Basel Committee
on Banking Supervision

Report to G20 Finance Ministers and Central Bank Governors on monitoring implementation of Basel III regulatory reform

April 2013

BANK FOR INTERNATIONAL SETTLEMENTS

This publication is available on the BIS website (www.bis.org).

ISBN 92-9131-930-9 (print)

ISBN 92-9197-930-9 (online)

Contents

Summary

Full, timely and consistent implementation of Basel III remains fundamental to building a resilient financial system, maintaining public confidence in regulatory ratios and providing a level playing field for internationally active banks.

This report updates G20 Finance Ministers and Central Bank Governors on progress in adoption of the Basel III regulatory reforms since the Basel Committee on Banking Supervision[1] issued its October 2012 report.[2] The scope of this update is broader than previous progress reports to the G20. In addition to reporting on the steps taken by Basel Committee member jurisdictions towards implementing the Basel III capital standards, which was the focus of the last report, this update also covers developments in other Basel III regulatory standards, and banks' progress in bolstering their capital bases. The report also highlights specific implementation-related shortcomings that are surfacing, which require continued policy and operational attention.

Basel Committee members agreed to begin implementation of Basel III's capital standards from 1 January 2013, requiring that they translate the Basel III standards into national laws and regulations before this date. Since the Basel Committee's October 2012 report, eight more member jurisdictions have issued final Basel III-based capital regulations, bringing the total to 14. Eleven Basel Committee member jurisdictions now have final Basel III capital rules in force: Australia, Canada, China, Hong Kong SAR, India, Japan, Mexico, Saudi Arabia, Singapore, South Africa and Switzerland. Three Basel Committee member jurisdictions – Argentina, Brazil and Russia – have issued final rules and will bring them into force by end 2013. The other 13 member countries that missed the 1 January 2013 deadline for issuing final regulations have published their draft regulations: nine countries that are also members of the European Union,[3] Indonesia, Korea, Turkey and the United States. The Basel Committee is urging those jurisdictions to issue final versions of their regulations as soon as possible and to align their implementation with the internationally agreed transition period deadlines. It is particularly important for member jurisdictions that are home to global systemically important banks (G-SIBs) to complete the issuance of final Basel III regulations.

Despite some delays in implementing Basel III regulations, national supervisors are ensuring that internationally active banks are, where necessary, making steady progress in strengthening their capital base to meet the new Basel III standards. The latest data collected by the Basel Committee indicate that, for the 12 months ending June 2012, large internationally active banks on average raised their capital ratios. For example, the average Common Equity Tier 1 (CET1) capital ratios rose from 7.1%

[1] The Basel Committee on Banking Supervision consists of senior representatives of bank supervisory authorities and central banks from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Committee's governing body is the Group of Central Bank Governors and Heads of Supervision, which is comprised of central bank governors and (non-central bank) heads of supervision from member countries. The Committee usually meets at the Bank for International Settlements (BIS) in Basel, Switzerland, where its permanent Secretariat is located.

[2] That report and the Committee's June 2012 report to the G20 are available at www.bis.org/bcbs/implementation/bprl1.htm.

[3] Those EU countries that are members of the Basel Committee are Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Spain, Sweden and the United Kingdom. The European Union recently announced it had reached agreement on the final form of a legislative package (commonly referred to as CRD IV) to replace its existing Capital Requirements Directive.

to 8.5% of risk-weighted assets.[4] For those banks that do not yet meet the fully-phased in requirements, CET1 capital shortfalls fell from roughly €450 billion to €200 billion.[5]

The Basel Committee's Regulatory Consistency Assessment Programme (RCAP) introduced in 2012 is helping advance and deepen the Basel III reform efforts. The RCAP is monitoring progress in introducing regulations, assessing their consistency with the agreed international standards, and analysing outcomes across banks and regulatory regimes, thereby helping to ensure confidence in the regulatory framework. The RCAP is also helping emphasise that issuing domestic Basel III-based rules alone does not guarantee effective implementation. Sound supervisory and industry practices along with rigorous enforcement and analysis of intended prudential outcomes are also required for effective implementation of the Basel III framework.

A central element of the RCAP is the assessment of the content and substance of different jurisdictions' regulations. The Basel Committee has launched a series of these assessments to gauge the consistency of domestic regulations with the requirements of the Basel framework. The first three assessments covered final capital regulations in Japan and draft capital regulations in the European Union and the United States. Subsequently, the Basel Committee assessed regulations in Singapore and is now evaluating Basel III capital regulations in China and Switzerland. Evaluations of regulations in Australia, Brazil and Canada will begin during the second half of 2013. There will also be new assessments of EU and US regulations immediately after they are finalised and issued. The Committee aims to complete a first assessment of Basel III capital regulations in every member jurisdiction by the end of 2015.

The RCAP also studies the consistency of regulations' effects on banks. This work, which the Committee started in 2012, is analysing the sources of variation across banks in their estimates of risk-weighted assets (RWAs). The first set of findings, which was published in January 2013, identified considerable variation in the risk weighting of assets held in the trading book due to factors other than risk exposures.[6] Preliminary results for the assets held in the banking book point in a similar direction.

While some variation in RWAs is natural and desirable, excessive variation diminishes the comparability of the reported capital ratios. Further analysis is therefore under way, and areas where Basel Committee standards might be modified to reduce excessive variation are becoming apparent. The Committee has begun to consider what form some of these modifications might take. Three types of policy options are emerging: (i) improving public disclosure and regulatory data collection to aid the understanding of banks' calculations of RWAs; (ii) narrowing the modelling choices for banks; and (iii) further harmonising supervisory practices with regard to model approvals (to reduce the level of variation in RWAs). In this context, the Committee's fundamental review of the market risk framework will address some of the key findings with regard to the risk measurement of trading book assets.[7]

The Committee continues its work to finalise the development of its post-crisis reforms, including the remaining outstanding components of the Basel III framework. With respect to Basel III's

4 Basel III's minimum capital requirements are subject to phase-in arrangements out to 1 January 2019. These ratios are calculated on a fully phased-in basis.

