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# EBA Opinion on the macroprudential rules in CRR/CRD

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EBA response to the European Commission on Article 513 CRR call for advice

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# Abbreviations

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ASRF	Asymptotic Single Risk Factor
AVC	Asset Value Correlation
BCBS	Basel Committee on Banking Supervision
CCB	Countercyclical Capital Buffer
CCF	Credit Conversion Factor
CRD	Capital Requirements Directive - Directive 2006/48/EC and 2006/49/EC
CRD IV	Capital Requirements Directive IV - Directive EU 2013/36
CRE	Commercial Real Estate
CRR	Capital Requirements Regulation - Regulation EU 575/2013
DA	Designated Authority
F-IRB	Foundation-IRB
FX	Foreign Exchange
G-SII	Global Systemically Important Institution
IRB	Internal Ratings Based Approach
LGD	Loss Given Default
MS	Member State
(N)CA	(National) Competent Authorities
O-SII	Other Systematically Important Institution
PD	Probability of Default
RRE	Residential Real Estate
RTS	Regulatory Technical Standard
RW	Risk Weight
SA	Standardised Approach
SRB	Systemic Risk Buffer

# 1. Executive summary

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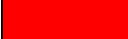


This report sets out four objectives of macroprudential policy, which are described in more detail in the next section of the report. The different objectives of macroprudential policy are the following:

1. Macroprudential policy should contribute to financial stability;
2. Macroprudential policy should protect the singleness of the European financial market;
3. The goal and purpose of each macroprudential rule should be clearly defined;
4. Macroprudential policy should be transparently disclosed.

The different macroprudential tools are then assessed against these objectives. The report contains the reasoning behind each assessment and the results of this analysis are summarised in a ‘traffic light’ table. The rows contain the different macroprudential tools and the four objectives are stated in the columns. The fifth column contains an assessment of the consistency with the Basel text, bearing in mind that the Basel framework contains a set of minimum requirements. The final column contains an overall score for each macroprudential measure, which is computed as an average assessment across the objectives.

The assessment of each measure against each objective is summarised in one colour: red indicates that the objective is not yet sufficiently met, yellow indicates that the objective is partially met, but that some elements could be improved, whereas green indicates that the objective has been achieved. A similar assessment is made in order to verify whether the different risks are adequately covered (see Table 3).

**Table 1: Legend of traffic-light assessment**

	Legend for Table 2	Legend for Table 3
	Objective is not achieved	Risk is not adequately covered
	Objective is only partially achieved	Risk is moderately covered
	Objective is achieved	Risk is well covered

For the capital conservation buffer, the first objective of enhancing financial stability is assessed as yellow. This buffer increases banks’ capital buffers and therefore increases resilience. However, it is a static measure, in contrast to, for instance, the CCB, which explains the result. The objective of maintaining a level playing field is only partially met, firstly because the CRD text provides for the option to exempt small and medium sized investment firms, whereas it is not clear why this is the case, which may damage the level playing field. A second reason is the reference to the capital conservation buffer in Article 458 CRR. It is assessed that the boundaries of systemic or macroprudential risk in the other rules of CRR/CRD versus Article 458 are not clearly defined, and

may therefore damage the level playing field. The capital conservation buffer is considered to be clearly defined, and is therefore assessed as green towards the third objective. However, it is not entirely clear whether the capital conservation buffer should be considered as a macroprudential measure. A majority of National Competent Authorities (NCA) assert that it should be considered as a microprudential tool, as it is not considered to be a macroprudential measure in the SSM Regulation. The capital conservation buffer is however considered to increase the resilience of the financial sector (first objective), irrespective of whether it is classified as a micro- or a macroprudential tool. There are no disclosure requirements in cases of non-compliance with the capital conservation buffer. However, situations may occur in which the market finds out about this, depending also on the level of Pillar 2 requirements – for instance, when an institution changes its distribution policy. It is considered sub-optimal that the amount of information available to the public is not consistent across banks, and therefore the final score is yellow. Finally, the capital conservation buffer is fully in line with the Basel text, and therefore gets a green score.

For the CCB, it is assessed that this tool enhances the resilience of the financial system, but a proper assessment is hindered by the lack of practical experience, and therefore it gets a yellow score. Given the uniform applicability of the CCB to all institutions, the rationale of ‘guided discretion’ in the setting of the CCB and the mandatory reciprocity of CCBs up to 2.5%, the potential for ring-fencing is deemed to be limited and the level playing field in the European financial market seems to be preserved. However, further improvements to the EU single market could be obtained by requiring mandatory reciprocity for rates in excess of 2.5%. The goal and purpose of the CCB are also clearly explained and documented, there is sufficient disclosure of the CCB and the CCB is consistent with the Basel text, which explain the overall green score for the CCB.

The G-SII framework is designed to impose higher own funds requirements on global systemically important institutions to compensate for the higher risk that they represent for the financial system and the potential impact of their failure on taxpayers. The CRR provides for a maximum G-SII buffer rate of 3.5%. However, there are currently no banks identified which would be allocated to the highest sub-category, and, therefore, the cap of 3.5% on the G-SII has not been identified as restrictive. To take into account the possibility that this cap will be binding in the future, the G-SII framework only partially achieves the first objective of enhancing financial stability. All other objectives are achieved, and therefore are assessed with a green score.

The O-SII framework gets an overall red score, as it fails to meet several objectives. Firstly, the objective of enhancing financial stability is not sufficiently achieved because of the cap of 2% on the O-SII buffer. Several National Competent Authorities pointed out that this cap is restrictive, and therefore this report recommends increasing the level of the O-SII cap and determining the appropriate higher level in an impact assessment. Furthermore, the identification of O-SIIs is laid down in GLs (which are currently being developed by EBA), whereas the setting of the level of the O-SII buffer is currently not regulated. This leaves room for ring-fencing and may harm the integrity of the single market. Therefore, it is considered that improvements could be made to

enhance the consistency of rules of the setting of O-SII buffers across Europe. In particular, this report recommends that additional guidelines should be developed in order to set the level of the O-SII buffer, while at the same time preserving an authority's ability to apply supervisory judgment. The goal of the O-SII buffer is to compensate for the higher risk that O-SIIs represent for the financial system and the potential impact of their failure on taxpayers. The score on the third objective (clear goal and purpose) is yellow, however, as this purpose is not explicitly stated in the Level 1 text. The fourth objective of disclosure is also assessed to be partially met. The Level 1 text contains provisions for the disclosure of the O-SII buffer: CAs or DAs are to notify the names of the O-SIIs to the public, the ESRB, the EBA and the Commission (among others). However, disclosure could be improved by providing the list of indicators which are used to identify the O-SIIs, and to connect quantifiable indicators to these. Finally, the O-SII framework gets a yellow score for its consistency with the Basel text. Two differences can be noticed between the O-SII and the D-SIB framework: (i) the criteria to identify O-SIIs and set the O-SII buffer, and (ii) the 2% cap on the O-SII buffer in the CRD.

The SRB fails to achieve several objectives, and only the first objective, enhancing financial stability, is met. The SRB is considered to be a very versatile tool, covering a broad set of risks and can be applied to either all institutions or a subset by requiring a higher level of CET1 capital.

The second objective of protecting the singleness of the EU market is not achieved – for several reasons: (i) it is not clear how to assess and interpret structural systemic risk, meaning that the boundaries between the risks covered by the SRB and the risks covered by other tools are not clear, so that the pecking order is unclear; (ii) the fact that the SRB can be applied to a subset of institutions implies that it can damage the level playing field across institutions; (iii) reciprocity is voluntary, and; (iv) unclear procedures to be followed for activation. The report gives some recommendations to address these shortcomings, namely: (i) mandatory reciprocity of the SRB should be considered; (ii) the process should be clarified, and; (iii) guidelines should be written to clarify its activation, exploring possible quantitative indicators and the risks covered.

The third objective (a clear goal and objective for each measure) is not achieved either. In particular, the goal and scope of the SRB is very broad, and has been identified as overlapping in a number of dimensions with other tools (Pillar 2, G/O-SII buffer, Article 458 CRR, Article 124/164 CRR). Because of the uncertainties surrounding the risks covered by the SRB, it is clear that further work should be done to define its goal and purpose, which is the aim of the above proposed additional guidelines.

Regarding disclosure, the report suggests some areas of improvement: (i) that if indicators for the activation of the SRB are developed, then these indicators should also be disclosed, and; (ii) other Member States that have institutions with exposures to the country which sets the SRB could be explicitly informed about the structural systemic risk connected to these exposures. Other issues related to the disclosure of the SRB are: (i) the rules of procedure, which could be clearer, and; (ii) the consequence of failing to hold a sufficient SRB may not always be disclosed to the public



(i.e. restrictions on distributions apply). For these reasons, the score for the fourth objective is yellow.

The score on consistency with the Basel level is red, as no such buffer exists at the Basel level, although it has to be acknowledged that Basel only constitutes a minimum framework.

Articles 124 and 164 CRR allow CAs, under certain conditions currently being developed in the RTS by the EBA, to increase the RW or LGD floor for (subsegments) of residential or commercial real estate exposure classes. This is judged to contribute to financial stability, but some improvements could still be made, and therefore these tools are scored yellow. In particular, the report recommends aligning Article 164 with Article 124 CRR in a number of ways: (i) including all RRE and CRE in its scope (and not only retail RRE/CRE); (ii) requiring a consultation procedure, rather than the current notification equivalent, and; (iii) clarifying the boundaries and purpose of Articles 124 and 164, particularly in relation to Article 458 CRR.

The second objective, preserving the level playing field across institutions in Europe, is deemed to be achieved, and therefore gets a green score. However, the report mentions that these RTS may potentially be damaging for the level playing field in cases where the setting of RW or LGD floors is not correctly and consistently mapped to the level of risk across countries.

Regarding the third objective, a distinct lack of clarity in this mandate needs to be mentioned, explaining the red score. The concepts of financial stability considerations and forward-looking real estate developments contain a macroprudential element. In practice, provisions under Articles 124 and 164 could be activated both in a forward-looking fashion (macroprudential) based on financial stability considerations, including the build-up of excessive real estate credit risk and possible future deterioration of the conditions in the real estate sector, e.g. before a crisis may materialise, or based on currently increasing loss rates, e.g. during a crisis. Therefore, to a certain extent, Articles 124 and 164 may be used in a structural way (i.e. to set higher capital requirements because of the local specificities of the real estate market) or in a forward-looking way (i.e. because real estate risks are accumulating, and the authority wants to set additional buffers, and slow the build-up of the bubble). This means that Articles 124 and 164 seem to have both a microprudential as well as a macroprudential application.

The disclosure of these tools receives a yellow score, as the report sets out that disclosure could be improved if the specific motivation, source of risk, losses, financial stability considerations and forward-looking elements were also disclosed to the public.

Article 458 CRR, generally referred to as ‘the flexibility package’, allows Member States to take a variety of macroprudential measures to address systemic risks. However, because of the temporary nature of the measure and the stringent process surrounding its activation, the first objective is only partially achieved. The final score on this objective is yellow, because of the lack of clarity in assessing whether systemic risk is sufficiently addressed by other macroprudential tools, and because this tool does not allow the imposition of stricter requirements for specific

exposure classes (except for real estate). Therefore, the report recommends that Article 458 be extended to include specific exposure classes (for instance, corporate exposures). Additionally, the report recommends extending the reciprocity of Article 458 measures (of the SRB, but not both).

Regarding the singleness of the European financial market, it should be mentioned that no uniform rules apply in Article 458 CRR, which could potentially lead to inconsistencies and hence damage the single market. However, given the detailed notification procedure, requiring the EBA (and the ESRB) to issue its Opinion, it is considered that Article 458 has some checks in place in order to protect the EU single market. Therefore, Article 458 CRR gets a yellow score on the second objective. However, the procedure has a rather tight timeline, and therefore the report recommends that the EBA should be granted a month's extension in exceptional circumstances when forming its Opinion in relation to Article 458 CRR. The situations during which exceptional circumstances could be advocated should be specified before the event.

The goal and purpose of Article 458 is not clear (see also the above comment), however, and in particular the overlap with some other tools (SRB, Article 124/164, G/O-SII, Pillar 2). The disclosure of this tool (the fourth objective) could also be improved.

Pillar 2 is very broad in scope, as a wide range of measures can be taken. In particular, Pillar 2 is the only measure that can cover a number of risks, such as non-real estate exposures, interest rate risk arising in the banking book and foreign exchange (FX) risks, among other things. Furthermore, Pillar 2 can target specific groups of institutions to limit negative spill-over effects and the associated costs to other institutions that have not been affected by that risk. This explains the green score for the first objective of enhancing financial stability. However, given the lack of clear rules, there may be a threat to the singleness of the EU market, and therefore the objective of preserving the level playing field is only partially met (yellow score). Although Pillar 2 has traditionally been thought of as addressing idiosyncratic risks related to the risk profile of the individual institution, CRD IV explicitly recognises the macroprudential use of Pillar 2 measures. This mixed micro and macroprudential feature of Pillar 2 is considered to be confusing by some National Competent Authorities, and therefore the goal and purpose of Pillar 2 is not considered to be fully clear. Other National Competent Authorities, however, thought the macroprudential dimension of Pillar 2 serves an important purpose as it enables risks that are not covered elsewhere to be addressed. There are also no disclosure requirements connected to Pillar 2 measures, and this is sub-optimal for the measures which are taken for macroprudential purposes, and therefore the score for the fourth objective is red.

Finally, the assessment of the liquidity rules in CRR/CRD against the different objectives has not been completed, mainly as it is considered reasonable to first fully develop the microprudential framework before further developing the macroprudential liquidity framework. In this context, the Commission still has to deliver its delegated act in accordance with Article 460 CRR.

Apart from the recommendations stemming from these individual measures, there are two recommendations which apply to several, or to a subset of, macroprudential measures. Firstly, there is currently no requirement for the CA and the DA to coordinate their actions, which may lead to the same risk being targeted twice. It is proposed that a mandatory coordination process between the authorities be put in place. Secondly, the pecking order of macroprudential instruments is not considered adequate, and it is recommended that the hierarchy of the tools should be adjusted by placing the SRB before Pillar 2 and moving Article 458 CRR so that it is level with Pillar 2. The recommended hierarchy for the set of macroprudential tools would therefore be: (1) CCB, SRB, G/O-SII buffer, and (2) Pillar 2 for macroprudential purposes or Article 458 CRR, with neither one coming before the other.

Table 3 describes the extent to which there may be gaps in the framework by going through the various sources of risk that the macroprudential tools may have to address. Risks caused by structural and cyclical sources are well covered in the framework, as several tools exist to address these risks. Because of the temporary nature of Article 458, it has been classified as primarily covering cyclical risks, although this definition is not universally shared and some prefer putting it within the structural dimension. Risks caused by systemically important institutions is also an area where the current framework is very well developed and where no further tools are predicted to be needed, meriting a green score. In general, there is a clear lack of tools in the area addressing exposure-based risks, both in the structural and the cyclical dimension. Currently, Pillar 2 is the only tool covering all aspects of exposure-based risks. Although Articles 124, 164 and 458 can also address exposure-based risks, they are in general limited to targeting real estate exposures. This highlights a potential gap in the framework and explains the red score given in this dimension. The report addresses this by suggesting that further work should be done to evaluate the need and the exact type of measures that should be incorporated to address this deficiency. Following the above definition, Article 458 would be more appropriate to cover the cyclical dimension while the SRB would cover structural exposure based risks. Another area only partially addressed is funding-based risks. Both Pillar 2 and Article 458 are able to address these risks. However, it is difficult to apply Pillar 2 to all institutions, as an institution-specific decision has to be taken, and Article 458 is only temporary. For these reasons, funding risks are currently only partially addressed, although the Commission's delegated act in accordance with Article 460 CRR may change this. There are also a number of other miscellaneous risks, such as interest rate risks arising from the banking book or risks related to deficiencies in the infrastructure of the financial system, and risks that we are not yet aware of that are not captured by the other dimensions. Pillar 2 can be used to a certain extent, as can Article 458. However, these risks are, by their very nature, hard to pinpoint and define, making it hard to evaluate if anything is missing. This explains the yellow score awarded.

