

Conference on Basel III
Financial Stability Institute
Basel 6 April 2011

Basel III: Stronger Banks and a More Resilient Financial System

Stefan Walter

Secretary General, Basel Committee on Banking Supervision

I. Introduction

Thank you for the opportunity to speak to you this morning about Basel III. It is now three and a half years since the global financial crisis began. The banking sector and financial system have now been stabilised. But this required unprecedented public sector interventions. Despite the severity of the crisis, we are already seeing signs that its lessons are beginning to fade. At the same time, there are still significant risks on the horizons, while key reforms still need to be carried through if we are to achieve a truly stable banking and financial system.

I would like to begin this morning by recalling the damaging effects of the crisis and why the Basel III reforms are central to promoting financial stability. I will then briefly outline the key reforms that comprise Basel III. Finally, I will focus on what still needs to be done to ensure longer-term stability. In particular, I will discuss the need for global and consistent implementation of the Basel III reform package and the ongoing work to address the risks of systemic banking institutions.

II. Motivation for Basel III reforms

A. Damaging effects of banking crises

There is a wide body of evidence that the most severe economic crises are associated with banking sector distress. While there is variation in findings across studies, the Basel Committee's long-term economic impact study found that the central estimate in the economics literature is that banking crises result in losses in economic output equal to about 60% of pre-crisis GDP.¹ Why are banking crises so damaging? Banks are highly leveraged institutions and are at the centre of the credit intermediation process. In addition, credit and maturity transformation functions are vulnerable to liquidity runs and loss of confidence. A destabilised banking system affects the provision of credit and liquidity to the broader economy and ultimately leads to lost economic output. [see Table 1]

In the most recent phase of the crisis there has also been significant spillover of risk between the banking sector and sovereigns. Governments in a number of industrialised countries had to increase their debt in order to stabilise their banking systems and economies. As a result, debt-to-GDP ratios in a number of economies increased by as much as 10-25 percentage points. It therefore is clear that the economic benefits of raising the resilience of the banking sector to shocks are immense.

¹ Basel Committee on Banking supervision (2010): An assessment of the long-term economic impact of stronger capital and liquidity requirements.

B. Frequency of banking crises

The costs of banking crises are extremely high but, unfortunately, the *frequency* has been as well. Since 1985, there have been over 30 banking crises in Basel Committee-member countries. Roughly, this corresponds to a 5% probability of a Basel Committee member country facing a crisis in any given year – a one in 20 chance, which is unacceptably high. [See Table 2]

Many countries may not have been the cause of the current crisis, but they have been affected by the global fall out. Moreover, history has shown that banking crises have occurred in all regions of the world, affecting all major business lines and asset classes. Moreover, there tend to be a common set of features that seem to repeat themselves in various combinations from banking crisis to banking crisis. These include:

- Excess liquidity chasing yields
- Too much credit and weak underwriting standards
- Underpricing of risk, and
- Excess leverage

In the current crisis, these recurring trends were magnified by:

- Weak bank governance practices, including in the area of compensation
- Poor transparency of the risks at financial institutions and in complex products
- Risk management and supervision focused on individual institutions instead of also at the system level
- Procyclicality of financial markets propagated through a variety of channels, and
- Moral hazard from too-big-too-fail, interconnected financial institutions.

C. Benefits of tighter regulation through Basel III exceed the costs

The objective of the Basel III reforms is to reduce the probability and severity of future crises. This will involve some costs arising from stronger regulatory capital and liquidity requirements and more intense and intrusive supervision. But our analysis and that of many others has found the benefits to society well exceed the costs to individual institutions. The Committee's long-term economic impact analysis found that capital and liquidity requirements could be increased – well above current minimum levels – while still achieving positive net economic benefits. [see Table 3]

These findings are not surprising. It is widely accepted that prudent fiscal and monetary policies are the cornerstones of financial stability and sustainable economic growth. Indeed, maintaining conservative fiscal and inflation policies involve a cost – they result in potentially lower short-term economic growth, which is offset by more sustainable long-term growth. Increasing stability of the banking and financial system involves a similar trade-off, where the costs are more than offset by the long-term gain. In particular, it is difficult to imagine a country that can maintain sustainable growth on the foundation of a weak banking system

III. Key features of the Basel III reform package

The Basel III framework is the cornerstone of the G20 regulatory reform agenda and the final Basel Committee rules were issued at the end of last year. This development is the result of an unprecedented process of coordination across 27 countries. Compared to Basel II, it was also achieved in record time, less than two years. The next step, which is just as critical as the policy development, is implementation. The full potential of Basel III will only be achieved if all Committee-member countries and regions work within the global process, and fully implement the *minimum* standards. Some countries may choose to implement higher

standards to address risks particular to their national contexts. This has always been an option under Basel I and II, and it will remain the case under Basel III.

