinguish between whether a bank follows a market value (MV) concept for determining the value of its real estate collateral or whether it uses a mortgage lending value (MLV) concept. According to CRR MLV can only be used in those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions. The concept of a MLV is not used in many jurisdictions and is, at least in certain jurisdictions, closely linked to the requirements for collateral pools of covered bonds. The general rule is that the MLV indicates what a property is worth notwithstanding the market cycle and the features specific to a certain property. In any case, the value that is assigned to the real estate collateral for regulatory purposes can never be higher than the MV. The application of the two concepts in the CRR is however not consistent since:
- a) for residential real estate exposures under the SA, the underlying assumption is that both values are comparable (i.e. the preferential RW of 35% is applied to the part of the exposure up to 80% of the MV or 80% of the MLV), whereas

- b) for commercial real estate exposures under the SA, the underlying assumption is that the MLV is more conservative than the MV because of the different percentage of LTV applicable (i.e. the preferential RW of 50% is applied to the part of the exposure up to 50% of the MV or 60% of the MLV).
180. The revised SA according Basel III no longer distinguishes between the two concepts, but sets out some general valuation criteria in paragraph 62:
- *Value of the property: the valuation must be appraised independently using prudently conservative valuation criteria. To ensure that the value of the property is appraised in a prudently conservative manner, the valuation must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan. National supervisors should provide guidance setting out prudent valuation criteria where such guidance does not already exist under national law. If a market value can be determined, the valuation should not be higher than the market value.*
181. These requirements will no longer allow institutions to solely apply a MV concept as in any case they have to “take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan”, which is not required in Articles 208 and 229 of the CRR. The revised SA framework also includes only one single calibration and does not distinguish between whether an institution follows a MV or a MLV concept.
182. Thus, the requirements of paragraph 62 of the final Basel III text for CR-SA should be included directly in the level 1 text, amended by some additional specifications to clarify how a current use of either MV or MLV could be included in the definition of property value. This would allow institutions currently using either an MLV or an MV concept to continue to do so, provided that the values used as input parameters under these approaches exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan. In addition, the values determined under these approaches are never higher than those based on the general criteria according to paragraph 62 of the Basel III text. Institutions currently applying an MV concept would in the future instead have to follow the general criteria according to paragraph 62 of the Basel III text directly because market values can always decrease, thus an MV concept cannot meet the requirement to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan. It is therefore impossible to ensure that.
183. The alignment with the final Basel III framework would not only foster an international level playing field with regard to the treatment of real estate exposures, but allows a practical harmonisation of valuation practices, especially where different practices exist across Members States, as well as where national regulations on the approaches exists. This harmonisation is no longer achieved by prescribing the metrics for valuation, but by

presenting a series of criteria that the value used in a jurisdiction needs to comply with. To ensure a harmonized understanding and implementation of what those criteria actually entail, further guidance would be needed in order to fully clarify what banks are expected to do in order to comply with paragraph 62.

184. There are, however, different valuation practices across Member States and several jurisdictions use the market value, as per the examples below:

a) In Ireland for example, in addition to the valuation requirements which are set out in Art. 208 and 229 CRR, Statutory Instrument 142/2016, which implements the Mortgage Credit Directive, requires that a creditor shall use reliable standards, such as those developed by the International Valuation Standards Council, the European Group of Valuers' Associations or the Royal Institution of Chartered Surveyors, when carrying out a property valuation of residential immovable property for credit purposes, or take reasonable steps to ensure that reliable standards are applied where a valuation is conducted by a third party. In addition, "a creditor shall ensure that internal and external appraisers conducting property valuations are professionally competent and sufficiently independent from the credit underwriting process so that they can provide an impartial and objective valuation, which shall be documented in a durable medium and of which a record shall be kept by the creditor."

b) Denmark currently applies the market value. The use this principle is carried out in accordance with the definition in the CRR and international valuation standards, combined with additional requirements to ensure a prudent use, in accordance with Executive Order on Valuation of Mortgages and Loans in Real Property which are Provided as Collateral for Issue of Covered Mortgage-Credit Bonds and Covered Bonds. This ensures that the valuation considers if the circumstances are estimated to condition a special scarcity price, where this shall be disregarded in the valuation, and that the valuation take into account a current risk of changes in market conditions or structural changes.

185. Moreover, there are areas where the alignment with the valuation methodology as provided by the final Basel III framework might have unintended consequences. One notable interaction that would merit further attention is the interaction with the covered bonds framework and the eligibility of assets for the pool of assets for covered bonds. More precisely, it should be further investigated whether the conditions in Article 129 of the CRR for applying preferential treatment to covered bonds would effectively result in the ineligibility of certain real estate loans once the valuation requirements are aligned. Other implications might affect certain jurisdictions individually.

### 3.8.5 Cyclical effects of valuation requirements (value at origination vs current value)

#### Recommendation CR-SA 27: Value at origination vs. current value of real estate collateral

It is the EBA's opinion that institutions should be required to revise the property value downwards if necessary. In this regard the current monitoring requirements in the CRR should

be maintained. However, regarding a potential subsequent upwards adjustment, EBA sees two options: either capping the upwards adjustment at the value at origination of the loan; or allowing an increase of the value beyond the value at origination in line with Article 208 of the current CRR.

186. According to Article 229(1) of the CRR, real estate collateral shall be valued at below the market value, regardless of whether an institution follows a MV or MLV concept for determining the value of its real estate collateral. In addition, Article 208(3) of the CRR requires institutions to monitor the values of properties taken as collateral on a frequent basis and review the valuation when there is an indication that the value of the property may have declined materially. As a consequence, the two provisions in combination require institutions to adjust the value of real estate collateral downwards where necessary but at the same time, there is nothing in the CRR that would prevent an institution from assigning a value to a property that is higher than the value that was assigned to this property when it was taken as collateral for the first time, if the institution has sufficient evidence that the market value has indeed increased. As a consequence, values of real estate collateral can move with the cycle under the CRR.
187. The final Basel III framework for CR-SA takes a different approach on this issue as, according to paragraph 60 in the final Basel III text for CR-SA, institutions must record real estate values as the value measured at origination. The value must be adjusted downwards if an extraordinary event occurs resulting in a permanent reduction of the property value. On the one hand, this ensures that speculative elements, which lead to an increase of the property value beyond the value at origination, are mitigated. On the other hand, this reduces risk sensitivity, as also any sustainable increases in the value will not be reflected in institutions' own funds requirements. Moreover when property prices drop progressively, the collateral value will be overestimated compared to market value and an increase in credit risk is knowingly ignored. If the value of the property was updated, the LTV ratio of the exposure would go up as the loan amount remains unchanged while the value of the property decreases and consequently own funds requirements would also increase. To address this concern, the final Basel III framework includes a national discretion for supervisors to require institutions to revise property value downwards. If the value has been adjusted downwards, a subsequent upwards adjustment can be made but not to a value higher than the value at origination.
188. Consequently, there are two options for the proposed way forward:
- a) Option 1: Follow the baseline treatment according to Basel III, i.e. keep property value at origination with adjustments only if an extraordinary event resulting in a permanent reduction of the property value occurs but exercise the national discretion for supervisors to require institutions to revise property value downwards. In this case, a subsequent upwards adjustment can be made but not to a higher value than the value at origination.

- b) Option 2: Maintain the current approach of the CRR which requires institutions to monitor property values, to adjust the value of real estate collateral downwards where necessary but at the same time allows institutions to assign a value to a property that is higher than the value that was assigned to this property when it was taken as collateral for the first time.
189. Option 1 means alignment with the final Basel III framework. As the intention is to reduce the possible cyclical effects of property valuation, there is merit in implementing a more conservative approach. Since alignment with the revised provisions is sought also regarding the implementation of methods for valuation, the differential between property values appraised in economic recession or expansion should not be significant. There could be adverse incentives for shorter minimum lending periods, should upwards adjustments not be allowed. Even though the origination of new loans entails costs, institutions could try to circumvent the prohibition of increased property values, by using early termination clauses for replacement with an identical contract but based on the increased property value, or the obligor could use such clauses for departing to another bank that might offer better conditions based on the increased property value. Therefore, supervisors will need to be aware and monitor for practices in this regard.
190. Option 2 could also be considered an appropriate option, especially for loans with long maturities, where institutions should be encouraged to monitor collateral values. Fixing a collateral value at origination for 20 to 25 years (which is the usual maturity of mortgage loans in some countries) does not appear to adequately reflect the risks of the institution over the life of the loan. The approach proposed by option 2 is considered to be more accurately reflecting the actual risk of the loan, while the constant monitoring ensures prudent valuation.

### 3.8.6 Additional indicators for RW assignment

#### Recommendation CR-SA 28: Additional indicators for valuation of real estate collateral

It is the EBA's opinion that, given the lack of harmonised implementation of different indicators across Member States, the assignment of RWs for real estate exposures should rely solely on the LTV, in line with the final Basel III framework.

191. As part of the CfA, the EBA was "... invited to consider whether there is sufficient rationale to supplement LTV ratios with other factors..." for the purposes of determining the RWs applicable to exposures secured by real estate. Indicators like a debt-to-income-ratio or a debt-service-ratio were considered by the Basel Committee when the first consultation paper for the revised CR-SA was developed. However, concerns remained whether such indicators could be implemented in a consistent way across jurisdictions given that income levels, tax systems and underwriting practices are very different.



192. During the consultation, the participants welcomed the efforts of the BCBS in this respect, as they contribute to increasing risk sensitivity but at the same time - for the reasons given above - raised concerns if a standardised definition and threshold would be used. Based on these considerations, in the final Basel III rules, LTV is used as the primary indicator for assigning RWs while underwriting criteria such as an assessment of the borrower's ability to repay the loan, have been incorporated in the operational requirements for recognising real estate collateral.
193. While it appears difficult to supplement the LTV with other reliable indicators in the level 1 text, there are several regulatory products that offer indications regarding other indicators that can be used as part of Pillar 2. Most notably, the Mortgage Credit Directive<sup>33</sup> contains provisions on the assessment of the creditworthiness of a borrower, while the upcoming EBA Guidelines on loan origination provide guidance on several notable aspects: assessment of the borrower's creditworthiness, commercial real estate lending, lending for real estate development, as well as a section on collateral valuation.

### 3.8.7 Additional guidance on underwriting policies

#### Recommendation CR-SA 29: Additional guidance on underwriting policies

The EBA recommends that paragraph 61 of the final Basel III text for CR SA be implemented without the national discretion regarding additional guidance on underwriting policies. Furthermore, the requirement in Article 125(2)(b) of the CRR regarding the assessment of the ability of the borrower to repay the loan from other sources should be extended as a mandatory requirement to all real estate exposures except land acquisition development and construction exposures.

194. According to the final Basel III framework, for a real estate loan to be eligible for the preferential treatment set out for the real estate exposure class, among others, the "*ability of the borrower to repay*" (see paragraph 60 of the final Basel III text for CR-SA, which redirects to paragraph 61) should be assessed. The rules text requires institutions to "*put in place underwriting policies with respect to the granting of mortgage loans that include the assessment of the ability of the borrower to repay*". Those policies must:
- a) delineate metrics (such as the loan's debt service coverage ratio);
  - b) specify their corresponding relevant levels to conduct such assessment.
195. Metrics and levels for measuring the ability of the borrower to repay should mirror the FSB Principles for sound residential mortgage underwriting practices (April 2012)<sup>34</sup> (hereinafter FSB Principles). Furthermore, *underwriting policies must also be appropriate when the*

<sup>33</sup> <https://eur-lex.europa.eu/eli/dir/2014/17/oj>

<sup>34</sup> [https://www.fsb.org/wp-content/uploads/r\\_120418.pdf?page\\_moved=1](https://www.fsb.org/wp-content/uploads/r_120418.pdf?page_moved=1)

*repayment of the mortgage loan depends materially on the cash flows generated by the property, including relevant metrics (such as an occupancy rate of the property).*

196. Paragraph 61 of the final Basel III text for CR-SA confers to the national supervisors the power to provide guidance setting out appropriate definitions and levels for these metrics in their jurisdictions.
197. Article 125(2) (b) of the CRR already today requires institutions to “... determine maximum loan-to-income ratios as part of their lending policy and obtain suitable evidence of the relevant income when granting the loan...”. However, this requirement is limited to exposures fully and completely secured by residential real estate and seems to be only relevant in Member States where the derogation according to Article 125(3) of the CRR cannot be used.
198. Further, the “FSB Principles for Sound Residential Mortgage Underwriting Practices” require lenders to evaluate not only the current consumer's income capacity but also the consumer's income history and its future ability to repay, taking into account all relevant factors and information. These Principles are applicable only to loans to individuals (consumers) that are secured by residential real estate.
199. The EBA also published a number of GL (GL on creditworthiness assessment<sup>35</sup>; GL on credit institutions credit risk management practices and accounting for expected credit losses<sup>36</sup>; GL on management of non-performing and forborne exposures<sup>37</sup>) in which institutions are required to assess the creditworthiness of the borrower.
200. Moreover, the EBA does not see the need to provide further guidance on appropriate definitions and levels for the metrics used in addition to what institutions have to assess under Article 125(2)(b) of the CRR. However, this requirement to “... determine maximum loan-to-income ratios as part of their lending policy and obtain suitable evidence of the relevant income when granting the loan...” should also be applied to CRE loans.

### 3.8.8 Condition for exclusion from IPRRE treatment

#### Recommendation CR-SA 30: Exclusion from IPRRE treatment

It is the EBA's opinion that, with regard to the conditions for excluding exposures from being treated as Income Producing Residential real estate, the condition on ‘exposures secured by an income-producing residential housing unit, to an individual who has mortgaged less than a certain number of properties or housing units’ should be implemented in a way that the number

<sup>35</sup> <https://eba.europa.eu/documents/10180/1092161/EBA-GL-2015-11+Guidelines+on+creditworthiness+assessment.pdf/f4812d37-06c4-42e4-a9e7-e3cf18501093>

<sup>36</sup> <https://eba.europa.eu/documents/10180/1842525/Final+Guidelines+on+Accounting+for+Expected+Credit+Losses+%28EBA-GL-2017-06%29.pdf>

<sup>37</sup> <https://eba.europa.eu/documents/10180/2425705/Final+Guidelines+on+management+of+non-performing+and+forborne+exposures.pdf/371ff4ba-d7db-4fa9-a3c7-231cb9c2a26a>

of income producing housing units should only be verified for all exposures that already exist when a bank grants a loan to a borrower. Moreover, the number of housing units should not be higher than 4.

201. The revised SA in paragraph 68 allows institutions to exclude certain types of exposures secured by residential real estate from the IPRRE treatment although they may be cash flow dependent by their nature. If an exposure falls into one of the four categories mentioned in paragraph 68 of the rules text for the revised CR-SA, institutions do not have to assess whether an exposure is indeed an IPRRE exposure but may directly apply the general real estate treatment. The reason for excluding certain types of exposures is to avoid unduly high own funds requirements in these specific cases as the types of exposure mentioned in this paragraph exhibit certain risk mitigating characteristics compared to other IPRE exposures such as the property being the primary residence of the borrower or the property being owned by a cooperative whose members have their primary residence in the property. The second bullet point of paragraph 68 excludes the following type of exposures from IPRRE:
- ‘An exposure secured by an income-producing residential housing unit, to an individual who has mortgaged less than a certain number of properties or housing units, as specified by national supervisors.’
202. The second consultative paper for the revised CR-SA already included a similar exemption in footnote 49 to paragraph 56, which however was much more specific and restrictive: ‘Exposures secured by properties where the borrower lives in one unit and rents other unit(s) within the same property will be automatically excluded from this penalised treatment (i.e. risk weighting is IPRE) as long as the number of units is not higher than 4.’
203. During the finalisation of the framework the Basel Committee decided that more generally individual borrowers with a small number of mortgaged income producing properties should not be included under IPRRE. Therefore, footnote 49 was changed in order to incorporate these exposures. However there were split views on whether the text should be more precise regarding the number of mortgaged income producing properties since in other parts of the text (e.g. paragraph 60 (finished property) and the previous footnote 49) the text mentions a fixed number of housing units. The final agreement was to not set a fixed number and in this way to align the rules text for the revised CR-SA to what is set out in the second bullet of paragraph 231 of the Basel II framework for the IRB approach.
204. The second consultative document already provided an indication on what the Basel Committee had in mind when allowing the exemption in paragraph 68. Similar to what is required in paragraph 60 for un-finished property, there should obviously be some de-minimis cases where an individual owns some rental property but this is clearly not his main economic activity. Most commonly, such borrowers are expected to be high-net-worth individuals, who in any case will have other sources of income than solely relying on the cash flows generated from the rental property for repaying the loan.

205. Therefore, as a way forward also for the purposes of paragraph 68, second bullet, the same approach could be chosen with respect to the “finished property”-requirements in paragraph 60: The objective of the Basel rule would obviously be met as long as the number of income-producing residential housing unit is sufficiently small. Unless there is strong evidence that it would not be appropriate for the European markets, the threshold of three (if we consider that based on CP 2, the total number of housing units owned by the borrower should not be higher than four) or four additional income producing housing units is recommended for implementing the requirements of paragraph 68 of the revised CR-SA.
206. However, there is an additional problem with the Basel rules text with respect to this issue, as it does not include a direct link between the exposure in question and the collateral that is securing this exposure. In practice this could lead to the situation where the borrower finances income producing housing units up to the allowed threshold with one bank and then goes to a second bank and acquires additional income producing housing units. This is not an issue for the second bank, as it will probably treat the exposure financing the additional housing unit as IPRE. The problem exists for the first bank, which originally treated and especially also priced its exposure as not being IPRRE but now may no longer be allowed to make use of the exemption mentioned in paragraph 68, second bullet, as the borrower now owns more than the allowed number of income producing housing units. . In essence, the own funds requirements of the first bank will depend on the lending decision of the second bank, though indeed this lending decision of the second bank can increase the dependency of the payment ability of the obligor on the income produced by all the financed properties, thus in practice does increase the risk also for the first bank.

### 3.8.9 Treatment of exposures where the servicing of the loan materially depends on the cash flows generated by a portfolio of properties owned by the borrower

#### **Recommendation CR-SA 31: Material dependence on cash flows generated by a portfolio of properties**

In the EBA’s opinion, it is not relevant whether the other sources of income of the borrower are other real estate properties or any other type of investment such as debt securities or equities. Therefore, the assessment should only focus on whether the servicing of a loan materially depends on the cash flows stemming from the property securing the loan.

207. While the general criteria for classifying an exposure as IPRE foresee a one-to-one relationship between an exposure and a property securing this exposure (see paragraphs 67 and 73: “...prospects for servicing the loan materially depend on cash flows generated by the property securing the loan...”), footnote 50 introduces a national discretion to carry out the material dependence assessment for IPCRE also on a portfolio basis. Originally, this discretion was also foreseen for IPRRE; it is not clear why it has been dropped in the final rules text.
208. When the Basel III framework was finalised, there were different views regarding what the introduction of the IPRE sub-category is actually supposed to achieve. One view was that IPRE

should include exposures to individuals or companies whose main source of activity is renting or selling real estate. In order to capture this, material dependence should be understood on a portfolio basis: if more than 50 % of the total income from the borrower used in the bank's assessment of its ability to repay is from cash flows from the portfolio of properties owned by the borrower, the exposure should be classified as IPRE. The other view was that the rules should stick to the approach in the second consultative document and the idea of IPRE being a type of specialised lending exposure. According to this view the original intention behind its introduction also in the CR-SA was to address situations where the borrower and the financed property are effectively the same. While the text of paragraphs 67 and 73 reflect the second view, the first view is reflected in footnote 50.

209. It is proposed not to implement footnote 50 and only require to assess whether the servicing of a loan materially depends on the cash flows stemming from the property securing this loan. It is deemed irrelevant whether the other sources of income of the borrower are other real estate properties or any other type of investment such as debt securities or equities. This is especially true for larger real estate companies which may have a well-diversified and dynamic portfolio of properties.

### 3.8.10 Land acquisition, development and construction exposures – general treatment

#### Recommendation CR-SA 32: Implementation of the ADC sub-exposure class

The EBA recommends the implementation of the Land Acquisition, Development and Construction (ADC) sub-exposure class and the associated RW treatment, given the risk incurred by loans financing any of the land acquisition, development or construction of any properties where the source of repayment at origination of the exposure is either the future uncertain sale of the property or cash flows whose source is substantially uncertain.

210. With a view to introducing further risk sensitivity in the CR-SA, and particularly in the real estate exposure class, the final Basel III framework has introduced a new subset of exposures, ADC, which includes loans financing any of the land acquisition, development or construction of any properties where the source of repayment at origination of the exposure is either the future uncertain sale of the property or cash flows whose source is substantially uncertain (e.g. the property has not yet been leased to the occupancy rate prevailing in that geographic market for that type of real estate). Instead of the initial proposal to introduce ADC exposures as a sub-type of specialised lending exposures, the BCBS has eventually decided to include ADC as a sub-type of real estate exposures in order to clarify the conceptual distinction between specialised lending and real estate exposures.
211. According to the CfA QIS, the impact of the introduction of this sub-set of accounts for 0.5% of the overall 1.1% impact of the real estate class on the RWAs of the SA book. Moreover, it should be mentioned that this impact is over-estimated by the fact that it has been assumed that the same 150% RW has been applied to both SPVs and companies, as well as residential borrowers. This is mainly due to the fact that it was not feasible to set the necessary

thresholds to identify those exposures that would warrant a preferential RW treatment of 100% (see section 3.8.11).

### 3.8.11 Conditions for the application of 100% RW for certain Land acquisition, development and construction (ADC) exposures

#### Recommendation CR-SA 33: Preferential RW treatment for certain ADC exposures

The EBA considers that, in order for certain ADC exposures to qualify for preferential treatment, their speculative character needs to be assessed, while a harmonised identification of the speculative features needs to be available across Member States. As this can only be achieved by providing thresholds separating speculative from non-speculative ADC exposures, which should be calibrated based on empirical evidence, the EBA recognises that further work is necessary and thus recommends a mandate be granted to the EBA for specifying the conditions for assigning a 100% RW to certain ADC exposures.

212. Paragraph 75 of the new Basel framework allows for a preferential RW of 100% for ADC exposures where the following two criteria are met:
- a) prudential underwriting standards meet the requirements in paragraph 60 where applicable;
  - b) pre-sale or pre-lease contracts amount to a significant portion of total contracts or substantial equity at risk<sup>38</sup>. Pre-sale or pre-lease contracts must be legally binding written contracts and the purchaser/renter must have made a substantial cash deposit which is subject to forfeiture if the contract is terminated. Equity at risk should be determined as an appropriate amount of borrower-contributed equity to the real estate's appraised as-completed value.
213. With regard to the 2nd bullet point, several clarifications are needed in order to provide for a clear implementation that would not result in additional variability in the SA:
- a) definition/ quantification of what a 'significant' portion of total contracts means;
  - b) definition/ quantification of what 'substantial' equity at risk means;
  - c) definition/ quantification of what 'substantial' cash deposit means.
214. As the CfA explicitly requires the EBA to 'analyse the risk-sensitivity of the conditions for applying the 100% RW considering also the criteria currently applied in the EU for distinguishing non-speculative from speculative immovable property financing', the issue has been included in the qualitative questionnaire, where participants were kindly asked to fill in the amounts of the speculative immovable property portfolio which would fit into different

<sup>38</sup> National supervisors will give further guidance on the appropriate levels of pre-sale or pre-lease contracts and/or equity at risk to be applied in their jurisdictions.

buckets based on thresholds for pre-sale or pre-lease contracts (i.e. 0%-30%, 30%-40%, 40%-50%, 50%-70% and >70%) and equity at risk (i.e. 0%-15%, 15%-20%, 20%-25%, 25%-30% and >30%). Unfortunately, the feedback provided by the participating institutions is scarce and not very helpful – only 16 respondents provided information regarding the pre-sale or pre-lease contracts, while only 3 replied to the question about equity at risk. Moreover, only 27% of the respondents provided information regarding the current content of their speculative immovable property portfolio, while only 18% informed about the share of the current speculative immovable property portfolio that would qualify as ADC in the future.

215. Based on the information currently available, it is not possible to identify hard thresholds for any of the elements in paragraph 208 a), b) or c) within the CfA Report timeline. However, providing clarity or specific thresholds for the above-mentioned elements is all the more important given that not providing further guidance would result in a source of variability regarding the implementation of an exposure class which is characterised by its speculative features. As it is clear that more work is needed on this topic, it is proposed that a mandate be assigned to the EBA in order to frame and monitor the implementation of such criteria.

### 3.9 RW multiplier to certain exposures with currency mismatch

#### Recommendation CR-SA 34: RW multiplier for certain exposures with FX mismatch

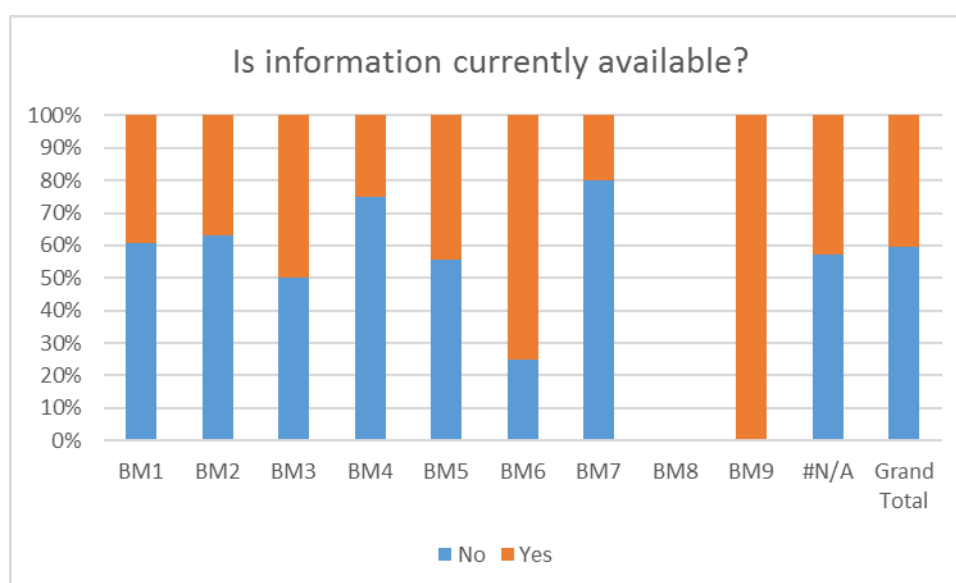
The EBA recommends the implementation of the RW multiplier for unhedged retail and residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income, both to currently existing loans as well as newly originated loans. Furthermore, where institutions are unable to single out those loans with a currency mismatch, the RW multiplier should be applied to the whole stock of unhedged retail and residential real estate exposures to individual denominated in a currency different to the national currency in the jurisdiction where the loan is originated.

216. The final Basel III text introduces a 1.5 RW multiplier for 'unhedged retail and residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income'. The resulting maximum RW to be applied is capped at 150%. This revision was introduced as institutions with a significant portion of their loans denominated in foreign currencies to borrowers with income in a different (i.e. their own domestic) currency may see the credit risk of the borrowers rise as a consequence of rapid changes in foreign exchange rates.
217. The qualitative questionnaire explored how feasible the implementation of this point would be for institutions. Based on the replies of the participants to the qualitative questionnaire (178 respondents), 60% do not currently have the means to monitor the currency of the borrower's source of income during the loan period. This conclusion does not vary significantly according to the size of the bank, but does present a certain variability based on

the business model<sup>39</sup> of the respondents. Roughly the same percentage (60%) considers that it would be difficult to monitor the currency a debtors' income is paid in (c.f. graphs below).

218. The reasons for the difficulty in the monitoring of the information are varied: i) monitoring would require extensive IT costs; ii) sourcing the data would be complex; iii) data is available at origination only, but no monitoring is conducted; iv) other (data not deemed useful; income and currency information is looked up for SMEs and corporates, but not retail; FX retail portfolios are very small; institutions do not have regular payment accounts, nor current accounts; some institutions have internal policies to prevent it).

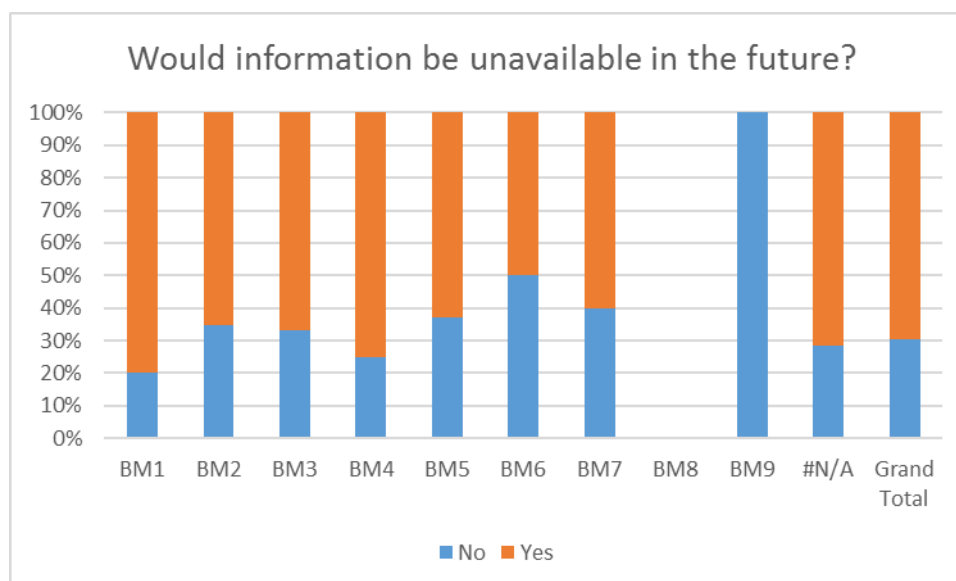
Figure 19: Availability of information



<sup>39</sup> BM1 – Cross-border universal institutions; BM2 – Local universal institutions; BM3 – Automotive, consumer credit institutions; BM4 – Building societies; BM5 – Locally active savings and loan associations/ cooperative institutions; BM6 – private institutions; BM7 – Custody institutions; BM8 – CCPs; BM9 – Merchant institutions; BM10 – Leasing and factoring institutions; BM11 – Public development institutions; BM12 – Mortgage institutions including pass-through financing mortgage institutions; BM13 – Other specialised institutions



Figure 20: Future availability of information



219. With regard to the scope of application of this multiplier, there are concerns that applying the instrument only to the newly originated loans would not solve the issue of borrowers exposed to the risk of FX-rate volatility, as some jurisdictions, mainly outside the Eurozone, still hold significant amounts of FX vintages with long maturities (mainly mortgage loans). Concerning non-Eurozone jurisdictions, several episodes (e.g. CHF lending) affecting borrowers exposed to FX-rate volatility have resulted in NCAs taking measures for encouraging lending in national currency (e.g. Hungary's decision to ban FX lending), which is now on an upward trend. However, significant stocks of FX-loans persist, particularly long maturity loans.
220. Since, based on the evidence provided via the qualitative questionnaire, but also based on the feedback received during the QIS<sup>40</sup>, it appears difficult to track the potential currency mismatch with the borrowers' currency of income, while the materiality of FX-loans in the stock of loans to households in certain jurisdictions remains significant, an extension of the scope of application of the RW multiplier to institutions' full stock of FX loans should be considered. However, should institutions be able to identify those exposures with currency mismatch, the RW multiplier should only be applied to those specific exposures. This measure should be considered an incentive for institutions to adjust their policies with regard to monitoring.

### 3.10 Off-balance sheet items

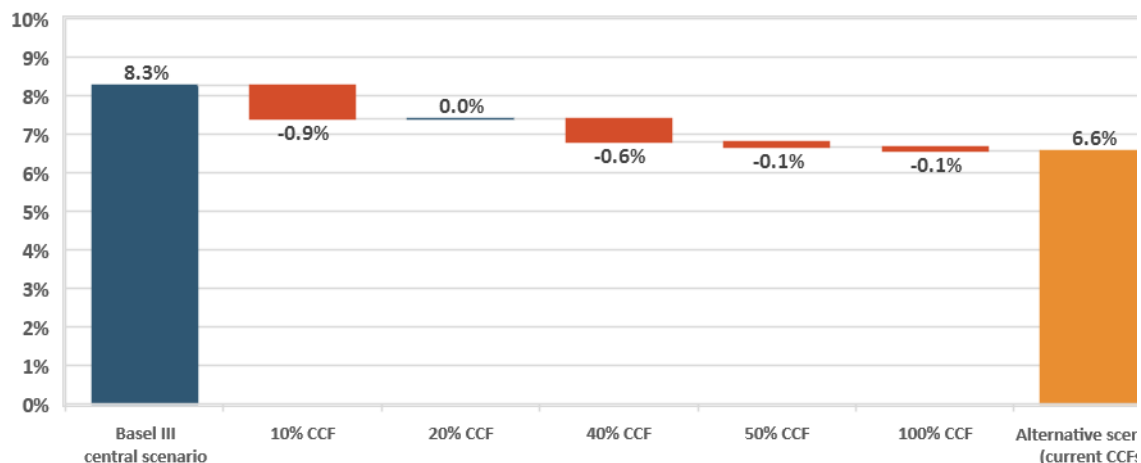
#### Recommendation CR-SA 35 : Revised treatment for OBS items

<sup>40</sup> The QIS finds that only about 0.4% of the total SA exposure in the EU would be subject to the specific measure under consideration. Accordingly, the contribution of the currency risk multiplier to the total 8% average increase in SA RWAs appears to be as low as 0.1%. But in the light of the marked difficulty in identifying the corresponding exposures, these numbers seem significantly underestimated.

It is the EBA's opinion that the new CCFs of 10% and 40% should be introduced. However, the EBA recognises this alignment will result in a need to re-assign OBS items in Annex I of the CRR according to the new structure of the CCFs. Furthermore, the EBA considers that there is a need to further clarify the criteria for allocation of items to Annex I of the CRR, as well as provide guidance on those factors that constrain the ability to cancel commitments and also specifying the process for notifying the EBA on institutions' classification of specific OBS items in Annex I categories. Hence, the EBA is asking a mandate for an RTS be assigned in order to further specify the treatment of OBS items.

221. The final Basel framework for CR SA includes three CCFs which are different compared to the current CRR (of which only the first two represent changes in the Basel framework):
- a) 10% applies to unconditionally cancellable commitments – the corresponding CRR CCF is 0%;
  - b) 40% applies to all other commitments, regardless of the maturity of the underlying facility – the corresponding CRR CCFs are 20% (for commitments with a maturity up to one year) and 50% (for all other commitments);
  - c) 50% applies to certain transaction-related contingent items (eg performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) – the corresponding CRR CCF is 20%.
222. Figure **21** shows the impact on RWA resulting from the final Basel III framework including the impact from implementing the revised CCFs for OBS exposure as well as excluding this impact. The difference in impact is provided for each CCF separately:

Figure 21: Percentage change in SA RWA due to application of revised credit conversion factors (relative to total current SA RWA)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 94 banks. CCF, credit conversion factor.

223. Under the CRR, the elements classified as “full risk” OBS items in Annex I map almost completely the items associated with a 100% CCF in the final Basel III text. For the remaining categories however, there is a difference in approach between the two frameworks: where the CRR details the list of items qualifying for different categories, the final Basel III framework gives a loose description of the elements that should be associated with each type of CCF. Nonetheless, despite providing under the CRR a list/examples for what should be included in each CCF category under the CRR, there is an affluence of Q&As with regard to classification of items.
224. In order to better understand the challenges that the classification of OBS items under Annex I poses, an analysis of the EBA-received Q&As has been carried out. With particular regard to the kind of issue raised by submitters, we can identify two main reasons to submit a Q&A: i) Annex I provides a non-exhaustive list of items for each risk category, which is completed by a residual point that is meant to include “other items” which carry the same risk of the previous ones; stakeholders have therefore experienced difficulties in understanding what is the common denominator of the items listed under each category; or ii) it is not clear what are the items listed in Annex I and/or why they are included under a risk category rather than a different one.
225. More precisely, the outcome of the analysis shows there are currently 19 Q&As, mostly published, related to the classification of OBS items. According to the issue they are addressing, the main difficulties raised by these Q&As can be summarized as follows (knowing that often one Q&A will include several aspects to be considered):
- a) Is a certain item within the scope of Annex I? – 6 Q&As;

- b) In what risk class a certain item should be classified according to Annex I based on its characteristics? - 13 Q&As;
  - c) Is the 'full risk' category the default category if an item cannot be associated with any other risk category in Annex I? – 4 Q&As;
  - d) Interaction with CRM provisions – 4 Q&As;
  - e) Clarifications with regard to the maturity to be considered – 5 Q&As.
226. Several Q&As deal with clarifications regarding the classification as credit substitute, while other deal with the definition of credit line. Another element that warranted clarifications through Q&As was the notion of 'unconditionally cancellable commitment', as well as the distinction between revocable and irrevocable commitments and agreements to lend. Additionally, a short list of specific items brought forward by the various Q&As comprises:
- a) Documentary credit and self-liquidating transactions;
  - b) Uncommitted lines;
  - c) Committed reverse repo facilities and other committed credit facilities conditional on purchasing/receiving eligible collateral;
  - d) Invoice discount facilities;
  - e) Irrevocable standby letters of credit not credit substitutes, nor related to trade finance;
  - f) Performance bonds;
  - g) Guarantees for payment of delivered goods and services;
  - h) Long term letters of credit arising from the movement of goods;
  - i) Contingent liabilities within the merchant services industry;
  - j) Proposals for mortgage extensions.
227. All these different strands of discussion on the construction and content of Annex I illustrate the need to, at a minimum, carry out work on specifying the notions based on which items are allocated to Annex I (e.g. Basel III has a definition for the term 'commitments') and better explain what should be included in Articles 1(k), 2(b)(iv), 3(b)(ii) and 4(c) of Annex I in the CRR. It is proposed that a mandate is given to the EBA in order to clarify criteria for allocation of items to Annex I.
228. Furthermore, with regard to the newly introduced CCF of 10% for UCCs, paragraph 84 of the final Basel text for CR SA advises that 'national supervisors should evaluate various factors in the jurisdiction, which may constrain institutions' ability to cancel the commitment in

practice, and consider applying a higher CCF to certain commitments as appropriate'. It is currently unclear how institutions should proceed in the identification process. It is proposed to provide guidance on those factors that constrain the ability to cancel commitments in the mandate for the RTS on Annex I.

229. Finally, in Annex I of the CRR, articles 2(b)(iv), 3(b)(ii) and 4(c) refer to 'other items also carrying [medium; medium/low; low] risk and as communicated to the EBA'. The notification process for these cases is not referenced in the CRR and it is unclear for stakeholders (as evidenced from different questions received from eGate users):
- a) Who should notify the EBA?
  - b) What is the content and purpose of the notification?
  - c) What will be done with the information received via this notification?
230. Based on discussions regarding this notification process, it would appear that further work is needed in order to outline a process that is efficient and useful for its purposes, thus it is proposed to include the notification process in the mandate for the RTS on Annex I.

## 3.11 Other assets

### 3.11.1 Gold bullion backed by bullion liabilities

#### Recommendation CR-SA 36: Gold bullion backed by bullion liabilities

The EBA considers that, with regard to the treatment for other assets, the conditions where a 0% RW shall be assigned to gold bullions in line with Article 134(4) of the CRR should be clarified. Hence, it should be specified that the gold liability rests with the entity that has the gold under custody on behalf of the owner and that the owner has a right to sort out the gold in case of insolvency of the custodian.

231. Q&A 2017/3649<sup>41</sup> enquires about the RW treatment where a gold bullion is held on the behalf of an institution by other institutions and where such investment is not backed by gold bullion liabilities. While the answer clarifies that where the conditions of Article 134(4) of the CRR are not met, the counterparty RW should be applied to the gold exposure, it does not provide clarity on the conditions for applying Article 134(4) of the CRR.

### 3.11.2 Residual value of leased assets

#### Recommendation CR-SA 37: Residual value of leased assets

<sup>41</sup> [https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017\\_3649](https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017_3649)

The EBA considers that, in the case of the residual value of leased assets, the exposure value should refer directly to the accounting value at the end of the lease that remains after minimum lease payments or bargain options, while the recognition of CRM for operating leases should be aligned under both the SA and the IRB Approach.