Table 2: Evaluation of the different tools against the objectives

	Financial Stability (effectiveness and efficiency)	Maintaining a level playing field	Clear goal and purpose of measure	Disclosure	Consistency with Basel	Overall score
Capital conservation buffer	Yellow	Yellow	Green	Yellow	Green	Yellow
CCB	Yellow	Green	Green	Green	Green	Green
G-SII	Yellow	Green	Green	Green	Green	Green
O-SII	Red	Red	Yellow	Yellow	Yellow	Red
SRB	Green	Red	Red	Yellow	Red	Red
Article 124/164 CRR	Yellow	Green	Red	Yellow	Yellow	Yellow
Article 458 CRR	Yellow	Yellow	Yellow	Red	Red	Yellow
Pillar 2	Green	Yellow	Red	Red	Yellow	Yellow
Liquidity rules						

Table 3: Risks covered by the various tools

	Structural risks	Cyclical risks	Risks caused by SII	Systemic funding risks	Structural exposure-based risks	Cyclical exposure-based risks	Other systemic risks
Capital conservation buffer							
CCB		√					
G-SII			√				
O-SII			√				
SRB	√		√				
Art 124/164 CRR					(√)	(√)	
Art 458 CRR		√		√		(√)	(√)
Pillar 2	√	√	√	√	√	√	√
Liquidity rules				?			
Risk adequately covered	Green	Green	Green	Yellow	Red	Red	Yellow

(V ) denoting a measure only addressing real estate risks

## 2. Background

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The EBA has been consulted by the European Commission, as envisaged in Article 513 of the CRR, on the macroprudential rules in the CRR and CRD. The EBA answered this call for advice by issuing this Opinion in the context of Article 8(1)(a) of the EBA regulation (Regulation (EU) No 1093/2010 of the European Parliament and of the Council).

This report summarises the views of the EBA on the macroprudential rules and addresses a number of specific aspects raised by the Commission.

Given the lack of practical experience of the different macroprudential tools contained in the CRR/CRDIV framework at this stage, it is not possible to make an empirical assessment of the macroprudential measures. The focus of the report is therefore on the conceptual nature of the macroprudential tools within the CRR/CRD IV with a particular emphasis on the microprudential framework and the banking supervisory perspective.

Central questions asked are:

- Do the tools and instruments in the CRR/CRD enhance the capacity of the supervisory function? In particular, do they close loopholes identified by supervisors in light of the financial crisis?
- Are the tools effective, efficient and transparent?
- Do the macro-tools combine efficiently bearing in mind their goal and purpose? Are the identified overlaps between micro and macroprudential tools and among macro-tools adequate?
- Are the rules consistent with internationally agreed standards?

Before moving on to the assessment of whether the macroprudential tools are effective, efficient and transparent, it is necessary to put forward the key objectives of macroprudential regulation. The different macroprudential tools will be assessed by benchmarking them against these criteria. The EBA considers the following to be the objectives of macroprudential policy:

## 1. Macroprudential policy should contribute to financial stability

Among the reasons to adopt a measure for macroprudential or systemic risk, one can differentiate between the following.

1. Macroprudential measures which aim to adapt the microprudential rules, which have been calibrated on an average global, sometimes European, market to specific **national or local market economic conditions**.
2. Macroprudential measures in CRD/CRD complement many of the other rules in these texts, which are mostly microprudential, with a view to addressing systemic risk and notably the existence of **externalities** across institutions and risks. From this perspective, macroprudential rules are only justified for covering the possible deficiencies of microprudential rules; the value of microprudential tools should not be underestimated given that they fit with, and were constructed for, the economy when it is in its average state. From that perspective, a macroprudential approach should provide arguments regarding why it is necessary to go beyond a cross-sectional or horizontal approach to risks in the banking system (e.g. because of times of 'crisis', as opposed to 'normal' times, that significantly impaired the normal functioning of the banking system, notably in terms of risk management).
3. Macroprudential measures which are taken in a **forward-looking** way, to build additional buffers to protect the financial system with additional capital. The CCB should, for instance, ensure that sufficient buffers are built during good times so that they can be depleted during times of stress.

## 2. Macroprudential policy should protect the singleness of the European financial market.

When applying the macroprudential framework, we have to bear in mind that while local solvency of banks or banking systems could be reinforced, the singleness of the European market is not promoted, denying any potential future benefits of enhanced competition or a level playing field. In other words, any benefits in financial stability should be weighed against the negative impact these measures may have on the internal market<sup>1</sup>, noting that there may be a feedback loop between the two (i.e. a measure that ensures financial stability across the Union would also be beneficial for the internal market by improving the functioning of the single market).

In this respect, it is important that the purpose and goal of an instrument is clear. This means that the instrument's purpose with respect to its macro and micro use should be unambiguous and not subject to interpretation, but also that the risks addressed (structural/cyclical risks) and the scope of the instrument (bank specific/system wide) are adequately specified.

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<sup>1</sup> Article 458 balances these two objectives, as paragraph 4 explicitly mentions that in situations where the negative impact on the internal market outweighs the financial stability benefits resulting from a reduction of the macroprudential or systemic risk, the Commission may propose to the Council an implementing act to reject the draft national measures.

Harming the EU single market can take many forms. Ranging from more severe to less damaging, and also relevant for microprudential tools, one can differentiate between the following.

- Measures with **ring-fencing** side effects. The most severe case of damaging the internal market would be the example of a measure taken with a ring-fencing objective. Therefore, this report will pay particular attention to measures which can be taken on a subset of institutions (i.e. the measure does not necessarily apply to all institutions). Measures which focus on a specific exposure class have a lower risk when used for ring-fencing purposes.
- Measures which damage the **level playing field**. An example of a measure which is damaging to the level playing field would be a situation where an institution in one jurisdiction is required to hold higher capital requirements for the same portfolio than an institution in another jurisdiction. This situation may arise if reciprocity is not mandatory or if a measure with mandatory reciprocity enters in combination with a measure with voluntary reciprocity (or with a measure for which no disclosure is required, e.g. Pillar 2, and other Member States may not be aware of the measure). From the perspective of maintaining a level playing field in the EU single market, mandatory reciprocity of measures is preferable to voluntary reciprocity. To illustrate, a hypothetical example would be the case where the UK has decided to increase RWs for real estate exposures in the UK by means of Article 124 CRR, and Belgium has decided to use Article 458 CRR to increase RWs for real estate exposures. A Belgian bank with real estate (RE) exposure to UK then needs to comply with the higher risk weights (RW) (UK) due to the mandatory reciprocity of Article 124 measures and the Belgian Article 458 measure, whereas a French bank (assuming that France does not recognise the Belgian Article 458 measure) with exactly the same exposure to the UK real estate market, would only have to comply with the higher RW as decided by the UK.
- Measures which allow **regulatory arbitrage**. The regulatory framework should be designed in such a way that regulatory arbitrage is minimised. An example of regulatory arbitrage may arise when a rule is not reciprocated. For instance, when a country imposes an Article 458 measure in its jurisdiction (for instance, higher own funds requirements on specific exposures), and this measure is not reciprocated, then a situation may arise where the institution prefers subsidiaries outside that jurisdiction to take those assets on its balance sheet to avoid the additional capital surcharge stemming from the Article 458 measure. A similar situation may arise if a buffer is imposed at the sub-consolidated level (and not at the consolidated level)<sup>2</sup>. Therefore, in reviewing the macroprudential rules, particular attention should be paid to the level of application, i.e. consolidated, sub-consolidated versus individual level, and the extent to which reciprocity provisions exist to mitigate this risk.

Therefore, in reviewing the framework, one has to bear in mind, on the one hand, that national flexibility in the macroprudential framework enables supervisors and/or DAs to adopt the measure best suited to address a specific local risk and to promote financial stability, but on the

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<sup>2</sup> In the specific case of the Systemic Risk Buffer, voluntary reciprocity is allowed (Article 134 CRD).

other, this flexibility, if not used consistently across national authorities, may jeopardise the overall objective of creating a level playing field in the European financial market. The macroprudential framework ought to strike a balance between these two objectives.

### **3. The goal and purpose of each macroprudential rule should be clearly defined**

Given the novelty of the macroprudential framework, the EBA also considers it an important principle that the goal and purpose of each macroprudential rule should be clearly defined. This means that all market participants and regulators (competent and designated) should have the same understanding of the risks and exposures that can be covered by the rule, and about the situations in which the rule may be applied. Consequently, it is important that there is a high degree of transparency about the scope of the measures taken in the macroprudential framework, in particular when it affects or uses elements from the microprudential framework. Given that macroprudential measures basically draw on microprudential tools, the hierarchy in the use of these tools (capital buffers, RW increases, LGD floors, etc.) should be well distinguished and disclosed. Macroprudential measures should leave the fundamental microprudential risk measurements untouched and serve as a separately disclosed add-on to the existing microprudential measures.

Defining a clear goal and purpose for each macroprudential rule does not imply that macroprudential tools cannot be built upon elements from the microprudential framework. Quite the contrary, there should be transparent disclosure of which elements stem from macroprudential concerns.

### **4. Macroprudential policy should be transparently disclosed**

The EBA considers that macroprudential policy can only be effective when it is transparently disclosed. Therefore, any macroprudential measure should be accompanied by sufficient disclosure requirements. The underlying idea is that macroprudential policy should not only ensure that sufficient buffers are held by financial institutions, but also that market participants are sufficiently aware of the risks which are accumulating in the financial system and to which banks are exposed. Sufficient transparency and market information is necessary in order to allow market discipline (Pillar 3) to be effective.

The report acknowledges the state of play reached under the CRD/CRR by legislators and puts forward clarifications in a number of areas where the current framework leaves room for different interpretations and, consequently, different implementations. The EBA in this regard also considers it important to ensure harmonised implementation of the macroprudential frameworks across jurisdictions.



## 3. Classification of instruments and pecking order considerations

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### 3.1 Classification of tools

According to the second objective described in section 2, and given that the responsibility of the EBA is to set proper single rules for micro-supervisors, there is a need to allocate a clear repair role to macro tools against the insufficiencies of micro-tools as regards macroeconomic or financial developments at local or European levels. Also, according to the third objective, each macroprudential tool should have a clear goal and scope. To perform this type of assessment, this report attempts to expand on the possible deficiencies of micro-tools and models as regards various macroeconomic and financial risks. This demonstrates the need to use specific macro tools to deal with externalities across institutions. Following this bottom-up approach, which is characteristic of an EBA supervisory angle, the report attempts to classify the macroprudential tools along several dimensions: (i) the classification of which tool is a micro or macroprudential tool; (ii) the classification of measures which are system-wide versus idiosyncratic, and; (iii) the classification of structural versus countercyclical measures<sup>3</sup>.

#### 3.1.1 Micro versus macroprudential instruments

Although there is certainly merit in clarifying the classification of micro versus macroprudential, in the following section an attempt has been made to classify tools accordingly.

Two main regulatory provisions of overlap can be identified between the micro and macroprudential rules. These are (i) Articles 124 and 164 CRR, (ii) Pillar 2 and (iii) capital conservation buffer. These overlaps are shown in the following table. The first row indicates that the microprudential toolkit consists of Pillar 1 and Pillar 2 measures, and the responsibility for these measures is with the CA. The row beneath contains the macroprudential measures. It can be seen that there is a basic framework of macroprudential buffers (countercyclical buffer (CCB), capital conservation buffer, G/O-SII buffer and the systemic risk buffer (SRB)). Furthermore, Member States can apply measures by using Article 458 CRR. The responsibility for these measures lies with the CA or DA.

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<sup>3</sup> The high complexity and multiple facets of the macroprudential framework in Europe have been studied in a recent study of Valerie Herzberg and Max Watson, St Anthony's College, Oxford (<http://www.sant.ox.ac.uk/pefm/Dicussion%20draft%20-%20Macropru%20policies%20in%20the%20Euro%20Area.pdf>).

**Table 4: Micro versus macroprudential rules**

	<b>Basic framework</b>	<b>Other</b>	<b>Responsibility</b>
<b>Microprudential tools</b>	Pillar 2	Pillar 2	CA
	Article 124/164, capital conservation buffer		
<b>Macroprudential tools</b>	CCB, G/O-SII buffer, SRB	Article 458 CRR	CA/DA

The overlap between the tools along these dimensions may be seen as a necessary implication of the willingness to avoid gaps in the macroprudential risks coverage, but creates challenges in interpreting and implementing some provisions. This also creates uncertainty over which authority is responsible for activating which measure. In the CRR/CRD, the CA is usually responsible for microprudential measures, whereas the DA designated for certain macroprudential rules (this can be the CA or the DA) is responsible for those instruments. The fact that the CA is responsible for a measure which is both micro and macroprudential in nature may give rise to confusion. Furthermore, the definition of what is micro versus what is macro, the structural versus temporary nature of a tool, and other elements are not always clearly defined.

### **3.1.2 System-wide/bank-specific and structural/countercyclical**

Alternatively, these tools can be classified using other dimensions: system-wide versus idiosyncratic, and structural versus countercyclical. Table 4 shows that the classification of Article 124/164 as structural or countercyclical is not clear-cut. Pillar 2 overlaps in both dimensions, as it can be used in a structural and countercyclical way, and as both a bank-specific and a system-wide tool. The same can be said of Article 458 CRR. Finally, the SRB cannot be easily classified as a bank-specific or a system-wide measure, as it can be used on a subset of institutions.

**Table 5: Bank-specific versus structural, structural versus countercyclical**

	Structural		Countercyclical/Forward-looking
<b>Bank-specific (i.e. it affects usually only one or a few banks based on their idiosyncratic characteristics)</b>	G/O-SII	Pillar 2/Article 458	
	SRB		
<b>System-wide (i.e. it applies to all institutions or a subset of these)</b>	Article 124/164		CCB

It is considered necessary to clarify the purpose of these tools according to these dimensions, and whenever the purpose of a tool is not clear, the report gives recommendations to improve the clarity and transparency of the macroprudential instruments in question.

### 3.1.3 Microprudential parameters with relationship to macroprudential risks

The third objective mentions the need to have a clear purpose for each macroprudential rule, and to be explicit about its microprudential versus macroprudential use. It is therefore essential to reflect on how microprudential policy should be aligned and interact with macroprudential policy, in particular as macroprudential rules are often used with the argument that microprudential rules do not sufficiently address the particular systemic risk. Therefore, this section starts from the microprudential framework for credit risk, and analyses which microprudential elements touch upon the macroprudential framework.

In the **SA**, fixed risk weights are applied for each exposure class. These risk weights reflect the underlying risk of each exposure class from a microprudential perspective, and are calibrated at a global or European level. In such cases, the general application of higher RWs, but for SA banks, may be warranted. However, only a significant and stable distance between the SA implicit RW and the local experience, probably depicting a structural situation, may justify the application of a RW add-on and a departure from the single-market rule. Analysis by exposure class is needed in these cases.

In the **IRB** approach, several parameters enter the IRB supervisory RW curve<sup>4</sup>: PD, LGD, CCF, Maturity and Asset Correlation. The PD, LGD and CCF are determined by the institution, whereas the Maturity and Asset Correlation are supervisory parameters. There are four areas in this IRB RW curve which potentially do not address macroprudential concerns. This is explored in more detail in Appendix 1.

<sup>4</sup> See <http://www.bis.org/bcbs/irbriskweight.pdf> for more information on the IRB risk weight function.

## 3.2 Pecking order considerations

### 3.2.1 Activation of tools

The following section clarifies the current pecking order of the tools within the CRR/CRD framework. The current Level 1 text explicitly states the order in which several macroprudential tools should be considered. Specifically, following Article 133(11)(e) and Article 133(12)(e) CRD the order is: (1) Article 124/164 CRR, CCB, capital conservation buffer, G/O-SII, Pillar 2 and (2) SRB. Following Article 458(2)(c), the order is: (1) Article 124/164 CRR, Pillar 2, SRB and CCB and (2) Article 458 CRR. Finally, there is a general notion of applying Pillar 2 measures in cases when the Pillar 1 framework is considered insufficient to cover the risks identified at the bank-specific level (or for a subset of institutions).

