SENATE ECONOMICS REFERENCE COMMITTEE

INQUIRY INTO THE POST-GFC BANKING SECTOR

The Suitability of the Basel Rules for the Australian Banking System

A Submission by

Professor Imad Moosa

School of Economics, Finance and Marketing, RMIT
239 Bourke Street
Melbourne, Victoria 3000
Phone:

E-mail:

Private E-mail:

Executive Summary

Although some Australian regulators believe that Basel III is the way forward when it comes to banking regulation I argue in this submission that the Basel accords in general are inadequate and have so many defects and that Basel III is no good for Australia, or any other country for that matter. It is suggested that banking regulation, and regulation in general, is a domestic issue that should be determined in relation to the domestic economic and financial environment.

The Basel III provisions can be grouped under six elements (i) changing the regulatory capital requirements, (ii) expanding risk coverage, (iii) the introduction of a leverage ratio, (iv) the introduction of countercyclical capital buffers, (v) the introduction of liquidity provisions, and (vi) improving Pillar 2 and Pillar 3 of Basel II. There are so many problems with these provisions that Basel III still leaves a lot to be desired.

Changing regulatory capital requirements leaves two major problems. The first is that Basel III is still capital-based regulation, which is inadequate as demonstrated by the global financial crisis. The second is that the calculation of the capital ratio on the basis of risk weighted assets, where weights are determined by the rating agencies, is rather worrying. It was the reason why banks scrambled to accumulate highly rated toxic assets in the run-up to the global financial crisis and Greek bonds in the run-up to the European credit crisis. Basel II therefore was a reason for the advent of the two crises.

Expanding risk coverage still leaves a variety of risks that are not covered by the provisions of Basel III. The objective of encouraging the move of OTC derivatives to

organised exchanges can be accomplished by forcing such a move. A measure like this is not as draconian as the prohibition of short selling, which is hailed as a measure that helped Australia avoid the worst of the global financial crisis.

The introduction of a leverage ratio is a step forward, except that the Basel Committee does not considers it as a main tool, while our regulators think it will have a marginal benefit. The liquidity ratios are important but they are complicated and wrongly based on liabilities rather than assets. The proposed changes to Pillar 2 and Pillar 3 are more like rhetoric. Basel III is not, and it should not be, about risk management.

Basel III ignores the lessons that should have been learned from the global financial crisis because it is still capital-based regulation, it still allows banks to calculate regulatory capital by using internal models, and because the Basel Committee still treats the rating agencies with the respect they do not deserve. Basel III has not solved any of the fundamental problems of Basel II, and it remains an expensive exercise in pure compliance.

While they claim that Basel III is the way to go for Australia, our regulators admit that it was sound domestic policy that helped Australia go through the global financial crisis without a dent. Harmonisation of banking rules across countries does not make any sense—it should be a domestic decision. Australia will be better off avoiding the costly and useless exercise of compliance with Basel III.

Introduction

In October 2010, the Basel Committee on Banking Supervision (BCBS) released a report entitled *The Basel Committee's Response to the Financial Crisis: Report to the G20*, in which the Committee declared the development of "a reform programme to address the lessons of the crisis". The report, which "details the key elements of the reform programme and future work to strengthen the resilience of banks and the global banking system", laid the foundations of the Basel III accord, which is typically portrayed as a "great leap forward" when compared to its predecessor, Basel II.²

Australian regulators (RBA and APRA) have been very enthusiastic about Basel III (and its predecessor, Basel I), particularly since Australia became a member of the Basel Committee as a result of the enlargement of the Committee in the aftermath of the global financial crisis. Australia, as a matter of fact, was one of the first countries to adopt Basel 2.5, the intermediate accord between Basel II and Basel III. Australian regulators have been as eager to defend Basel II as the staff of the Basel Committee and the Bank for International Settlements, which is where the BCBS resides. They have also been adamant that the international unification of banking regulation (under the leadership of the Basel Committee) is the way to go and that Australia would benefit by going the Basel way.⁴

In this submission I will argue against the views of Australian regulators and explain why Basel III (just like Basel II) is no good for Australia or any other country for that matter. The principal idea conveyed by this submission is that financial regulation

¹ BCBS (2010).

² The term "great leap forward" is used by Moosa (2011).

³ The U.S. is yet to implement the intermediate accord.

⁴ See Edey (2011) and Byres (2010, 2011).

should be a domestic issue, tailor-made for the domestic economic conditions and financial environment.

The Basel III Provisions

Basel III is supposed to be a response to the global financial crisis in the sense that it is the outcome of modifying Basel II by taking into account the lessons learned from the crisis. While the Basel officials defended Basel II in the aftermath of the global financial crisis, they acknowledged the loopholes that have to be plugged and presented the Basel III proposals for this purpose.

The Basel III proposals can be grouped under six elements. The first element is the need to raise regulatory capital requirements and reviewing the definition of capital, emphasising the quality, consistency and transparency of the capital base. The following changes are suggested: (i) making common equity (common stock and retained earnings) the predominant form of Tier 1 capital; (ii) harmonising Tier 2 capital instruments; and (iii) eliminating Tier 3 capital. In July 2010 the BCBS reached an agreement on a new definition of capital focusing on common equity and the requirement that regulatory capital deductions to be taken from common equity rather than from Tier 1 or Tier 2 capital. The minimum common equity ratio is to be raised from 2 per cent to 4.5 per cent. In addition a conservation capital buffer of 2.5 per cent will bring the total common equity requirement to 7 per cent. Add to that Tier 1 and Tier 2 capital, the total capital ratio goes up to 10.5 per cent.

The second element of expanding risk coverage is aimed at ensuring that all material risks are adequately integrated into and covered in the process of computing

regulatory capital, particularly those related to trading activities, complex transactions and derivatives. This includes boosting the capital requirements for counterparty credit exposures arising from banks' derivatives, repos and securities financing transactions. The objective here is to provide incentives to move over-the-counter (OTC) derivative contracts to central counterparties (probably clearing houses) and to strengthen the risk management of counterparty credit exposures. To deal with systemic risk, more capital is to be held against the trading of derivatives and the complex securitisations associated with systemic risk and interconnectedness, as well as inter-financial sector exposures that are more correlated.