232. In the CRR, the treatment is described in one article (art 134(7)) for the SA, but split in 3 different articles for the IRB (art 147(9) for the classification – article 156(b) for the RW computation – article 166(4) for the exposure value computation). This discrepancy should be seen as an inconsistency in the presentation, not in the treatment itself; but the EU Regulatory Consistency Assessment Programme (RCAP) noticed a small difference<sup>42</sup>, i.e. *‘While the IRB Approach correctly uses the term ‘exposure value’ in the formula  $[(1/t * Exposure\ value)]$ , the Standardised Approach uses the term ‘residual value’  $[(1/t * Residual\ value)]$ ’*. BII<sup>43</sup> and BIII<sup>44</sup> also have an inconsistency, since there is no specific methodology to measure the ‘residual value’ under SA.
233. The residual value used for the SA is obviously meant to refer to the current accounting value. The formula  $1/t * 100\% * residual\ value$  [Article 134(7) CRR] is supposed to apply a 100% RW to the value remaining at the end of the lease, where t refers to the remaining years of the lease. This suggests the assumption is linear amortisation of the value currently recorded as residual value on the balance sheet. This is not different on substance from the IRB Approach which determines the exposure value of other non-credit obligation assets as the accounting value after specific credit risk adjustments (Article 168 of the CRR), thus also as the residual value currently recorded on the balance sheet. The future formula for the exposure value should be more general than the current formulas. As explained above,  $1/t * residual\ value$  assumes linear amortisation over the remaining lease term. This assumption does not necessarily hold under all applicable accounting frameworks. The exposure value should therefore directly refer to the accounting value at the end of the lease that remains after minimum lease payments or bargain options, because this is the amount that remains exposed to loss risk after all payment obligations have been fulfilled.
234. Moreover, the CRR should further specify the treatment of leased assets in relation to the exposures arising from minimum lease payments in case of operating leases. While for financing leases the leased asset is typically pledged as collateral, thus the general rules for funded CRM are applicable, in case of operating leases the leased asset is owned by the institution itself. In this case, the minimum lease payments rather serve for covering the risk of depreciating value of the leased asset. Nevertheless, the ownership over the leased asset achieves the same CRM in case of failures on the minimum lease payments, and could be even easier enforceable than for a leased asset “solely” pledged as collateral in case of financing leases. This justifies treating minimum lease payments also in case of operating

<sup>42</sup> See page 35 of EU RCAP

<sup>43</sup> SA: para: 81 (no specific treatment) IRB: para 524

<sup>44</sup> SA: para: 95 (no specific treatment) IRB: para 299 (no change)

leases as collateralised by the leased asset where eligible as funded CRM under the CRR. This treatment is already explicitly allowed under Basel standards for the IRB Approach (Basel II, 523 / d242, IRB, 298), where this is not constrained to financing leases. However, Basel standards apply additional conditions that are currently missing in the CRR, in particular that the difference between the rate of depreciation of the physical asset and the rate of amortisation of the lease payments must not be so large as to overstate the CRM attributed to the leased assets. The CRR should explicitly allow the same recognition of CRM for operating leases under both the SA and the IRB Approach.

## 3.12 Credit risk mitigation framework (CRM)

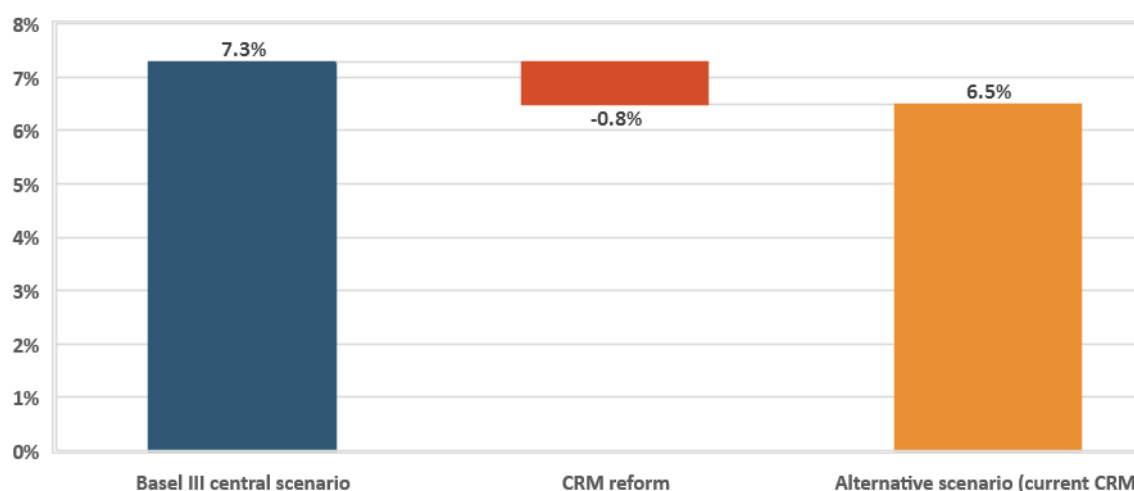
### 3.12.1 Impact of the Basel III revisions to the current CRM framework

#### **Recommendation CR-SA 38: Revised CRM framework**

The EBA recommends that the CRM framework be aligned with the revised Basel III provisions for CRM under the CR SA.

235. The final Basel III framework brings a series of changes to the CRM provisions:
- a) the removal of own estimates of haircuts when using the comprehensive approach for taking into account the effects of the collateral posted or received;
  - b) supervisory haircuts under the comprehensive approach for taking into account the effect of collateral posted or received;
  - c) full recognition of credit derivatives, where restructuring is not specified as a credit event;
  - d) no recognition of n-th-to-default products.
236. The overall impact of the implementation of the revised CRM provisions has been studied via the QIS:

Figure 22: Percentage change in RWA due to the application of revised CRM reform



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Note: Based on a sample of 61 banks.

237. Moreover, the EBA has also studied the perception of institutions regarding the amendments brought to the CRM framework via the qualitative questionnaire. Questions addressed separately the expected impact on the level of RWA for the SA portfolio of each of the above-mentioned amendments.
238. On the expected impact of the removal of own estimates of haircuts when using the comprehensive approach for taking into account the effects of the collateral posted or received (in line with paragraph 155 of the final Basel text for the SA), there was a response rate of 52%, of which 79% expect a variation smaller than 0.5% of their SA RWA and 20% expect an increase higher than 0.5%. The results vary marginally when analysed by size of the bank and by business model.
239. Regarding the impact of the proposed supervisory haircuts under the comprehensive approach for taking into account the effect of collateral posted or received (in line with paragraphs 163 and 164 of the final Basel text for the SA), there was a 67% response rate, of which 70% expect a variation smaller than 0.5% of their SA RWA, while 27% expect an increase higher than 0.5%. Here as well the analysis by size and business model does not bring added value compared to the overall results.
240. As far as the impact of the full recognition of credit derivatives, where restructuring is not specified as a credit event, but where the requirements of footnote 83 of the final SA under Basel III are met, there was a 52% response rate. 90% of the respondents expect a marginal variation of their SA RWA amounts (+/- 0.5%), with these results being robust to a size and business model analysis.
241. The removal of recognition of nth-to-default credit derivatives was also the object of the qualitative questionnaire and had a response rate of 52%. Of the respondents, only a very



small minority expect an increase of their SA RWA higher than 0.5%, result which is robust with regard to size of the institution and business model.

242. Institutions were also asked to rank from the most impactful to the least impactful CRM amendments, and the results are similar for the overall sample as well as the analysis by size and business model. The order is the following (from the largest expected impact to the smallest expected impact):
- a) Recalibrated haircuts;
  - b) Removal of use of own estimates;
  - c) Full recognition of credit derivatives;
  - d) Removal of the use of n-th to default.

### 3.12.2 Targeted fixes to the current CRM framework (in line with the EBA CRM Report)

#### Recommendation CR-SA 39: CRM framework targeted fixes in line with the EBA CRM Report

The EBA recommends that the targeted fixes provided in the EBA CRM Report published in 2018 be implemented.

#### (i) Guarantor's repayment schedule after default of the obligor

**Policy recommendation:** align the CRR with Basel on the treatment of guarantees, more specifically with paragraph 194 (a) in the final Basel III text for credit risk under SA, which allows the guarantor to either make one lump sum payment or to assume the future payment obligations of the counterparty covered by the guarantee.

243. Q&A 3576 enquires whether the timely payment requirement for unfunded credit protection (UFCP) is fulfilled in a situation where the main obligor defaults and the whole amount of the loan becomes due and payable for him prior to the original scheduled payment dates, but the guarantor has the contractual right to pay according to the original scheduled payment dates of the hedged loan. In particular it is not clear whether, in order to ensure eligibility of the credit protection, the lending institution has to be able to claim the immediate repayment of the whole amount from the guarantor when the whole re-payment of the loan becomes immediately due in the event of a default of the main obligor (or for any other reason that triggers the acceleration clause).
244. The answer reflects the view, whereby, in principle, the guarantee is eligible if it covers any payment due by the obligor, in the sense that the guarantee contract refers to the main obligation, but it is not required to cover also additional clauses that are applicable to the main obligor. Thus, the guarantee should be considered to be eligible irrespective of whether the institution's contract with the obligor contains additional clauses under which the loan

becomes due according to terms different from the originally scheduled payment dates, as it would be e.g. in case of a close out netting agreement.

## (ii) Treatment of on-balance sheet netting (OBSN) with regard to currency mismatch

245. Article 195 of the CRR regarding on-balance sheet netting (OBSN) sets out that OBSN is limited to reciprocal cash balances between the institution and the counterparty. There is no intended limitation of eligibility with regard to currency mismatches.
246. However, Article 219 of the CRR clarifies that loans and deposits with the lending institution ‘denominated in the same currency’ are to be treated by such institution as cash collateral. It is therefore unclear whether OBSN still applies in case of currency mismatch, and which would be the appropriate regulatory treatment in this case.
247. The EBA considers that the phrase ‘denominated in the same currency’ in Article 219 of the CRR ensures that zero haircuts are applied for the purposes of the Financial Collateral Comprehensive Method (FCCM) in the case of OBSN when there is no currency mismatch. However, this phrase is not necessary and could lead to confusion, as the loans and the deposits should also be treated as cash collateral where there is a currency mismatch, with the only difference being that under the FCCM a volatility adjustment for currency mismatch applies in line with Article 224(1) of the CRR, Table 4.
248. To recognise the effects of OBSN, one can also apply the Financial Collateral Simple Method (FCSM). In this case, should a currency mismatch occur, the RW assigned to the collateralized portion of the exposure shall be at least 20% (as per Article 222(3) of the CRR), which is expected to mitigate said currency mismatch.

**Policy recommendation:** it is advised to amend Article 219 of the CRR:

*‘Loans to and deposits with the lending institution subject to on-balance sheet netting are to be treated by that institution as cash collateral for the purpose of calculating the effect of funded credit protection for those loans and deposits of the lending institution subject to on-balance sheet netting ~~which are denominated in the same currency.~~’*

## (iii) Cash Assimilated Instruments (CAIs) used as a technique of credit risk mitigation

249. Under Article 4(1)(60) of the CRR, a cash assimilated instrument (CAI) is defined as a “certificate of deposit, a bond, including a covered bond, or any other non-subordinated instrument, which has been issued by an institution, for which the institution has already received full payment and which shall be unconditionally reimbursed by the institution at its nominal value”.
250. In Q&A [2015\\_1917](#) it is clarified that ‘an unconditionally drawable letter of credit held directly by an institution as beneficiary cannot be treated as cash assimilated instruments, to the extent that it is issued by a party different from the lending institution (and guarantees a

payment obligation vis-à-vis the latter).’ The underlying rationale is that, in order for this technique of CRM to be considered similarly to cash on deposit with the lending institution for the purposes of Article 197(1)(a) of the CRR, it should be issued by the lending institution.

251. This interpretation is consistent with the treatment of cash on deposit with the lending institution and CAIs referred in Article 197(1)(a) of the CRR as cash collateral under the FCCM (i.e. zero volatility adjustments apply, unless there is a currency mismatch). In the same way, for the purposes of the FCSM under Article 222(6)(a) of the CRR, the collateralized part of the exposure would be assigned a zero RW. This follows from the fact that the lending institution would not need to liquidate the collateral upon default of the obligor (as it effectively issued it) and thus to capitalize the risk that the collateral could default or lose value while liquidating, but would instead just directly offset the loss resulting from the borrower with its liability on the CAI, which is no longer supposed to reimburse to external parties.<sup>45</sup> It is therefore recommended to amend the level 1 text to clarify that CAIs referenced in Article 197(1)(a) of the CRR are only those issued by the lending institution.
252. In addition, for the purposes of the CAIs mentioned in Article 200(a) of the CRR and used as a form of OFCP, it is useful to clarify in the level 1 text that they should be only those issued by the lending institution. The requirements and CRM mechanics envisaged for these CAIs are described in Articles 212(1) and 232(1) of the CRR, and such CAIs are therefore treated as a guarantee provided by the third party institution holding the CAI. The suggestion to clarify that those CAIs be only those issued by the lending institution is motivated by the fact that the lending institution, which upon default of the obligor will be paid the CAI held by the third party institution mentioned in Article 200(a) of the CRR, bears the risk that the CAI is defaulted at the time of the payment by the third party institution (and thus may receive no protection), and this risk is not recognised as part of the mechanics to recognize the CRM effects, unless it is in fact the lending institution that has issued itself the CAI.
253. To support this rationale, it is also noted that the above understanding was reflected in Directive 2006/48/EC by the definition of CAI specified in Article 4(35) of that Directive: “‘cash assimilated instrument’ means a certificate of deposit or other similar instrument **issued by the lending credit institution**”, which effectively limited CAIs to be instruments issued by the lending institution.

**Policy recommendation:** it is advised to amend Article 4(1)(60) of the CRR:

“certificate of deposit, a bond, including a covered bond, or any other non-subordinated instrument, which has been issued by ~~the lending institution-an institution~~, for which the **lending** institution has already received full payment and which shall be unconditionally reimbursed by the **lending** institution at its nominal value”.

<sup>45</sup> On the contrary it would not be appropriate to allow – under Article 197(1)(a) CRR – CAIs which are issued by institutions different than the lending institution, as they would otherwise be assigned either a zero risk weight under the FCSM (c.f. Article 223(6) CRR) or zero volatility adjustments under the FCCM, while those instruments are still subject to credit risk and possible deterioration in value, and should therefore be treated similarly to other types of financial collateral.

254. While the proposed amendment in Article 4(1)(60) of the CRR would ensure an adequate CRM treatment for CAIs referred to in Articles 197(1)(a) and Article 200(a) of the CRR, it is nevertheless noted that, should this amendment not be directly introduced in Article 4(1)(60) of the CRR, relevant Articles affecting CAIs used under the CRM Framework should be amended to reflect the above understanding. For example, an alternative could be to clarify in Article 192 of the CRR that CAIs mentioned in Chapter 4 refer exclusively to CAIs issued by the lending institution.

(iv) **Cash Assimilated Instruments (CAIs) used as a form of OFCP**

255. Consistently with the above understanding regarding the use of CAIs as referred to in Article 200(a) of the CRR, it should be clarified that Article 232(1) of the CRR references these instruments as well. It is therefore proposed to amend Article 232(1) of the CRR with a view to providing clarification in this regard.

**Policy recommendation:** It is proposed to amend Article 232(1) of the CRR:

‘Where the conditions set out in Article 212(1) are met, cash on deposit with, or cash assimilated instruments held by, a third party institution **in a non-custodial arrangement and pledged to the lending institution**, may be treated as a guarantee provided by the third party institution.’

**Forms of gold eligible under Article 197(1)(g) of the CRR**

256. Clarification was sought on the definition of ‘gold’ under Article 197(1)(g) of the CRR: the lack of further specification may give way to different interpretations of the term, thus resulting in national interpretation of the forms of gold which could be considered eligible under Article 197(1)(g) of the CRR.

257. For example, it was enquired whether synthetic exposures towards gold (e.g. exchange traded funds (ETFs) tracking the gold price) may be considered ‘gold’ in the context of Article 197(1)(g) of the CRR. The EBA has therefore considered whether a specification or amendment of the term in Article 197(1)(g) of the CRR would be beneficial to ensure further clarity and harmonisation of this term.

258. Under the SA, direct exposures towards gold are treated under Article 134(4) of the CRR, which refers to ‘gold bullion’. In this context, [Q&A 2016\\_3011](#) provides further clarification on the forms of gold understood by ‘gold bullion’. This term (i.e. ‘gold bullion’) refers to gold in the form of a commodity (e.g. gold bars, ingots, coins, etc.) commonly accepted by the bullion market, for which liquid markets exist and whose value is determined by the value of its gold content, rather than its numismatic interest, defined by purity and mass.

259. However, the CRR does not provide a detailed definition of gold (e.g. on the basis of its technical composition<sup>46</sup>) for the purposes of direct exposures towards gold under Article

<sup>46</sup> Such as for example a definition similar with the one provided in Article 344 of Council Directive 2006/112/EC.

134(4) of the CRR. As such, it might not be appropriate to introduce a definition limited to gold that may be used under Article 197(1)(g) of the CRR.

260. On the other hand, forms of gold under Article 197(1)(g) of the CRR are also expected to be gold in the form of a commodity that the institution receives as collateral on its exposures, rather than synthetic instruments whose value is associated with the gold price. As a consequence, it is proposed to substitute the term ‘gold’ in Article 197(1)(g) of the CRR with ‘gold bullion’, which would ensure consistency with the term and understanding of gold specified in Article 134(4) of the CRR.

**Policy recommendation:** It is proposed to amend Article 197(1)(g) CRR:

‘gold **bullion**’

**(v) Eligibility of financial collateral based on credit assessments of non-nominated ECAIs**

261. Article 197(1) of the CRR sets out the types of collateral which are eligible under all approaches and methods for the determination of minimum own funds requirements for credit risk. According to points (b), (c), (d) and (e) of this paragraph, this includes debt securities issued by central governments or central banks, institutions and other entities which are required have a credit assessment by an ECAI (or an ECA in case of debt securities issued by a central government or a central bank) that corresponds to at least a certain minimum credit quality step as determined by the EBA according to the rules set out under the standardised approach for credit risk.
262. For the determination of RWs for direct exposures, Article 138 of the CRR is clear that for this purpose institutions may only use credit assessments of ECAIs they have explicitly nominated for this purpose. In contrast, what appears not to be clear from the text of the CRR is whether institutions may rely on a credit assessment issued by any ECAI with respect to a certain debt security for determining whether the required minimum credit quality step is met or whether also this determination may only be done based on credit assessments issued by ECAIs or ECAs that are explicitly nominated by the bank for this purpose. Moreover, the text of point (b) of Article 197 (1) on this aspect differs from that of points (c), (d) and (e).

**Policy recommendation:** It is advised to amend Article 197 (1)(b) of the CRR as follows:

‘debt securities satisfying each of the following conditions:

1. are issued by central governments or central banks;
2. have a credit assessment carried out by an ECAI or export credit agency, which credit assessment (i) is recognised as being eligible for the purposes of Chapter 2 and (ii) has been determined by EBA to be associated with credit quality step 4 or

above under the rules for the risk weighting of exposures to central governments and central banks under Chapter 2;'

It is advised to amend Article 197 (1)(c) of the CRR as follows:

'debt securities satisfying each of the following conditions:

1. are issued by institutions;
2. have a credit assessment carried out by an ECAI, which credit assessment (i) is recognised as being eligible for the purposes of Chapter 2 and (ii) has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to institutions under Chapter 2;'

It is advised to amend Article 197 (1)(d) of the CRR as follows:

'debt securities satisfying each of the following conditions:

1. are issued by other entities;
2. have a credit assessment carried out by an ECAI, which credit assessment (i) is recognised as being eligible for the purposes of Chapter 2 and (ii) has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to corporates under Chapter 2;'

It is advised to amend Article 197 (1)(e) of the CRR as follows:

'debt securities having a short-term credit assessment carried out by an ECAI, which credit assessment (i) is recognised as being eligible for the purposes of Chapter 2 and (ii) has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of short-term exposures under Chapter 2;'

#### (vi) Loan commitments contingent on collateral

263. Given several pending Q&As on the topic, it was discussed whether (contingent) collateral to be posted before a loan already committed by the bank is drawn can be recognised as a credit risk mitigant in the calculation of own funds requirements for the corresponding OBS item. In other words, the question is, whether under the condition that a loan will only be paid out when the collateral is available to the bank, the corresponding OBS item may be risk weighted as if being already collateralised even though the collateral is not yet posted to the bank.
264. In this context, it was considered that the own funds requirements for OBS items should reflect their relative riskiness when they become on-balance sheet items. This should be reflected by both their CCF (which has an impact on the exposure value) and their RW. Therefore, where an unsecured OBS item will only become an on-balance sheet item once it

is secured, i.e. the bank will not pay out on its commitment unless collateral has been posted, this OBS item may already be risk weighted as if they were collateralised before the collateral is posted to the bank.

**Policy recommendation:** It is advised to amend Article 193 of the CRR by introducing the following paragraph:

‘Where collateral satisfies all eligibility requirements set out in Chapter 4, it can be recognised as such even for exposures associated with undrawn facilities. Where drawing under the facility is conditional on the prior or simultaneous purchase or reception of collateral to the extent of the institution’s interest in the collateral once the facility is drawn, such that the institution does not have any interest in the collateral to the extent the facility is not drawn, such collateral can already be recognised for the exposure arising from the undrawn facility.’

#### (vii) Requirement in Article 199(6)(d) of the CRR regarding eligibility of physical collateral

265. Paragraph 6 of Article 199 of the CRR sets out eligibility requirements for other physical collateral. One of these requirements is that institutions demonstrate that the valuation of the types of physical collateral used by the institution is sufficiently stable. More specifically, letter (d) of that paragraph requires: ‘The institution demonstrates that the realised proceeds from the collateral are not below 70 % of the collateral value in more than 10 % of all liquidations for a given type of collateral. Where there is material volatility in the market prices, the institution demonstrates to the satisfaction of the competent authorities that its valuation of the collateral is sufficiently conservative.’
266. The assumed intention of this requirement is that an institution should provide evidence that, in at least 90% of all liquidations of a given type of collateral, the difference between the value of the collateral and the proceeds stemming from the liquidation of that collateral is less than 30% of the collateral value.
267. However, it was noted that the rule text may be ambiguous since it could be read as requiring that, (only) in more than 10% of all liquidations, the realised proceeds shall not be below 70% of the collateral value, i.e. the requirement would already be fulfilled if the difference between the collateral value and the proceeds stemming from the liquidation of that collateral is less than 30% of the collateral value in less than 90% of all liquidations. This ambiguity resulted particularly in wrong translations of the CRR.<sup>47</sup>
268. Taking into account the assumed intention of this requirement, a slight amendment of the relevant rule text in Article 199(6)(d) CRR is suggested to avoid the above interpretative doubts.

---

<sup>47</sup> As an example, the German translation of the CRR implements a wrong understanding of this provision.

**Policy recommendation:** It is advised to amend Article 199(6)(d) of the CRR as follows:

‘The institution demonstrates that **in at least 90% of all liquidations for a given type of collateral** the realised proceeds from the collateral are not below 70 % of the collateral value ~~in more than 10 % of all liquidations for a given type of collateral~~. Where there is material volatility in the market prices, the institution demonstrates to the satisfaction of the competent authorities that its valuation of the collateral is sufficiently conservative.’

(viii) **Insurance against the risk of damage**

269. Article 210(i) of the CRR on the requirements for other physical collateral, specifies: ‘the collateral taken as protection shall be adequately insured against the risk of damage and institutions shall have in place procedures to monitor this’. Currently there are no types of ‘other physical collateral’ for which institutions can automatically assume that the conditions referred to in points (a) and (b) of Article 199(6) of the CRR can be met<sup>48</sup>. Instead, institutions shall document the fulfilment of these conditions in accordance with the second subparagraph of Article 199(6) of the CRR.
270. On the other hand, for immovable property collateral, a similar requirement is specified in Article 208(5) of the CRR which reads: ‘Institutions shall have in place procedures to monitor that the property taken as credit protection is adequately insured against the risk of damage.’
271. The EBA analysed whether it would be useful to provide further guidance on the requirement in Article 210(i) of the CRR by indicating if the institution should elaborate in its internal rules on the type of damages to be insured against, the payment limit or on how the validity of insurance can be proved. However, given the specificities of ‘other physical collateral’, it was concluded that it would not be appropriate to develop a uniform approach for all types of collateral.
272. Instead, it is suggested to align the wording in Articles 210(i) and 208(5) of the CRR. Although both provisions cover risk of damage, the wording in Article 210(i) of the CRR appears stronger, as it requires the collateral be insured against the risk of damage in any circumstance, while Article 208(5) of the CRR refers to monitoring only. Consequently, it is recommended that the wording in Article 208(5) of the CRR be amended to align with the one in Article 210(i) of the CRR.

**Policy recommendation:** It is advised to amend Article 208(5) of the CRR:

~~‘Institutions shall have in place procedures to monitor that t~~The immovable property taken as credit protection ~~shall be~~ is adequately insured against the risk of damage **and institutions shall have in place procedures to monitor this.**’

<sup>48</sup> Please refer to the following EBA webpage: <https://www.eba.europa.eu/supervisory-convergence/supervisory-disclosure/rules-and-guidance>



### (ix) Requirements for the valuer of immovable property collateral

273. The requirements for the valuer in Article 208(3)(b) of the CRR in the context of on-going valuation specify that the review of the property valuation is performed by ‘a valuer who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process’. However, equivalent requirements for the independent valuer are not specified for the purposes of valuation under Article 229(1) of the CRR. As a consequence the EBA suggests these requirements for the independent valuer be reflected also in Article 229(1) of the CRR.

**Policy recommendation:** It is advised to amend Article 229(1) of the CRR:

‘For immovable property collateral, the collateral shall be valued by an independent valuer **who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process** at or less than the market value. An institution shall require the independent valuer to document the market value in a transparent and clear manner.’

### (x) Alignment of the terminology for exposures secured by immovable property

274. It has been noted that different terminologies are used across the CRR under the SA and the IRBA when referring to exposures secured by immovable properties. For example, the CRR uses the terms ‘mortgage on immovable property’, ‘exposure secured by immovable property collateral’, or ‘exposures secured by [residential/commercial] property’.

275. In this context the [Q&A 2015\\_2376](#) clarifies that the term ‘exposures secured by immovable property’ incorporates ‘exposures secured by mortgages on immovable property’ and, as a generic term, could also include exposures secured by mechanisms different from mortgages but economically equivalent and recognised as collateral on immovable property under the Member States’ pertinent legislation setting out the conditions for the establishment of those rights.

276. With a view to enhancing harmonization in the usage of terms and their understanding across the CRR, it is considered beneficial to align the terms used to refer to immovable property collateral. For this purpose it is suggested the more general term ‘exposures secured by [residential/commercial] immovable property’ be used to refer to immovable property collateral under the SA and IRBA.

**Policy recommendation:** It is advised to use the more general term ‘exposures secured by [residential/commercial] immovable property’ when referring to refer to exposures collateralized by immovable property collateral, and align accordingly the terminology consistently under the SA and IRBA to credit risk.

### (xi) Exposures guaranteed by central governments and central banks

277. Article 235(3) of the CRR specifies: 'Institutions may extend the treatment set out in Article 114(4) and (7) to exposures or parts of exposures guaranteed by the central government or central bank, where the guarantee is denominated in the domestic currency of the borrower and the exposure is funded in that currency.'
278. Article 114(4) of the CRR specifies: 'Exposures to Member States' central governments, and central banks denominated and funded in the domestic currency of that central government and central bank shall be assigned a RW of 0 %'.
279. Article 114(7) of the CRR specifies: 'When the competent authorities of a third country which apply supervisory and regulatory arrangements at least equivalent to those applied in the Union assign a RW which is lower than that indicated in paragraphs 1 and 2 to exposures to their central government and central bank denominated and funded in the domestic currency, institutions may RW such exposures in the same manner.'
280. In addition Article 495(2) CRR specifies: 'In the calculation of RWA for the purposes of Article 114(4), until 31 December 2017 the same RW shall be assigned in relation to exposures to the central governments or central banks of Member States denominated and funded in the domestic currency of any Member State as would be applied to such exposures denominated and funded in their domestic currency.'
281. An issue was raised suggesting there is an inconsistency between Articles 114(4) and 235(3) of the CRR regarding the different treatment that could be applied between direct or indirect<sup>49</sup> exposures towards the central government (CG) or central bank (CB), although the underlying credit risk towards the CG or the CB bank would be the same in both situations.
282. As an example, assume a situation in which an Italian institution has an exposure in EUR towards a SE client (which being established in Sweden, would have SEK currency), and said exposure is funded with liabilities denominated in EUR. If the Italian bank receives a guarantee denominated in EUR from the Italian CG or CB, the guaranteed part of the exposure would not benefit the preferential RW assigned to direct exposures to the Italian CG or CB, despite the fact that the underlying credit risk for the guaranteed part of the exposure would not have changed from the perspective of the lending institution (compared to a direct exposure to the Italian CG or CB). This is due to the fact that Article 235(3) of the CRR specifies that the 0% RW treatment may be extended to exposures or parts of exposures guaranteed by the central government or central bank where the guarantee is denominated in the domestic currency of the borrower (which in this case is SEK) and the exposure is funded in that currency (i.e. SEK). As in this case the guarantee is denominated in EUR, which is a currency different from the one of the borrower, the preferential treatment is not applicable. This occurs irrespective of whether the provision in Article 495(2) of the CRR is also applicable to indirect exposures.

---

<sup>49</sup> By indirect exposure is meant when the exposure is to an entity in the role of guarantor/protection provider.

283. However, the wording used in Article 235(3) of the CRR yields unintended outcomes due to the various combinations of countries' CGs and CBs and currencies involved. For the purposes of this Article and in light of the reference to Articles 114(4) and (7), the CG and CB involved may be any CG or CB of any Member State, or a CG or CB of a country which applies supervisory and regulatory arrangements at least equivalent to those applied in the Union and which has assigned lower RWs to its CG and CB in accordance with Article 114(7) of the CRR.
284. From a policy perspective, the rationale for allowing a preferential RW to exposures (either direct or indirect) towards a CG or CB is associated to the requirement of the exposure towards the central government or central bank to be denominated and funded in the currency of the CG or CB. When this is not the case, any currency mismatch between the currency of the original exposure (which may be different from domestic currency of the obligor) and the currency in which the guarantee is denominated would be addressed via the currency haircut required under Article 233(3) of the CRR.

**Policy recommendation:** It is advised to amend Article 235(3) of the CRR as follows:

'Institutions may extend the preferential treatment set out in Article 114(4) and (7) to exposures or parts of exposures guaranteed by the central government or the central bank as if they were direct exposures to the central government or the central bank, provided the conditions in Article 114(4) or (7), as applicable, are met for such direct exposures.'

(xii) **Deletion of the mandate under Article 194(10) of the CRR**

285. Article 194(10) of the CRR mandates the EBA to develop draft RTSs (RTS) to specify what constitutes sufficiently liquid assets and when asset values can be considered as sufficiently stable for the purposes of Article 194(3) of the CRR.
286. In the context of the CRM framework, the CRR effectively merged in Part Three, Title II, Chapter 4 the sections on general requirements for CRM previously specified in Title V, Chapter 2, Section 3, Subsection 3 of Directive 2006/48/EC, with the specific requirements for CRM techniques and methods in Annex VIII of that same Directive. While Article 194 of the CRR reflects the general requirements for eligible collateral, which were set out in the main text of the Directive, the more specific requirements for the liquidity of assets usable for CRM purposes and the stability of the value of these assets over time previously set out in Annex VIII are now explicitly or implicitly covered by the various particular requirements on those assets set out in the various Articles in Part Three, Title II, Chapter 4.
287. As an example with respect to financial collateral, the existence of volatility adjustments (i.e. haircuts) under the FCCM or the minimum 20% RW under the FCSM, together with the various requirements under Articles 197, 198 and 207 of the CRR, are designed to also address both the stability of the value of the assets taken as collateral by institutions over time and the liquidity risk of these assets.

288. Regarding immovable property collateral, the requirements on monitoring of property values together with the other requirements set out in Articles 199, 208 and 229 of the CRR should address concerns around the stability of the value and the liquidity of immovable property recognised as collateral by institutions. It is also noted that, under Articles 124(2), 164(5) and 458 of the CRR, Competent Authorities may address issues related to the immovable property sector, which would function as a backstop in cases of concern regarding property values.
289. In a similar manner, for other physical collateral, receivables and leasing, the CRR sets out requirements in Articles 199, 209, 210, and 211 which address concerns around the stability of the value of the collateral as well as liquidity risks. Finally, it is noted that minimum LGD values prescribed in Article 230 of the CRR may only be applied once a minimum level of overcollateralization is achieved, which results in implied haircuts for the collateral. This also accounts for concerns around the stability of the value of the collateral and liquidity risks.
290. With respect to forms of other funded credit protection (FCP) mentioned in Article 200 of the CRR, these techniques of CRM effectively are recognised similarly to UFCP (e.g. as a guarantee). In this case the lending institution is interested in the credit risk of the protection provider rather than the liquidity risk (which would instead be associated to instruments held as a mean of FCP which could experience liquidity risks in case it was needed to liquidate the collateral).
291. By taking into account the observations above, it is considered that the particular requirements for the various techniques of FCP outlined in Part Three, Title II, Chapter 4 of the CRR are already addressing, either explicitly or implicitly, both the stability of the value of the assets taken as collateral by institutions, and the liquidity risk of these assets. Given the existence of these specific requirements, the need for additional requirements to be developed through the RTS under Article 194(10) of the CRR seems of unclear prudential or proportionate benefits.
292. More specifically, developing an RTS to set out additional requirements in this context could introduce redundancies, undue duplications or lead to inconsistencies between the CRR and the RTS, taking into account that in addition to Article 194(3) of the CRR specific requirements for the individual types of assets to be used for CRM purposes are included in Part Three, Title II, Chapter 4 of the CRR.

**Policy recommendation:** It is advised to delete the mandate in Article 194(10) of the CRR which requires the EBA to develop draft RTS to specify what constitutes sufficiently liquid assets and when assets values can be considered as sufficiently stable for the purposes of Article 194(3) of the CRR. It is recommended that institutions assess independently the sufficient liquidity and the price stability over time of the eligible assets held as collateral as required under Article 194(3) of the CRR, together with satisfying the other CRR requirements relevant for those assets for the purposes of CRM.

## 4. The Internal Ratings Based Approach

### 4.1 Basel reform and modelling incentives

#### **Recommendation CR-IR 1: Incentives to use the IRB Approach**

The prudential regulation should ensure adequate incentives for the institutions to manage their risks in an appropriate manner. Given that the IRB Approach leads to better understanding of risk and enhanced risk managements practices, the regulation should in general retain the incentives for the institutions to use this approach where adequate.

293. While the EBA was working on the comprehensive review of the IRB Approach, the BCBS was finalising its Basel III capital framework, constituting the response to the financial crises of 2008-2010, which also took into consideration consistency in institutions' risk weighting practices. The EBA welcomes the revised standards, as the variability of the model outcomes is not only a European issue, and considers this reform as complementary to the review carried out in European Union (EU). While the EBA's regulatory review of the IRB Approach took a bottom-up perspective focusing on identifying the sources of non-risk based variability and addressing them through providing adequate clarifications, the BCBS tackled the issue in a top-down manner, by specifying limitations to the scope of modelling and to model outcomes. The main measures in that regard introduced in the final Basel III framework include: (i) limited applicability of the most advanced approaches (only F-IRB Approach available for portfolios typically characterised by a low number of observed defaults, obligation to use SA for the equity exposures); (ii) input floors limiting the estimates of parameters for obligors and individual exposures; and (iii) output floor limiting the overall level of RWA.
294. It has to be noted that the implementation and maintenance of the IRB Approach requires significant investment and resources from the institutions. These costs are justified by improved risk management, as the IRB Approach forces appropriate availability and quality of data as well as robust internal policies, including credit, collateral management, recovery and collection, internal monitoring and reporting policies. As a result of these improvements institutions may benefit from potential reduction of the own funds requirements by a more precise measurement of risk based on internal models.
295. While the final Basel III capital framework limits the flexibility in applying the most advanced approaches and the outcomes of the estimation, at the same time it increases the flexibility to implement the IRB Approach only to selected exposure classes, rather than to the whole credit portfolio of the institution. As such, the impact of the implementation of the new IRB approach in the final Basel III capital framework has to be considered: (i) in the context of the impact on the existing portfolios under the IRB Approach; (ii) in the context of incentives for the institutions to maintain the current approach or to revert to less sophisticated approaches; (iii) and finally in the context of incentives for the institutions that currently do

not make use of the IRB Approach and may decide to implement it given the new flexibility in terms of rollout. These decisions will be taken by institutions based on their assessments of costs and benefits of the available approaches.

296. The process of reverting to a less sophisticated approach would be operationally relatively easy for institutions. This will be further facilitated by the output floor requirement, due to which all institutions will have to fully implement the revised SA for all portfolios, even where they apply the IRB Approach for prudential purposes. This ensures that institutions will only implement the IRB approach for the exposure class where the benefits from the modelling will out-weight the cost of maintenance of the model. This is particularly relevant for the low default portfolios, where the gap between the enhanced new standardised approach and an internal model based on limited observation is narrowed under the final Basel III framework. However, any change in the scope of modelling will require approval by the competent authority based on its assessment, where in particular the possibility of potential regulatory arbitrage should be investigated. Further considerations on the future scope of modelling are discussed in section 4.1.1.
297. The reverse process, should institutions decide to apply the IRB Approach again in the future, would not be an easy task, especially if they would stop collecting all detailed data necessary for modelling purposes. It is possible that after reverting to the SA institutions may consider as no longer justified the costs necessary to collect and store all necessary information and to maintain high quality risk management practices such as independent validation. In this case, the future application of the IRB Approach would not be straightforward, and institutions would have to go through all the steps of IRB modelling and validation in a similar manner as if it was implementing the IRB Approach for the first time. Another possible scenario would be that institutions maintain the models for internal purposes and calculation of economic capital only, but apply the SA for the Pillar 1 own funds requirements. This would enable them to maintain the estimates in the risk management processes, but at the same time avoid strict estimation requirements, rigorous monitoring and validation processes and supervisory assessments, leading eventually to deteriorations in the quality of the risk measurement systems over time.
298. The incentives for maintaining the current approach or reverting to less sophisticated approaches can be analysed from the following perspectives: (i) the overall own funds requirements compared to the overall costs, (ii) the offsetting effects between different portfolios and between different types of risk, and (iii) the benefits of the A-IRB Approach as compared to the F-IRB Approach. These elements are further analysed below.
299. The output floor limits the overall level of RWA for all types of risk to 72.5% of the RWA calculated according to the revised standardised approach to be used for all the risks in the Basel III framework. This level of the floor in general keeps the incentive to maintain the models as long as the RWs calculated using modelling approach is within a range of 72.5 to

100% of the RW calculated under the standardised approaches<sup>50</sup>, assuming that the benefit in terms of capital relief is not overcome by the additional costs of maintaining the IRB Approach. With the implementation of the final Basel III framework, the overall costs of maintaining the approaches based on internal models increase due to additional requirement of implementing in parallel the SA for the purpose of the output floor. However, until 31 December 2017 similar requirement already existed in accordance with Article 500 of CRR, with the so-called Basel I floor.

