

EUROPEAN MORTGAGE FEDERATION-EUROPEAN COVERED BOND COUNCIL (EMF-ECBC)

Position Paper

13 May 2019

Implementation of the Basel III Output Floor in the EU

EMF-ECBC Proposal

The finalisation of Basel III agreed on in December 2017 introduces a new floor on the capital requirement for banks using Internal-Risk-Based (IRB) methods. This so called “output floor” is a capital requirement calculated by applying risk-weighted assets (RWA) that are no lower than 72.5% of RWA as calculated by the Basel III framework's standardised approaches.

As a general principle, the European mortgage industry does not believe that the output floor is necessary in the EU as a result of existing requirements that already serve as a back-stop to capital requirements, notably the leverage ratio. The output floor furthermore penalises European banks at international level compared to other jurisdictions, notably the US, as a result of their originate-to-hold balance sheets and the substantial share of low-risk mortgage assets in their portfolios.

If the output floor is implemented into European legislation, it should be **applied at the highest level of consolidation** and the output floor capital requirements should not include any additional European or supervisory capital requirements going beyond the minimum requirements included in the definition of the output floor in the finalisation of the Basel III framework.

Specifically, we propose that, if the output floor is included in the EU financial legislation, it should be implemented as one of three **parallel** capital requirements:

- (1) The risk-based requirement applying RWA calculated using approved internal models and standardised approaches as applicable (based on all EU and nationally set requirements);
- (2) The output floor requirement applying RWA calculated as 72.5% of RWA using standardised approaches only (based on Basel III requirements only)
- (3) The leverage ratio requirement

All three capital requirements should be fulfilled. The constraining capital requirement (the requirement that results in the highest own fund requirement) will be decisive for the risk sensitivity of the capital requirement framework for the bank.

Key Industry concerns

1. Representing the views of the European Mortgage industry, we fundamentally regard the output floor in Basel III as unnecessary for European banks. The leverage ratio is an adequate backstop to risk-based capital requirements in order to prevent excessively low capital levels. Recent developments in the regulatory framework on the use of internal models, including new restriction in the final Basel standard, address the potential unwarranted variability and lack of comparability in the use of internal models.
2. European banks, including large banks using internal models, typically have a different composition of their balance sheet compared to large banks in other jurisdictions across the globe. In terms of mortgage lending, an important characteristic of EU banks is the fact that loans mainly remain on lenders' balance sheets, whereas in other markets, notably in the United States (US), mortgage lending is in large part removed from lenders' balance sheets by way of securitisation ("originate to distribute" model), and US mortgage lenders have access to Fannie Mae and Freddie Mac to free up their balance sheets. In addition, most public sector funding in the US is channelled via bond markets rather than intermediated by banks as in the EU. This means that balance sheets in the US are much smaller than in the EU. This on-balance characteristic entails a relative penalisation of "originate to hold" models vis-à-vis "originate to distribute" models. It is also worth noting here another fundamental difference between the EU and US models which underlines the different risk profiles of their respective mortgage lending activities i.e. the practice of non-recourse lending in many US States, compared to the situation in the EU, where recourse to borrowers' private assets is a cornerstone of the mortgage lending business.
3. Because the standardised approach for credit risk only summarily reflects the actual risk associated with these loans, European banks using the Internal Rating Based approach for credit risk will potentially be heavily affected by a floor on the risk weighted assets based on the standardised approach. Moreover, if the output floor is applied at sub-consolidated level it would hit, in particular, affiliated entities within groups that are specialised, and therefore do not benefit from the diversification underpinning the calibration of Basel ratios. The consequences would also be that some group entities may then be submitted to additional and specific operational cost: prudential processes specific to the output floor, capital instruments issuances, accounting and fiscal processes.
4. With these considerations in mind, we are all the more concerned about the negative consequences that a gold plating of the output floor calculation can have on the European banking industry in the context of the implementation of Basel III finalisation in European legislation. The European regulation includes additional capital requirements that go beyond the minimum capital requirements set in the Basel III framework and these additional EU capital requirements are not included in the output floor as described in the Basel III framework. Hence, they should not form part of any implementation of the output floor in Europe.
5. If the output floor is implemented in Europe in a way that includes the additional European capital requirements in the calculation it would fundamentally change the European capital requirement framework. The output floor would not act as a backstop affecting only outlier banks as intended. The result would be a severe loss of risk-sensitivity in the capital requirements for a wide section of European IRB banks and a substantial increase in overall capital requirements compared to their counterparts worldwide. This would especially affect the core lending activity of low-risk European mortgage lenders. Hence, such implementation would violate the overall target that the amended Basel III capital requirements should not trigger significant capital increases in general. It could furthermore result in the creation of an un-level playing field between the EU and US and negatively affect EU banks' competitiveness.
6. Finally, less risk sensitive capital requirements weaken the incentives for IRB banks to lend to low risk customers and increase the incentives for high-risk lending. This can put upward pressure on the cost of mortgage lending for both households and corporates, and ultimately have negative consequences for financial stability.

