



A PRACTITIONER'S GUIDE TO  
**BASEL III AND BEYOND**

Consultant Editor

**Richard Barfield**

**PricewaterhouseCoopers LLP**



THOMSON REUTERS™

# Contents

<b>Biographies</b>	<b>v</b>
<b>Author email and phone details</b>	<b>xi</b>
<b>Foreword</b>	<b>xiii</b>
<b>Preface</b>	<b>xvii</b>
<b>1 Introduction</b>	<b>1</b>
Richard Barfield	
1.1 Overview	1
1.2 For whom is the Guide intended	1
1.3 Overview of the reform agenda	2
1.4 The players	4
1.5 A brief history of Basel	8
1.6 Basel III in a nutshell	9
1.7 Coverage of the Guide	13
1.8 Looking forward	18
1.9 Conclusion	19
<b>2 Strategic Context</b>	<b>21</b>
Richard Kibble and James Worsnip	
2.1 Introduction	21
2.2 The reforms in context	23
2.3 Basel III – Impact and response	35
2.4 Unintended consequences	47
2.5 Conclusion	52
<b>3 Defining Capital</b>	<b>53</b>
Chris Matten	
3.1 Introduction	53
3.2 Overview of the key changes	53
3.3 Definition of capital under Basel I and Basel II	54
3.4 Going concern v gone concern	62
3.5 The definition of capital under Basel III	65

3.6	New minimum capital ratios	78
3.7	Contingent capital	80
3.8	The capital buffers	81
3.9	Practical considerations	82
3.10	Superequivalence	85
3.11	Conclusion	86
<b>4</b>	<b>Trading Book and Securitisation</b>	<b>89</b>
	Ina de Vry	
4.1	Introduction	89
4.2	The Standardised Approach to market risk capital	90
4.3	The internal model approach to market risk capital	92
4.4	The Basel II review of the trading book in 2005	93
4.5	The effect of the crisis	94
4.6	Basel II.5 and Basel III changes	97
4.7	Market risk – looking forward	116
<b>5</b>	<b>Counterparty Credit Risk</b>	<b>121</b>
	Monika Mars and Agatha Pontiki	
5.1	Introduction	121
5.2	Overview of counterparty credit risk	121
5.3	Proposals to enhance counterparty credit risk capture	126
5.4	Implications and practicalities	141
<b>6</b>	<b>Liquidity and Funding</b>	<b>147</b>
	Charlie Beach and Claire Rieger	
6.1	Introduction	147
6.2	Basel III regulations	153
6.3	Implications and practical issues	169
<b>7</b>	<b>Leverage</b>	<b>181</b>
	Fernando de la Mora	
7.1	Introduction	181
7.2	Background	182

7.3	Basel response	187
7.4	Conclusion	192
<b>8</b>	<b>Accounting Considerations</b> Simon Gealy and Addison Everett	<b>197</b>
8.1	Introduction	197
8.2	Interaction of Basel III with current and proposed accounting guidance	200
8.3	Practical implementation considerations	206
8.4	Conclusion	218
<b>9</b>	<b>Role of Pillar 2</b> Chris Matten	<b>219</b>
9.1	Introduction	219
9.2	The role of Pillar 2 under Basel II	220
9.3	Impact of Basel III on Pillar 2	223
9.4	Implications for economic capital	227
9.5	Importance of risk management – strengthening the SREP	231
9.6	Conclusion	233
<b>10</b>	<b>Procyclicality</b> Monika Mars	<b>237</b>
10.1	Introduction	237
10.2	Managing procyclicality	238
10.3	Basel III proposals to address procyclicality	240
10.4	Conclusion	256
<b>11</b>	<b>Stress Testing</b> Fernando de la Mora, Richard Barfield and Pramit Mitra	<b>259</b>
11.1	Introduction	259
11.2	Basel III guidelines	263
11.3	Key features off effective stress testing	268
11.4	Conclusion	283

<b>12</b>	<b>Disclosures and Pillar 3</b>	<b>285</b>
	Christophe Cadiou	
12.1	Introduction	285
12.2	Overview of risk disclosure requirements	288
12.3	Practical implementation challenges	307
12.4	Conclusion – the future of risk management disclosures	312
<b>13</b>	<b>Taxation</b>	<b>315</b>
	Matthew Barling and Anne-Marie Stomeo	
13.1	Introduction	315
13.2	The taxation environment for banks	315
13.3	Tax implications of Basel III proposals	322
13.4	Conclusion	331
<b>14</b>	<b>Reward</b>	<b>333</b>
	Tom Gosling	
14.1	Introduction	333
14.2	Forces for change	333
14.3	Incorporating risk into performance measures	337
14.4	Design of compensation	348
14.5	Governance of remuneration	356
14.6	Disclosure of remuneration	362
14.7	Conclusion	364
<b>15</b>	<b>Recovery and Resolution Planning</b>	<b>367</b>
	Duncan McNab	
15.1	Introduction – in peace plan for war	367
15.2	International overview	369
15.3	Recovery – financial Business Continuity Planning	374
15.4	Resolution – planning for your own funeral	379
15.5	Reality check – lessons learned from the pilots	383
15.6	Conclusion	384