The third element is that of the introduction of a (non-risk based) leverage ratio as a "supplementary" (or "backstop") measure to the Basel II risk-based framework. This proposal is motivated by the objectives of (i) putting a floor under the build-up of leverage in the banking sector; (ii) introducing additional safeguards against attempts to "game" the risk-based requirement; and (iii) addressing model risk. The numerator of the leverage ratio (capital) would consist only of high-quality capital that is generally consistent with the revised definition of Tier 1 capital. However, it is indicated that during the risk assessment and calibration process, the BCBS intends to consider whether the more appropriate measure would be total Tier 1 capital (as revised) or only the common equity component. The intention is to test a minimum Tier 1 leverage ratio of 3 per cent, starting in 2013.

The fourth element is about the introduction of a countercyclical capital buffer (in the range 0-2.5 per cent) to promote the build up of capital in "good times" that can be drawn upon in periods of stress ("bad times"), hence reducing the procyclicality of the

banking industry. The capital buffers are designed to (i) dampen any excess cyclicality of regulatory capital; (ii) promote more forward looking provisions; (iii) conserve capital to build buffers at individual banks and the banking sector that can be used in stress situations; and (iv) achieve the broader macro-prudential goal of protecting the banking sector from periods of excess credit growth.

The liquidity provisions include the following: (i) banks must hold a stock of high-quality liquid assets that is sufficient to allow them to survive a 30-day period of acute stress; and (ii) a longer-term structural liquidity ratio to promote the funding activities with more stable sources of funding on an ongoing basis. The liquidity measures corresponding to (i) and (ii) are the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), respectively (both must be greater than one). The LCR is the ratio of high quality assets to 30-day net cash outflows. The NSFR is the ratio of available stable funding to required stable funding. Banks can meet these standards by changing their funding profiles, which makes them less vulnerable to liquidity shocks.

The sixth element is about Pillar 2 (the supervisory review process) and Pillar 3 (public disclosure), as well as proposals to enhance risk management practices. The objectives can be summarised as follows:⁵

- Assuring that regulation and supervision of systemically important banks is strong,
 forcing them to internalise the risks they create for the public at large.
- Strengthening risk governance and management, building on the Pillar 2 supervisory review process.

.

⁵ Walter (2010).

- Improving market discipline by enhancing the Pillar 3 disclosure of risk profile and capital adequacy.
- Promoting practical approaches to improve the management of cross border bank resolutions.

The Australian Regulatory Perspective

The views of Australian regulators reflect those of the Basel Committee. Both use the same flawed arguments, and even the same fancy expressions, to describe some provisions of Basel III. One can get a feel of the official Australian view of Basel III from recent writings by Malcolm Edey, the Assistant Governor (Financial System) of the RBA⁶ and Wayne Byres, the Executive General Manager (Diversified Institutions Definition) of APRA.⁷ The following is a summary of these views:

- 1. Basel III is a "major re-think of the existing minimum standards for international banking".
- 2. Basel III is designed to make banks more resilient by increasing the quantity and quality of capital, coupled with higher liquidity.
- 3. The harmonisation of banking rules are necessary because (i) since financial stability can be thought of as an "international public good", all countries benefit from the stability of the world financial system as a whole and they all experience some cost when the system is unstable; and (ii) there is rationale for avoiding a competitive lowering of standards.
- 4. Basel III is a response to the lessons learned from the global financial crisis. These lessons, according to Malcolm Edey, provide a prescription consisting of measures to avoid future mishaps: (i) more capital and better quality capital to withstand

⁶ Edey (2011)

⁷ Byres (2010, 2011)

losses; (ii) managing liquidity risk; (iii) the need to improve loan underwriting standards; (iv) improving governance arrangements; and (v) eliminating or managing conflict of interest such as the originate and distribute model and the role of rating agencies.⁸

- 5. Australian regulators dismiss (and are rather hostile to) the view that we should have our own Australian version of the international rules, or even avoid the implementation of some aspects of the reform proposals at all.
- 6. The international harmonisation of banking rules is important, given the global nature of the financial system—hence we are not immune from some of the trends that occurred throughout the world. One of our regulators wonders whether "we have the capacity to stand apart from the rest of the world". 9
- 7. Basel II was not the cause (or a cause) of the global financial crisis because it was implemented "long after the seeds of destruction have been sown". 10
- 8. It is strange to suggest that Basel III should be scrapped in favour of some less risk-sensitive measures.
- Many of the Basel III provisions in the area of capital adequacy are consistent with the philosophy already adopted in Australia, so the impact will be less than in other countries.
- 10. A leverage ratio will produce limited benefit if the risk-based ratio is correctly implemented and policed.

In what follows I will respond to these claims in my challenge to the pro-Basel views in general. I will explain why Basel II has indeed caused the global financial crisis and why Basel III will not solve any of the fundamental problems of Basel II.

⁸ Edey (2011).

⁹ Byres (2010).

¹⁰ Byres (2010).

Basel II as a Cause of the Global Financial Crisis

Our regulators believe that Basel II had nothing to do with the global financial crisis, a view that reflects the claims of the Basel Committee. They are, as a matter of fact, inclined to put this view more strongly than the Basel officials. The Chairman of the Basel Committee, Nout Wellink, once argued that Basel II "would have helped prevent the global credit crisis from occurring" and that "it was a misunderstanding to say that Basel II would have allowed the risky practices among banks that triggered the crunch". He further argued that Basel II would provide impetus for banks to produce "forward-looking approaches to assessing, managing and holding adequate capital for risk". Wellink is also quoted as saying that "the accord [Basel II] is designed to combat liquidity risk and would have improved the robustness of valuation practices and market transparency of complex and less liquid products", hence concluding that "the implementation of Basel II would have gone some distance to alleviate the crisis".

Like Nout Wellink, the General Manager of the Bank for International Settlements, Jaime Caruana, has been on the offensive to defend Basel II. This is what he said in a speech on the importance of the Basel accords for Latin American and Carribean countries:¹²

Some of you, including those who have been making important efforts to move to Basel II, may be wondering about the wisdom of my first argument in the light of the criticism that Basel II has received in the wake of the financial crisis. Forgive me for being very blunt, but I do not believe that Basel II contributed to the recent crisis for two reasons. First, the

¹¹ Wellink (2008).