300. However, the analysis of the overall level of RWA is not sufficient to understand the implications of the introduction of the output floor on modelling incentives, as the institutions will also take into consideration any possible netting effects between different portfolios and between different types of risk. In particular, institutions may have an incentive to introduce further models only as long as it will bring them additional marginal benefit in terms of the overall own funds requirements. This could create an incentive for institutions which are constrained by the output floor to maintain only those models which bring them the highest overall capital relief, and drop the models which do not bring additional benefits due to the output floor constraint. In addition, in the case of existing roll out plans, institutions may not develop the rating systems as previously planned, if these additional rating systems are not expected to bring benefits in the form of lower capital requirements. It should finally be noted that, regardless of the capital implications, banks may still choose to implement IRB models due to the integration with internal risk management procedures and overall risk strategy.
301. Furthermore, under the final Basel III capital framework, even if institutions decide to retain the IRB Approach, in the case of exposures to corporates belonging to a group with total consolidated annual revenues below €500m, the application of the F-IRB Approach might become more beneficial than A-IRB Approach for institutions in some cases, given that:
- a) LGD estimation is particularly challenging in terms of the scope of necessary data, and burdensome with respect to the maintenance of the models, taking into account the accompanying requirements related to collateral management and valuation necessary to recognise the effect of the collateral in the model;
  - b) The scope of estimation of CCFs and possible levels of estimates are limited in the final Basel III capital framework. As a result, the potential benefits in terms of capital relief which can be gained through modelling of CCFs are more limited: this aspect is further described in section 4.2.5;

---

<sup>50</sup> However, due to the aggregated nature of the floor, institutions may still have incentives to maintain models with outcomes lower than 72,5% of the RW under the SA, due to offsetting effect with other portfolios and risk types, including dilution effect coming from RWA already computed under a standardised approach. In addition, the output floor only caps the reduction of own funds requirements, i.e. developing models can still allow institutions to decrease own funds requirement up to 72,5% of the RW computed with the standardised approaches.

c) The final Basel III capital framework introduces floors for the individual LGD estimates which only takes into account the type of collateral eligible for the F-IRB Approach. At the same time the regulatory LGD values for unsecured senior claims to corporates decreases from 45% to 40% and the regulatory LGD values for secured exposures is substantially reduced. As a result, the potential benefits of lower own LGD estimates as compared to regulatory LGDs is *de facto* limited and in some cases own estimates of LGD could be higher than regulatory values. More details on the regulatory LGDs and LGD floors are presented in section 4.2.4;

302. However, there are still incentives to opt for an A-IRB model, since there is still a significant difference between the A-IRB LGD floors and the regulatory LGDs under the F-IRB approach, higher haircuts for collateral under the F-IRB approach and additional eligible collateral under the A-IRB approach. As a matter of fact, conditionally to the implementation of technical adaptation discussed in the following sections, the EBA believes that final Basel III capital framework strikes an adequate balance between the need to maintain incentives and risk sensitivity in the overall framework and the necessity to constrain the use and outcomes of internal models to ensure the appropriateness of own fund requirements.
303. In order to analyse these aspects, the qualitative survey conducted for the purpose of this report included questions regarding potential implications of the final Basel III framework on the choice of approaches by the institutions. However, it is clear that the results of this survey have to be read with caution, as in most of the institutions the final decisions have not yet been taken.

#### 4.1.1 Change in the PPU philosophy

##### Recommendation CR-IR 2: New PPU philosophy

The mandates for the EBA to develop RTSs to determine conditions for the appropriate nature and timing of the sequential roll out of the IRB Approach across exposure classes and for the application of the permanent partial use (PPU) of the SA as well as to develop guidelines related to the application of PPU to sovereign exposures are no longer relevant and should be deleted.

304. Whereas the general philosophy of the Basel II framework and the CRR has been that “*once a bank adopts an IRB approach for part of its holdings, it is expected to extend it across the entire banking group*”, the final Basel III framework introduces further granularity on the expectations of the IRB implementation: “*once a bank adopts an IRB approach for part of its holdings **within an asset class**, it is expected to extend it across all holdings **within that asset class***”<sup>51</sup>. This change of paradigm is very relevant in the context of the EU RCAP given that the possibility of a PPU of the SA for certain types of exposures in accordance with Article 150 of the CRR was mentioned as a material deviation<sup>52</sup>, especially because of the possibility

<sup>51</sup> It should be noted that “asset class” is the Basel terminology for the “exposure class” used in EU.

<sup>52</sup> <https://www.bis.org/bcbs/publ/d300.pdf> See page 38



of not implementing the IRB Approach for sovereign exposures (i.e. exposures to central governments and central banks).

305. Furthermore, in Articles 148(6), 150(3) and 150(4), the CRR specified mandates for the EBA to develop RTS to determine conditions for the appropriate nature and timing of the sequential roll out of the IRB Approach across exposure classes, for the application of PPU of the SA, as well as to develop guidelines related to the application of PPU to the said exposures to central governments and central banks. The EBA has so far not been able to deliver the requested RTS, and it has informed the Commission in a letter dated 18 December 2015 accordingly<sup>53</sup>. The development of the standards was not finalised as it was considered counterproductive from a supervisory perspective and costly for the EU banking system to force institutions to implement models, especially for the types of exposures which are less suited for modelling. Now that the Basel III framework has been finalised it is possible to address the final decisions regarding the criteria for the roll-out plans and PPU of the SA and the respective mandates, in a manner consistent with the final framework.
306. In order to reflect this new philosophy of the IRB implementation, Articles 148 and 150 of the CRR would have to be modified. To a large extent this would solve the issues described above and institutions would be allowed to apply the IRB Approach only to a selected set of exposure classes. The following modifications to the mandates for the EBA would be needed:
- a) The mandate included in Article 148(6) of the CRR to specify conditions for the roll-out plans would become obsolete and hence should be dropped. The qualitative criteria have already been specified in Article 7 of the final draft RTS on the specification of the assessment methodology for CA regarding compliance of an institution with the requirements to use the IRB Approach in accordance with Articles 144(2), 173(3) and 180(3)(b) of Regulation (EU) No 575/2013 (hereinafter: 'RTS on IRB assessment methodology')<sup>54</sup>. These criteria are considered sufficient for the appropriate assessment of the roll-out plans by CA.
  - b) The mandate included in Article 150(3) of the CRR to specify conditions for the PPU would no longer be relevant and should hence also be dropped. The part of the mandate referring to the conditions of application of points (a) and (b) of Article 150(1) of the CRR is no longer relevant as these points refer to specific exposure classes for which institutions will already be given the discretion to decide whether to apply the IRB Approach or not. With regard to the part of the mandate referring to conditions of application of point (c), the aspect of materiality of certain specific portfolios remains relevant, but only within a single exposure class. Therefore, it should be further clarified that institutions would still be allowed to apply PPU to certain immaterial business units and types of exposures, subject to certain conditions. However, such conditions have

<sup>53</sup> <https://eba.europa.eu/documents/10180/1349330/Letter+to+Olivier+Guersent+DG+FISMA+re+Postponement+EBA+products.pdf/014df70e-4530-4655-bb67-5f102d5b311d>

<sup>54</sup> <https://eba.europa.eu/documents/10180/1525916/Final+Draft+RTS+on+Assessment+Methodology+for+IRB.pdf/e8373cbc-cc4b-4dd9-83b5-93c9657a39f0>

already been given in an indirect manner by specifying in Article 8 of the RTS on IRB assessment methodology the conditions to be verified by the CA in assessing the institution's compliance with the conditions for PPU of the SA. The EBA believes that these conditions are sufficient. Furthermore, under the general approach of the final Basel III framework the conditions should be assessed at the level of an exposure class, no further mandate is needed.

- c) The mandate included in Article 150(4) of the CRR to develop guidelines and recommending limits for the application of the PPU to exposures to counterparties listed in Article 150(1)(d) of the CRR seems no longer relevant and should also be dropped. Since the final Basel III framework allows the implementation of the IRB Approach only to selected exposure classes, institutions will be allowed to treat sovereign exposures fully under the SA.

307. Once the Basel III framework is incorporated in the CRR the EBA intends to review the RTS on IRB assessment methodology, and in particular the articles on the PPU and the sequential implementation of the IRB Approach in order to make sure that they fit with the change in philosophy in the implementation of the IRB approach. Therefore it is important to maintain the mandate specified in Article 144(2) of the CRR in order to allow for the necessary revisions.

#### 4.1.2 Reversal to less sophisticated approach: application of Article 149

##### Recommendation CR-IR 3: Conditions for reversal to less sophisticated approaches

The entry into force of the final Basel III framework should be considered as an extraordinary circumstance for reverting to less sophisticated approaches in order to ensure an even level playing field between institutions and not create a last mover advantage with respect to the implementation of the IRB Approach. However, permission of a competent authority to return to less sophisticated approach should be required in all cases.

308. Paragraph 48 of the final Basel III framework adapts the conditions applicable to revert to less sophisticated approaches introduced in paragraph 261 of the Basel II framework. Under the final Basel III framework the conditions apply at the level of the exposure class rather than at an overall level: *"Banks adopting an IRB approach for an asset class are expected to continue to employ an IRB approach for that asset class. A voluntary return to the standardised or foundation approach is permitted only in extraordinary circumstances, such as divestiture of a large fraction of the bank's credit-related business in that asset class, and must be approved by the supervisor."*
309. The EBA believes that the implementation of the modelling restrictions in the final Basel III framework should be considered as "extraordinary circumstances" for the purpose of reverting to less sophisticated approaches, either with regard to the whole IRB implementation or with regard to rating systems for selected exposure classes. The main reason for this interpretation is that the costs related to the maintenance of IRB models can

be significant, and require a detailed cost and benefit analysis, as described in section 4.1. Furthermore, this interpretation ensures that the framework does not grant an advantage in terms of flexibility of implementation for institutions currently without IRB permission compared to institutions with an already approved IRB model.

310. However, it also has to be also stressed that the decisions regarding the scope of application of the IRB Approach, both in the context of initial applications for the permission to use the IRB Approach and in the context of potential returns to less sophisticated approaches, should not be motivated by a desire to minimise own funds requirements. This requirement is in line with paragraph 46 of the final Basel III framework and should remain valid even under these extraordinary circumstances described above. Therefore, the return to less sophisticated approaches should in any case require supervisory approval in accordance with Article 149 of the CRR.
311. The EBA carried out a qualitative survey in order to assess the impact of this new PPU philosophy on the scope of use of the IRB Approach. However, at this stage most of the institutions do not seem to have a final view on the exact future perimeter of application of the IRB Approach, given the complexity of a comprehensive cost and benefit analysis for such a short timeframe.

#### 4.1.3 Sovereign exposures

##### (i) Applicability of the final Basel III framework to exposures to central governments and central banks.

#### **Recommendation CR-IR 4: Consistency of treatment between the sovereigns and other exposure classes**

In order to ensure the consistency of the overall framework it is necessary to apply some of the changes introduced in the IRB Approach also to exposures to central governments and central banks. These changes are limited in scope to those considered as non-substantive and do not include the main parts of the reform such as limited scope of modelling of PD and LGD modelling or PD and LGD input floors.

312. The final Basel III framework does not address the treatment of sovereign exposures, which was assumed to remain unchanged compared to the current implementation of the Basel II framework. However, in order to ensure the consistency of the overall framework, some of the changes introduced in the IRB Approach may also have to be rolled out to the sovereign exposure class<sup>55</sup>. Under the EU framework, the sovereign exposure class (defined in paragraph 19 of the final Basel III framework) is denominated as “*exposures to central government and central bank*”, and described in Article 147(3) of the CRR. Although the exposures belonging to this exposure class under the CRR and under the final Basel III

<sup>55</sup> As defined in paragraph 19 of the final Basel III framework, “this asset class covers all exposures to counterparties treated as sovereigns under the standardised approach. This includes sovereigns (and their central banks), certain PSEs identified as sovereigns in the standardised approach, MDBs that meet the criteria for a 0% risk weight and referred to in footnote 11 of the standardised approach, and the entities referred to in paragraph 10 of the standardised approach.”

framework are generally the same, a specific treatment for RGLA and PSE exposures may have to be introduced as further discussed in section 4.2.2. The EBA supports introduction of this limited scope of changes considered as non-substantive also to exposures to central governments and central banks.

313. The most significant and most impactful changes in the IRB Approach include the removal of the A-IRB Approach for certain exposure classes, where typically small number of defaults is observed, as well as the introduction of LGD floors for exposures under the A-IRB Approach. It is clear that in accordance with the final Basel III capital framework these elements should not be applicable to exposures to central governments and central banks. As a result, institutions would continue to have the possibility to apply SA, F-IRB or A-IRB to such exposures, where neither PD estimates, nor own estimates of LGD would be restricted by the input floors. The implications of these provisions on exposures to RGLA and PSE are further discussed in section 4.2.2.
314. Another aspect of the IRB Approach where the final Basel III capital framework introduce significant changes is the calculation method and values of regulatory LGDs, applicable under the F-IRB Approach. Instead of general over-collateralisation requirement, the revised standards introduce a set of haircuts specific to the types of collateral and the calculation formula, which allows recognition of multiple collaterals. These changes are expected to have a significant impact especially on securities in the corporate exposure class, but also to unsecured corporate exposures where the value of LGD for unsecured senior claims decreased from 45% to 40%. However, these changes in the F-IRB approach are not considered significant for exposures to central governments and central banks, as these exposures are usually unsecured and the value of LGD for this type of exposures remains at the level of 45%.
315. The above analysis is supported by the QIS and further discussed in section 4.2.4. Taking into account the expected insignificant impact on own funds requirements and in order to avoid inconsistencies in the overall requirements, the EBA is of the opinion that the final F-IRB Approach should be incorporated also to exposures to central governments and central banks.
316. In any case the treatment of exposures to central governments and central banks would not remain fully unchanged as it is implied from the final Basel III framework that any changes to CCFs as well as to the CRM eligibility requirements and recognition methods will also apply to exposures to central governments and central banks. Similarly, the 1.06 scaling factor in the RW function in the IRB Approach has been removed for all exposure classes, including for exposures to central governments and central banks.
317. Moreover, the final Basel III framework introduces a number of less significant changes and clarifications that, if not applied to all relevant exposure classes, would lead to inconsistencies and possibly misinterpretation of the overall framework. The table below presents the scope of changes, which in the view of the EBA should be implemented in a

comprehensive manner, i.e. should also be applicable to exposures to central governments and central banks:

Table 18: List of changes from the final Basel III framework and applicability to central government and central bank exposures

	<b>Basel III credit risk change</b>	<b>Paragraphs in the final Basel III capital framework for IRB Approach &amp; CRM</b>	<b>Articles of the CRR specifying current application</b>	<b>Change applicable to sovereigns</b>
1	CCF changes	78-89 SA	111, 166, Annex I	Yes
2	CRM changes	117-205 SA	192-241	Yes
<b>3</b>	<b>The removal of A-IRB for low default portfolios</b>	<b>34</b>	<b>151</b>	<b>No</b>
<b>4a</b>	<b>The new PD input floors</b>	<b>68</b>	<b>160, 163</b>	<b>No</b>
<b>4b</b>	<b>The new LGD input floors</b>	<b>85-86</b>	<b>161, 164</b>	<b>No</b>
<b>4c</b>	<b>The new EAD input floors</b>	<b>105</b>	<b>166</b>	<b>No</b>
5	Removal of the 1.06 scaling factor	53	153, 154	Yes
6	New IRB roll out requirements	44-50	148	Yes
7	New Basel III methodology for determining the LGD for collateralised exposures on F-IRB (including use of models to calculate the exposure value for counterparty credit risk exposures)	70-83	161, 221, 225, 226	Yes
8	Removal of PD adjustment option for the recognition of guarantees (double default treatment)	90-91	153(3), 154(2)	N/A
9	The new requirement that exposures guaranteed by a SA (or F-IRB approach) guarantor need to subject to the SA (or F-IRB)	93, 96, 255	N/A	Yes
10	The prohibition on the recognition nth to default other than first-to-default credit derivatives as CRM	97	183	Yes
11	The new SA CCF that apply to IRB exposures as a result of the IRB text cross referring to them.	102	166(8)-(10)	Yes

	<b>Basel III credit risk change</b>	<b>Paragraphs in the final Basel III capital framework for IRB Approach &amp; CRM</b>	<b>Articles of the CRR specifying current application</b>	<b>Change applicable to sovereigns</b>
12	The requirement that EAD can only be modelled for undrawn revolving commitments.	105	151, 166	Yes
13	The prohibition on institutions using the repayment date on current drawings for the determination of the maturity parameter.	109	162	Yes
14	The new guidance regarding the specification of ratings systems used in PD estimation.	182	170	Yes
15	The new requirements regarding the minimum data used to calculate PDs.	230-231	180	Yes
16	The new requirements regarding institutions' EAD estimates, such as the requirement to use the 12 month fixed horizon approach and not capping EAD estimates at the principle outstanding amounts of the facility.	242, 245-248	182	Yes
17	The new guidance regarding when conditional guarantees can be recognised	257-258	183	Yes
18a	The additional specification of the conditions for the recognition of real estate collateral.	283	208	Yes
18b	The additional specification of the conditions for the recognition of physical collateral.	295-296	210	Yes
19	The recognition of general security agreements that was introduced in Basel III.	297	210	Yes

318. The impact of implementing the technical clarifications has been assessed via a qualitative questionnaire. The results are presented in the different sections related to each of the risk parameters (sections 4.2.3, 4.2.4 and 4.2.5).

**(ii) Application of the PD and LGD floors to exposures with sovereign guarantees**

**Recommendation CR-IR 5: Application of the input floors to exposures with sovereign guarantees**

Clarification should be provided on the application of the rule that the floors that apply to risk components do not apply to the part of exposure covered by the sovereign guarantee. In particular, for cases where institutions recognise the effect of the guarantee through modelling

approach, it should be clarified that the 0% floor should apply only to those parameters that are adjusted to reflect the effect of the guarantee.

319. The final Basel III framework introduces input floors on the individual LGD estimates, and increases the level of PD input floors. The impacts of these floors on other exposure classes are further discussed in sections 4.2.3 and 4.2.4. In accordance with paragraph 66 of the final Basel III framework *“the floors that apply to risk components do not apply to the part of exposure covered by the sovereign guarantee”*; however, no further explanation on how this should be applied in practice is provided.
320. The rule is equivalent to the application of a 0% floor to both PD and LGD estimates. The EBA believes that the two following points should be clarified when incorporating the final Basel III framework into the CRR:
- a) In order to disregard the floors, the guarantee should meet the eligibility criteria as applicable under the F-IRB Approach. The EBA notes that in the case of sovereign guarantees which do not meet the eligibility criteria, the PD and LGD floors which should apply should be the one used for unsecured exposures, in the same manner as for all other non-eligible guarantees from other protection providers.;
  - b) In determining the secured portion of the exposure all haircuts applicable under the F-IRB Approach should be applied.
321. Furthermore, how this waiver should be applied by institutions which recognise the effect of the guarantee through the modelling approach should be further clarified, i.e. whether the 0% floor should apply to both parameters (PD and LGD) or to just one of them. This should ensure that the same guarantee is not recognised more than once. Taking the possible approaches for the recognition of the effect of the guarantee into account, the following principles could be specified:
- a) Under the substitution approach – both the PD and LGD estimates for the part of the exposure covered by the eligible sovereign guarantee could benefit from the 0% floor. It should however be made clear that the part of the exposure that is not covered by the guarantee remains subject to the relevant floors;
  - b) Under the modelling approach – the PD and LGD parameters reflect the risk of the obligor and of the transaction to the obligor; therefore only the parameter which is adjusted to reflect the effect of the guarantee could benefit from the 0% floor (e.g. as typically the adjustment is incorporated in the LGD parameter, the floor would only be waived for LGD, whereas for the PD the floor as applicable for the obligor would continue to apply).
322. In any case, the EU should continue monitoring any further developments and guidance coming from the BCBS on the application of the floors. In practical terms, in the case of exposures partially covered by the guarantee, for the purpose of LGD floor in applying the

formula specified in paragraph 86 of the final Basel III framework, the eligible sovereign guarantees should be treated similarly to financial collateral with a 0% floor<sup>56</sup>.

## 4.2 Specific recommendations

### 4.2.1 Quantitative impact study: main impacts of the different parts of the reform

323. The EBA has conducted a QIS in order to collect evidence on the expected impact of the reform. The reform was assessed not only in terms of its overall impact, but also each of the main changes was assessed in a marginal manner via an “all but one” analysis. This means that institutions were asked to report the RWA after applying all the provisions of the final Basel III framework except for the one specifically analysed. This methodology was necessary in order to deal with the strong non-linear impacts when combining the changes, where the order of application of the different measures strongly determines the impact of that measure<sup>57</sup>. This allows policy makers to assess the impact of not implementing one specific measure, as well as to present the results in an objective manner (without any subjective ordering of the parts of the reform). The reference date for the data collection was the 30<sup>th</sup> of June 2018. The following elements of the final Basel III framework were assessed in this manner based on the said “all-but-one” analysis:

- a) migration of exposures to less sophisticated approaches (i.e. A-IRB Approach not available for large corporates, financial institutions treated as corporates and institution exposures, obligation to use the SA for the equity exposures);
- b) increase of PD input floors;
- c) introduction of LGD input floors;
- d) increase of PD input floors and introduction of LGD input floors (this scenario is a simple combination of the two previous scenarios);
- e) change in the regulatory LGD values (under the F-IRB Approach);
- f) clarification on the calculation of the effective maturity (M) risk parameter;
- g) change in the treatment of guarantees provided by guarantor risk weighted under the F-IRB Approach and the SA;

<sup>56</sup> This clarification is relevant for partial guarantees. The proposed treatment ensures the consistency between the substitution and the modelling approach. Under the substitution approach, only the LGD of the uncovered part will be floored at the usual LGD floors, while the covered part will not be floored. This requirement is equivalent to “average LGD floor”, applied at the facility level, defined as the exposure-weighted average of the usual LGD floors (for the uncovered part) and the 0% floor (for the covered part). This weighted average is equivalent to the formula in paragraph 86 of the final Basel III framework for financial collateral, and should therefore apply to exposures with an LGD estimated via the modelling approach.

<sup>57</sup> For instance, the change in the regulatory LGD values (only applicable to F-IRB exposures) has a higher scope of application (and therefore a higher impact) if applied after the migration from A-IRB to F-IRB Approach of the large corporates, financial institutions treated as corporates and institutions.



- h) change in the treatment of CCFs (including change in the modelling scope, new regulatory values, introduction of input floors and clarification in the requirements for estimation).

324. Two sets of impacts are presented for each element of the reform:

- a) The “contribution impact”, where, for each sub exposure class, the differences between the RWAs calculated under a given scenario and the RWA calculated under the current framework are **expressed in percentage of the total RWA calculated under the current IRB approach**. As such, this metric combines the relative impact of a given exposure class with a volume effect, taking into account the materiality of the exposure class;
- b) The “relative impact”, where, for each sub exposure class, the differences between the RWAs calculated under a given scenario and the RWA calculated under the current framework are **expressed in percentage of the total RWA calculated under the current IRB approach of the exposure class and a given approach (A-IRB or F-IRB)**.

325. These impacts are discussed in detail in the subsequent sections of the report, along with the specific recommendations. However, results should be interpreted with caution:

- a) First, this isolated analysis of specific aspects of the reform does not take into account interactions with the requirement of the output floor, which may fully or partially offset these marginal impacts.
- b) Second, it has to be stressed that this analysis of marginal impacts has certain shortcomings both in terms of data and methodology. In particular, the analysis has been performed on a limited sample of institutions and numerous data quality issues<sup>58</sup> were identified which may indicate that the results may not be fully accurate. In addition to the data quality checks performed to compute the total impact of the IRB reforms, only institutions with strictly positive RWA in both scenarios have been considered.
- c) As a consequence to the second point, the sample of institutions is different across the marginal exercises as well as with the cumulative total IRB impact, and therefore the impacts may vary depending on the graph considered. The number of institutions used for each marginal analysis is given in the following table<sup>59</sup>:

<sup>58</sup> For example, some institutions reported result deemed impossible, such as RWA with current PD floors above RWA with future PD floors. As a result, the EBA has performed retreatments on some of the reported figures.

<sup>59</sup> The report only presents impacts for the exposure classes directly impacted by the considered elements of the reform. For example, although the recalibration of the regulatory LGD values may indirectly impact the exposures currently classified as retail exposures (via F-IRB guarantors), the observed impact on these exposure classes was very limited and is therefore not shown in the graphs of this report. These elements are in italic in Table 19.

Table 19: sample size for the marginal scenario

	<b>Central Scenario</b>	<b>PD</b>	<b>LGD</b>	<b>PD LGD</b>	<b>Regulatory LGD</b>	<b>Migration</b>
Sovereigns	29	17	17	17	16	24
Banks	46	26	26	26	28	41
Financial institutions treated as corporates	34	23	23	23	23	28
Large corporates	61	36	36	36	40	51
Specialised lending excluding slotting	44	29	27	27	31	36
Specialised lending slotting	13	8	8	8	6	11
Mid corporates	65	40	40	39	46	55
Corporate SME	64	39	39	39	43	55
Other retail	64	37	37	37	44	55
Residential mortgages	67	40	40	40	46	58
Qualifying revolving retail exposures	29	19	19	19	19	26
Eligible purchased receivables	8	6	5	6	5	7

326. The following figure summarises the main results of the analysis of isolated marginal impacts at an aggregated level:

Figure 23: Expected impacts from the main elements of the finalisation of the final Basel III framework (based on QIS results)

Total A-IRB	Migration	PD floors	LGD floors	LGD values	CCF	1.06
Sovereigns						
Institutions						
FI treated as Corp					SFT	
Large Corporates	LGD floor *					
Specialised Lending						
Mid Corporates						
SME (corp & retail)						SME Supporting factor
Retail - other & QRRE						
Retail - Mortgages						
Equity (3 approaches)						

<b>Strong impacts</b> >+10%	<b>Moderate impact</b> [10% ; 5%]	<b>≈ no impact</b> [+5% ; -5%]	<b>Negative impact</b> <-5%	<b>Not applicable</b>	<small>*the RWA calculated under the future F-IRB approach are higher than the RWA calculated under the current A-IRB approach, but similar to the RWA calculated under the A-IRB approach with LGD floors</small>
--------------------------------	--------------------------------------	-----------------------------------	--------------------------------	-----------------------	--

Total F-IRB	PD floors	LGD values	CCF	1.06
Sovereigns				
Institutions				
FI treated as Corp			SFT	
Large Corporates				
Specialised Lending				
Mid Corporates				
SME (corp)				SME Supporting factor

<b>Strong impacts</b> >+10%	<b>Moderate impact</b> [10% ; 5%]	<b>≈ no impact</b> [+5% ; -5%]	<b>Negative impact</b> <-5%	<b>Not applicable</b>
--------------------------------	--------------------------------------	-----------------------------------	--------------------------------	-----------------------

#### 4.2.2 Scope of modelling: migration

327. The final Basel III framework limits the scope of modelling via the migration of some exposures into less sophisticated approaches. These restrictions are introduced in paragraph 34 of the final Basel III framework on the IRB Approach, with the following main changes:

- a) The IRB approach is no longer available for equity exposures, which should now be risk weighted according to the SA. The treatment of exposures currently falling under the treatment of Article 49 of the CRR is described in section 2.4.

- b) The A-IRB Approach is no longer available for exposures to large corporates with total consolidated annual revenues greater than €500m.
- c) The A-IRB Approach is no longer available for exposures to financial institutions treated as corporates.
- d) The A-IRB Approach is no longer available for exposures to institutions. This also indirectly applies to some domestic PSE not treated as exposures to central governments and central banks under the SA, which include some RGLA according to the footnote 10 of paragraph 12 of the final Basel III framework on the SA.

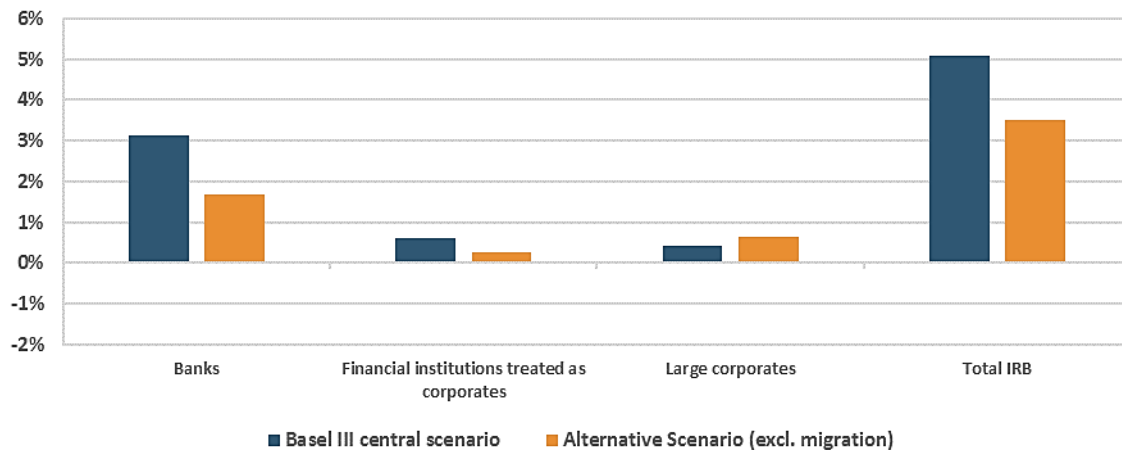
**(i) Migration of the large corporates, financial institutions and institutions to the F-IRB Approach**

**Recommendation CR-IR 6: Limited scope of application of the A-IRB Approach**

As proposed in the final Basel III framework, exposures to large corporates, financial institutions treated as corporates and institutions should migrate to the F-IRB Approach in order to reduce the undue variability of the outcomes of internal models.

328. The following impact from the migration of exposures to less sophisticated approaches has been reported in the QIS conducted by the EBA:

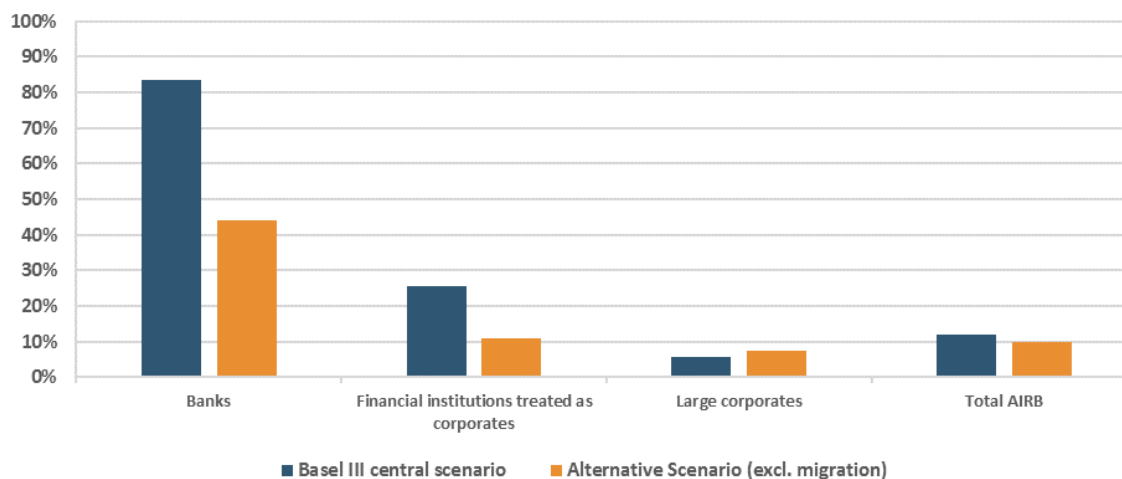
Figure 24: Percentage change in IRB RWA per exposure class excluding migration to FIRB approach (relative to total current IRB RWA)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 48 banks.

Figure 25: Percentage change in AIRB RWA per exposure class migrating to FIRB approach (relative to exposure class current AIRB RWA)



Sources: EBA 2018-Q2 QIS data and EBA calculations.

Notes: Based on a sample of 48 banks.

329. The migration to the F-IRB Approach increases own funds requirements to exposures to institutions and to financial institutions treated as corporates. This is an intended consequence of the final Basel III framework, since the main impacts are expected on LDP in order to reduce undue variability of RWA for such exposures. In this case, the increase of own funds requirements is the necessary trade-off coming from the migration to a less sophisticated approaches. The impact is very limited for exposures to large corporates. This can be explained by the recalibration of regulatory LGD, in particular for senior unsecured exposures which is reduced from 45% to 40% under the final Basel III framework (further analysis of this change can be found in section 4.2.4). In addition, the scenario “all-but-migration” incorporates (fictive) LGD input floors, and highlights the fact that the average of regulatory LGDs is similar to the average of LGDs estimated under the A-IRB approach with LGD floors. It should however be noted that the LGD calculated under the future F-IRB approach are higher than the LGD calculated under the current A-IRB approach. In addition, the migration to the F-IRB Approach entails the use of regulatory CCFs instead of modelled CCFs. The observed impacts of these changes are further discussed in section 4.2.6.

330. Regarding the migration of exposures to large corporates, financial institutions and institutions from A-IRB to F-IRB Approach, the EBA believes that this measure is consistent with the intention to limit the variability of model outcomes, since these portfolios typically show severe shortages of default data. Indeed, the availability of empirical observations for LGD estimation is problematic for LDP, since the realised LGDs can only be observed on defaulted exposures<sup>60</sup>.

<sup>60</sup> However, the EBA supports the use of the F-IRB Approach for exposures to institutions, financial institutions and large corporates, subject to the application of all the requirements already in place in the current EU framework. Indeed, a “low default portfolio” is not necessarily a “low data portfolio” in the context of PD modelling, with valid modeling technics that can still be used.

331. In addition, the EBA would like to point out that one element of consistency is the terminology, where three different expressions are used for the basis for various thresholds across the framework, such as ‘turnover’, ‘revenue’ or ‘sales’. In order to avoid misinterpretations, the same terminology should be used to express the same concept. As the CRR already refers to ‘consolidated sales’, the same wording should be used when introducing the new threshold for large corporates.

## (ii) Migration of equity exposures to the Standardised Approach

### Recommendation CR-IR 7: Migration of equity exposures to SA

As proposed in the final Basel III framework, the equity exposures should migrate to the SA in order to reduce the undue variability of the outcomes of internal models. Institutions should be allowed to use a five-year linear phase-in arrangement in a consistent manner for all equity exposures. In case institutions choose not to apply the phase-in arrangements they should apply the full phase-in treatment under the SA from the date of application of the final Basel III framework in the EU.

332. With regard to the migration of equity exposures to the SA, the EBA believes this will contribute to a reduction of the RWA variability without significantly limiting the risk sensitivity of the framework. It is considered that the treatment of equity exposures does not play an essential role in the IRB Approach and it should be aligned with the treatment under the SA. In accordance with the current IRB Approach, equity exposures are currently risk weighted according to one of three available approaches:

- a) The simple RW approach, set out in Article 155(2) of the CRR, is conceptually closer to the SA since RW are fixed and determined in accordance with prescribed observable characteristics. However, the RW are different (higher) than those applicable under the SA. This approach is currently used to compute the RWA for around 80% of the equity exposures.
- b) The PD/LGD approach, as described in Article 155(3) of the CRR, is conceptually closer to F-IRB Approach, where the LGD is fixed at 65% or 90% and M is set to five years. However, the definition of default may not be easily applied to equity exposures, and in case institutions do not have sufficient information to use the definition of default set out in Article 178 of the CRR, a scaling factor of 1,5 is assigned to the RW. This approach is currently used to compute the RWA for around 20% of the equity exposures.
- c) The internal models approach as described in the CRR article 155(4) builds on the concept of value-at-risk which is closer to internal market risk models than credit risk models. This approach is currently used to compute the RWA for less than 1% of the equity exposures.

333. The existence of three alternative approaches resulting in significantly different RW for equity exposures contributes to the variability of RWA. Therefore, the EBA supports the removal of the equity exposures from the scope of the IRB Approach.

334. At the same time the EBA supports the five-year linear phase-in arrangement from the date of implementation of the standard, as introduced in footnote 9 of paragraph 42 of the final Basel III framework. It should be noted that depending on the composition of the equity portfolios and the current approach in use the migration of these exposures to the SA may lead either to increases or decreases of RWA for individual institutions. As the phase-in arrangements are designed specifically to address sharp increases in own funds requirements<sup>61</sup>, the application of such arrangements should be at the discretion of each institution. However, in any case the phase-in arrangement should be used consistently across all equity exposures in order to limit the scope for arbitrage opportunities. In case institutions choose not to apply the phase-in arrangements they should apply the fully phased-in treatment under the SA from the date of application of the final framework in the EU.

### (iii) Treatment of PSE and RGLA

#### Recommendation CR-IR 8: Consistent treatment of PSE and RGLA

The IRB exposure class segmentation should be based on the nature of the obligor and not on its riskiness. In order to ensure a consistent treatment all RGLA and PSE should be assigned to the same exposure class, regardless of the treatment applied under the SA.

335. The EBA notes in particular the increased importance of the classification of RGLA and PSE, which depends on the classification set by the CA. Depending on their treatment under the SA, exposure to such entities are categorised either as exposures to institutions or as exposures to central governments and central banks. The segmentation criteria are set up in Articles 147(3)(a), 147(4)(a) and 147(4)(b) of the CRR, which implement in the EU paragraph 229 of the Basel II framework (unchanged under the final Basel III framework, in paragraph 19). It should be noted that the conditions for treating exposures to RGLA and to PSE as exposures to the central government and central banks are slightly different in the CRR than in the Basel capital framework:

- a) The central government treatment can only be applied in exceptional circumstances for PSE, “where in the opinion of the CA of this jurisdiction there is no difference in risk between such exposures because of the existence of an appropriate guarantee by the central government, regional government or local authority.” (Article 116(4) of the CRR). This national discretion is also present in paragraph 58 of the Basel II framework, and remains unchanged with the final Basel III framework (see paragraph 12).
- b) The central government treatment can be applied for RGLA “*where there is no difference in risk between such exposures because of the specific revenue-raising powers of the former, and the existence of specific institutional arrangements the effect of which is to reduce their risk of default.*” (Article 115(2) of the CRR). This national discretion is also

<sup>61</sup> The EBA believes this justifies the marginal increase in the complexity of the framework, as well as the small delay in the implementation of the final rules

reflected in footnote 23 of the Basel II framework, and remains unchanged under footnote 10 of the SA of the final Basel III framework<sup>62</sup>.

336. This classification directly impacts the possibility to estimate own LGD as well as the application of PD input floors, since the treatment of sovereign exposures is unchanged on these aspects from the Basel II framework. Furthermore, from a practical perspective the lack of consistent classification of the RGLA and PSE to one exposure class may lead to the need to fully redevelop the internal rating systems for RGLA and PSE. In particular, where the LGD model covers all exposures to RGLA and PSE, of which some are classified as exposures to central governments and central banks and some as institutions, these models will have to be redeveloped by reducing the scope of application only to those RGLA and PSE which are treated as sovereigns, while for the other RGLA and PSE exposures classified as institution exposures only the F-IRB Approach will be available. While typically these types of exposures are characterised by a low number of defaults, after the reduction of the scope of application the LGD estimates would be based on an even smaller sample of observations.
337. The table below presents the impact of the final Basel III framework on exposures to RGLA and PSE, depending on whether they are currently classified as respectively: (i) exposures to central governments and central banks; or (ii) exposures to institutions. The results indicate that for those exposures treated as exposures to central governments and central banks, implementation of the final the Basel III framework will result in declining own funds requirements, stemming mostly from the elimination of the 1.06 scaling factor in the IRB RW formula. However, for the PSE/RGLA exposures classified as institutions exposures, there will be a high positive impact. This results from the migration of these portfolios to the F-IRB Approach, where the exposures will become subject to a fixed LGD parameter and increased minimum PD floors.

Table 20: observed impact of the RGLA and PSE depending on their classification

	<i>Currently classified as exposures to central governments and central banks</i>		<i>Currently classified as institutions</i>	
	<b>PSE</b>	<b>RGLA</b>	<b>PSE</b>	<b>RGLA</b>
<b>All institutions</b>	<b>-28%</b>	<b>-10%</b>	<b>78%</b>	<b>78%</b>
Large	-28%	-10%	78%	78%
<i>of which: G-SII</i>	-6%	-1%	150%	259%
<i>of which: O-SII</i>	-25%	-4%	63%	92%
Medium	0%	0%	0%	0%

338. The EBA believes that the inconsistent treatment of RGLA and PSE under the IRB Approach leads to disproportionate impacts and adds unnecessary complexity to the framework. As such, the IRB classification should be based on the nature of the obligor and not on its riskiness, and the differences in riskiness should rather be reflected through appropriate

<sup>62</sup> This requirement is however implemented in a slightly different manner, since the PSE are defined as a category of RGLA in the Basel framework. Yet the requirements on the specific revenue-raising power as well as specific institutional arrangements are mentioned in the text.



estimates of risk parameters. As the SA rules do not define *classification* of RGLA and PSE as central governments or institutions but only the *treatment* based on the same RW, there is no need to base the IRB classification on the SA treatment. Finally, given that the classification is a decision taken by the CA of the relevant jurisdiction, the strong difference in the impact introduces wrong incentives to supervisors in the making of their decision.