Therefore, the order that one can derive from the Level 1 text is the following:

**Table 6: Current pecking order**

		<b>Purpose</b>
<b>1</b>	Pillar 1	Capital requirements to protect against losses
<b>1</b>	Article 124/164 <sup>5</sup>	Setting a higher RW for those property segments of exposures corresponding to the actual risks, taking into account losses, forward-looking real estate developments and financial stability considerations.
<b>1</b>	CCB	Ensure that banks accumulate, during periods of economic growth, a sufficient capital base to absorb losses in stressed periods.
<b>1</b>	Capital conservation buffer	Limit distributions in case the combined buffer requirement is not maintained.
<b>1</b>	G/O-SII	Require higher capital for banks which are expected to exert distress on the global financial market or domestic economy.
<b>2</b>	Pillar 2	Apply the SREP for institutions with similar risk profiles that might be

<sup>5</sup> Although it is clear that Pillar 2 measures should be taken considering the Pillar 1 framework, the hierarchy between Pillar 2 and Article 124/164 CRR is currently not regulated.

		exposed to similar risks or pose similar risks to the financial system.
<b>3</b>	SRB	Capture long-term non-cyclical systemic or macroprudential risks.
<b>4</b>	Article 458	Remaining macroprudential/systemic risk (i.e. not sufficiently addressed by Pillar 1, Article 124/164 CRR, Pillar 2, SRB and CCB)

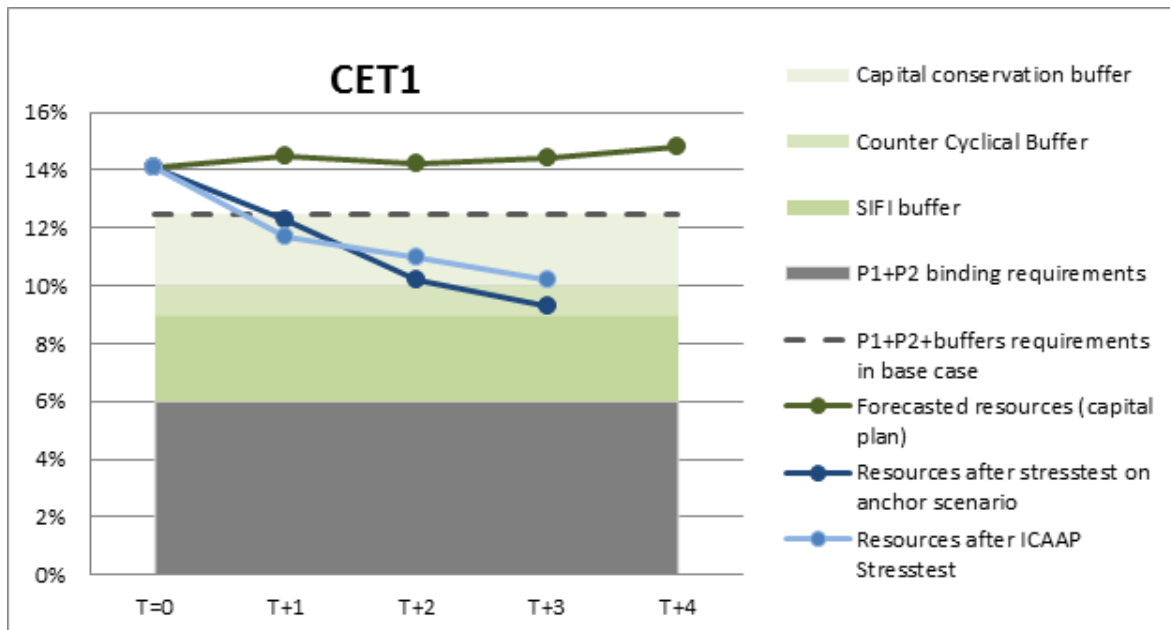
The purpose of such a hierarchy is to ensure that measures with the most beneficial characteristics are used first. This contributes to a more consistent application of the rules across the market, and hence to meeting the second objective of enhancing the singleness of the internal market. Furthermore, a clear hierarchy contributes to transparency and the associated signalling effect that a fully disclosed measure benefits from. It will be clear throughout the text that the current hierarchy of instruments may need adjustment. If each tool were to be clearly defined and separated, there would be no benefit in defining a hierarchy of the different rules. A clear separation between risks is unlikely to be achievable, however, and therefore a distinct hierarchy is required.

With respect to Pillar 2, the relevance of the hierarchy mainly concerns cases of macro (systemic) risks, and serves little purpose for micro (idiosyncratic) risks. It will be explained in Section 4.8 that Pillar 2 would be better used as a second order choice for macroprudential purposes.

### 3.2.2 Depletion of buffers

The different macroprudential tools are also arranged in a hierarchical order for use in stressed scenarios. The current Level 1 text contains different provisions for the sanctions to be imposed if an institution does not comply with the rule. These sanctions can either be supervisory action (if the minimum requirement is not met) or distribution restrictions (if the combined buffer requirement is not met). These differences are particularly relevant when a financial institution is experiencing a period of stress. It is essential to be aware that this is an additional feature of the different macroprudential tools and one which differentiates them from each other. Attention should be paid to these differences, in particular in the context of BRRD where certain provisions are currently being developed. Figure 1 shows that Pillar 1 and Pillar 2 buffers make up the minimum requirements, and hence determine the point of non-viability of the institution. For some institutions, these minimum requirements have to be complemented by a G/O-SII buffer, which also consists of CET1 capital. Furthermore, a capital conservation buffer of 2.5% is mandatory, as well as a countercyclical capital buffer, depending on the geographical distribution of its exposures, and the applicable countercyclical capital buffers. For the capital conservation buffer, the countercyclical capital buffer and the systemic risk buffer, restrictions on distributions apply whenever these buffers are not held. For this reason, these buffers are at the top of the hierarchy, meaning that these buffers would be depleted first.

Figure 1: Hierarchy in depletion of capital buffers



### 3.3 Coordination considerations

There is an inherent coordination issue in the CRR/CRD IV framework whereby some measures may have been assigned to the CA while others have been assigned to the CA or DA<sup>6</sup>. Only Pillar 2, Articles 124 and 164 CRR measures have been specifically assigned to the CA, while all other measures could be assigned to either of the two authorities. Furthermore, the DA may be one single institution or several. There are no provisions in the CRR/CRD IV framework stating that any coordination between the authorities must take place. The lack of coordination and the limited involvement of macroprudential authorities could lead to an unbalanced solution if there is a conflict of interest between microprudential and macroprudential supervision, or could lead micro and macro supervisors to target the same risk twice. This may be a relevant problem for many measures, primarily between tools traditionally perceived as micro in relation to macro-tools, such as Pillar 2 versus Article 458 CRR or Article 124/164 CRR versus Article 458 CRR, but also between macro-tools that may have been assigned to different DAs.

The lack of coordination between the designated and the competent authority could have a negative impact on the effectiveness and efficiency of many measures within the framework.

Coordination problems should decrease, at least for the SSM countries, once the SSM is in place. This will, nevertheless, remain an issue for countries outside the SSM. For these countries, the absence of a legal obligation for the CA (DA) to inform or consult the DA (CA) (or the ESRB) when

<sup>6</sup> The specific wording of the legal text in these cases is: 'Member States shall designate the authority in charge of the application of this article. This authority shall be the competent authority or the designated authority.'

these are two separate authorities applying a tool for a macroprudential purpose represents a shortcoming.

The inclusion of a provision stating that coordination between the authorities (when the designated and the competent authority are two different authorities) must take place, is therefore warranted and should be included in the current framework for further clarification. This could be in the form of a mandatory coordination process.

## 4. Benchmarking the different macroprudential tools against the objectives

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### 4.1 Capital conservation buffer

According to the BCBS, the capital conservation buffer ‘is designed to ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements<sup>7</sup>. The capital conservation buffer defined in the CRD is very simple and **consistent** with the capital conservation buffer proposed by the **BCBS**.

Although Article 129 CRD on the capital conservation buffer does not mention its macroprudential objectives, recitals 79 and 80 CRD refer to their purpose to hold ‘a sufficient capital base to absorb losses in stressed periods’. Further indications regarding its micro or macroprudential purpose can be obtained by considering which authority is responsible for this tool. Article 129 mentions that the CA or DA is responsible for the decision on exemptions. The CA is to be notified if an institution fails to meet the combined buffer requirement and intends to make a distribution (Article 141(8) CRD). Capital conservation plans must be submitted to the CA (Article 142). Therefore, in terms of assigning responsibilities, there is no clear separation between micro and macroprudential elements. Furthermore, it should be noted that the capital conservation buffer is not part of the definition of macroprudential tools in the draft SSM Framework Regulation of the ECB, and is hence interpreted as a microprudential tool by the ECB (Article 101). Finally, the provisions under Article 458(2)(d)(iv) allow for the capital conservation buffer to be raised above its fixed 2.5% rate, explicitly introducing a macroprudential element. It is concluded that it is not clear whether the capital conservation buffer should be considered as a micro or macroprudential tool, and hence the **third objective** is only partially met.

Regarding the **first objective**, to adequately ensure financial stability, since it is a buffer it improves the overall resilience of the financial system as it mitigates a risk once it has crystallised. However, it cannot target specific risks and is static in nature. These features are appropriate given the goal and purpose of the measure, but set it apart from the dynamic application of the other measures discussed in this report.

Regarding the **second objective**, to safeguard against negative effects on the internal market, it is reassuring that the capital conservation buffer is applied to all institutions. Exemptions are possible for small and medium-sized investment firms (Article 129(2) CRD), however, and

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<sup>7</sup> <http://www.bis.org/publ/bcbs189.pdf>



Member States which apply such an exemption should notify the Commission, the ESRB, the EBA and the CA of the Member State in question of their decision, providing reasons and justifications as to why this does not threaten the stability of the financial system. It is not clear why this exemption is laid down in the Level 1 text, and it is thought that this provision may result in potential negative effects on the level playing field. It is not clear why financial stability considerations are taken into account but potential negative effects on the single market are not.

The capital conservation buffer is not only referred to in the CRD, but also in the CRR in Article 458, where it states that Member States may increase the level of the capital conservation buffer (Article 458(2)(d)(iv) CRR) if it identifies changes in the intensity of macroprudential or systemic risk with the potential to have serious negative consequences to the financial system and the real economy of a specific Member State. The CA or DA should, however, justify why other tools could not adequately address the macroprudential risk (Article 124/164 CRR, Pillar 2, the SRB and the CCB). In practice, it may be difficult to assess whether this condition is satisfied, and this may limit the effectiveness of this tool.

Finally, the capital conservation buffer should be assessed on the **fourth objective**, sufficient disclosure of macroprudential tools. In general, when a CA imposes restrictions on distributions, or requires an increase in an institution's own funds, there are no disclosure requirements involved in taking these measures. It could be argued, however, that when these capital requirements become binding, or when an institution needs to change its distribution policy, the market is likely to find out about these measures.

In general, National Competent Authorities support the capital conservation buffer as it is, because of its beneficial effect on financial stability, irrespective of whether it is classified as a micro- or macroprudential tool.

## 4.2 Countercyclical capital buffer (CCB)

The BCBS defined the objective of the CCB as 'to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth that have often been associated with the build-up of system-wide risk'<sup>8</sup>. In the CRD, recitals 79 and 80 express this goal of the CCB to build up additional buffers 'in periods of aggregate growth in credit and other asset classes which is associated with a build-up of system-wide risk, which can be drawn down during stressed periods'. Hence, the CCB as defined in the CRD is considered to be **consistent with the Basel text**. The CCB has a clear macroprudential objective, and as such it is considered consistent for the responsibility of activating this tool to lie with the DA (Article 136(1) CRD). This satisfies the **third objective** of a clear purpose and goal. The effectiveness of this measure will depend on the ability of the designated or the CA to identify both the activation and the de-activation points of the buffer. Given the lack of practical experience in the application of this instrument, this is difficult to assess at this stage.

<sup>8</sup> <http://www.bis.org/publ/bcbs172.pdf>

The Basel text states that any decision on the CCB should be based on as much of the relevant prevailing supervisory and macroeconomic information as possible, and that a timely sharing of information among these authorities is therefore necessary for consistency. The current CRD does not mention any mandatory sharing of information between the CA and the DA. This is an area where the Level 1 text could be improved, as it would limit potential threats to the single market<sup>9</sup>. Furthermore, according to Article 136(7) CRD, DAs should announce the quarterly setting of the countercyclical buffer rate and other information to the ESRB. The transparency of the CCB is high given that DAs need to publish the rate on a quarterly basis. It could, however, be improved by also notifying the EBA of any adjustments to the CCB rates set.

In relation to the **first objective** to ensure a stable financial system, although the CCB clearly enhances the resilience of the financial system, a proper assessment is hindered by the lack of practical experience. In particular, because of the dynamic nature of the risks that the buffer addresses, it is important to assess it over a longer time period, preferably at least one credit cycle, considering whether both the activation as well as the de-activation phase of the buffer works properly. It is therefore premature to evaluate how well the buffer works from a financial stability point of view. In addition, the ESRB guidance on setting CCB rates have not been finalized. The idea behind these Guidelines is that of a 'guided discretion', along with a list of indicators and a methodology to gain insight into the deviation of the credit-to-GDP ratio from its long-term trend.

Given the applicability of the CCB to all institutions and all relevant credit exposures, and the mandatory reciprocity of CCBs up to 2.5%, the potential for ring-fencing is deemed limited and level playing field in the European financial market seems to be preserved for CCBs set up to 2.5%. This addresses the EBA's **second objective** of macroprudential policy (preservation of EU's single market).

Further improvements to the EU single market could be obtained by requiring mandatory reciprocity for rates in excess of 2.5%, or alternatively, imposing a comply or explain rule in case an authority does not reciprocate beyond 2.5%. Furthermore, the uniform application of the CCB to all institutions contributes to the level playing field in Europe. However, Member States may exempt small and medium-sized investment firms from holding the CCB (Article 130(2) CRD) in cases such an exemption does not threaten the financial stability of the financial system. It is not clear why the financial stability considerations are taken into account, but the potential negative effects on the single market are not.

### 4.3 G-SII buffer (Article 131 CRD)

The G-SII buffer is designed to impose higher own funds requirements (CET1 capital) on global systemically important institutions in order to compensate for the higher risk that G-SIIs represent

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<sup>9</sup> An example would be a situation where a CA has decided to take specific Pillar 2 measures for a subset of banks in its jurisdiction in order to build sufficient buffers to cover for a bubble, whereas the DA decides to increase the CCB rate.

for the financial system and the potential impact of their failure on taxpayers (recital 90 of CRD). Furthermore, Article 131(9) defines systemic significance as the expected impact exerted by the G-SII's distress on the global financial market, and Article 131(2) CRD defines that the identification methodology of G-SIIs will be based on the (i) size of the group, (ii) its interconnectedness, (iii) the substitutability of the services or the financial infrastructure provided by this group, (iv) the complexity of the group, and (v) the cross-border activity of the group<sup>10</sup>. These elements are clear and well defined and therefore the **third objective** is achieved. The EBA has drafted the RTS to provide consistent parameters and to specify a harmonised methodology for identifying G-SIIs and determining adequate levels of own funds across the European Union<sup>11</sup>.

The **BCBS** has defined the buffer for global systemically important banks (G-SIBs)<sup>12</sup> and the European G-SII buffer is largely consistent with the Basel measure. Two differences can be noticed, as follows.

- (i) The CRD (Article 131(9)) mentions that the 'highest sub-category of the G-SII buffer shall be subject to a buffer of 3.5% of total risk exposure amount', but the Basel text does not put a limit on the G-SII buffer<sup>13</sup>. However, there are currently no banks identified which would be allocated to the highest sub-category, and, therefore, the cap of 3.5% on the G-SII has not been identified as restrictive. This cap could possibly become a restriction in the future, however, and, therefore, some National Competent Authorities suggested removing the 3.5% cap and implementing the dynamic feature suggested in the Basel text to create an additional category above the 3.5% for use when the highest category becomes populated. As such, the **first objective** to ensure financial stability is only partially met.
- (ii) The BCBS sets out disclosure requirements, and requires 'all banks with a leverage ratio exposure measure exceeding EUR 200 billion to disclose at least the 12 indicators used in the assessment methodology'. In contrast, Article 131(12) CRD requires CAs or DAs to disclose the names of the G-SIIs and O-SIIs and the respective sub-category to which each G-SII is allocated. Furthermore, Article 441 CRR requires institutions to disclose the values of the indicators used for determining the score of the institutions in accordance with the identification methodology. Hence, the CRR/CRD only requires the disclosure of the G-SII names, the sub-category and the values of the indicators. It could be argued, however, that additional disclosure requirements for all institutions would enhance transparency and market discipline, hence contributing to financial stability. Along these

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<sup>10</sup> Each category shall receive an equal weighting and shall consist of quantifiable indicators.

<sup>11</sup> <https://www.eba.europa.eu/regulation-and-policy/own-funds/global-systemically-important-institutions-g-sii->

<sup>12</sup> <http://www.bis.org/publ/bcbs255.pdf>

<sup>13</sup> The Basel text assigns a 3.5% buffer to the highest category, but the text also mentions that '...although the bucket thresholds will be set initially such that bucket 5 is empty, if this bucket should become populated in the future, a new bucket will be added to maintain incentives for banks to avoid becoming more systemically important. Each new bucket will be equal in size (in terms of scores) to each of the initially populated buckets and the minimum higher loss absorbency requirement for the new buckets will increase in increments of 1% of risk-weighted assets.'

lines, the EBA has drafted guidelines<sup>14</sup> (for both institutions and CAs) on the formats and date for the disclosure of the values of these indicators, which state that the disclosure requirements should apply not only to institutions that have already been identified as G-SIIs, but also to large institutions with an exposure above EUR 200 billion, since they potentially constitute a significantly larger threat to financial stability. These disclosure guidelines and the disclosure ITS guarantee that the **fourth objective** of a macroprudential tool is met.