¹² Caruana (2010).

crisis manifested itself in 2007 on the basis of imbalances that had built up prior to the implementation of Basel II. Second, many countries that have adopted Basel II did so in 2008 or later. The crisis came too soon for Basel II to be credibly held responsible.

Caruana, therefore, plays the ultimate scapegoating game by attributing the global financial crisis to "imbalances", meaning of course that China is the culprit. Basel II was actually approved in 2005, when banks started working on compliance with the rules, and by 2008 most banks were fully compliant. Caruana chooses to ignore two facts: (i) the originate and distribute model, which was encouraged by Basel I and sustained by Basel II, made banks more reckless; and (ii) the calculation of regulatory capital on the basis of risk-weighted assets encouraged the accumulation (by banks) of triple-A CDOs and sovereign debt (including Greek bonds). Basel II, therefore, contributed to the advent and severity of the global financial crisis and the current European debt crisis. Despite the fact that the originate and distribute model was adopted by banks in response the Basel rules, our regulators claim that Basel III will resolve the originate and distribute issue ¹³—no one knows how.

The sanguine views of Basel II—as expressed by Wellink, Caruana and our regulators—are disputed by neutral observers and scholars who have no stake in the underlying issues. Consider the following counter views:

The implementation of the Basel II proposal or anything that looks remotely like it
would not have alleviated the ongoing collapse of the market of complex
structured assets.¹⁴

¹³ Edey (2011).

¹⁴ Whalen (2007).

2. One reason why Basel II could not have dealt with the global financial crisis was its excessive fixation on capital adequacy, which is a "lagging indicator of potential trouble". ¹⁵

3. Dozens of the world's largest banks, including many that (on paper) fully met the Basel II capital adequacy standards, were devastated by the crisis. ¹⁶ It is not that Basel II was implemented after the seeds of disaster had been sown, as our regulators argue.

- 4. Basel II allowed banks to overstate their true amount of capital and understate the risks to which they were exposed.¹⁷ This is because Basel II allowed banks (at least big banks) to determine their economic (hence regulatory) capital by using their internal models, and to judge the riskiness of assets by the "grades" given to those assets by the rating agencies (I will come back to this point later).
- 5. The Basel risk weighting approach has allowed banks to expand their leverage almost without limit for all practical purposes (a numerical example will be presented later). 18
- 6. Basel II created incentives for banks to develop off balance sheet business and to shift credit risk. It was largely the Basel accords that induced banks to engage in securitisation and to develop credit risk shifting instruments".¹⁹

It is not only that Basel II failed to cope with the global financial crisis. It was (and so was Basel I) a reason for the advent of the crisis.²⁰ It is unfortunate, therefore, that our regulators echo the views of the Basel officials and defend Basel II along the same

¹⁵ Llewellyn (2010).

¹⁶ Dolan (2010).

¹⁷ Dolan (2010).

¹⁸ Blundell-Wignall and Atkinson (2010).

¹⁹ Llewellyn (2010).

²⁰ Moosa (2010b) describes Basel II as a "casualty of the global financial crisis" because the crisis exposed the weaknesses of Basel II.

faulty lines. Any prosecutor seeking the indictment of Basel II will not have a difficult job to do.

The Miserable History of the Basel Accords

The story of the Basel accords is not a happy one. In the 1980s, Basel I was proposed to make banking "safer" by requiring banks to hold capital against credit risk. Banks reacted by resorting to securitisation, which eventually led to the global financial crisis. When the BCBS realised that banks had managed to circumvent the rules (after the fact, of course) and recognised the possibility that banks are as likely to fail because of market risk, they introduced the 1996 amendment to deal with market risk. A few years later, the BCBS realised (as a result of well-publicised corporate collapses, such as Enron) that banks could fail because of operational losses—hence Basel II was introduced with emphasis on operational risk. Then came the global financial crisis, in which financial institutions failed because of excessive leverage and shortage of liquidity. On the way to Basel III, we have Basel 2.5, which deals predominantly with market risk and credit risk (not operational risk) because the losses incurred during the global financial crisis were predominantly market and credit losses.

This history spawns two observations about the Basel regulation. First, it is reactive, backward-looking—not prospective, forward-looking (something drastic has to happen before the rules are changed). Second, this kind of regulation is more about risk financing than risk reduction, dealing with the consequences rather than the causes. It is ludicrous that the Basel officials and our regulators claim that Basel III is about risk management and oversight. It is not, and it should not be.

A Lesson that has not been Learned: Sticking to Capital-Based Regulation

One lesson that has not been learned from the global financial crisis is that capital-based regulation is inadequate and that risk-based capital regulation can produce disastrous results. Sticking to capital-based regulation represents a big lesson that has not been learned.

Regulatory capital requirements are supposed to protect financial institutions from insolvency, but the crisis has shown no relation whatsoever between capital ratios and the incidence and severity of losses. It is not that financial institutions with lower capital ratios collapsed while those with high capital ratios survived. The idea behind capital regulation is that a firm that is adequately capitalised remains solvent if it is hit by a big loss event. The problem with this argument is that it is unlikely that a firm that is hit by a big loss event is capable of resuming business as usual, at least not immediately, and it will invariably suffer a loss of reputation. A firm's long-term viability can be impaired by operational failures, regardless of whether the immediate losses are sustainable in the short term.²¹ The impact of operational failure may be augmented by litigation, which could damage irrevocably a firm's reputation and brand even if the legal cost can be easily supported by the firm's resources.²² As a matter of fact, regulatory capital protects the creditors of a firm, not the firm itself. And when the firm spends its capital on the repayment of creditors it will need to raise

²¹ Kilavuka (2008).

²² In its issue of 1 March 2008, the *Wall Street Journal* reported that "after getting rid of the trader who lost \$141.5 million on wheat futures... brokerage firm MF Global Ltd is finding out how hard it will be to clean up the mess he left behind". In the two days following the discovery of the trading loss, the stock price of MF Global plunged 40 per cent. The *Wall Street Journal* argues that "many investors are worried that plugging holes in MF Global's risk management procedures won't be enough to restore customer confidence". The reputational factor is mentioned explicitly as the newspaper stated that "clients who make trades through MF Global because of its long-time reputation as a savvy player in the topsy-turvy futures industry might take that business elsewhere".

more capital anyway, but it may not be capable of doing that. This is why government bailouts may be required.