339. Therefore, the EBA believes that all exposures to RGLA and PSE should be grouped into an additional, separate exposure class, for which the A-IRB Approach would remain available. This solution also ensures that, unless specified otherwise, the general approach regarding PD and LGD floors would apply to all RGLA and PSE. The EBA believes these floors are necessary in order to ensure the LGD modelling of these portfolios does not hinder the purpose of reducing RWA variability. However, the EBA notes that introducing a threshold on sales as done in the exposure class corporates triggers potential difficulties in the application for some PSE that do not report turnover figures. Furthermore, the introduction of a specific exposure class would naturally increase the possibility to use a PPU of SA for RGLA and PSE in accordance with the new philosophy under the final Basel III framework, irrespective of the approach used for institution exposures. This is deemed justified given the very different nature of these obligors compared to institution or possibly. The EBA notes that splitting the RGLA and the PSE in two separate sub-exposure classes increases the flexibility of use of the PPU of SA and could also simplify the reporting of these exposures by a closer alignment with the SA.
340. As a variant to the proposed previous treatment, the EBA believes the current classification of RGLA and PSE as exposures to central governments and central banks could be maintained, therefore introducing the new exposure class only for the RGLA and PSE currently classified as institution exposures. This would mean in practice that PD and LGD floors would by construction not apply to the former exposures, and the approach (IRB Approach or SA) for these exposures should be the same as the one used for exposures to central governments and central banks.
341. Should it be considered that the treatment of RGLA and PSE needs further refinements, the EBA stands ready to further assist the Commission on the most appropriate regulatory requirements to be developed.
342. As a consequence, the impact on PSE and RGLA should be close to the scenario “all but migration”, with the only difference not captured being the introduction of PD and LGD floors on exposures currently classified as exposures to central governments and central banks. Apart from increasing the consistency of the overall framework (in term of exposure classes in the SA and the IRB Approach), the alternative treatment proposed by the EBA allows for a reduction of the impact on own funds requirements for RGLA and PSE classified as institutions. Compared to the previous approach, this ensures that no substantive change are applied to counterparties treated as sovereign under the standardised approach,

although the framework would be introducing a clear Basel deviation for counterparties treated as institutions under the standardised approach<sup>63</sup>.

### 4.2.3 Impact on risk parameters – PD

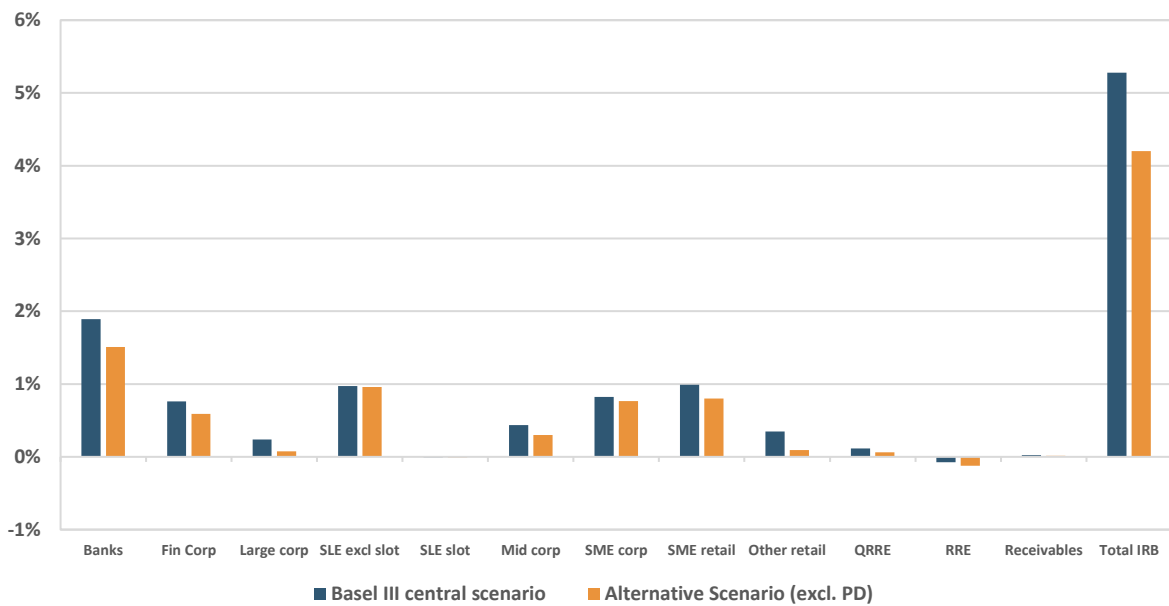
#### (i) PD input floors

##### Recommendation CR-IR 9: PD input floors

The PD input floors should be raised from three basis points to five basis points as proposed in the final Basel III framework in order to reduce the undue variability and keep a conservative minimum level of the outcomes of internal models.

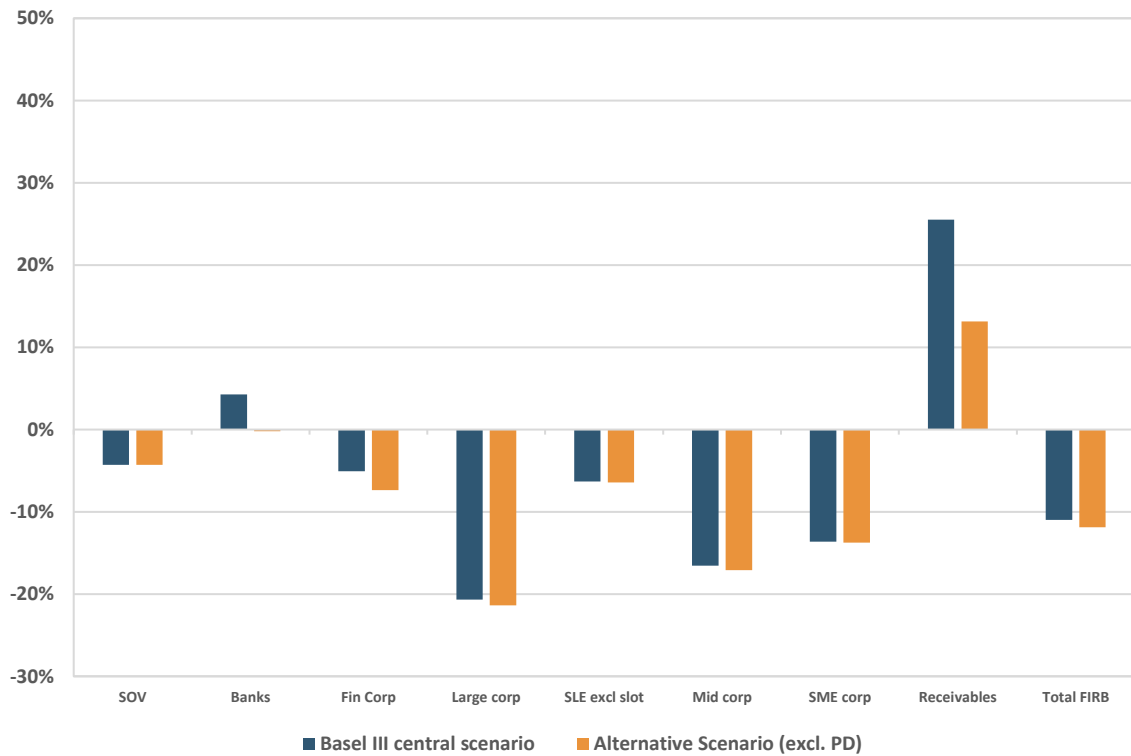
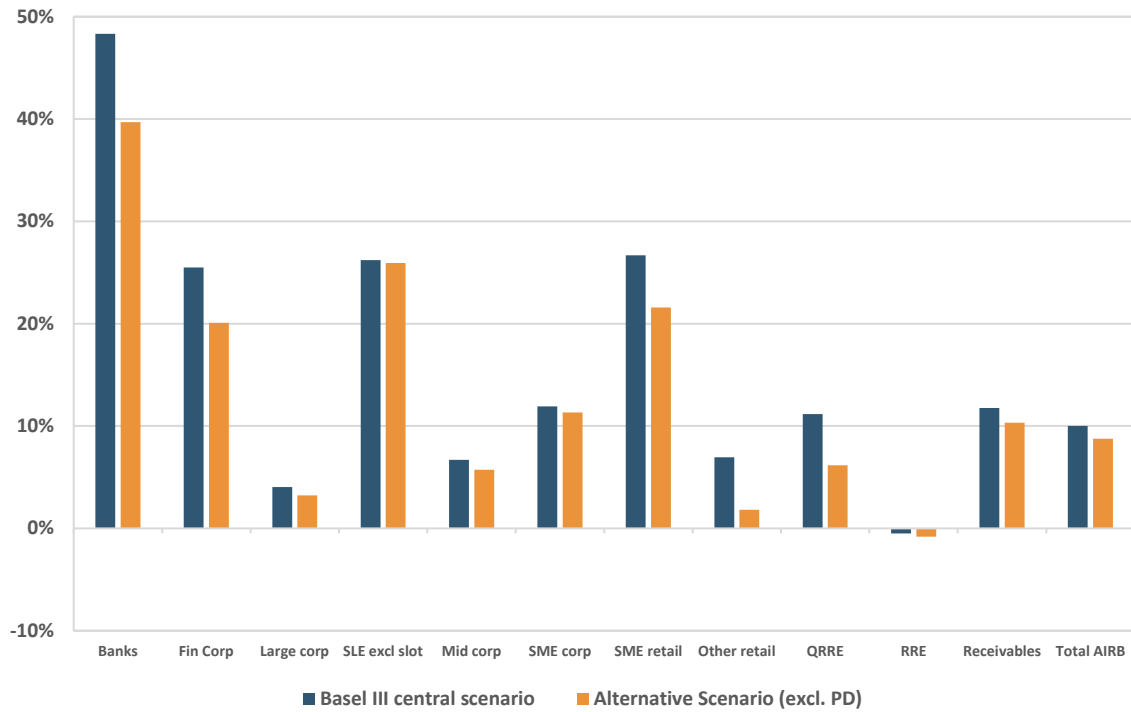
343. The final Basel III framework raises the current PD input floors from three basis points to five basis points. The following impact has been reported in the quantitative impact study conducted by the EBA:

Figure 26: Marginal impact of the PD floors (contribution)



<sup>63</sup> As a difference to the approach with one separated exposure class, where the common treatment of all RGLA and PSE under implementation in the EU would imply a more conservative treatment for some exposures (those assimilated to sovereigns under the SA) and a less conservative for the others (those assimilated to institutions under the SA), with therefore no clear direction of the deviation.

Figure 27: Relative impact of the PD floors (split by regulatory approach: A-IRB portfolios above, F-IRB portfolios below)



344. The impact of the measure (difference between the blue and orange bar) is positive but remains low. It is slightly higher for exposures to institutions, financial institutions treated as corporates and large corporates. In the same manner as for the impact of the migration to the F-IRB Approach, this is an intended consequence of the final Basel III framework, since the main impacts are expected on LDP in order to reduce the undue variability of RWARWA. As such, the PD floors ensure a minimum conservatism in the own funds requirements, in particular for cases where limited data is available for a proper risk quantification.

(ii) **Additional clarifications on the PD modelling**

**Recommendation CR-IR 10: Clarifications on PD estimation**

The additional clarifications and enhancements related to the estimation of PD should be implemented as proposed in the final Basel III framework in order to reduce the undue variability of the outcomes of internal models.

345. The effects of additional clarifications on the PD modelling introduced in the final Basel III framework have been assessed in the qualitative survey. Institutions were asked to provide a qualitative assessment of the impact<sup>64</sup>, in a separate manner for exposures to central governments and central banks, as well as to the institution, corporate and retail exposure classes. The assessment related specifically to the following clarifications in the final Basel III framework:

- a) horizon of the rating assignment (IRB, paragraphs 182 and 183);
- b) computation of the one-year default rate (IRB, paragraph 230);
- c) underlying data for the PD estimation reflecting good and bad years (IRB, paragraphs 231 and 234);
- d) indirect impact from changes in the SA: no assumptions of implicit government support in the ECAI rating (SA, paragraph 18).

346. The number of respondents providing the assessment greatly varies depending on the exposures class and the question considered, with about 45 responses for exposures to central governments and central banks and exposures to institutions, 60 for the corporate exposures and 55 for the retail exposures. None of the changes raised concerns (i.e. led to high impact) for more than two institutions. As in overall all concerns regarding clarifications on the PD estimates were raised by only four institutions, the EBA believes that these

<sup>64</sup> Institutions had the following choice:

- No impact as current policy in line with revised Basel III: no change
- Negligible impact: less than 5% change (negative or positive)
- Low impact: between 5% and 10% change (negative or positive)
- Moderate impact: between 10% and 20% change (negative or positive)
- High impact: more than 20% change (negative or positive)
- N/A: The institution has no IRB exposures

changes will not lead to significant impact while at the same time may contribute to a decrease in the undue variability of RWA. Moreover, some of the clarifications (e.g. on the computation of the one-year default rate; underlying for the PD estimation reflecting good and bad years) have already been introduced by the EBA's review of the IRB Approach. Therefore, the clarifications proposed in the final Basel III framework should also be reflected in the EU implementation of this framework.

#### 4.2.4 Impact on risk parameters – LGD

##### (i) Impact of the change in regulatory values under F-IRB Approach

###### **Recommendation CR-IR 11: LGD regulatory values**

The new LGD regulatory values should be implemented as proposed in the final Basel III framework.

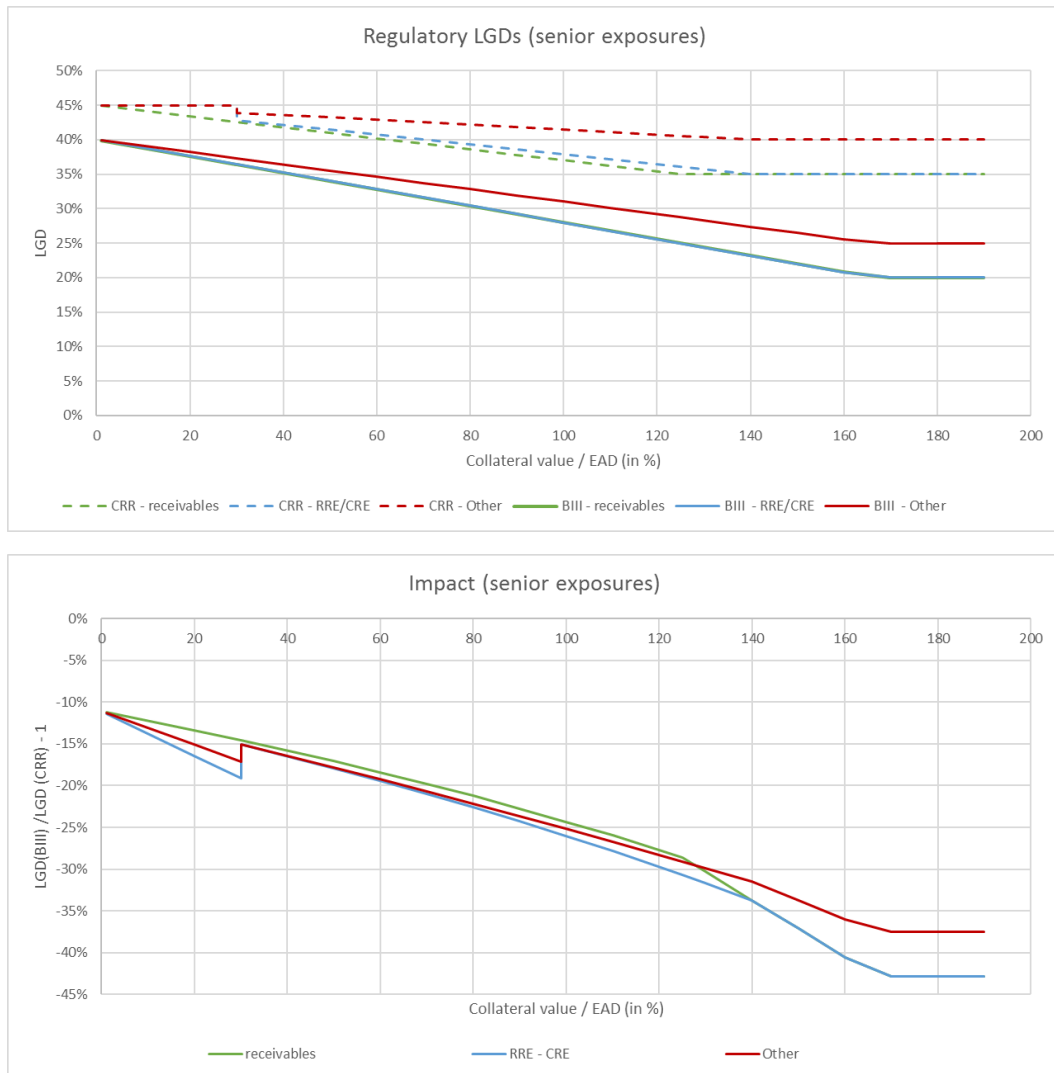
347. The final Basel III framework introduces a new formula to compute the regulatory LGD parameters for secured exposures (paragraph 74 to 77 of the final Basel III framework). Compared to the Basel II framework, this formula increases the risk sensitivity of the overall framework in the following manners:

- a) it deletes the minimum collateralisation requirements; therefore, the collateral is taken into account as soon as it has any value;
- b) it increases the difference between the LGD applied to unsecured exposures and LGD applied to fully and partially secured exposures; this comes from a reduction of the LGD secured (from 35% to 20% for exposures secured by real estate collateral and eligible receivables and from 40% to 25% for exposures secured by other physical collateral) along with a recalibration of the haircuts applies to the value of the collateral<sup>65</sup>;
- c) it adjusts downwards the LGD for senior unsecured corporate exposures, from 45% to 40%.

348. These changes can potentially lead to a significant decrease in the LGD and therefore in the own funds requirements, as the RWA formula is linear with the LGD risk parameters, meaning that a reduction of X% of the LGD parameter reduces by the same X% the RWA (and the EL amounts). The theoretical relations between the level of collateralisation and the regulatory LGDs under the current CRR and under the final Basel III framework are shown in the following graphs (for the exposure class corporate):

<sup>65</sup> No haircut are directly defined in the Basel II framework; instead, the text gives an LGD applied to fully secured exposures. The LGD for partially secured exposures is defined as a weighted average (through the LTV) of the LGD unsecured and LGD fully secured; this indirectly defines an "implied" haircut level under the current framework.

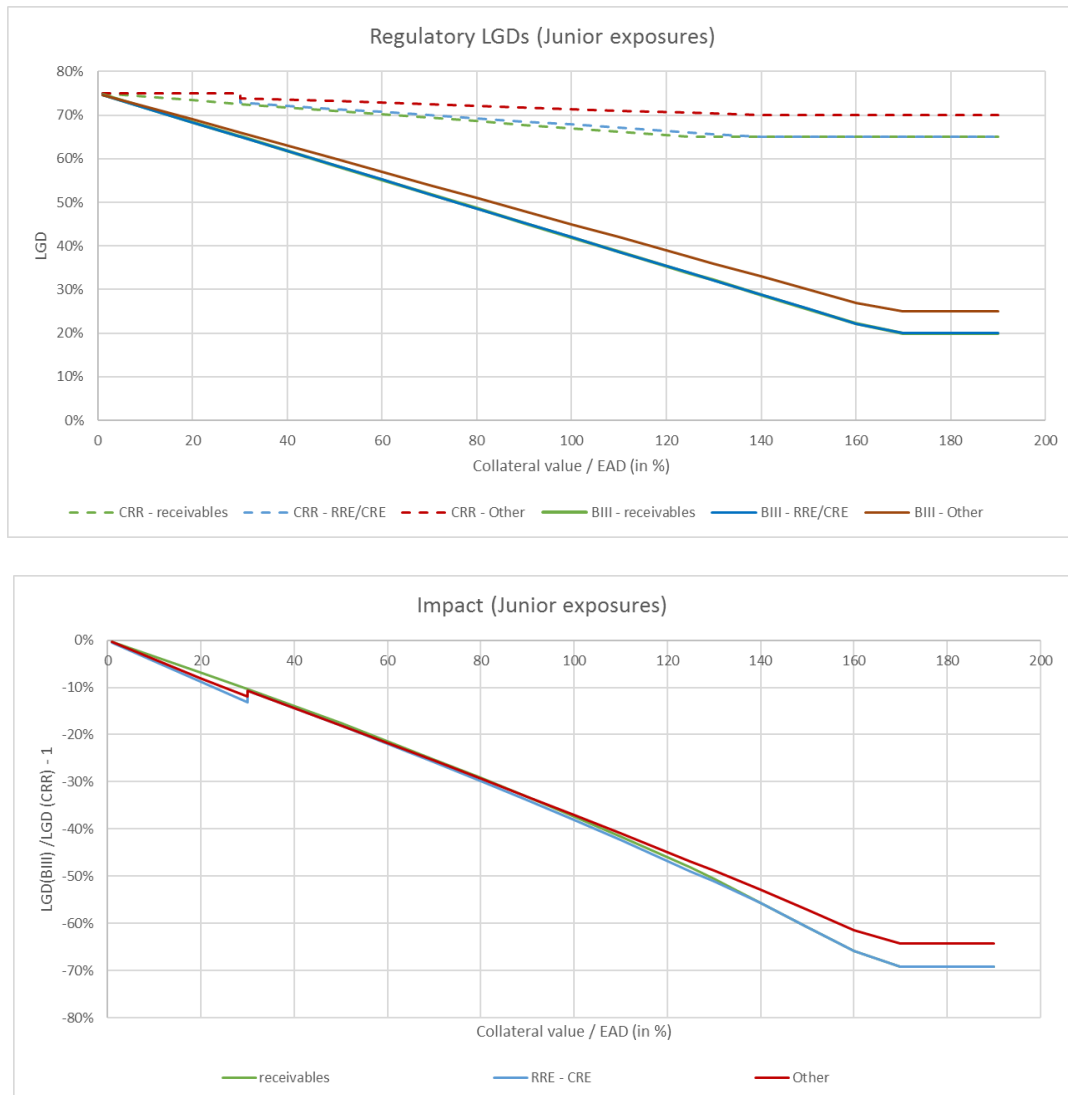
Figure 28: Theoretical impacts of the recalibration of regulatory LGD for corporate senior exposures (in % of current LGD and current RWA)



*Example: for an exposure with an LTV (pre haircut) of 100%, the recalibration of regulatory LGD implies a reduction of 25% of the own fund requirements.*

349. Furthermore, with regard to subordinated exposures, it should also be noted that there is currently a deviation introduced in the EU framework compared **to the Basel II framework**. While the current Basel capital framework concentrates only on senior exposures, Article 230 of the CRR also allows for a reduction of the LGD for subordinated exposures. The final Basel III framework removes this deviation since the LGD secured (for the input floors as well as for the regulatory LGDs) seem to apply to subordinated exposures. It is however very likely that the amount of secured subordinated exposures will be limited (although no quantitative evidence can support this assertion).

Figure 29: Theoretical impacts of the recalibration of regulatory LGD for corporate junior exposures (in % of current LGD and current RWA)



350. The following impact of the change in the regulatory LGD values has been reported in the QIS conducted by the EBA:

Figure 30: Marginal impact of the new regulatory LGD values (contribution)

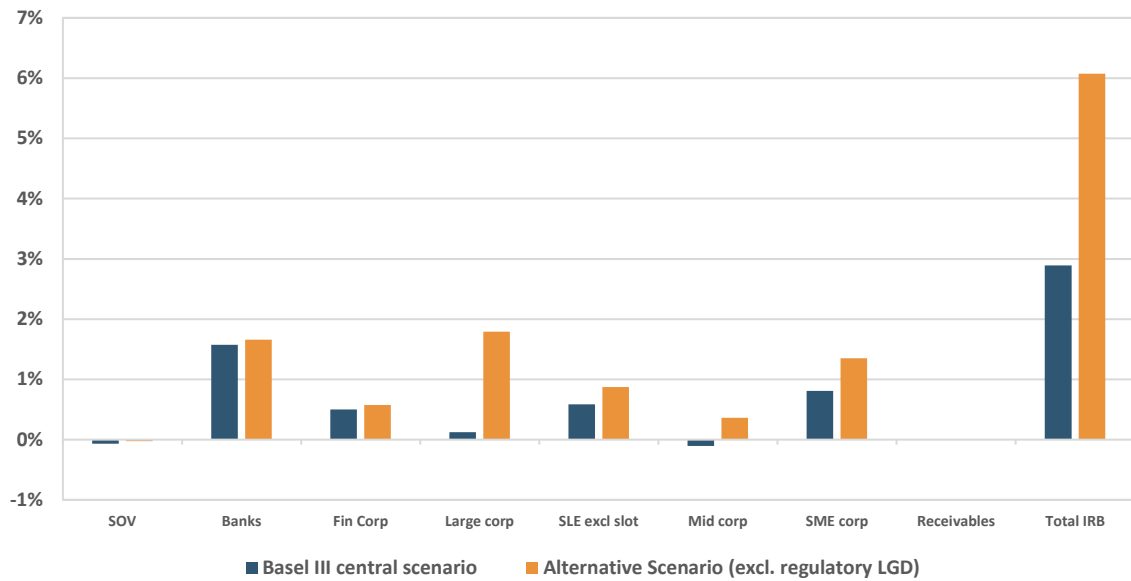
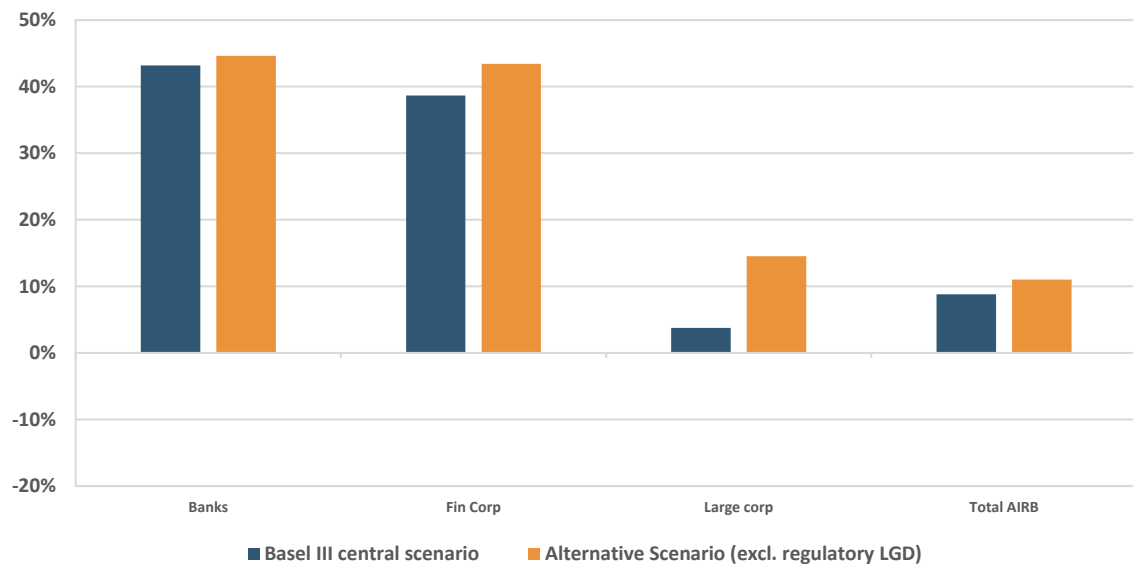
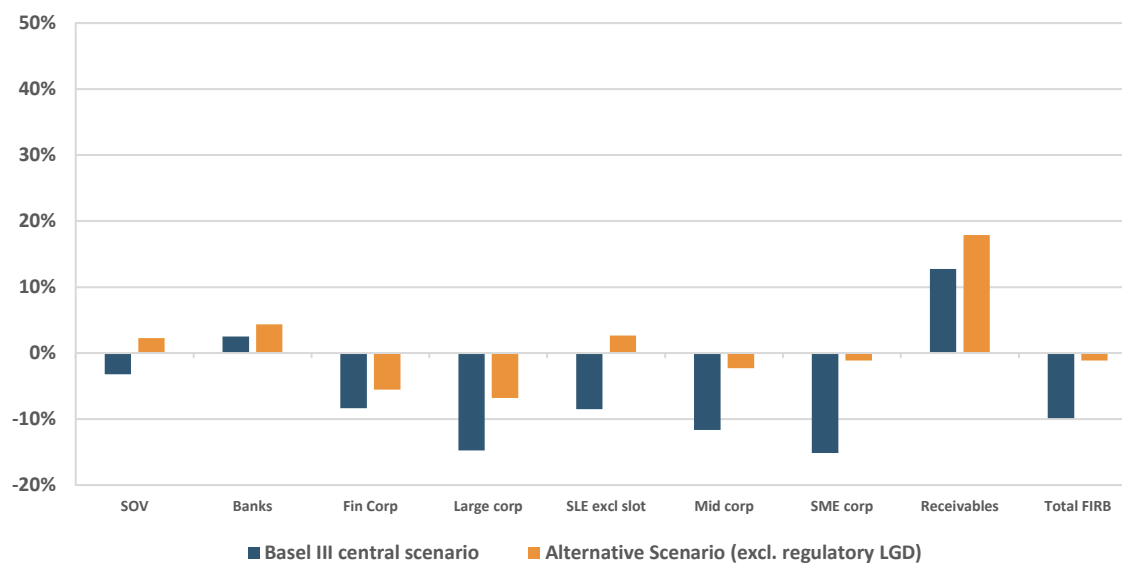


Figure 31: Relative impact of the new regulatory LGD values (split by regulatory approach: A-IRB portfolios above, F-IRB portfolios below)







351. As expected, the highest negative impact (reduction of own fund requirements) is observed for the exposures to corporates. However, the magnitude of the reduction of own fund reduction is somewhat below the pure theoretical impact.
352. The EBA believes that the impact of the final Basel III framework should be assessed in a holistic manner, without focusing on marginal part of the reform. Hence, in this context this measure partially compensates the positive impact of the migration of large corporates from the A-IRB Approach to the F-IRB Approach. As pointed out in section 4.2.2(i), the LGD calculated under the future F-IRB approach are still higher than the LGD calculated under the current A-IRB approach. In addition, it increases the risk sensitivity of the overall framework, first via a better distinction between exposures to institutions and exposures to corporates, and second by better recognising the effect of the different collateral types.
353. Therefore, the EBA recommends to reflect those changes in the regulatory LGD in the EU implementation of the final Basel III framework (using the same LGD secured for senior and subordinated exposures). However, as described in section (ii), the EBA believes that the current values used for exposures in the form of covered bonds should be maintained.

## (ii) Treatment of covered bonds under the IRB Approach

### Recommendation CR-IR 12: Covered bonds

The EBA supports the treatment of covered bonds under the F-IRB Approach, with the application of the PD input floor of 0.05%, and with no change in the regulatory LGD values defined in the CRR.

354. As opposed to the Basel II framework, the CRR currently includes a preferential treatment for covered bonds both in the SA and in the IRB Approach. In the CRR, the “eligible” covered

bonds are defined in Article 129 of the CRR as part of the SA, referring to the general definition of covered bonds set out in Article 52(4) of the Directive 2009/65/EC. The same definition is used in Article 161 of the CRR for the IRB approach, which specifies that: “covered bonds eligible for the treatment set out in Article 129(4) or (5) may be assigned an LGD value of 11,25 %”.

355. The final Basel III framework introduced the covered bonds exposure class in the SA, but omitted to align the IRB approach accordingly. This raises the question of consistency, and the EBA believes that it is relevant to keep the current specific treatment in the IRB Approach. In addition, the final Basel III framework impacts the covered bonds in an indirect manner in two ways:

- a) As covered bonds are by definition issued by credit institutions, they will have to be all treated under the F-IRB Approach. This is consistent with the general approach of the final Basel III framework to limit the modelling of LGD for LDP, and the EBA supports this consequence.
- b) The application of the PD floor will increase the minimum RW under F-IRB Approach (although it is partly compensated by the deletion of the 1.06 factor): the minimum RW would move from 3.83% (PD = 0.03%, LGD= 11.25% with 1.06 scaling factor and an effective maturity (M) of 2.5 years) to 4.91% (PD = 0.05%, LGD= 11.25% with no 1.06 scaling factor and a M of 2.5 years). This compares with a minimum RW of 10% in accordance with the current treatment under the SA as specified in Article 129(4) and 129(5) of the CRR, and with the revised SA as specified in paragraph 35 of the SA of the final Basel III framework. Should the specific treatment be removed, an LGD of 45% would apply, and the minimum RW would be at 20%, well above the 10% of the SA. Based on this comparison, the removal of the A-IRB Approach does not remove the incentives for PD modelling. However, should the current specific treatment for covered bonds under the IRB Approach be removed, the hierarchy of approaches would be affected and the minimum RW under the F-IRB Approach would be higher than the RW available under the SA.

### (iii) LGD input floors

#### **Recommendation CR-IR 13: LGD input floors**

The LGD input floors should be implemented as proposed in the final Basel III framework in order to reduce the undue variability and to keep conservative minimum levels of the outcomes of internal models. It should further be clarified that the haircuts used for calculation of the individual LGD input floors for secured and partially secured exposures should be based on the eligibility criteria of the A-IRB Approach.

356. The final Basel III framework introduces LGD input floors for exposure classes where the modelling of LGD remains eligible; these input floors are specified in paragraphs 85 and 86 for corporate exposures, and in paragraph 121 for retail exposures. The computation of the floor for fully or partially secured exposures is based on the rules for the F-IRB Approach

specified in paragraphs 74 and 75. In particular, the same values for the haircuts are to be applied to the value of the collateral recognised in the computation of the floor. The values of such haircuts for eligible financial collateral are based on the FCCM, while they are fixed at 40% for other eligible collateral and at 100% for ineligible collateral. The values of the LGD floors vary between 25% and 50% for the unsecured part of the exposures, depending on the type of exposures, and between 0% and 15% for the secured part of the exposures, depending on the type of collateral. The calculation of the LGD input floors does not take the effect of UFCP into account even though these may be reflected in the LGD estimation.

357. The following impact of the LGD input floors has been reported in the quantitative impact study conducted by the EBA:

Figure 32: Marginal impact of the LGD floors (contribution)

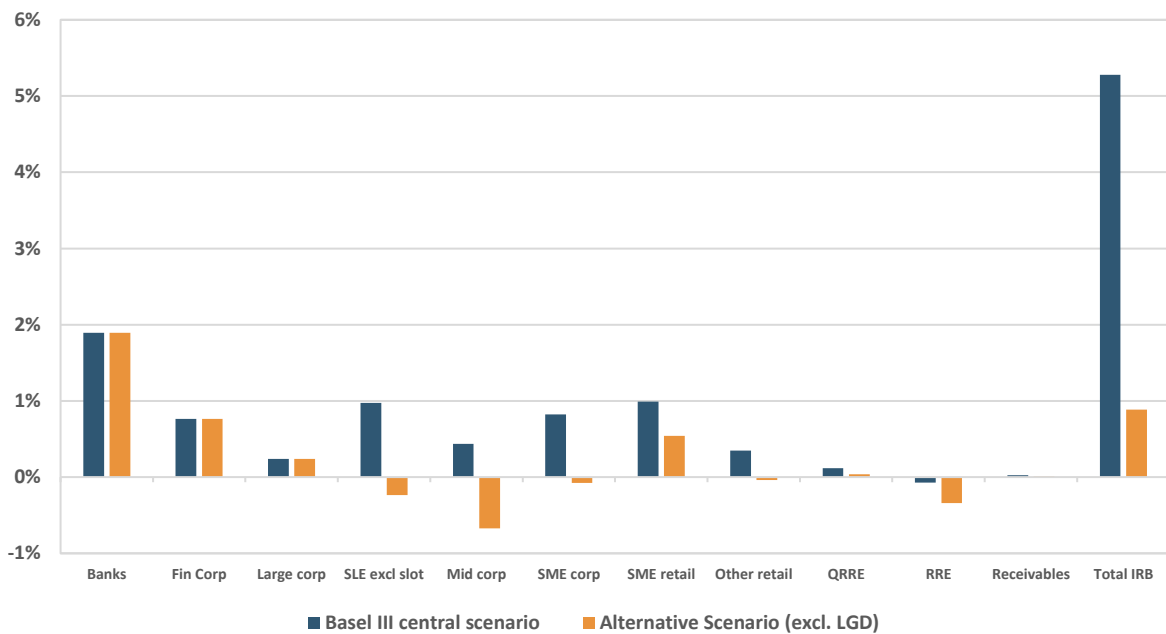
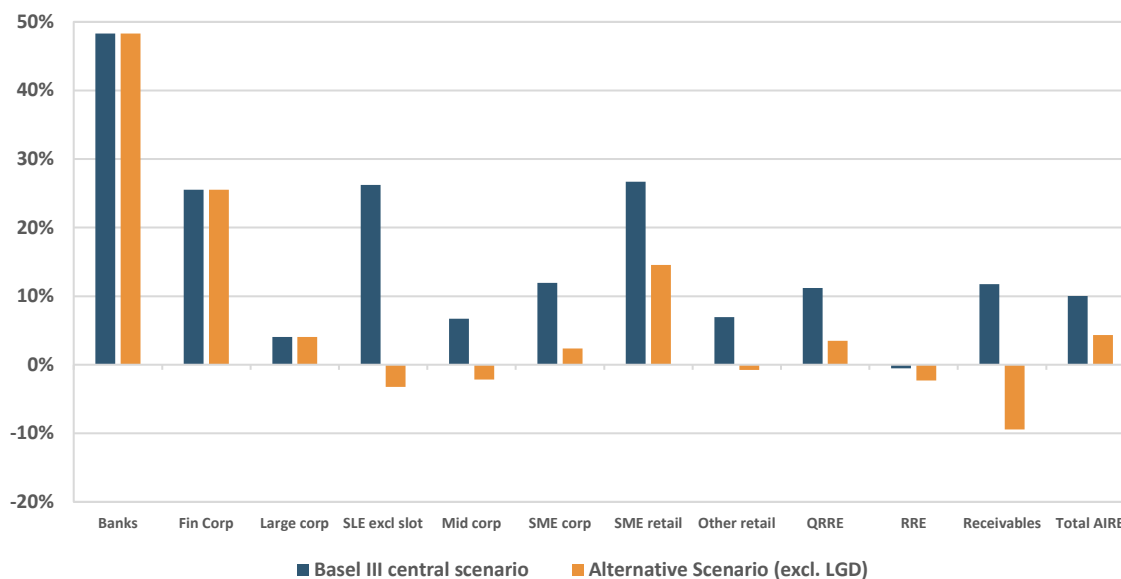


Figure 33: Relative impact of the LGD floors (split by regulatory approach: only A-IRB portfolio)



358. The impact of the LGD floors is substantial for exposures to medium and small corporates, other retail exposures as well as SLE treated under the A-IRB Approach. This effect is in line with the expectations, as these types of exposures are more likely to be secured by forms of collateral other than residential mortgages, where the haircuts to the value of collateral as well as the levels of the floors are particularly high as compared to the estimates. However, it should also be highlighted that the impact tested in the QIS refers to the application of the floors to the current estimates of risk parameters. These parameters do not yet (fully) reflect the clarifications recently provided as part of the EBA's review of the IRB Approach, and in particular of the EBA Guidelines on PD and LGD estimation, the RTS on the nature, severity and duration of economic downturn and of the EBA Guidelines on the downturn LGD estimation. Implementation of these requirements is expected to significantly decrease the variability of LGD estimates and the impact of the LGD input floors as proposed in the final Basel III framework may hence be significantly different when applied to those revised LGD estimates.
359. The EBA is of the opinion that in order to ensure consistent application of the LGD input floors additional clarifications should be provided in the EU implementation of the final Basel III framework. First of all, it should be clarified that regardless of the application of the floors, institutions may estimate LGD in accordance with the current model design reflecting the most relevant risk drivers and being most suitable to the risk profile of the portfolio and recovery strategies of the institution, even if this design does not explicitly differentiate the secured from the unsecured LGD. Such split of exposures is only required for the purpose of the calculation of the LGD floor, which is then compared to an LGD estimate applicable to the entire exposure, i.e. by facility.

360. Secondly, the magnitude of the difference in the values used for the haircuts implies that it is crucial to clarify how this value should be determined. In particular, the EBA believes that the scope of recognised collateral should be assessed by institutions according to the applicable framework. In other words, for the computation of the LGD input floors, the eligibility criteria should be assessed according to the requirements applicable under the A-IRB Approach. This implies that in the case of collateral eligible under the A-IRB Approach, but not under the F-IRB Approach, a 100% haircut would apply when determining the regulatory LGD under the F-IRB Approach, but in the calculation of the LGD floor under the A-IRB Approach a haircut lower than 100% would be used, as applicable to eligible types of collateral. This clarification is very relevant in particular for SLE, where the nature of the projects makes it very hard to meet the eligibility requirements of the F-IRB Approach. The use of F-IRB eligibility criteria would imply that a significant number of SLE would be considered as unsecured for the purpose of the calculation of the LGD input floors, with a substantial increase of own funds requirements as evidenced by the result of the QIS. The EBA is of the view that this effect would not be appropriate and the resulting RW would not be sufficiently risk sensitive.
361. Should it be considered that the treatment of SLE needs further refinements, the EBA stands ready to further assist the EU Commission on the most appropriate regulatory requirements to be developed.