5 The full results of the Committee's Basel III monitoring exercise are available at www.bis.org/publ/bcbs243.htm.

6 See Basel Committee on Banking Supervision, *Regulatory consistency assessment programme (RCAP) - Analysis of risk-weighted assets for market risk*, January 2013, available at www.bis.org/publ/bcbs240.htm.

7 See Basel Committee on Banking Supervision, *Fundamental review of the trading book*, May 2012, available at www.bis.org/publ/bcbs219.pdf.

liquidity reforms, the final form of the Liquidity Coverage Ratio was published in January 2013.[8] The Committee intends to finalise its work on the leverage ratio in 2013, and most if not all work on the Net Stable Funding Ratio, the trading book, securitisation and large exposures should be finished in 2014. It remains essential, however, that the Basel framework be adopted and fully implemented in a timely manner. While the Basel Committee continues to strengthen its implementation monitoring efforts and the RCAP, it urges G20 Finance Ministers and Central Bank Governors to renew their commitment to completion of the Basel III regulatory reforms consistently, expeditiously and completely.

8 See Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, available at www.bis.org/publ/bcbs238.htm.

Progress report on Basel III implementation

Full, timely and consistent implementation of Basel III is fundamental to building a resilient financial system, maintaining public confidence in regulatory ratios and to providing a level playing field for internationally active banks. To aid in the implementation process, the Basel Committee has put in place the Regulatory Consistency Assessment Programme (RCAP) to monitor, review and report on Basel III implementation. It covers three areas: (i) the timing of Basel standards adoption; (ii) the consistency of domestic regulations with the Basel standards and identification of material gaps; and (iii) the consistency of the regulations' effects.

This report provides an overview of the status of Basel III (including Basel II and 2.5). It provides an update on policy development work and on the progress banks have made in adjusting to the new Basel standards. The report also outlines progress on: (i) completing the development and issuance of standards under the Basel framework; (ii) adoption of rules and assessment of consistency by Basel Committee members; and (iii) analysing outcomes (eg impact studies and international studies of consistency in bank risk measurement practices).

(i) Completing the Basel III framework

The core components of the Basel III capital framework were finalised in 2011. Since then, the Basel Committee has substantially completed the remaining components (see Table 1). The capital frameworks for global and domestic systemically important banks (G-SIBs and D-SIBs) were published in 2011 and 2012 respectively. The Committee issued the final standard for the Liquidity Coverage Ratio in January 2013, with implementation scheduled to commence in 2015. It is actively working to finalise the specification of the other key elements of the Basel III package: in particular, the leverage ratio and the Net Stable Funding Ratio.

Table 1: Status of Basel III components and target dates for implementation

Core component of Basel III	**Progress**
Basel III capital adequacy reforms[9]	Published in 2011; implementation from 1 January 2013
G-SIB/D-SIB framework	Published in 2011 and 2012; implementation 1 January 2016
Liquidity Coverage Ratio	Published in 2013; implementation from 1 January 2015
Leverage ratio	Disclosure starting in 2015 with a view to migrate to Pillar 1 in 2018
Net Stable Funding Ratio	Under review; minimum standard to be introduced in 2018

9 Building on the three pillars of the Basel II framework, Basel III strengthens the regulatory capital framework by raising both the quality and quantity of the regulatory capital base and enhancing the risk coverage of the capital framework. It introduces a leverage ratio that serves as a backstop to the risk-based capital measures as well as a number of macroprudential elements to help contain systemic risks.

Agreement on the Liquidity Coverage Ratio

On 6 January 2013, the Group of Central Bank Governors and Heads of Supervision (GHOS) – the governing body of the Basel Committee – endorsed the revised LCR. The LCR is one of the Basel Committee's key reforms to strengthen global liquidity regulations with the goal of promoting a more resilient banking sector. The LCR promotes the short-term resilience of a bank's liquidity risk profile. It does this by ensuring that a bank has an adequate stock of unencumbered high-quality liquid assets that can be converted into cash easily and immediately in private markets to meet its liquidity needs for a 30 calendar day liquidity stress scenario. It will improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillovers from the financial sector to the real economy.

The LCR will be introduced on 1 January 2015 with the minimum requirement at 60%, rising in equal annual steps of 10 percentage points to reach 100% on 1 January 2019. This graduated approach is designed to ensure that the LCR can be introduced without disrupting the orderly strengthening of banking systems or the ongoing financing of economic activity.

(ii) Adoption of Basel III-based regulations and assessment of consistency

Table 2 summarises the overall progress Basel Committee members have made in implementing the Basel risk-based capital framework as of end-March 2013. Members have made considerable progress since the last report was published in October 2012. More detail regarding the implementation status of each member jurisdiction can be found in the tables in Annex 1, which include summary information about the next steps and the implementation plans being considered.