<b>16</b>	<b>Stakeholder Perspectives</b>	<b>387</b>
	Richard Barfield	
16.1	Introduction	387
16.2	The funding spectrum	387
16.3	Equity investors	389
16.4	Debt investors and contingent capital	393
16.5	Depositors and borrowers	396
16.6	Government and the taxpayer	399
16.7	Rating agencies	402
16.8	Transparency for stakeholders	404
16.9	Conclusion	407
<b>17</b>	<b>Implications for Risk Management</b>	<b>409</b>
	Sonja du Plessis	
17.1	Introduction	409
17.2	Establishing an explicit risk culture	412
17.3	Role of the board	415
17.4	Risk appetite	421
17.5	Chief risk officer	424
17.6	Conclusion	434
<b>18</b>	<b>Implications for the Economy</b>	<b>437</b>
	Nick Forrest	
18.1	Introduction	437
18.2	How banks (and banking regulations) impact the economy	441
18.3	Likely response of banks	450
18.4	Impact of previous regulatory changes	452
18.5	Impact on the broader economy	454
18.6	Conclusion	466
<b>19</b>	<b>Implications for Supervision</b>	<b>469</b>
	Patrick Fell	
19.1	Introduction	469
19.2	The core principles	471
19.3	Rethinking supervision	475
19.4	New style supervision – the glide path	476

19.5	Key principles for macro-prudential supervision	479
19.6	Will the authorities be able to meet the expectations placed on them?	482
19.7	The place of the regulator	492
19.8	International oversight	494
19.9	Conclusion	498
<b>Appendix I – Trends in Pillar 3 reporting and risk disclosures</b>		<b>501</b>
<b>Appendix II – List of banks covered in the analysis of Pillar 3 and risk management disclosures</b>		<b>511</b>
<b>Appendix III – CEBS observed good practices for disclosures on activities affected by the market turmoil (with mapping to the SSG leading practices)</b>		<b>513</b>
<b>Index</b>		<b>519</b>

# Chapter 1

## Introduction

**Richard Barfield**

### 1.1 Overview

Basel III represents the biggest regulatory change that the banking industry has seen in decades. It is salutary to remember that it is only one, albeit very important, component of a suite of related reforms that are changing banking, regulation, supervision and the relationship between banks and the state.

In November 2010 the G20 ratified the Basel Committee's proposals for strengthening capital and liquidity standards. In doing so, they committed the global banking industry to significant change and a transition period that extends beyond 2020.

Distant deadlines have the danger of creating complacency and inaction. Leading banks recognise this threat and have no desire to suffer the same fate as the apocryphal simmering frog. The market is also asking how banks will be impacted. The question then, is what practical actions should banks be taking? This Guide aims to provide some answers.

To set the scene, this Chapter introduces Basel III, the reform landscape, the key players, and provides an overview of the Guide.

### 1.2 For whom is the Guide intended?

This is a Practitioner's Guide to the potential implications of Basel III and beyond: we go beyond the text of the new Basel guidance to consider implications and practical implementation issues. The Guide also goes beyond Basel III to consider closely

related reforms such as changes to recovery and resolution (what banks should do when they are at risk of failing or when they have failed). This is therefore a Practitioner's Guide that aims to address the new realities.

The Guide is intended to have broad appeal; the types of reader that we had in mind when putting finger to keyboard included for example:

- (a) CEOs and directors wanting to understand the important parts of the G20 reform agenda and its consequences for financial institutions;
- (b) CFOs, CROs, Compliance Officers, Treasurers, and COOs grappling with managing one of the most complex change agendas in history; and
- (c) supervisors and legal advisers looking for a rounded and coherent overview of Basel III and insights into what it might mean for banks.

### **1.3 Overview of the reform agenda**

It is important to put Basel III in context. The G20's main aim on banking reform is to ensure that governments never again have to bail out the sector. They want to remove the implicit guarantee that governments will back large banks if they get into trouble. The G20 does not want to eradicate bank failure nor does it expect central banks never to have to provide liquidity support to troubled firms, but the G20 is absolutely clear that bank-dependency on taxpayer support on the scale witnessed over the last three years is unacceptable and must not be repeated.

The clarity and unity of purpose of the G20 on the issue is unparalleled. Recent events in Ireland, Greece and Portugal illustrate the importance of achieving this goal. However, for it to happen, that unity of purpose will need to be sustained for a long time.

The causes of the global financial crisis were complex and, because of the interconnectedness of the financial system, its impact was felt far and wide. However, it did not affect all banks or all economies in the same way. Several countries' banks emerged unscathed. Asia generally, Australia, Brazil, Russia,

Canada and South Africa are some notable examples. This is why the G20's unity is remarkable, but unity it has been nonetheless.

Given that the Financial Stability Forum ("FSF") was born at the G7 Finance Ministers' meeting in the wake of the Asian financial crisis of 1999, perhaps we should not be so surprised. Since then, the G7 grouping has grown in both number and scope. In response to the 2007 financial crisis, G20 summits involving heads of state were convened. The summits were preceded by meetings of the G20 Finance Ministers and Central Bank Governors. The G20 was designated the premier forum for international economic cooperation at the Pittsburgh G20 summit in 2009, formally superseding the G7. In the same year, the Financial Stability Board ("FSB") superseded the FSF.