Another justification for regulatory capital is that it makes banks more careful and provides an incentive to avoid excessive risk for fear of significant losses.²³ unless capital ratios are set very high, banks still have a significant option value to them. When capital ratios are not very high (which is typically the case because the business will not be viable), taking excessive risk by banks is still attractive. This is because if a risky strategy is followed, banks reap all of the upside whereas the downside is limited to capital.²⁴ More importantly, however, is the fact that decisions about risk assumption are made by managers, not by shareholders (hence the agency problem). Managers have much less to lose than shareholders (collectively) when things go wrong.

The introduction of the Basel capital adequacy standards has led to the emergence of a strand of research dealing with the controversial issue of the effect of introducing regulatory capital requirements on the risk and profitability of banks. The results of this research show the following:

- There is an inverse relation between risk-based capital requirements and bank risk taking.²⁵
- 2. Capital regulation may boost risk by encouraging banks to seek out more risky activities.²⁶

-

²³ Hawkins and Turner (2000).

²⁴ Banks face an asymmetric loss function because they handle other people's money. An asymmetric loss function means that banks reap the financial gain from taking risk but only assume a fraction of the ensuing losses. At the 2008 International Financing Review Conference, which was held in London, a joke circulated about the losses incurred by banks. The joke went as follows: "the bad news is that we have lost a lot of money; the good news is that it was other people's money" (The Economist, 2008a). ²⁵ Avery and Berger (1991).

3. Capital regulation can limit bank risk taking for risk averse (as opposed to risk neutral) banks only.²⁷

4. Risk-based capital requirements encourage a bank to invest in less risky individual assets but more risky portfolios.²⁸ This is because capital regulation does not incorporate correlations adequately, which means that banks can reduce their capital requirements if they invest in highly correlated, relatively low-risk individual assets.²⁹

5. Capital regulation may reduce bank profitability, which induces banks to take on more risk to boost return.³⁰

6. The profit margin on high risk loans is relatively small, suggesting that the additional costs and losses of these risky loans are not covered sufficiently by higher credit spreads.³¹

7. The Basel capital adequacy standards led to higher exposure to the systematic market risk of U.S. banks, which at the same time limited their interest rate exposure.³²

8. Capital-based regulation induced Swiss banks to boost their capital levels but not to reduce risk exposure.³³

9. Evidence is available to support the proposition that capital regulation over the period 1985-94 did not deter banks from shifting risk onto the public safety net by exploiting the deposit insurance scheme.³⁴

26

²⁶ Furlong and Keeley (1989), Keeley (1980), Keeley and Furlong (1990), and Gennotte and Pyle (1991).

²⁷ Rochet (1992).

²⁸ Flannery (1989).

²⁹ Allen (2004).

³⁰ Blum (1999).

³¹ Bikker and Hu (2002).

³² Allen and Jagtiani (1997)

³³ Rime (2000).

10. The Basel capital adequacy standards have perverse risk-taking incentives because the implementation of these standards encouraged banks to switch from priced credit risk exposure to unpriced interest rate risk exposure.³⁵

11. The relation between risk and capital requirements is a U-shaped function of the initial capital position.³⁶

12. The Basel capital adequacy standards have been successful in raising bank capital levels but not necessarily in controlling bank insolvency risk.³⁷

13. Because of the fat-tailed behaviour of losses, the concept of capital adequacy is insufficient to guide the allocation of economic capital with a view to curb risk exposure while allowing banks to operate profitably.³⁸

The Basel Committee overstates the applicability of the "capital cushion philosophy" when insurance and internal process controls should do the job of risk management as well.³⁹ This is because insurance is part of the risk management process, which means that the focus of capital adequacy should be on residual risk after insurance. A minimum charge may provide a false sense of security instead of fostering adequate controls.⁴⁰ A related view is that "the problem with using risk capital to act as a deterrent.... is that it creates a form of moral hazard".⁴¹

While the Basel Committee aims at setting capital adequacy levels that are high enough to absorb losses under foreseeable conditions, capital adequacy is not a fail-

³⁴ Hovakimian and Kane (2000). Big banks (and other financial institutions) in particular take advantage of the too-big-to-fail status and assume excessive risk. The global financial crisis has made this proposition an undisputed fact of life.

³⁵ Allen et al (1996)

³⁶ Calem and Rob (1996).

³⁷ Greenspan (1998).

³⁸ Jobst (2007).

³⁹ Calomiris and Herring (2002).

⁴⁰ Doerig (2003).

⁴¹ McConnell (2006).

safe system, for at least three reasons: (i) the very setting of a level signals a magnitude beyond which capital will be exhausted; (ii) it is vulnerable to error because of the potential atypicity of the historical data used to set capital levels; and (iii) the assumption concerning the correlation of asset performance may not be valid for extreme ranges.⁴²

In short, capital-based regulation does not work, and capital-based regulation Baselstyle is even worse. For most countries, including Australia, the adoption of the Basel accords by itself could undermine the adoption of better public policy structures, thus increasing both the likelihood and cost of financial instability.

A Lesson that has Not Been Learned: The Use of Internal Models

One lesson that has not been learned is not to put too much faith in internal risk models in general and value at risk (VAR) models in particular. On the contrary, Basel 2.5 (the gateway to Basel III) requires the use of two VARs: conventional VAR and stressed VAR. A major consequence of the use of VAR models is complacency with respect to risk exposure. For example, these models predicted that losses endured by financial institutions during the global financial crisis could only happen once every few million years. The need to recapitalise banks after the onslaught of the crisis reveals that the internal models of many banks performed poorly and greatly underestimated exposure to risk.

A question has been raised about whether or not the risk models used by financial institutions are any good to the extent that a high-profile quant once said that that "a

.

⁴² Atik (2009).

lot of them [the models] are disastrous" and that "modeling is currently in terribly, terribly bad shape". A recent article in The Economist makes the same point by referring to the models used by the hedge fund LTCM in the 1990s, which predicted the impossibility of divergence between the yields on sovereign bonds, and the models (used by AIG among others) that predicted the impossibility of a simultaneous collapse of house prices across the U.S. In both cases, it is pointed out, "financial firms quickly found themselves racking up daily losses that the computer said should occur only once in millions of years". Hence it does not make any sense that Basel 2.5 (and consequently Basel III) is more model-dependent than Basel II—this is not learning from, but rather ignoring, the lessons of the global financial crisis.