Table 2: Overview of progress in implementation of the Basel capital framework by Basel Committee member jurisdictions

	As of October 2012			*As of end-March 2013*		
	Basel II	**Basel 2.5**	**Basel III**	**Basel II**	**Basel 2.5**	**Basel III**
Number of countries which have issued final rules and implemented them	22	20	0	24	22	11
Number of countries which have issued final rules, but have not yet implemented them	1	0	6	1	0	3
Number of countries which are at various stages of finalisation of rules	4	4	19	2	3	13
Number of countries which have not initiated any significant action to put in place the rules	0	3	2	0	2	0
Total	27	27	27	27	27	27

Basel II

Of the 27 Basel Committee member countries, 24 have now implemented Basel II fully. The United States, which is one of the three jurisdictions yet to fully implement Basel II, has issued final regulations on Basel II; however, its largest banks are still on parallel run for implementing the advanced approaches. The remaining two jurisdictions (Argentina and Russia) have also initiated the process for the implementation of Basel II and plan to issue the final regulations in 2013.

Basel 2.5

The number of members who have implemented Basel 2.5 fully has risen to 22. Of the remaining five members, three have initiated steps to implement the regulations.

Basel III

Eleven members have now issued final Basel III rules, which are legally in force in these jurisdictions. Three members have issued final rules but have not yet brought them into force. All remaining members have issued draft rules.

Going forward, the monitoring of the adoption of the Basel standards will be broadened to include other components of the framework, such as the LCR and the requirements for G-SIBs and D-SIBs. The broadened monitoring will also become part of the periodic updates published by the Basel Committee, the next of which is expected in October 2013.

Regarding non-Basel Committee member jurisdictions, in 2012 the Financial Stability Institute of the Bank for International Settlements published the results of its biennial survey on the adoption of the Basel standards. Seventy non-member jurisdictions participated in the survey, and more than half indicated they were in the process of implementing Basel III.[10]

Consistency of domestic regulations with Basel standards

In 2012, the Committee conducted the first detailed assessments of the content and substance of the final regulations implementing the Basel III package in Japan, and the draft regulations in the European Union and the United States. The Committee continued the programme with the assessment of Singapore, which was published in March 2012 (see Annex 2),[11] and is currently in the process of assessing Switzerland and China. Assessments of Australia, Brazil and Canada will commence later this year. Also, new assessments of the EU and US assessments will be conducted once their final Basel III regulations have been published. The Basel Committee urges jurisdictions to address material inconsistencies between domestic regulations and the globally agreed Basel framework identified by the final assessments. It will monitor progress in future reviews as well as future analysis of prudential outcomes.

These assessments contribute to greater consistency in the national adoption of Basel III standards. For example, in the case of Singapore, the Monetary Authority of Singapore promptly

[10] See *FSI Survey – Basel II, 2.5 and III Implementation*, in July 2012, available at www.bis.org/fsi/fsiop2012.pdf. The 2013 survey has recently been launched and results are expected by 4Q2013.

[11] See Basel Committee on Banking Supervision, *Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III regulations – Singapore*, published in March 2013, available at www.bis.org/bcbs/implementation/l2_sg.pdf.

resolved a number of initial assessment findings by amending the domestic regulations that implement Basel III. These amendments contributed to a more consistent domestic implementation of the Basel framework, and thus set a positive precedent for future assessments.

(iii) Regulatory outcomes

Bank progress in adjusting to Basel III capital standards

Since 2010 the Basel Committee has periodically monitored the progress of a sample of banks in its member jurisdictions in adjusting to the minimum Basel III requirements for capital and liquidity. A total of 210 banks participated in the most recent study, including 101 large internationally active (Group 1) banks and 109 other (Group 2) banks.[12] Overall, banks are making substantial progress towards meeting the Basel III minimum standards.

Graph 1 shows banks' capital shortfalls assuming full implementation of the Basel III requirements as of 30 June 2012, including changes to the definition of capital and risk-weighted assets, and ignoring phase-in arrangements. Group 1 banks that could not currently meet the minimum requirements would have had an overall shortfall of €3.7 billion for the CET1 minimum capital requirement of 4.5%, rising to €208.2 billion for a CET1 target level of 7.0% (ie including the capital conservation buffer); the latter shortfall also includes the capital surcharges for G-SIBs according to the update published by the Financial Stability Board in November 2012 where applicable.[13] As a point of reference, the sum of profits after tax prior to distributions across the same sample of Group 1 banks between 1 July 2011 and 30 June 2012 was €379.6 billion.

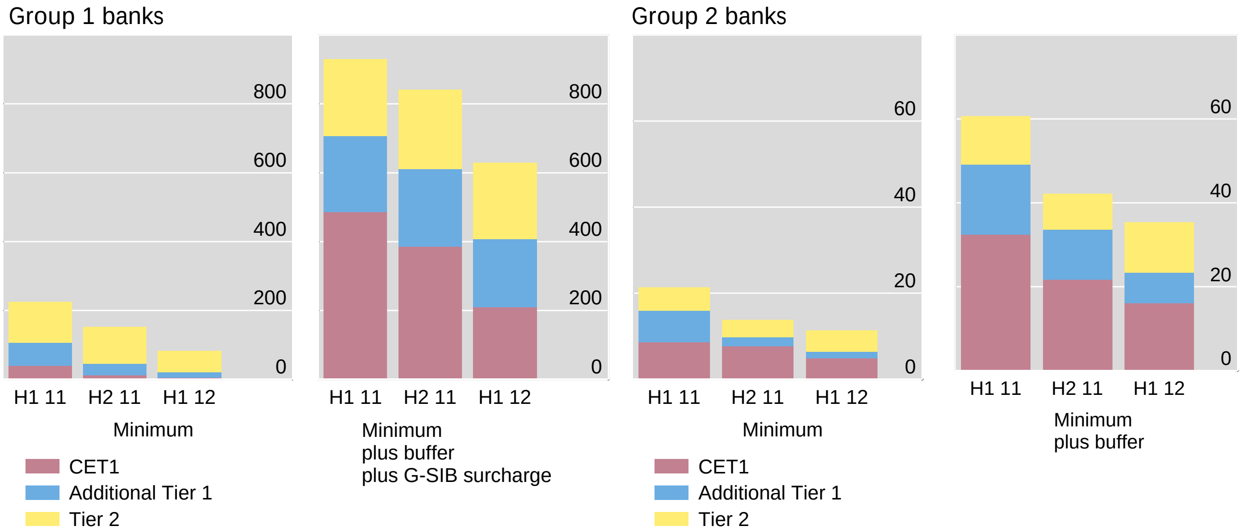
Compared to December 2011, the aggregate CET1 shortfall with respect to the 4.5% minimum for Group 1 banks improved – the shortfall was €8.2 billion (68.7%) lower. At the CET1 target level of 7.0% (plus the surcharges on G-SIBs as applicable), the aggregate CET1 shortfall for Group 1 banks also improved – it was €175.9 billion (45.8%) lower than in December 2011. The revised G-SIB surcharges did not significantly change the amount of the shortfalls.