Why is Basel III fundamentally different from Basel I and Basel II? First, it is more comprehensive in its scope and, second, it combines micro- and macro-prudential reforms to address both institution and system level risks.

On the microprudential side, these reforms mean:

- A significant increase in risk coverage, with a focus on areas that were most problematic during the crisis, that is trading book exposures, counterparty credit risk, and securitisation activities;
- A fundamental tightening of the definition of capital, with a strong focus on common equity. At the same time, this represents a move away from complex hybrid instruments, which did not prove to be loss absorbing in periods of stress. We also introduced requirements that all capital instruments must absorb losses at the point of non-viability, which was not the case in the crisis;
- The introduction of a leverage ratio to serve as a backstop to the risk-based framework;
- The introduction of global liquidity standards to address short-term and long-term liquidity mismatches; and
- Enhancements to Pillar 2's supervisory review process and Pillar 3's market discipline, particularly for trading and securitisation activities.

In addition, a unique feature of Basel III is the introduction of macroprudential elements into the capital framework. This includes:

- Standards that promote the build-up of capital buffers in good times that can be drawn down in periods of stress, as well as clear capital conservation requirements to prevent the inappropriate distribution of capital;
- The leverage ratio also has system-wide benefits by preventing the excessive build-up of debt across the banking system during boom times.

To minimise the transition costs, the Basel III requirements will be phased in gradually as of 1 January 2013.

I would now like to say a few words in particular about two of the newer elements of the regulatory framework, namely the liquidity standards and the leverage ratio. As mentioned, excess leverage and weak liquidity profiles of banks were at the core of the crisis, and they therefore represent a critical part of the Basel III framework going forward.

A. The Liquidity Framework

There is broad support for the liquidity framework introduced by the Committee. Banks and other market participants already use methods similar to the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). Many of the issues that have been raised pertaining to these requirements revolve around the calibration of the ratios, rather than the conceptual basis of the framework.

It is important to emphasise the Committee's goal in establishing the liquidity framework: to require banks to withstand more severe shocks than they had been able to in the past, thus reducing the need for such massive public sector liquidity support in future episodes of stress. The success of the framework should not be measured in terms of whether it will have zero cost. Instead, the better measure of success is whether the framework corrects pre-crisis extremes at acceptable costs. Banks that take on excessive liquidity risk should be penalised under the new framework, while sound business models should continue to thrive. With

these objectives in mind, the Committee will use the observation period to review the implications of the standards for individual banks, the banking sector, and financial markets, addressing any unintended consequences as necessary.

In this regard, the Committee's focus is now on ensuring that the calibration of the framework is appropriate. Certain aspects of the calibration will be examined and this will involve regular data collection from banks. Any adjustments should be based on additional information and rigorous analyses. Moreover, relying just on banks' experiences from the crisis is not sufficient, as it embeds a high level of government support of banks and markets. Hence, the analysis will need to include *both* quantitative bank experience and additional qualitative judgement.

It is worth emphasising that a number of effects of the framework are indeed intended. For example, with regard to the pool of liquid assets, the rules are meant to promote changes in behaviour. Contrary to popular perception, they are *not* about promoting the hoarding of government debt, but about creating incentives to reduce risky liquidity profiles. This can be achieved, for example, by pushing out the average term of funding or increasing the share of stable funds. In other cases, banks did not price liquidity appropriately throughout the firm, and correcting risk management deficiencies will in turn improve liquidity profiles. In fact, the initial response we have observed in some countries that have already implemented comparable liquidity ratios suggest that these are the types of strategies that are being pursued.

Also contrary to what many have claimed, the new standards should help promote greater diversification of the pool of liquid assets held by banks. Bank holdings of liquid assets continue to be dominated by exposures to sovereigns, central banks and zero percent risk-weighted public sector entities. These assets comprised 85% of banks' liquid assets according to the Committee's most recent quantitative impact study. By recognising high quality corporate and covered bonds – subject to a limit – the liquidity framework will help promote a further diversification of the liquid asset pool.

B. The Leverage Ratio

Many banks entered the crisis with excessive leverage. This increased the probability of bank failures. It also exacerbated the effects of the crisis on broader financial markets as many banks rushed to de-leverage once the crisis hit.