Since the crisis, a plethora of reforms have been proposed from a wide variety of sources, not just the Basel Committee. These included the FSB's proposals on reward; the European Commission's proposals on governance in financial institutions; bank levies proposed globally and locally; and taxes on bankers' bonuses etc. Figure 1.1 gives an idea of the range and complexity of reform that is being pursued. The Basel proposals are one item on this list.

**Figure 1.1 The reform agenda**

The reform agenda	
Basel II.5 and Basel III	Product market regulation
Pre-funding of deposit insurance	Pro-consumer regulation
Resolution fund	Role of credit rating agencies
Wholesale levy	Securitisation markets
Provisions and other accounting changes	Fund managers to improve fund liquidity
Subsidiarisation	Hedge fund regulation
Central counterparty clearing (OTC contracts)	Bank risk management and governance
Reporting (capital and liquidity) supervision/oversight	Macro-prudential
Remuneration	Supervisory approach
Narrow banking	Cross-border colleges
"Glass-Steagall II"	Recovery and resolution

To give one example of the scale of other reforms: in the US, the Dodd-Frank Act was signed into law on 21 July 2010 and has 2,319 pages (by contrast the 1933 Glass-Steagall Act had a mere 37 pages). The remarkable thing is that the Dodd-Frank Act is just the beginning. Ten US regulatory agencies are now putting the detailed regulatory flesh on the bare legislative bones. As the devils lie in the detail, the final consequences of Dodd-Frank may be unclear for years to come. And, of course, Dodd-Frank does not cover everything in Figure 1.1.

The scope of reforms addressed in other countries may, in some cases, be similar in breadth to the reforms brought about by Dodd-Frank, but these will vary according to local context, history, experience of the crisis, existing central bank and regulatory frameworks etc.

The impact of Basel III in each country will also need to be placed in the context of the local reform agenda. For example, in the European Union, Solvency II (which sets out strengthened risk management and capital adequacy requirements for insurance firms) is being introduced with a proposed “go-live” date of 1 January 2013. This parallel development may have impacts on banks, for example in the availability and pricing of medium-term funding.

There are also much bigger forces at play. There is the rebalancing of the world economic order to the East and the South, large government deficits in several Organisation for Economic Cooperation and Development (“OECD”) economies, persistent trade imbalances and mis-valued currencies. This means that reforms are being introduced in “interesting times”.

## **1.4 The players**

So, who are the main players in shaping the reform agenda? The G20 sponsors the FSB whose central goals are to improve the functioning of financial markets and to maintain financial stability through coordinating the work of national financial bodies and promoting effective regulatory, supervisory and other financial sector policies.

The Basel Committee on Banking Supervision (the “Committee” or “BCBS”) is one of the 42 FSB members and the central forum for regular cooperation on banking supervisory matters. It takes its name from the Swiss border town where its secretariat is based. This is also where Committee members, senior officials responsible for banking supervision or financial stability issues, meet. The members come from central banks and other authorities with formal responsibility for the prudential supervision of banking. Over recent years, it has developed increasingly into a standard-setting body on all aspects of banking supervision. At the time of writing (March 2011), the Chairman of the Committee is Mr Nout Wellink, President of the Netherlands Bank.

The countries represented on the Basel Committee are: Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong, 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.

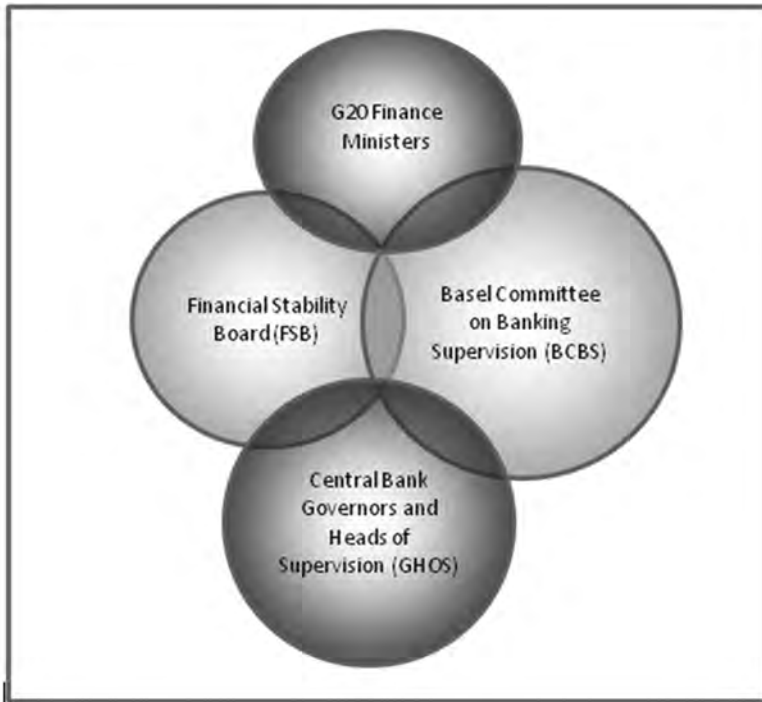
The BCBS reports to a joint committee of central bank governors and heads of supervision (GHOS) from its member countries. The GHOS debates and approves the Committee’s recommendations before they are issued.