[12] Group 1 banks are those that have Tier 1 capital in excess of €3 billion and are internationally active. All other banks are considered Group 2 banks. See Annex 3 for details on the sample of banks.

[13] See Financial Stability Board, *Update of group of global systemically important banks (G-SIBs)*, 1 November 2012, available at www.financialstabilityboard.org/publications/r_121031ac.pdf.

Estimated overall capital shortfalls[1]

In billions of euros, sample of banks and exchange rates as at the reporting dates — Graph 1

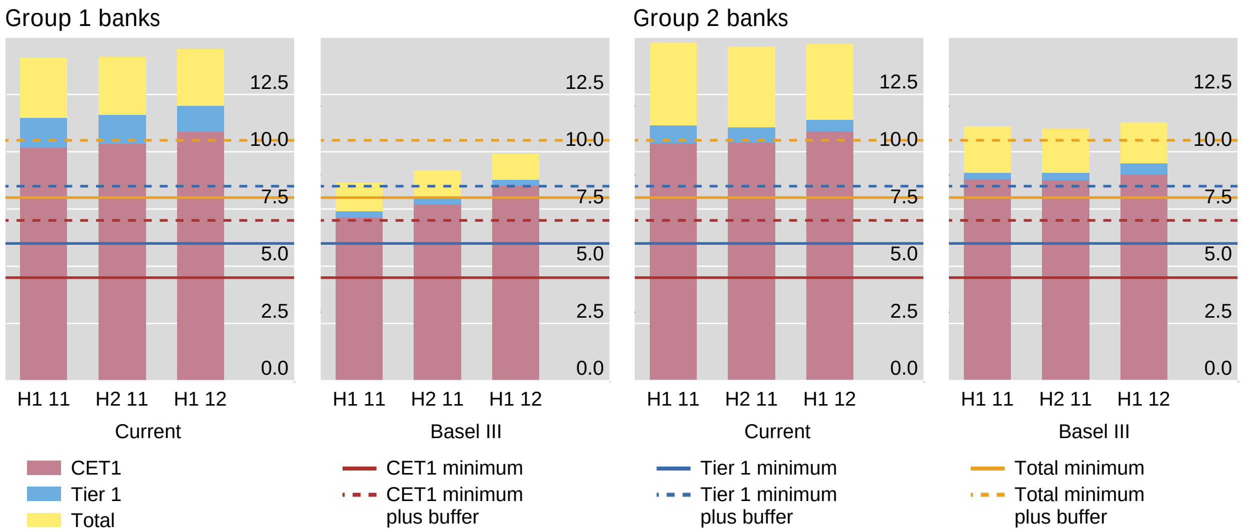


[1] The figures for the minimum plus the capital conservation buffer also include the capital surcharge for G-SIBs as applicable. The total height of each bar shows the total shortfall comprising the unmet requirements for each tier (ie CET1, Tier 1, and Tier 2) of capital.

Graph 2 shows the weighted average capital ratios for the banks in the sample. The weighted average CET1 ratio for Group 1 banks assuming full implementation of the Basel III requirements improved from 7.1% in June 2011 to 8.5% in June 2012, while their total capital ratio increased from 8.6% to 9.9%. As of end-June 2012, average capital ratios under the Basel III framework for a consistent sample of Group 2 banks were higher than those for Group 1 banks, but had improved only slightly. CET1 ratios increased from 8.8% in June 2011 to 9.0% in June 2012, and total capital ratios improved from 11.1% to 11.3% over the same period.

Average CET1, Tier 1 and total capital ratios

Consistent sample of banks, in per cent — Graph 2



Studies of risk-weighted assets and consistency of regulatory outcomes

As part of its implementation programme, the Basel Committee initiated studies into the consistency of the calculation of the risk-based capital ratio (the ratio of capital to RWAs) across banks. Inconsistencies in the measurement of risk-weighted capital ratios may stem from either calculations of capital or risk-weighted assets, ie the numerator or the denominator of the ratio (Table 3). The studies initially focused on the consistency of measuring RWAs, the denominator of the ratio.

Table 3: Potential sources of inconsistencies in measurement of the risk-based capital ratio

$$\text{Risk-based capital ratio} = \frac{\text{Capital resources}}{\text{Risk-weighted assets}}$$

Numerator/denominator	**Potential sources of inconsistencies in calculation**
Capital resources	Differences in valuation practices; the implementation of prudent valuation requirements and the regulatory definition of capital; differences in supervisory practices with regard to provisioning and write-downs.
Risk-weighted assets	Differences in risk modelling and in reliance on internal models for calculating risk weights; differences in supervisory practices including the use of additional regulatory add-ons and multipliers; differences in valuation practices, parts of which can affect risk measurement models such as value-at-risk.