(iv) **Simplified A-IRB Approach**

**Recommendation CR-IR 14: New simplified A-IRB Approach**

It should be clarified that under the simplified A-IRB Approach as proposed in the final Basel III framework the haircuts used for calculation of the LGD risk parameter for secured and partially secured exposures should be based on the eligibility criteria of the F-IRB Approach.

362. The final Basel III framework gives the possibility to combine A-IRB with F-IRB Approach as specified in paragraph 87. In accordance with this rule, institutions under the A-IRB Approach would be allowed to use the formula in paragraph 74 or 83 of the final Basel III framework specified for regulatory LGD values with the difference that instead of the 40%, 45% or 75% regulatory LGD values for the unsecured part of the exposures they would be allowed to use their own estimate of LGD. This own LGD estimate must not take account of any effects of collateral recoveries.
363. The EBA agrees with the condition set out in paragraph 87 of the final Basel III framework that that the eligibility requirements of the F-IRB Approach for the collateral have to be met in order to use this new possibility.
364. In addition, it should be made clear that the use of the simplified approach described above is only available to exposures that are still treated under the A-IRB Approach and that specific permission is required for LGD models, which only provide estimates applicable to the unsecured part of the exposures. This interpretation is coming from (1) the subsection where

this paragraph is located (“LGD under the advanced approach”); and (2) the beginning of the paragraph (“In cases where a bank has met the conditions to use their own internal estimates of LGD for a pool of unsecured exposures”). Further guidance may be needed on how to estimate and assess the LGD for the unsecured part of the exposures without taking account of any effects of collateral recoveries.

(v) **Additional clarifications on the LGD modelling**

**Recommendation CR-IR 15: Clarifications on LGD estimation**

The additional clarifications related to the estimation of LGD should be implemented as proposed in the final Basel III framework in order to reduce the undue variability of the outcomes of internal models.

365. Institutions were asked to provide a qualitative assessment of the impact related to the proposed deletion of the possibility to give unequal importance to historic data in estimating LGD for retail exposures (removal of paragraph 473 in the Basel II framework). Only two institutions (out of 57 responding institutions) assessed the impact of this change as high. Therefore, the EBA supports the deletion of this optionality in order to reduce the variability of the LGD estimates. In addition, this provision would have little practical relevance after the implementation of the RTS on the nature, severity and duration of economic downturn and EBA Guidelines on the downturn LGD estimation. The EBA hence considers that this optionality with regard to the weighting of historical data should be deleted, as it adds unnecessary complexity and contributes to unjustified variability of the long-run average LGD estimates.

#### 4.2.5 Combined PD and LGD floors

366. The following impact of the PD and LGD input floors has been reported in the QIS conducted by the EBA:

Figure 34: Marginal impact of the PD and LGD floors (contribution)

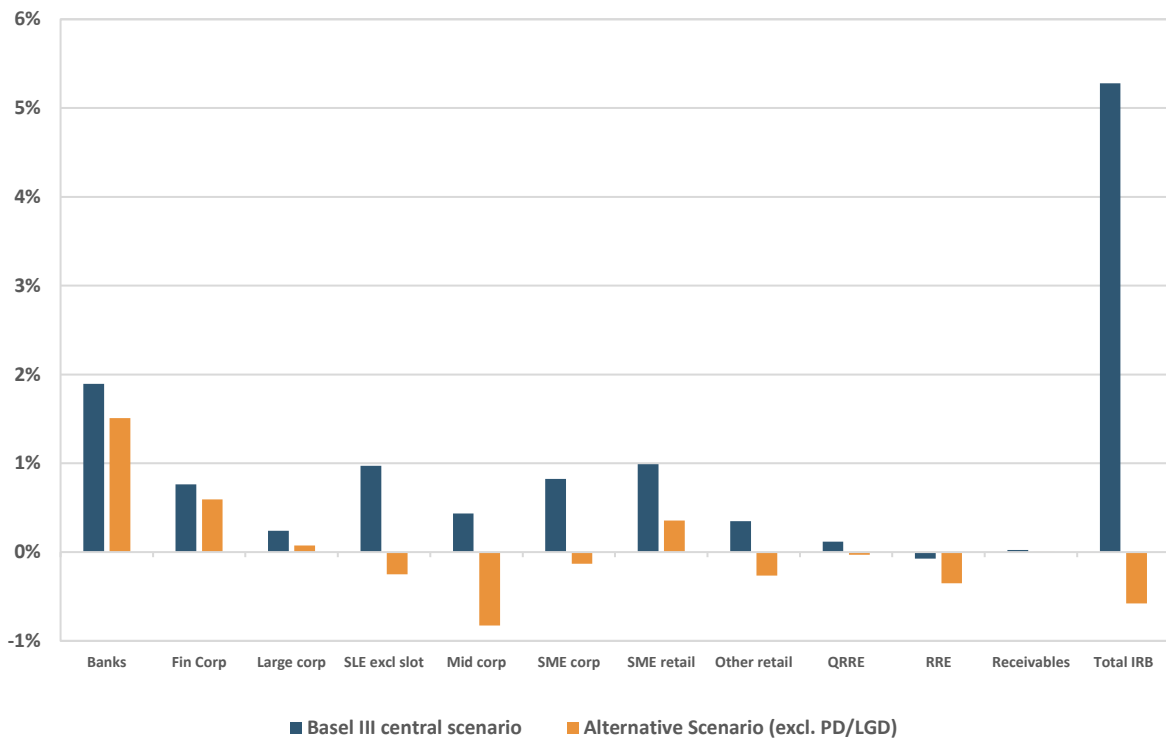
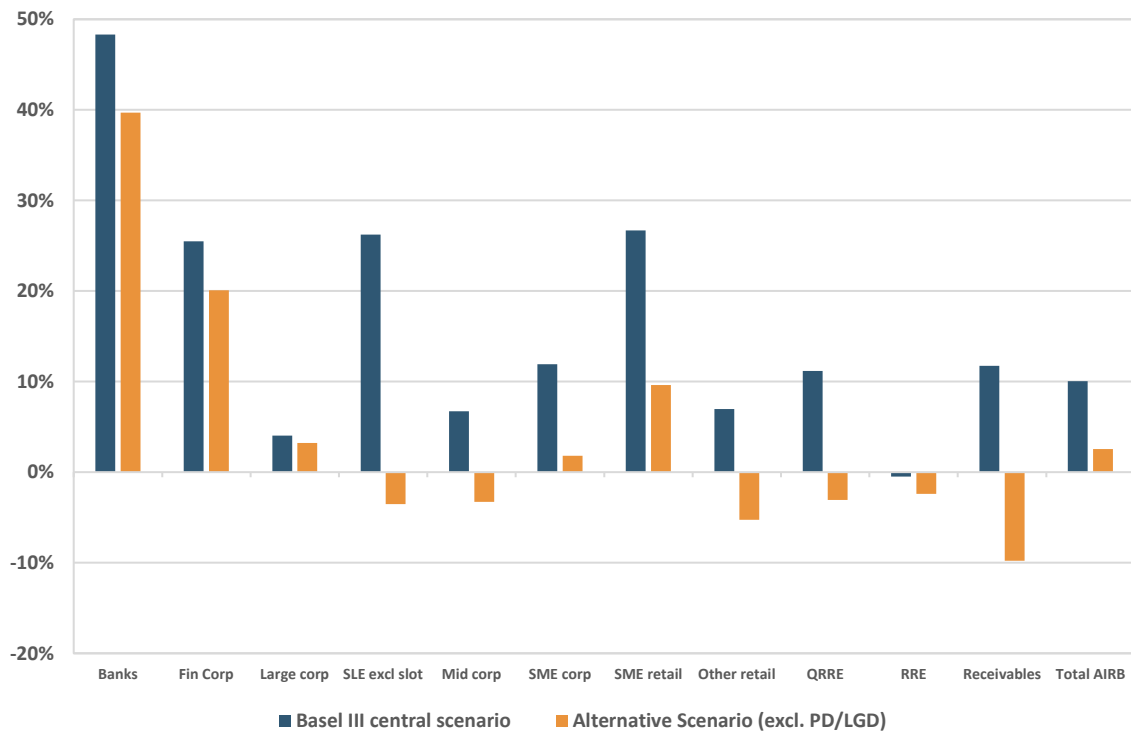


Figure 35: Relative impact of the LGD floors (split by regulatory approach: only A-IRB portfolios)



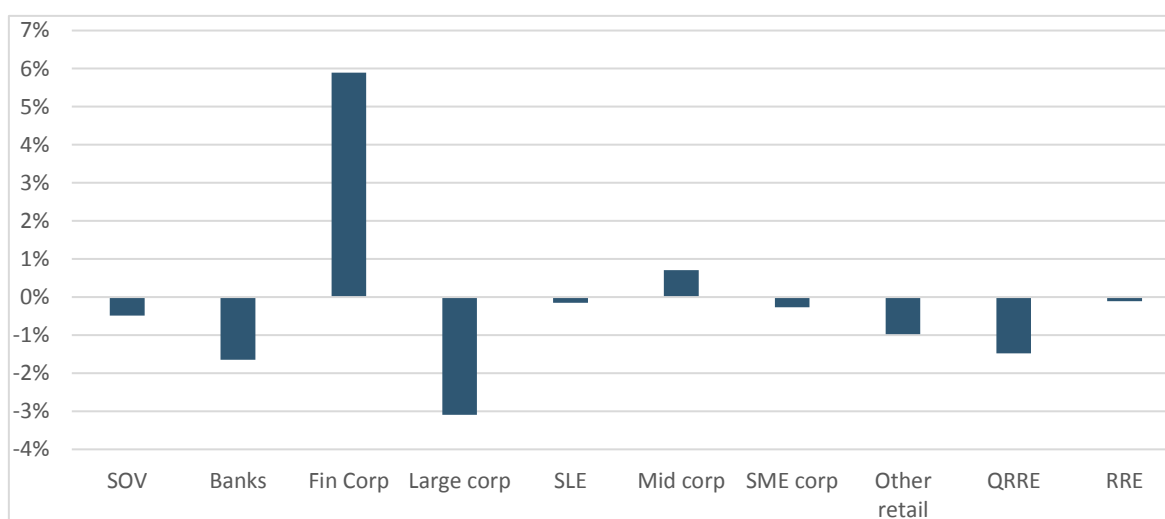
#### 4.2.6 Impact on risk parameters - CCF

367. The final Basel III framework changes the following aspects with respect to the off balance sheet exposures:

- a) It restricts the scope of modelling of CCF, both via the migration of exposures from the A-IRB to the F-IRB Approach, as well as via paragraph 105 (for non-retail exposures) and 125 (for retail exposures) which restricts the modelling to *“undrawn revolving commitments [...], provided the exposure is not subject to a CCF of 100% in the standardised approach.”*.
- b) It updates the regulatory values applied to the OBS amounts. This update is done indirectly for the IRB exposures via paragraph 102, which requires the CCF applied to be *“the same as those in the standardised approach, as set out in paragraphs 78 to 89.”* This update is discussed more in depth in Section 4.2.6(ii).
- c) It provides more extensive clarifications on the estimation of CCF within the remaining scope. These elements have been assessed via the qualitative questionnaire.
- d) It changes the definition of a “commitment”. This part of the framework has also been assessed via the qualitative questionnaire and is discussed more in depth in Section 2.6.

368. The following impact of the combined changes in relation to the CCF estimates (all changes except the new definition of commitments) has been reported in the QIS conducted by the EBA:

Figure 36: Marginal change in exposure value by exposure class

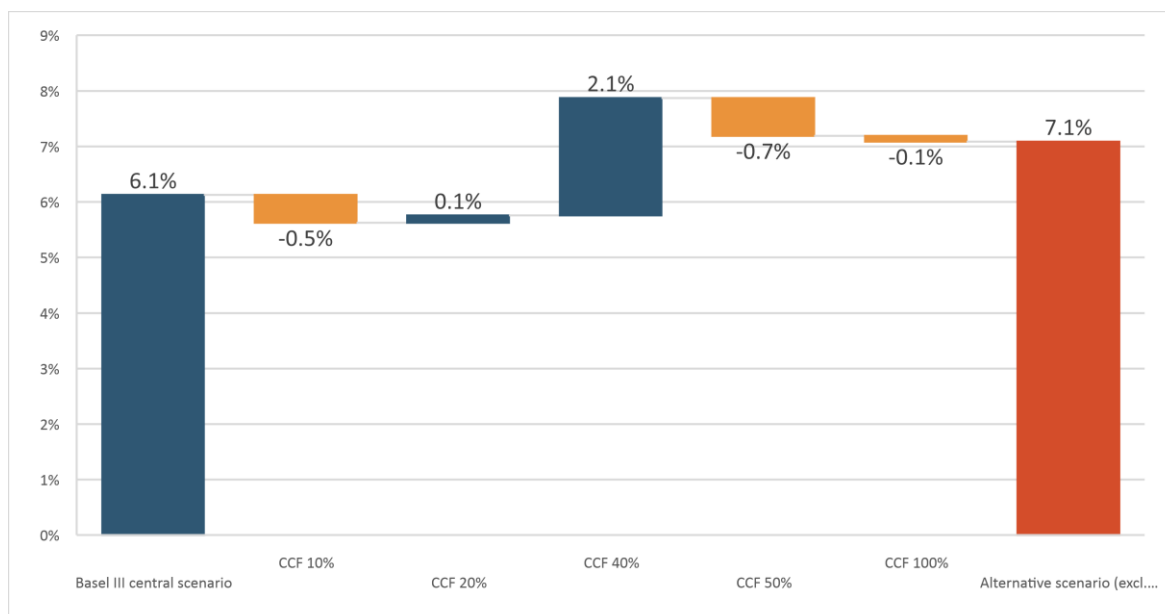


369. While there is a general decrease in the exposure value measure, the EBA notes the exception of the exposures to financial institutions treated as corporates. This increase is not due to the change in the CCF framework, but mostly due to the introduction of the minimum haircut floors for non-centrally cleared securities financing transactions (SFTs). The change



introduced in paragraphs 179 to 188 of the SA to credit risk section is analysed further by the EBA in the *Policy advice on the Basel III reforms on Securities Financing Transactions*.

Figure 37: Marginal impact of the new CCF (change in RWA by risk category for OBS items<sup>66</sup>)



### (i) Scope of CCF modelling

#### Recommendation CR-IR 16: Reduced scope of CCF modelling

The EBA supports the restriction of CCF to “undrawn revolving commitments [...], provided the exposure is not subject to a CCF of 100% in the standardised approach”. However, it is necessary to include in the CRR a precise definition of ‘revolving commitment’, such as facilities “where customers’ outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to a limit established by the bank.”

370. Due to the change in the scope of modelling, Articles 151 and 166 of the CRR will have to be revised, which gives the opportunity to improve the clarity of the text. In this context, the **definition of revolving facilities** can have significant impact on the consistent application of the requirements and should be carefully drafted. In particular, the EBA believes that the definition of revolving exposures should be compatible with exposures treated as QRRE in the retail exposure class. In paragraph 24 of the Basel III framework, these revolving exposures are defined as “those where customers’ outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to a limit established by the bank.” Further elements on this sub exposure class are exposed in section 2.5.2

<sup>66</sup> The labels of the buckets for the x-axis refer to the regulatory CCFs used either directly to derive the exposure value, or indirectly to calculate the CCF input floors when own CCF estimates are used.

(ii) Impact of the change in CCF regulatory values

**Recommendation CR-IR 17: CCF regulatory values**

The new CCF regulatory values and new buckets should be implemented as proposed in the final Basel III framework.

371. The following impact of the change in regulatory CCF values has been reported in the quantitative impact study conducted by the EBA:

Figure 38: Marginal impact of the new regulatory CCF for F-IRB institutions (contribution)

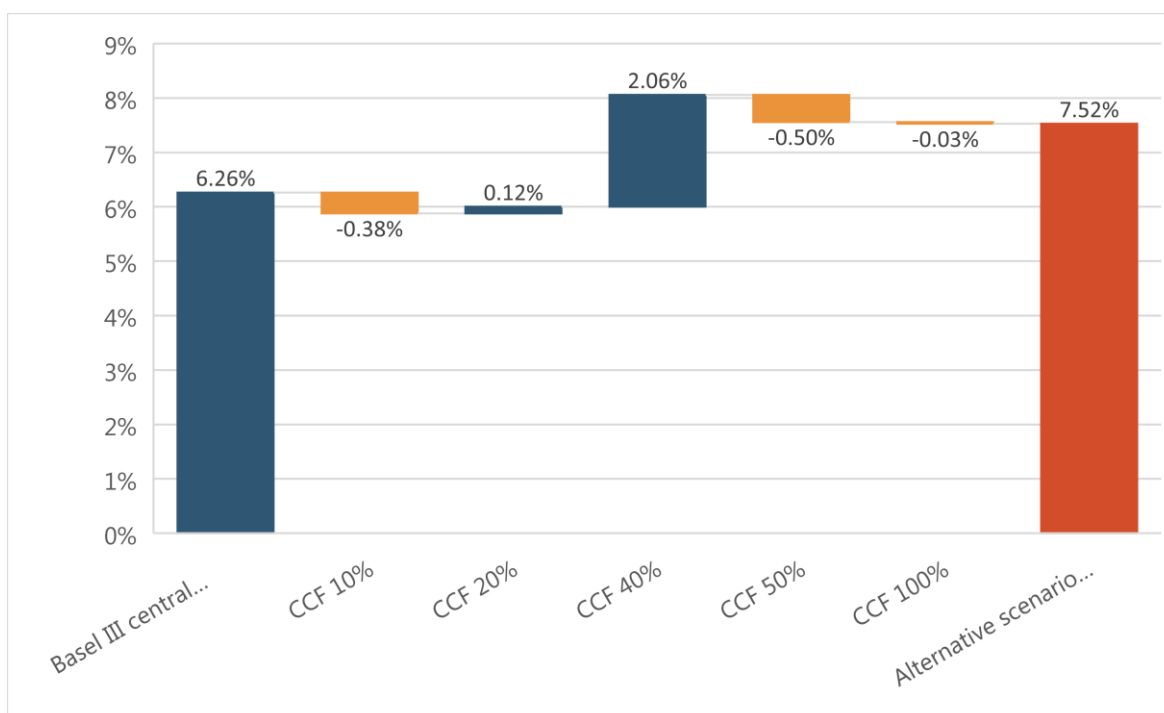
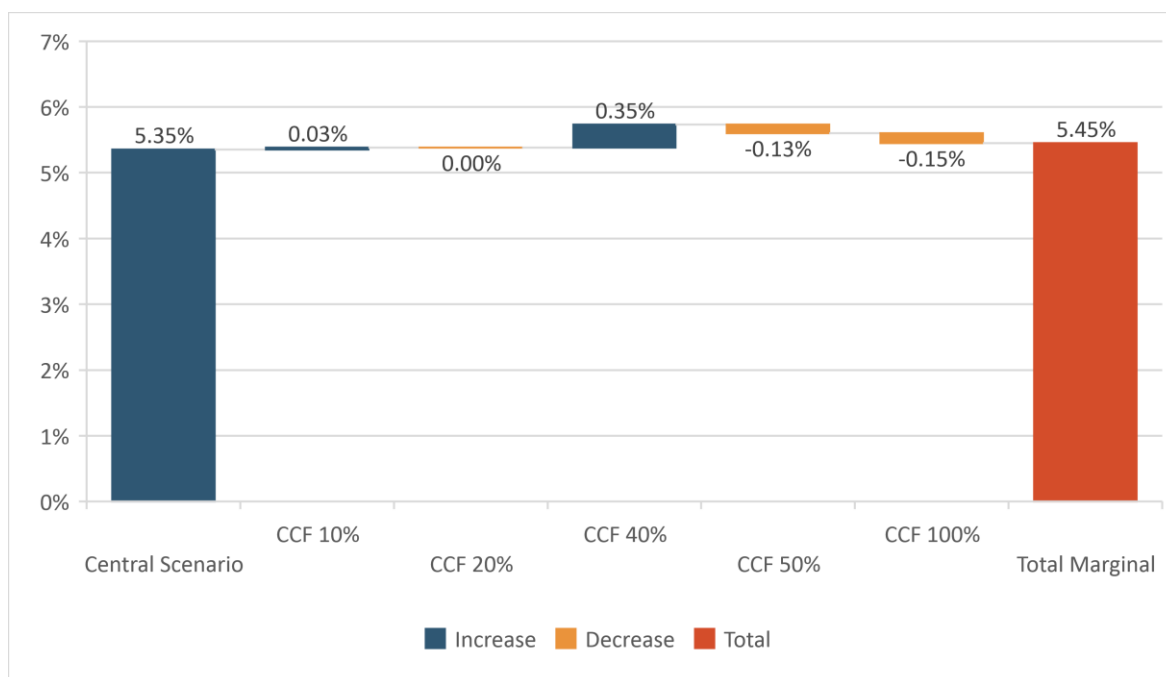


Figure 39: Combined impact of the migration to regulatory CCF and new CCF regulatory values for A-IRB bank (contribution)



372. The EBA's recommendation is to implement these new regulatory values as proposed in the final Basel III framework, consistently for all approaches.

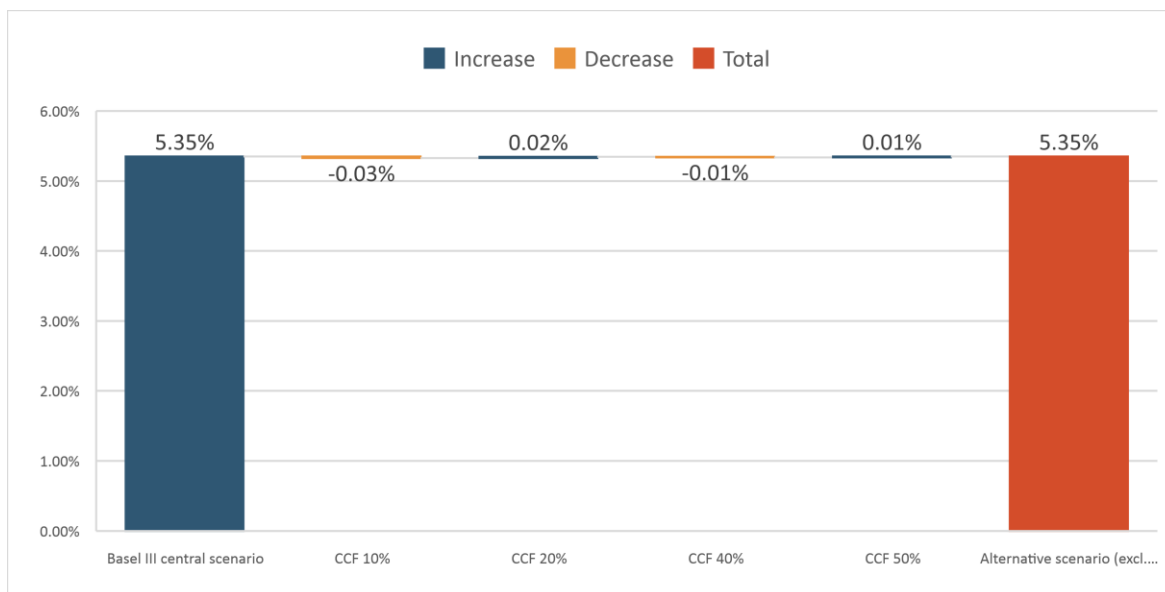
### (iii) CCF Input floors

#### Recommendation CR-IR 18: CCF input floors

The new CCF input floors should be implemented as proposed in the final Basel III framework in order to reduce the undue variability and keep conservative minimum levels of the outcomes of internal models.

373. The following impact of the introduction of CCF input floors has been reported in the QIS conducted by the EBA:

Figure 40: Marginal impact of the CCF floors for A-IRB institutions (contribution)



374. It should be noted that the figures under the marginal scenario “no CCF changes” also revert the marginal clarifications on the CCF modelling presented in the next subsection. Nevertheless, in accordance with the results of the qualitative questionnaire, these clarifications are not expected to significantly impact the own funds requirements, hence the figures are deemed to be a good proxy of the marginal impact of the CCF input floors.
375. The EBA’s recommendation is to implement these input floors as proposed in the final Basel III framework.

#### (iv) Additional clarifications on the CCF modelling

##### Recommendation CR-IR 19: Clarifications on own CCF estimations

The additional clarifications and enhancements related to the estimation of CCF should be implemented as proposed in the final Basel III framework in order to reduce the undue variability of the outcomes of internal models.

376. In the qualitative questionnaire institutions were asked to provide a qualitative assessment of the impact related to certain additional clarifications on own CCF estimations separately for exposures to central governments and central bank, as well as for institution, corporate and retail exposures. In particular, the impact of the following clarifications proposed in the final Basel III framework was analysed:
- 12-month fixed-horizon approach, as other approaches such as the cohort approach will no longer be allowed (IRB, paragraphs 245 and 246);
  - downturn exposure at default (EAD) should not fall below a conservative estimate of the long-run default-weighted average EAD (IRB, paragraph 242);

- c) specification of homogeneous segments (IRB, paragraph 246);
- d) treatment of regions of instability (IRB, paragraph 247);
- e) no caps to the principal amount (IRB, paragraph 248);
- f) reflection of wrong-way risk in the calculation of EAD (IRB, paragraph 191);
- g) definition of commitments (SA, paragraph 78).

377. As compared to the questions related to the PD and LGD clarifications, the sample of responding institutions has been smaller for non-retail exposure classes, with less than 25 respondents for all the questions related to exposures to central governments and central banks as well as to institutions<sup>67</sup>, around 35 respondents for corporates exposures and around 50 institutions for retail exposures. Six institutions pointed out potentially high impact of the definition of commitments (discussed in section 2.6; four institutions expressed concerns on the clarification around the 12-month fixed-horizon approach and the restrictions on other approaches (such as the cohort approach); and one bank raised concerns on all the other clarifications. Overall, 10 institutions pointed out at least one issue which is expected to have a high impact on their own CFF estimates.

378. The EBA supports the introduction of these clarifications in the EU implementation of the final Basel III framework. The EBA believes that these clarifications will contribute to further reductions of undue variability of own estimates of CCFs.

#### 4.2.7 Impact on risk parameters – Effective Maturity

##### (i) Additional clarifications on the calculation of effective maturity

###### **Recommendation CR-IR 20: Calculation of effective maturity for revolving facilities**

The additional clarifications to the maturity parameter should be implemented as proposed in the final Basel III framework. In addition, Article 162 of the CRR on the calculation should be further clarified in order to ensure harmonised application.

379. Paragraph 109 of the final Basel III framework includes clarification on the effective maturity (M) for revolving facilities, which must be the maximum contractual termination date and not the repayment date of the current drawing. The EBA believes that this clarification should also be incorporated in the CRR as it is expected to contribute to the reduction of undue variability of RWA.

380. Article 162(2)(f) of the CRR currently specifies that where an institution is not in a position to calculate M in accordance with the specified formula, the parameter should reflect the maximum remaining time (in years) that the obligor is permitted to fully discharge its

<sup>67</sup> Since the institutions exposure class is migrating to F-IRB Approach (where the CCF modelling is not permitted), the limited number of respondent on the impact of the clarifications related to CFF estimates was expected.

contractual obligations. Despite the negligible marginal impact of the additional clarification provided in the final Basel III framework, the EBA believes that for the sake of clarity of the regulation and its homogenous application, this additional clarification regarding M for revolving facilities should be explicitly reflected in the EU implementation of the final Basel III framework. Furthermore, the potential impact of this clarification may be mitigated by the proposals presented in the next subsection with regard to the possibility to use the implicit maturity adjustment based on fixed values for M under the A-IRB Approach.

381. In addition, the EBA would like to stress that there has been a significant number of Q&As related to the application of Article 162 of the CRR on the calculation of the M parameter. The EBA believes that the clarifications and corrections brought in the Q&As could be incorporated in the text of the CRR in order to improve its overall clarity. In particular:

- a) The introductory sentence in Article 162(2) of the CRR fails to refer to letter (f) to (j) (the paragraph only mentions points (a) to (e))<sup>68</sup>.
- b) The drafting of Article 162(2)(a) of the CRR could be enhanced to clarify that M should be computed using the contractual schedule, i.e. a potential change to the schedule that would solely depend on a decision to extend the exposures by the institution does not need to be taken into account when determining M<sup>69</sup>.
- c) The drafting of Article 162(2)(g) of the CRR could be enhanced to clarify that it applies for netting sets for which an institution applies the internal model method (IMM) regardless of whether the transaction is collateralised or not. For netting sets for which an institution applies the internal model method and for which the longest-dated contract within the netting set has a maturity of less than or equal to one year, the maturity is calculated by the methods given in Article 162(2)(b) or (c) for derivatives and Article 162(2)(d) of the CRR for SFT<sup>70</sup>.

## (ii) Use of the implicit maturity adjustment based on standardised M values under the A-IRB Approach

### Recommendation CR-IR 21: Use of fixed maturity under A-IRB Approach

With regard to the possibility for institutions to use fixed maturity under A-IRB Approach, the CRR could be simplified by dropping the part of the threshold based on assets for using fixed 2.5 year maturity value. This modification would align with the threshold used for the scope of modelling for large corporates in the final Basel III framework, i.e. in both cases a simple threshold of EUR 500 million of consolidated sales would be used. While this would be a deviation from the final Basel III framework, such deviation already exists in the CRR as for some exposures the threshold based on assets is increased from EUR 500 million to EUR 1 billion.

<sup>68</sup> Q&A 762: [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2014\\_762](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2014_762)

<sup>69</sup> Q&A 686 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013\\_686](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013_686) Q&A 687 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013\\_687](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013_687)

<sup>70</sup> Q&A 3169: [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017\\_3169](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017_3169)

382. As a general rule exposures under the F-IRB Approach are assigned fixed values for M of 0.5 years for repurchase or borrowing transactions and securities or commodities lending, and 2.5 years for other exposures, whereas for the exposures under the A-IRB Approach an explicit maturity adjustment based on the institutions' calculation of the M for each exposure is used. However, under some conditions there are exceptions to this general rule. The first one is that some corporate exposures under the A-IRB Approach can be risk weighted using a fixed M value of 2.5 years. More specifically, paragraph 319 of the Basel II framework, and similarly also paragraph 108 of the final Basel III framework, provide a discretion to national supervisors to allow institutions to assume set M to 2.5 years for facilities to certain smaller domestic corporate borrowers if reported sales (i.e. turnover) as well as total assets for the consolidated group for which the firm is a part are less than € 500 million.
383. This discretion is incorporated in Article 162(4) of the CRR, which provides institutions the possibility to consistently assign a value of M of 2.5 years for exposures to corporates situated in the EU and having consolidated sales and consolidated assets of less than EUR 500 million. In addition, this article allows institutions to increase the threshold for total assets to EUR 1 billion for corporates which primarily own and let non-speculative RRE property<sup>71</sup>.
384. It should be noted that a similar threshold is introduced in paragraph 34 of the final Basel III framework, namely in the case of setting the boundary for the application of the A-IRB Approach for large corporates. This point is discussed in detail in Section 4.2.2.

Purpose	BII	BIII	CRR
M		Sales (i.e. turnover) € 500 million Assets € 500 million	Sales € 500 million Assets € 500 million, 1 billion if Corporates non speculative RRE
A-IRB-F-IRB	∅	Annual revenue: €500 million	∅

385. Each of the thresholds have their own purpose, and it could therefore be argued that the current structure should be kept. On the other hand, this lack of consistency increases the complexity of the framework, with often unclear benefits. The following simplified table summarises the different cases and conditions where the fixed value for M of 2,5 years could potentially be used for corporate exposures after implementation of the final Basel III framework:

<sup>71</sup> The EU framework is therefore slightly less restrictive than the Basel capital framework for those exposures.

M = 2.5 years? (In millions €)		Sales	
		< 500 (A-IRB and F-IRB exposures)	> 500 (F-IRB exposures)
Assets	< 500	Possible for A-IRB ( <i>'Institutions may choose'</i> )	Always (F-IRB exposure) <sup>72</sup>
	> 500	<b>Not possible (current CRR)</b>	Always (F-IRB exposure)

386. The EBA notes that the current deviation, i.e. the increased threshold on assets for certain types of entities from EUR 500 million as in the Basel capital framework to EUR 1 billion, has the effect of this threshold being less binding for companies typically characterised by high asset value, which means that this criterion has previously been considered less relevant than the criterion of sales value. It could therefore be argued that the criterion of assets could be dropped completely, with an additional benefit of simplifying the framework by aligning the scope of this option with the scope of the A-IRB Approach for corporate exposures.

387. The EBA is therefore of the opinion that the CRR could be simplified by dropping the part of the threshold for the maturity parameter based on assets and in both cases use a simple threshold of EUR 500 million of consolidated sales. The use of the fixed value for M of 2,5 years should however remain optional, i.e. institutions should still be allowed to calculate the explicit maturity adjustment for corporates under the A-IRB Approach. The following simplified table summarises the preferred alternative implementation:

M = 2.5 years?		Sales		
		< 500		> 500
Assets	all	If A-IRB Possible	If F-IRB Always <i>(possible if proposal in the next section implemented)</i>	F-IRB Always <i>(possible if proposal in the next section implemented)</i>

### (iii) Use of the explicit maturity adjustment under the F-IRB Approach

#### Recommendation CR-IR 22: Use of the explicit maturity adjustment under F-IRB Approach

The possibility for competent authorities to grant permission to institutions to use the explicit maturity adjustment for exposures under the F-IRB Approach should be implemented in a more flexible manner in light of the migration of some exposures to the F-IRB Approach. It is therefore recommended make the explicit maturity adjustment available, subject to the permission of the competent authority, to either all the F-IRB exposures of the institutions or to all exposure

<sup>72</sup> Subject to national implementation of the F-IRB framework with respect to the estimation of maturity: see next section.



class subject to the migration from the A-IRB to the F-IRB Approach under the final Basel III framework, i.e. for large corporates, financial institutions treated as corporates and institutions.

388. A second exception to the general rule relates to the national discretion provided in paragraph 107 of the final Basel III framework, also already introduced in paragraph 318 of the Basel II framework. This discretion allows jurisdictions to require all the institutions under the F-IRB Approach to use the explicit maturity adjustment based on calculated values for M. However, this provision is implemented in a slightly different manner in the EU framework in the second paragraph of Article 162(1) of the CRR, where the discretion is provided at the level of an individual institution, where CA can decide as part of the permission in Article 143 of the CRR whether a given institution shall use the explicit maturity adjustment.
389. The EBA believes that this deviation from the Basel capital framework should be maintained, especially in light of the migration of exposures from the A-IRB Approach to the F-IRB Approach, thereby maintaining appropriate risk sensitivity of the framework and limiting undue costs for some F-IRB institutions currently making use of the explicit maturity adjustment option.
390. As a result, CA should still be allowed to decide whether an institution with some exposures migrating to the F-IRB Approach should continue to use the explicit maturity adjustment based on calculated values for M either for all F-IRB exposures or for exposures from selected exposure classes, in particular those that are subject to migration from the A-IRB Approach to the F-IRB Approach. In this context, the EBA considers to make the explicit maturity adjustment available to either all the F-IRB exposures or to all exposures subject to the migration from the A-IRB Approach to the F-IRB Approach under the final Basel III framework, i.e. for large corporates, financial institutions treated as corporates and institutions subject to the permission of the CA. This additional flexibility should also be allowed for exposures currently treated under the F-IRB Approach in order to ensure a harmonised framework.

#### 4.2.8 Specialised lending exposures – High Volatility Commercial Real Estate

**Recommendation CR-IR 23: Specialised lending exposures - High Volatility Commercial Real Estate**

The EBA recommends not to introduce a sub exposure class of High Volatility Commercial Real Estate in the IRB approach. At the same time the classification of exposures under the SA and IRB Approach should be aligned to the extent possible, at least by using consistent definitions of similar categories.

391. The CRR currently does not distinguish between the high volatility commercial real estate (HVCRE) exposures and the other sub-exposure classes of SLE in the IRB Approach, although the Basel II framework specifies for HVCRE a specific RW function under the F-IRB and the A-IRB Approach as well as specific RW and EL values under the supervisory slotting criteria approach. As a result, in accordance with the current CRR, HVCRE are treated in the same way as other income-producing real estate (IPRE) exposures.

392. In the SA of the final Basel III framework, the sub-exposure class of SLE as specified in paragraphs 44 to 48 includes only three subclasses, namely: (i) project finance; (ii) object finance; and (iii) commodities finance. Exposures secured by immovable properties are treated separately, with a split between RRE, CRE and ADC. The first two sub-exposure classes of real estate exposures are divided between cases where the “*repayment is materially dependent on cash flows generated by property*” (paragraphs 67 for RRE and 73 for CRE) and other cases (paragraphs 63 to 66 for RRE and 69 to 72 for CRE).
393. The EBA understands the interactions in the definitions introduced by the final Basel III framework as follows:
- a) The category RRE, CRE and ADC are not intended to be fundamentally different between the SA and the IRB Approach.
  - b) Although the category IPRE is not used *per se* in the revised SA framework as part of SLE, it incorporates RRE, CRE and ADC exposures where the “*repayment is materially dependent on cash flows generated by property*”; however, unlike for the SA, under the IRB Approach IPRE exposures specifically refer to exposures meeting the definition of SLE.
  - c) The category HVCRE is composed of CRE and ADC where “*repayment is materially dependent on cash flows generated by property*”; however, it does not cover all ADC exposures.
  - d) It is not clear under the final Basel III framework whether the subset of ADC exposures not considered as HVCRE is the same as the ADC exposures weighted at 100% under paragraph 75 of the SA.
394. Given that the changes in the SLE classifications under the final Basel III framework are limited to the SA, which does not introduce the HVCRE exposure category, the EBA does not see the need for a change on this particular aspect in the IRB Approach. In other words, as there is no significant change in the specific market circumstances and in the IRB Approach related to SLE under the final Basel III framework as compared to the Basel II framework, no substantial change should be introduced with regard to the RW function, nor to the RW and EL values under the SSCA.
395. The EBA believes that in order to ensure consistent application of the regulatory framework, the new EU framework should incorporate precise definitions of the categories both under the SA and under the IRB Approach. The introduction of the HVCRE exposure category would introduce an element of subjectivity which could lead to inconsistencies in the application. It is in particular unclear how to assess the volatility in paragraph 17 for the IRB Approach of the final Basel III framework, as it refers to different elements such as volatility of loss rate, asset correlation and volatility of default rates. Furthermore, it is unclear which levels of volatility should be considered high enough to lead to the classification as HVCRE. Given the very individual nature of SLE it is considered unlikely that sufficiently precise criteria could

be developed to ensure consistent application of the HVCRE exposure category across the EU.

396. Another advantage of not introducing the HVCRE exposure category is that it provides for a significant simplification of the framework, in particular with respect to the mapping of the treatment between the SA and the IRB Approach. This general consistency of exposure classes between the SA and the IRB Approach becomes increasingly important in the context of the output floor, where IRB institutions will be required to maintain the calculation of own funds requirements based on both approaches.
397. While the EBA recommends not to introduce a specific exposure category of HVCRE in the IRB Approach, it is nevertheless possible to ensure that institutions recognise higher risk of such exposures where relevant through appropriate clarifications in Level 2 regulations and guidelines. In particular:
- a) for SLE under the slotting approach it could be clearly stated that where ADC exposures meet the definition of SLE they are part of a broader category of IPRE<sup>73</sup>. Since the definitions of the types of SLE are provided in the RTS developed based on the mandate included in Article 153(9) of the CRR (RTS on supervisory slotting approach), the clarification on the subtype of ADC could also be provided in these RTS, with therefore no change required in the CRR on this aspect. Furthermore, a separate set of factors for ADC exposures could be introduced to better reflect the nature of such exposures. This means that the mandate in Article 153(9) of the CRR on the slotting approach should be retained in order to allow the EBA to amend the RTS if necessary.
  - b) for SLE under the F-IRB Approach or A-IRB Approach, further clarification could be provided in the EBA's guidelines and in the RTS on IRB assessment methodology to ensure that the analysis of potential risk drivers in the estimation of risk parameters should take into account the volatility of the SLE associated with commercial real estate. This means that the mandate specified in Article 144(9) of the CRR should be retained in order to allow the EBA to amend the RTS if necessary.
  - c) In order to allow appropriate monitoring, the ADC category, once specified, could also be distinguished in the supervisory reporting templates.
398. To summarise, the EBA stresses the importance of clear and consistent definitions to be applied across the credit risk framework, also taking into account the interactions between the revised SA and the IRB Approach. Figure 41 summarises these interactions in a simplified manner:

---

<sup>73</sup> At the same time it would have to be ensured that the definition of ADC is consistent between SA and the IRB Approach (including criteria on the pre-sale and pre-lease contracts as well as the equity at risk).