As the reader can see, there is overlap between GHOS membership and G20 finance ministers and central bank governors. See Figure 1.2

As one would expect, the BCBS is supported by a number of expert committees (see Figure 1.3). From the point of view of Basel III, the most important of these is now the Standards Implementation Group which concentrates on the implementation of Basel standards and guidance, and, as of March 2011, is chaired by José María Roldán.

It is useful to draw a distinction between regulation and supervision. Regulation is the set of rules and standards that govern financial institutions; supervision is the process designed to oversee financial institutions to ensure that the rules and

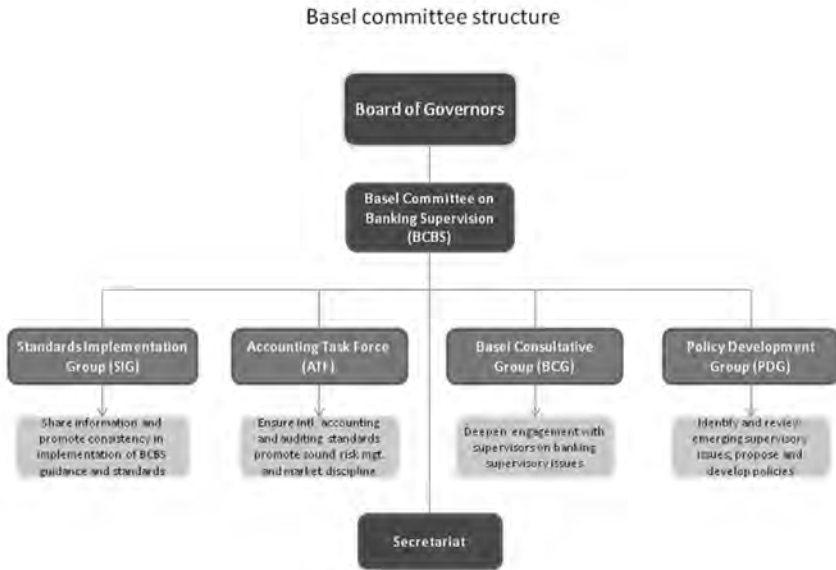
**Figure 1.2 The players**



standards are applied. In some countries, these two activities are performed by separate bodies (e.g. China, Germany and Switzerland) and in many by different parts of the same organisation (e.g. Reserve Bank of India, South African Reserve Bank and the Monetary Authority of Singapore). In the UK, the Bank of England and the FSA are represented on the Basel Committee, but the FSA's responsibilities for prudential supervision will soon become part of the Bank of England. It should be clear to the reader that regulation, supervision and financial stability are often closely interlinked.

Another important stakeholder group is the banks themselves. In some countries, criticising banks has long been a national sport and in others the crisis gave criticising banks a much-needed boost. Politicians, previously cheerleaders of the credit-fuelled boom, were, in the natural way of things, not slow in

Figure 1.3 The Basel Committee structure



changing their position. As a result of unrelenting bad press in some countries, it is sometimes easy to forget the critical role that banks play in international trade, financial intermediation (linking providers of finance with those that need it) and the economy as a whole. Their participation in the reform debate has also been very important to provide input to finance ministers, central bankers, regulators and their staff to give insights into how the reforms might impact banks and what the wider economic consequences might be.

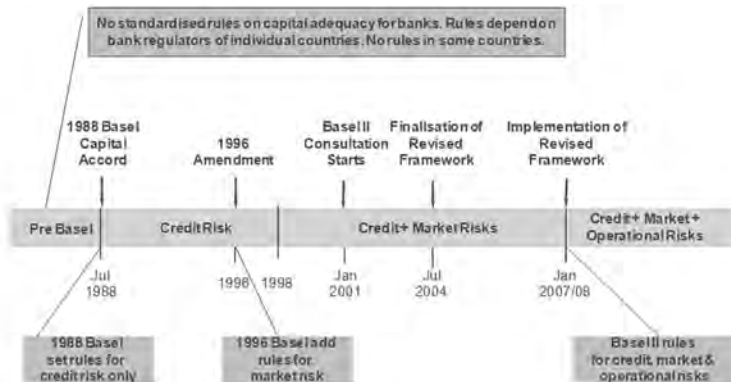
In most countries there are trade associations of banks (the British Bankers' Association, for example). These play an important role at national level. However, the only global association of financial institutions is the Institute of International Finance ("IIF"). Like the G7 it was born of crisis and was created in 1983 by banks in the wake of the international debt crisis of the early 1980s. The IIF now has over 400 financial institutions as members. Its mission is to support the industry in managing risk, develop best practices and standards for the industry, advocate policies that are in the broad interests of members and foster global financial stability.

## 1.5 A brief history of Basel

Global standards for capital are a relatively recent innovation. Basel I came into force in 1988, related only to credit risk, and was relatively simple. Before then, there were no standardised rules on capital adequacy for banks. In 1996, market risk rules were added. In December 1998, the BCBS recognised that Basel I needed to be revised to reflect credit risk more effectively and to prevent increasing use of arbitrage by the banks that were using more and more sophisticated internal models to measure and understand risk. The Committee also decided to recommend a capital charge for operational risk.