With regard to the measurement of RWAs, the Basel standards deliberately allow banks and supervisors some flexibility in measuring risks in order to accommodate differences in risk appetite and local practices, but also with the goal of accommodating greater precision. Some variation in RWAs should therefore be expected. In addition, from a financial stability perspective, some diversity in risk management practices is desirable to avoid a situation in which all banks act in a similar way, which potentially could create additional instability. However, excessive variation – that is, that does not reflect material differences in the underlying risks taken by banks – is undesirable and could be harmful to the international level playing field.

As a first step, the Committee examined in more detail the drivers of possible inconsistencies in the measurement of RWAs for the banking book and trading book of banks. Importantly, the objective of this work was not to judge the correctness of banks' modelling choices or to assess the compliance of supervisory approaches taken in different jurisdictions. Rather, the objective was to obtain a preliminary estimate of the potential for variation in RWAs across banks and to highlight aspects of the Basel standards that contribute to this variation. The findings provide a direction for policy options that can be considered if the Committee wishes to narrow the potential for variation in the future.

In January 2013, the preliminary findings regarding the RWAs in the trading book were published.[14] The analysis investigating RWAs in the banking book is under way, and its results are expected to be published in the coming months.

[14] See Basel Committee on Banking Supervision, *Regulatory consistency assessment programme (RCAP) – Analysis of risk-weighted assets for market risk*, January 2013, available at www.bis.org/publ/bcbs240.pdf.

Analysis of risk-weighted assets in the trading book

In the trading book study, the Committee undertook (i) an analysis of publicly available data of large globally active banks with significant trading operations and (ii) a hypothetical test portfolio exercise to examine what methodology choices are the greatest potential drivers behind the variability of internal market risk model outcomes.

The review of public disclosures focused on a sample of 16 global banks with significant trading activity. The observation period included the most recent changes related to Basel 2.5, which had taken effect in some jurisdictions but not all. Despite the asynchronous adoption of Basel 2.5, value was found in comparing market risk RWAs across pre- and post-Basel 2.5 jurisdictions because many of the issues carry over to the new regime, for example regarding the contribution to RWAs from internal models and standardised approaches. For some banks, the disclosures required under Basel II (Pillar 3) factored into the analysis and provided a chance to evaluate the utility of such disclosures.

Based on public disclosures, the analysis showed considerable variation in average published RWAs for trading assets and provided some indication that differences in the composition and size of trading positions are correlated with banks' average market risk RWAs. However, the quality of disclosures was generally found to be insufficient to allow investors and other interested parties to assess how much of the variation reflects differing levels of actual risk and how much is a result of other factors.

The focus of the hypothetical test portfolio exercise was to discover the design elements of internal models that have the greatest potential impact on the level of variability in market risk RWAs. Hypothetical test portfolios overcome the limitations encountered when attempting to use public and supervisory data on real portfolios to investigate potential sources of variation because they control for differences in portfolio composition. However, they show only potential and not realised variation in outcome. Moreover, in this case, the exercise focused on a series of simple long and short positions, designed to reveal the impact of model design features. To shed light on the effect of different sources of variation on more realistic portfolios, the Committee plans to conduct a further hypothetical test portfolio exercise later in 2013. This will include other, more complex, hypothetical test portfolios, with the aim of helping the Committee to deepen its analysis of the variation in risk measurement of trading books across banks.

The hypothetical test portfolio exercise indicated that there can be a substantial difference between the bank reporting the lowest RWAs and the bank reporting the highest. This outcome is attributed to a range of factors:

- A sizeable portion of the variation is due to supervisory decisions applied either to all banks in a jurisdiction, or to individual banks. An example of the former would be policy decisions to restrict modelling options (eg to disallow any diversification benefit between types of risk). An example of the latter would be the application of supervisory multipliers: around one quarter of the total variation in the hypothetical diversified portfolio could be attributed to this single factor. These supervisory actions typically result in higher capital requirements than would otherwise be the case but can also increase the variation in RWAs between banks, particularly across jurisdictions. These supervisory actions, particularly at an individual bank level, are often not disclosed.
- Another key source of variation is modelling choices made by banks. The exercise found that a small number of key modelling choices are the main drivers of the remaining model-driven variability.

The study did not seek to identify the optimal level of variation, but the preliminary findings highlight potential policy options that could reduce for variation where it is considered excessive. These policy options complement important policy initiatives that are already under way, such as the fundamental review of the trading book, and policy work on disclosures. The policy options are further discussed below.

Analysis of risk-weighted assets in the banking book

The Committee is finalising its first study on sources of material differences across banks in RWAs in the banking book. As with the trading book, the Committee has been assessing the extent to which these variations are driven by differences in risk levels or in practices, by analysing data and studying banks' risk assessment and quantification practices.

The Committee reviewed a wide range of existing analyses of RWAs across banks and countries to assess methodologies and identify possible drivers of RWA variation. The studies highlighted many potential drivers, most of which suggested that RWA differences are due to both risk-based and practice-based factors. Risk-based factors are those that stem from differences in underlying risk at the exposure or portfolio level and in business models, including asset class mix. Practice-based factors include differences in bank practices (eg approaches to risk management and measurement) and in the regulatory environment (eg supervisory practices, implementing laws and regulations including national discretion, accounting standards). While the focus of the studies varied across these factors, no existing study could pinpoint the definitive causes of RWA differences between banks.

