Basel Committee
on Banking Supervision

Reducing excessive variability in banks' regulatory capital ratios

A report to the G20

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1. Introduction

The cornerstone of an effective regulatory capital framework is sufficient, high-quality capital to absorb unexpected losses supplemented by prudent constraints on excessive leverage. Other essential building blocks of such a framework are effective supervision and adequate public disclosure of bank information to allow a full assessment and comparison of the level and quality of capital across institutions. The global financial crisis revealed deficiencies in each of these areas – shortcomings which were addressed in the Basel Committee's regulatory response, the Basel III framework.

The Basel III capital standards have significantly improved the minimum requirements for a sound capital base and introduced a simple leverage ratio to complement the risk-weighted framework and restrict the build-up of excessive leverage. The Basel framework provides different options for how banks must calculate the relative riskiness of their assets and off-balance sheet exposures. Those options include approaches based on prescribed supervisory risk weights (eg the Standardised Approach for credit risk) as well as approaches based on a bank's own internal risk estimates (eg the Internal Ratings-Based or IRB approaches). Variations in banks' regulatory capital requirements based on their internal estimates are driven by a mix of differences in underlying risk and differences in banking and supervisory practices.

This report sets out the Basel Committee's responses to address excessive variability in risk-weighted asset calculations with the objective of improving consistency and comparability in bank capital ratios, and thereby restoring confidence in risk-weighted capital ratios. It provides an overview of the policy responses already adopted by the Committee to help reduce material differences in the risk-weighting of assets by banks, to help ensure effective implementation of the Basel III capital standards and to restore confidence in risk-weighted capital ratios. It also discusses additional analytical and policy work in progress.

2. The Basel Committee's response

An important focus of the Basel Committee is establishing consistency in the implementation of post-crisis regulatory reforms to improve the resilience of the global banking system, promote public confidence in regulatory capital ratios and encourage a regulatory level playing field for internationally active banks. In 2012, the G20 endorsed the Committee's adoption of a comprehensive Regulatory Consistency Assessment Programme (RCAP) to assess the implementation of the Basel framework across internationally active banks. Through this programme, the Basel Committee has completed three studies that assessed banks' risk-weighting of banking and trading book assets.[1] The studies confirmed that there are material variances in banks' regulatory capital ratios that arise from factors other than differences in the riskiness of banks' portfolios. These variances undermine confidence in capital ratios. Supported by its governing body, the Group of Central Bank Governors and Heads of Supervision

[1] These risk-weighted asset studies and further information about the Committee's RCAP and other related implementation efforts are available at www.bis.org/bcbs/implementation.htm.

(GHOS), the Committee is taking steps to reduce the level of observed variation in capital ratios across banks. The Committee's response thus far has centred around three areas:

- Policy: Developing prudential proposals to improve the standardised, non-modelled approaches for calculating regulatory capital that will also provide the basis for the use of floors and benchmarks; undertaking a more fundamental review of modelling practices; reviewing the calibration of the leverage ratio; and providing additional guidance on those aspects of the Basel framework that are ambiguous or require clarity.
- Disclosure: Strengthening the disclosure requirements related to risk weights by amending Pillar 3 of the Basel framework.
- Monitoring: Ensuring proper implementation by monitoring outcomes of risk-weighted asset variability through Hypothetical Portfolio Exercises (HPEs) under the Committee's RCAP.

Policy measures

Review of the Standardised Approaches

The Standardised Approaches are widely used by banks around the world. By year-end, the Committee will publish for consultation a revised Standardised Approach for credit risk. In October 2014, the Committee published for consultation a revised Standardised Approach for operational risk; this followed the Committee's earlier consultations on the Standardised Approach for market risk, and the recent finalisation of the Standardised Approach for counterparty credit risk.[2] These revisions and ongoing work in this area aim to improve the way all banks calculate risk-weighted assets. Moreover, the greater risk sensitivity embedded in the revised approaches will improve their use as a basis for the implementation of a capital floor, while continuing to provide a fallback option, when banks do not meet the requirements for use of the internal model-based approaches.

Capital floor

The initial focus of the work is on *policy measures* aimed at credit risk and market risk, with analysis and policy measures on operational risk to follow. One overarching issue is the Basel II capital floor, which is currently set at 80% of the capital requirements under Basel I and was meant to avoid a significant drop in capital requirements after the implementation of Basel II. The Committee has identified weaknesses in the implementation of the current floor. This is, in part, a reflection of the floor being a transitional measure and its reliance on Basel I. The Committee intends to publish for consultation towards the end of this year a revised capital floor based on the Standardised Approaches. To promote confidence in the risk-based capital measure, the floor will cover all risk categories, be transparent and ensure that internal model-based capital requirements do not fall below prudent levels. It will also provide a standardised regulatory-determined risk measure against which capital outcomes calculated using risk models can be compared, allowing for greater comparability across banks.

