BRIEFING

# Upgrading the Basel standards: from Basel III to Basel IV?

*The briefing first describes the evolution of the Basel framework since the first standards were enacted, and describes the ongoing revisions of the Basel III framework. Finally the main findings of different impact assessments are reminded, as well as the different positions of various stakeholders. This is regularly updated.*

## From Basel I to Basel III

Over the last decades, banking regulatory capital requirements have changed substantially. In 1988, the first Basel Accord introduced an international standard to compute banks regulatory capital. Today, nearly 30 years later, the Basel Committee on Banking Supervision (BCBS) (see Box 1) is preparing what has already been coined by some as 'Basel IV'. Over the years, capital standards drafted by the BCBS have shifted from simplicity to risk-sensitivity.

### Basel I

- Defined in 1988, this first Basel Accord had three objectives, according to the BCBS itself:
    - to make sure banks held sufficient capital to cover their risks;
    - to level the playing field among international banks competing cross-border;
    - to facilitate comparability of the capital positions of banks.

Basel I included a definition of eligible capital and a set of simple risk-weights, depending essentially on the institutional nature of banks' counterparts and not on the intrinsic risks. Basel I focused on credit risk. In 1996 it was updated to include a market risk component. At this occasion and for the first time within the Basel framework, the recourse to internal models by banks was allowed.

**Table 1: Basel I risk metrics**

| Counterparts | Sovereigns | Banks | Mortgages | Corporates |
|---|---|---|---|---|
| Risk-weights | 0% | 20 % | 50 % | 100 % |

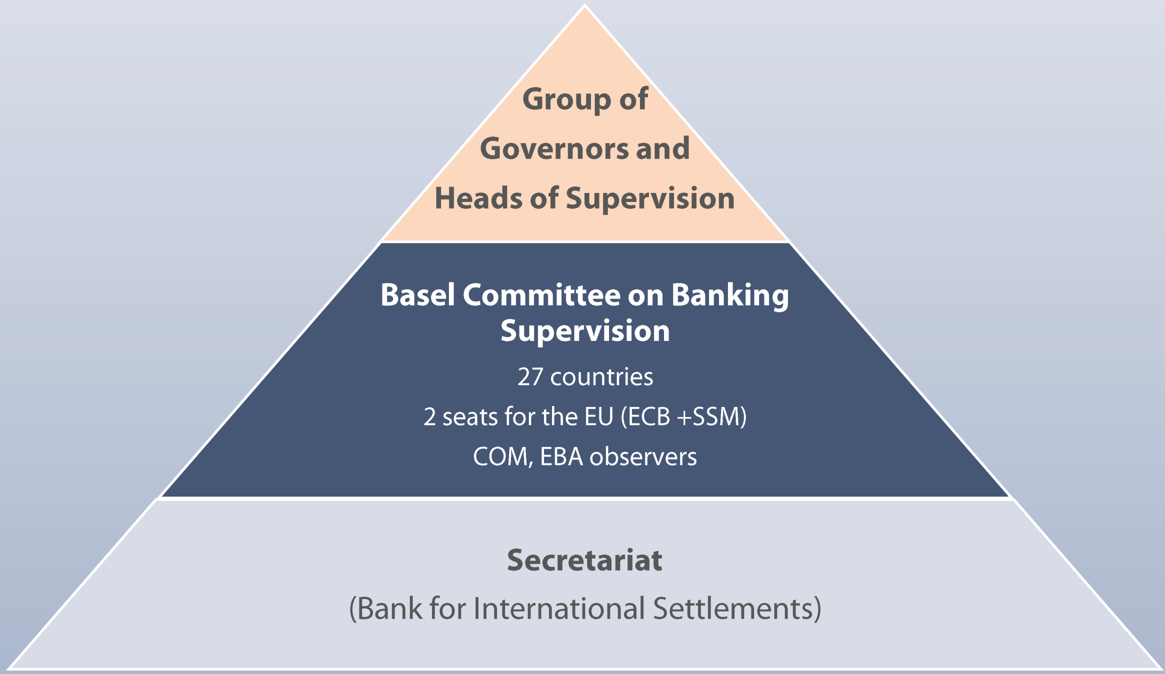
Source: BCBS, 1988

ECONOMIC GOVERNANCE SUPPORT UNIT
Authors: M. Magnus, A. Margerit, B. Mesnard, A. Korpas
Directorate-General for Internal Policies
PE 587.361 - October 2017

EN

**Box 1: The governance of the BCBS**

The BCBS was established in 1974. Its seat is in Basel (Switzerland) and its secretariat is provided by the Bank for International Settlements (BIS). The members of the BCBS are central banks and banking supervisors from 28 jurisdictions around the globe (essentially the G20 countries and a few additional founding countries, including Switzerland). Currently 9 Member States sit in the BCBS (BE, FR, DE, IT, LU, NL, ES, SE, UK) alongside the ECB which represents the EU. The ECB holds two seats as it represents the EU in both its central banking and supervisory capacity (SSM). The Commission and the European Banking Authority are invited as observers.