Overall, the divergence with the BCBS text is considered to be minimal and not restrictive.

Regarding the **second objective** of macroprudential tools, the potential negative effects on the internal market, it is comforting that the CRD has established that the identification methodology of G-SIIs will be based on a fixed set of categories (with equal weighting and based on quantifiable indicators), and that the EBA has drafted the RTS to determine the methodology to identify the G-SIIs and to specify the methodology for the definition of the sub-categories and the allocation of G-SIIs into sub-categories. This unified methodology contributes to a level playing field in the EU single market.

However, Article 131(10) CRD allows CAs or DAs to re-allocate a G-SII from a lower sub-category to a higher sub-category, and to allocate an entity with an overall score lower than the cut-off score of the lowest sub-category to the lowest sub-category or a higher sub-category. The CA/DA will notify the EBA thereof and provide reasons for this decision. It is clear that this is an area where supervisory judgment is provided for. However, this element is also regulated in the draft RTS developed by EBA, where it is stated that (Article 5, paragraphs 4 to 6 of the draft RTS) this judgment should be based on 'an assessment whether its failure would have a significant negative impact on the global financial market and the global economy'. These judgments can be supported by ancillary indicators. The draft ITS on the disclosure of indicators used for determining the score of G-SIIs then specify the ancillary indicators (13 in total). The indicators are designed to reflect the different aspects of potential negative externalities of an entity's failure and its critical functions for the stability of the financial system. This judgment also refers to the potential impact of a failure and not to the probability that the G-SII will fail. Overall, it seems that this element of supervisory judgment is well regulated to limit the potential negative effects on the EU internal market. Therefore, it is considered that the second objective of macroprudential tools is met.

#### 4.4 O-SII buffer (Article 131 CRD)

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<sup>14</sup> See [https://www.eba.europa.eu/regulation-and-policy/own-funds/global-systemically-important-institutions-g-sii-](https://www.eba.europa.eu/regulation-and-policy/own-funds/global-systemically-important-institutions-g-sii) for the Guidelines on the formats and date for the disclosure of the values of these indicators, for the draft ITS on disclosure, and for the RTS on the identification methodology of G-SIIs.

The O-SII buffer takes a complementary perspective to the G-SII since it aims at addressing externalities raised by institutions at domestic level, which have been authorised within their jurisdiction.

The O-SII buffer is the equivalent of the buffer for domestic systemically important banks (D-SIB) at the Basel level. The underlying idea is that there are many banks that are not significant from an international perspective, but that nevertheless could have an important impact on their domestic financial system and economy compared to non-systemic institutions. Some of these banks may have cross-border externalities, even if the effects are not global in nature. The D-SIB framework focuses on the impact that the distress or failure of banks (including by international banks) will have on the domestic economy. This goal of the O-SII buffer in the CRD is not explicitly specified. Recital 90 of the CRD only refers to the goal of the G-SII buffer: ‘in order to compensate for the higher risk that G-SIIs represent for the financial system and the potential impact of their failure on taxpayers’.

Whereas the G-SII framework is largely in line with the **Basel text**<sup>15</sup>, there are more pronounced differences between the O-SII and the D-SIB framework. Two elements should be mentioned: (i) the criteria to identify O-SIIs and set the O-SII buffer, and (ii) the 2% cap on the O-SII buffer in the CRD.

Regarding the first element, the CRD (Article 131(3)) states that O-SIIs will be identified on the basis of at least one out of the four criteria mentioned. These criteria are: (i) size, (ii) importance for the economy, (iii) significance of cross-border activities, and (iv) interconnectedness. However, the criteria outlined in the Basel text are not exactly the same, and it is not clear why the CRD IV text deviates from this. Furthermore, whereas the G-SII identification requires that each criterion receives an equal weighting and consist of quantifiable indicators, the O-SII identification and buffer setting leaves more flexibility to CAs or DAs in Member States, in line with the Basel text. The EBA has been given the mandate to publish guidelines on the criteria to determine the conditions of application, and these guidelines will take into account international frameworks for domestic systemically important institutions, as well as Union and national specificities. These guidelines are currently being developed by the EBA and will try to strike the right balance between a common understanding of the O-SII identification, uniform application of the rules and the necessary flexibility needed at national level to account for national specificities. However, it is clear that the identification of O-SIIs is more principle based than the identification of G-SIIs; given that the identification of O-SIIs will be outlined in the guidelines, this leaves more room for supervisory judgment. Some may argue that it is not clear why the identification of O-SIIs should be specified in guidelines, whereas the identification of G-SIIs is specified in the RTS. However, others object that a ‘one size fits all’ approach would not work in view of the differences in banking sector structures across countries. They argue that it is sensible for harmonisation across the Union to be achieved through guidelines, rather than binding RTS. National Competent Authorities raised the argument that national authorities are more aware of national specificities.

<sup>15</sup> <http://www.bis.org/publ/bcbs224.pdf>

However, an analysis of the likely impact of the distress or failure of banks on the domestic economy does not necessarily have to be made by the national authority, as the relevant data and tools are available to assess this. Furthermore, assigning this supervisory judgment to the national authorities without fixed rules leaves room for ring-fencing and may harm the integrity of the single market. Therefore, it is considered that improvements could be made to enhance the consistency of the rules regarding O-SII identification and the setting of O-SII buffers across Europe. The CRD does, however, mention (in Article 131(6) CRD) that the setting of the O-SII buffer ‘must not entail disproportionate adverse effects on the whole or parts of the financial system of other Member States or of the Union forming or creating an obstacle to the functioning of the internal market’. Although it is recognised to contribute to the second objective, safeguarding against the adverse effects for the internal market, it should be mentioned that this provision in the CRD does not prevent CAs or DAs from applying this in a discretionary manner. Furthermore, the Level 1 text does not provide a uniform and objective methodology, and leaves it to the CA or DA to decide on which criteria to use, and to set the O-SII buffer. If these measures are applied in a discretionary manner, this could lead to ring-fencing or an uneven playing field across European financial institutions. Taking into account these elements, it is clear that the **second objective** to safeguard against negative effects on the internal market is not sufficiently addressed.

The second element is the 2% cap on the O-SII buffer. Article 131(5) CRD states that an O-SII buffer of up to 2% of the total risk exposure amount can be set. The Basel framework does not mention a cap in the D-SIB framework. Some Member States have already applied an SRB to certain institutions, because the O-SII cap of 2% was considered to be too low to address the systemic risk of the institution<sup>16</sup>. This is possible because Article 133(2) CRD stipulates that the SRB could be applied to individual institutions<sup>17</sup>. Although instruments can be complementary, in general it is not desirable that Member States apply two instruments simultaneously to address the same goal. The possibility of setting an O-SII buffer is considered to contribute positively to the goal of financial stability, and from this perspective, it is not clear why there is a cap of 2% on the O-SII buffer. It seems that this cap of 2% has been implemented as a compromise, because there is a risk to the integrity of the single market, given that the O-SII buffer can be set by a procedure of notification (and justification) but no other safeguards are put in place.

Furthermore, there are currently no provisions in the CRD to address an alignment of risk with the level of the O-SII buffer. Overall, the **first objective** concerning the enhancement of financial stability is not adequately met, and it is suggested that the level of the cap of the O-SII buffer should be raised.<sup>18</sup> As some National Competent Authorities asked for the cap to be raised further or even removed altogether, it would be advisable to perform an impact assessment to estimate

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<sup>16</sup> Another reason is that the O-SII buffer can only be applied from January 2016 onwards, whereas the SRB can be implemented from January 2014 onwards.

<sup>17</sup> Section 4.5 analyses the SRB in more detail.

<sup>18</sup> One Member State objected to the raising of the cap on the grounds that it could threaten the single market, preferring that an impact assessment in terms of costs/benefits should be conducted concerning the level of the cap.

the potential impact of distress or failure of a bank on the domestic economies as well as the potential adverse effects on the internal market of a higher cap, to adequately calibrate the appropriate level of the cap. Finally, in order to preserve the singleness of the EU market, additional guidelines could be specified regarding the level of the O-SII buffer, according to the measured risk.

Regarding the **third objective**, for the tool to have a clear goal and purpose, this objective is met, because the tool does indeed have a clear purpose, namely to compensate for the higher risk that O-SIIs represent for the financial system and the potential impact of their failure on taxpayers. However, this goal of the O-SII buffer is not explicitly referred to in the Level 1 text, and this could be improved. The text would be clearer if it said explicitly that the O-SII buffer should be set to account for the potential negative externalities of an entity's failure.

Regarding the **fourth objective** of transparent disclosure requirements, the CAs or DAs are to notify the names of the O-SIIs to the public, the ESRB, EBA and the Commission. The notification to the EBA will also contain (a) a justification as to why the O-SII buffer is considered likely to be effective and proportionate in mitigating the risk, (b) an assessment of the likely positive and negative impact of the O-SII buffer on the internal market, and (c) the O-SII buffer that the Member State wishes to set.

In line with the previous comments, disclosure could be further improved by disclosing the list of indicators that are used to identify the O-SIIs, and to connect quantifiable indicators to these. Although quantitative indicators are a good complement, it is notoriously difficult to create a quantitative framework that incorporates all possible risks and scenarios. For this reason, the quantitative framework already in place for the CCB as well as the G-SII also contains supervisory judgment as an additional criterion, which is also important to maintain in the case of the O-SII buffer.

Furthermore, disclosure would be enhanced by providing a mapping of the estimated impact of the distress or failure of a bank on the domestic economies to an O-SII buffer. Transparency would be enhanced whenever this information is disclosed for all institutions of sufficient size, and not only those identified as O-SIIs.

## 4.5 Systemic risk buffer (SRB, Article 133 CRD)

The SRB does not directly correspond to any **internationally agreed standard** but it should be acknowledged that Basel remains a minimum framework. Its scope is relatively broad - its aim is to prevent and mitigate 'long term non-cyclical systemic or macroprudential risks' (Article 133(1) CRD) – and can be applied to the entire financial sector or a subset (Article 133(2) CRD).

Regarding the **second objective** to prevent potential negative effects on the EU's single market:

- It is not entirely clear how structural systemic risk should be assessed (i.e. which variables could indicate structural risk in a Member State) and at what level the SRB should be set in

order to address the level of structural systemic risk. In the absence of such guidance and clear criteria, the SRB may be set too high or too low, leading to an ineffective response to the identified risk or an uneven playing field across the Union. The ESRB has carried out some work on this in its handbook on *Operationalising Macroprudential Policy in the Banking Sector*, further detailed below.

- The possibility of applying the SRB to a subset of institutions implies that it can be used for ring-fencing purposes. There are a number of safeguards in place that mitigate the risk of ring-fencing to some degree. When the SRB is set up to 3% for domestic (local) exposures and third countries (paragraphs 11 and 13 state that in these cases, the procedure is a notification only), although Article 133 CRD contains the same safeguard for the internal market as applicable to the O-SII buffer<sup>19</sup>, this may not be sufficient protection. When the SRB is set to exposures in other Member States, the SRB will be set equally on all exposures, meaning that this rule is more EU-friendly (paragraphs 8 and 18)<sup>20</sup>. When the SRB is set above 3%, different rules apply regarding the procedure to be followed<sup>21</sup>, implying that more safeguards are in place to protect the singleness of the EU market<sup>22</sup>. However, some National Competent Authorities suggested that the risk of using the SRB for ring-fencing purposes could be mitigated by changing the consolidation level to which the SRB applies<sup>23</sup>. Currently the SRB, in addition to the group-consolidated level, can also be applied at the individual as well as the sub-consolidated level, where the latter two could be used for ring-fencing. Some other National Competent Authorities did not agree with this suggestion, pointing out that such a change would severely limit the effectiveness of the SRB.
- In general, the procedural differences that apply depending on country of exposure, the rate applied and differences in procedure for the pre- (until 1 Jan 2015) and post-phasing-in period, make Article 133 untransparent, leaving room for different interpretations and misunderstandings, and potentially creating an uneven playing field. The processes governing the SRB would therefore benefit from clarification, something that should be achievable without changing the balance between national flexibility and the safeguarding of the internal market.

<sup>19</sup> Article 133(10)(a) states that setting ‘the SRB must not entail disproportionate adverse effects on the whole or parts of the financial system of other Member States or of the Union as a whole forming or creating an obstacle to the functioning of the internal market’.

<sup>20</sup> Whether this rule implies that the SRB may not be set for a subset of institutions is unclear.

<sup>21</sup> The exact procedure to be followed depends on (i) on the phasing-in arrangements (before versus after January 2015, paragraph 13 of Article 133 CRD), (ii) the location of the exposures (domestic exposures and exposures to third countries, versus exposures to other Member States), and (iii) the level of the SRB (up to 3%, between 3% and 5%, and above 5%).

<sup>22</sup> In particular, depending on the situation, the Commission can adopt an implementing act (paragraph 15), provide an opinion (paragraph 14), or the EBA/ESRB can provide an opinion (paragraph 15), and CAs will comply or explain (paragraph 14).

<sup>23</sup> The underlying assumption is that ring-fencing is achieved when a Member State restricts the flow of capital between subsidiaries (or sub-consolidated levels) of a group by requiring that the subsidiaries (or sub-consolidated levels) in its jurisdiction must hold a certain amount of capital, effectively locking in the capital within that subsidiary (or sub-consolidated level).



- Paragraph 4 of Article 133 determines that when a group is on a consolidated or sub-consolidated basis subject to a G-SII or O-SII buffer, and a systemic risk buffer applies to these institutions, the higher of the two buffers will apply. However, paragraph 5 then determines that when the SRB applies only to domestic exposures it will be cumulative. It can be understood that these rules strike a balance between financial stability considerations (in which case both buffers should be cumulative) and potential threats to the single market (for which one could argue that the two should not be cumulative, as this may lead to an uneven level playing field). When the SRB applies only to domestic exposures, this may incentivise banks to move their exposures to outside the Member State to avoid the additional capital charge on these exposures. In conclusion, the higher buffer rule seems appropriate in its current form, although a few National Competent Authorities favour a cumulative approach instead.
- The SRB is subject to voluntary reciprocity, as specified in Article 134 CRD (recognition of an SRB rate). Other Member States may recognise the SRB rate set by another Member State, and may apply that buffer rate to domestically authorised institutions for exposures located in the Member State that sets the buffer rate. Hence, if the SRB is not recognised, a situation may arise where institutions in one Member State have to hold additional capital requirements because an SRB applies, whereas institutions in other Member States are not required to hold this additional capital despite being exposed to the same risks. This creates an uneven playing field and could be prevented by introducing mandatory reciprocity when an SRB is applied to all institutions (i.e. not a subset), in the same spirit as for the CCB that also benefits from such reciprocity for rates set up to 2.5%.
- In Article 133, paragraphs 11(e) and 12(e) CRD describe the hierarchy of specific rules. In particular, these articles specify that before an SRB can be set, the CA or DA should explain why none of the existing measures in the CRR and CRD, excluding Article 458 CRR, are sufficient to address the macroprudential or systemic risk. This implies that the following should be considered: Pillar 1, Pillar 2, Articles 124 and 164, the CCB, the capital conservation buffer and the G/O-SII buffer. It is not clear how to define the boundaries between these articles and Article 133 (SRB). In particular, whereas the SRB is defined to address structural risk, it is not clear why the CCB, which is a clear countercyclical (forward-looking) rule, should be taken into account. Defining the boundaries between these rules and the SRB requires the concept of structural systemic risk to be better defined and a set of indicators to be provided to quantify this risk.

Regarding the **first objective**, the ability to ensure financial stability, this can be achieved through a number of avenues:

- The SRB targets structural systemic risks. In order to specify the different forms of structural systemic risk and the concrete cases of activation, the ESRB has identified some possible risk drivers which could motivate the activation of the SRB: (i) size of the financial system in relation to the economy; (ii) concentration of the financial system; (iii) institutions with common exposures/interconnections; (iv) externalities raised by

systemically relevant institutions. Furthermore, structural risks arising from the innovation of new financial instruments, as highlighted by the boom and bust of the asset-backed security market (e.g. MBS and CDO instruments), could also be captured by the SRB.

- Its ability to be tailored to a subset of institutions implies that it can target only those institutions at risk without incurring additional capital charges and costs to remaining institutions.

The SRB's breadth of scope captured by the structural systemic risks addressed by the SRB and its ability to target subsets of institutions makes it a versatile tool, well equipped to ensure financial stability.