Figure 41: Definitions of (sub-) exposure classes in SA and IRB

		RRE	CRE	ADC
SLE under IRB	IPRE / Materially dependent on CF generated by property	SA: para. 67 IRB: para. 282	SA: para. 73 IRB: para. 282	SA: para. 74-75 IRB: para. 17
non SLE under IRB	"IPRE style" / Materially dependent on CF generated by property	SA: part of footnote 46 IRB: IPRE style but not SLE	SA: part of footnote 48 IRB: IPRE style but not SLE	SA: para. 74-75 IRB: IPRE style but not SLE
	Non materially dependent on CF generated by property <sup>1</sup> <small><sup>1</sup>: +SA footnote 49 &amp; IRB footnote 30</small>	SA: para. 63-66 IRB: para. 281 (non IPRE style)	SA: para. 69-72 IRB: para. 281 (non IPRE style)	SA: para. 74-75 IRB: para. 281 (non IPRE style)

No HVCRE (IRB – BIII only)

#### 4.2.9 Credit Risk Mitigation (CRM)

##### (i) UFCP – the treatment of A-IRB exposures secured by SA or F-IRB protection providers and the application of the risk weight floor

###### Recommendation CR-IR 24: Methods for the recognition of UFCP

Clarification should be provided on the methods for the recognition of the effects of UFCP in the case the protection provider is treated under the SA or under the F-IRB Approach. In addition, further clarifications should be provided on the split of exposures in the case of partial and pro-rata protection, especially with regard to the allocation of cash flows, costs and credit risk adjustments.

399. One of the main objectives of the final Basel III framework in the area of credit risk was that of dealing with the lack of robustness in modelling certain exposure classes. The revised IRB Approach removes the possibility to use the A-IRB Approach for exposure classes such as large corporates, exposures to institutions and other financial institutions which can now be treated only under the F-IRB Approach. It also removes the option to use the IRB Approach for equity exposures to be treated only under the SA.
400. The underlying reasoning is that institutions should not be allowed to use the A-IRB Approach for LDP where a robust LGD modelling is not deemed possible, but should still have the possibility to use own estimates for other portfolios if they are able to robustly model the PD and LGD. Nevertheless, paragraphs 96, 122 and 255 of the IRB part of the final Basel III framework seem to go against this principle in case the corporate or retail obligor is treated under the A-IRB Approach but less sophisticated approaches (such as F-IRB or SA) apply to a direct exposures to the guarantor (hereinafter 'F-IRB guarantor' and 'SA guarantor'), as the final RW should then be computed according to the approach applied to direct exposures to the protection provider. The simultaneous objectives of the Basel capital framework of

allowing corporate and retail exposures to be in the scope of the A-IRB Approach and the requirement of treating these exposures under less sophisticated approaches for the purposes of recognising the effect of UFCP could arguably be considered as a contradiction. In fact, when direct exposures to the guarantor are treated under the SA or the F-IRB by applying the RW calculated under the SA or the F-IRB Approach to the guaranteed exposures, the scope of the use of the SA or F-IRB Approach is extended by including also the guaranteed exposures. Especially for retail exposures, which are sometimes guaranteed either by a central government and central bank or by an institution exposure, this would imply for institutions either choosing not to use the IRB Approach and de facto extending the scope for the SA and the F-IRB Approach even further, or choosing not to recognise the UFCP at all and thereby decreasing the risk sensitivity of the framework.

401. The revised IRB Approach also introduces minimum PD and LGD values (the so called “input floors”) to ensure a minimum level of conservatism in the risk parameters for exposure classes where the IRB Approach remains available. Furthermore, for the purpose of recognising the risk mitigating effects of UFCP an additional layer of conservatism is introduced in paragraphs 96 and 254 by requiring that *“in no case can the bank assign the guaranteed exposure an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the guarantor”* (the so-called “RW floor” requirement). This floor intends to safeguard the consistency of the framework in terms of risk assessment, avoiding circumstances where an indirect exposure to a certain protection provider could benefit from a lower RW than a direct and comparable exposure where that same person is the main obligor. However, this requirement limits the risk sensitivity of RWA based on own estimates of risk parameters, especially for cases where institutions apply less sophisticated approaches, such as the SA or the F-IRB Approach, to the direct exposure to the protection provider.
402. This section focuses on analysing the interaction and potential consequences of these inconsistencies between the requirements to treat exposures guaranteed by SA or F-IRB protection providers under the SA or the F-IRB Approach, and the requirements to apply the RW floor, clarifications and issues related to the application.
403. With regard to the requirements of the final Basel III framework linked to the recognition of UFCP for exposures under the A-IRB Approach, two main potential contradictions may be highlighted:
  - a) For **non-retail exposures under the A-IRB Approach**: There is an element of ambiguity with regard to the eligibility and the treatment of UFCP in case the obligor is treated under the A-IRB Approach but less sophisticated approaches, such as F-IRB Approach or SA, apply to direct exposures to the protection provider. In particular:
    - i) **Paragraph 96** specifies that A-IRB institutions can recognise the effect of UFCP through an adjustment to the PD or LGD estimates provided that the resulting adjusted RW is not lower than that of a comparable direct exposure to the protection provider (i.e.

the RW floor). The second part of the paragraph makes an exception to this rule specifying that in case of exposures guaranteed by SA or F-IRB protection provider the bank may only recognise the guarantee by applying the SA (i.e. substitute the SA RW) or the F-IRB (i.e. substituting PD of the protection provider and regulatory LGD associated to the exposure) to the covered portion of the exposure. Further clarifications on the eligibility requirements to be applied in case of the SA and the F-IRB protection providers are needed. In order to keep consistency with the treatment of exposures under the SA and the F-IRB Approach it seems relevant to specify that such recognition should be limited only to guarantees meeting the criteria of paragraphs 191 to 199 of the SA part of the Basel III framework for CR-SA protection providers, and paragraph 92 of the IRB part of the framework for F-IRB protection providers. This in turn leaves the question of whether guarantees provided by SA and F-IRB protection providers which are ineligible under SA and F-IRB could still be recognised through the PD or LGD adjustment in accordance with paragraphs 96 and 252 to 254 of the IRB part of the final Basel III framework unresolved.

- ii) The following **paragraph 97** allows institutions under the A-IRB Approach to recognise UFCP by either adopting the treatment outlined for the F-IRB Approach, i.e. the “substitution approach” including also the eligibility requirements of paragraph 92, or by adjusting PD or LGD estimates, i.e. the “modelling approach”. In particular, it is specified that if the institution adjusts PD or LGD estimates *“there are no limits to the range of eligible guarantors although the set of minimum requirements provided in paragraph 256 and 257 [concerning the type of guarantee must be satisfied]”*. Paragraphs 256 and 257 do not include any restrictions with respect to the approach applied to direct exposures to the protection provider and, therefore, may contradict the previous paragraph 96 which instead limits the applicability of the modelling approach to protection providers treated under the A-IRB Approach.
- b) Similar considerations apply also to **retail exposures** where similar ambiguity exists with regard to eligibility and treatment of protection providers under less sophisticated approaches. An additional aspect to consider in this context is the potential inconsistency between paragraphs 122 and 255 of the IRB part of the final Basel III framework:
- i) **Paragraph 122** specifies that guarantees should in general be recognised through PD or LGD adjustment according to *“the minimum requirements in paragraphs 252-263”* so including also paragraph 255. An exception is provided for CR-SA protection providers where instead the guarantee should be recognised by substituting the SA RW to the covered portion of the exposure. Like for non-retail exposures under the A-IRB Approach a clarification on the eligibility requirements should be applied in case of SA protection providers is needed.
  - ii) **Paragraph 255** applicable to retail exposures through the reference included in paragraph 122 requires also that the F-IRB protection providers are recognised by applying the F-IRB Approach to the covered portion of the exposure. However, the use

of F-IRB RW in case of guarantees provided by F-IRB protection providers is in contradiction with both the exception made in paragraph 122 only for what concern SA protection provider and the principle that the F-IRB Approach should not be applied to retail exposures.

404. In consideration of the above, two potential alternatives have been taken into consideration:

- a) **Option 1 (mandatory treatment under the SA and the F-IRB Approach for exposures guaranteed by SA and F-IRB protection providers).** This option is consistent with paragraphs 96 and 255 of the IRB part of the final Basel III framework but would require a better specification of the eligibility criteria for the recognition of guarantees through the application of a RW appropriate for the protection provider under the SA and the F-IRB Approach and through adjustment of PD or LGD as follows:
- i) The use of SA RW in the case of a SA protection provider should be subject to the eligibility criteria under the SA as specified in paragraphs 191 to 199 of the SA part of the final Basel III framework.
  - ii) The use of the F-IRB RW in the case of a F-IRB protection provider should be subject to the eligibility criteria under the F-IRB approach as specified in paragraph 92 of the IRB part of the final Basel III framework.
  - iii) The recognition of UFCP through PD or LGD adjustment in case of A-IRB or retail protection providers should be subject to the eligibility criteria specified in paragraphs 256 to 258 of the IRB part of the final Basel III framework. In this respect the requirement of paragraph 256 would have to be modified when incorporating into the EU legal framework in order to limit the eligibility to A-IRB and retail protection providers such as to avoid the contradiction with paragraph 96 and 97 described above.
  - iv) For retail exposures the treatment of F-IRB protection providers would have to be clearly specified. In order to ensure consistency of the framework it could be specified in accordance with paragraph 255 of the IRB part of the final Basel III framework that the effects of the protection provided by F-IRB protection providers can only be recognised by applying the F-IRB Approach, in accordance with the eligibility criteria applicable under the F-IRB Approach as specified in paragraph 92 of the IRB part of the Basel III framework. Moreover, it should be clarified that the use of SA RW in case of SA protection provider should be subject to the eligibility criteria under SA as specified in paragraphs 191 to 199 of the SA part of the final Basel III framework.
- b) **Option 2 (leaving institutions the option to treat exposures guaranteed by SA and F-IRB protection providers either under SA and F-IRB respectively, or through PD and LGD adjustments).** This option is consistent with paragraph 97 of the IRB part of the final Basel III framework but is in contradiction with paragraphs 96 and 255 and therefore could be seen as a deviation from the final Basel III framework. Like for Option 1, it would require

a better specification of the eligibility criteria for the recognition of UFCP through the application of a RW appropriate for the protection provider under the SA and F-IRB Approach as follows:

- i) The use of SA RW in case of a SA protection provider should be subject to the eligibility criteria under the SA as specified in paragraphs 191 to 199 of the SA part of the final Basel III framework.
- ii) The use of the F-IRB RW in case of F-IRB protection provider should be subject to the eligibility criteria under F-IRB as specified in paragraph 92 of the IRB part of the final Basel III framework.
- iii) For retail exposures the recognition of UFCP through PD or LGD adjustment in case of A-IRB or retail protection providers should be subject to eligibility criteria specified in paragraphs 256 to 258 of the IRB part of the final Basel III framework. In particular, as specified in paragraph 256, all types of protection providers (including F-IRB protection providers and SA protection providers) should be treated as eligible for the modelling approach, but leaving the optionality to apply the substitution approach provided that the eligibility criteria for respectively the SA or the F-IRB Approach are met. Moreover, in order to avoid cherry picking, the requirements would have to ensure that institutions decide upfront which approach is used for which types of exposures and apply this approach consistently.

405. Under Option 2, two alternatives may be further considered with regard to the application of the RW floor:

- a) **Option 2A: no change in the application of the RW floor.** Under this option the RW associated to direct exposures to SA and F-IRB protection providers would serve as a floor for the adjusted RW in case the exposure remains under the A-IRB Approach. In other words, unless the adjusted RW is above the RW floor, this option is equivalent to substituting the A-IRB RW with the SA and F-IRB RW applicable to a comparable direct exposure to the SA protection providers and F-IRB protection providers respectively, i.e. an approach equivalent to Option 1.
- b) **Option 2B: keep the RW floor requirement only for exposures guaranteed by an A-IRB protection provider** and consider potential alternatives to the RW floor for the case of SA and F-IRB protection providers. Under this option the RW floor would not apply in case of SA and F-IRB protection providers.

406. While it is not possible to assess the impact of these options in a precise quantitative manner<sup>74</sup>, some **qualitative considerations about advantages and disadvantages and potential implications** of the two options are presented below:

---

<sup>74</sup> In particular, in the data collected via the QIS, only 17 banks were able to calculate an impact different from zero. This is due to IT difficulties in identifying guarantors under a less sophisticated approach, as well as in risk weighting the original exposure with the RW of this guarantor.



- a) Option 1 has the advantage of simplicity in aligning the treatment of exposures guaranteed by a SA protection providers and a F-IRB protection provider to the treatment of comparable direct exposures to the protection provider as prescribed in paragraphs 96 and 255 of the IRB part of the final Basel III framework. Conversely, Option 2 has the advantage of keeping the risk sensitivity allowed for those exposures which fall under the scope of the A-IRB Approach in accordance with paragraph 97, but would require a deviation from paragraphs 96 and 255 of the IRB part of the final Basel III framework. In particular, Option 2 seems more conservative (i.e. potentially leading to higher own funds requirements) when considering the new input floors (in comparison to the low RW usually applied to exposures to central governments and central banks under the SA) as well as due to the fact that adjusting risk parameters under the A-IRB approach pursuing Option 2A may only lead to an adjusted RW which is above the one imposed under Option 1 (i.e. the RW floor of a comparable direct exposure to SA protection provider and F-IRB protection provider, assuming that this floor would be kept).
- b) The requirement of Option 1 of treating exposures guaranteed by SA protection providers or F-IRB protection providers under the SA or the F-IRB Approach respectively may lead to the paradoxical situation, where an institution may not be allowed to recognise the effect of a UFCP which is not eligible under the SA or the F-IRB Approach, despite having received the permission to apply the A-IRB approach to the original exposure and despite being able to apply the PD or LGD adjustment in accordance with the eligibility requirements relevant under A-IRB Approach for the same UFCP. This constrain may be over-conservative in the case institutions have enough data to properly model the effect of a UFCP provided by a SA protection provider or a F-IRB protection provider.
- c) The absence of the internal rating of the protection provider and/or internal LGD associated with direct exposures to the protection provider, which is the main rationale behind Option 1, may not be of particular concern for reflecting the effect of the UFCP in the risk parameters. In fact, other characteristics of the UFCP or of the protection provider may provide better risk differentiation. A proper adjustment of the PD or LGD is possible considering the existence of the UFCP as a risk driver and taking into account the pattern of historical observed recoveries. The modelling approach considers the guaranteed exposure as a whole, without the need for direct use of the risk parameters of the protection provider (as under the substitution approach). Conversely, one could claim, against Option 2, that institutions may not have enough data on the default of the protection provider, especially when they are treated under the SA, and this would give the rationale to rather use the approach applied to the direct exposures to the protection provider as proposed under Option 1. While the difficulty of taking into account the effect of a default of a protection provider is recognised, it should also be noted that the potential bias is not expected to be significant<sup>75</sup>. In this respect, a conservative adjustment

<sup>75</sup> The bias would come from observing only LGDs in the case of no default of the protection provider (therefore estimating the LGD conditional to the non-default of the protection provider). The bias is however very low as soon as the probability of default of the protection provider is low:  $LG D (unconditional) = PD_{guarantor} \cdot LG D (default guarantor) + (1 - PD_{guarantor}) \cdot LG D (default guarantor) \approx LG D (default guarantor)$

in the LGD estimation may take into account this potential uncertainty keeping the risk sensitivity of the treatment under the A-IRB Approach instead of the requirement to treat the exposures under less risk-sensitive approaches.

- d) Option 1 may give an incentive to institutions to treat direct exposures to the protection provider under the A-IRB Approach, provided where the A-IRB Approach remains available to these obligors. On the other hand, this incentive would not exist for UFCP provided by institutions, financial institutions and large corporates, for which the substitution approach under the SA or the F-IRB Approach would have to be used<sup>76</sup>.
- e) The limited scope of eligible types of collateral under the SA may prevent institutions from recognising the combined effects of UFCP provided by SA protection providers and collateral under Option 1. In particular, under the SA physical collateral and immovable property collateral are not eligible. Immovable property collateral benefit from specific treatment through a separate exposure class and the recognition of both the UFCP and the immovable collateral at the same time is not possible. Under the SA simultaneous recognition of a guarantee and another collateral is only possible where the collateral reduces the exposure value. Neither the immovable property, nor any other physical collateral can reduce the exposure value<sup>77</sup> and hence it is not possible to recognise the effect of both the UFCP and such collateral under the SA<sup>78</sup>. Under these considerations the requirement under Option 1 to apply the SA may be quite costly for institutions and decreases significantly the incentive to take physical or immovable property collateral to cover exposures which are also guaranteed by an SA protection provider. On the other hand, institutions have the option of using the F-IRB Approach instead of the SA for the relevant exposure classes, meaning that it would be the choice of the institution to be subject to the limitations mentioned above. Conversely, under Option 2 institutions have the option to model the combined effect of the UFCP and the collateral in the LGD associated to the covered part of the exposure.
- f) Under Option 2A, the application of the RW floor for cases where the protection provider is under the F-IRB Approach or under the SA disincentivises the institution to model the guaranteed exposure through LGD (and PD) adjustments. Indeed, in modelling risk parameters the institution could not benefit from a reduction in the RWA because of the RW floor. This may even lead to unintended situations where the institution is incentivised to take on higher risks to compensate for the conservative treatment of the CRM techniques, where the level of RWA is constrained by the RW floor. This would provide the rationale to discuss alternatives to the RW floor in case of a UFCP provided

---

if  $PD_{guarantor} \cdot LGD(\overline{default\ guarantor}) \ll LGD(\overline{default\ guarantor})$  and  $(1 - PD_{guarantor}) \cdot LGD(\overline{default\ guarantor}) \ll LGD(\overline{default\ guarantor})$ , which is the case if  $PD_{guarantor} \ll 1$ .

<sup>76</sup> This is consistent with the general spirit of the Basel III framework and the underlying considerations to introduce limits to the modelling of the LDP

<sup>77</sup> The SA risk weight applies to an exposure value from which the value of other collateral has been deducted.

<sup>78</sup> If an IRB exposure secured by immovable property, for example, receive an SA RW due to the existence of a guarantee provided by an SA guarantor, this should be the RW of the guarantor and not the one applicable to the exposure class immovable property.

by a SA protection provider or an F-IRB protection providers as proposed under Option 2B. However, applying the RW floor only to an A-IRB protection provider under this alternative may provide institutions with the incentive to move the treatment of direct exposures to the protection provider from the A-IRB Approach to less sophisticated approaches. Therefore, this disincentive should be taken into account if Option 2B was chosen by drafting proper alternatives to the RW floor for the case of SA and F-IRB protection providers.

- g) The application of the RW floors under Option 2A as well as the substitution of the SA RW under both Option 1 and Option 2 are problematic, as the SA RW (and hence the RW floor) is not readily comparable to the IRB RW. This is due to (i) the different setups between the SA and the IRB Approach; and (ii) the fact that the floor is defined at the level of the RW as opposed to RWA level. This leads to the following issues:
- i) The SA RW applies to exposures net of specific credit risk adjustments (SCRA) whereas the IRB RW is applied to the exposure gross of SCRA. As the RWs under the SA and under the IRB Approach apply to different measures of exposures, they are not directly comparable.
  - ii) The SA RW used to determine the level of the floor applies to an exposure value after deduction of the value of other eligible financial collateral has been deducted and is therefore a RW appropriate on the remaining unsecured part of the exposure. Under the IRB Approach, in case of exposures covered by both FCP and UFCP, the RW applies to the full credit obligation, including the effects of other types of collateral directly reflected in the LGD estimates. Moreover, the limited scope of eligible collateral under the SA (in particular excluding physical collateral) make the comparison between the SA RW (and hence the floor) and the IRB RW even more problematic.
  - iii) Last, the RW only constitutes a part of the total own funds requirements: Under the IRB Approach the RW is only reflective of the UL component, and the EL component is calculated separately, contributing to the global minimum required capital (MRC) directly through adequate adjustments to the own funds. Under the SA the EL part of own funds requirements is not clearly differentiated in the global MRC where the RWA is aggregated together with accounting provisions and the own funds are only corrected to reflect general credit risk adjustments (GCRA).

407. Taking into account the above considerations the EBA supports Option 1 in line with the final Basel III framework. Alternatively, the EBA believes Option 2A could also be implemented in the EU framework. Although more complex and potentially considered as a deviation from the final Basel III framework, its main advantage would be to allow UFCP not meeting the F-IRB and SA eligibility requirements to be accounted via a modelling approach<sup>79</sup>, as well as to

<sup>79</sup> Under option 1, guarantees not meeting the F-IRB and SA eligibility requirements would not be accounted, and the exposures would have to be treated as unsecured, either as via the framework ineligible CRM framework (further discussed in the sub section 4.2.9(iv))

incentivise institutions to correctly monitor the real level of risk. Option 2B is considered inappropriate as it would lead to a deviation from the agreed final Basel III framework.

408. On top of the above-mentioned considerations supporting the alternative proposals, under both of the considered options, it is necessary to clarify some **application aspects** where the final Basel III framework does not provide sufficient guidance. These are mainly related to the following:

- a) The treatment of partial guarantees – for UFCP provided by a SA or an F-IRB protection provider where the treatment is performed by applying the SA or the F-IRB Approach respectively, clarifications on how to split the exposures have to be provided. In this context, further clarifications on the allocation of recoveries and costs to ensure adequate modelling on the part of the exposure not covered by the UFCP need to be provided. Moreover, in the case of a UFCP provided by SA protection provider guidance on the allocation of credit risk adjustments (CRA) to the covered portion of the exposure moved to the SA versus the portion of the exposure remaining under the IRB Approach has to be provided.
- b) The treatment of exposures covered by both a UFCP and a FCP – taking into account types of collateral recognised through the adjusted exposure value under the SA versus the treatment under the IRB Approach and other types of collateral.

409. With regard to the **treatment of partial guarantees**, further clarification should be provided around the splitting of exposures. The following clarifications could be provided in the EBA guidelines:

- a) The allocation of recoveries and costs should follow the same principles as those proposed in paragraph 34 of the consultation paper on the GL on CRM<sup>80</sup>. In particular, cash flows and direct costs related to the UFCP should be allocated to the guaranteed part of the exposure, while any other cash flow (apart from cash flows coming from collateral which are allocated according to the institution's policy to the guaranteed part of the exposure) or direct cost should be allocated to the remaining part of the exposure. Indirect cost allocation should follow the guidance provided in paragraph 113 of the EBA Guidelines on PD and LGD estimation<sup>81</sup>.
- b) The RWs under the SA and the IRB Approach are not fully comparable as they apply to different exposure values and they are combined with different assumptions regarding EL amounts. The use of a RW from the SA under the IRB Approach would be problematic as it would require a change of exposure measure, application of EL and a respective adjustment of own funds. In order to perform such adjustments, a proper allocation of the provisions should be ensured between the portion of the exposure which is covered

<sup>80</sup> <https://eba.europa.eu/-/eba-consults-on-guidelines-on-credit-risk-mitigation-for-institutions-applying-the-irb-approach-with-own-estimates-of-lgd>

<sup>81</sup> <https://eba.europa.eu/regulation-and-policy/model-validation/guidelines-on-pd-lgd-estimation-and-treatment-of-defaulted-assets>

by the guarantee and the portion which is not. In this respect, it is proposed to clarify that provisions should first be allocated to the unsecured part of the exposure and any amount in excess on a pro-rata basis to the part of the exposure which is secured by a UFCP and/or any other CRM;

- c) Finally, it should be clarified that the requirement (Option 1) or optionality (Option 2) of treating the covered portion of the exposure under the SA is just for the purpose of calculating the risk with the exposure remaining under the IRB Approach even if the LGD is not modelled. This implies that all information about the original obligor/exposure has to be collected and stored, and the requirements with regard to governance as specified under the IRB Approach still binding.

410. Further clarifications could also be provided in the EBA guidelines with regard to the **treatment of exposures secured by both a UFCP and a collateral**. It is proposed to align the requirements around the allocation of collateral to the one included in the consultation paper of the GL on CRM. In particular:

- a) Institutions should have clear policies for the allocation and recognition of collateral which are consistent with the internal recovery and collection process, and should not recognise the effects of each CRM techniques more than once. In splitting the collateral between the part covered by the UFCP and the part which is not, no double recognition of the collateral should be allowed.
- b) Institutions should apply the substitution approach consistently as specified in paragraph 96 of the final Basel III framework. Therefore, in case of overlap of the collateral and the UFCP splitting the UFCP in two parts and applying to one part the substitution and to the other part the modelling approach would not be allowed.

(ii) **UFCP – relevant risk weight function to be used under the substitution approach**

**Recommendation CR-IR 25: RW function under the substitution approach**

Subject to certain eligibility criteria the effects of UFCP may be recognised through substituting risk parameters of the obligor with the risk parameters of the protection provider. Clarification should be provided that in this case the RW should be calculated based on the RW function applicable to the protection provider rather than that applicable to the original obligor.

411. The IRB part of the final Basel III framework confirms the requirement of the Basel II text with regard to the RW function to be used when applying the substitution approach under the IRB Approach. In particular:

- a) For exposures under the F-IRB Approach guaranteed by an IRB protection provider, paragraph 93 specifies that for the covered portion of the exposure the RW is derived by using the RW function appropriate for the type of the protection provider and by replacing the PD of the obligor with the PD of the protection provider. In addition, the same

paragraph introduces a new requirement according to which institutions should use the SA in case of SA protection providers.

- b) For exposures under the A-IRB Approach, institutions are given an option in paragraph 97 to either model the effect of the UFCP or to apply the F-IRB treatment (i.e. substitution approach which demands a change of the RW function by the one of the protection provider as outlined above). In addition, paragraph 96 introduces a new requirement according to which institutions should use the SA in case of SA protection providers and to use the F-IRB in case of F-IRB protection providers.
412. As different practices on the relevant RW function to be used are currently observed by CA, leading to unwarranted variability of RWA, it becomes necessary to clarify this aspect while implementing the final Basel III framework in the EU legislation. Moreover, the applicability of the appropriate RW function should be considered, also taking into account consistency between different approaches. The table below summarises the current guidance on the relevant RW function to be used when applying the substitution approach.

Table 21: Change of RW-function for exposures under A-IRB

	SA protection provider	F-IRB protection provider	A-IRB protection provider
<b>Basel II</b>	If substitution approach is used the protected portion is assigned the RW of the protection provider (paragraph 303)	Optional treatment under F-IRB (i.e. substitution approach) according to the RW function of protection provider (paragraphs 307 and 303)	Optional treatment under F-IRB (i.e. substitution approach) according to the RW function of protection provider Change of the RW function if LGD adjustment is used is not envisaged (paragraph 307)
<b>Current CRR</b>	Unclear whether Article 183(4), could be interpreted as suggesting mandatory use of SA.	Substitution approach and change of RW function to the one of the protection provider is not envisaged. EBA Q&A 2013/415 clarifies that a change of RW function to the one of the protection provider is not required neither in Article 161(3) – A-IRB – nor in Article 236(1) – SA and F-IRB.	
<b>Basel III</b>	Mandatory use of SA RW applicable to direct exposure to protection provider (paragraph 96)	Mandatory treatment under F-IRB (i.e. substitution approach) according to the RW function of protection provider (paragraphs 96 and 93)	Optional treatment under F-IRB (i.e. substitution approach) according to the RW function of protection provider (paragraphs 93) Do not change the RW function if LGD adjustment is used (paragraphs 97 and 93)

413. Behind the decision regarding the relevant RW function to be used when applying the substitution approach there is the trade-off between keeping consistency of the RW function used within the A-IRB Approach (ensured where the RW of the obligor is used for both modelling and substitution approach) and keeping consistency between the RW function used according to differently rated protection providers and between CRM techniques (ensured where the RW function of the protection provider is used both when substituting the RW in case of SA protection provider as well as when substituting risk parameters in case of IRB protection provider). Having this in mind, the EBA has considered the arguments supporting two possible alternative options when applying the substitution approach under the A-IRB Approach:

- a) **Option 1:** using the RW function of the original obligor which implies maintaining the status quo of the current interpretation of the CRR provided through a Q&A, but deviating from the requirements in paragraph 93 of the final Basel III framework;
  - b) **Option 2:** using the RW function of the protection provider aligning with the requirement in paragraph 93 of the final Basel III framework.
414. First of all it must be noted that neither of the above options is in itself more conservative. Whether one option is more conservative than the other depends on the variety of different scenarios (e.g. exposure class of the obligor and protection provider respectively).
415. The reasons justifying using the RW function of the obligor (Option 1) are the following:
- a) The Commission has suggested that the previously adopted deviations from the Basel II framework should in general be retained, unless there is a good reason for reverting them. It is unclear why the change of the RW function to the one applicable to the protection provider - which was already envisaged in the Basel II framework - was not implemented in the current CRR.
  - b) In case of a retail exposure guaranteed by a corporate entity or a bank, it avoids the operational burden to compute M for retail exposures which is not an explicit parameter of the retail RW function. Moreover, moving to the RW function relative to a corporate protection provider, the cap at five years for M will not allow to capture the long maturity of mortgages which is instead indirectly reflected in a high asset value correlation coefficient in the retail RW function.
  - c) This option keeps consistency of treatment under various ways of recognising the effects of UFCP either through substitution or through the adjustment of risk parameters, as institutions opting to recognise guarantees by adjusting PD and LGD estimates are not requested to change the RW function.
  - d) This option keeps consistency with an additional aspect specific to the EU, i.e. the rules for the application of the SME supporting factor. In accordance with Q&A 2013/565 the SME supporting factor should be applied to a RW of the SME obligor irrespective of whether the exposure is reclassified for reporting purposes to another exposure class due to the substitution approach or not. While this was a reporting Q&A it creates policy consequences and it may be less meaningful to apply the SME supporting factor after a full substitution of the RW with a RW of the non-SME protection provider.
416. The reasons justifying the adoption of the policy adopted in the final Basel III framework and changing the RW function to the one of the protection provider (Option 2) are the following:
- a) This option ensures alignment with paragraph 93 of the IRB part of the final Basel III framework stating that the RW function of the protection provider is to be used under the F-IRB Approach and that this can also be used under the A-IRB Approach (as specified



in paragraph 97). The use of the substitution approach would be applied in the same way within the IRB Approach (F-IRB or A-IRB Approach).

- b) This option ensures consistency with the requirement of substituting the SA RW in case of SA protection provider (as specified in paragraphs 93 and 96 of the IRB part of the final Basel III framework).
- c) This option ensures consistency with the rationale behind the substitution approach, i.e. that the institution can treat the guaranteed exposure as if it was a direct exposure to the protection provider. Direct and indirect exposures to a given obligor would be treated consistently by the institution and would receive the same RW in case of recognising CRM using the substitution approach.
- d) The correlation coefficient (R) in the RW functions is itself calculated as a function of PD. As the formula has been calibrated differently for retail and non-retail exposures to capture their different characteristics of the exposure classes, the use of the RW function of the protection provider would ensure consistency of the calculation of R based on the PD of the protection provider.

417. In light of the above considerations and the fact that the rationale behind the substitution approach is that the exposure is effectively held against the protection provider the EBA supports Option 2 and suggests aligning the requirements with the final Basel III framework, i.e. the use of the RW function of the protection provider when applying the substitution approach. Thus the use of the substitution approach would also be applied consistently within the IRB Approach. Moreover, it is suggested that the following additional clarifications on the aspects listed below should be provided:

- a) Any parameter in the relevant RW function (i.e. RW function of the original obligor if an institution is adjusting PD or LGD and RW function of the protection provider in the case of the substitution approach), such as the correlation coefficient (R) or the maturity adjustment factor (b), should be computed according to the new PD (no matter if the PD is only adjusted or substituted).
- b) The use of the substitution approach should not imply a change of the exposure class to which the covered part of the exposure is assigned.

### (iii) UFCP -- eligibility and treatment of conditional guarantees

#### **Recommendation CR-IR 26: Definition of conditional guarantees**

The Basel III framework considers conditional guarantees as ineligible collateral under all methods. It is therefore important to precisely clarify what is understood by conditional guarantees. It is proposed to define this notion as guarantees where *“the execution of the guarantee is conditional on the reasons for which the payment has not been made by the obligor, including the performance of the financed investment”*.

418. In accordance with the Basel II framework, Article 183(1)(c) of the CRR clarifies that, in the context of the A-IRB Approach, conditional guarantees *“prescribing conditions under which the protection provider may not be obliged to perform”* may be recognised subject to the permission of the CA<sup>82</sup>. Under the A-IRB Approach there are less restrictions in the recognition of guarantee providers and types of guarantees, as the wider scope of the guarantees can be appropriately taken into account through the modelling approach. In that case, there seems to be no reason for disallowing conditional guarantees in the estimation of PD and LGD for the purposes of calculating own funds requirements.
419. A new requirement included in paragraph 257 of the IRB part of the Basel III framework however specifies that generally under all approaches in order to be eligible, a guarantee/credit derivative must be *“unconditional”*. In particular, it is specified that the guarantee contract should not include any clauses, outside the control of the bank, which could prevent the protection provider from being obliged to pay in a timely manner for any missed payment by the obligor. At the same time, it makes an exception for the A-IRB Approach, where for the purposes of own estimates of LGD<sup>83</sup> *“guarantees that only cover loss remaining after the bank has first pursued the original obligor for payment and has completed the workout process”*.
420. While the final Basel III framework generally relates the unconditionality of the guarantee with respect to the timely payment criterion, in the mentioned exception for the A-IRB Approach the timely payment criterion is not applicable, as the guarantee is still considered eligible despite the payment being only realised after the end of the workout process. The link between timeliness of payment and conditionality of the guarantees included in the final Basel III framework is not perceived as appropriate by the EBA in the context of the A-IRB Approach, where the timeliness of payment should be considered in modelling the effect of the guarantee on the risk parameters rather than as an eligibility criterion. At the same time the current definition of conditional guarantees included in Article 183 of the CRR referring to guarantees prescribing conditions under which the protection provider may not be obliged to perform, seems too generic and leaves too much room for interpretation.
421. In this context, the EBA believes that when incorporating the requirements of the final Basel III framework into EU legislation, additional clarifications should be provided in order to operationalise the requirement and ensure harmonised application. It is therefore proposed that an improved definition of conditional guarantees should also be included in the amended CRR, as an appropriate understanding of this term will determine the scope of application of this eligibility requirement.

---

<sup>82</sup> Article 183(6) CRR contains a mandate for the EBA to develop RTS specifying the conditions according to which CA may permit conditional guarantees to be recognised. This Article reflects paragraph 484 of Basel II where it is specified that in contrast to the F-IRB conditional guarantees *“may be recognised under certain conditions. Specifically, the onus is on the bank to demonstrate that the assignment criteria adequately address any potential reduction in the risk mitigation effect”*.

<sup>83</sup> Paragraph 257 refers to EAD but we assume this was not intentional and is a result of an obvious mistake. It has been corrected in the draft consolidated framework, which now says: *“However, under the advanced IRB approach, guarantees that only cover loss remaining after the bank has first pursued the original obligor for payment and has completed the workout process may be recognised.”*

422. In defining how restrictive the definition of conditional guarantees should be one should keep in mind that the consequence of introducing such a definition would be that it applies to all approaches. There is therefore an element of trade-off between (i) the SA and the F-IRB Approach, where eligibility criteria should ensure that only high quality credit protection is recognised and where the substitution approach is the only available method; and (ii) the A-IRB Approach, where good LGD models require that all relevant information is taken into account and where a broader spectrum of CRM techniques can be appropriately recognised through LGD modelling.
423. It seems that the current solution, according to which the timely payment is defined as a separate criterion rather than as a part of the definition of conditional guarantees, provides cleaner criteria and gives an incentive for appropriate modelling of risk. It ensures that guarantees which do not respect the timely payment criterion can only be recognised under the A-IRB Approach through LGD modelling and are not eligible under the F-IRB Approach and the SA. Therefore, the current rules ensure restrictive eligibility criteria for CR-SA and F-IRB Approach, while also allowing appropriate modelling under the A-IRB Approach.
424. In this context, it is proposed not to link the definition of conditional guarantees to the timely payment criterion as proposed in the final Basel III framework. Instead, the EBA recommends specifying a more precise and quite restrictive definition where conditional guarantees would be identified as guarantees *“where the execution of the guarantee is conditional on the reasons for which the payment has not been made or will not be made by the obligor”*. It could be further clarified that this definition includes cases where the guarantee is conditional on the performance of the financed investment.
425. This proposed definition of conditional guarantees should be accompanied by adequate eligibility requirements under the SA and F-IRB Approach, including the timely payment criterion as currently specified in Article 213(1)(c)(iii) of the CRR. In other words, under the proposed definition of conditionality, a guarantee including clauses which prevent the protection provider to pay out in a timely manner would not be considered as conditional and therefore the reduced timeliness of payment could be modelled under the A-IRB Approach, but should remain ineligible under the SA and the F-IRB Approach.
426. Furthermore, the irrevocability of the guarantee is treated separately from the concept of conditionality in the final Basel III framework. In particular, according to paragraph 192(c) of the SA part and paragraph 257 of the IRB part of the final Basel III framework, the protection provider should not be allowed to cancel the guarantee. So in this respect, if the guarantee has some clauses that allow the protection provider to unilaterally cancel the credit protection this should not be eligible, because it does not meet the irrevocability criterion, but it will not necessarily be considered as a conditional guarantee under the SA and under the IRB Approach. This is also currently reflected in the current CRR, both for A-IRB Approach in Article 183(1)(c) (*“A guarantee shall be (...) non-cancellable on the part of the guarantor”*) and for the SA and F-IRB Approach in Article 213(1)(c)(i) (where in order to be eligible

guarantees shall not contain clauses the fulfilment of which is outside the direct control of the lender, that “*would allow the protection provider to cancel the protection unilaterally*”).

427. While the EBA in general supports keeping the concept of irrevocability as a separate criterion from the definition of conditional guarantees, it is also proposed to extend this criterion to cover also for cases where the protection provider could unilaterally change the credit protection, including therefore cases where the credit protection is not cancelled but is reduced (for example going from full to partial coverage). The EBA therefore proposes to update the eligibility requirements of the current CRR in the following ways:
- a) for the A-IRB Approach, in Article 183(1)(c) of the CRR, it should be specified that “*a guarantee shall be... non-cancellable **and non-changeable** on the part of the guarantor*”;
  - b) for the SA and the F-IRB Approach, in Article 213(1)(c)(i) of the CRR, it should be specified that in order to be eligible guarantees shall not contain clauses that “*would allow the protection provider to cancel **or change** the protection unilaterally*”.
428. A qualitative survey was launched to assess the scope of use of conditional guarantees and potential implications of the change introduced in the final Basel III framework. With regard to the question “Do you accept any conditional guarantees to secure your credit risk exposures (including conditional guarantees that are not recognised for the purpose of capital requirements)?”
- a) 54% of the institutions (96) did not reply;
  - b) 39% of the institutions (70) replied ‘no’;
  - c) Only 7% (13) of the institutions replied ‘yes’.
429. Institutions participating in the survey were also requested to rank the removal of the recognition of conditional guarantees based on their expected impact on the level of RWA for credit risk under the IRB, rating them from 1 to 3, from the one with highest expected impact to the one with the lowest expected impact (“1” being the most impactful reform in terms of impact):
- a) 72% (129) institutions left the answer blank;
  - b) 17% (30) ranked this as having the lowest expected impact (rank 3);
  - c) 4% (7) institutions ranked this as average expected impact (rank 2);
  - d) 7% (13) institutions ranked this as one with the highest expected impact (rank 1). Interestingly among those institutions only five are those which confirmed that they accept conditional guarantees to secure credit risk exposures and seven of them replied they are not accepting conditional guarantees to secure credit risk exposures.