The Basel Committee, currently chaired by Stefan Ingves, the governor of the central bank of Sweden relies on a number of working groups. It reports for critical decisions to an oversight body, the Group of Governors and Heads of Supervision (GHOS). The GHOS is currently chaired by Mario Draghi, the President of the ECB.

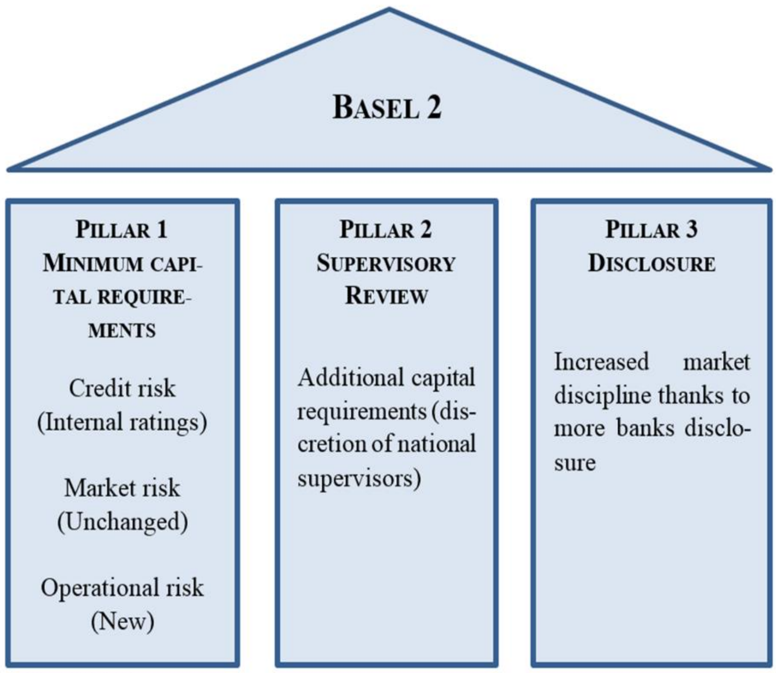
*Source: BCBS; See also Policy Department In-Depth Analysis:* The European Union's role in International Economic Fora, Paper 5: The BCBS

The European Parliament has underlined the importance of a more integrated EU representation in international bodies as well as the necessity of a better coordination of Member States' positions in its resolution on 'The EU role in the framework of international financial, monetary and regulatory institutions and bodies', adopted on 12 April 2016.

## Basel II

Introduced in 2004, the Basel II package introduced a number of changes in the framework. It relied heavily on self-regulation and market discipline. It was built on three pillars. As part of pillar 1, operational risk was added alongside credit risk and market risk for the computation of the capital ratio. Greater reliance on banks internal models was allowed when assessing risk. Pillar 2 corresponded to the supervisory review process whereby supervisors were entitled to impose higher capital requirements on top of pillar 1 requirements based on supervisory judgement. Basel II also introduced disclosure and market discipline principles as part of its pillar 3.