Basel II was born and took five years to develop and then a further four years to implement. Basel II has only been in place since January 2007 (or 2008 for those on the advanced approaches under Basel II: credit risk regulatory requirements may be calculated using one of three methods which are, in increasing order of sophistication, the Standardised Approach (“SA”); the Foundation Internal Ratings Based approach (“FIRB”); and, Advanced Internal Ratings-Based approach (“AIRB”). Most large international banks use AIRB for the majority of their exposures). In some countries it had not been implemented when the crisis hit (for example the US). Figure 1.4 provides the timeline.

Figure 1.4 Brief history of Basel I and Basel II



The Committee's remit extends a long way beyond capital adequacy. Its other global standards and consultations include, for example, liquidity risk, deposit insurance, risk management, corporate governance, stress testing and alignment of risk and reward.

The Committee's conclusions and recommendations do not have legal force: its role is to formulate supervisory standards and guidelines. It recommends best practices in the expectation that individual authorities will implement them through detailed national arrangements – statutory or otherwise – which are best suited to their own national systems. The Committee encourages convergence towards common approaches and standards without attempting detailed harmonisation of member countries' supervisory techniques. Even in the EU where Basel III will be enshrined in version four of the Capital Requirements Directive ("CRD"), there are likely to be some differences in national interpretation and implementation.

## **1.6 Basel III in a nutshell**

The main aim of Basel III is to improve financial stability. Views on the causes of the financial crisis are well (and extensively) documented. Commentators still argue over some aspects but there is consensus on the key issues. The Report of the de Larosiere Group on the future of European regulation and supervision, published in February 2009 (Report, the high-level group on financial supervision in the EU, chaired by Jacques de Larosiere, 25 February 2009), was an early and excellent contribution that succinctly identified the principal causes of the financial crisis and made detailed recommendations for reform within the European system and globally.

Before the crisis, there was a period of excess liquidity. As a result liquidity risk had, for many banks and supervisors, become practically invisible. When liquidity became scarce (particularly as wholesale funding dried up) as the crisis developed, banks found that they had insufficient liquidity reserves to meet their obligations.

Also, banks had insufficient good quality (i.e. loss absorbing) capital. Low inflation and low returns had led investors to seek ever more risk to generate returns. This led to increased leverage and riskier financial products. High leverage amplified losses as banks tried to sell assets into falling and shrinking markets, which created a vicious circle of reducing capital ratios and a need to de-lever, which increased asset disposals. Mark-to-market accounting meant that there was no hiding place as buyers disappeared, prices dropped and trading asset valuations plummeted.

Due to a lack of transparency, counterparty credit risk was misunderstood and risk concentrations were underestimated. The interconnectedness of the financial system meant that, when trading counterparties defaulted, the shocks were transmitted rapidly through the system; the necessary shock absorbers were not in place, nor was transparency over the linkages.

To make matters worse, the Basel II capital formulae for credit risk are “procyclical”. This means that as a downturn develops the probability of borrower default and loss at default both increase, which means that regulatory capital requirements increase. This should be dealt with through Pillar 2 capital planning buffers but the risks had been underestimated by banks and supervisors alike. Under Basel II, Pillar 1 calculates the minimum regulatory capital requirements for credit, market and operational risk; Pillar 2 covers the supervisory review process where supervisors evaluate whether banks should hold more capital than the Pillar 1 minimum; and Pillar 3 aims to encourage market discipline by specifying disclosure requirements to be made by banks to the market.

All the above meant that banks had to turn to their central banks for liquidity support and some to their governments for capital injections or support in dealing with assets of uncertain value for which there were no other buyers. Several major institutions are still dependent on state (i.e. taxpayer) support.

In response to the crisis, the Basel proposals have five main objectives:

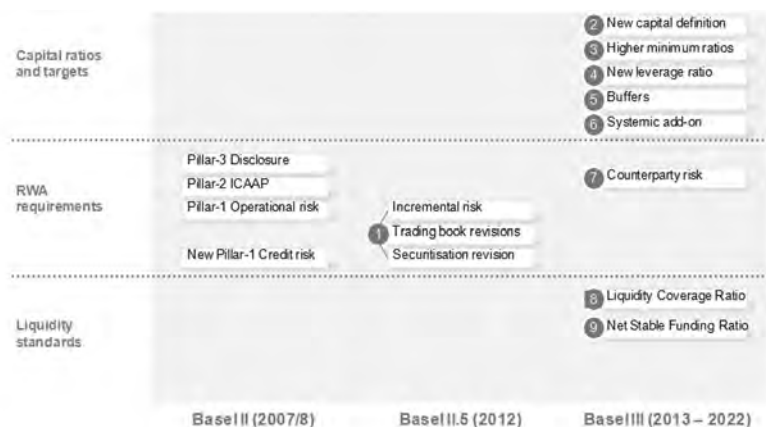
- (1) raise the quality, quantity, consistency and transparency of the capital base to ensure that banks are in a better position to absorb losses;
- (2) strengthen risk coverage of the capital framework by strengthening the capital requirements for counterparty credit risk exposures;
- (3) introduce a leverage ratio as a supplementary measure to the Basel II risk-based capital;
- (4) introduce a series of measures to promote the build-up of capital buffers in good times that can be drawn upon in periods of stress. Linked to this, the Committee is encouraging the accounting bodies to adopt an expected loss provisioning model to recognise losses sooner; and
- (5) set a global minimum liquidity standard for internationally active banks that includes a 30-day liquidity coverage ratio requirement, underpinned by a longer-term structural liquidity ratio.