POSITION PAPER ON THE IMPLEMENTATION OF THE OUTPUT FLOOR IN THE EU

The output floor in the final Basel III standard introduces a new floor on the capital requirement for banks using internal models. The output floor capital requirement is calculated by applying risk weighted assets floored at 72,5 % of risk weighted assets using the standardised approaches.

Fundamentally we regard the output floor as unnecessary. The leverage ratio is more than an adequate backstop to risk-based capital requirements for credit risk in order to prevent excessively low capital levels. Furthermore, recent developments in the regulatory framework on the use of internal models from EBA and ECB, including new restriction in the final Basel standard, address the potential unwarranted variability and lack of comparability in the use of internal models.

If the output floor is implemented into European regulation, we would recommend an approach where it is implemented as a parallel additional capital requirement, based on the minimum capital requirements set in the Basel III framework describing the output floor, as illustrated in section 2.1, without additional EU capital requirements. With this approach, the output floor would work as back stop capital requirements for bank using internal models, and thus preserving a risk sensitive capital requirements framework, for most European IRB banks.

This paper also outlines other approaches to the implementation of the output floor that are considered. We show that if the output floor is applied to the calculation of the capital requirements based on all existing European and nationally implemented capital buffer requirements, including those that go beyond the minimum requirements defined in the Basel framework ("full RWA output floor" detailed in section 2.2), it results in a substantial and harmful increase in capital requirements for a typical European IRB bank. The output floor capital requirement using this approach would be binding for a large proportion of the European banks using internal models and not work as a back-stop capital requirement affecting only outlier banks¹. In our view, this approach would be gold plating the Basel output floor requirement and introduce a competitive bias within the industry between Europe and the rest of the world, more particularly the United States². The risk sensitivity of the capital requirement framework will be very significantly reduced. We also show that a modified version of this approach, the "hybrid RWA output floor" in section 2.2, would only result in a minor reduction in the over capitalisation resulting from the "full RWA output floor", and risk sensitivity of the capital framework would still be significantly reduced.

1. CAPITAL REQUIREMENTS WITHOUT AN OUTPUT FLOOR

Under the CRR/CRD rules the own funds of European banks must fulfil all the following EU minimum **risk-based** capital requirements cumulatively (Items 3 to 6 must be met by CET1 capital):

1. Pillar 1: 8 % of RWA (CET1 at least 4.5%, Tier 1 at least 6 %)
2. Pillar 2 Supervisory Review and Evaluation Process (**SREP**) add-on
3. Capital conservation buffer (2.5% of RWAs) (**CCB**)
4. Possible institution-specific countercyclical capital buffer (**CcyB**)
5. Possible buffer for systemically important banks (The higher of the **O-SII buffer and possible G-SII buffer**: up to 3% of RWAs)
6. Possible additional **systemic risk buffer** (normally 1% to 3% of RWA)

The Pillar 2 add on is set by national supervisors according to different supervisory practices. The O-SII buffer in item 5 and the systemic risk buffer in item 6 are EU specific buffer requirements which are not defined the Basel capital framework.

¹ See empirical evidence on the EBA Basel III Monitoring Exercise p.14

<https://eba.europa.eu/documents/10180/2551996/Basel+III+Monitoring+Exercise+Report+-+data+as+of+30+June+2018.pdf>

² See empirical evidences on the BIS Monitoring Exercise (Graph 25 p.31) <https://www.bis.org/bcbs/publ/d461.pdf>

When CRR 2 takes effect, a non-risk-based requirement; the **leverage ratio (LR)** set at 3% of the total leverage exposure measure, will also have to be met, with an additional Leverage ratio buffer for G-SIIs. The leverage ratio requirements must be met by Tier 1 capital.