**Figure 1: Basel II three pillars**

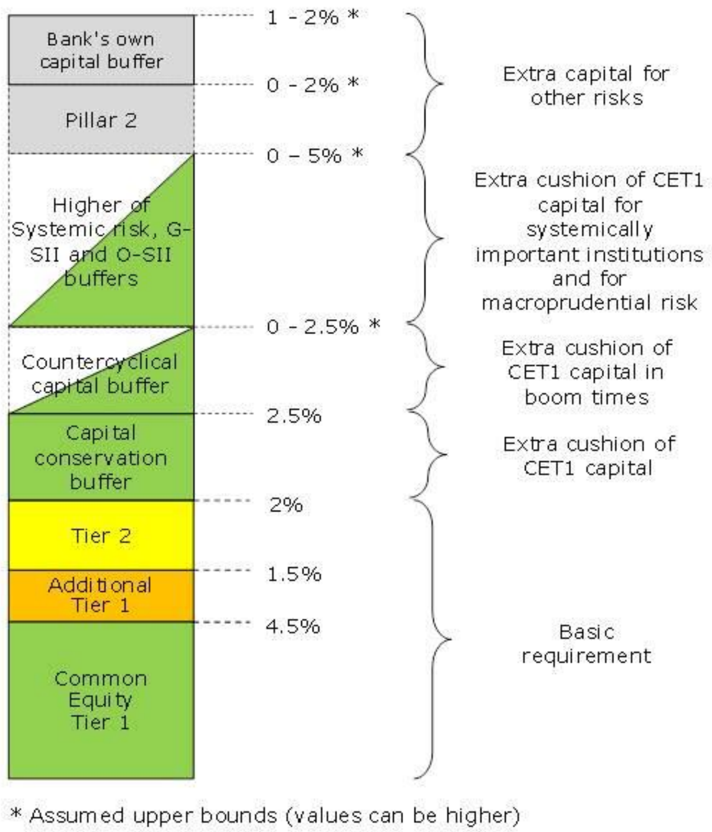



*Source: BCBS*

## Basel III

The 2008 financial crisis triggered another wave of reform of capital requirements. Both the quantity and quality of capital were increased compared to Basel II requirements. The framework also introduced elements of countercyclicality with the countercyclical capital buffer and imposed higher capital requirements to systemically important institutions. A non-risk based leverage ratio was introduced as well as two liquidity ratios, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). An overview of the adoption of Basel III in the European Union is provided in Annex 1 (See also [European Parliamentary Research Service Briefing: The cost of banking - Recent trends in capital requirements](), July 2016).

**Figure 2: Basel III capital requirements**




Source: European Commission

## Main revisions of the Basel III framework

The BCBS initiated in 2012 a comprehensive review of the risk-weighted capital framework, aiming at finalizing the Basel III reform package and ensuring its consistent implementation, "*which will help strengthen the resilience of the global banking system, maintain market confidence in regulatory ratios and provide a level playing field for banks operating internationally*". The Regulatory Consistency Assessment Programme (RCAP) looked at the timely and consistent implementation of the Basel framework, and focussed on the consistent calculation of risk-weighted assets under the new framework.

The BCBS analysed separately the banking book, the trading book[1] and operational risk. On the basis of quantitative / qualitative analysis and extensive consultations, the BCBS proposed several amendments to the Basel III framework. Those proposals are described below.

On the 13th of October 2017, the Secretary General of BCBS, William Coen gave a speech at the IIF Annual Membership Meeting in Washington DC. The speech provided an update over BCBS' latest work noting that the BCBS was close to finalising the set of reforms. The speech mentioned in particular progress as regards:

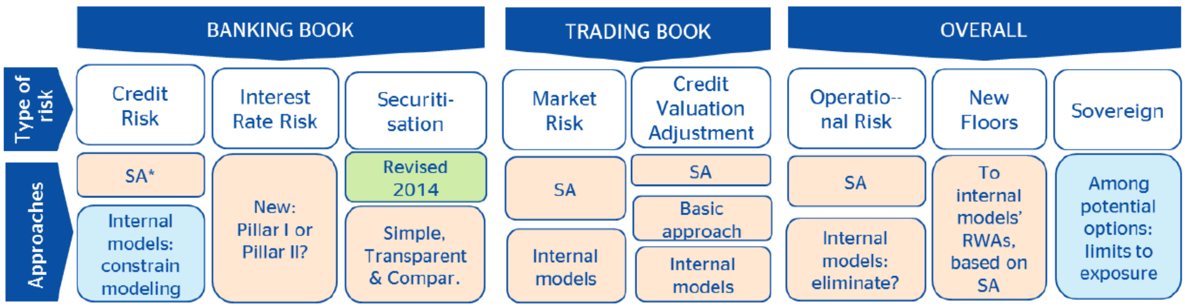
i. Discussion over the NSFR and agreement on national discretion for the NSFRs treatment of derivative liabilities;

ii. Further progress on *step-in* risk (i.e. the risk that a bank will provide financial support to an off-balance sheet entity, beyond its contractual obligations, if that entity gets into difficulties).

iii. Getting closer to an agreement on capital-output floors;

iv. The publication of the 13th progress report on the adoption of the Basel regulatory framework.

**Figure 3: Main revisions to the Basel III framework**




Source: BBVA Research

[1] The banking book includes all exposures which are not actively traded by the bank and that are expected to be held until they mature. They are generally accounted for at historical cost, meaning they are not marked to market. By contrast, the trading book includes exposures which are held with an aim at reselling those instrument at a later date: since the remuneration of the bank is also heavily reliant on the profit/loss booked by the bank upon sale of the instrument, they are usually booked at market value. The risk management of the banking books therefore focusses on the credit risk (probability that the bank does not recover the entirety of interests and principal), liquidity risk (maturity mismatch between assets and liabilities) and interest rate risk (sensitiveness of assets and liabilities to variations in interest rates), while for trading books risk management focusses on variations in market values, which depend on various drivers.

## *Capital floors*

**What was the problem?**

The BCBS started a review of the capital floors. Under the current framework, capital requirements cannot be lower than a floor calculated on the basis of the Basel I framework. However this framework is now obsolete as, for example, some banks have never been subject to it. In addition, the new leverage ratio also acts as a floor on the calculation of capital requirements, albeit it does not address the same issues (see figure 4).