Supervisory data analysis

The Committee analysed supervisory data it collected as part of its ongoing capital monitoring. The analysis covered 56 large, internationally active banking organisations and 44 non-internationally active banking organisations in 15 jurisdictions.

The analysis suggests that a major portion of the variation in RWAs is driven by asset class mix, a risk-based driver. The remaining dispersion is due to different risk weights within asset classes – either from differences in actual risk (risk-based) or its measurement (practice-based). Key practice-based drivers include the choice of modelling approach for credit risk, capital floor adjustment, the treatment of defaulted and securitisation exposures, as well as the calibration of associated probabilities of default (PDs) and losses-given-default (LGDs). Many, although certainly not all, of these drivers reflect elements of the flexibility provided to banks and supervisors within the Basel framework.

Portfolio benchmarking analysis

A portfolio benchmarking exercise was used to explicitly investigate the magnitude of practice-based differences, by controlling for risk through the use of common obligors across banks. Thirty-two banks from 13 jurisdictions participated in the exercise, reporting PD and LGD estimates for a set of sovereign, bank, and corporate exposures.

The findings indicate that there is considerable consistency across banks with regard to the *relative* riskiness of obligors in the exercise (ie the rank order in terms of risk), but that there are sizeable differences in the *levels* of the perceived risk. The analysis suggests that different estimates of the PD and/or LGD for the same exposures create material differences in risk-weighted assets across banks.

Range of practices and meetings with banks

The Committee also identified and assessed the significance of a list of practice-based drivers of RWA variation. Many of these drivers are provided for in the Basel standards or in individual countries' implementation of the Basel framework.

Further insights on practices were collected through meetings in March 2013 with 12 of the 32 banks that participated in the portfolio benchmarking exercise. The meetings focused on the banks' RWA modelling practices for banking book exposures with a view to developing a better understanding of the specific drivers of observed variation.

Potential policy options and directions for future work

The preliminary results for both the trading book and the banking book indicate considerable variation in average risk-weighted assets across banks, of which only a part can be explained by variation in actual risk-taking. While some amount of variation is expected in any regime based on internal models, where it is considered excessive the findings suggest a potential direction for future policy work that could narrow down the potential variation.

Generally, the analysis highlights three potential types of policy options that could be considered in the future: (i) improvement of public disclosure and regulatory data collection to aid in the understanding of risk-weighted assets; (ii) narrowing down the modelling choices for banks, including through further use of floors and/or benchmarks; and (iii) further harmonisation of supervisory practices with regard to model approvals.

At this stage, the suggestions for policy options should not be seen as comprehensive, nor as pre-empting any specific policy measures, but rather as potential directions for future work to be considered by the Committee. Furthermore, the potential policy measures should not be seen as mutually exclusive: some combination of the three could be appropriate going forward. More broadly, the Committee has been considering the appropriate balance between risk sensitivity, comparability and simplicity. In the near term, the Committee intends to publish a paper setting out its thinking on the relevant policy trade-offs and identifying potential policy options that the Committee intends to explore to make the regulatory framework simpler and more comparable.

Annex 1

The Basel III framework builds upon and enhances the regulatory framework set out under Basel II and Basel 2.5. The tables herein therefore review members' regulatory adoption of Basel II, Basel 2.5 and Basel III.

- Basel II, which improved the measurement of credit risk and included capture of operational risk, was released in 2004 and was due to be implemented from year-end 2006.[15] The Framework consists of three pillars: Pillar 1 contains the minimum capital requirements; Pillar 2 sets out the supervisory review process and Pillar 3 corresponds to market discipline.
- Basel 2.5, agreed in July 2009, enhanced the measurements of risks related to securitisation and trading book exposures.[16] Basel 2.5 was due to be implemented no later than 31 December 2011.
- In December 2010, the Committee released Basel III, which set higher levels for capital requirements[17] and introduced a new global liquidity framework.[18] Committee members agreed to implement Basel III from 1 January 2013, subject to transitional and phase-in arrangements.

In November 2011, G20 Leaders at the Cannes Summit called on jurisdictions to meet their commitment to implement fully and consistently Basel II and Basel 2.5 by end 2011, and Basel III, starting in 2013 and completing by 1 January 2019. In June 2012, G20 Leaders at the Los Cabos Summit reaffirmed their call for jurisdictions to meet their commitments. This message was reiterated in Moscow in February 2013 by the G20 Finance Ministers and Central Bank Governors.

Methodology

The data contained in this annex are based on responses from Basel Committee member jurisdictions. The following classification is used for the status of adoption of Basel regulatory rules:

1. Draft regulation not published: no draft law, regulation or other official document has been made public to detail the planned content of the domestic regulatory rules. This status includes cases where a jurisdiction has communicated high-level information about its implementation plans but not detailed rules.
2. Draft regulation published: a draft law, regulation or other official document is already publicly available, for example for public consultation or legislative deliberations. The content of the document has to be specific enough to be implemented when adopted.
3. Final rule published: the domestic legal or regulatory framework has been finalised and approved but is still not applicable to banks.

[15] *International Convergence of Capital Measurement and Capital Standards*, June 2006, available at www.bis.org/publ/bcbs128.htm

[16] *Enhancements to the Basel II framework*, July 2009, available at www.bis.org/publ/bcbs157.htm

[17] *Basel III: A global regulatory framework for more resilient banks and banking systems*, June 2011, available at www.bis.org/publ/bcbs189.htm

[18] *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, available at www.bis.org/publ/bcbs238.htm

4. Final rule in force: the domestic legal and regulatory framework is already applied to banks.

In order to support and supplement the status reported, summary information about the next steps and the implementation plans being considered by members are also provided for each jurisdiction.[19]

In addition to the status classification, a colour code is used to indicate the implementation status of each jurisdiction.

