CUMULATIVE IMPACT ASSESSMENT OF THE BASEL REFORM PACKAGE

DATA AS OF DECEMBER 2015

EBA EUROPEAN BANKING AUTHORITY

Contents

Introduction

In 2014, the Basel Committee on Banking Supervision (BCBS) initiated the work to complement and refine the overall Basel framework in order to address the problem of undue variability in risk-weighted assets calculations. The set of revisions, proposed by the BCBS as part of the agenda to tackle risk-weighted assets variability[1], aimed at restoring the credibility of the risk-weighted assets metric and safeguarding the comparability of regulatory capital ratios.

On 7 December 2017, the BCBS published the final set of revisions to the Basel III framework addressing undue variability in risk-weighted assets calculations. The revisions amend the Basel III framework as follows:

- **The standardised approaches for credit risk and credit valuation adjustment (CVA) risk become more risk-sensitive.**
- An entirely **new standardised approach for operational risk**, called Standardised Measurement Approach (SMA), replaces all existing methodologies to calculate capital requirements for operational risk;
- **The use of internal models is constrained**, by i) introducing specific lower bounds on the input parameters of the Internal Ratings Based (IRB) approach and by reducing its scope of application; and by ii) removing the possibility to use internal models for operational risk and CVA risk;
- The measurement of leverage exposure is amended and a **leverage ratio surcharge requirement is introduced for global systemically important banks (G-SIBs)**;
- **An aggregate output floor is introduced**, which acts a backstop to internally-modelled risk-weighted assets calculations and is calibrated at 72.5% of the risk-weighted assets calculation carried out on the basis of the revised standardised approaches.

[1] https://www.bis.org/bcbs/publ/d424_hlsummary.pdf

Overview of the results

A summary of the results of an analysis carried out by the EBA to assess the impact of the December 2017 package of revisions on the EU banking system is presented here. The sample used to assess the impact of the revised standards includes 88 European institutions from 17 EU Member States, of which 36 are Group 1 institutions and 52 are Group 2 institutions.

The impact assessment relies on December 2015 data. The results of the analysis do not, therefore, reflect bank-level changes in capital, portfolio composition and adjustments to business models occurred since December 2015. In addition, the baseline minimum required capital (MRC) used in the impact assessment reflects the implementation of the Basel III framework at jurisdiction level and assumes full implementation of the Fundamental Review of the Trading Book (FRTB). Further details on the methodology are provided in the Annex.

The increase in total Tier 1 MRC for the entire EU sample is 12.9% in weighted average terms[2] (see Table 1). EU global systemically important institutions (G-SII) are the most impacted, with a +15.2% weighted average increase in Tier 1 MRC. MRC increases by 14.1% for EU Group 1 banks, whereas it only increases by approximately 4% for EU Group 2 banks. The aggregate output floor is the strongest driver of the MRC increase, whereas the revisions to the credit risk and operational risk frameworks have a more moderate impact.

Table 1: Change in total MRC T1 as percentage of baseline (December 2015) MRC (in %)

	Total		Credit risk		Operational risk	Output floor	Leverage ratio
	All factors	of which: risk-based	IRB	SA			
All banks	12.9	14.5	4.3	1.0	2.5	6.6	-1.6
Group 1	14.1	15.6	4.5	1.5	2.7	6.9	-1.6
G-SIIs	15.2	14.1	5.1	1.6	2.9	4.5	1.1
Group 2	3.9	5.3	2.7	-2.4	0.8	4.2	-1.3

The reform has a limited aggregate impact on regulatory capital ratios and capital shortfalls. The CET1 ratio, calculated according to the revised standards, is 0.6 percentage points lower than the baseline for the overall sample. The total capital shortfall amounts to EUR 39.7 billion. Table 2, below, shows the impact of the package of revisions in terms of changes in CET1 capital ratios, Basel III Tier 1 leverage ratios, and the resulting capital shortfalls.

[2] The capital impact rests on a number of methodological choices, which is outlined in more detailed in the Annex.

Table 2: Regulatory capital ratios, leverage ratios and capital shortfalls

Bank category	No. of banks	Risk-weighted CET1 capital ratio (%)			Tier 1 leverage ratio (%)			Capital shortfalls (EUR billions)		
		Current (Dec 2015)	Revised	Difference	Current (Dec 2015)	Revised	Tier 1 surplus (EUR billions)	CET1	Tier 1 combined	Total capital
All banks	88	12.3	11.6	-0.6	4.8	4.8	1.3	17.5	34.4	39.7
Group 1	36	12.2	11.5	-0.7	4.7	4.8	1.2	16.4	32.0	36.7
G-SIIs	12	11.7	10.9	-0.8	4.5	4.5	0.7	16.4	30.0	36.7
Group 2	52	12.5	12.6	0.2	5.3	5.3	2.3	1.1	2.4	3.0