**What is the proposal?**

One option considered is to set an aggregate *output* floor to be calibrated on the basis of the new standardised approaches adopted respectively for the calculation of credit risk, market risk and operational risk. Such floor would typically be set at 60-90% of RWA as calculated under the standardised approach. However other options such as the calculation of floors at more granular levels are also being assessed.

**Figure 4: Issues addressed by capital floors and leverage ratios**

| Issue | Addressed by risk-weighted capital floor | Addressed by the leverage ratio |
|---|---|---|
| • Use of low RWAs to boost financial leverage | No | Yes |
| • Unexpectedly large losses in low-RWA portfolios | No | Yes |
| • Lack of market confidence in RWAs | No | Yes |
| • RWA inconsistency and dispersion | Yes | No |
| • Low level of models-based RWAs | Yes | No |
| • Horizontal inequity in risk-weighted capital | Yes | No |

Source: BCBS (2014, p.5)

**Where do we stand?**

Given the impact of output floors on the level of capital requirements, the BCBS had indicated in its consultative document on "Reducing variation in credit risk-weighted assets - constraints on the use of internal model approaches" that the final design and calibration would be done at a later stage on the basis of a comprehensive quantitative impact study. Therefore the overall issue of interactions between input floors, output floors and the leverage ratio is currently under discussion within the BCBS, which plans to address it when finalizing its global review of the Basel III framework.

## *The Fundamental Review of the Trading Book*

**What was the problem?**

In January 2013 the BCBS analysis of risk-weighted assets for market risks highlighted considerable variation in average published RWA based on the market risk framework, while external analysts could not accurately assess to what extent such variations were linked to diverging risk profiles or to other factors. In particular supervisory decisions as well as modelling choices were crucial in explaining variations in RWA calculations. In addition, the theoretical concept of Value-at-Risk (VaR), the blurred boundary between banking and trading books, and treatment of credit and liquidity risk in trading book positions were seen as structural weaknesses of the Basel III framework[2].

**What is the proposal?**

The new standards for minimum capital requirements for market risks include a number of amendments as listed below:

- a revised internal models approach, with an enhanced process for supervisory approval as well as a stricter assessment of hedging and diversification impacts. The theoretical concept of VaR was replaced by the Expected Shortfall (ES) which better captures tail risk.

- a revised standardised approach, which was made more risk-sensitive;

- a greater focus on liquidity risk both under the internal models approach and the standardised approach, with varying liquidity horizons factored in the calculation.

- a more objective boundary between banking books and trading books in order to reduce regulatory arbitrage.

In addition, the BCBS proposed in July 2015 to review the framework for credit valuation adjustment (CVA) risk: Under the Basel II market risk framework, banks had to hold capital against the variability in the market value of their derivatives in the trading book, but there was no requirement to hold capital against changes in the financial standing of the issuer of those derivatives, although during the financial crisis some changes in the financial standing of issuers turned out to be a major source of losses in the derivatives portfolios (via fair value adjustments). The goal of the review was to ensure better consistency with the overall framework covering the trading book as well as with accounting rules and industry practices.

**Where do we stand?**

The final standards on market risk were published on 14 January 2016 and will come into effect on 1 January 2019 (bank reporting by end 2019). The package of banking reforms proposed by the Commission on 23 November 2016 implements those standards into EU Law, with few deviations to cater for the specificities if the EU economy (see box 1).

Regarding CVA, a consultative paper was published on 1 July 2015, and further proposals were introduced in the March 2016 consultative document on "Reducing variation in credit risk-weighted assets - constraints on the use of internal model approaches".

[2] PriceWaterhouseCoopers, Quo Vadis "Basel IV"

## *The review of the Banking Book: IRBB, securitisation, Standardised Approach, IRB models*

**What were the problems?**

The aim of the banking book review is very similar to the aim of the trading book review: to ensure maximum consistency in risk-weight calculations across banks and jurisdictions, and ensure standardised approaches are sophisticated enough to be used as credible backstops when internal models are not fit for purpose. In addition, the treatment of securitization was deemed insufficient particularly as regards the calibration of risk-weights and the lack of incentives for proper risk management.

**What are the proposals?**

First, the BCBS has again assessed whether the interest rate risk of the banking book should carry a Pillar 1 requirement (minimum level to be complied with by all institutions) or a Pillar 2 requirement (bank specific add-on). The new standards update the principles governing the management of interest rate risk in the banking book, with more extensive guidance, stricter supervision, and enhanced disclosure requirements, but falls short of imposing pillar 1 requirements on interest rate risk.

On securitisation, the BCBS has reviewed and simplified the overall framework, with a new hierarchy of approaches, a lower reliance on external ratings, and a significant increase in requirements. In addition, the framework was amended to factor-in the Simple, Transparent and Comparable (STC) securitisation criteria as defined by the BCBS and the International Organization of Securities Commissions (IOSCO), leading to a reduction in the risk weight floor for senior exposures from 15% to 10%.