Recent developments cast a big shadow of doubt on the usefulness of VAR as a foundation of risk management. One problem with VAR is that it typically estimates how bad things could get using data from the preceding three or four years, which means that predictions get more favourable the longer things go smoothly. Yet common sense tells us that the risk of a blow-up increases the further away we get from the last one. Therefore, VAR is designed to instil complacency. Also, VAR captures how bad things can get 99 (or 99.9) per cent of the time, but the real trouble is caused by the outlying 1 (or 0.1) per cent. Unfortunately, these outliers appear often in the real world, more frequently than banks wish for. A certain VAR model (published in the February 2008 issue of *Asia Risk*, p 38) is described as a "straw man, more attribute to their [the authors'] intelligence and cleverness than a source of useful

⁴³ Wood (2008).

⁴⁴ The Economist (2012).

⁴⁵ The Economist (2008b)

insight". 46 Risk models are intellectually admirable but practically they are useless at best and dangerous at worst.

For some reason the BCBS has an obsession with all the nines when it comes to the confidence level used in conjunction with VAR models. Under the Basel requirements, VAR must be calculated at a confidence level of 99 and 99.9 per cent. The calculation of VAR (hence the capital charge) as the 99th or 99.9th percentile of the loss distribution means is that if a bank maintains a capital charge that is calculated this way, the management team of this bank can sleep peacefully at night, knowing with a 99 or 99.9 per cent confidence level that their bank will not be insolvent if it gets hit by a big loss event.

The use of the 99.9th percentile to calculate regulatory capital has been described as an "unrealistic level of precision" that would introduce moral hazard, thus encouraging managers to claim that risk has been fully mitigated rather than address the serious issues underlying large loss events in particular.⁴⁷ Hence the Basel Committee is indulging in an illusory search for precision, because epidemiologists work within a six point scale for the primary risk of death whereas banks are required to estimate capital to cover losses to a precision of 1 in 1000. This level of precision is unheard of even in experimental science, which makes one wonder why the Basel Committee believes that risk can be measured more easily and accurately than the thrust of a jet engine or the age of Planet Earth.⁴⁸

⁴⁶ Schachter (2008).

⁴⁷ McConnell (2006)

⁴⁸ Moosa (2008a) presents a comprehensive critique of the model-based advanced measurement approach to the calculation of regulatory risk against operational risk under Basel II.

A Lesson that has not been Learned: Reliance on Rating Agencies

Another lesson of the global financial crisis that has not been learned is the hazard of depending on the ratings provided by the cartel of rating agencies. While the rating agencies are not as reckless as they were in the run-up to the global financial crisis, the Basel Committee still treats these agencies with the respect they do not deserve, taking for granted their ratings and using them to assign weights for the purpose of calculating risk-weighted assets and the corresponding capital charges. Hence, nothing has changed in this respect, despite the claim made by Malcolm Edey that one of the objectives of Basel III is to deal with the role of the rating agencies.⁴⁹

In the U.S., the Dodd-Frank ignores the "wise judgement" of the rating agencies by forbidding the use of their ratings to determine risk weights—this is why, unlike Australia, the U.S. has not yet implemented Basel 2.5. The Americans are understandably reluctant to use the advice of the rating agencies following the damming report on the role played by these agencies in the global financial crisis as determined by the Financial Crisis Inquiry Commission. The Commission concluded that "the failures of the credit rating agencies were essential cogs in the wheel of financial destruction", that "the three credit rating agencies were enablers of the financial meltdown", and that "this crisis could not have happened without the rating agencies". As an example, the report states that "from 2000 to 2007, Moody's rated nearly 45,000 mortgage-related securities as triple-A" and that "in 2006 alone, Moody's put its triple-A stamp of approval on 30 mortgage-related securities every day".

-

⁴⁹ Edey (2011) argues that Basel III will eliminate or manage the conflict of interest embodied in the role of the rating agencies. The only way to do that is not to use the "wisdom" of these agencies, but the Basel Committee still insists on doing that.

⁵⁰ Financial Crisis Inquiry Commission (2011).

Reliance on the rating agencies to determine the riskiness of assets sounds ludicrous in the post-crisis era. One has to remember why the likes of Citigroup and Bank of America were brought to their knees: it was exposure to the triple-A securitised debt, an allegedly "risk-free" asset manufactured, with the help of the rating agencies, from risky loans. Since regulatory capital is calculated on the basis of risk-weighted assets, and since risk weights are determined by credit ratings, banks found it tantalising to maximise exposure to triple-A assets that pay well. We know the rest of the story.

Even without the crisis, this reliance is misguided because the rating agencies do not provide consistent estimates of creditworthiness. Questions have been raised on whether or not the rating agencies meet the credibility, independence, objectivity and transparency criteria envisaged by the Basel Committee.⁵¹ In the May 2008 issue of *OpRisk & Compliance* (p10), it was reported that "industry bodies such as the European Savings Banks Group, British Bankers' Association, and the European Banking Federation agree that the rating agencies have failed to deliver sufficient transparency regarding their ratings methodologies or to demonstrate enough independence". It is also doubtful if the agencies had the expertise to assess the risk embodied in CDOs, even if they wanted to be objective (according to a widespread view, they did not have a clue).⁵²

It is ironic that the BCBS has enhanced faith in the rating agencies when two economists at the Bank for International Settlements, which is where the BCBS

-

⁵¹ Cifuentes (2007).

⁵² This statement was made in a documentary entitled "Crash: the Next Depression", which was shown on the History Channel in June 2009.

resides, argued against the use of the ratings of the rating agencies back in 2000.⁵³ These economists suggested that "many would be wary of putting too much emphasis on the assessment of credit-rating agencies". To support their argument, they referred to the performance of the rating agencies during the Asian crisis. While they (the agencies) did not downgrade most Asian countries before the crisis (when imbalances were developing), their downgrades in the midst of the crisis made it even worse. They concluded that "rating agencies were backward-looking rather than forward-looking in their assessments". The BCBS itself is as backward-looking as the rating agencies, changing the rules only following the realisation that they do not work.