Figure 1 illustrates the CRR/CRD-capital requirements. The numbers are derived from the nominal example shown in the textbox. For the sake of simplicity, the systemic risk buffer is omitted, and we assume no Tier 2 capital. The example is based on a non-globally systemically important bank (G-SII-buffer = 0%)³.

Example shown in figures in text:

Risk Weighted Assets (RWA) using internal models (unfloored): €500

RWA using standardised approaches only: €828

RWA floored of 72,5 % of RWA using standardized approaches only: €600

Total leverage exposure measure: €2000

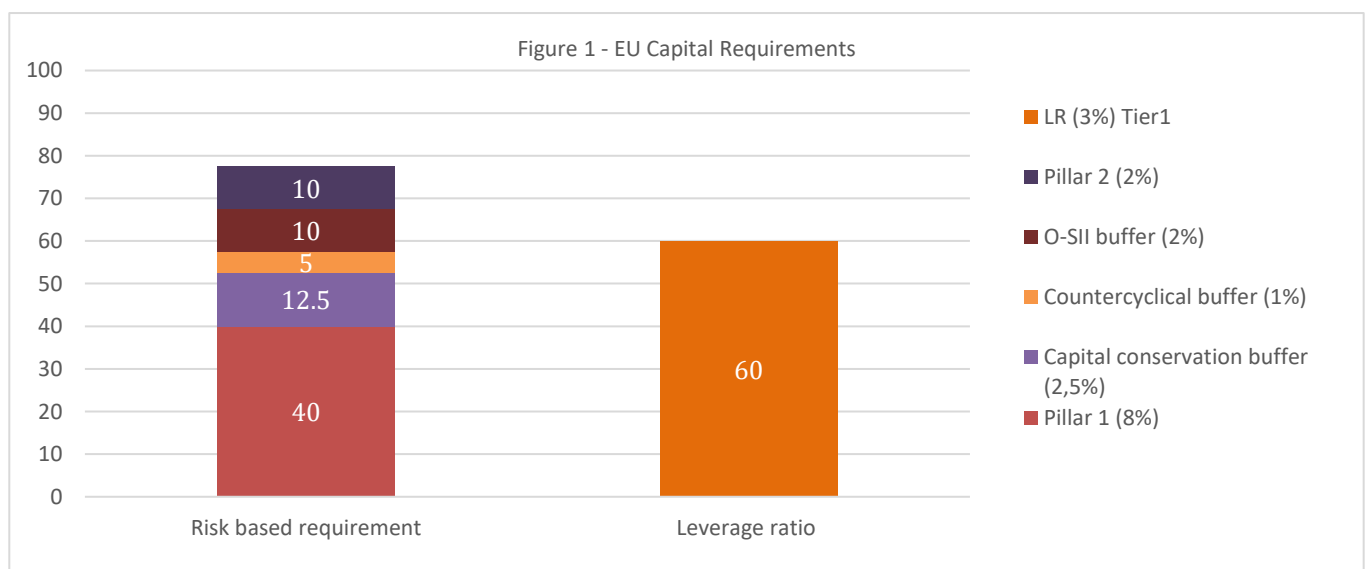
Total own funds €100

Actual capital ratio based on RWA using internal models (unfloored): 20 %

Actual capital ratio based on RWA floored at 72,5 % of RWA standardised approach: 16,7%

Basel capital ratio requirement: 11,5 % - assuming: 8% (Pillar 1) + 2,5 % (capital conservation buffer) + 1% (countercyclical buffer)

Additional EU capital ratio requirements 4 % - assuming 2 % (O-SII buffer) + 2 % (Pillar 2)



³ The separate risk-based capital requirements are calculated on the basis of unfloored RWA of €500 and the separate capital ratios. This results in a Pillar 1 requirement of €40 (8% of €500), capital conservation buffer of €12.5 (2.5% of €500), countercyclical buffer of €5 (1% of €500), O-SII buffer of €10 (2% of €500) and Pillar 2 of €10 (2% of €500). The leverage ratio requirement of €60 is calculated as 3% of €2000 total leverage exposure measure.

2. IMPLEMENTING THE OUTPUT FLOOR IN THE EU CAPITAL REQUIREMENT FRAMEWORK

The Output floor requirement is described in the final Basel III framework in page 137-138. According to paragraphs 2 and 3, non-global systemically important banks must meet the following capital requirements:

1. Pillar 1: 8 % of RWA (CET1 at least 4.5%, Tier 1 at least 6 %)
2. Capital conservation buffer (additional CET1 capital of 2.5% of RWAs)
3. Possible institution-specific countercyclical buffer.