19 The tables are also available on the Basel Committee's website (www.bis.org/bcbs). The web version of the tables includes links to relevant domestic regulations.

Status of adoption of Basel II regulations (as of end-March 2013)

Country	Basel II	Implementation plans
Argentina	3, 4	(3) Final Pillar 3 rules published on 8 February 2013 will come into force on 31 December 2013. (4) Final rules for Pillar 1 credit risk and Pillar 2 came into force on 1 January 2013.
Australia	4	
Belgium	4	
Brazil	4	
Canada	4	
China	4	
France	4	
Germany	4	
Hong Kong SAR	4	
India	4	
Indonesia	4	
Italy	4	
Japan	4	
Korea	4	
Luxembourg	4	
Mexico	4	
The Netherlands	4	
Russia	1, 4	(1) Pillar 2 expected to be implemented not earlier than 2014. Pillar 3 expected to be implemented not earlier than 2013. (4) Simplified standardised approach for credit risk, simplified approach for market risk and the Basic Indicator Approach for operational risk implemented.
Saudi Arabia	4	
Singapore	4	
South Africa	4	
Spain	4	
Sweden	4	
Switzerland	4	
Turkey	4	
United Kingdom	4	
United States	4	Parallel run ongoing – All Basel II mandatory institutions are required to implement the advanced approaches to credit risk and operational risk. Banks have made significant progress in implementation efforts and those institutions in parallel run are reporting both Basel I and Basel II regulatory capital ratios to supervisors on a quarterly basis. US institutions in parallel run remain subject to Basel I capital requirements.
European Union	4	

Number and colour code: 1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force. Green = implementation completed; yellow = implementation in process; red = no implementation.

Status of adoption of Basel 2.5 regulations (as of end-March 2013)

Country	Basel 2.5	Implementation plans
Argentina	1, 4	(1) *Revisions to the Basel II market risk framework* (July 2009): market risk amendments to reflect Basel 2.5 are considered a lower priority given the limited activity in Argentina. (4) *Enhancements to the Basel II framework* (July 2009): rules relating to enhancements to securitisation came into force on 1 January 2013.
Australia	4	
Belgium	4	
Brazil	4	
Canada	4	
China	4	
France	4	
Germany	4	
Hong Kong SAR	4	
India	4	
Indonesia	1	Securitisation exposures in Indonesia are currently insignificant and prospects remain highly subdued for any material issuance. However, the regulation concerning prudential requirements on asset securitisation for banks has been in force since 2005. No bank has adopted the internal model approach (IMA) for market risk capital charge although the relevant regulation has been in force since 2007.
Italy	4	
Japan	4	
Korea	4	
Luxembourg	4	
Mexico	1	Pillar 2 provisions are partially implemented. The remaining aspects will be implemented in 2013, as well as the requirements under Pillar 3.
The Netherlands	4	
Russia	1, 4	(1) Pillar 2 expected to be implemented not earlier than 2014. (4) Final regulation on the revised standardised approach for market risk in force since 1 February 2013.
Saudi Arabia	4	
Singapore	4	
South Africa	4	
Spain	4	
Sweden	4	
Switzerland	4	
Turkey	4	
United Kingdom	4	

United States	2, 4	(4)	Final market risk capital requirements, which incorporate Basel 2.5, became effective on 1 January 2013.
		(2)	Other Basel 2.5 revisions included as part of the proposed Basel III rule approved in June 2012. The US banking agencies intend to finalise the rule after consideration of public comments.
European Union	4		

Number and colour code: 1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force. Green = implementation completed; yellow = implementation in process; red = no implementation.

Status of adoption of Basel III (capital) regulations (as of end-March 2013)

Country	Basel III	Implementation plans
Argentina	3, 4	(3) Final Pillar 3 rules published on 8 February 2013 will come into force on 31 December 2013. (4) Final rules for Pillars 1 and 2 came into force on 1 January 2013.
Australia	4	
Belgium	(2)	(Follow EU process)
Brazil	3	Final rules published on 1 March 2013 will come into force on 1 October 2013.
Canada	4	Footnote[20]
China	4	Footnote[21]
France	(2)	(Follow EU process)
Germany	(2)	(Follow EU process)
Hong Kong SAR	4	Final rules on minimum capital standards took effect on 1 January 2013. Rules on capital buffers expected to be issued in 2014. Disclosure rules scheduled to take effect on 30 June 2013.
India	4	Footnote[22]
Indonesia	2	Consultative paper on Basel III, which contains draft regulation released in June 2012 for industry comments.
Italy	(2)	(Follow EU process)
Japan	4	Rules covering capital conservation buffer and the countercyclical buffer not yet issued. Draft regulations expected in 2014/15.
Korea	2	Draft regulation published on 27 September 2012. Final regulations are ready and will be implemented at an appropriate time to ensure a level playing field with other major countries.
Luxembourg	(2)	(Follow EU process)
Mexico	4	Footnote[23]
The Netherlands	(2)	(Follow EU process)
Russia	3	Final regulation for capital definition and capital adequacy ratios published in February 2013. Reporting under the new capital rules starts from 1 April 2013 with 1 October 2013 being the expected effective date of their implementation as a regulatory requirement. Draft regulations for leverage ratio are planned to be published for public consultation in 2013.
Saudi Arabia	4	

[20] Final rules for the credit valuation adjustment (CVA) issued on 10 December 2012 will come into force on 1 January 2014

[21] Rules on banks' exposure to central counterparties (CCPs) will be issued shortly.