Basel III as a Conduit to Bank Resilience

Presumably banks will be made more resilient by the introduction of new capital adequacy rules as well as the liquidity and leverage provisions. We start with the capital adequacy rules.

Redefining capital to exclude items that do not remotely represent or resemble capital is a positive move. However, redefining capital and raising regulatory capital requirements do not solve the fundamental problem that Basel III, like Basel II, is capital-based regulation—more like buying insurance to pay for the damage than avoiding the damage. I have already argued strongly against capital-based regulation. A more serious problem is the calculation of the capital ratio on the basis of risk-weighted assets. The risk weights are arbitrary, and the whole system boosts the procyclicality of the banking industry without solving the problem of regulatory

⁵³ Hawkins and Turner (2000).

arbitrage. It has also encouraged the accumulation of "low-risk" or "risk-free" assets that led to the global financial crisis and the European debt crisis.

While expanding risk coverage is a positive move, the regulation still excludes reputational risk and business risk, which were proved to be of paramount importance (a prime source of destruction) during the global financial crisis. The objectives of providing incentives to move OTC derivative contracts to central counterparties and to strengthen the risk management of counterparty credit risk sound good but there are problems. To control the problem of counterparty risk in derivatives, a more effective course of action is to force the trading of derivatives on organised exchanges or to require a full financial back-up of transactions.⁵⁴ Regulators should learn from the lessons of the late 1990s, when Brokesley Born, the then head of the Commodity Futures Trading Commission (the US agency in charge of regulating derivatives), made some serious suggestions to regulate OTC derivatives. Unfortunately, Born's proposals (which could prevent the recurrence of an AIG-type mess) did not see the light because of opposition from Larry Summers, Alan Greenspan and Robert Rubin.

Dealing with systemic risk brings with it the problem of judging the systemic importance of individual financial institutions. The plan is to use interconnectedness and correlation as measures of systemic importance, but this is not so straightforward. Criteria other than size have been suggested for the purpose of identifying systemically important institutions as an alternative to the concept of too big to fail, which pertains to size only. These criteria include contagion, correlation,

⁵⁴ Forcing the trading of OTC derivatives on organised exchanges may sound like anti-free-market, anti-democratic and draconian measure. However, a truly draconian measure, the prohibition of short selling, is hailed as a reason why Australia avoided the worst of the global financial crisis. On the flaws in the regulation of short selling, see Moosa (2012).

concentration and (the underlying) conditions. However, no matter which one of these criteria is used (including correlation), systemic importance boils down to size.⁵⁵

It is rather strange to design Basel II in such a way as to make it procyclical then try to reduce procyclicality by introducing countercyclical capital buffers and claim that to be a revolutionary and an evolutionary aspect of Basel III. The procyclicality of Basel II results from the calculation of the capital ratio on the basis of risk-weighted assets, which means that one of the proclaimed advances over Basel I (increased risk sensitivity) is counterproductive. This is why some economists argue that procyclicality can be reduced by calculating the capital ratio from total unadjusted assets. For example, it has been suggested that one way in which countercyclical elements could be introduced into regulatory capital requirements is to make capital a function of the change in assets, not the risk-weighted level.⁵⁶ Introducing countercyclicality by design sounds more sensible than suggesting a procyclical system and subsequently looking for countercyclical measures. Then there are no precise definitions for "good times" and "bad times". There is no way of coming up with a figure for the capital buffer that will absorb losses in bad times. It is some sort of "Mission Impossible" to calculate (basic) regulatory capital Basel-style, which makes the task of calculating countercyclical capital buffers "Mission Impossible 2". This requirement will also reinforce the problem of regulatory capture when regulators are assigned the task of approving the models used by banks to calculate capital buffers—hence they feel responsible for the success or failure of these models.

⁵⁵ See, for example, Moosa (2010a).⁵⁶ Goldstein (2008).

The introduction of a leverage ratio is a step forward, although our regulators wrongly believe that it will make a marginal contribution or that it is only a supplementary measure. As a matter of fact, Australian regulators seem to be more dismissive of the usefulness of the of the leverage provisions than the Basel Committee itself. This is rather strange, given the devastation inflicted by excessive leverage during the global financial crisis (for example, Bear Sterns). Contrary to these views, some economists believe that "the introduction of a leverage ratio is likely to be the single most important reform". These economists point out that "the leverage ratio should not be thought of as a backstop measure, given how effective the capital weighting approach has been". They go as far as arguing for the leverage ratio to be the primary "capital control tool", pointing out that "risk weighting and leverage ratio may not sit well together".

To suggest that the leverage ratio is a supplementary tool to the capital ratio does not make sense, given that when a leverage ratio is in place, it implies a corresponding capital ratio (and this is why the leverage ratio is a capital control tool). Furthermore, the leverage ratio is more objective, easier to calculate and more readily understandable than the risk-based capital ratio. While there is substantial empirical evidence for a negative relation between the leverage ratio and bank insolvency, no such evidence is available on how insolvency is related to risk-based capital ratios.⁶⁰ The Basel Committee admits explicitly that one reason for the introduction of a leverage ratio is that it is possible to "game" the risk-based capital requirements.⁶¹ If

⁵⁷ Byres (2010)

⁵⁸ In his description of how Basel III is a response to the lessons learned from the global financial crisis, Malcolm Edey does not even mention leverage (Edey, 2011).

⁵⁹ Blundell-Wignall and Atkinson (2010).

⁶⁰ See, for example, Evanoff and Wall (2001)

⁶¹ BCBS (2010).

the capital ratio (Basel-style) can be manipulated while the leverage ratio is immune from manipulation, and since the leverage ratio is indicative of the capital ratio, the sensible thing to do would be to replace the latter with the former—that is, abandoning capital-based regulation in favour of leverage-based regulation. For our regulators, this plausible and pragmatic proposition is unthinkable.