Because of the SRB's broad scope, the SRB overlaps with several other macroprudential rules:

- The SRB versus the macroprudential use of Pillar 2. It is not clear which risks should be addressed when setting the SRB, and for which risks Pillar 2 (for macroprudential purposes) should be used, given that both can be used to address systemic risk, and can be applied to a subset of institutions. Furthermore, as a consequence of the pecking order in Article 133 CRD, institutions may first wish to consider the macroprudential use of Pillar 2 before activating the SRB. This is sub-optimal since Pillar 2 lacks the transparency and signalling benefits of the transparent disclosure of the SRB setting. Some National Competent Authorities suggested that the overlap could be avoided by limiting the use of Pillar 2 to microprudential purposes. Other National Competent Authorities, however, thought that Pillar 2 should continue to include a macroprudential objective. There was, on the other hand, a broad agreement that Pillar 2 should only be used to address a macroprudential risk if the use of the other macroprudential tools had already been considered (CCB, capital conservation buffer, G/O-SII, SRB, with the exception of Article 458 CRR). This would effectively mean that Pillar 2 and the SRB swap places in the hierarchy and clarifies that the more transparent SRB should be applied before any Pillar 2 measures are taken<sup>24</sup>.
- The SRB versus the O-SII buffer. The overlap is created by allowing national authorities to set the SRB to a subset of the financial sector. However, it must be noted that the scope of application of the SRB is broader than that of the O-SII. For example, the SRB captures innovation risk, related to new financial instruments, but can also be applied to a number of institutions that do not individually pose a threat to the system but do so in aggregation. There are therefore cases when the SRB is applicable and the O-SII is not. Furthermore, the O-SII buffer is ahead of the SRB in the hierarchy and is therefore the first choice. Some National Competent Authorities suggested that the overlap could be mitigated by allowing the SRB to be applied to all institutions only (i.e. remove the possibility of applying it to a subset of

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<sup>24</sup> One Member State objected to this proposal.

institutions<sup>25</sup>) and allowing it to target exposure classes instead. However, some National Competent Authorities thought that the SRB should continue to be applicable to a subset of institutions, as removing this option would risk leaving gaps in the framework (although it should be mentioned that Article 458 CRR can also be used to address macroprudential risk to a subset of institutions).

- The SRB versus Article 458 CRR. As mentioned before, the SRB should address structural systemic risk, whereas Article 458 is designed to cover systemic risk (in general, in Article 458). Furthermore, both the SRB and Article 458 can be applied to a subset of institutions, which means the implications for the EU single market should be borne in mind. Whereas Article 458 contains more safeguards to protect the single market, these provisions are not laid down in Article 133. This overlap could be contained by requiring that the SRB is applied to all institutions in a jurisdiction. Despite these features, there are a number of mitigating factors. (i) Temporality: Article 458 should be used for a temporary period of heightened risk, in fact for a limited time period of two years, with the possibility of extension. This makes it suitable for addressing cyclical risks. The SRB, on the other hand, targets ‘long term non-cyclical systemic or macroprudential risks’. (ii) Article 458 is a last resort measure, as highlighted by the fact that it is last in the hierarchy. To effectively serve as a last resort measure, Article 458 contains an exhaustive list of tools. This implies a high degree of overlap with not only the SRB but also with many other measures, such as Article 124/164 CRR, the capital conservation buffer, the O-SII buffer and Pillar 2. Article 458 therefore overlaps with a large number of tools and is intended to do so. (iii) The safeguards for the internal market in Article 458 come at the cost of restricting national flexibility and imposing a cumbersome process. Again, some National Competent Authorities thought the overlap could be contained by requiring that the SRB be applied to all institutions in a jurisdiction, while some National Competent Authorities felt that national flexibility concerns outweigh the drawbacks of overlap and that the SRB should continue to be applicable to a subset of institutions.

There are, however, a number of reasons why overlaps could be beneficial and serve a useful purpose:

- Since we lack any practical experience of applying the framework, it is risky to limit or remove tools before they have actually been used, in particular since unforeseen risks may arise in the future.
- Even if the nature of risks were known with certainty, allowing for national flexibility means that the best-suited tool can be chosen to address a particular risk, providing better risk mitigation as well as enabling a more targeted response.
- The cost of inaction, as triggered by gaps in the framework, can be greater than the cost of excessive overlaps.

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<sup>25</sup> Note also that Article 458 CRR is allowed to be applied to a subset of institutions.

Regarding the **third objective** of having a clearly defined goal for each macroprudential rule, it should be mentioned that the goal and scope of the SRB is very broad. In particular, the SRB has been identified as overlapping with other tools. Coming back to the classification of tools as either structural or forward-looking, bank-specific or system-wide (cf. discussion in Section 3.1), the SRB can be structural or system-wide, as it can be applied to a subset of institutions. As mentioned before, this may give rise to ring-fencing and could also be perceived as creating confusion around this tool. Regarding the structural versus forward-looking dimension, the Level 1 text is very clear that the SRB should be used to address structural systemic risk. In practice, however, it is unclear how to measure structural systemic risk, and how to differentiate it from a purely countercyclical measure. Regarding the division of the micro versus macroprudential objective, one could argue that the SRB is clearly a macroprudential tool, given the references to systemic risk.

Regarding the **fourth objective** of transparency and appropriate rules of disclosure for each macroprudential measure, it should firstly be mentioned that:

- The rules of procedure are unclear and should be improved (see footnotes above for more details).
- Furthermore, Article 133(16) CRD states that each CA or DA must announce the setting of the SRB by publication on an appropriate website, and that this notice will include: (i) the SRB rate, (ii) the institutions to which it applies, (iii) a justification, (iv) the date from which the SRB must be applied, and (v) the countries where exposures are recognised. Although it is considered beneficial for all elements of the SRB setting to be disclosed, one could argue that (i) if indicators are developed for setting the SRB, then these also should be disclosed, and (ii) that if other Member States have institutions with exposures in the country which sets the SRB, they should be contacted in order to inform them about the structural systemic risk connected to these exposures.
- A final argument relates to the sanctions which apply when institutions do not comply with the SRB. Article 133, paragraph 17 CRD, states that if an institution fails to meet the SRB requirement, it is subject to restrictions on distributions. Although the publication of the SRB should make it clear to which institutions this SRB applies, issues regarding transparency may arise if the SRB is combined with Pillar 2 requirements. Consider, for example, the case of an institution which is subject to both Pillar 2 requirements and the SRB. If these requirements are binding, restrictions on distributions will apply and the market will be informed. As the SRB is transparently disclosed, the market can infer the Pillar 2 minimum requirements from the breach of the SRB requirements. However, it must be stressed that this is a consequence of features related to Pillar 2 rather than the SRB. A similar issue would arise if Pillar 2, for instance, were combined with an O-SII buffer.

## 4.6 Articles 124 and 164 CRR

Article 124 allows for setting higher RWs for exposures secured by mortgages on real estate in the standardised approach. This measure requires consultation with the EBA. Reciprocity is compulsory. Article 164 allows for a higher exposures-weighted LGD floor for retail exposures

secured by residential or commercial property than normally allowed under the CRR in IRB banks. This measure requires notification to EBA. Reciprocity is compulsory. Both measures refer to the following elements: financial stability considerations, loss experience and forward-looking real estate market developments. The BCBS contains provisions to address real estate risk, but it does not explicitly address increasing RWs with respect to real estate for financial stability reasons. The EBA is mandated to develop the RTS to specify the conditions to be taken into account when applying these two measures.

For the **first objective**, the increase in RWs and LGD floors should lead to higher capital requirements, and should therefore enhance financial stability.

- The term ‘financial stability considerations’ is explicitly mentioned as an element to take into account in the setting of RWs/LGDs. Whether the objective of enhanced financial stability will be met will depend on whether the setting of RWs/LGDs is in line with the actual risks<sup>26</sup>.
- Furthermore, Article 164 allows the setting of an LGD floor, whereas Article 124 allows increasing RWs related to one or more property segments. The option of raising LGD floors in Article 164 is perceived as less effective than the option of raising RWs in Article 124<sup>27</sup>, because the ultimate impact on RWs for RRE and CRE exposures depends also on the PDs and the CCFs. Therefore, one could argue that Articles 124 and 164 should be symmetrical, and that both should allow the increase of RWs. An additional argument is that the introduction of a minimum RW would also be less intrusive in bank capital calculations, as the IRB model would be left unchanged and the RW floor would only be included after the calculation has been performed. Also, an LGD floor would not necessarily address the issues in the F-IRB, as the LGD would be fixed in this case. However, adding an LGD floor is conceptually in line with the idea of protecting banks against a real estate bubble, whereas it is not clear why one would expect an increase in the backwards looking PD parameter whenever a real estate bubble builds up.
- Another element is that Article 164 only applies to retail RRE and CRE exposure classes (whereas as Article 124 applies to all RRE and CRE exposures). Therefore, Article 164 leaves some exposures out of the scope. From the perspective of financial stability, it would be advisable to obtain symmetry between Article 124 and Article 164 CRR, and to target all RRE and CRE exposure classes in Article 164.
- Furthermore, it should be mentioned that if the timing of the increases in RWs/LGD floors is not adequate (too late), then the benefits for financial stability will be minimal, and this can exacerbate the pro-cyclicality of capital requirements. Therefore, the increases in RWs/LGDs must be timely in order to be effective.

<sup>26</sup> To the extent that this is not the case, this may be damaging for the level playing field.

<sup>27</sup> Note that Article 458 CRR (paragraph 2(d)(vi)) also allows the increase of RWs for targeting asset bubbles in the RRE and CRE sector, and paragraph 10 of Article 458 allows the increase of RWs for real estate exposures up to 25%, without it being necessary to follow the procedure in Article 458.

Regarding the first objective there are several features in Article 124/164 that limit its ability to address financial stability concerns and so the objective is only partially met.

Regarding **the second objective** concerning the EU's single market, it can be argued that mandatory reciprocity should guard against potential ring-fencing, regulatory arbitrage or the creation of an uneven playing field.

- However, to the extent that the setting of risk weights or LGD floors is not correctly and consistently mapped to the level of risk across countries, one could argue that this legal provision can be damaging to the level playing field. The specification of the conditions that CAs will take into account when determining higher RWs/LGDs, and in particular the term 'financial stability considerations' are being specified in the RTS by the EBA. However, the mandate to specify the conditions that CAs should take into account when setting higher RWs/LGDs, and the term 'financial stability considerations' in Articles 124 and 164, are unclear, and this may lead to the inconsistent application of the rules across Europe and therefore an uneven playing field.
- When setting higher RWs under Article 124, CAs should consult the EBA before applying these measures. This consultation is another channel for taking the harmonisation of the single market into account, although clearly defined rules are usually a more effective way to protect the single market. Article 164 states that CAs should notify the EBA when a higher LGD floor is applicable in their jurisdiction. A notification does not allow the EBA to assess to what extent the higher LGD floor is in line with the higher actual risks, and is therefore not an effective provision to protect the single market.

Regarding the **third objective** of having a clearly defined goal, there is a distinct lack of clarity in this mandate, which needs to be addressed.

The concepts of financial stability considerations and forward-looking real estate developments contain a macroprudential element. In practice, provisions under Articles 124 and 164 could be activated both in a forward-looking fashion (macroprudential) based on financial stability considerations, including the build-up of excessive real estate credit risk and possible future deterioration of the conditions in the real estate sector, e.g. before a crisis may materialise, or based on currently increasing loss rates, e.g. during a crisis. Therefore, to a certain extent, Articles 124 and 164 may be used in a structural way (i.e. to set higher capital requirements because of the local specificities of the real estate market) or in a forward-looking way (i.e. because real estate risks are accumulating and the authority wants to set additional buffers to slow the build-up of the bubble). This means that Articles 124 and 164 appear to have both a microprudential as well as a macroprudential application.

Some National Competent Authorities hold the view that the articles should have a purely microprudential scope, while some National Competent Authorities think that this should not be

the case. An alternative would be to provide separate articles on the use of Articles 124 and 164 in a structural versus a countercyclical way.

If Articles 124 and 164 are kept purely microprudential, they would serve the sole purpose of allowing authorities to raise RWs and flooring LGD if they have evidence that the calibration agreed in Basel<sup>28</sup> is seriously inconsistent with the features of local markets. This would be consistent with the fact that Articles 124 and 164 CRR are part of the Capital Requirements Regulation, which is usually microprudential (with the exception of Article 458 CRR, which has sufficient control mechanisms in place, however, to safeguard the integrity of the single market). In particular, it should be taken into account that (i) the current capital requirement regulation is in place to ensure that losses that go beyond a 99.9th percentile of the loss function are covered, and (ii) the Level 1 text already incorporates a downturn scenario for the purpose of estimating the LGD. These provisions already contain an element of severity, and therefore any measures taken under Articles 124 and 164 should be justified on the basis of implying a higher risk. Limiting the future scope of Articles 124 and 164 to purely microprudential concerns does not mean that this would eliminate the possibility of setting higher country-specific risk weights or LGD floors. Instead, the justification for setting higher risk weights (or LGD floors) should stem from a microprudential concern, in the sense that a higher perceived risk of an exposure class should justify setting a higher risk weight (or LGD floor) for that exposure class.

A final comment relates to the element of hierarchy between Articles 124 and 164 and Article 458. CAs or DAs can only use Article 458 measures when Articles 124 and 164 cannot adequately address the systemic risk identified. Given the lack of clarity in Articles 124 and 164 mentioned above, it is not always clear how to demonstrate whether the systemic risk has been addressed. This could potentially lead to conflicts between the CA and DA, and also to inaction bias. Further work should be done regarding: (i) the specification of the scope of Article 124/164/458, including clear responsibilities for each authority, and (ii) coordination mechanisms between CAs and DAs.

Regarding the **fourth objective** of transparency and disclosure, Articles 124(2) CRR and 164(5) state that the EBA will publish any changes to RWs and LGDs applied by Competent Authorities. This provision contributes to transparency, although this could be further enhanced if the specific motivation, source of risk, losses, financial stability considerations and forward-looking elements were also disclosed to the public. Furthermore, transparency could be improved by a mapping of the level of losses (observed or expected) to changes in RWs and LGDs. This would ensure a common understanding among CAs regarding the setting of RWs/LGDs.

## 4.7 Article 458 CRR

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<sup>28</sup> The Basel text and the current capital requirement regulation are set to cover losses which go beyond a 99.9<sup>th</sup> percentile of the loss function. Furthermore, the current capital requirement regulation already incorporates a downturn scenario for the purpose of estimating the LGD.

Article 458 CRR includes macroprudential measures that allow national authorities to impose stricter prudential requirements to address systemic risks subject to strict legal requirements and a notification/approval procedure. These measures target different dimensions of systemic risk. No equivalent of this tool is included in the Basel text as this remains a minimum framework. In accordance with Article 458 CRR, the list of potential measures is:

- level of own funds laid down in Article 92;
- requirements for large exposures laid down in Article 392 and Articles 395 to 403;
- public disclosure requirements laid down in Articles 431 to 455;
- level of the capital conservation buffer laid down in Article 129 of Directive 2013/36/EU;
- liquidity requirements laid down in Part Six;
- risk weights for targeting asset bubbles in the residential and commercial property sector;
- intra-financial sector exposures.

The measure is very broad, and it covers a wide range of instruments.

Regarding the **second objective**, and the potential negative effects on the EU internal market, several observations are worth mentioning:

- Measures taken under Article 458 CRR are not regulated in the Level 1 text, and do not give the EBA a mandate to develop these provisions. This is to ensure that CAs or DAs have the flexibility to deal with risks that may be unknown at this stage. In order to reduce the risk of this flexibility leading to an uneven playing field, a detailed procedure has to be followed (see further below), and a notification template (developed by the ESRB and the EBA) has to be completed covering all these aspects. These are not mandatory, but they should help the institution to perform its assessment. Furthermore, the EBA and the ESRB could develop guidelines/recommendations for DAs on completing these templates, requesting ex ante the provision of certain indicators (depending on which Article 458 measure is taken) in order to demonstrate consideration of the single market. Article 458(2)(f) explicitly states that CAs or DAs, when using this article, should make an assessment of the likely positive or negative impact of the draft measure on the internal market. Furthermore, Article 458(4) CRR also mentions the purpose of the procedure, i.e. ensuring that the measure balances the financial stability benefits with the negative impact on the internal market. However, as long as different rules are applied by different Member States, i.e. no uniform rules apply, there can be no single market across Europe.
- The use of this article is subject to a notification/approval process, which includes a notification by the CA or DA, Opinions by the ESRB and the EBA, a proposal by the European Commission and a decision from the Council<sup>29</sup>. The application of all macroprudential

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<sup>29</sup> The procedure is very detailed, and in line with the pecking order of instruments, National Competent Authorities understand that Article 458 is a last resort measure. However, for this reason, some National Competent Authorities



measures available under Article 458 CRR (except paragraph 10) is subject to a process at European level of prior notification (to the Commission, Parliament, Council, the ESRB and the EBA) and non-objection (by the Council, based on a recommendation by the Commission, involving ESRB and EBA Opinions). The EBA and the ESRB need to give an Opinion on the relevant points to the Council, Commission and Member State within one month. The Commission may, within one month, propose a rejection of the measure to the Council. If the Council (qualified majority) does not reject the proposed measure, the Member State may apply the measure for a period of up to two years (or less if the systemic risk ceases). This thorough procedure should ensure that any negative effects on the internal market are duly taken into account before a Member State is authorised to apply the measure.