The review of the standardised approach has focussed on improving the risk-sensitiveness of the measurement while avoiding excessive reliance on external ratings. To start with, some categories of exposures have been excluded from the scope of internal rating based (IRB) modelling, in order to avoid too much variability (banks, large corporates, specialized lending, equity). The use of external ratings would also be subject to the bank carrying out due diligence on the counterparty. The revised standardised approach introduces new risk drivers for unrated exposures as well as residential mortgages and commercial real estate. One consequence would be to increase capital requirements on mortgages with loan-to-value (LTV) ratios of more than 0.8 or when the repayment relies on cash flows generated by the property, while decreasing requirements for those with low LTV ratio (below 0.4).

For the internal models, floors would be introduced on key parameters such as the probability of default (PD), the exposure at default (EAD), and the loss given default (LGD). The modelling of PD would be stable over time to reduce cyclicality, while a number of amendments to the modelling of all parameters aim at improving the comparability between banks.

**Where do we stand?**

The standards on interest rate risk in the banking book were published in April 2016, and shall be implemented by 2018 (on the basis of data as of 31 December 2017).

The revision of the securitization framework was finalised in December 2014 and amended in July 2016 to incorporate the Simple, Transparent and Comparable (STC) securitisation criteria as defined by the BCBS and the International Organization of Securities Commissions (IOSCO).

In December 2015 the BCBS published its second consultative document on revisions to the Standardised Approach for credit risk. Comments were to be submitted by 11 March 2016.

The BCBS published in April 2016 its second report on risk-weighted assets in the banking book, which analyses the variability of Risk-weighted Assets (RWA) for banks using internal models. This was only one week after the BCBS had published its consultative document on "Reducing variation in credit risk-weighted assets - constraints on the use of internal model approaches". Comments were to be submitted by June 2016.

The overall issue of interactions between input floors, output floors and the leverage ratio will be assessed by the BCBS when it finalizes its global review of the Basel III framework.

## The revised standardized measurement approach for operational risk

**What was the problem?**

In its October 2014 consultative document on Operational risk- revisions to the simpler approaches, the BCBS noted: "*Despite an increase in the number and severity of operational risk events during and after the financial crisis, capital requirements for operational risk have remained stable or even fallen for the standardised approaches*". The BCBS therefore concluded that for many banks the capital requirements for operational risk were not correctly calculated.

**What is the proposal?**

The BCBS proposed to withdraw internal modelling approaches for the calculation of minimum capital requirement for operational risks, due to excessive complexity and lack of comparability. The BCBS has proposed the Standardised Measurement Approach as a single and non-model based method for assessing operational risk. It relies on a business indicator (based on the three main sources of income) and the past performance of the financial institution.

**Where do we stand?**

The second consultative document on the Standardised Measurement Approach for operational risk was published in March 2016. Stakeholders were requested to submit comments by 3 June 2016. The BCBS intends to publish the final standard once the outcome of both the Quantitative Impact Study (QIS) and the consultation have been assessed.

*In addition: leverage ratio, disclosure requirements under pillar 3, sovereign exposures, etc...*

The work programme of the BCBS is not limited to the trading book, banking book and operational risks. It also covers, inter alia:

- disclosure requirements under pillar 3: on 11 March 2016 the BCBS consulted on new proposals aimed at improving the quality and granularity of disclosure requirements;
- amendments to the calculation of the leverage ratio, as well as a proposal to introduce higher requirements for GSIBs;
- the revision of the supervisory framework for measuring and controlling large exposures;
- the treatment of sovereign exposures, which is still under review.
- The prudential treatment of problem assets: In April 2017, BCBS released normative guidelines with the aim of ameliorating consistency in 'measurement and application of two important measures of asset quality, non-performing exposures and forbearance'.

Therefore the Regulatory Consistency Assessment Programme (RCAP) constitutes a rather comprehensive review of the Basel III framework, which impact on banks' capital requirements may be substantial, alongside the impact of other reforms at global level such as the new requirements for total loss absorbing capacity (TLAC, see EGOV briefing PE 574.408). This explains why some stakeholders present it as a new "Basel IV" framework, albeit overall it remains a collection of refinements, additions and further specifications to the Basel III framework. The next section summarizes the impact assessment studies carried out by the BCBS and other stakeholders.

## Impact assessments

### *Fundamental review of the trading book – interim impact analysis*

In October 2013, the Basel Committee set out a consultative paper on the fundamental review of **capital requirements for banks' trading books**, suggesting a revised market risk framework. In order to better understand the capital impact of the proposed new market risk framework, Basel Committee carried out a trading book **quantitative impact study**, and reported on the results in November 2015.