Regulating liquidity is a step forward because low liquidity hampers business and may induce a run on bank deposits. The problem here is that the proposed liquidity provisions are rather complex in the sense that the liquidity ratios are difficult to measure. More seriously, the net stable funding ratio is based on liabilities rather than assets, which is inappropriate.⁶² Instead, a simple asset-based liquidity ratio can be used to supplement the leverage ratio. A liquidity ratio may be set in terms of deposits, total liabilities or current liabilities, with a clear-cut listing of the underlying liquid assets. Another useful indicator is the funding gap, the difference between loans and deposits.⁶³

Basel III as a Great Leap Forward

Some of the most fundamental problems with Basel I and Basel II have not been dealt with in Basel III. I have already examined some of these problems, such as the use of internal models to calculate regulatory capital and the use of the services of the rating agencies. Therefore, any critique of Basel II (and Basel I) that has not been addressed by Basel III is also a critique of Basel III.

⁶² It is not clear how the LCR and NSFR are going to be reconciled, given that the former is asset-based while the latter is liabilities-based. Strictly speaking liquidity should be judged in terms of assets rather than liabilities.

⁶³ For example, the run on Northern Rock in 2007 was caused by lack of liquidity. Prior to the run, the bank was experiencing a widening liquidity gap, which the regulators failed to observe and do something about.

The most serious problem remains to be the risk-based approach to the calculation of regulatory capital. For example, with a capital ratio of 8 per cent and a risk weight of 0.2, the capital requirement is 1.6 per cent, which allows banks to leverage 62.5 to 1. That is why there was a stampede to hold AAA CDOs although they were created from risky subprime loans (and we know the rest of the story). Under the same rules, a sovereign bond rated AAA or AA has a weight of zero, which is why Greece found it easy to borrow and why banks were enthusiastic about lending to Greece.

Basel III does not address the exclusionary and discriminatory aspects of Basel II. The global financial crisis has hit financial institutions across the board: small and large, sophisticated and not-so-sophisticated, internationally active and not-sointernationally active, and those operating in emerging economies and otherwise. It has hit commercial banks, investment banks, hedge funds and other financial (and non-financial) institutions. Financial institutions incurred losses by being exposed to market risk, credit risk, operational risk, legal risk, business risk and reputational risk. Yet, the Basel II Accord covers commercial banks only. It discriminates between large banks and small banks, between sophisticated and down-to-earth banks, and between internationally active and internationally inactive banks. And it ignores business and reputational risks (the same can be said of Basell III). Perhaps what is more alarming is that these exclusions and double standards are typically motivated by convenience, not by substance. Business and reputational risks may be more significant than the direct losses that the banking industry has been asked to monitor.⁶⁴ These risks are left out not because they are insignificant but because they are difficult to assess.

⁶⁴ Pezier (2003).

Consider first business risk and reputational risk. Financial institutions incurred losses because they took positions on CDOs, believing that the AIG's credit default swaps would provide adequate protection, an operation that involved business risk. This exposure, which resulted from severe errors of judgment, produced significant losses. As far as reputational risk is concerned, the financial institutions that endured market and credit losses during the crisis also suffered from dented (if not completely lost) reputation (for example, Northern Rock). Empirical studies of operational risk have shown that a firm can suffer a market value decline in the days surrounding the announcement of a large loss that is significantly larger than the loss itself. This is attributed to the indirect impact of reputational risk, because disclosure of fraudulent activity or improper business practices at a firm may damage the firm's reputation. Yet these risks are not recognised by the Basel accords (as they are excluded from the BCBS's definition of operational risk). This is why it has been suggested that financial institutions need to speed up the implementation of some risk management practices not explicitly covered by the Basel accords.

Another facet of the Basel II exclusionary design is that the Accord covers (commercial) banks only while the main victims of the crisis were investment banks.⁶⁸ Requiring (commercial) banks only to hold regulatory capital against market, credit and operational risk makes them less competitive in this era of universal banking (so much for the objective of enhancing competitive equality).

⁶⁵ Atik (2009) argues that reputational risk refers to both the prospect of a decline in goodwill and the possibility of feeling constrained to undertake certain transaction for the purpose of maintaining goodwill. He suggests that reputational risk manifested during the global financial crisis.

⁶⁶ Moosa and Silvapulle (2012) provide Australian evidence on this proposition. See also Moosa and Li (2012).

⁶⁷ Topping (2008).

⁶⁸ Zuberbuhler (2008).

Furthermore, the Basel accords discriminate against small banks, less sophisticated banks and internationally inactive banks because big and sophisticated banks are allowed to calculate regulatory capital by using their internal models. This gives them the advantage of being able to manipulate their models in such a way as to produce the desired level of capital.⁶⁹ Small banks may, therefore, feel that the Basel accords put them at a competitive disadvantage vis-à-vis large banks, which makes them attractive potential takeover targets. However, large banks may (and do) complain that, unlike small banks, they have to spend a fortune on the development of internal models to measure regulatory capital under the advanced measurement approach (AMA). Small banks may (and do) claim that the capital charge under the basic indicators approach (BIA) is too high, but the BCBS cannot reduce this number without enraging the large banks adopting the AMA. It is a real mess!

Like Basel II, Basel III is no more than an expensive compliance exercise. Some observers would argue that preoccupation with Basel II and its complexity hurt financial institutions during the crisis because it is not a risk management exercise and because banks were concerned more with compliance than with actual risk management. Financial institutions with cross-border operations face a particularly daunting task in trying to comply with varied versions of Basel II (and Basel III).⁷⁰

In a report produced by KPMG in 2005, it is argued that "Basel II.... is perceived as being yet another regulatory compliance obligation", which brings with it the risk of

⁶⁹ Moosa (2008b) demonstrates how internal models can be manipulated for this purpose. ⁷⁰ Topping (2008).

non-compliance and the potential losses associated with it.⁷¹ As a result, the focus (as far as banks are concerned) has become meeting the requirements rather than driving business value from the effort, given time and resource constrains. Furthermore, Basel II and Basel III are complex, but complexity does not necessarily make the calculation of regulatory capital more accurate (and regulation more effective). Increased complexity, however, raises compliance costs and reduces banks' and supervisors' understanding of the underlying concepts and issues.⁷² The complexity of the Basel accords makes compliance costs prohibitively high.⁷³ The Credit Suisse Group estimated compliance costs at an average of \$15 million per banks for about 30,000 banks worldwide.⁷⁴ One can only wonder if Basel II is feasible in terms of costs and benefits.