- The one month time period for the EBA (and the ESRB) to provide an Opinion is deemed to be very short by the EU authorities, taking into account the internal governance process which has to be followed. A majority of the National Competent Authorities is in favour of a one-month extension being granted to the EBA in exceptional cases where the case is difficult to assess in just one month (for instance, because a Member raises concerns about the measure and its impact on the single market identified by information not covered in the ex ante indicators presented by the notifying Member State). This would allow for a more thorough analysis and would benefit the single market. However, to reduce uncertainty for CAs or DAs wishing to use Article 458, what constitutes an ‘exceptional case’ would need to be defined/outlined ex ante.
- An exception to the rules of procedure is made in paragraph 10 of Article 458 CRR. In this paragraph, Member States can raise RWs on real estate exposures by up to 25%, and tighten the large exposure limit by up to 15%, irrespective of the Opinions of the EBA and the ESRB or action by the Commission. In particular, the procedure in Article 458, paragraphs 3-9, has to be followed, but Member States will always be allowed to increase RWs on real estate exposures by up to 25%, and increase the large exposure limit by up to 15%. Some National Competent Authorities would like to have this paragraph clarified as it is unclear why an exception is made for these specific cases; however, it does give Member States the ability to take limited measures swiftly to address an impending financial stability risk.
- Measures taken under Article 458 CRR are not subject to mandatory reciprocity. Article 458(5) CRR states that Member States may recognise these measures and apply them to domestically authorised branches located in the Member State authorised to apply the measure. Article 458(6) allows other Member States to recognise these measures, in which case they should notify the Council, Commission, EBA, ESRB and the Member State

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would prefer to have alternative tools available for the same purpose, with less stringent procedures, so that Article 458 measures can be avoided as much as possible. From the perspective of preserving the internal market, the resulting divergence in rules and practices should be avoided.

concerned<sup>30</sup>. Hence, reciprocity of these measures is not mandatory, which may lead to an uneven playing field. Mandatory reciprocity would be preferred to preserve the internal market. In particular, given that the boundaries between Article 124/164 and Article 458 are not clear, this may lead to a situation where one Member State chooses to apply an Article 124/164 measure, which needs to be reciprocated, whereas another Member State applies an Article 458 measure. If the Article 458 measure is not recognised, the institutions in the Member State applying the Article 458 measure will be penalised twice for exposures to the country which has activated the 124/164 measure.

The **first objective** of enhanced financial stability is deemed to be partially met for the following reasons:

- On the one hand, the wide range of available tools under this article contributes to financial stability.
- On the other, as noted above, the much more stringent process underpinning Article 458 may well serve the protection of the single market, but this comes at the expense of limiting national flexibility to enhance financial stability.
- Also, the temporary nature of the article implies that it is best suited for risks of a temporary nature, such as cyclical risks, which further limits its ability to successfully enhance financial stability. However, as pointed out elsewhere, the exact nature of the risks addressed is not clear.

However, the option to increase own funds requirements (Article 458(2)(d)(i)) or increase the capital conservation buffer (Article 458(2)(d)(iv)) is not always considered to be effective when a specific exposure class is targeted. In this case, increasing own funds requirements or increasing the capital conservation buffer may be a relatively blunt tool. Therefore, some National Competent Authorities suggest that Article 458 should be extended to allow the targeting of specific exposure classes (for exposures to corporates, for instance)<sup>31</sup>.

Regarding the **third objective** of having a clearly defined goal:

- Reference should be made to the hierarchy of instruments, as referred to in Article 458(2)(c). In particular, CAs or DAs should justify why Article 124/164, Pillar 2, the CCB and the SRB do not sufficiently address the macroprudential or systemic risk identified. It is considered unclear how this should be assessed, and this could therefore lead to inconsistent application across countries.

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<sup>30</sup> These recognition rules are not entirely clear, as they leave unspecified whether recognition refers to applying the Article 458 measure to exposures in the Member State which has taken this measure, or whether recognition refers to applying the Article 458 measure to subsidiaries authorised in the country which takes the Article 458 measure.

<sup>31</sup> Note that Article 458 outlines the option to apply a national measure to a subset of domestically authorised institutions. With the exception of real estate, the option to target specific exposure classes is not provided for in Article 458.

- Article 458 versus SRB. As mentioned before, the SRB should address structural systemic risk, whereas Article 458 is designed to cover systemic risk (in general, in Article 458). Furthermore, both the SRB and Article 458 can be applied to a subset of institutions, which requires caution in view of the implications for the EU single market. Whereas Article 458 is considered to contain some safeguards to protect the single market, these provisions are not included in Article 133. Despite these features there are a number of mitigating factors. (i) Temporality: Article 458 should be used for a temporary period of heightened risk, in fact for a limited time period of two years, with the possibility of extension. This makes it suitable for addressing cyclical risks. The SRB, on the other hand, targets '*long term non-cyclical systemic or macroprudential risks*'. (ii) Article 458 is a last resort measure, as highlighted by the fact that it is last in the hierarchy. To effectively serve as a last resort measure, Article 458 contains an exhaustive list of tools. This implies a high degree of overlap with not only the SRB but also with many other measures such as Article 124/164 CRR, the capital conservation buffer, the O-SII buffer and Pillar 2. Article 458 therefore overlaps with a large number of tools and is intended to do so. (iii) The safeguards for the internal market in Article 458 come at the cost of restricting national flexibility and imposing a cumbersome process. Some National Competent Authorities thought that the overlap could be contained by requiring that the SRB be applied to all institutions in a jurisdiction. Some National Competent Authorities thought that the SRB should continue to be applicable to a subset of institutions.
  
- Article 458 versus the Pillar 2. Pillar 2 can be used both for a micro as well as a macro purpose (see more in Section 4.8). Taking into account the current pecking order of instruments, it is clear that CAs or DAs should first consider Pillar 2 measures before Article 458 measures can be taken. However, Pillar 2 is very broad, where many measures can be taken (see Article 104 CRD for an overview of the supervisory powers), and the same is true of Article 458 CRR, where the range of measures is very broad (see Article 458(2)(d) CRR). Given that the purpose of Article 458 is to be a last resort measure, its place in the hierarchy after Pillar 2 is understandable. However, some National Competent Authorities thought that Pillar 2 should be after or at the same level in the hierarchy as Article 458. To enhance the transparency of Pillar 2, which currently does not benefit from the same mandatory disclosure as Article 458, it would be advisable to add disclosure requirements to the macroprudential use of Pillar 2.

Again, it must be stressed that although overlaps could lead to differences in implementation across Member States, overlaps can also be the result of not wanting to run the risk of gaps; the implication of which could be much more severe. Moreover, overlaps imply a larger degree of flexibility, allowing Member States to address the risks at hand with the tool best suited given the circumstances. Limiting overlaps is therefore not necessarily an objective per se.

Regarding the **fourth objective** of disclosure and transparency, Article 458(3) CRR mentions that if a CA or DA is authorised to apply national measures, then they should provide the relevant CAs or DAs in other Member States with all the relevant information. Furthermore, Article 458(6) allows other Member States to recognise these measures, in which case they should notify the Council,

Commission, EBA, ESRB and the Member State concerned. It is not mandatory, however, to disclose these measures to the public. From the perspective of transparency, it would be preferred if this measure would also be published, in order to allow Pillar 3, market discipline, to enhance the effectiveness.

## 4.8 Pillar 2

Pillar 2 measures are broad in scope; Article 104 CRD lists the supervisory measures that can be taken. These are: (i) additional own funds; (ii) specific treatment of assets; (iii) limitation of operations; (iv) tightening of liquidity requirements; (v) additional disclosure.

Pillar 2 has traditionally been thought of as addressing idiosyncratic risks related to the risk profile of the individual institution, based on the SREP process. However, CRD IV explicitly recognises the macroprudential use of Pillar 2 measures. Firstly, when conducting SREP, which is the basis for the application of Pillar 2 measures, the CAs (micro) will consider not only (i) the risks to which an institution is or might be exposed, but also (ii) the risks it poses to the financial system. Therefore, the assessment of systemic risk is one of the elements to consider during the SREP (see Articles 97 and 98 CRD). Second, CRD IV states that Pillar 2 measures can be imposed on a group of institutions with similar risk profiles (Article 103 CRD). This means that, even though Pillar 2 is applied on an individual basis, the same measure can be applied to different banks with similar profiles. An important implication of the above analysis is that Pillar 2 can be used both for a micro as well as a macro purpose.

Regarding the **first objective** of financial stability, Pillar 2 is flexible and includes a large set of measures:

- The breadth of scope implies that virtually all risks can be addressed, reducing the chance of being without a relevant tool to mitigate a particular risk when a measure is needed. In particular, the macroprudential use of Pillar 2 is the only tool that can address non-real estate exposure-based risks<sup>32</sup>, as well as miscellaneous risks such as interest rate risk arising from the banking book, as well as FX risks. Apart from the last resort measure of Article 458 CRR, it is also the only measure that addresses liquidity concerns.
- Furthermore, since Pillar 2 can be tailored in a targeted fashion to a specific institution or a group of institutions sharing a similar risk profile, the negative spill-over effects and associated costs to other institutions that have not been affected by that risk are limited.

Overall, Pillar 2 is among the most flexible and versatile measures within the CRR/CRD IV framework and therefore achieves the first objective.

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<sup>32</sup> It should be noted that Article 458(2)(d)(vii) can address intra financial sector exposures, However, it only applies to exposures from one financial institution to another, leaving out important cases in which banks have exposures to the corporate sector, for instance, and therefore has a much more limited scope.

Regarding the **second objective**, the integrity of the internal market, it should be mentioned that several features of Pillar 2 are detrimental to the level playing field across institutions at risk:

- The fact that Pillar 2 measures are not required to be disclosed, and can hence not be reciprocated is not beneficial for the internal market. Problems may arise if Pillar 2 measures are taken to address a systemic risk that affects one or more banks. Consider, for instance, the case where one country applies an Article 124/164 measure, thereby increasing the capital requirements for real estate. If an institution is subject to Pillar 2 requirements for its real estate portfolio, then this institution will, for the part of the portfolio that is exposed to this country, be penalised twice in terms of higher capital requirements<sup>33</sup>. When applied to a specific institution, the untransparent use of a Pillar 2 measure may be desirable, however, since disclosure may reveal confidential information. On the other hand, when used in a macroprudential context, disclosure of the measure would benefit from the same positive signalling effects as other Pillar 1 measures. This is possible in the current framework since nothing prevents Pillar 2 measures from being disclosed.
- The non-uniform implementation of the SREP processes by CAs may lead to inconsistent application across the Union. This could lead to an uneven playing field, or even Pillar 2 being used for ring-fencing purposes. This could be improved if a greater harmonisation of the SREP process across Member States were put in place; current EBA work on Pillar 2 guidelines will help to reduce differences across Member States. This work should be continued.
- Some National Competent Authorities think the current micro and macro feature of Pillar 2 is confusing and may lead to an uneven playing field. The argument is that if some countries use Pillar 2 measures to address macroprudential concerns for which other countries use one of the macroprudential tools, this will lead to inconsistent application across the Union. They argue that it therefore would be preferable to keep Pillar 2 solely for microprudential use. Several arguments justify this preference: (i) the CRR/CRD contains a framework of macroprudential measures which is already very broad, and which is transparent, contrary to Pillar 2, (ii) the CA is responsible for the use of Pillar 2 and given this responsibility it would be more logical to use Pillar 2 for microprudential purposes, (iii) there is substantial overlap already between the other macroprudential tools in the CRR, in particular between Pillar 2 and the SRB, between Pillar 2 and Article 458, and between Pillar 2 and the G/O-SII buffer, and (iv) finally there is the issue of transparency. The current Level 1 text does not require disclosure of measures taken under Pillar 2, and this is considered desirable in cases in which bank-specific measures are taken. When Pillar 2 measures are taken to address macroprudential concerns, the lack of disclosure is considered a drawback, and additional disclosure requirements would be advisable (see below). However, it must be stressed that nothing prevents the CA from disclosing this information, it is just not currently a requirement.

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<sup>33</sup> Note that this effect can occur irrespective of whether Pillar 2 is used to address a micro or a macroprudential concern.

It should be noted that the exclusion of a macroprudential scope from Pillar 2 does not imply that Pillar 2 would not include forward-looking components (stress tests, for instance), but only that Pillar 2 should focus on bank-specific measures. For instance, if a bank is subject to a macro shock that particularly affects its activity and risk profile while another bank is able to avoid this given its own niche, it can be required to hold a Pillar 2 buffer; if the same shock affects a group of banks or the entire banking sector then the response would be macroprudential (for instance, the SRB or the CCB).

The above views were not shared by all National Competent Authorities, however, as some think the macroprudential use of Pillar 2 should be kept because (i) it is the only measure that can address some macroprudential risks that are otherwise not covered (non-real estate exposure based risks, miscellaneous risks such as interest rate risks arising from the banking book, FX risks, etc.). Exclusion of its macroprudential use could risk leaving gaps in the framework (see Table 2 in the Executive summary). (ii) It can also be used to supplement measures that cannot be completely addressed through Pillar 1 (which may capped, for example, e.g. the O-SII buffer).

- The difference in scope between Pillar 2 (when used as a macroprudential tool) and the SRB is not clear. The scope of the SRB in particular could therefore be further clarified through additional guidelines or a best practice report.
- The difference in scope between Pillar 2 (when used as a macroprudential tool) and Article 458 CRR is not clear. However, by virtue of containing an exhaustive list of measures and a pre-requisite to serve as a last resort measure, Article 458 will overlap with a large number of measures. In addition to Pillar 2, it also overlaps with Article 124/164 CRR, the capital conservation buffer, the O-SII buffer and the SRB.

In summary, despite the above disagreement among National Competent Authorities about the future scope of pillar 2 - purely microprudential and thus removed from the macroprudential hierarchy all together, or maintain the current framework where both micro and macroprudential purposes are allowed - there was agreement that pillar 2 should primarily be used for microprudential purposes. If used for macroprudential purposes it should be moved further down the hierarchy. Some National Competent Authorities suggest to put pillar 2 to just above Article 458 measures (i.e. first SRB, then pillar 2 for macroprudential purposes, and then Article 458)<sup>34</sup>, whereas other National Competent Authorities suggested to put the use of pillar 2 for macroprudential reasons to the last in the macroprudential hierarchy (i.e. SRB, Article 458 CRR, then pillar 2 for macroprudential purposes), as it can be difficult to motivate why pillar 2 cannot be used instead of Article 458, or to put the two on an equal footing in the hierarchy. A reasonable compromise is to put the two measures level with each other, that is: SRB and then either pillar 2 for macroprudential purpose or Article 458 CRR.

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<sup>34</sup> Section 3.2.1 elaborates on the pecking-order of instruments.

Regarding the **third objective**, of tools having a clearly defined goal, the versatile nature of Pillar 2 means that it overlaps with other measures, making it less distinct and less clear.

Regarding the **fourth objective** of transparency and disclosure, it should be mentioned that Pillar 2 measures are not required to be disclosed, although there is nothing preventing their disclosure. Therefore, Pillar 2 may be perceived as less transparent than other measures. This could be improved by making it mandatory to disclose specific supervisory measures, in particular when Pillar 2 is used for a macroprudential purpose. Article 438(b) CRR already allows that the CA can ask the institution to disclose the results of the ICAAP.

## 4.9 Liquidity provisions

As a consequence of the recent crisis, the Basel Committee devised within the liquidity framework its 'Sound Principles'<sup>35</sup> for adequate liquidity management along with two minimum liquidity metrics: the liquidity coverage requirement (LCR)<sup>36</sup> and the net stable funding requirement (NSFR)<sup>37</sup>.

In the liquidity framework of the EU, Part 6 of the CRR captures these two liquidity metrics for financial institutions to cover the liquidity risk inherent to their business. These two metrics are envisaged in the CRR for reporting purposes exclusively. Both metrics are still under observation periods for their final calibration in line with international developments.