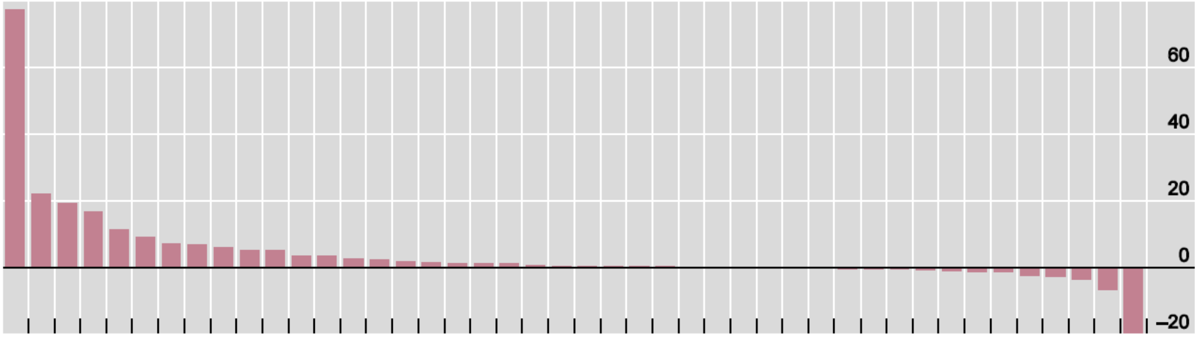
Based on a sample of 44 banks that voluntarily provided usable data, the impact study concluded that the proposed framework would on average result in a 4.7% increase in overall capital requirements (the Basel III aggregate covering credit risk, operational risk, market risk etc.). That result is, however, mainly driven by the influence of a single "outlier", i.e. a large bank with considerable trading activities and a significant proportion of market risk-weighted assets.

If that bank was excluded from the sample, the overall capital requirements would increase by just 2.3% (compare distribution in figure 5).

Looking specifically at the segment of capital charges covering the aggregate market risk, the proposed standard would result in a weighted average increase of 74% when compared with the current market risk framework. That effect, however, is much smaller when calculated as a simple average (increase of 41%), or when calculated for the median bank in the same sample (increase of 18%).

Furthermore, when taking into account the further calibration refinements endorsed by the BCBS in December 2015, the weighted average increase in market risks RWA is reduced to 40%, with a median increase of 22%. This means the final arbitrages have softened the impact for banks with important trading activities.

**Figure 5: Impact of the fundamental review of the trading book on total risk weighted assets in a sample of 44 banks**




Note: Sample (x axis) = 44 banks; weighted mean = 4.7%.
With first bank from the left of the graph excluded: sample (x axis) = 43 banks; weighted mean = 2.3%.

Source: Fundamental review of the trading book – interim impact analysis, Basel Committee November 2015, p. 3

As observed in figure 5 the revised market risk framework would for many banks only have a limited impact on total capital requirements as market risk RWAs makes up for only a small part of total RWAs.

Still, the Global Financial Markets Association, the Institute of International Finance and the International Swaps and Derivatives Association, for example, worried in a joint feedback that the rules may have a negative effect on banks' capital markets activities and reduce market liquidity, claiming that the capital increases indicated by the impact study were not in line with the Basel Committee's reassurance that overall capital requirements would not significantly increase.

## *Consultation and stakeholders' reaction to the planned constraints on the use of internal models*

As explained in the previous section, the Basel Committee proposes to:

- remove the option to use internal models for certain exposures,
- adopt certain minimum model parameters (floors), and
- provide greater specification of parameter estimation practices.

The option to use the internal models (instead of the standardised approach to credit risk) shall be removed where model parameters cannot be estimated with sufficient reliability. For example, large corporates, banks, and other financial institutions are usually considered to be low-default exposures. For low-default exposures, however, it is difficult to reliably estimate probabilities of default. Hence, in future the standardised approach to credit risk shall be used for exposures to large corporates (with total assets exceeding EUR50bn), banks, or other financial institutions, rather than internal models. Sovereign bonds are another example of low-default exposures, yet they are subject to an ongoing separate review.

The public consultation on the consultative document closed on 24 June 2016. All comments that had not asked for confidential treatment were published on a dedicated website.

A cursory review of the comments received indicates that most European banks and banking associations, repeatedly raise the following two issues (as can, for example, be seen in the feedback by the British Bankers Association or the European Association of Co-operative Banks):

- there is the argument that the proposals - the constraints on the use of internal risk models and the proposed floors - lead to reduced risk sensitivity, incentivising banks to focus their lending on riskier asset classes;
- and the argument that a Quantitative Impact Study needs to be completed to better understand the likely impact of the proposals on overall levels of bank capital held against credit risk, respectively the concern that the proposals will have a significant impact on the overall level of required capital[3].