[2] See *Operational risk – Revisions to the simpler approaches*, October 2014, www.bis.org/publ/bcbs291.htm; *Fundamental review of the trading book – second consultative document*, October 2013, www.bis.org/publ/bcbs265.htm; and *The standardised approach for measuring counterparty credit risk exposures*, March 2014, www.bis.org/publ/bcbs279.htm.

Measures related to banks' credit risk modelling practices

Drawing from the analyses of its risk-weighted asset studies of the banking book, the Committee is developing specific policy proposals to reduce excessive variability in the IRB approaches to credit risk. These measures include:

- The introduction of fixed loss-given-default[3] (LGD) parameters for portfolios of unsecured loans that have low numbers of defaults and thus limited loss data. The Committee's work suggests that such measures, which will also serve to align the measurement of LGDs between banks using the Advanced and Foundation IRB approaches, will contribute significantly to reducing practice-based risk-weighted asset variation.
- The adoption of a uniform treatment of the IRB maturity adjustment factor for revolving exposures. This treatment will use the expiry date of a facility to determine the maturity parameter, which is a practical and conservative approach as compared to the alternative "repayment date of draw" approach. This proposal might have only a limited impact on risk-weighted asset variability overall, but could have a significant impact for portfolios with revolving exposures.
- Changes in the manner in which collateral and guarantees are considered when calculating exposures.
- Greater alignment of the definitions of exposures between the IRB approach and revised Standardised Approach to credit risk.
- Consideration of a combination of policy changes and promotion of more consistent implementation of existing standards in the following areas: the application of partial use in the Basel framework; margins of conservatism that banks apply to their risk parameters; supervisory practices for the validation of models; and the definition of default and treatment of defaulted exposures.

The modifications to the IRB framework outlined above will narrow the modelling choices available to banks, particularly in areas which by their nature are not amenable to modelling, and will serve to increase consistency and reduce complexity in the IRB approaches to credit risk.

Measures related to banks' market risk modelling practices

The RCAP studies pointed to considerable variation in risk-weighted assets for market risk, only part of which could be explained by variation in actual risk-taking or business models. The revised models-based approach outlined in the Committee's ongoing fundamental review of the trading book[4] incorporates a number of recommendations that directly respond to the main findings of RCAP risk-weighted asset studies:

- Improving public disclosure. The Committee's fundamental review of the trading book rules proposes that all banks must calculate and disclose the standardised capital charge for all asset classes within the trading book.

[3] Loss-given-default is the amount of loss a bank would incur if a borrower were to default, taking into account collateral or other forms of credit risk mitigation.

[4] In May 2012, the Committee initiated a fundamental review of the trading book rules that is meant to strengthen capital standards for market risk. The Committee published a second consultative paper in October 2013 (available at www.bis.org/publ/bcbs265.htm) and expects to finalise the review by end 2015.

- Constraining modelling choices in banks. The proposed internal models-based approach for market risk constrains the set of possible modelling choices available to institutions in a number of ways, including: (i) fixing (at 12 months) the length of the data period for calibrating banks' internal models; (ii) placing a constraint on diversification benefits that can be realised across broad risk factors; and (iii) limiting discretion on the choice of risk factors used to model incremental default risk.

Measures related to banks' operational risk modelling practices

The Committee is currently reviewing the costs and benefits of the Basel framework's Advanced Measurement Approaches (AMA) for operational risk. Under the AMA, a bank's regulatory capital requirement is based on its internal operational risk measurement system subject to supervisory approval. When the Committee introduced the AMA as part of the Basel II framework in 2004, the field of operational risk measurement was still in its infancy and the AMA framework of quantitative and qualitative criteria allowed for a diverse range of approaches. Over time, it was expected that the range of practices would narrow considerably and that best practices would emerge. Supervisory experience with the AMA has been mixed and, given the inherent complexity of this part of the capital framework, the Committee is assessing whether a considerable simplification is needed.

Leverage ratio

The Basel III leverage ratio, the calculation of which was endorsed by the GHOS in January 2014, serves as a critical complement to the risk-weighted capital framework. It will be disclosed from 2015 with a view to full implementation at the start of 2018, after appropriate review and calibration. The leverage ratio helps ensure broad and adequate capture of both the on- and off-balance sheet sources of banks' leverage and it restricts the build-up of excessive leverage.