The objective of the leverage ratio is to serve as a back-stop to the risk-based measure. The Committee's calibration work shows that bank leverage was a highly statistically significant discriminator between banks that ultimately failed or required government capital injections during the crisis and those that did not. Moreover, at the height of the crisis, the market gravitated towards simple leverage based measures to compare banks. [see Table 4]

The leverage ratio also serves a macroprudential purpose. We have seen during this and prior crises the cyclical movement of leverage at the system-wide level. Leverage, which tends to build up prior to crisis periods, is subsequently unwound when a crisis occurs. This cyclical aspect exacerbates both the upswing phase and the downturn. In addition, what can appear to be very low risk assets at the institution level can ultimately create incentives for the build-up of risks at the broader system level. The leverage ratio serves to limit excessive concentrations in such asset classes. [see Table 5]

As with the liquidity framework, the Committee has a process in place to assess the impact of the leverage ratio on business models. It will take actions if necessary to make sure that the design of the leverage ratio will achieve its objectives. As I stressed earlier, it is important that all countries and regions continue to work within this global process.

IV. *What still needs to be done to ensure longer-term banking sector and economic stability?*

Over the past three years, much has been achieved by the global regulatory community to respond to the crisis. This policy work is now substantially complete. But to ensure longer-term banking sector and economic stability, consistent and timely global implementation of Basel III is critical. In addition, a key remaining area of policy development work is focused on dealing with systemically important banks (SIBs). Finally, we will also need to stay attuned to bank-like risks that emerge in the shadow banking sector.

V. *Implementation of Basel III*

The Committee has put in place mechanisms to help ensure more consistent implementation of its standards. This applies not only to Basel III but to other global standards agreed by the Committee. The efforts of the Committee are reinforced through additional institutional arrangements introduced at the level of the Financial Stability Board (FSB) and the G20.

Going forward, the Committee's Standards Implementation Group will play a critical role in conducting thematic peer reviews of member countries' implementation of standards and sound practices. Implementation involves not only introduction of the standards in legal form, but also rigorous and robust review and validation by supervisors. We therefore are also introducing processes to ensure the integrity of key elements of the framework. An example of this is the review of banks' risk weightings, which should include the use of test portfolio exercises.

As we have painfully learned from the recent crisis, the failure to implement Basel III in a globally consistent way will again lead to a competitive race to the bottom and increase the risk of another crisis down the road.

VI. *Addressing the Too-Big-To-Fail (TBTF) problem*

During the crisis, the failure or impairment of certain banks sent shocks through the financial system. This had an adverse knock-on effect on the real economy. Supervisors and relevant authorities had limited options to prevent or contain problems effecting individual firms and this led to wider financial instability. As a consequence, public sector intervention to restore financial stability during the crisis was necessary, as was the massive scale of these responses. The fallout from the crisis underscores the need to put in place additional measures to reduce the likelihood and severity of problems emerging at systemic banking institutions.

The Committee, in close cooperation with the FSB is working to address the financial system externalities created by Systemically Important Banks (SIBs). To achieve this broad objective, policy tools are being designed to:

- Reduce the probability as well as the impact of an SIB failure;
- Reduce the cost to the public sector should a decision be made to intervene; and
- Level the playing field by reducing too-big-to-fail competitive advantages in funding markets.

The Committee has developed a methodology that embodies the key components of systemic importance. These are size, interconnectedness, substitutability, global activity and complexity. The methodology can serve as a basis for the differentiated treatment of systemic institutions without needing to specify a fixed list of such institutions.

Common equity is the key when it comes to going concern capital as it is available to absorb losses with certainty, thus reducing the probability of failure. The Committee also continues to study the role that going-concern contingent capital could play in its framework for SIBs.

Strong resolution and recovery frameworks play a critical role in reducing the impact of failure by facilitating the orderly wind-down of a global bank. In this context, the Committee is reviewing the role that bail-in debt could play in complementing Tier 2 capital to provide additional resources that can mitigate the systemic impact of banks at the point of non-viability.

The Committee's work on systemically important banks is part of the broader effort of the Financial Stability Board (FSB) to address the risks posed by SIFIs. The Committee is working closely with the FSB through this process, and expects to consult on proposals to address the risks of globally systemic banks around the middle of the year.