On the other hand, those demurs are, for example, neither shared by Finance Watch, a non-profit public interest organisation, nor by the Customer-Owned Banking Association, which represents smaller Australian banking institutions that use the standardised approach rather than internal models, nor by the credit card company American Express which promotes the idea to eliminate the use of internal models altogether.

A more elaborate review of the arguments related to the system of floors and constraints on the use of internal models can be taken from the external briefings which ECON Coordinators asked the banking expert panel members to provide before the Public hearing with Ms Nouy, Chair of the SSM, scheduled for 9 November 2016. Those papers have been published on the Banking Supervision website of the ECON committee.

### *Resolution of the European Parliament on 23 November 2016*

On 23 November 2016 the European Parliament adopted one resolution on the finalisation of Basel III. The European Parliament underlined the need to consider carefully the impact of the proposed reforms, and to promote a level-playing field at global level while paying attention to the peculiarities of the EU economy and of European banking models.



Contact: egov@ep.europa.eu

This document is available on the Internet at: www.europarl.europa.eu/supporting-analyses

[3] In November 2016 PwC has published an analysis of the overall impact of the current proposals. The new framework would increase RWA by 40 to 65% (EUR 5-7 trillion) for European banks according to this study.

# Annex 1: BCBS Eleventh report on adoption of the Basel regulatory framework

On 19 October 2016 and 25 April 2017 the BCBS published its eleventh report and twelfth report on the adoption of the Basel regulatory framework, which focuses on the status of adoption of the Basel III framework.

**Table 2: Overview table on the adoption of Basel III in the European Union**

| | | | | |
|---|---|---|---|---|
| Risk Based Capital | Definition of capital | Jan 2013 | 4 | Final Basel III rule [Regulation (EU) No 575/2013 (CRR) and Directive 2013/36/EU (CRD) approved and published in June 2013, effective in 1 January 2014. |
| | Countercyclical Buffer | Jan 2016 | 4 | The CRD requires national authorities to issue regulations implementing a countercyclical buffer, with the requirement becoming applicable on 1 January 2016. EU jurisdictions are given the option to introduce the requirement before that date. For the national implementation status of these capital buffers, see the respective EU jurisdictions below. |
| | Capital Conservation Buffer | Jan 2016 | 4 | The CRD requires national authorities to issue regulations implementing a countercyclical buffer, with the requirement becoming applicable on 1 January 2016. EU jurisdictions are given the option to introduce the requirement before that date. For the national implementation status of these capital buffers, see the respective EU jurisdictions below. |
| | TLAC Holdings | Jan 2019 | 2 | The proposal for implementing TLAC holdings standard was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | Minimum capital requirements for risk | Jan 2019 | 2 | The proposal for implementing the market risk framework was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | Capital requirements for equity investments in funds | Jan 2017 | 2 | The proposal for implementing the standard on capital requirements for equity investments in funds was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |

| | | | | |
|---|---|---|---|---|
| | SA-CCR | Jan 2017 | 2 | The proposal for implementing the SA-CCR standard was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | Securitisation framework | Jan 2018 | 2 | The proposal for implementing the securitisation framework was adopted by the European Commission in September 2015. It is currently being considered by the legislator. |
| | Margin requirements for non-centrally cleared derivatives. | Sept 2016 | 4 | The technical standard was published in the Official Journal on 15 December 2016. The application of IM requirements are being phased in depending on the type of counterparty from 4 February 2017. The VM requirements will apply from 1 March 2017. |
| | Capital requirements for CCPs | Jan 2017 | 2 | The proposal for implementing the standard on capital requirements for exposures to CCPs was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| Liquidity standards | Net Stable funding ratio | Jan 2018 | 2 | The proposal for implementing the standard on the NSFR was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | NSFR disclosure requirements | Jan 2018 | 2 | The proposal for implementing the standard on NSFR disclosure was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | Monitoring tools for intraday liquidity management | Jan 2015 | 4 | EU regulation (article 86 (1) of the CRD) sets out that institutions shall have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of intraday liquidity risk. |
| | LCR disclosure requirements | Jan 2015 | 4 | The European Banking Authority published in March 2017 its final Guidelines on LCR ratio disclosure. The Guidelines will apply from 31 December 2017. |
| Leverage Ratio | Leverage Ratio | Jan 2018 | 4,2 | (4) The delegated act on the leverage ratio (as modified by the Basel Committee in January 2014) was adopted in October 2014 and published in January 2015 (Official Journal of EU).<br>(2) The proposal for introducing a capital requirement based on the leverage ratio was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| | Leverage ratio disclosure requirements | Jan 2015 | 4 | Mandatory public disclosure of leverage ratio is applicable from 1 January 2015 (cf Articles 451 and 521 of Regulation (EU) No 575/2013). |