Other

In addition to the specific measures noted above, the Committee has issued answers to frequently asked questions and guidance in a number of areas to promote consistency in practices. The Committee has also published a table of national discretions that have been applied in Basel Committee member jurisdictions, and is working on reducing the number of national discretions available in the framework. In addition, the companion to this report – *Implementation of Basel standards: A report to G20 Leaders on implementation of the Basel III regulatory reforms* – provides further details on policy areas that have been subject to implementation follow-up work.

Better disclosure

A substantial revision of the Basel framework's Pillar 3 disclosure requirements was proposed in June 2014.[5] The existing Pillar 3 disclosure requirements, in particular those related to risk-weighted assets, have proved to be inadequate in a number of respects. A key shortcoming has been the lack of consistency across banks, both with respect to the form and granularity of the information disclosed and in the interpretation of disclosure requirements.

The proposed new standard promotes greater consistency in the way banks disclose information about risks, as well as their risk measurement and management. The aim of the revisions is

[5] The consultative paper is available at www.bis.org/publ/bcbs286.htm.

to enable market participants to compare banks' disclosures of their risk-weighted assets and to assess more effectively a bank's overall capital adequacy. The disclosures are also a particular response to concerns about the opacity of internal model-based approaches to determining risk-weighted assets. In most cases, the revisions do not require banks to disclose additional information but rather to present requirements in a more prescriptive way to facilitate comparability across banks. The detailed disclosure requirements relate to risk-weighted assets computed for credit risk, counterparty credit risk, securitisation positions and market risk. The Committee expects to finalise the proposed revisions around year-end 2014.

Ongoing monitoring

Through its ongoing programme of hypothetical portfolio exercises, the Committee will measure changes in risk-weighting behaviour and assess the impact of current and planned policy measures on reducing excessive variation in risk-weighted assets. The Committee is also analysing the remaining material asset classes in the banking and trading book with respect to practice-based risk-weighted asset variation. These efforts, along with a systematic programme to assess regulatory consistency and ongoing monitoring of risk-weighted asset variation, will help promote convergence in practices relating to risk-weighting of assets in the banking and trading books.

The Committee is also undertaking a longer-term review of the structure of the regulatory capital framework to consider whether more fundamental reform is necessary. In undertaking a longer-term review, the Committee is seeking to ensure that the regulatory framework is as effective as it can be in meeting its objectives. Considerations inherent in the review include (i) the costs and benefits of basing regulatory capital on banks' internal models, (ii) the extent to which internal modelling options in the regulatory framework facilitate improved risk and capital management in banks, and (iii) alternative approaches for determining regulatory capital that reduce or remove reliance on bank-internal models while maintaining adequate risk sensitivity. Importantly, the review will also consider to what degree effective market discipline is inhibited by ongoing inconsistencies in bank capital ratios and how these inconsistencies can be addressed in the longer term to facilitate comparability across banks.

The next update on progress made towards improving consistency and comparability of regulatory capital ratios will be prepared toward the end of 2015. A summary of the Committee's work programme addressing excessive variability in risk-weighted assets and the timelines for completion of the work is provided in Annex 1.

Annex 1

Type of policy response		Status	Finalisation
	Policy measures		
Review of the Standardised Approaches	• Credit risk • Market risk • Operational risk	Consultation by end-2014 Second public consultation completed Proposed revisions published October 2014	End-2015 End-2015 Mid-2015
Capital floors	• Replacement of the Basel II transitional floor with a permanent floor based on the Standardised Approaches for credit, market and operational risk	Consultation by end-2014	End-2015
Credit risk internal models	• Constraints on credit risk model parameter estimates (eg LGD parameter for low-default exposures; maturity of revolving facilities; simplification and harmonisation of the credit risk mitigation framework) • Alignment of definitions of exposures under IRB and revised Standardised Approaches • Guidance to support the risk models framework (eg validation of risk models; "margins of conservatism" in model estimates; definition of default; partial use of risk models)	Consultation by mid-2015	End-2015
Market risk internal models	• Greater standardisation of traded market risk model requirements (eg use of historical data; treatment of correlation; estimation of default)	Second public consultation completed	End-2015
Leverage ratio	• Complementary measure aimed at restricting the build-up of excessive leverage and at mitigating model risk	Exposure definition finalised – monitoring and calibration 2015-17	Disclosure 2015 Implementation 2018
	Disclosure		
Enhanced disclosure	• Improvements to existing disclosures to describe different risk model approaches • Additional disclosure requirements	Policy released for consultation Policy under development	End-2014 End-2015
	Ongoing monitoring		
Additional analysis and ongoing monitoring	• Analysis of retail and small and medium-sized enterprise credit portfolios • Analysis of off-balance sheet lending commitments	Analysis ongoing	End-2015
Framework review	• Strategic review of the capital framework against Committee objectives	Review under way	