The Basel changes discussed in this Guide are embodied in Basel II.5 and Basel III. The evolution from Basel I to Basel III is shown in Figure 1.5. Overall there are nine elements to the Basel changes which the Guide covers as follows:

- (a) Capital definition (Chapter 3) – item 2 in Figure 1.5
- (b) Higher minimum ratios (Chapter 3) – item 3
- (c) Trading book and securitisation – Basel II.5 (Chapter 4) – item 1
- (d) Counterparty risk (Chapter 5) – item 7
- (e) Liquidity Coverage Ratio (Chapter 6) – item 8
- (f) Net Stable Funding Ratio (Chapter 6) – item 9
- (g) Leverage ratio (Chapter 7) – item 4
- (h) Conservation and countercyclical buffers (Chapter 9) – item 5
- (i) Systemic risk (Chapter 15) – item 6

Basel II.5 refers to guidance that was issued in July 2009 (“Revisions to Basel II market risk framework”). It included additional capital requirements for the trading book and revisions to the treatment of securitisations that come into effect on 1 January 2012. Basel III also goes further and recommends changes to Pillar 2 (banks’ internal assessment of capital

**Figure 1.5 Basel evolution**

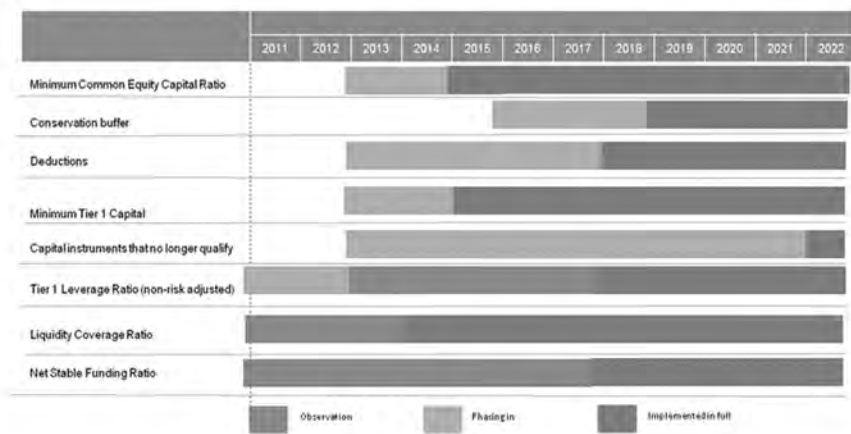


requirements and supervisory review of risk management and capital assessment) and Pillar 3 (market discipline). The Committee provides additional guidance on key areas to consider as part of Pillar 2 (e.g. risk concentrations): these were expected to be implemented immediately. On Pillar 3, the Committee reiterates banks' responsibility to make sure that their disclosures to market participants evolve to keep up with changes in their risk profile. The Committee also makes detailed recommendations regarding, for example, the disclosure of traded securitisations.

Given the scale of change being proposed in Basel III, the Committee has agreed a lengthy transition period (see Figure 1.6). All but the phasing out of certain capital instruments will be in place by 1 January 2019. The phasing out of capital instruments, such as hybrids and Tier 2 instruments that will no longer qualify will be completed by 1 January 2022. After 1 January 2013, new issues of capital instruments that do not qualify as common Tier 1 equity will be required to include a conversion feature, making them contingent capital.

For the leverage ratio, the Liquidity Coverage Ratio and the Net Stable Funding Ratio, observation periods will be used to monitor carefully how the new measures will work

**Figure 1.6 The transition to Basel III**



before they are phased in. Given the speed with which agreement was reached on Basel III, it is likely that we will see some changes as the consequences and implementation challenges become better understood through the transition period.

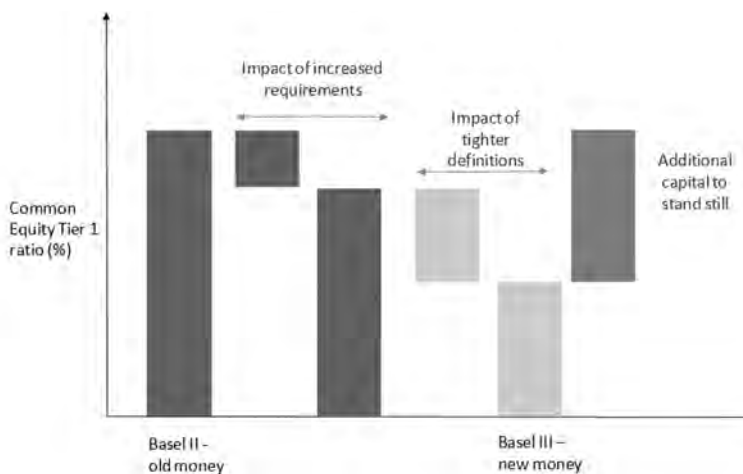
## 1.7 Coverage of the Guide

In Chapter 2 we consider the big picture: the strategic context into which Basel III and other reforms are being introduced. This Chapter considers questions such as: what are the key trends and challenges facing banking? What will Basel III mean for business models and bank management? Is Basel III likely to achieve its intended consequences and what is the risk of unexpected outcomes? The first step in Basel III is to provide a tighter definition of regulatory capital. This is needed to address the issue that not all Tier 1 regulatory capital proved to be loss-bearing (e.g. preference shares). The Committee also agreed that the rules regarding the definition of available capital resources needed to be sharpened. Chapter 3 examines in detail the definition of capital and discusses the implications for banks.