VII. Shadow Banking

The final area where further work is needed is shadow banking. Shadow banking was a key mechanism through which the crisis was propagated. SIVs, money market mutual funds, the securitisation process, and bank liquidity lines to off-balance-sheet exposures all served to amplify the impact of the crisis on banks. While it is clearly important to address issues in the shadow banking sector, its existence should not detract from the fundamental need to strengthen the resilience of the banking system itself.

The banking sector remains at the centre of the credit and liquidity intermediation process. This is true even in economies that are more reliant on capital markets. Moreover, significant parts of shadow banking were created, sponsored or financed by the banking sector and these include SIVs, ABCP conduits, MMMFs, certain securitisation structures, and hedge funds. Finally, much of the shadow banking sector depends on the financing and liquidity support of the banking sector. Basel III goes a long way to closing the gaps in exposure to shadow banking. It does this in several ways:

- by addressing the capital treatment for liquidity lines to SIVs and other types of off-balance sheet conduits;
- by addressing counterparty credit risk;
- by including off-balance sheet exposures in the Basel III leverage ratio; and
- by incorporating a range of contractual and reputational risks arising from the shadow banking sector into the liquidity regulatory and supervisory standards.

Thus, stronger, consolidated banking regulation and supervision will go a significant way towards containing the risks of the shadow banking sector.

In addition, to the extent that bank-like risks emerge in the shadow banking sector, they should also be addressed directly. Supervisors should take a system-wide perspective on the credit intermediation process. To the extent that bank-like functions are carried out in the shadow banking sector and pose broader systemic risks, they should be subject to appropriate regulation, supervision, and disclosure. In particular this is the case where activities combine credit intermediation, maturity or liquidity transformation, and leverage. The FSB, the Basel Committee and the Joint Forum of Banking, Securities, and Insurance Supervisors will monitor developments closely and promote appropriate responses as circumstances dictate.

VIII. Other Basel Committee initiatives

The Committee is also conducting a fundamental review of the trading book. It is fundamental in the sense that it will help inform basic questions such as how to address the line between the banking and the trading book and how to improve upon the current VAR based framework for measuring trading risks. We will consult on this issue as the work progresses, which I expect will be around the end of this year

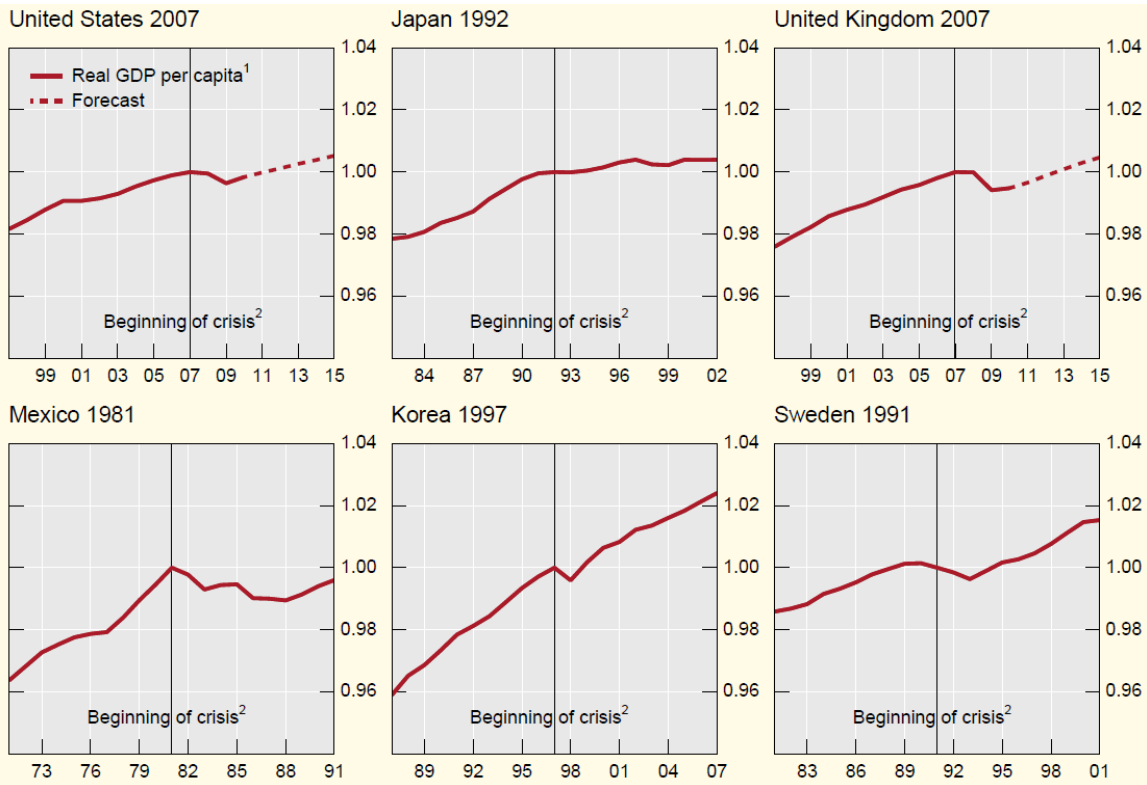
Other issues on the Committee's agenda include further work on cross-border bank resolution issues and updating of large exposure standards, as well as a revision of the Core Principles for Effective Banking Supervision. It is critical that we incorporate the lessons of the crisis into a revised set of Core Principles, which will serve as the basis for enhanced country level reviews through the IMF and World Bank.