[22] Final rules for the credit valuation adjustment (CVA) have been issued and will come into force on 1 January 2014. Draft rules on capital requirements for bank exposures to central counterparties (CCPs) were issued on 10 January 2013 and the final rules will be issued shortly for implementation.

[23] Rules on banks' exposure to central counterparties (CCPs) not yet issued.

Singapore	4	Footnote[24]
South Africa	4	A directive has been recently issued which has the effect that the capital charge for credit valuation adjustment (CVA) risk on banks' exposures to ZAR-denominated OTC derivatives and non-ZAR OTC derivatives transacted purely between domestic entities will be zero-rated for the course of 2013, ie until 31 December 2013.[25]
Spain	(2)	(Follow EU process)
Sweden	(2)	(Follow EU process)
Switzerland	4	Footnote[26]
Turkey	2	Draft regulations issued on 1 February 2013 covering capital requirements. Further drafts covering buffers will follow in 2013.
United Kingdom	(2)	(Follow EU process)
United States	2	Joint notice of proposed rulemaking approved in June 2012. The US agencies intend to finalise the rule after consideration of public comments. Basel 2.5 and Basel III rulemakings in the United States must be coordinated with applicable work on implementation of the Dodd-Frank regulatory reform legislation.
EU	2	The European Parliament and the EU Council have reached an agreement on the legislative texts implementing Basel III and further measures regarding sound corporate governance and remuneration structures. The legislators agree that the acts should enter into force before the end of the first half of the year, allowing for a date of application of 1 January 2014.

Number code: 1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force. Green = implementation completed; yellow = implementation in process; red = no implementation.

[24] Final rules on capitalisation of banks' exposure to CCPs have been issued and will come into force from 1 July 2013.

[25] This came about as a result of the limited time between the finalisation by the Basel Committee of the proposed rules and the intended date of implementation, and the absence of a domestic central counterparty for domestic OTC derivative transactions.

[26] Parallel application of "Swiss approach" allowed for small banks until end-2018.

Annex 2

Singapore review

In March 2013, the Basel Committee completed its assessment of Singapore.[27] The assessment evaluated the local regulations established by the Monetary Authority of Singapore (MAS), which implements Basel III in Singapore. The regulations were published in September 2012 and further amended in November 2012. Additional regulations implementing associated disclosure requirements were published in December 2012 and were also considered in the assessment.

The assessment found that Singapore's overall capital regime is in line with the requirements of the Basel framework. Singapore's regulations were found to be "compliant" in 12 out of the 14 components assessed. While two other components were assessed as "largely compliant", the deviations were not considered to be material by the assessment team. As a result, the overall framework was graded with an overall assessment outcome of "compliant". The assessment team also noted Singapore's active and continuing commitment to the global regulatory reforms that form part of the package of reforms announced by the Basel Committee. In this regard, it must be highlighted that the Monetary Authority of Singapore (MAS) was able to promptly resolve a number of initial assessment findings by issuing amendments to the domestic rules that implement Basel III. These amendments contributed to the favourable assessment outcome.

[27] See Basel Committee on Banking Supervision, *Regulatory Consistency Assessment Programme (RCAP): Assessment of Basel regulations – Singapore*, March 2013, available at www.bis.org/bcbs/implementation/l2_sg.pdf.

RCAP assessment grades: Singapore

Key components of the Basel framework	Grade[28]
Overall grade	Compliant
Capital requirements	
Scope of application	C
Transitional arrangements	C
Definition of capital	C
Pillar 1: Minimum capital requirements	
Credit risk: standardised approach	LC
Credit risk: internal ratings-based approach	LC
Credit risk: securitisation framework	C
Counterparty credit risk rules	C
Market risk: standardised measurement method	C
Market risk: internal models approach	C
Operational risk: basic indicator approach and standardised approach	C
Operational risk: advanced measurement approaches	C
Capital buffers (conservation and countercyclical)	C
G-SIB additional loss absorbency requirements	na
Pillar 2: Supervisory review process	
Legal and regulatory framework for the supervisory review process and for taking supervisory actions	C
Pillar 3: Market discipline	
Disclosure requirements	C

[28] Compliance assessment scale: C (compliant), LC (largely compliant), MNC (materially non-compliant) and NC (non-compliant). For definitions of the compliance scale, see Basel Committee on Banking Supervision, *Basel III regulatory consistency assessment programme*, April 2012, available at www.bis.org/publ/bcbs216.pdf.

Annex 3

Sample of banks included in the Basel Committee's monitoring exercise

In 2010 the Committee started periodically monitoring the progress of a sample of internationally active banks in adjusting to the new Basel III standards for capital and liquidity. The table below shows the distribution of participation by jurisdiction in the most recent study.

Number of participating banks[1]

	Group 1 banks	Group 2 banks
Argentina	0	2
Australia	4	1
Belgium	1	2
Brazil	2	0
Canada	6	2
China	6	0
France	5	5
Germany	8	25
Hong Kong SAR	0	7
India	5	5
Indonesia	0	2
Italy	2	11
Japan	13	4
Korea	5	3
Luxembourg	0	1
Mexico	0	7
Netherlands	3	16
Russia	0	1
Saudi Arabia	3	0
Singapore	3	0
South Africa	3	3
Spain	2	3
Sweden	4	0
Switzerland	2	4
Turkey	6	0
United Kingdom	5	5
United States	13	0
Total	**101**	**109**

[1] Group 1 banks are those that have Tier 1 capital in excess of €3 billion and are internationally active. All other banks are considered Group 2 banks.

Source: Basel Committee on Banking Supervision, *Report on end-June 2012 Basel III monitoring data*, March 2013, p 6.