The LCR (Article 412 CRR) aims to ensure that banks can face liquidity stress situations (both idiosyncratic and market-wide) during a period of one month. Institutions are required to hold liquid assets which can meet potential stressed net outflows during a month. The CRR sets out a description of this metric for reporting purposes only. The European Commission is to adopt a delegated act by June 2014 which will specify the definition of the requirement (definition of liquid assets, inflow and outflow rates, etc.) for regulatory and supervisory purposes (Article 460 CRR). The delegated act will be substantiated on the reports produced by the EBA in 2013 (Article 509 CRR). Specifically, the EBA produced and published in December 2013 a report assessing the impact of the LCR to see whether the LCR could have a material detrimental impact on the business and risk profile of institutions, on the stability and orderly functioning of financial markets, and on the economy as a whole with particular focus on the impact on lending to SMEs and on trade financing. The general conclusion of the report was that it is not likely to have a material detrimental impact in these areas. Furthermore, the findings in the report suggest that the LCR does not conflict with capital ratios, i.e. compliance with the LCR does not make it more difficult to meet the (volume or risk-based) capital ratios and vice versa.

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<sup>35</sup> <http://www.bis.org/publ/bcbs144.pdf>

<sup>36</sup> <http://www.bis.org/publ/bcbs238.pdf>

<sup>37</sup> <https://www.bis.org/publ/bcbs271.pdf>

The NSFR (Article 413 CRR) aims to ensure that any funding gap during a year is properly covered even under stress conditions. It requires financial institutions to hold the necessary stable funding for those investments which are expected to be kept in the long term. This kind of structural measure aims to cover an exacerbated funding risk under stress conditions which could jeopardise the roll-over of the lending activity of an institution and trigger a situation of liquidity distress. The EBA is mandated to produce a report by the end of 2015 (Article 510), where an impact assessment of the NSFR must be developed along with an exercise for calibrating the metric itself. To this end, the EBA intends to start working on this report at the beginning of the second half of 2014. By 31 December 2016 the EC will, if appropriate and substantiated by this report, submit a legislative proposal to the EP and the Council.

Articles 412 and 413 CRR should mainly be considered as having a microprudential objective, although the details of Article 412 CRR in particular is yet to be specified further by the Commission's adoption of a delegated act. It is therefore premature to fully assess the overlap of the liquidity-related measures within the framework. This is also relevant with respect to an assessment of the macroprudential context, as it is not clear if the delegated act may include macroprudential elements. However, in due course, this type of framework may need to be developed.

However, it is reasonable to first fully develop the microprudential framework, as the Commission still has to deliver its delegated act in accordance with Article 460 CRR, before the macroprudential framework is assessed further. Another concern is the liquidity of instruments and the adequacy of central bank liquidity, but these issues remain beyond the scope of the CRR. However, these should certainly be continuously monitored; institutionally, a role for the ESRB could be welcome here.

However, the current set of tools to address liquidity risk already overlap: Article 458 and Pillar 2 (in some cases) are both used for liquidity requirements (Article 105 CRD).

- Article 412/413 CRR versus Article 458(2)(d)(v). Article 458 allows CAs or DAs to address remaining systemic risk by applying stricter liquidity tools. Given that the current microprudential tools have not been completely calibrated, it is difficult to assess which scenarios could justify the use of Article 458. Furthermore, the provisions in Article 458 to use stricter liquidity requirements are not defined, and hence a plethora of tools can be expected, potentially leading to an uneven playing field.
- Article 105 CRD versus Article 458(2)(d)(v). Article 105 CRD allows Pillar 2 to be used to address specific liquidity risks, including systemic liquidity risk, and these provisions can be applied to a subset of institutions. As Article 458 can also be applied to a subset of institutions and Article 458 should address systemic risk as well, the boundaries between these two measures are not clearly defined, and may lead to inconsistent application. On the other hand, given that Pillar 2 comes before Article 458 in the hierarchy, it is clear that the former is the first choice and that the latter should only be used once Pillar 2 opportunities have been exhausted.



## 4.10 FX lending

According to the ESRB recommendation of FX lending, national supervisory authorities are recommended to require financial institutions to hold sufficient capital to cover the risks associated with foreign currency lending. This measure is implemented under the Pillar 2 framework. Additionally, financial institutions are required to adequately monitor foreign currency lending, incorporate foreign currency lending risks into their internal risk management systems and provide information to enhance borrowers' awareness of the risks involved in foreign currency lending.

Since higher capital levels contribute to enhancing the resilience of banks to losses, and the costs associated with a capital surcharge can constitute a disincentive for both banks and borrowers to engage in FX lending/borrowing, these provisions can be effective in the mitigation of risks related to these activities. As these provisions allow banks to internalise the costs associated with FX lending, they may be more efficient than the imposition of a quantitative limit on the amount of FX lending.

However, these provisions can be difficult to implement. The level of additional capital required to meet the risks arising from foreign currency lending, or to discourage this type of loan, may not be easy to define. In addition, the recommendation could benefit from clearer guidelines concerning, for example, the information needed to enhance borrowers' awareness of the risks involved in FX lending.

By reducing risks which have a systemic and cross border impact, these measures can contribute to the smoother functioning of the internal market.

## 5. Consultations/notifications received

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### 5.1 Belgium

On 1 April 2014, the EBA received a notification from the National Bank of Belgium (NBB) of its intention to make use of Article 458 CRR to modify capital requirements. Article 458 CRR requires DAs to notify the EBA when the authority identifies changes in the intensity of macroprudential or systemic risk in the financial system with the potential to have serious negative consequences to the financial system and the real economy in a specific Member State and which the authority considers would be better addressed by stricter national measures. Within one month of receiving the notification, the EBA is required to provide its Opinion on the points in Article 458(2) CRR to the Council, the Commission and the Member State concerned.

In summary, the proposed measure includes an increase to risk weights for retail exposures secured by Belgian residential immovable property for Belgian IRB banks by an add-on of five percentage points. This macroprudential measure is part of a broader set of measures introduced in 2013. It includes, as additional microprudential measures, the evaluation of the calibration of PD and LGD models to address potential weaknesses of the risk parameters used in the IRB approach and a self-assessment of credit institutions' credit standards against EBA guidelines.

Based on the evidence submitted by the NBB, the EBA acknowledges that the combination of an increase in house prices and debt levels may pose a threat to the financial stability of Belgian banks. At this stage, the EBA does not object to the adoption of these measures, since they will increase the resilience of the Belgian banking sector, and an increase of risk weights was already introduced in 2013 without any sign of negative impact on the internal market. However, the EBA has identified a number of issues to which it would like to draw the Commission's attention (the need for an evaluation of the adequacy of IRB models applied by credit institutions and the potential to apply institution-specific supervisory measures to avoid constant add-ons to risk weights that could penalise banks with more conservative credit standards or models).

The EBA Opinion was approved by the BoS and submitted to the Council, the Commission and the NBB on 30 April 2014. The ESRB submitted its Opinion on the same day.

Following Article 458 CRR, the Commission may, within one month, propose to the Council an implementing act to reject the draft national measures. In the absence of a Commission proposal within that period, the Member State concerned may immediately adopt the draft national measures for a period of up to two years or until the macroprudential or systemic risk ceases to exist, if that occurs sooner. The Council will decide on the proposal by the Commission within one month after receipt and state its reasons for rejecting (or not) the draft national measures. In the absence of a Council implementing act to reject the draft national measures within one month after receipt of the proposal by the Commission, the Member State may adopt the measures and

apply them for a period of up to two years or until the macroprudential or systemic risk ceases to exist, if that occurs sooner.

## 5.2 Croatia

### 5.2.1 Article 124 CRR

In accordance with Article 124(2) CRR, the Croatian National Bank has decided to set stricter criteria for the application of the 35% risk weight to exposures fully and completely secured by mortgages on residential property.

The stricter criteria are the following.

- A credit institution may assign a risk weight of 35% only to those exposures or a part of an exposure secured by mortgages on residential property which is or shall be occupied or let for residential purposes by the owner who is a natural person, under a property leasing contract.
- A credit institution may assign the risk-weight of 35% only under the condition that the owner of the residential property is the owner of not more than two residential properties.
- Residential property for that purpose means a house, a flat or associated parts of the flat in flat ownership intended to be used as a dwelling and a building plot intended to be used for construction of a house. A garage or a parking spot, is considered residential property only if the mortgage on or fiduciary transfer of ownership of a garage or a parking spot is connected with the mortgage on or fiduciary transfer of ownership of a house, flat or associated parts of the flat in flat ownership that are intended to be used as a dwelling. Holiday homes are not considered residential property.

The Croatian National Bank set these stricter criteria from 1 January 2014.

These measures should be seen in the context of Article 125 CRR which determines the criteria to consider exposures as fully and completely secured by mortgages on residential property, and sets out how these should be treated, unless otherwise decided by the CAs in accordance with Article 124(2) CRR. Furthermore, the definition of residential property is a stricter definition than the definition of residential property as in Article 4(1)(75) CRR.

### 5.2.2 Article 133 CRD

The Croatian National Bank intends to set a SRB from 19 May 2014 onwards.

An SRB of 1.5% CET1 will be applied to a first subgroup of less complex institutions, and an SRB of 3% of CET1 to a second subgroup of more complex institutions. The SRB will be applied to all exposures. Several arguments are put forward: (i) possible adverse effects on the real economy caused by the disruption of banks in the second subgroup; (ii) structural macroeconomic

imbalances increase the probability of a severe shock (second subgroup); (iii) real estate markets are characterised by low turnover and low liquidity (both subgroups); and (iv) high level and increase of concentration in the financial sector (both subgroups). The G/O-SII buffer framework can only be applied from 2016 onwards, and therefore the SRB will be applied instead.

The SRB will be applicable for at least two years, and an annual review is also planned.

The Croatian National Bank will publish this information in the Official Gazette and on its website.

## 5.3 Estonia

### 5.3.1 Systemic Risk buffer

Eesti Pank, as the macroprudential authority of Estonia, requires all credit institutions licensed in Estonia to maintain a SRB requirement of 2% starting from 1 August 2014. Eesti has notified EBA regarding this measure, pursuant to Article 133(11) CRD, and has completed the notification template for the SRB. In its justification, Eesti Pank refers to (i) structural vulnerabilities of the financial sector, including the sector's high concentration and the exposure of institutions to similar economies and sectors, (ii) structural vulnerabilities stemming from the small size and the openness of the Estonian economy, (iii) recent experience has shown that any unexpected deterioration in the economic environment can lead to a rapid increase in debt servicing problems in the non-financial sector, and increases the need for credit institutions to make additional provisions for non-performing loans suddenly.

### 5.3.2 Transitional period for capital conservation buffer

Eesti Pank has decided to require credit institutions licensed in Estonia to maintain a 2.5% capital conservation buffer, without a transitional period, starting from 19 May 2014. Eesti Pank has notified the EBA of this decision, pursuant to Article 160(6) CRD.

## 5.4 Latvia

The Financial and Capital Market Commission of the Republic of Latvia has notified EBA that the capital conservation buffer is introduced without any transitional period, pursuant to Article 160(6) CRD. The requirement to maintain a capital conservation buffer of Common Equity Tier 1 capital equal to 2.5% of institution's total risk exposure amount has been in force as from 28 May 2014.

## 5.5 Luxembourg

In Luxembourg, the Commission de Surveillance du secteur financier has decided to impose the capital conservation buffer of 2.5 % to institutions as from 24 February 2014, and has notified the EBA of this decision, pursuant to Article 129(2) CRD.

## 5.6 The Netherlands

DNB (De Nederlandsche Bank) will impose an additional capital buffer requirement on Dutch systemic banks. DNB has notified the EBA and ESRB of its intention to impose an O-SII buffer and an SRB on selected Dutch banks. In particular, an O-SII buffer of 2% is set for ING Bank NV, Cooperative Centrale Raiffaisen-Boerenleenbank BA, ABN Amro Bank NV and an O-SII buffer of 1% is set for SNS Bank NV. The O-SII buffer applies at the consolidated level. The main criteria used to set the O-SII buffer are size, substitutability and interconnectedness.

An SRB of 3% is set for ING Bank NV, Cooperative Centrale Raiffaisen-Boerenleenbank BA and ABN Amro Bank NV. The SRB is intended to mitigate the long-term non-cyclical systemic risk resulting from the large and concentrated banking sector in the Netherlands. The loss of any of the functions of these large banks would have an immediate negative effect on many other financial institutions, consumers and businesses, and therefore the probability of default of these institutions needs to be significantly reduced. This will be accomplished by higher capital buffer requirements for these banks. However, the O-SII buffer is capped at 2%. DNB does not consider this sufficiently prudent, and therefore the SRB is activated. In its notification, DNB also explains why other macroprudential tools cannot adequately address the identified systemic risk (e.g. the O-SII buffer, Pillar 2). The SRB applies to all exposures, including those to third countries. The O-SII buffer and the SRB cannot be cumulated.

Both buffer requirements are intended to be activated from 1 July 2014 (when the national legislation will have formally transposed the CRD IV). In line with the CRD, the buffer requirements will be phased in as from January 2016 to January 2019 (Article 160 CRD).

## 5.7 Norway

In accordance with Article 164(5) CRR, the Norwegian Ministry of Finance has decided to increase the minimum EAD weighted average LGD for retail exposures secured by residential real estate in Norway from 10% to 20%.

The Norwegian Ministry of Finance set this higher LGD floor from 1 January 2014.

This measure should be seen in the context of Article 164(4) CRR, which determines that the exposure weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments should not be lower than 10%, unless otherwise decided by the CAs in accordance with Article 164(5) CRR.

## 5.8 Sweden

In 2010 the Swedish FSA introduced a LTV cap, set at 85% of the value of the property. To further address risks within the Swedish mortgage sector, in 2013 the Swedish FSA introduced a 15% risk weight floor on Swedish mortgages for IRB banks. The authority has also announced the intention

to increase the risk weight floor for mortgages to 25% in 2014 upon the transposition of CRD 4 into Swedish law. The risk weight floor was introduced as a part of FI's overall supervisory review and evaluation process of the firms, within the framework of FI's Pillar 2 supervision activities. Although the CRR was not implemented when these measures were taken, the FI does explain why Pillar 2 is a better alternative than art. 458 CRR:

- Temporality of 458 should be used for temporary periods of heightened risk, in fact, for a limited time period of two years, with the possibility of extension. The overall purpose of FI's new practice is to permanently strengthen the resilience of firms.
- Subsidiarity of 458. Also, the competent authority must explain, to the Commission, the Council, the ESRB, the EBA, etc. why the identified systemic risk or macroprudential risk cannot equally be addressed in the framework of Pillar 2. Therefore, the competent authority not being able to achieve the same result through measures in Pillar 2 is a precondition to use 458.

In 2011 the Swedish FSA announced that Sweden's four largest banks (Nordea, SEB, Handelsbanken and Swedbank) must as of January 2013 hold 10% in CET 1 capital and as of January 2015 12% in core tier one capital. This includes the activation of the capital conservation buffer but excludes the countercyclical buffer. Awaiting the transposition of CRD 4 into Swedish law the specific measures utilized still remain to be specified. Furthermore, as of January 2013 Sweden also introduced a binding 100% LCR requirement in EUR, USD and at an aggregated level for institutions with at least 100 billion SEK in total assets. Finally, the Swedish FSA has also announced the intention to activate the countercyclical buffer.

## 5.9 UK

### 5.9.1 Article 124 CRR

In accordance with Article 124(2) CRR, the UK PRA and FCA have decided to set stricter criteria for eligibility when assigning the 50% risk weight to exposures fully and completely secured by mortgages on offices or other commercial premises. The stricter criteria require firms to determine whether annual average loss rates from lending secured by mortgages on commercial property in the UK exceeded 0.5% or not over a representative period. For this purpose, a representative period is a time frame of sufficient length, which includes a mix of good and bad years. The loss rate should be calculated in accordance with the loss data collected and published by the PRA as under Article 101 CRR. Where this condition is not satisfied, firms need to apply the 100% risk weight in Article 124(1) CRR.

The UK PRA and FCA set those stricter criteria from 1 January 2014.

This measure should be seen in the context of Article 126(1)(a) CRR, which determines that exposures or any part of an exposure fully and completely secured by mortgages on offices or

other commercial premises may be assigned a risk weight of 50%, unless otherwise decided by the CAs in accordance with Article 124(2) CRR.

### **5.9.2 Article 129 CRD**

The UK FCA has decided to exempt small and medium sized investment firms from maintaining a capital conservation buffer, and has notified EBA of this decision pursuant to Article 129(2) CRD.