The RWAs used to determine compliance with these requirements are calculated as the higher of:

- the RWAs calculated using internal models approved by supervisors or by standardised approaches (RWA “unfloored”)
- 72.5% of RWAs calculated using standardised approaches only (RWA floored).

Different ways of implementing the output floor in the EU are being considered: They include an application of the RWA floor on all EU capital requirements (full RWA output floor), an application of the RWA floor on Basel III requirements and adding additional EU-specific requirements with no floor (hybrid RWA output floor) and an application of the output floor as a parallel capital ratio requirement based on Basel III capital requirements only. **We strongly advocate to consider an application of the output floor as a parallel capital ratio requirement based on Basel III capital requirements only.**

2.1. The output floor as a parallel capital ratio requirement

In this approach, the output floor is simply treated as a **separate additional capital ratio requirement based on Basel capital requirements only**:

- Output floor capital requirements ratio: Basel minimum capital ratio (i.e. 11.5 % for non-G-SIIs)
- Actual output floor capital ratio: Own Funds/RWA as 72,5 % of SAs (i.e. 16.7 % in textbox)

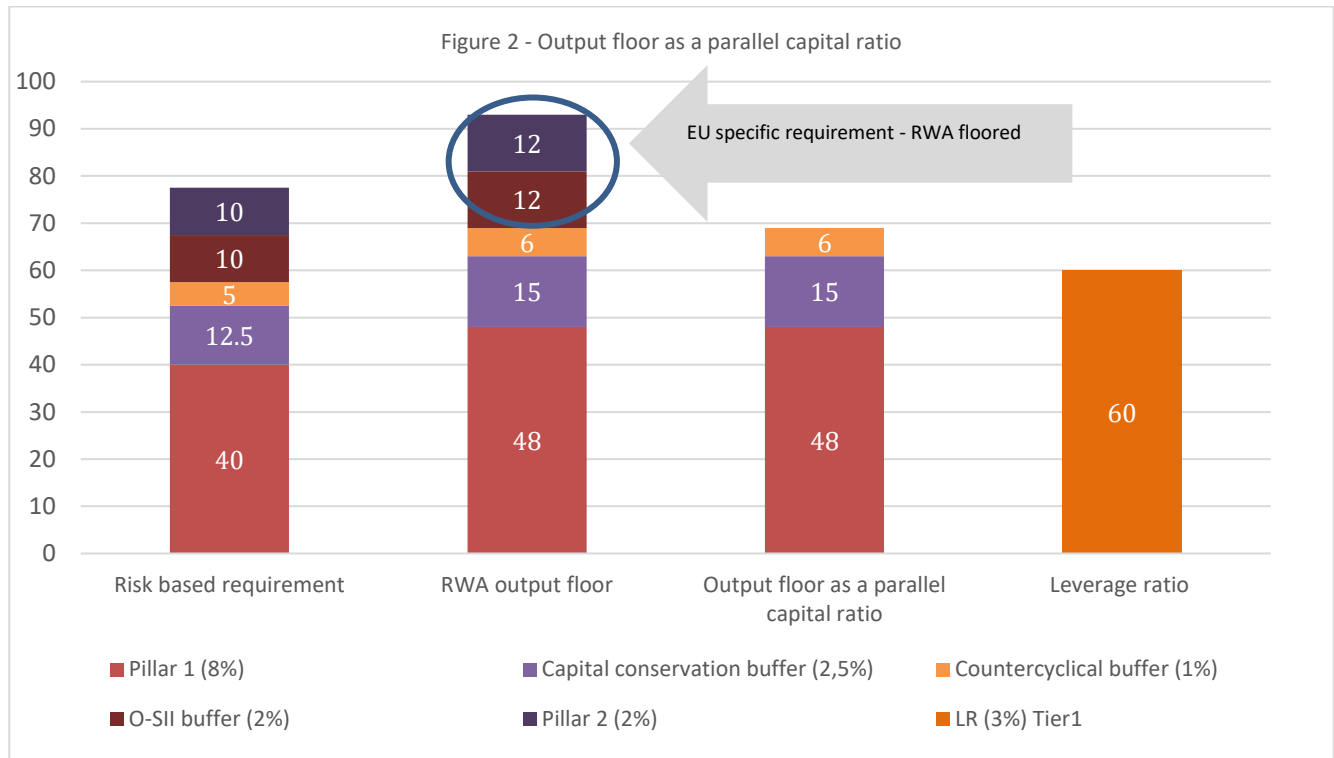
Under this approach, a bank would have to calculate and disclose the following three requirements. All three capital requirements should be fulfilled:

- 1) The risk-based requirement using approved internal models and standardised approaches as applicable (based on all EU and nationally set requirements)
- 2) The output floor requirement applying RWA as 72.5% of RWAs using standardised approaches only (based on Basel III requirements only)
- 3) The leverage ratio requirement

This implementation can be inferred from the Basel Committee’s accord text, para 1 of the dedicated output floor section. The text states that the output floor “will ensure that banks’ capital requirements do not fall below a certain percentage of capital requirements derived under standardised approaches. Indeed, within this implementation, the constraining capital requirement (the requirement that results in the highest own fund requirement) will be decisive for the risk sensitivity of the capital requirement framework for the bank.

Figure 2 illustrates the effect of the output floor as a parallel capital ratio requirement working as a backstop. When comparing the risk based capital requirement (the first column), the output floor as a parallel capital ratio (the third column) and the leverage ratio (the fourth column), the risk based capital requirement is the highest and would be the constraining

capital requirement (in the example we have for the sake of simplicity assumed a bank with no Tier 2 capital, thus easing the comparison with the leverage ratio requirement)⁴.



With this approach, significant increases in capital requirements for most EU IRB banks could be avoided and any potential over capitalisation not based on risk would be limited to actual outlier banks. This would be in alignment with the intention of the final Basel III framework not to give rise to significant increases in capital requirement. Furthermore, the additional complexity of this approach will be modest, similar to introducing the additional leverage ratio requirements for banks.

This implementation would be fully compliant with the aim of the output floor in Basel Committee framework and result in the output floor working as a capital backstop for most European banks as intended, rather than the constraining requirement. **It will, in a significant way, minimise the detrimental effects of the implementation of an output floor in Europe.** Furthermore, it would also make it possible for authorities that wish to increase capital requirement buffers for banks in their jurisdiction to keep capital requirements fully risk-based.

2.2. The full RWA output floor and the hybrid RWA output floor approaches

Based on the example in the textbox, figure 3 illustrates the effect of the full RWA output floor and the hybrid RWA output floor.

⁴ The "Output floor as a parallel capital ratio" in the third column is calculated based on floored RWA of €600 and the separate capital ratios. This results in a Pillar 1 requirement of 48 (8% of 600), capital conservation buffer of €15 (2.5% of €600) and countercyclical buffer of €6 (1% of €600). The "RWA output floor" in the second column is calculated based on a floored RWA of €600 and the separate capital ratios. This results in a Pillar 1 requirement of €48 (8% of €600), capital conservation buffer of €15 (2.5% of €600), countercyclical buffer of €6 (1% of €600), O-SII buffer of €12 (2% of €600) Pillar 2 of 12 (2% of €600).