IX. Conclusion

The policy work for developing the Basel III framework has for the most part been completed. The reforms are significant and bring together micro and macro lessons of the crisis. The Committee has now moved to the next phase: implementation. One of the regulatory lessons of the crisis is that it is critical that all countries and regions now follow the global implementation process.

By definition, it will be hard to predict the cause of the next crisis. Many risks are still looming on the horizon, and all countries need to continue the process of building their capacity to absorb shocks – whatever the source. The banking sector's shock absorbing capacity must be much stronger than it has been in the past, and the implementation of our standards must be more globally consistent and robust.

Table 1



¹ GDP per capita is the logarithm of real GDP per capita, normalised to 1 at the beginning of the crisis. ² The starting years for crisis are based on Laeven and Valencia (2008) and Reinhart and Rogoff (2008).

Source: IMF (2009).

Table 2

Table A1.4		
Banking crises in BCBS countries since 1985 ¹		
	Reinhart and Rogoff (2008) ⁽¹⁾	Laeven and Valencia (2008) ⁽¹⁾
Argentina	1989, 1994, 2001	1989, 1995, 2001
Australia	1989	
Belgium	2008	2008
Brazil	1990, 1994	1990, 1994
Canada		
China	1997	1998
France	1994, 2008	2008
Germany	2007	2007
Hong Kong	1998	
India	1993	1993
Indonesia	1992, 1997	1997
Italy	1990	
Japan	1992, 2008	1997, 2008
Korea	1986, 1997	1997
Luxemburg	2008	2008
Mexico	1992	1994
Netherlands	2008	2008
Russia	1995, 1998	1998
Saudi Arabia		
South Africa	1989	
Sweden	1991	1991
Switzerland	2008	2008
Turkey	1991, 2000	2000
United Kingdom	1991, 1995, 2007	2007
United States ²	2007	1988, 2007
Frequency of banking crises 1985-2009³		
All BCBS countries	5.2%	3.6%
G10 countries	5.2%	4.1%

¹ Both papers were published prior to the failure of Lehman. The dating of the recent crisis is based on the strict crisis definition by Borio and Drehmann (2009). ² The beginning of the savings and loan crisis according to Reinhart and Rogoff is 1984 and therefore excluded from the table. ³ The frequency is calculated as the number of crises divided by the number of countries in the sample times the years from 1985 to 2009. Adjusting for a three-year duration of crises and considering Russia and China only from 1992 onwards will increase the frequency to 5.9% (6.8%) and 3.9% (4.3%) for all BCBS (G10) countries.

Source: BCBS (August 2010), As assessment of the long-term economic impact of stronger capital and liquidity requirements.

Table 3

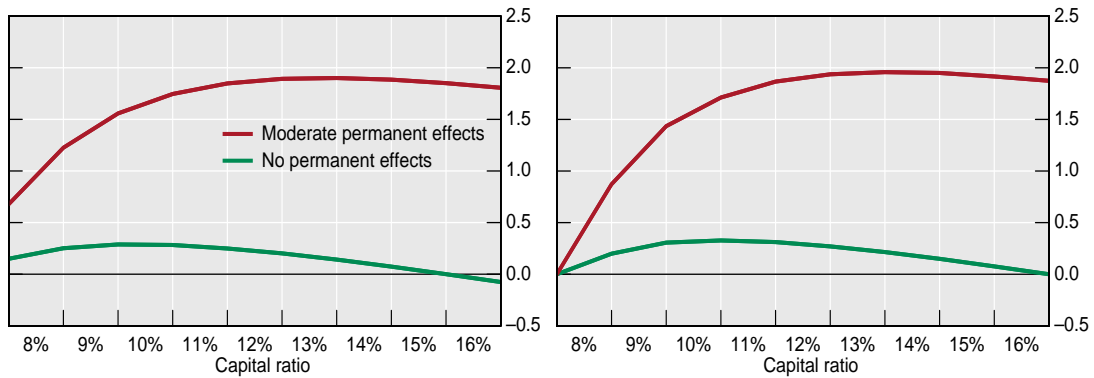
Summary graph

Long-run expected annual net economic benefits of increases in capital and liquidity