The requirements to hold capital have also changed. Risk-weighted assets ("RWA") have increased through Basel II.5 for the trading book and securitisations and through Basel III for counterparty credit risk. Chapter 4 covers this aspect of Basel II.5 while Chapter 5 discusses the new treatment for counterparty credit risk. These reforms will have a major impact on investment banks and the funding of financial institutions.

The effect of tougher definitions of capital and increased RWA is to make a 1 per cent Tier 1 ratio under Basel III a lot more expensive than under Basel II (see Figure 1.7). The Basel Quantitative Impact Study ("QIS") published in December 2010 estimated that for Group 1 banks (defined by the Basel Committee as those with Tier 1 capital in excess of €3 billion that are well diversified and internationally active; all other banks are classified as Group 2. The QIS covered 91 Group 1 banks, 74 of which provided the relevant data), double the amount of capital would be required under Basel III due to the tighter definition of capital and the increase in RWA (before any increase in minimum ratios or the impact of the leverage ratio). As one can see, this will depress return on equity and is likely to fundamentally change investors' perceptions of banks.

**Figure 1.7 New money, old money**



On top of this devaluation, the minimum ratio for common equity more than trebles from 2 per cent to 7 per cent (a minimum of 4.5 per cent plus a conservation buffer of 2.5 per cent). Together these figures imply about a seven-fold increase in Basel minimum capital requirements. Note that this is before the countercyclical buffer and any addition for Systemically Important Financial Institutions (“SIFIs”).

A major innovation in Basel III is the introduction of global liquidity standards. Basel III introduces a “Basel I” for liquidity for the first time. This has two aspects: a Liquidity Coverage Ratio (“LCR”) and a Net Stable Funding Ratio (“NSFR”). The LCR aims to make sure that banks hold a defined buffer to allow them to be self-sufficient for up to 30 days should a bank-specific stress event and a market downturn occur at the same time. The NSFR takes a longer view and aims to encourage banks to better match the funding characteristics of their assets and liabilities beyond a one year period. The NSFR will reduce the amount of “maturity transformation” provided by the financial sector (the ability of banks to borrow short and lend long). Chapter 6 discusses how the NSFR is likely to work in practice.

The BCBS approach to leverage builds on approaches in use in some countries already (for example the US, Switzerland and Canada). As with liquidity, a global standard is being set for the first time. Chapter 7 assesses this new measure which could have implications for several banks’ business models.

Chapter 8 investigates the implications of changes to IFRS and US GAAP. The standard-setters are under pressure to introduce reforms that will eliminate the worst procyclical effects of the current accounting rules. A significant change to the way provisioning is undertaken is expected. This is just one of a series of major changes to financial reporting that will be introduced over the next few years. Together with the developments in Pillar 3 reporting these changes pose a significant operational challenge for banks.

The impact of Basel III on Pillar 2 is discussed in Chapter 9 together with capital planning and the interaction of the new capital buffers: the conservation and countercyclical capital

buffers. The qualitative aspects of Pillar 2 – risk management and managing risks that are not captured in Pillar 1 – are areas where greater supervisory attention is likely to be focussed.

Chapter 10 discusses the reforms to the procyclical components of the Basel rules. Procyclicality – the tendency of capital requirements to increase in a downturn and decrease in an upturn – is a fundamental feature of risk-based capital requirements but is probably one of the least understood. This Chapter examines the nature of procyclicality in Pillar 1 capital requirements and modelling (which affects both Standardised and Advanced banks), and the proposed “dampeners” of provisioning and capital buffers.

Stress testing is a key tool to understanding emerging risks and capital requirements over the cycle. Supervisors are increasingly using supervisor-determined stresses to evaluate the relative riskiness of institutions. At the end of 2010, the Federal Reserve required the larger US banks to undertake stresses before it would approve distributions in dividends and bonuses. The European Banking Authority and its predecessor, the Committee for European Banking Supervisors, have conducted European-wide stress tests in 2010 and 2011. These have proved to be very challenging exercises for banks and supervisors. Chapter 11 examines recent developments in leading industry practices for stress testing.

Chapter 12 reviews developments in Pillar 3 for disclosures to market participants. Lack of transparency has been identified as a contributing factor to the crisis and Basel aims to strengthen the market discipline embodied in Pillar 3 by requiring greater disclosures from the banks, many of whom have already begun to do this.

No discussion of capital reforms would be complete without considering the tax implications which are addressed in Chapter 13. In particular, the removal of deferred tax assets as a source of capital for banks that are going concerns has serious consequences for certain banks in certain jurisdictions. This will have consequences, amongst other things, for structure, domicile and funds transfer pricing. Tax is also closely linked

to the entity structure of financial institutions which is also under the magnifying glass as part of addressing recovery and resolution plans (see Chapter 15).