430. Among those 13 institutions which indicated that they accept conditional guarantees to secure their credit exposures, the following types of conditions have been listed as the most used:
- a) default of obligor;<sup>84</sup>
  - b) guarantees conditioned on a limited and defined time period (typically the start-up phase of a project);
  - c) guarantees conditioned on the performance of the investment;
  - d) insurance policies with (aggregated) first loss component;
  - e) guarantees where the guarantor has to pay the outstanding receivables only if the borrower fails and execution proceedings by the lender have been unsuccessful;
  - f) guarantees payable if insolvency proceedings were opened on the assets of the principal obligor;
  - g) guarantees payable if the residence of the borrower is unknown and the lender cannot be accused of negligence;
  - h) accessory guarantees without joint and several liability of the guarantor, these types of accessory guarantees require the beneficiary to first exercise in full its recourse against the borrower before claiming under the guarantee.
431. Some other answers have been provided by institutions which were rather listing specific type of conditional guarantees rather than explaining the conditions which were making them conditional. The analysis of the practices seems to confirm that most of the usual conditions are covered by the proposed definition above. The EBA believes that default of the obligor should not be specified as a condition in the definition of conditional guarantees, as all eligible guarantees should be payable upon default of the obligor at the latest.
432. Moreover, among those 13 institutions it has been requested to report whether the conditional guarantees are reflected in the PD and LGD models for the main exposure classes, namely exposures to central governments and central banks, institutions, corporates and retail, as well as to estimate on risk parameters. Due to the low materiality of the recognition of conditional guarantees, the expected impact of the final Basel III framework of making conditional guarantees ineligible is expected to be low. In particular:

---

<sup>84</sup> According to the Guidelines of definition of default calling a guarantee should be considered as an unlikelihood to pay criteria and therefore the obligor will be always be considered as defaulted when the guarantee is called. We can therefore skip this condition in our definition of conditional guarantees.

- a) for exposures to central governments and central banks and institutions, only one institution recognises conditional guarantees in the LGD estimates and evaluates the impact on risk parameters of the final Basel III framework to be low;
- b) for corporate exposures, three institutions recognise conditional guarantees in their LGD estimates and the impact on LGD parameters may rank from low to moderate; two more institutions currently reflect conditional guarantees in the PD estimates but are expecting no impact from the final Basel III framework.
- c) for retail exposures, two institutions recognise conditional guarantees in their LGD estimates and for one institution the impact on LGD parameters may be low, while high for the other; for two more institutions currently reflecting conditional guarantees only in their PD estimates and for another institution recognising conditional guarantees in both PD and LGD estimates, no impact is expected from the final Basel III framework.

433. Therefore, the outcome of the qualitative questionnaire tend to suggest that the impact of the ineligibility of conditional guarantees is expected to be low.

#### (iv) UFCP and FPC - eligibility criteria and treatment of ineligible CRM techniques

##### **Recommendation CR-IR 27: Treatment of ineligible CRM techniques under A-IRB Approach**

The EBA recommends a holistic review of the eligibility and treatment of CRM techniques. In particular, in light of the constraints related to the use of conditional guarantees and nth to default credit derivatives, the treatment of ineligible CRM techniques under the A-IRB Approach should be reconsidered in a comprehensive manner. Therefore, a mandate should be granted to the EBA to develop guidelines on the application of eligibility criteria and requirement for the treatment of CRM techniques under all approaches (i.e. F-IRB and A-IRB), and in particular to specify the treatment of ineligible CRM techniques in the estimation and application of risk parameters.

434. The final Basel III framework changes the eligibility criteria of some CRM techniques, namely conditional guarantees and n<sup>th</sup>-to-default credit derivatives. This applies to both the F-IRB and the A-IRB Approach:

- a) In the context of the F-IRB Approach, paragraph 199 of the SA part of the final Basel III framework states that “First-to-default and all other nth-to-default credit derivatives (i.e. by which a bank obtains credit protection for a basket of reference names and where the first- or nth–to-default among the reference names triggers the credit protection and terminates the contract) are not eligible as a CRM technique and therefore cannot provide any regulatory capital relief. In transactions in which a bank provided credit protection through such instruments, it shall apply the treatment described in paragraph 89.”
- b) In the context of the A-IRB Approach paragraph 97 includes a new restriction that “for exposures for which a bank has permission to use its own estimates of LGD, the bank may recognise the risk mitigating effects of first-to-default credit derivatives, but may not recognise the risk mitigating effects of second-to-default or more generally nth-to-default

credit derivatives.”. Furthermore, paragraph 96 refers to paragraphs 256 and 257 for the set of minimum requirements concerning the type of guarantee that must be satisfied, where it is specified that the “guarantee must also be unconditional”. This last change was assessed via the qualitative survey and further discussed in section (iii).

435. Therefore, the  $n^{\text{th}}$ -to-default credit derivatives and conditional guarantees would clearly become ineligible as CRM techniques. However, this would lead to a different treatment for CR-SA/F-IRB institutions and for A-IRB institutions, only the latter being allowed to use first-to-default CDS. It should be noted that according to the qualitative survey carried out by the EBA, only a marginal number of institutions use conditional guarantees and  $n^{\text{th}}$ -to-default credit derivatives.
436. The EBA has in the past received numerous questions about the eligibility criteria and the recognition of the CRM in the calculation of own funds requirements. To the extent possible, clarifications have been provided in the Report on CRM and in the draft Guidelines on CRM, which have been subject to public consultations in the first half of 2019 and are currently being finalised. However, the EBA is of the opinion that further consideration is necessary in that regard, in order to (i) provide clarity to the institutions and CA on the adequate use of CRM techniques in the prudential framework; and (ii) ensure that the framework sets the right incentives for the institutions to manage their risks in an adequate manner.
437. One of the issues which has been considered in the context of stricter eligibility criteria is the treatment of ineligible forms of CRM under the A-IRB Approach. The final Basel III framework is silent on how the requirements on UFCP should impact the risk parameter estimates for exposures risk weighted under the A-IRB Approach. This problem is similar to the treatment of ineligible FCP, where paragraph 237 of the final Basel III framework (and paragraph 470 of Basel II) specifies that to the extent that LGD estimates take into account the existence of collateral, institutions must establish internal requirements for collateral management, operational procedures, legal certainty and risk management process that are generally consistent with those required for the F-IRB Approach.
438. The concept of eligibility of the CRM techniques is not consistent with the general principle underlying the A-IRB Approach, namely that all relevant information should be used in the estimation of risk parameters. While in principle the outcomes of internal models should be based on observed defaults and losses, the concept of eligibility goes beyond the observations and creates an inconsistency between the most accurate estimates based on historical observations and the risk parameters which can be used in the calculation of own funds requirements. The EBA believes that an adequate trade-off must be found between the necessity to implement this additional layer of prudence and the objective of risk sensitivity of the IRB Approach. While the EBA does not oppose the stricter eligibility criteria as proposed by the final Basel III framework, their introduction should not come at the expense of appropriate differentiation of risk under the A-IRB Approach, as this would lead to adverse incentives for institutions to continuously improve their risk management practices. In particular, it is the EBA’s view that disregarding the cash flows from ineligible

CRM techniques in the estimation of LGD is not appropriate as it would automatically bias the estimates, directly contradicting the principle to use the information on all observed defaults.

439. Currently the treatment of ineligible collateral is specified in Article 181(1)(f) of the CRR and the treatment of UFCP in case the modelling approach is used is clarified in Article 183 of the CRR. These requirements have been further clarified in the EBA GL on PD and LGD estimation (with regard to collateral) and in the Consultation Paper on the Draft Guidelines on Credit Risk Mitigation for institutions applying the IRB Approach with own estimates of LGDs<sup>85</sup> (with regard to guarantees and credit derivatives). The Consultation Paper draws on the rules previously specified for the treatment of collaterals, and hence in both cases it is clarified that in case collateral or UFCP does not meet eligibility criteria, it cannot be recognised in the model as a risk driver.
440. In order to fulfil the eligibility requirements while at the same time ensuring adequate differentiation and quantification of risk, the guidance currently provided for LGD estimation is composed of three pillars:
- a) The ineligibility of the CRM technique directly impacts model development: ineligible CRM techniques can not be considered in the risk differentiation as risk drivers. However, all the observed cash flows are taken into account in the risk quantification, and in practice this means that cash flows from ineligible CRM techniques are likely to impact the estimation of the “unsecured LGD”.
  - b) All the main types of collaterals must actually be eligible, since the paragraph 126 of the guidelines on PD and LGD estimation specify that “Institutions should clearly define in their internal policies the main and other types of collaterals used for the type of exposures covered by the rating system and should ensure that, to the extent that LGD estimates take into account the existence of collateral, the policies regarding the management of these types of collateral comply with the requirement of Article 181(1)(f) of Regulation (EU) No 575/2013.”
  - c) *“Where necessary, institutions should perform appropriate adjustments in order to avoid any bias in the LGD estimates”*. This involves a monitoring of the source of the cash flows from ineligible collateral; however, it is not further specified how the “correction of the bias” should be understood. Since the CRR does not allow recognition of ineligible collateral as risk drivers, they are included in the same pool as unsecured exposures. However, since ineligible collateral may still provide additional recoveries in the collection process, the average realised LGD of such broader pool is lower than the average calculated exclusively on actual unsecured exposures. The correction of this potential bias in the estimation is already required, but the final results may still not be fully accurate as they will not differentiate between exposures with and without ineligible collateral.

---

<sup>85</sup> <https://eba.europa.eu/documents/10180/2616311/CP+GL+on+CRM.pdf>



441. Given the changes introduced by the final Basel III framework the current solution may prove inappropriate. As the revised eligibility criteria do not only refer to the internal collateral management, but also to some objective characteristics of the CRM techniques, institutions may not be able to meet the criteria for all main types of CRM techniques in use. Furthermore, changes to the eligibility criteria of CRM techniques would require institutions to look into their databases and verify whether all historical guarantees and credit derivatives would remain eligible under the final Basel III framework or not. This would mean that the reference data set would potentially have to be adjusted and models be redeveloped in order to ensure that ineligible CRM techniques are not used as a risk driver. It can be expected that historical reassessment of eligibility of collaterals would be challenging.
442. The EBA considers that the current framework for the treatment of ineligible CRM techniques under the A-IRB Approach has certain conceptual and practical drawbacks and should therefore be comprehensively reconsidered. A potential alternative treatment considered by the EBA could be to recognise eligibility of credit protection in the application rather than in the estimation of risk parameters, avoiding any distortions in risk differentiation and in the historical databases. As a result, institutions would be able to use all relevant risk drivers and quantify risk in the most accurate manner. At the same time, additional layer of prudence would be added in the application of risk parameters ensuring sufficiently conservative calculation of own funds requirements.
443. It has to be stressed that the area of CRM, both in the context of eligibility and treatment under various approaches, is particularly complex. In order to avoid potential unintended consequences any proposed solutions have to be thoroughly considered, taking into account incentives for the risk management of the institutions and impact of the framework on certain portfolios and business models. The design of the framework should take into account various forms of CRM techniques used by institutions and potential developments in the markets, such as increased use of credit insurance by institutions, of which the EBA has been informed by the representatives of the industry on several occasions. The EBA stands ready to further support the EU Commission and develop appropriate solutions for the recognition and treatment of CRM techniques. Furthermore, the EBA suggests that a mandate is granted for the EBA to develop guidelines on how to apply the eligibility criteria and rules for the treatment of various CRM techniques under all approaches.
444. The mandate as suggested above should in particular include a request to develop guidelines to specify the treatment of ineligible CRM techniques in the estimation and application of risk parameters. However, in order to allow such review, at least Article 181(1)(f) of the CRR would need to be adjusted or deleted, since it is currently not possible for LGD estimates to “take into account” ineligible collateral. It is the EBA’s recommendation that reference to eligibility criteria should not be included in Article 181 of the CRR, which should exclusively specify the requirements for appropriate quantification of risk. In addition, Article 183 of the CRR would need to be adjusted as well, in order to deal with the new ineligibility requirements on UFCP (see previous recommendations in other sub sections).

## 4.3 Recommendations for improvements of the existing IRB framework

445. In the CfA from the EU Commission on the implementation of the final Basel III framework the EBA was requested not only to assess the impact of the implementation of the revised framework, but also to report on any other issues or inconsistencies in both the current EU regulation as well as in the Basel capital framework. This section includes detailed recommendations for improvement of the general drafting and clarify of the CRR text.

### 4.3.1 Missing and misleading definitions

446. Clear and precise definitions are beneficial for a harmonised application of the prudential framework. During its ongoing regulatory and monitoring work the EBA has found that some notions are interpreted in a different manner by institutions, leading to different outcomes. The review of the CRR gives an opportunity to include missing definitions or correct those that are not entirely clear. The EBA is proposing the following set of clarifications:

- a) an overall review of the notions of credit obligation, credit exposure, facility, and related concepts;
- b) technical corrections and enhancements of the existing definitions.

447. The EBA has identified several enhancements necessary to improve the clarity of the CRR. The lack of clear concepts for the notions fundamental for the credit risk framework directly contributes to the variability of estimates, via different understandings of the requirements on either the model landscape or in estimation of risk parameters.

#### (i) Review of the definition of type of exposures

##### **Recommendation CR-IR 28: Definition of “type of exposures”**

The definition of “type of exposures” specified in point (1) of Article 142(1) of the CRR should be amended by deleting the reference to the “type of facilities”.

448. The definition of “*type of exposures*” is especially relevant in the context of defining the models landscape of the institutions, since in accordance with point (1) of Article 142(1) of the CRR a rating system applies for a certain type of exposures. A strict interpretation of the current text would mean that an institution would need to develop a separate “*rating system*” for each different type of facilities of its obligor, even if it is managing the exposures at the obligor level (for instance for corporates). The EBA does not see merit of such a requirement, which also contradicts common modelling practices. Therefore the EBA proposes to amend the definition of “type of exposures” by deleting the reference to “type of facilities”. Besides, it should be noted that the concept of “type of facilities” is in turn not defined in the current CRR and is not used in any other parts of the framework.

## (ii) Review of the notions of exposure, facility and obligation

### Recommendation CR-IR 29: Definition of “credit obligation” and “credit exposure”

As the credit obligation is one of the main concepts underlying the own funds requirements for credit risk it is important that it is understood and applied in a harmonised manner and hence it should be defined in the CRR. It is proposed that the following definitions could be applied:

*‘credit obligation’ means any amount of principal, accrued interest and fees owed by an obligor to the institution or in case an institution serves as a guarantor, owed by an obligor to a third party.*

*‘credit exposure’ means any on balance sheet item, including any amount of principal, accrued interest and fees owed by the obligor to the credit institution, and any OBS items, which results or may result in a credit obligation.*

### Recommendation CR-IR 30: Definition of “facility”

The definition of facility determines the level of estimation of the LGD and CCF, as well as the PD in case of retail exposures with a definition of default used at facility level. Hence, a clear definition of this key concept is crucial to ensure harmonised estimation of risk parameters. It is proposed that the following definition could be applied:

*‘facility’ means a contract between an obligor and an institution, which results in a credit obligation towards the institution, and based on which a certain exposure to an obligor is recorded in accounting system of the institution, under the terms of agreement of the contract.*

449. The interaction between the concepts of facility, exposure, credit exposure and credit obligation should be clarified. The EBA understands that:

- a) An “exposure”, as defined in point (1) of Article 5 of the CRR, is considered from the perspective of the institution, while a “credit obligation” is considered from the perspective of the obligor. An “exposure” is a broader concept than a “credit exposure”, for instance “credit exposures” do not include equity exposures. A “credit exposure” is necessarily related to a “facility” or “credit facility”, which constitutes a basis for the “credit obligation” of an obligor. The EBA believes that the definition of “credit obligation” should be incorporated in the text of the CRR in order to clarify the link with a “credit exposure”. However, the definition of “exposure” should remain unchanged.
- b) A single credit obligation as well as a single credit exposure is related to a single facility. A facility is a contract between the institution and the obligor resulting in a credit obligation of the obligor, while a credit exposure (and a corresponding credit obligation) is expressed as an amount<sup>86</sup>.
- c) The notion of facility is widely used under the IRB Approach as it determines the level of estimation of risk parameters such as LGD and CCF, but also potentially PD if the definition of default is applied at the level of an individual facility rather than at the level of the obligor, as allowed by Article 178(1) of the CRR (see also considerations in section 4.3.6).

<sup>86</sup> Therefore, the CRR deals with “facility grades and pools”, not “credit exposures grades and pools”

Therefore, a common understanding of the notion of facility is crucial for the comparability of the estimates of risk parameters.

d) The concepts of “credit obligation” and “facility” are not only used in the IRB Approach but are also useful in the SA framework, for instance for the application of the CCF and for the definition of default when applied at the credit facility level. Therefore, the definitions of these notions should be introduced in Article 4 of the CRR.

450. Furthermore, the EBA analysed the impact of the clarification of the notion of facility on the estimation of risk parameters, in particular in cases where the recovery process does not allow a direct observation of the realised value of the LGD and CCF at facility level. This may arise in two situations, where:

a) cash flows received in the collection process cannot be allocated to an individual facility without additional assumptions;

b) collateral is not allocated to an individual facility, but secures a pool of facilities (‘cross-collateralisation’).

451. The EBA is of the view that the first situation usually occurs at the later stages of the collection process, where the return to a non-defaulted status is no longer possible and hence where the institution typically tries to recover the debt through the legal process. At that stage institutions may bundle all exposures towards the obligor on one account and either stop calculating interests or calculate interests in accordance with national legislation. In this case, the total obligation is considered fully due and is no longer split into individual facilities, i.e. none of the initial schedules of payment continue to apply. As this situation only takes place at later stages of the collection process, treating this as a reason for aggregated LGD estimation would lead to a loss of valuable information obtained by facilities at earlier stages (for the estimation of LGD to be applied to the living portfolio). Instead, a solution is already provided in paragraph 112 of the GL on PD and LGD estimation, which clarifies that in the case of aggregated information institutions should develop an appropriate methodology for the allocation of recoveries and costs to individual exposures and that such methodology should be applied consistently across exposures and over time. However, for the purpose of estimation of the LGD in-default, the institution may treat this bundle of facilities as one facility. This is already possible via the concept of “reference date” introduced in paragraph 172(b) of the GL on PD and LGD estimation.

452. With respect to the second situation of cross-collateralisation, the EBA considers that the exposures secured by the same pool of collateral should share the same risk characteristics and the collection process would be carried out jointly from the beginning. As a matter of fact, the cross-collateralisation arrangement will most likely stem from a given overarching contract between the obligor and the institution. This initial overarching contract, which could be a basis for possible further contracts related to individual loans if necessary, could be considered as an individual facility, since it could be considered as a form of credit line

where an obligor provides a pool of collateral and can draw different forms of loans up to a specified limit. In this case the proposed definition based on a contract between an obligor and an institution would still be valid and this additional clarification could be provide legal certainty.

### (iii) Definitions of risk parameters

#### **Recommendation CR-IR 31: Definitions of risk parameters**

Own estimates of risk parameters such as PD, LGD, CCF and EL determine the level of own funds requirements under the IRB Approach. In order to ensure consistent estimation and comparability of these parameters across institutions they have to be defined in a precise manner. Therefore, several amendments to the definitions are proposed to clarify that: (i) the LGD, CCFs and EL are estimated at the level of a single facility, and (ii) that PD and LGD parameters may refer either to default risk or, in the case of purchased receivables, to dilution risk.

453. As a direct consequence of the considerations presented in the previous section, the definitions impacted by the concept of “facility” discussed above should be clarified. These include “loss given default”, “conversion factor”, “expected loss” and “facility grades or pools”. In particular, some inconsistencies in these existing definitions have been identified and proposals are put forward to correct them where necessary. The definitions should also incorporate the possibility to use the risk parameter to estimate dilution risk. The proposed definitions in the Table 22 below incorporate the conclusion of the discussion presented in section 4.3.3.

### (iv) Notions such as obligor, borrower, counterparty

#### **Recommendation CR-IR 32: Consistency in the terminology: obligor, borrower, counterparty**

The notions of “obligor” and “borrower” should be used consistently across the framework, and the notion of counterparty should be used only in the context of counterparty credit risk.

454. The EBA understands that the notions of “obligor” and “borrower” have the same meaning, with the only difference that “obligor” is considered from the perspective of the institution and “borrower” from the perspective of the client or counterparty of the institution<sup>87</sup>. In addition, the EBA believes that the term “counterparty” should be used only in the context of counterparty credit risk in order to improve the clarity of the text and avoid misunderstandings.

### (v) Requirements for the use of models in assignment of exposures to grades or pools

#### **Recommendation CR-IR 33: Definition of a “model”**

Article 174 of the CRR on the use of models for the assignment of exposures to grades and pools should be further clarified in order to ensure harmonised application of the use of models. In

<sup>87</sup> The inconsistent use are in Article 4(1)(59), Article 166(8)(a), Article 166(8)(a) and Article 178 second paragraph

particular it should be ensured that the requirements specified in Article 174 are applicable to all rating systems used under F-IRB and A-IRB Approach.

455. Article 174 of the CRR specifies the requirements for the use of statistical models and other mechanical methods in the assignment of exposures to grades or pools. It has to be noted in this context that while all requirements in this article refer to “models”, this notion is not defined in the CRR. In addition, interpretational issues have been raised with respect to Article 174 of the CRR, according to which the list of requirements applies “If an institution uses statistical models and other mechanical methods to assign exposures to obligors or facilities grades or pools”. It is not clear which other methods which are not statistical models or other mechanical methods could be allowed for the purpose of the IRB Approach. The EBA is of the view that Article 174 of the CRR should be redrafted in order to improve its clarity.
456. More specifically, it should be made clear that for the purpose of assignment of exposures to grades or pools institutions shall use models, either based on statistical models or other mechanical methods, and that in all cases the requirements specified in Article 174 of the CRR must be met. In addition, it should be clarified that such statistical model or mechanical methods should use clearly defined inputs, and there should be a functional link between the inputs and the output of such a model or method. However, the functional link between the inputs and the outputs of the model may be determined through expert judgment.

(vi) Requirement for margin of conservatism

**Recommendation CR-IR 34: Definition of appropriate adjustment and margin of conservatism**

The IRB approach includes a requirement that adequate margin of conservatism is added to the estimates of risk parameters. In order to ensure harmonise application of the requirements, the notion of margin of conservatism should be defined, including the clarification that it accounts for expected range of estimation errors, stemming from identified deficiencies in data, methods and changes to underwriting standards, risk appetite, collection and recovery policies and any other source of additional uncertainty, as well as general estimation error.

457. Article 179(1)(f) of the CRR requires that institutions add a margin of conservatism (MoC) to their estimates of risk parameters. It is however not clarified how to understand and apply this concept, which resulted in large variety of practices across institutions. It is therefore proposed that the clarification could be provided, building on the concepts of “appropriate adjustment” and MoC, as introduced in the GL on PD and LGD estimation. It is proposed to define the notion of MoC in the CRR given its particular importance for the consistent application of the requirements.

## (vii) Overview of all proposed changes and additions in the definitions

Table 22: Summary of proposals related to missing or unclear definitions in the CRR

Concept	Existing legal background	Proposed amendments
Type of exposures	In accordance with Article 142(1)(2) of the CRR <i>‘type of exposures’ means a group of homogeneously managed exposures which are formed by a certain type of facilities and which may be limited to a single entity or a single sub-set of entities within a group provided that the same type of exposures is managed differently in other entities of the group;</i>	<i>Proposed amended definition:</i> <i>‘type of exposures’ means a group of homogeneously managed exposures which may be limited to a single entity or a single sub-set of entities within a group provided that the same type of exposures is managed differently in other entities of the group;”</i>
Credit obligation & Credit exposure	The CRR does not define a credit obligation, but some clarification has been provided in paragraph 73(a) of the Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures (GL on PD and LGD estimation) <sup>88</sup> : <i>“...credit obligation refers to both of the following:</i> <i>(i) any on balance sheet item, including any amount of principal, interest and fees;</i> <i>(ii) any off-balance sheet items, including guarantees issued by the institution as a guarantor.”</i>  The CRR gives the definition of an exposures in Article 5(1): <i>‘exposure’ means an asset or off-balance sheet item;</i>	<i>Proposed new definition in Article 5 of the CRR:</i> <i>‘credit obligation’ means any amount of principal, accrued interest and fees owed by an obligor to the institution or in case the institution serves as a guarantor, owed by an obligor to a third party.</i>  <i>‘credit exposures’ means any on balance sheet item, including any amount of principal, accrued interest and fees owed by the obligor to the institution, and any off-balance sheet items, which results or may result in a credit obligation .</i>
Facility	The CRR does not define a facility. However, this notion is used in several contexts, including:	<i>Proposed new definition in Article 5 of the CRR:</i>

<sup>88</sup> <https://eba.europa.eu/documents/10180/2033363/Guidelines+on+PD+and+LGD+estimation+%28EBA-GL-2017-16%29.pdf/6b062012-45d6-4655-af04-801d26493ed0>

Concept	Existing legal background	Proposed amendments
	<ul style="list-style-type: none"> <li>- definition of default</li> <li>- estimation of risk parameters</li> </ul>	<p><i>‘facility’ means a contract between an obligor and an institution, which results in a credit obligation towards the institution, and based on which a certain exposure to an obligor is recorded by the institution under the terms of agreement of the contract as an on- or off-balance sheet item.</i></p>
Facility grade	<p>In accordance with point (7) of Article 142(1) <i>‘facility grade’ means a risk category within a rating system’s facility scale, to which exposures are assigned on the basis of a specified and distinct set of rating criteria from which own estimates <b>of LGD</b> are derived;</i></p>	<p><i>Proposed amended definition:</i></p> <p><i>‘facility grade’ means a risk category within a rating system’s facility scale, to which exposures are assigned on the basis of a specified and distinct set of rating criteria from which own estimates <b>of risk parameters</b> are derived;</i></p>
Probability of default	<p>In accordance with point (54) of Article 4(1) of the CRR, <i>‘Probability of default’ or ‘PD’ means the probability of default of a counterparty over a one-year period;”</i></p>	<p><i>Proposed amended definition:</i></p> <p><i>Probability of default or ‘PD’ means the probability of default of a counterparty over a one-year period. <b>In the context of dilution risk, the PD should be understood as the probability of dilution.</b></i></p>
Loss given default	<p>In accordance with point (55) of Article 4(1) of the CRR, <i>‘loss given default’ or ‘LGD’ means the ratio of the loss on an exposure due to the default of counterparty to the amount outstanding at default;</i></p>	<p><i>Proposed amended definition:</i></p> <p><i>‘loss given default’ or ‘LGD’ means the ratio of the loss on an exposure <b>related to a single facility</b> due to the default of an obligor <b>or facility</b> to the amount outstanding at default. <b>In the context of dilution risk, the LGD should be understood as the Loss given dilution and should refer to the loss on an exposure due to a dilution</b></i></p>
Conversion factor	<p>In accordance with point (56) of Article 4(1) of the CRR <i>‘conversion factor’ means the ratio of the currently</i></p>	<p><i>Proposed amended definition:</i></p>



Concept	Existing legal background	Proposed amendments
	<p><i>undrawn amount of a commitment that could be drawn and that would therefore be outstanding at default to the currently undrawn amount of the commitment, the extent of the commitment being determined by the advised limit, unless the unadvised limit is higher;</i></p>	<p><i>‘conversion factor’ means the ratio of the currently undrawn amount of a commitment that could be drawn <b>from a single facility before default</b> and that would therefore be outstanding at default to the currently undrawn amount of the commitment <b>from that facility</b>, the extent of the commitment being determined by the advised limit, unless the unadvised limit is higher.</i></p>
Expected loss	<p>In accordance with point (3) of Article 5 of the CRR <i>‘expected loss’ or ‘EL’ means the ratio of the amount expected to be lost on an exposure from a potential default of a counterparty or dilution over a one year period to the amount outstanding at default.</i></p>	<p><i>Proposed amended definition:</i></p> <p><i>‘expected loss’ or ‘EL’ means the ratio <b>related to a single facility</b> of the amount expected to be lost on an exposure from a potential default, the latter over a one year period, to the amount outstanding at default, <b>or from a potential dilution</b> over a one year period to the amount outstanding at <b>dilution</b>.</i></p>
Use of models	<p>In accordance with Article 174 of the CRR <i>‘If an institution uses statistical models and other mechanical methods to assign exposures to obligors or facilities grades or pools, the following requirements shall be met:</i></p> <p>(a) <i>the model shall have good predictive power and capital requirements shall not be distorted as a result of its use. The input variables shall form a reasonable and effective basis for the resulting predictions. The model shall not have material biases;</i></p> <p>(b) <i>(...)</i></p>	<p><i>Proposed amended article:</i></p> <p><i>For the assignment of exposures to obligors or facilities grades or pools institutions shall use models, either based on statistical models or other mechanical methods. In the use of models the following requirements should be met:</i></p> <p>(a) <i>there should be a functional link between the inputs and the outputs of the model. This functional link does not prevent the use of human judgement.</i></p> <p>(a) (bis) <i>the model shall have good predictive power and capital requirements shall not be distorted as a result of its use.</i></p>

Concept	Existing legal background	Proposed amendments
Margin of conservatism	<p>In accordance with Article 178(4) of the CRR “Institutions that use external data that is not itself consistent with the definition of default laid down in paragraph 1, shall make appropriate adjustments to achieve broad equivalence with the definition of default.”</p> <p>In accordance with paragraph 224 of Basel III “A bank must record actual defaults on IRB exposure classes using this reference definition. A bank must also use the reference definition for its estimation of PDs, and (where relevant) LGDs and EADs. In arriving at these estimations, a bank may use external data available to it that is not itself consistent with that definition, subject to the requirements set out in paragraph 230. However, in such cases, banks must demonstrate to their supervisors that <b>appropriate adjustments</b> to the data have been made to achieve broad equivalence with the reference definition. This same condition would apply to any internal data used up to implementation of this Framework. Internal data (including that pooled by banks) used in such estimates beyond the date of implementation of this</p>	<p><i>The input variables shall form a reasonable and effective basis for the resulting predictions. The model shall not have material biases;</i></p> <p><i>(b) (...)’</i></p> <p><i>Proposed new definition:</i></p> <p><i>Margin of conservatism means conservatism, after appropriate adjustments have been performed, to account for expected range of estimation errors, stemming from identified deficiencies in data, methods and changes to underwriting standards, risk appetite, collection and recovery policies and any other source of additional uncertainty, as well as general estimation error. In this context, appropriate adjustments mean methodologies to correct the identified deficiencies to the extent possible in order to overcome biases in risk parameter estimates stemming from the identified deficiencies.</i></p>

<b>Concept</b>	<b>Existing legal background</b>	<b>Proposed amendments</b>
	<p>Framework must be consistent with the reference definition.”</p> <p>In accordance with paragraph 38 of the EBA GL on PD and LGD estimation “In order to overcome biases in risk parameter estimates stemming from the identified deficiencies referred to in paragraphs 36 and 37, institutions should apply adequate methodologies to correct the identified deficiencies to the extent possible. The impact of these methodologies on the risk parameter (‘appropriate adjustment’), which should result in a more accurate estimate of the risk parameter (‘best estimate’), represents either an increase or a decrease in the value of the risk parameter. Institutions should ensure and provide evidence that the application of an appropriate adjustment results in a best estimate.”</p> <p><b>Margin of Conservatism:</b></p> <p>In accordance with Article 179(1)(f) of the CRR “an institution shall add to its estimates a margin of conservatism that is related to the expected range of estimation errors. Where methods and data are considered to be less satisfactory, the expected range of errors is larger, the margin of conservatism shall be larger.</p>	

#### 4.3.2 1.25 scaling factor on the asset value correlation coefficient for “large financial sector entities”

##### **Recommendation CR-IR 35: Correlation scaling factor for large financial sector entities**

The definition of a large financial sector entity should be aligned with the Basel framework, and should use a EUR 70 billion threshold on the consolidated assets of the parent entity when applied to a subsidiary of a group.

458. Article 153(2) of the CRR requires the application of a scaling factor to the asset value correlation coefficient for “exposures to large financial sector\_entities” and “unregulated financial entities”. The definitions of such entities are included in points (4) and (5) of Article 142(1) of the CRR. This adjustment is included in the amended paragraph 272 of the Basel II framework<sup>89</sup>, and is repeated in paragraph 53 of the final Basel III framework. As explained in the introduction of amended Basel II framework, this factor was introduced in order to *“address systemic risk within the financial sector, [...], as financial exposures are more highly correlated than non-financial ones.”*
459. The definition in the Basel capital framework of a large financial sector entity is wider as it consolidates exposures to any entity of a group where parent or subsidiaries have consolidated assets above a comparable threshold of USD 100 billion. In the CRR this threshold is translated into EUR 70 billion but, as clarified in the Q&A process<sup>90</sup>, it applies only to consolidated assets of the entity and its subsidiaries, i.e. it does not consider the possibility of being a subsidiary of a large financial sector entity. This was mentioned as a non-material deviation in the EU RCAP<sup>91</sup>, and could be considered as inconsistent with the new relevant scope of consolidation to be used to identify Large Corporates that should migrate to the F-IRB Approach. As a matter of fact, the use of sub-consolidated data is inconsistent with the rest of the framework:
- a) it is not used anywhere else in the regulatory credit risk framework;
  - b) it is inconsistent with the rating of the obligor, which would typically take into account any support from the parent company;
  - c) it opens the door for arbitrage strategies, via transferring businesses into smaller subsidiaries;
  - d) it does not meet the objective of the final Basel III framework to reduce the interconnectedness of the financial institutions<sup>92</sup>.
460. Therefore, the choice to consider the higher scope of consolidation should be reconsidered, and the EBA believes this deviation from the Basel capital framework should be removed from the EU framework. The EBA acknowledges that the impact for some obligors may be significant, as illustrated in Table 23 below.

<sup>89</sup> <https://www.bis.org/publ/bcbs189.pdf> , paragraph 104

<sup>90</sup> Q&A 2193, [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015\\_2193](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015_2193) and Q&A 3057 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016\\_3057](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016_3057)

<sup>91</sup> See page 39

<sup>92</sup> As pointed out in *“The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions.”*

### Recommendation CR-IR 36: Scope of application of the correlation scaling factor

The scope of application of the 1.25 scaling factor to the correlation coefficient as specified in Article 153(2) of the CRR is unclear and hence the definitions included in points (4) and (5) of Article 142(1) of the CRR should be amended to enhance clarity.

461. In addition, numerous Q&As were raised on the scope of application of this scaling factor, which highlights the possibilities to improve the drafting and clarity of the CRR. The EBA proposes three enhancements related to the following notions:
- a) 'large financial sector entity' is defined in point (4) of Article 142(1) of the CRR, and relies implicitly on the definition of 'Financial sector entities' given in point (27) of Article 4(1) of the CRR<sup>93</sup>. Two criteria are added: on the size of the entity and on the prudential regulation (respectively in points (a) and (b) of Article 142(1)(4) of the CRR).
  - b) 'unregulated financial sector entity' in point (5) of Article 142(1) of the CRR, which refers to the activities listed in Annex I of [directive 2013/36/EC](#) and Annex I of [directive 2004/39/EC](#)<sup>94</sup>. These entities are subject to scaling factor of the asset value correlation coefficient if they are not 'prudentially regulated'.
462. The first proposal has an objective of improved clarity of the text via two changes in point (4) of Article 142(1) of the CRR:
- a) The notion defined is rather about 'large regulated financial sector entity'; the EBA notes that 142(1)(5) refers to the notion of 'regulated financial sector entity' which is not defined *per se* in the CRR;
  - b) The legal references to assess the whether the entity is subject to a prudential regulation should be explicitly given. For instance, this second criterion implicitly refers to the Annex V of the [Commission Implementing Decision No. 2014/908](#) (amended by the [Commission Implementing Decision 2016/2358/EU](#)) entities in a third country, although the said Annex V only refers to credit institutions and investment firms (given the scope of the Commission Implementing Decision No. 2014/908). The EBA also notes the potential interactions with Article 119(5) of the CRR which could also be clarified. In addition, the EBA has already published a report on other financial intermediaries and regulatory perimeter issues<sup>95</sup>, and in particular on entities carrying out credit intermediation activities and not subject, on an individual basis, to a prudential framework.

<sup>93</sup> The EBA notes that Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 marginally updates the definition of financial institutions (without solving the issues presented in this section): 'financial institution' means an undertaking other than an **institution and other than a pure industrial holding company**, the principal activity of which is to acquire holdings or to pursue one or more of the activities listed in points 2 to 12 and point 15 of Annex I to Directive 2013/36/EU, including a financial holding company, a mixed financial holding company, a payment institution **as defined in point (4) of Article 4 of Directive (EU) 2015/2366 of the European Parliament and of the Council (\*)**, and an asset management company, but excluding insurance holding companies and mixed-activity insurance holding companies as defined, respectively, in points (f) and (g) of Article 212(1) of Directive 2009/138/EC

<sup>94</sup> Q&A 516 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicid/2013\\_516](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicid/2013_516)

<sup>95</sup> <https://eba.europa.eu/documents/10180/1720738/Report+on+OFIs.pdf>

463. Secondly, the interaction between a 'large financial sector entity' and an 'unregulated financial sector entity' should be clarified and potentially amended. One potential unintended consequence of these definitions is that the correlation scaling factor does not apply to third country Insurance and re-insurance undertakings (as clarified in Q&A 206\_3057):
- a) They would not be considered as a 'large financial sector entities' (i.e. 'large regulated financial sector entity') since they would not be considered as regulated. Indeed, a third country Insurance and re-insurance undertakings are not considered as regulated since they are not mentioned in Annex V of the Commission Implementing Decision No. 2014/908<sup>96</sup>.
  - b) They would not be considered as an 'unregulated financial sector entity' since they are not mentioned in Annex I of directive 2013/36/EC nor Annex I of directive 2004/39/EC.
464. The example of third-country insurance and re-insurance undertakings illustrates two problems:
- a) It is not clear whether the definition of an 'unregulated financial sector entity' in Article 142(1)(5) of the CRR relies on the CRR Article 4(1)(27), since it mentions activities listed in Annex I of directive 2013/36/EC and Annex I of directive 2004/39/EC. The EBA notes that this article CRR has been amended in the second Corrigendum<sup>97</sup> of the CRR, from 'unregulated financial entity' to 'unregulated financial sector entity'.
  - b) Should the current text not refer to the same entities when mentioning large regulated ones and unregulated ones, it would be in contradiction with paragraph 53 of the final Basel III framework, which refers to the same entities. It would also produce counter-intuitive results if exposures toward (large) non-regulated financial sector entities would have a lower RW than exposures toward large regulated financial sector entities.
465. The EBA believes the CRR should be simplified if regulated and unregulated financial sector entities would explicitly refer to the same kind of entities. The EBA has no strong view on whether entities with activities described in Annex I of directive 2013/36/EC or Annex I of directive 2004/39/EC not falling under the definition in Article 4(1)(27) of the CRR should be considered, but notes that these references trigger substantial implementation issues. Therefore, the EBA is of the view that other possibilities to define the financial entities could be explored.
466. The Commission should then carefully review the scope of financial entities considered as regulated, including Annex V of the Commission Implementing Decision No. 2014/908 amended by the Commission Implementing Decision 2016/2358/EU) in order to decide whether or not to include insurance and re-insurance undertakings. Indeed, the scaling factor

<sup>96</sup> Q&A 1989 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015\\_1989](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015_1989) and Q&A 1991 [http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015\\_1991](http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2015_1991)

<sup>97</sup> <https://eur-lex.europa.eu/eli/reg/2013/575/corrigendum/2013-11-30/oj/eng>

on the asset value correlation coefficient significantly impacts the RWA as shown in the Table 23 (using an LGD of 45% and a Maturity of 2,5 years):

Table 23: Impact on the RW from the scaling factor on the asset value correlation coefficient

PD	Regulatory correlation	Scaled correlation	RW (reg corr)	RW (Scaled correlation)	Impact
0.03%	24%	30%	15%	21%	36%
0.05%	24%	30%	21%	28%	36%
0.10%	23%	29%	31%	42%	35%
0.50%	21%	27%	74%	97%	31%
1.00%	19%	24%	98%	125%	28%

467. Thirdly and conditional on the two changes proposed above, the EBA believes that the structure of the CRR could be enhanced by using a two steps approach:

- a) In a first step, the text could specify the general scope of entities eligible to the application of the scaling factor on the asset value correlation coefficient (Article 4(1)(27) of the CRR, Directive 2013/36/EC and Directive 2004/39/EC);
- b) As a derogation to point (a), the scaling factor on the asset value correlation coefficient would not apply to 'small' entities [in the sense of not meeting the criteria of Article 142(1)(4)(a) of the CRR] which are 'prudentially regulated' [in the sense of Article 142(1)(4)(b) of the CRR].

468. In summary, the EBA believes that the general structure of the applicability of the scaling factor should be enhanced as presented Table 24.