| | | | | |
|---|---|---|---|---|
| SIB | G-SIB requirements | Jan 2016 | 4 | The disclosure requirements for G-SIBs and the identification methodology (technical standards on the latter were published in October 2014 (Official Journal of EU) and are applicable from 1 January 2015) are currently in force.<br>Mandatory G-SIB buffer implemented by Article 131 of Directive 2013/36/EU with date of application of 1 January 2016.<br>For the national implementation status of G-SIB and D-SIB requirements, see the respective EU jurisdictions. |
| | D-SIB requirements | Jan 2016 | 4 | Optional D-SIB buffer implemented by Article 131 of Directive 2013/36/EU with date of application of 1 January 2016. EBA guidelines on criteria to assess D-SIBs were published in December 2014. |
| Pillar 3 disclosure requirements | | Dec 2016 | 3,2 | (3) The EBA has adopted, in December 2016, Guidelines to implement the revised Pillar 3 framework (Phase 1) released by the Basel Committee in January 2015. The Guidelines apply from 31 December 2017, but G-SIBs are encouraged to comply with a subset of those Guidelines as soon as 31 December 2016.<br>(2) The proposal for implementing the changes to the Pillar 3 framework was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| Large exposures framework | | Jan 2019 | 2 | The proposal for implementing the large exposures framework was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |
| Interest rate risk in the banking book | | 2018 | 2 | The proposal for implementing the standard on IRRBB was adopted by the European Commission in November 2016. It is currently being considered by the legislator. |

Number code: 1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force (published and implemented by banks). Standards for which the agreed implementation deadline has passed receive a colour code to reflect the status of implementation: green = adoption completed; yellow = adoption in process (draft regulation published); red = adoption not started; N/A = not applicable.

Source: BCBS (2016, p. 23-24); BCBS (2017, p. 24-26)

# Annex 2: Components of capital under Basel III

Under Basel III 4.5% of capital over total risk-weighted assets should consist of CET1 which is considered as the capital buffer of highest quality. Another 1.5% should be accompanied with Additional Tier 1 capital. Furthermore, Tier 2 capital which should be at least 2%. The cumulative result is the basic 8% capital requirements with which all banks need to adhere to.

- **Common Equity Tier 1 (CET1).** More specifically:
  i. Common shares issued by the bank that meet the criteria for classification as common shares for regulatory purposes (or the equivalent for non-joint stock companies);
  ii. Stock surplus (share premium) resulting from the issue of instruments included CET1;
  iii. Retained earnings;
  iv. Accumulated other comprehensive income and other disclosed reserves;
  v. Common shares issued by consolidated subsidiaries of the bank and held third level parties (i.e. minority interest) that meet the criteria for inclusion in Common Equity Tier 1 capital. See section 4 of BCBS (2011, p13) for the relevant criteria;
  vi. Regulatory adjustments applied in the calculation of CET1.
- **Additional Tier 1 (AT1)**. More specifically:
  i. Instruments issued by the bank that meet the criteria for inclusion in Additional Tier 1 capital (and are not included in Common Equity Tier 1);
  ii. Stock surplus (share premium) resulting from the issue of instruments included in AT1;
  iii. Instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in AT1 and are not included in CET1;
  iv. Regulatory adjustments applied in the calculation of AT1.
- **Tier 2 Capital (T2)**. More specifically:
  i. Instruments issued by the bank that meet the criteria for inclusion in Tier 2 capital (and are not included in Tier 1 capital);
  ii. Stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital;
  iii. Instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in Tier 2 capital and are not included in Tier 1 capital. See section 4 for the relevant criteria;
  iv. Certain loan loss provisions as specified in paragraphs 60 and 61 of BCBS (2010, p. 19);
  v. Regulatory adjustments applied in the calculation of Tier 2 Capital.
- The **Capital Conservation Buffer (CCB)**, which is a further backstop in banks' ability to absorb losses. Banks will have to reserve an additional 2.5% of CET1 at all times. This signifies that banks' minimum capital requirements should not be less than 10.5% of risk-weighted assets. Specific restrictions apply in the distribution of capital when CCB has not been replenished after being used.
- The **Counter-cyclical Capital Buffer** will function as an ancillary mechanism for banks' ability to absorb losses during the economic cycle. The percentage of the buffer ranges from 0%-2.5% of risk-weighted assets, subject to supervisor assessments.
- The **high systemic risk buffer** which applies to Global Systemically Important Banks (G-SIBs) designates a range of additional 'higher loss absorbency' requirements. Banks that are '*larger, more interconnected, less substitutable, more cross-jurisdictional, and/or more complex will have greater HLA requirements and thus be better positioned to withstand financial distress*' (BCBS, 2014 p. 1).
- **Pillar 2** capital buffer which banks need to comply with in order to hold additional capital for losses falling under the scope of Pillar 2.
- **Banks' own discretionary additional capital buffers** which are separate from their obligations to meet the aforementioned capital requirements.