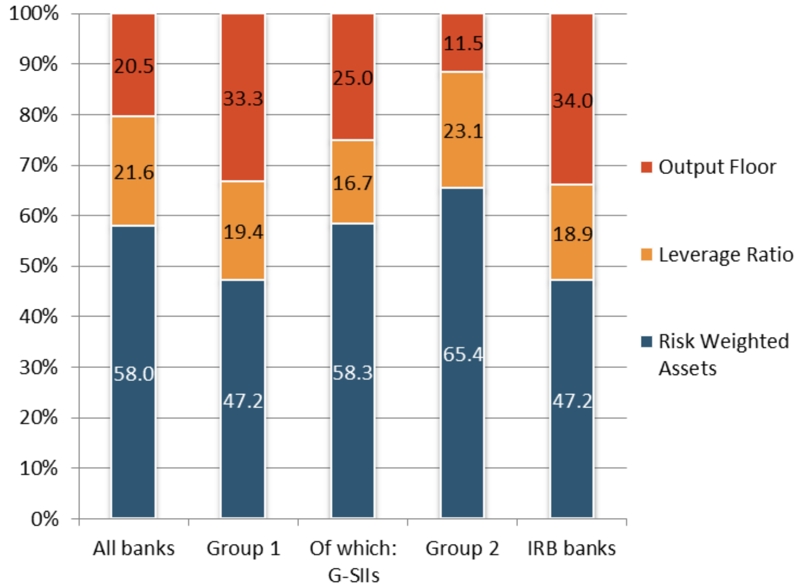
NOTE: The column 'Tier 1 surplus' shows the Tier 1 capital, as of December 2015, which banks hold above the revised required leverage ratio standard standalone (i.e. in isolation from the risk-based requirements), including the G-SIB surcharge, where applicable, as a percentage or leverage ratio exposure. The 'Capital shortfalls' column shows the overall capital shortfalls resulting from the combined impact of the requirements.

Overall, the weighted average CET1 capital ratio of Group 1 banks is expected to decrease by 0.7 percentage points, while that of Group 2 banks is estimated to increase by 0.2 percentage points. The leverage ratio requirement is estimated to remain almost stable for all bank categories in the sample.

For the purpose of measuring risk sensitivity in the system, the EBA assessed the percentage of banks which, under the revised framework, would be constrained[3] by either the risk-weighted assets-based requirement, the output floor or the leverage ratio requirements.

[3] For any institution in the sample, the constraining metric of capital requirement is the metric determining the highest MRC requirement.

Figure 1: Percentage of banks constrained by different metrics of capital requirement in the revised framework



The results reported in Figure 1, above, show that 58% of the institutions in the sample would remain constrained by the risk-weighted assets-based metric of capital, whereas 20.5% of them would be constrained by the output floor and 21.6% of them by the leverage ratio. The percentage of institutions constrained by the risk-weighted assets metric of capital decreases to 47.2% within the sub-samples of Group 1 banks and IRB banks for credit risk, and is instead substantially higher within the sub-sample of Group 2 banks (65.4%).

The EBA will publish a more detailed cumulative impact assessment report in due course.

Annex: Methodological considerations

In reading the cumulative impact assessment results in this note, the following methodological elements should be given careful consideration:

a) The exercise assumes static portfolios, relying on data as of December 2015.

b) Consistently with the BCBS methodology, the MRC requirement in this impact assessment is exclusively based on the 6% Tier 1 requirement augmented by the 2.5% Tier 1 capital conservation buffer and, where applicable, the G-SII loss absorbency buffer.

c) Consistently with the BCBS methodology, the baseline MRC requirement used in the impact assessment reflects the national implementation of the Basel III framework. This is one of the methodological factors behind the relatively higher impact that the EU jurisdictions receive from the reform, if compared to other jurisdictions in the Basel sample that implement a super-equivalent Basel framework.

d) The baseline MRC requirement used in the impact assessment assumes full implementation of the FRTB, as published by the BCBS in January 2016. Due to this methodological choice, the impact of the FRTB is not measured. Additionally, the impact assessment does not include any other aspects not part of the Basel reform, such as Pillar 2 add-ons.

e) On a best effort basis, the EBA tried to capture in its impact assessment all the revisions of the framework published by the BCBS on 7 December 2017. This set of revisions differs, in some cases to a material extent, from the initial proposals published by the BCBS for consultation. The impact assessment was designed on the basis of the consultative documents and the data had to be adjusted to reflect the impact of the final reforms. However, data and analytical constraints limit the extent to which the impact of certain agreed revisions to the framework can be measured. The EBA considers that, due to the specific nature of the revisions that could not be captured in the impact assessment, the results presented are likely to overestimate the actual impact for the EU sample.

f) The impact assessment assumes that the EU jurisdiction chooses to implement the national discretion of setting the internal loss multiplier (ILM) for operational risk equal to 1.

g) The impact assessment does not reflect any transitional arrangement and, therefore, represents a fully phased-in implementation of Basel reforms.

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