Table 24: Proposed application of the scaling factor

<b>Starting point: Financial entities</b> Point (27) of Article 4(1) of the CRR Annex I of <a href="#">directive 2013/36/EC</a> and annex I of <a href="#">directive 2004/39/EC</a>	Large	Small
Regulated Annex V of the <a href="#">Commission Implementing Decision No. 2014/908</a>	Yes	<b>No</b>
Unregulated (all the others)	Yes	Yes

### 4.3.3 Dilution risk

469. Dilution risk occurs in the IRB Approach in the orbit of purchased receivables. According to point (53) of Article 4(1) of the CRR, it is defined as *“the risk that an amount receivable is reduced through cash or non-cash credits to the obligor”*. It is worth mentioning that this risk is different from default risk (i.e. the institution may experience significant losses even if the obligor is not in default) and hence own funds requirements are calculated separately for this type of risk.

470. In general own funds requirements for dilution risk are calculated for retail and corporate purchased receivables. In both cases in order to calculate the requirements, the corporate RW function is used with specific PD and LGD estimates that relate to the dilution risk. Those parameters are derived from the bank's estimation of one-year EL due to dilution risk, either via a decomposition that uses own estimates, or via the use of fallback parameters. In addition, where the institution can prove that the dilution risk is immaterial no own funds requirements need to be calculated.
471. The EBA believes that the CRR could incorporate the following enhancements:
- a) correction of the definitions of risk parameters (PD and LGD);
  - b) inclusion of a general principle of a consistent use of the fallback parameters;
  - c) correction of the RW and EL formulae when using the fallback parameters;
  - d) introduction of a mandate for the EBA to clarify how to assess the materiality of the dilution risk.

(i) **Correction to the definitions of risk parameters (PD and LGD)**

**Recommendation CR-IR 37: Dilution risk in the definitions of risk parameters**

The definitions of the probability of default, loss given default and expected loss should be updated to be applicable to both the risk of default and the risk of dilution.

472. In the CRR, the notion of EL refers both to loss due to the default of an obligor or to dilution:

*“Expected loss” or “EL” means the ratio of the amount expected to be lost on an exposure from a potential default of a counterparty or dilution over a one-year period to the amount outstanding at default.”* (point (3) of Article 5 of the CRR)

473. However, the CRR is less precise when defining the PD and the LGD:

*“Probability of default” or “PD” means the probability of default of an obligor over a one-year period;”* (point (54) of Article 4(1) of the CRR)

*“Loss given default” or “LGD” means the ratio of the loss on an exposure due to the default of a counterparty to the amount outstanding at default;”* (point (55) of Article 4(1) of the CRR).

474. This inconsistency in definitions is problematic when talking about dilution risk for purchased receivables, as a literal reading of the CRR in fact requests to use the probability of default for an obligor instead of the probability of dilution and correspondingly the loss given default instead of loss given dilution. It is expected that these erroneous definitions open doors for different interpretations and promote inconsistencies in supervisory actions. The EBA believes that the CRR should be clarified and could be corrected in the following manner (correction **in red**):



- a) ‘Probability of default’ or ‘PD’ means the probability of default of a counterparty over a one-year period. *In the context of dilution risk, the PD should be understood as the probability of dilution;*“
- b) ‘loss given default’ or ‘LGD’ means the ratio of the loss on an exposure **related to a single facility** due to the default of an obligor **or facility** to the amount outstanding at default. *In the context of dilution risk, the LGD should be understood as the loss given dilution and should refer to the ratio of the loss on an exposure due to a dilution to the amount outstanding at dilution;”*
- c) ‘expected loss’ or ‘EL’ means the ratio *related to a single facility* of the amount expected to be lost on an exposure from a
- potential default, the latter over a one-year period, to the amount outstanding at default; *or*
  - *potential dilution risk event over a one-year period to the amount outstanding at the date of occurrence of the dilution risk event.*

(ii) Use of fallback parameters and own estimates

**Recommendation CR-IR 38: Consistent use of the fall-back parameters for dilution risk**

In the context of dilution risk for purchased receivables clarification should be provided that institutions are required to use either own estimates or fall-back parameters in a consistent manner. This means that simultaneous use of fall-back parameters and own estimates for different exposures within the same rating system should not be allowed and that where own estimates are used they have to be used for both PD and LGD parameters.

475. In order to avoid possible cherry picking the EBA believes that the simultaneous use of fallback and own estimates parameter values for different exposures within the same rating system should not be allowed. The choice between own estimates and fallback solutions should be applied consistently over time, hence it should be made clear that once the institution applies for the use of own estimates for dilution risk and those have been approved by the CA, the institution must use these own estimates and not the fallback parameters. This is in line with the general principle reflected in Article 149 of the CRR that institutions are not allowed to revert to less sophisticated approaches without an explicit permission by a CA.
476. It would be beneficial to also clarify that it is not possible to combine own estimates with fallback parameters, i.e. that own estimates have to be used either for both PD and LGD or for none of them. Otherwise the own funds requirements would not appropriately reflect the overall risk of loss due to dilution of purchased receivables.

(iii) Correction of the RW and EL formula when using the fall-back parameters

**Recommendation CR-IR 39: Regulatory LGD in the context of dilution risk**

In the context of dilution risk for purchased receivables a correction should be incorporated by specifying fall-back LGD parameter as 100%, in line with the Basel standards, and not 75%, as

currently specified in Articles 161(1)(g) and 164(1) of the CRR. This correction will allow avoiding inconsistencies in the calculation of EL for purchased receivables.

477. The current CRR deviates from the Basel II framework as regards fallback parameters, as was pointed out by the EU RCAP<sup>98</sup>: “Basel framework paragraph 369 says that, for dilution risk, the corporate RW function must be used with PD set to EL and LGD set to 100%. The CRR sets the LGD for dilution risk at 75% for corporate receivables (161(1) (g)) and more broadly for all purchased receivables (164(1)).”
478. The EBA believes that the EU framework should be aligned with the Basel capital framework, i.e. the fallback parameter for LGD should be 100%, for the following reasons:
- a) This deviation creates a technical inconsistency between the PD and the LGD estimation: under Articles 160(6) and 163(3) of the CRR, the PD is set at the level of the EL (therefore indirectly implying that the LGD is 100%). The inconsistency is very clear when considering the EL: when computed as the product of PD and LGD in accordance with Article 158(10) of the CRR, the EL is equal to  $EL * 75\%$ . The EBA considers that this 25% discount on EL for purchased receivables is not justified.
  - b) The current 25% discount on EL when using the fallback approach disincentivises institutions from using a more adequate decomposition of EL into PD and LGD. Once this discount is removed, an LGD below 100% (with PD equals to  $EL/LGD$ ) would triggers a decrease in own funds requirements due to the concave shape the RW function. Hence institutions would have an incentive to measure the level of dilution risk in a more precise manner.
479. The inconsistency between the Basel capital framework and the CRR cannot be justified on the basis of risk. Potential lower riskiness of certain types of purchased receivables should rather be captured via the use of appropriate EL estimate. The EBA acknowledge that this change would increase the own funds requirement of such exposures by 33%<sup>99</sup>.

#### (iv) Materiality of dilution risk

##### Recommendation CR-IR 40: Materiality of dilution risk

In accordance with Article 157(5) of the CRR competent authorities may exempt an institution from calculating risk weighted exposure amounts for dilution risk where the dilution risk is considered immaterial. In order to ensure harmonised application of the requirements related to dilution risk further clarifications should be provided on how to assess the materiality of this type of risk. This clarification could be provided by the EBA once a specific mandate is granted.

480. According to Article 157(5) of the CRR “The competent authorities shall exempt an institution from calculating and recognising risk-weighted exposure amounts for dilution risk of a type

<sup>98</sup> See page 42

<sup>99</sup> The RW function is linear with respect to the LGD, therefore a relative increase of 33% (from 75% to 100%) in LGD translates into a relative increase of 33% in the RW.

of exposures caused by purchased corporate or retail receivables where the institution has demonstrated to the satisfaction of the competent authority that dilution risk for that institution is immaterial for this type of exposures.” It is however not clear how to assess the materiality of dilution risk for this purpose. As a result, different criteria are applied by CA across the EU leading to different outcomes.

481. The EBA believes that in order to ensure harmonised application of the requirements related to dilution risk further clarifications should be provided on how to assess the materiality of this type of risk. Specifically, it should be at least clarified whether such assessment should be made in the context of only the portfolio of purchased receivables, or whether it should relate to the overall risk of all exposures of the institution. Should it not be feasible to provide such clarification directly in the text of the CRR, the EBA could be granted a mandate to specify the conditions under which dilution risk can be considered as immaterial.

#### 4.3.4 Exposure value – EL, IRB shortfall & excess

##### Recommendation CR-IR 41: Exposure value and IRB shortfall / excess calculation

Further clarity should be provided to the requirements on the calculation of IRB shortfall or excess as specified in Article 159 of the CRR, as well as to the specification of the exposure value in accordance with Article 166 of the CRR. The treatment of any adjustments for the purpose of the computation of the IRB shortfall / excess must be consistent with the determination of the exposure value.

482. The requirements for the computation of the IRB shortfall / excess remain broadly unchanged in the final Basel III framework as compared to the Basel II framework. However, the application of the requirements of Articles 159 and 166 of the CRR has been quite problematic and have raised a substantial number of Q&A. Overall, there are several issues which were identified as unclear, including the treatment of fair value adjustments, additional value adjustments, partial write-offs and discounts and premiums in the case of purchased receivables.
483. The EBA believes that when providing clarifications, one general principle applicable for all of the above elements should be incorporated in the CRR is that the treatment of any adjustments for the purpose of the computation of the IRB shortfall / excess in accordance with Article 159 of the CRR must be consistent with the determination of the exposure value in accordance with Article 166 of the CRR. The consistency with the exposure value should also be kept in the estimation of LGD in order to ensure that the EL amount is calculated in a correct manner. This means in particular that:
- a) where the exposure value is **net** of a given adjustment, such adjustment should **not be treated as eligible** for the computation of the IRB shortfall / excess; at the same time the LGD should be estimated in such a way that it reflects the loss on the net exposure value; this treatment is adequate for instance for full and partial write-offs under the current CRR; these elements will hereafter be called “Category 1” adjustments.

b) where the exposure value is **gross** of a given adjustment, such adjustment should be **treated as eligible** for the computation of the shortfall and the excess; at the same time the LGD should be estimated in such a way that it reflects the loss on the gross exposure value; this treatment is adequate for instance for specific and general credit risk adjustments under the current CRR; these elements will hereafter be called “Category 2” adjustments.

484. Only where this overall principle is kept it can be ensured that capital adequacy ratios are calculated correctly.

485. It should be noted that partial write-offs are considered as Category 2 adjustments in the Basel capital framework, i.e. the exposure value is gross of partial write-offs and they are considered as eligible for the computation of the shortfall and the excess. However, the CRR is ensuring consistency between partial and full write-offs and treat them as Category 1 adjustments<sup>100</sup>. This is justified by the fundamental difference between the write-off and the credit risk adjustments: while the credit risk adjustments can be reversed in case the circumstances or risk assessment change, the write-off is final and irreversible, i.e. any additional recoveries after a write-off are not allocated to a given exposure but are treated as unexpected gains. Therefore, it is considered that there is no justification for different treatment of full and partial write-offs and they should be treated as Category 1 adjustments. The EBA reviewed this interpretation, in particular taking into account the new definition of write-offs in the accounting framework (IFRS 9 5.4.4), and is of the view that the current treatment should remain unchanged<sup>101</sup>. This stance is based on the fact that the impact on the own funds requirements of this categorisation is limited under the current framework:

a) The categorisation of adjustments does not change the LGD estimates applied to performing exposures, since it does not impact the computation of the observed realised LGD. This is due to the fact that partial write-offs occurring after the default event are not used in the formula used to calculate of the economic loss<sup>102</sup>, and partial write-offs occurring before the default event are retreated and added back to the amount outstanding at default according to paragraph 134 of the EBA GL on PD and LGD estimation. The exposure value of non-defaulted exposures should not be impacted either since a material write-off should immediately trigger the default of the exposure;

b) The write-offs are accounted for in a specific manner for LGD estimates applied to defaulted exposures, according to paragraph 179 of the EBA GL on PD and LGD estimation, via the concept of ‘reference dates’. The guidance provided in this paragraph ensures that

<sup>100</sup> This treatment is an indirect consequence of the absence of the notion of partial write-off in the CRR: the exposure values is based on the accounting value with no reference to partial write-off, and they are not mentioned as eligible amounts to be compared with the EL amounts for the shortfall and excess calculation.

<sup>101</sup> The rationale given in [Q&A 2014/1064](#) still hold true under the new definition: any amounts written-back following a derecognition will not impact the carrying amount of the financial asset

<sup>102</sup> The loss covered by the write-off will be indirectly captured via a lower amount of recoveries

the estimates of LGD in-default and  $EL_{BE}$  are appropriate for the exposure value as currently specified.

- c) A change in the understanding of the exposure value would trigger the necessity to redevelop the models for LGD in-default and  $EL_{BE}$ .

#### **Recommendation CR-IR 42: Treatment of premiums and discounts for purchased receivables**

Further clarity should be provided on the requirement with respect to the treatment premiums and discounts for purchased assets, and in particular it should be specified how to reflect these elements in the exposure value. These clarifications should be provided separately for assets purchased when in default and other purchased receivables, ensuring consistency between the exposure value and the treatment of premiums and discounts in the calculation of IRB shortfall or excess.

486. In addition, the EBA is of the view that some clarifications are needed in the CRR with respect to the treatment premiums and discounts for purchased assets, and in particular it should be specified how to reflect these elements in the exposure value. It is therefore proposed that the answers to Q&A 2013/354<sup>103</sup> and Q&A 2016/2691<sup>104</sup> be incorporated into the CRR:

- a) For assets purchased when in default, the exposure value should be gross of discounts and premiums, i.e. the discounts should be added back and any premiums should be subtracted from the accounting value. At the same time these discounts and premiums should be included in the calculation of IRB shortfall / excess, where the discounts would be treated similarly as credit risk adjustments and the premiums would decrease the overall value of eligible provisions.
- b) For assets purchased when not in default, the exposure value should be net of discounts and premiums, i.e. any discounts and premiums should be reflected in the exposure value. At the same time these discounts and premiums should not be included in the calculation of IRB shortfall / excess.

#### **4.3.5 Calculation of realised LGD and realised CCF**

487. The computation of realised LGD and realised CCF is a crucial step in the modelling of own-LGD and own-CCF estimates; the comparability of the final risk parameters can only be achieved if these computations are performed in a consistent manner. The EBA has already clarified the calculation of realised LGD in the EBA GL on PD and LGD estimation, but is of the view that further enhancements could be incorporated in the CRR with regard to:

- a) the treatment of unpaid late fees: re-drafting of Article 181(1)(i) of the CRR to incorporate the clarifications introduced in the GL on PD and LGD estimation;

<sup>103</sup> [https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013\\_354](https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013_354)

<sup>104</sup> [https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016\\_2691](https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016_2691)

- b) the treatment of additional drawings after default: removal of the optionality for retail exposures and alignment of the computation method between retail and non-retail risk estimates.

(i) Unpaid late fees

**Recommendation CR-IR 43: Treatment of unpaid late fees in the LGD**

Article 181(1)(i) of the CRR should be amended to clarify that it refers to fees for late payments imposed on the obligor before the moment of default. However, any fees capitalised after the moment of default should not increase the amount of economic loss or amount outstanding at the moment of default.

488. The EBA suggests that Article 181(1)(i) of the CRR be clarified to refer to fees for late payments imposed on the obligor before the moment of default. However, any fees capitalised after the moment of default should not increase the amount of economic loss or amount outstanding at the moment of default. This ensures appropriate calculation of realised LGD with reference to the amount outstanding at the moment of default and provides for consistency of risk parameters used in the calculation of RWA and EL amounts. Such clarification has also been provided in paragraph 137 of EBA GL on PD and LGD estimation.

(ii) Additional drawings after default

**Recommendation CR-IR 44: Treatment of additional drawing in the LGD**

The requirements regarding the treatment of additional drawings after default as specified in Articles 181(2)(b), 182(1)(c) and 182(3) should be amended to improve consistency of the framework and to ensure appropriate estimation of risk parameters. In particular, it should be specified that in all cases the additional drawings after default should be accounted for only in the LGD, while CCFs should reflect any drawings before default.

489. The EBA is of the view that additional drawings should be only included in the LGD risk parameter for both retail and non-retail exposures. Currently, in accordance with Article 182(1)(c) of the CRR, additional drawings after default are generally included in CCF estimates, but for retail exposures they can instead be included in the LGD estimates, as specified in Articles 181(2)(b) and 182(3) of the CRR. This option to reflect additional drawings in LGD estimates is largely used in the models for retail exposures, as shown in Table 45 and Table 46 of the EBA Report on IRB modelling practices<sup>105</sup>. This observation is also confirmed by preliminary results of the Targeted Review of Internal Models (TRIM) investigations led by the SSM.
490. The EBA believes that additional drawings after default should be accounted for only in LGD estimates, as there seems to be no justification for such practice-based variability leading to

<sup>105</sup> <https://eba.europa.eu/documents/10180/1720738/EBA+Report+on+IRB+modelling+practices.pdf> – 57% included the additional drawings in the economic loss (i.e. in the LGD) and only 17% of institutions included them in the realised CCF

non-comparable risk parameters. This would also ensure a conceptual consistency in the estimation of risk parameters, where CCFs estimates would reflect what occurs up to the moment of default, while LGD estimates focus on all developments from the moment of default until the end of the recovery process. Finally, this is also consistent with the definitions of LGD and CCFs as already specified in points (55) and (56) of Article 4(1) of the CRR respectively.

491. This clarification becomes particularly relevant in the context of the final Basel III framework, where for non-revolving exposures, observed additional drawings can only be taken into account in LGD models, as own estimates of CCF will be prohibited. Without a change in the CRR, institutions would have a clear incentive not to reflect the losses related to additional drawings after default in their LGD estimates to avoid increases in own funds requirements.
492. The EBA is also of the view that this change should be applied to both retail and non-retail exposures, as the same conceptual arguments given for retail exposures also apply to non-retail exposures. This would require modifications not only in Articles 181(2)(b) and 182(3) but also in Article 182(1)(c) of the CRR. This would simplify the framework and would ensure full consistency between the estimates applied for retail and non-retail exposures and with the definitions of the respective risk parameters provided in the CRR.
493. However, the EBA acknowledges that this change may trigger some new development costs for the institutions. The impact on own funds requirement cannot be estimated but is expected to be low, since the own funds requirements should not depend on whether additional drawing after default are considered in the LGD or the CCF.

#### 4.3.6 Estimation of PD in the case of definitions of default applied at facility level

##### **Recommendation CR-IR 45: The level of estimation of PD for retail exposures**

While as a general rule default is identified at the obligor level and PD is estimated for the obligor, where institutions apply default definition at the level of individual facility in accordance with Article 178(1) of the CRR, they should also estimate their PDs for individual facilities. In order to ensure consistent PD estimation amendments should be introduced in Article 180 of the CRR to refer not only to obligor grades but also, where relevant, to facility grades.

494. In the IRB Approach, exposures are assigned to grades or pools at two different moments of the life cycle of the model: historical observations are assigned to grades or pools during the development of the model, whereas the obligors or facilities in the current portfolio are assigned to grades or pools in the application of the model. This implies in particular that for exposures assigned to the default status the definition of default is used both during the model development and for the default identification of the exposures in the current portfolio.
495. One additional dimension of the definition of default is the possibility for retail exposures to apply the criteria at the level of individual credit facilities rather than in relation to the total

obligations of the obligor. In other word, an obligor with different facilities could have some facilities in default and others not if an institution chooses to apply this option.

496. On this aspect, the CRR is not clear on whether the intention is to allow a definition of default at facility level only for the default identification (i.e. in the application of the model), or if it can also be used for the model development (risk differentiation and risk quantification). This interpretative issue comes from the interaction between Articles 178(1) and 180(2)(a) of the CRR. The EBA considers providing the following two possible clarifications:

a) **Option 1** – align the computation of default rates with the definition of default, i.e. compute default rates at facility level where the default definition is applied at facility level:

Under this option Article 180(2)(a) of the CRR could be redrafted in the following manner: *‘(a) institutions shall estimate PDs by obligor **or facility** grade or pool from long-run averages of one-year default rates; **The default rate shall be computed at facility level only where the definition of default is applied at facility level in accordance with Article 178(1).**’* This would mean that for retail exposures and where the definition of default is applied at facility level, paragraphs 73 to 81 of the EBA GL on PD and LGD can be applied facility level. In addition, the definition of “one-year default rate” in Article 4(1)(78) of the CRR should be amended: *“one-year default rate” means the ratio between the number of defaults occurred during a period that starts from one year prior to a date T and the number of obligors **or facilities** assigned to this grade or pool one year prior to that date;*

b) **Option 2** – computation of default rates at the level of the obligor, regardless of the level of application of the definition of default:

Under this option Article 180(2)(a) of the CRR could not be redrafted but potentially clarified: *‘(a) institutions shall estimate PDs by obligor grade or pool from long run averages of one-year default rates; **The default rate shall not be computed at facility level when the definition of default is applied at facility level in accordance with Article 178(1).**’* This would mean that for retail exposures and when the definition of default is applied at facility level, paragraphs 73 to 81 of the EBA GL on PD and LGD estimation should still be applied at obligor level.

497. Under the Option 1, the alignment is put forward, with a consistency between the development of the model, its application, and the risk management practices of the firm. Under Option 2, risk parameters are developed at the obligor level for all institutions; this means that the PD parameters are fully comparable between institutions.

498. It is important to note that the EBA believes that the optionality embedded in the application of the definition of default for retail exposures should be maintained, since it allows institutions to align the default identification with the economic reality of the transaction, depending on how they manage the exposures. The described interpretational issue applies



only to the cases where an institution has chosen to apply the definition of default at facility level. It mostly impact the way institutions compute the observed default rate, i.e. whether the denominator should be a number of obligors or facilities, and accordingly whether the numerator should be a number of defaulted obligors or facilities. It is not possible to identify *a priori* which approach is more conservative, since it depends on the comparison of the defaults rates of obligors with few facilities and obligors with many facilities<sup>106</sup>.

499. It should be noted however, that under Option 1 institutions should still be able to identify all facilities of one obligor, as in order to ensure best risk management practices institutions need to have information on the status of other facilities, especially if an obligor tries to acquire new facilities. This information may be relevant in the default identification processes through unlikelihood-to-pay criteria and it could be relevant in the modelling of risk parameters, where institutions are required to take into account all relevant risk drivers.
500. The EBA believes that the development of the model should reflect the risk management practices of the firm, and believes that the optionality should be exercised fully by the institutions. In this sense, the implied variability should be acknowledged and accepted as “warranted”, in particular because it does not trigger any concerns on the adequacy of own funds requirements. Therefore, the EBA supports the first option of the clarifications and the alignment of the level of application of the definition of default at the facility level with the calculation of default rates by counting individual defaulted facilities.

#### 4.3.7 Continuous rating scale

##### **Recommendation CR-IR 46: The use of continuous rating scales**

The EBA believes that an overall reflection on the granularity of rating scales, including the use of continuous rating scales, introduced through Article 169(3) of the CRR, should be carried out. In this context a mandate should be granted for the EBA to develop guidelines with further clarifications on the application of CRR requirements with regard to model development, risk quantification, application and validation of risk parameters based on continuous or very granular rating scales. This would serve the purpose of ensuring a harmonised application of the framework and level-playing field between institutions.

501. The IRB Approach is based on the notion of grades and pools, which are used to derive estimates of PD and LGD. The scales can be based on the obligor characteristic, as defined in Article 142(1)(6) of the CRR, or on the facility characteristics, as defined in Article 142(1)(7) of the CRR. In addition, Article 169(3) of the CRR, which sets general principles for rating systems and is therefore applicable to all risk parameters, introduces the possibility to use direct estimates of risk parameters for individual obligors or exposures, by considering them as estimates assigned to grades on a continuous rating scale. The final Basel III framework and the Basel II framework are silent on this possibility.

<sup>106</sup> A facility default rate computation puts more weight on obligors with many facilities. Therefore, if facilities belonging to obligors with many facilities have a lower default rate than facilities with obligors with few facilities, the observed default rate will be lower. Similarly, if facilities belonging to obligors with many facilities have a higher default rate than facilities with obligors with few facilities, the observed default rate will be higher.

(i) **Background: definition of continuous rating scales**

502. It should be noted that a correct terminology is critical, since a large amount of models are continuous in the risk differentiation part (e.g. a continuous scoring function) and then only discretised in a second step within the risk quantification. Hence, the EBA understands the provision in Article 169(3) of the CRR as specifically designed to allow “continuous rating scale”, i.e. allow the computation of own funds requirements as well as the main steps of the validation and risk quantification on a continuous basis. This provision is however not related to “continuous ranking models” (i.e. models where the risk estimation is performed continuously with a final discretisation step), in the sense that this provision is not needed to allow the use of such models. Furthermore, the discussion on Article 169(3) of the CRR is not related to potential use of so called master scales, as institutions which do not make use of this provision are not required to use a master scale<sup>107</sup>.

503. The following general types of PD models can be identified in the current practices:

- a) **Continuous direct estimates of PD:** PD estimates used for own funds requirements calculation result from a continuous modelling approach leading to a direct PD estimate, by converting the score into a direct PD estimate (‘one-step’). An additional calibration step in order to achieve a calibration target (which potentially leads to adjustments of PD) may or may not be applied.
- b) **Discrete direct estimates of PD:** this category uses a continuous modelling approach, where continuous PD are not used directly for the calculation of own funds requirements, but instead mapped to a discrete rating scale (either a master scale used across different portfolios or a grade- specific for the portfolio). The PD estimates of each grade are not derived from the long-run average (LRA) default rate of that grade, but obtained through (i) the simple average of direct PD estimates of the individual obligors / facility PDs; or (ii) a fixed PD per grade (e.g. the average of the upper and lower bound of each grade), as set out in Article 180(1)(g) of the CRR.
- c) **Grade-based estimation of PD:** PD used for the calculation of own funds requirements result from the LRA default rate calculated at grade level.

504. The following table summarises the types of PD models used :

<sup>107</sup> In particular, the EBA does not believe that the Level 1 text should impose the use of a master scale, since they trigger specific additional modelling challenges (such as maintaining the homogeneity within each grade) that should be treated carefully.

Table 25: Types of PD models

		<i>Granularity of the scale</i>	
		<i>Continuous</i>	<i>Discrete</i>
<i>Calibration is based on</i>	<i>LRA default rate at calibration segment level (EBA GL on PD and LGD estimation par. 92(b))</i>	<i>Continuous direct estimates</i>	<i>Discrete direct estimates</i>
	<i>LRA default rate at grade level (EBA GL on PD and LGD estimation par. 92(a))</i>		<i>Grade-based estimation</i>

505. A similar categorisation can be used for LGD models:

- a) **Continuous direct estimates of LGD:** the LGD estimates used for own funds requirements calculation result from a continuous scale, either estimated directly or calculated as the aggregation of several components.
- b) **Discrete direct estimates of LGD:** the LGD estimates used for own funds requirements calculation result from the aggregation of several components, which, when combined, result in a discrete scale.
- c) **Grade-based estimation of LGD:** the LGD estimates used for own funds requirements calculation result from the LRA LGD calculated at grade level.

506. The following table summarises the types of LGD models used:

Table 26: Types of LGD models

		<i>Granularity of the scale</i>	
		<i>Continuous</i>	<i>Discrete</i>
<i>Calibration is based on</i>	<i>LRA LGD at calibration segment level (EBA GL on PD and LGD estimation par. 161(b))</i>	<i>LGD direct continuous</i>	<i>LGD direct discrete</i>
	<i>LRA LGD computed at grade level (EBA GL on PD and LGD estimation par.161(a))</i>		<i>Grade-based estimation</i>

507. For all risk parameters, the overall question on the most relevant level of granularity has to be based on a trade-off between the more granularity across PD/LGD ranges and the availability of sufficient observations within a given range.

**(ii) Considerations on having two different approaches**

508. The use of continuous rating scales impacts the three main steps of the modelling, i.e. (i) risk differentiation; (ii) risk quantification; as well as (iii) application of the models. Since the drafting of the CRR follows the logic set out in the Basel capital framework based on models with grades or pools composed of a group of exposures, some of the requirements are difficult to apply for purely continuous rating scales, where in accordance with Article 169(3) of the CRR each estimate should be understood as a separate grade. While in principle there are ways to test continuous risk parameters, application of such tests is not consistent with

the wording of the CRR. These difficulties and potential inconsistencies are described in more detail below.

509. Institutions should among others ensure a meaningful differentiation of risk over time. When using continuous ratings scales the following considerations can be raised with regard to **risk differentiation** and the design of the grades and pools structure:

a) **Requirements on concentration:** while institutions using discrete rating scales have to comply with requirements on the concentration as specified in the CRR in Article 170(d) and Article 170(f) for non-retail exposures, and in Article 170(3)(c) for retail exposures, these requirements are not fully enforceable at the grade or pool level in case of continuous rating scales<sup>108</sup>. In the same spirit, the requirement of Article 171(1)(a) of the CRR to “*assign obligors or facilities posing similar risk to the same grade or pool*” is hardly enforceable in the case of continuous rating scales. However, it has to be noted that there are ways to test concentrations which could be used in the case of continuous rating scales, although these methods are not based on grades or individual estimates as referred to in the CRR.

b) **Validation of the homogeneity and heterogeneity:** while institutions using discrete rating scales have to comply with requirements on the homogeneity and heterogeneity requirements for their grades or pools as specified in Article 170 of the CRR, as well as in Article 38 of the final draft RTS on IRB assessment methodology<sup>109</sup>, these requirements are not fully enforceable in case of grades populated by a single obligor<sup>110</sup>. Again, while it is in general possible to test homogeneity and heterogeneity in the case of continuous scales, these methods are not based on grades or pools as required by the CRR. Furthermore, it can be argued that the use of a discrete scale can itself create variability as there are many ways in which the scale can be designed. Indeed, the estimates based on discrete scales are highly dependent on the design of the scales themselves. However, this variability should be reduced through appropriate enforcement of the requirement on the homogeneity and heterogeneity as described above.

510. Regarding **risk quantification** the CRR introduces requirements on the number of observations along two dimensions: on the number of obligors within one particular grade, and on the number of years of observations. Furthermore, the CRR prompts for a regular validation of the estimates (backtesting) at the level of grades or pools. These requirements are not fully enforceable in case of continuous rating scales:

a) **Minimum number of observations:** Article 170(3)(b) of the CRR requires the number of retail exposures in a given grade or pool to be sufficient to allow for meaningful quantification and validation of the loss characteristics at the grade or pool level. This

<sup>108</sup> The concentration requirement is not applicable at the grade level for grades populated by only one obligor.

<sup>109</sup> and further clarified in paragraphs 69 and 130 of the Guidelines on PD and LGD estimation. It should be noted that the homogeneity requirements are phrased in a slightly different manner between the PD and the LGD.

<sup>110</sup> The homogeneity requirement is not applicable at the grade level for grades populated by only one obligor.

requirement may be difficult to fulfil in practice in case sufficiently broad sets of data are not available. However, in case of continuous rating scales it is impossible to enforce the requirement on minimum number of exposures for the grades populated with a single exposure and hence the requirement on the minimum number of observations is applied at the level of a calibration segment rather than at the level of a grade or pool. As a result, using direct estimates can be viewed as a tool to compensate for a lack of data at a grade level by means of theoretical assumptions (for instance, shape of the calibration curve).<sup>111</sup>

- b) **Minimum number of years of observations:** minimum observation periods for risk quantification are defined for each risk parameter in the following requirements of the CRR: Articles 180(1)(h) and 180(2)(e) (history of default rate), Articles 181(1)(j) and 181(2) (history of loss rate) and Articles 182(2) and 182(3) (history of realised CCF). In the case of continuous rating scales these requirements can only be applied at the calibration segment level, while they would apply *de facto* at grade level in the case of a discrete scale.
- c) **Review of the estimates and backtesting:** The backtesting of final risk parameter estimates required in Article 185(b) of the CRR is defined at grade level<sup>112</sup>. However, in the case of PD, this validation test can hardly be performed at the grade level in case of continuous rating scales, since the PD of a single obligor (i.e. a real number between zero and one) would be compared with a single default event (i.e. a number being either zero or one); the “default rate” of every grade would be either 0% or 100%). In practice, for the purpose of backtesting of continuous PD institutions may build certain buckets. However, this is not explicitly required by the CRR and even if it is done, these buckets may not meet all requirements relevant for grades. As a matter of fact, when institutions use direct continuous risk parameter estimates, they may calculate a long-run average of the risk parameter only at the calibration segment level and ensure that the observed long-run average default rate and the estimated continuous risk parameter averaged across obligors or facilities are aligned within the same calibration segment. Nevertheless, this may no longer hold true at a more granular level, i.e. at different ranges of risk parameter values and subranges of the scope of application resulting in a potential underestimation of risk for some ranges of risk of exposures. This problem is less prominent in the case of LGD and CCF estimates where the realised loss rate or realised CCF can be compared with an estimate even at an individual level.

511. Finally, certain concerns can be raised also with regard to the **application of the risk parameters** based on the continuous rating scale:

<sup>111</sup> Background and Rationales of the Guidelines PD and LGD: “The portfolio level calibration is a method to obtain this long-run average default rate at a grade level, for instance where institutions do not have information at grade level for the whole historical observation period. It could therefore be seen as a two-step calibration, i.e. the first step would be to obtain the portfolio default rate representative of the long-run average, and the second step would be to derive the PDs at grade level.”

<sup>112</sup> It should be noted that the backtesting of final LGD/CCF estimates required in Article 185(b) of the CRR is phrased in a slightly different manner than for the PD: “Institutions using own estimates of LGD and conversion factors shall also perform **analogous analysis** for these estimates”

- a) **Overrides:** It is not completely straightforward to override a continuous risk parameter estimate (i.e. intermediate or final parameter). Different practices of overriding intermediate or final outputs on a continuous scale can be observed, mostly based on some kind of notching, and while doing so material bias could be added to the final risk parameter estimates. Furthermore, the requirements set up in Article 172(3) of the CRR relate to the assignment of an obligor or exposure to a grade or pool and not to an estimate of the risk parameter. However, also in the case of discrete scales different practices with regard to overrides exist. This should be mitigated by the requirement that institutions must have clear policies with regard to the use of overrides and they must analyse the performance of exposures whose rating has been overridden. These requirements apply regardless of the type of scale in use.
- b) **RWA variability between institutions:** Because of the concave shape of the RW function with respect to PD, RWA variability could occur when compared between continuous and discrete rating scales. Due to the steepness of the RW function, especially in the lower ranges of PD, the use of continuous rating scale may lead to overall lower RWA than the use of discrete scales. However, neither “smoothing” of the estimates, nor increased granularity lead in themselves to more accuracy. Therefore, the objective should be to seek the most appropriate estimates. This problem of the steepness of the RW function does not exist for the LGD and CCF estimates as their relation to RWA is linear.
512. **Granularity versus accuracy:** It can be argued that higher granularity gives opportunity to better differentiate between facilities and obligors, and that this increased risk sensitivity can be beneficial in pricing and risk management. However, it is possible to use continuous estimates for internal purposes while discretising the estimates for the purpose of backtesting and calculation of own funds requirements. Moreover, while it is clear a continuous risk parameter scales provides more granular estimates, these are not necessarily more accurate than estimates based on a discrete scale. In particular, in the case of discrete scale, the homogeneity requirement means in practice that all the exposures within the same grade should have similar level of risk, and therefore can share the same PD. Therefore, the accuracy of estimates depends on the performance of a given model rather than on the type of the scale
513. Given the complexity of the topic and its potential strong implications, both in terms of impact as well as in terms of variability of practices and own fund requirements, the EBA deems that further work is necessary. Therefore, a mandate should be granted for the EBA to develop guidelines on how to apply the requirements on model design, risk quantification, validation and application of risk parameters based on continuous or very granular rating scales. These guidelines would be specified separately for different risk parameters in order to account for their different characteristics.

#### 4.3.8 Treatment of intragroup insurance

514. The EBA points out the lack of specification of the application of Article 201(1)(g) of the CRR: “other corporate entities, including parent undertakings, subsidiaries and affiliated corporate entities **of the institution**, where either of the following conditions is met (...)”.
515. In general all requirements apply both at the solo and the consolidated level, in some cases the application at the solo level can be waived so that the requirements only apply at the consolidated level. On a consolidated level, the protection provided by an entity within a group does not change the overall level of risk and hence should not be recognised for prudential purposes. While the general rules of consolidation require elimination of any intragroup transactions, including any credit protection provided by entities included in the scope of consolidation, it is not clear how exactly this should be reflected in the risk weighting of exposures secured by such form of insurance.
516. Furthermore, where the protection is recognised for the purpose of own funds requirements at the solo level, this could open up opportunities for institutions to influence the overall level and allocation of required own funds in a way that may not have been intended by the legislator. It might be of a concern that such possibilities would be available mostly for large, universal banking groups with possibly cross-border operations, but not for smaller institutions focused on a more specific business model.
517. While this is not directly related to the implementation of the final Basel III framework, the EBA notes that this issue is addressed in a different manner in the final Basel III framework: indeed, paragraph 197 of the final Basel III framework includes in the list of eligible guarantors: “*Parent, subsidiary and affiliate companies **of the obligor** where their creditworthiness is not positively correlated with the credit risk of the exposures for which they provided guarantees. **For an intra-group company to be recognised as eligible guarantor, the credit risk of the whole group should be taken into account.***”<sup>113</sup>
518. Due to high complexity of the issue and to the lack of empirical results from supervisory assessments, it was not possible for to EBA to provide a meaningful advice in the short timeframe envisaged for the response to the CfA. However, the EBA is of the opinion that this issue should be further explored and clarified.

#### 4.3.9 Previous opinions published by the EBA

##### Recommendation CR-IR 47: 180 days past due option for the definition of default

The national discretion described in Article 178(1)(b) of the CRR to recognise default of an obligor at the latest after 180 DPD instead of 90 DPD is creating a possibility for unlevel playing field between institutions. It is therefore recommended that this discretion should be deleted.

<sup>113</sup> This paragraph is an updated version of the paragraph 195 of the Basel II framework, which include as eligible guarantors “*other entities rated A- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.*”

**Recommendation CR-IR 48: Framework for the annual benchmarking exercise**

The burden on regulators, supervisors and institutions could be decreased with a more appropriate legal setting and additional proportionality in the benchmarking exercise..

519. Last, the EBA would like to recall two opinions already published on the Level 1 text.
520. [Options on the 180 days past due \(DPD\) criterion](#): Due to the wide applicability of the 90 DPD criterion in the EU, the undue RWA variability caused by the 180 DPD criterion and the forthcoming changes in the accounting framework, it is consequently recommended to remove the 180 DPD exemption from Article 178(1) CRR, i.e. to disallow the continued application of the 180 DPD criterion.
521. [Opinion on benchmarking reports](#)<sup>114</sup> and [technical advice on benchmarking exercises](#)<sup>115</sup>: Article 78 of Directive 2013/36/EU (the CRD) requires CA to make an annual assessment of the quality of internal approaches used for the calculation of own funds requirements. The same Article requires the EBA to produce a report to assist CA in this assessment. The EBA's report is based on data submitted by institutions as specified in implementing technical standards on benchmarking (ITS). The EBA is in the view that a number of changes would decrease significantly the burden on regulators, supervisors and institutions. In particular, the EBA considers that the current legal setting is inappropriate and strongly recommends that benchmarking portfolios, as well as detailed reporting instructions are not adopted as part of Commission Implementing Acts, but that powers are given to the EBA to update regularly the portfolios and instructions on its website. Furthermore, more proportionality could be introduced, based on the nature, scale and complexity of institutions' activities, allowing less significant or less complex institutions' activities to be subject to reduced benchmarking exercises (e.g. no complex or immaterial portfolios) or less frequent benchmarking exercises.

---

<sup>114</sup> Page 3 – problem with the ITS process, at odds with the flexibility required to conduct the exercises

<sup>115</sup> CfA received on 09/12/2014 to assess the relevance of the tool, its scope, its mandates & legal settings, its annual frequency, the information sharing among CA and the areas designated for particular attention of the CA





**EUROPEAN BANKING AUTHORITY**

---

Floor 27, Europlaza  
20 Avenue André Prothin  
La Défense, Paris, France

---

Tel. +33 (1) 86 52 70 00

---

E-mail: [info@eba.europa.eu](mailto:info@eba.europa.eu)

---

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