### **5.9.3 Article 130 CRD**

The UK FCA has decided to exempt small and medium sized investment firms from maintaining a countercyclical capital buffer, and has notified EBA of this decision pursuant to Article 130(2) CRD.

## 6. Policy recommendations

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This opinion focuses on policy recommendations that would improve the effectiveness, efficiency and transparency of the macroprudential tools within the framework and protect the single market:

1. The cap on the O-SII buffer is considered too low and should be raised, with the appropriate higher level should be determined in an impact assessment. Regarding the level of the O-SII buffer applicable to individual institutions, additional guidelines should be developed in order to set the level of the O-SII buffer, while at the same time preserving an authority's ability to apply supervisory judgment
2. Currently there is no requirement for the CA and the DA to coordinate their actions, which may lead to the same risk being targeted twice or inconsistently. It is proposed that a mandatory coordination process between the authorities be put in place.
3. Pillar 2 is primarily to be viewed as a microprudential tool. Furthermore, the hierarchy between the tools should be adjusted by placing the Systemic Risk Buffer (SRB) before Pillar 2 and moving Article 458 CRR (also named flexibility package) so that it is level with Pillar 2. The recommended hierarchy for the set of macroprudential tools would therefore be:
  1. CCB, SRB, G/O-SII buffer
  2. Pillar 2 as a last resort tool as regards macroprudential purposes or Article 458 CRR, with neither one coming before the other.
4. With respect to the SRB buffer it is suggested that: (i) the process be clarified in particular with respect to Article 133(11) to (15), whilst maintaining the balance between financial stability and safeguarding the internal market, and (ii) guidelines be written to clarify its activation, exploring possible quantitative indicators, and the risks covered. The max-rule (regarding the SRB and the G/O-SII buffer) should be maintained.
5. The ability to review risk weights or LGD floors in real estate should be put more consistent. Article 164 CRR should be further aligned with Article 124 CRR in a number of ways by: (i) including all RRE and CRE in its scope (and not only retail RRE/CRE), (ii) requiring a consultation procedure, rather than the current notification equivalent, and (iii) clarifying the boundaries and purpose of Articles 124 and 164, in particular in relation to Article 458 CRR.



6. EBA should be granted a month extension in exceptional circumstances when forming an Opinion in relation to Article 458 CRR. The situations in which exceptional circumstances could be advocated should be specified ex-ante.
7. Given the lack of tools addressing exposure based risks (corporate exposures, for instance) as opposed to banks subsets or national scope discretions within the CRR/CRDIV framework it is suggested that a further work should be done to evaluate the need and the exact nature of how such tools could be structured, in the provisions of the SRB or Article 458 CRR.

## 7. Appendix 1

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### Estimates of the PD, LGD and CCF

IRB banks will generally determine their expected level of credit losses based on their own experience over a sufficiently long observation period. This will enable the corresponding risk parameters, i.e. PD, LGD and CCF, to be estimated. Where such loss experience has not shown a high level of credit losses, the risk parameters may underestimate any potential increase stemming from a macroeconomic development. In particular for the LGD estimates, some bank portfolios' loss experience has not shown a high level of credit losses and therefore does not exhibit sufficient LGD. Although the LGD should be estimated by taking into account a downturn scenario (Article 181 CRR<sup>38</sup>), these estimates sometimes do not sufficiently take into account the systemic risk in a particular jurisdiction, leading to capital requirements which are too low taking into account the macroprudential risk, and therefore warrant a change. This is what is intended in Article 164: should supervisors not be confident in ad hoc validation methods, an LGD floor may, as a blunt measure, guarantee that asset bubble consequences and in particular the related inability to seize good values of assets are to some extent prevented. Obviously, the floors should be specified according to the collateral asset class. Regarding the PD estimates, the IRB and the implementation of the ASRF model developed for Basel II make use of average PDs that reflect expected default rates under normal business conditions. The revised framework requires banks to undertake credit risk stress tests to underpin these calculations. Stress testing must involve identifying possible events or future changes in economic conditions that could have unfavourable effects on a bank's credit exposures and an assessment of the bank's ability to withstand these changes.

### Normal distribution

The IRB risk weight formula is based on a single-factor model that determines the probability of observing a specific level of credit losses. This model is used to obtain a mapping function to derive unexpected losses (conditional PD) from a pre-specified level of expected losses (regulatory PD). However, this model is based on the assumption that the systematic factor (i.e. single factor) driving the value of all the assets in the credit portfolio can be described by a normally distributed random variable. However, it can be argued that the overall state of the economy, represented by the systematic factor, may be characterised by recessionary values with a higher probability than the one implied by the normal distribution. This would justify an increase of the own funds requirements due to macroprudential risks.

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<sup>38</sup> This also holds true for the specification of the credit conversion factor, CCF, Article 182 CRR.

### Maturity

The standard maturity was chosen with regard to the fixed maturity assumption of the Basel foundation IRB approach, which is set at two-and-a-half years. The adjustments are linear and increase in the maturity  $M$ , the slope of the adjustment function with respect to  $M$  decreases as the PD increases, and for the maturity of one year, the function yields the value 1; hence the resulting capital requirements coincide with the ones derived from the specific Basel II ASRF model. The linearity may be insufficient, and in particular, it may not adequately reflect cycle changes early enough and in a sufficiently forward-looking manner.

### Asset Value Correlations (AVC)

Another parameter in the IRB risk weight curve is the asset correlation, which is the correlation between the assets in a given credit portfolio. It also expresses the degree of the obligor's sensitivity to the systematic risk factor in the single factor model, and therefore describes the dependence of the asset value of a borrower on the general state of the economy; all borrowers are linked to each other by this single risk factor. These asset correlations determine the shape of the risk weight formulas. They are asset class dependent, because different asset classes show different degrees of dependency on the overall economy.

In the IRB approach, the supervisory asset correlations of the risk weight formula for corporate, bank and sovereign exposures have been derived from an analysis of data sets from G10 supervisors. Time series of these systems have been used to determine default rates as well as correlations between borrowers; the asset correlation function is constructed from two limit correlations of 12% and 24% for very high and very low PDs (100% and 0%, respectively). These averages were formed because of the need to establish global standards. As opposed to the benefits of relying on common standard measures, one jurisdiction may happen to be far from the average calibration. Should this situation be structural, a change in the asset correlation, and consequently on the RW, could be warranted. These measures should not diminish the benefits of a single market but maintain a balance between the two different objectives (financial stability versus protecting the single market). Such a change can be allowed only in cases where deviations can be evidenced quantitatively and are significant and durable.

Under the IRB approach, the correlations between these limits are modelled by an exponential weighting function that displays the dependency on PD. The exponential function decreases rather quickly; its pace is determined by the so-called 'k-factor', which is set at 50 for corporate exposures. In addition to the exponentially decreasing function of PD, correlations are adjusted for the size of a firm, which is measured by annual sales. The linear size adjustment affects borrowers with annual sales between EUR 5 000 000 and EUR 50 000 000. For borrowers with EUR 50 000 000 in annual sales and above, the size adjustment becomes zero, and the pure asset correlation function applies. For borrowers with EUR 5 000 000 or less in annual sales, the size adjustment takes the value of 0.04, thus lowering the asset correlation from 24% to 20% (best credit quality) and from 12% to 8% (worst credit quality). It may be questionable whether this size

adjustment will fit the structural conditions of all countries across the EU. The calculation of a scaling factor to restate the borders of the size adjustment would lead to the review of the resulting RW function. However, it probably remains less prudent to make these revisions than not, as the re-anchoring of the size adjustment is likely to drive down capital requirements. No macro-tool provision seems able to address this issue which is definitely structural but not immediately dependent on macroeconomic conditions in the medium term.

The asset correlation function for bank and sovereign exposures is the same as for corporate borrowers, but the size adjustment factor does not apply. It is certainly questionable whether credit institutions' portfolios would exhibit the same asset correlations as corporate entities. The highest similar dependency can be acknowledged via the identification of higher 'interconnectedness'. In particular, the size factor could take into account the 'large and complex features' of institutions. The use of the GSII's buffer, or in the EU the OSII's buffer, is certainly able to compensate for such a deficiency of the normal single rule. Moreover, this type of buffer is neutral when it comes to the national dimension and does not hamper the single market as such.

Under IRB, the retail risk weights differ from the corporate risk weights in two respects: (i) the asset correlation assumptions are different and (ii) the retail risk weight functions do not include maturity adjustments. The asset correlations that determine the shape of the retail curves have been 'reverse engineered' from (i) economic capital figures from large internationally active banks, and (ii) historical loss data from the supervisory databases of the G10 countries. Both data sets contained matching PD and LGD values per economic capital or loss data point; analyses showed significantly different asset correlations for different retail asset classes. They have led to the three retail risk weight curves for residential mortgage exposures, qualifying revolving retail exposures and other retail exposures, respectively. The three curves differ with respect to the applied asset correlations: relatively high and constant in the residential mortgage case, relatively low and constant in the revolving retail case, and, similar to corporate borrowers, PD-dependent in the other retail case. The low correlation is a reflection of the fact that defaults of retail customers tend to be more idiosyncratic and less dependent on the economic cycle than corporate defaults.

1. Residential Mortgages: Correlation (R) = 0.15. The implicit maturity effect also explains the relatively high mortgage correlations: not only are mortgage losses strongly linked to the mortgage collateral value and the effects of the overall economy on that collateral, but they usually have long maturities that drive the asset correlations upwards as well. Some concerns were raised as to whether the 0.15 AVC is insufficient in some instances. This may be because the market conditions make the local market less diversified, more correlated and not 'normally' distributed, because maturities are longer than average. Depending on the evidence found against the above-mentioned variables, actions in Article 164 may be warranted.
2. Qualifying Revolving Retail Exposures: Correlation (R) = 0.04. A unique and low AVC is very difficult to elect given widespread differences across the global economies.

3. The Other Retail correlation function is structurally equivalent to the corporate asset correlation function. However, its lowest and highest correlations are different (3% and 16% instead of 12% and 24%). Moreover, the correlations decrease at a slower pace, because the 'k-factor' is set at 35 instead of 50.

#### Inverse relationship between PD and asset correlations

Under the IRB approach, there is an inverse relationship between PD and asset correlations for exposures: asset correlations that appear in the IRB risk-based capital formulas decline with increasing PD, so that the IRB risk-based capital formulas generally imply that a group of low-PD exposures are more correlated than a group of high-PD exposures. This inverse relationship between PD and asset correlations for exposures is broadly consistent with empirical research undertaken by G10 supervisors, and moderates the sensitivity of IRB risk-based capital requirements for exposures to the economic cycle. It has been assessed by other means that more counter cyclicality could be warranted using a dedicated countercyclical buffer to cover for higher asset correlations/PD relationships which may be caused by credit bubbles.

#### Portfolio invariance

The IRB model framework is portfolio invariant, i.e. the capital required for any given loan should only depend on the risk of that loan and must not depend on the portfolio it is added to. This characteristic has been deemed vital in order to make the IRB framework applicable to a wider range of countries and institutions; diversification effects depend on how well a new loan fits into an existing portfolio. As a result, the framework was calibrated to well-diversified banks. Within the EU prudential framework, minimum diversification has long been achieved via the large exposures requirement. Moreover, where a bank deviates from this ideal it is expected to address this under Pillar 2 of the framework.

## 8. Appendix 2

	Art. 124/164 CRR	Pillar 2 (Art. 102-104 CRD)	CCB (Art. 130, 136-140 CRD)	Capital conservation buffer (Art. 129 CRD)	G/O-SII (Art. 131 CRD)	SRB (Art. 133 CRD)	Art. 458 CRR
<b>All banks/ subsets of banks</b>	All banks	Subsets of banks	All	All banks	Only those institutions identified as G/O-SII.	All banks or a subset	All domestic institutions or a subset
<b>All exposures/ subsets of exposures</b>	Art. 124: RRE/CRE, all or a subset Art. 164: retail RRE/CRE, all or a subset	Subsets of exposures	All exposures	All exposures	All exposures	Subset of exposures allowed. Also in other MS or third countries. However, paragraph 18 of Art. 133 CRD is not clear.	Depends on the measure taken.
<b>Temporary/ structural</b>	Review periodically and at least annually	Review at least on an annual basis, as part of the supervisory examination programme.	CCB is set by the DA on a quarterly basis.	Both	- O-SII buffer must be reviewed at least annually. - G/O-SII identification must be reviewed annually. - G-SII allocation to sub-categories must be reviewed annually.	Structural: CA or DA will review every second year	First time: for a period of two years. Afterwards the Commission will review annually.
<b>Procedure</b>	Art. 124: consult EBA Art. 164: notify EBA	CAs will notify the EBA.	DAs will notify each quarterly setting to the ESRB.	n/a. The capital conservation buffer is mandatory.	O-SII: notify EBA, ESRB and Commission one month in advance.	- SRB up to 3%: notify ESRB, EBA, Commission and the MS concerned one month in advance. - SRB between 3% and 5%: notify ESRB, EBA, Commission and the MS	EBA/ESRB: Opinion within one month Commission: one month Council: one month

						concerned one month in advance and await the decision of the Commission before adopting the measure. ESRB and Commission issue an Opinion.	
<b>Notifi- cations/ Trans- parency</b>	EBA is consulted/ notified.	EBA is notified. EBA will monitor.	ESRB is notified and will publish on its website. EBA is notified about exemptions.	EBA is notified about exemptions.	EBA is notified one month before the CA/DA sets an O-SII buffer. The CA/DA notifies EBA of the names of the G/O-SIIs and the respective sub- categories.	CA/DA announces on its website the SRB rate, the institutions to which it applies and a justification. The justification may be dropped for financial stability reasons.	EBA is notified, EBA provides an Opinion.
<b>Micro/ Macro prudential measure</b>	Both	Both	Macro	Macro	Macro	Macro	Macro
<b>Hierarchy?</b>	Before Art. 458 CRR.	Before the SRB and before Art. 458 CRR.	n/a	n/a	n/a	After Art. 124/164 CRR, CCB, cap cons buffer, G/O-SII, Pillar 2, and before Art. 458 CRR.	After Art. 124/164 CRR, Pillar 2, SRB and CCB.
<b>Reciprocity</b>	Yes, mandatory.	n/a	Mandatory up to 2.5%. Voluntary for CCBs in excess of 2.5%.	n/a	n/a	Voluntary.	Voluntary.
<b>CA or DA?</b>	CA	CA	DA is responsible for setting the CCB (Art. 136(1) CRD). The CA or DA is responsible for the decision on exemptions of the	The CA or DA is responsible for the decision on exemptions (Art. 129(3) CRD). The CA will be notified in case	CA or DA	CA or DA	CA or DA

			buffer (Art. 130(3) CRD).	an institution fails to meet the combined buffer requirement and intends to make a distribution (Art. 142 CRD). Capital conservation plans need to be submitted to the CA.			
<b>Assessment base</b>	n/a	Not mentioned.	A percentage of the total risk exposure amount. The institution-specific countercyclical capital buffer will consist of a weighted average of the countercyclical buffer rates that apply in the jurisdictions where the relevant credit exposures of the institutions are located.	Will consist of CET1 capital equal to 2.5% of the total risk exposure amount.	Art. 131(4) CRD: G-SII buffer will consist of and will be supplementary to CET1 capital. Art. 131(5) CRD: O-SII buffer of up to 2% of the total risk exposure amount. The buffer will consist of and will be supplementary to CET1 capital.	Exposures located in the MS that sets the buffer rate may apply to exposures in other MS and may apply to exposures in third countries.	Depends on the measure taken.
<b>Level of application</b>	n/a	Not mentioned	Art. 129(1) CRD: on an individual and consolidated basis	Art. 130(1) CRD: on an individual and consolidated basis	Art. 131(4) CRD: each G-SII will maintain a G-SII buffer on a consolidated basis. Art. 131(5): each O-SII may be required on a consolidated or sub-consolidated or individual basis.	Art. 133(3) CRD: on an individual, consolidated or sub-consolidated basis. The CA or DA may require institutions to maintain the SRB on an individual and on a consolidated level.	Depends on the measure taken.



<b>What if the requirement is not met?</b>	Supervisory measures	Supervisory measures	Restrictions on distributions apply, set out in Art. 141(2) and (3).	Capital conservation measures (Chapter 4, Section III in CRD)	Supervisory measures	Restrictions on distributions apply, set out in Art. 141(2) and (3). If this is insufficient to address the systemic risk, the CA may take additional supervisory measures.	Not specified, depends on the measure taken.
<b>Similar measure at Basel?</b>	No mention of financial stability considerations.	Yes, although the explicit use for macroprudential purposes is not specified.	Yes	Yes	Yes	No	No