Probably one of the most emotive topics in the reform of the banking system is the subject of bankers' pay – or rather the high bonus pay of a relatively small number of bankers. To influence bank management, supervisors are focussing intently on the links between risk and reward and wish to make sure that banks are not offering incentives that would conflict with the goal of increasing financial stability. Chapter 14 delves into leading practice in this critically important and rapidly evolving area.

Planning your own funeral is how resolution plans have been described. Chapter 15 addresses this important and difficult subject. In the wake of the difficulties surrounding the winding up of Lehman, this is the push for banks to develop contingency plans that can be invoked in the event of a future crisis. Recovery refers to contingency plans that need to be deployed when survival is not at stake. These are particularly important for SIFIs, which may be systemically important from either a local or global perspective. SIFIs without sound recovery and resolution plans can expect capital and liquidity surcharges. The detailed recommendations on SIFIs are expected later in 2011.

In Chapter 16 we consider the perspectives of other stakeholders: equity investors, debt investors, government and rating agencies. Regulators seem to have a tendency to ignore the inconvenient question of supply of capital and the interests of capital providers. For example, Mervyn King, the Governor of the Bank of England, in a speech to leading economists, questioned why bankers should be concerned about return on equity ("Banking: from Bagehot to Basel and Back Again", the Second Bagehot Lecture, 25 October 2010). However, for the system to operate effectively, the interests of investors cannot be ignored: this Chapter discusses reform from their perspectives and from those of other stakeholders beyond banks and regulators.

A key response to the crisis has been strengthened risk management in banks. Chapter 17 examines the implications of reforms

for governance, risk management and the role of the CRO. Improved bank risk management is, in our view, likely to be as important a contributor to financial stability as higher capital ratios. It will be central to strengthening the industry and its ability to respond to future challenges.

Too rapid an introduction of reforms such as Basel III in a knee-jerk response to the crisis could cause banks to reduce the amount of credit available and/or increase its price (to achieve the new capital ratios or to pay for the additional capital and liquidity). In turn, this could harm the economy and some sectors would be worse hit than others. Chapter 18 considers likely bank responses to, for example, higher capital requirements and the potential macro-economic implications.

Last but not least, Chapter 19 examines the initiatives that are being taken to improve banking supervision. This is one of the areas of reform where small investments could reap enormous dividends if the investments are made wisely. It is also an area where the challenge of achieving international consensus and maintaining a reasonably level playing field is potentially a major obstacle to the successful implementation of Basel III.

## **1.8 Looking forward**

Much still needs to be done from regulatory and supervisory perspectives to make Basel III a reality. There are the operational details to be agreed on the treatment (and release) of capital buffers. There are definitional details to be refined and sharpened (for example in relation to capital deductions). In Europe, CRD IV needs to be drafted. In the US the timetable for the implementation of Basel III needs to be confirmed. Liquidity buffers, the NSFR, and the leverage ratio need to be monitored and calibrated over the transition period.

An international approach to recovery and resolution and the treatment of SIFIs remains to be agreed; the latest timetable is for this to be done by the end of 2011. And, of course, the market for contingent capital instruments needs to be established.

Banks face the uncertain strategic tasks of deciding what a Basel III world might look like and how they should compete successfully. At a minimum, this requires a long-term view of their capital plans supported by a coherent liquidity and funding strategy. It also requires a view on likely returns on equity, careful management of market expectations and a weather eye to peer performance. Changes to business models are likely for universal and investment banks, but they are unlikely to be alone.

Banks also face extensive operational issues. These range from strengthening risk management and governance to making major changes to capital and liquidity management processes, to enhanced stress testing capabilities, to new funds transfer pricing mechanisms and to multi-year programmes to enhance systems and reporting infrastructures.

## **1.9 Conclusion**

Basel III and other reforms represent an enormous challenge to the whole industry. We trust that this Guide will help you in assessing and addressing your own institution's challenges whether that is as a bank, a supervisor or a regulator.

Basel III was developed by the Basel Committee on Banking Supervision in a response to the deficiencies in financial regulation revealed by the global financial crisis, and represents the biggest regulatory change that the banking industry has seen in decades. The new accord strengthens bank capital requirements and introduces new regulatory requirements on bank liquidity and leverage. *A Practitioner's Guide to Basel III and Beyond* is a complete guide to the implications of Basel III and the related reforms.

This book considers the practical actions that banks should be taking, and gives detailed guidance on the systems and controls changes that banks will need to address in order to ensure continuing compliance. The rationale behind the new framework is explained, and each aspect of the new accord is covered in detail, giving readers an understanding of the changes and what they will mean in practice. The book also goes beyond Basel III to consider closely related reforms such as changes to recovery and resolution (what banks should do when they are at risk of failing or when they have failed) and parallel developments in accounting rules and taxation. It also considers implications for areas such as strategy, supervision and the economy. This is therefore a practitioner's guide that aims to address the new realities in a Basel III world, and will be essential reading for all those concerned with the regulation of banks.

"*A Practitioner's Guide to Basel III and Beyond* provides a single volume resource that will be very valuable for anyone involved in the banking industry and its supervision. It will help them to prepare for, and implement the major changes flowing from Basel III and related reforms. I therefore welcome its publication."

**José María Roldán**

Director-General of Banking Regulation, Bank of Spain  
Chair, Standards Implementation Group, BCBS