Net benefits (vertical axis) are measured by the percentage impact on the level of output

Increasing capital and meeting liquidity requirements

Capital only



The capital ratio is defined as TCE over RWA. The origin corresponds to the pre-reform steady state, approximated by historical averages for total capital ratios (7%) and the average probability of banking crises. Net benefits are measured by the difference between expected benefits and expected costs. Expected benefits equal the reduction in the probability of crises times the corresponding output losses. The red and green lines refer to different estimates of net benefits, assuming that the effects of crises on output are permanent but moderate (which also corresponds to the median estimate across all comparable studies) or only transitory.

Source: BCBS (August 2010), An assessment of the long-term economic impact of stronger capital and liquidity requirements.

Table 4

Mean leverage and risk-based capital ratios for stressed and non-stressed banks										
(Data is calculated as at end 2006, all capital ratios in per cent)										
Excludes countries with leverage ratio requirements										
	Working Group Sample				Broader Sample					
	Stressed		Other		Stressed		Other			
<i>Risk-based Ratios</i>										
Total capital /RWA	10	11.77	49	12.09	15	11.57	54	11.78		
Tier 1 capital / RWA	10	7.59	48	8.25	15	8.31	54	8.37		
TCE / RWA	8	5.66	45	6.86	14	6.16	58	7.69	**	
<i>Leverage Ratios</i>										
Total Capital / Assets	6	4.32	41	7.62	**	14	4.37	51	6.28	***
Tier 1 Capital / Assets	6	2.79	41	5.27	**	15	3.02	54	3.65	*
Common Equity / Assets	6	2.69	41	5.08	**	17	2.64	63	4.48	***
TCE / Tangible Assets	6	1.93	41	4.34	**	17	2.22	63	3.62	***

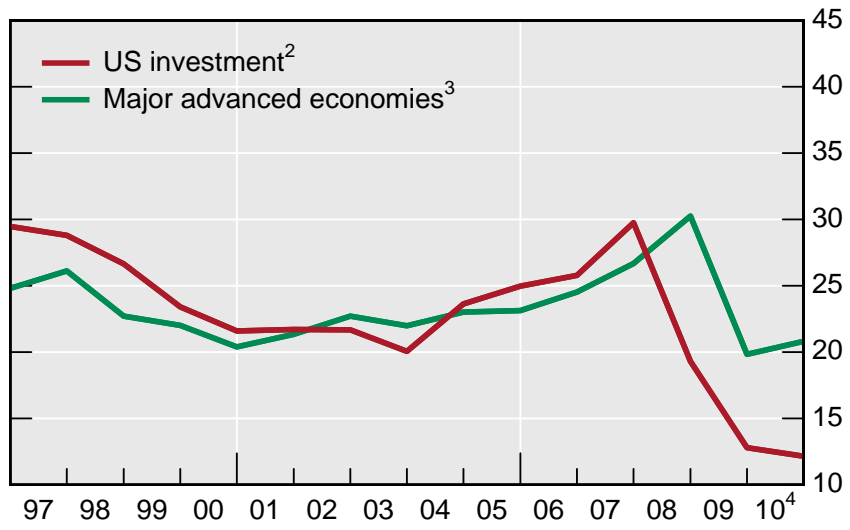
The symbols ***, **, * indicate that the difference is statistically significant at the 1%, 5% and 10% levels respectively. The Working Group Sample comprises up to 88 banks supplied by national supervisors from 14 countries. The Broader Sample is drawn from the Bankscope database and includes up to 117 banks from 19 countries. Each panel includes the number of banks in the sample and the relevant capital ratio.

Source: BCBS (October 2010), Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach.

Table 5

Bank balance sheet leverage ratio

(US investment banks and major advanced economy banks)



Leverage ratio is defined as total assets divided by total common equity, weighted by asset size. Sources: Bankscope; Bloomberg.