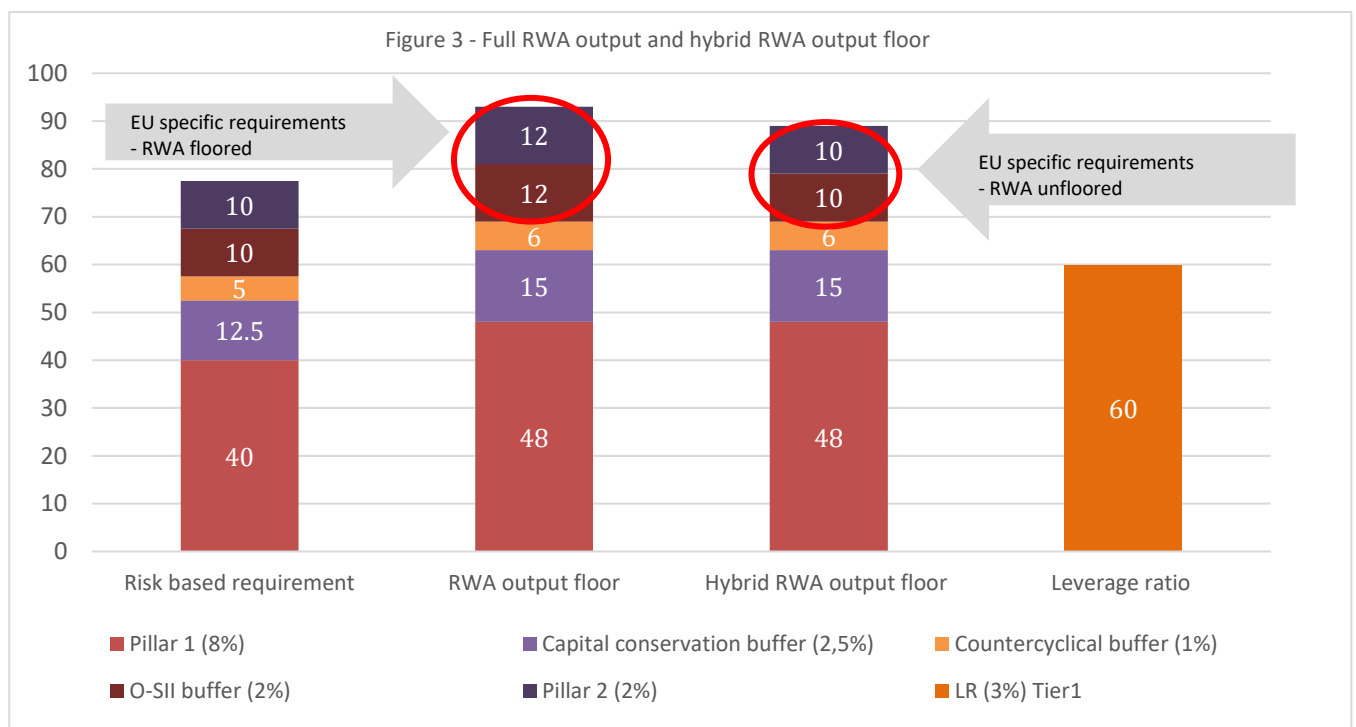
With the application of the full RWA output floor (the second column) the capital requirements resulting from Pillar 1, the buffers and the SREP add-ons (Pillar 2) would all rise significantly. In the example the capital requirement would rise 20% above the fully implemented risk-based requirements under the final Basel III framework if no output floor is applied.

The risk sensitivity of the capital requirements from internal models would be eliminated. If the output floor is implemented in Europe in a way that includes the additional European capital requirements in the calculation of the output floor capital requirement, the example shows that it could be binding requirement for a typical European IRB bank and not work as a backstop capital requirement, only affecting outlier banks as intended.

Arguably, this implementation would represent a “gold plating” of the Basel standards. The EU specific elements are SREP add-ons (Pillar 2), O-SII buffer and the systemic risk buffer. These go beyond the capital requirements in the Basel framework, and should therefore not be used for the calculation of the output floor requirement.

The third column in figure 3 illustrates the effects of the hybrid RWA output floor. The floored RWA is in this approach applies only to the capital requirements explicitly covered by the Basel framework. This application of the output floor would increase the capital requirement from Pillar 1, the capital conservation and countercyclical buffer, while the EU-specific requirements (the O-SII buffer and the SREP add-on) would not be affected by the floor.

As shown in figure 3, the hybrid RWA output floor only gives a minor reduction of the capital requirement compared to the application of a full RWA output floor. The hybrid RWA output floor still includes the additional EU capital requirements in the output floor calculation. The floor could still be the binding requirement for a typical European IRB bank, and thus not work as a backstop requirement for outlier banks as intended.⁵ The risk sensitivity of the capital framework would be very significantly reduced under this approach.



⁵ The “RWA output floor” in the second column is calculated based on a floored RWA of €600 and the separate capital ratios. This results in a Pillar 1 requirement of €48 (8% of €600), capital conservation buffer of €15 (2.5% of €600), countercyclical buffer of €6 (1% of €600), O-SII buffer of €12 (2% of €600) Pillar 2 of 12 (2% of €600).

The “Hybrid RWA output floor” in the third column is calculated based on a floored RWA of €600 for Pillar 1, capital conservation buffer and countercyclical buffer. O-SII buffer and Pillar 2 are calculated based on the unfloored RWA of €500. This results in a Pillar 1 requirement of €48 (8% of €600), capital conservation buffer of €15 (2.5% of €600), countercyclical buffer of 6 (1% of €600), O-SII buffer of €10 (2% of €500) and Pillar 2 of €10 (2% of €500)