Andrew Kuritzkes, a managing director with Oliver Wyman, is quoted by Risk magazine as saying that "the tremendous effort required in Basel compliance led to things like asset/liability risk, liquidity risk and business risk being crowded out". He goes on to suggest that "given a bit more freedom, I'd argue that risk managers would have been more focused on risks outside the Basel II box and would have been better able to anticipate the kind of events that played out from July [2007] onwards". Likewise, it has been argued that "the challenges of implementing Basel II had taken regulators' eyes off business as usual, to which liquidity management supervision in banks should be central". Therefore, Basel II is a distraction for regulators as well.

⁷¹ KPMG (2005).

⁷² Kaufman (2005).

⁷³ Rodriguez (2002).

⁷⁴ Credit Suisse Group (2001).

⁷⁵ Risk (2008).

⁷⁶ Business Mirror (2008).

The Internationalisation of Banking Rules

Any justification for using internationally uniform capital standards is more like rhetoric than economic sense and substance. Proponents of the Basel rules, including our regulators, tell us that the international implementation of these rules serves two ends: (i) worldwide financial stability, and (ii) maintaining decent regulatory standards. It is not clear to me how the Basel rules are conducive to financial stability when financial instability has been the rule rather than the exception since the mid-1980s when the Basel Committee started flexing its muscles. Financial stability was maintained for over 50 years in the U.S. as a result of the introduction of the Glass-Steagal Act (a piece of domestic regulation) in the 1930s. As for unifying standards, this sounds like attempts to save the planet by imposing the same penalties on high-pollution developed countries and low-pollution developing countries. It is ironic that this claim of egalitarianism is made on behalf of the BCBS whose rules discriminate between small banks and big banks, giving the latter the opportunity to hold less capital by manipulating their models.

Our regulators make it sound as if Australia will not be safe from financial turmoil unless we follow the Basel rules. Yet they admit that the Australian economy performed remarkably well and that Australia banks remained profitable in the aftermath of the global financial crisis because of appropriate domestic policy including the fiscal response (by the Treasury), the monetary response (by the RBA) and the ban on short selling imposed by ASIC, with the help of two more factors:

⁷⁷ Edey (2011).

⁷⁸ Unlike the Basel accords, the Glass-Steagall Act was based on a sound economic approach to regulation. The Act identified the possibility of market failure, addressed failure through intervention, and recognised and contained the direct costs of intervention (Acharya, 2010).

⁷⁹ It also discriminates between the banks of developed countries and those of developing countries.

favourable terms of trade and the depreciation of the Australian dollar. By adopting these policies Australia did not "stand apart from the rest of the world".

Unifying the rules for developed and developing countries does not make sense because the environments are different. It is unreasonable to suggest that the same banking regulation rules should be used in Australia, Sweden, Somalia, Saudi Arabia, Iran and the Congo. According to The Economist, "banks in emerging markets face different and far more exciting challenges" because "they need to grow quickly enough to keep pace with economies racing ahead at breakneck speed and to reach the legions of potential customers in villages and slums who are hungry for banking". ⁸⁰ In India and Indonesia, for example, bank lending is growing by 20-25 per cent per year, thus they cannot be put on the same rules as banks in developed countries where bank lending has been shrinking.

It is not clear why banks in third world countries should be regulated by Basel III when in fact they have tighter (and more effective) controls. It has been argued, for example, that "India should resist the call for a blind adherence to Basel III and persist with its [Reserve Bank of India's] asset-level leverage restrictions and dynamic sector risk-weight adjustment approach". In India the central bank determines what products banks are allowed to sell, it has banned all but the simplest of derivatives, and it tells banks where they should lend and where they can open branches. In India and elsewhere in the developing world, banking is seen as a tool of development wielded through ownership and regulation.

⁸⁰ The Economist (2011).

⁸¹ The Economist (2011).

⁸² Acharya (2010).

But it is not only about developing versus developed countries. The international harmonisation of banking regulation does not work. Take, for example, the following story about the Toronto 2010 conference on the aftermath of the global financial crisis:⁸³

As a group of central bankers and regulators responsible for reforming the world banking system sat in a Toronto conference room in mid-June [2010], hopes of a historic global agreement were fading fast. While the overall goal was to draft rules designed to prevent a repeat of the 2007-08 financial crisis, country after country began to argue for special exemptions that would benefit its domestic banks. Some participants began to disappear.

This anecdote tells the whole story, but it does not deter the Basel officials from insisting that this is the way forward. The President of the BIS, Jaime Caruana believes that Basel III is suitable (even better) for Latin American and Caribbean countries (hence for all other developing countries). ⁸⁴ In a speech given in Antigua, Guatemala, he suggested that this is the case for the following reasons: (i) Basel III will provide a good platform to continue to enhance risk management, disclosure and supervisory practices; (ii) the enhanced capital requirements and new liquidity standards will contribute to making financial systems even more resilient; (iii) implementing a macroprudential approach to regulation and supervision will be particularly useful in improving the oversight of system-wide risks; (iv) the Basel III framework, particularly its macroprudential overlay, will reduce opportunities for capital arbitrage in certain areas and promote a level playing field; and (v) we should learn from past crises to reduce the likelihood and impact of future ones. Caruana actually used the phrase "in Latin American and Caribbean countries" with each one of these (generic) points. He could easily replace "Latin American and Caribbean

⁸³ Masters and Murphy (2010).

⁸⁴ Caruana (2010).

countries" with "Middle Eastern countries" for the Dubai speech and with "African countries" for the Nairobi speech. The most ludicrous of those hollow rhetorical statements is the last one—learning from past crises. The Basel Committee has not learned anything from its contribution to past and current crises.

It is for these reasons that countries are implementing Basel 2.5 at different speeds. A BCBS document entitled *Status of Basel 2.5 Adoption* shows that there are serious leads and lags in the implementation of the new provisions. For example, Australia implemented the rules on 1 January 2012; Argentina is still drafting preliminary documents; in the U.S. market risk capital requirements have been postponed and remain to be finalised; in Turkey there is on-going work to harmonise current regulation with the Basel 2.5 rules; and in Russia Pillar 2 is expected to be implemented not earlier than 2014. Some countries have announced that they are not interested at all. For example, Indonesia considers Basel 2.5 to be inappropriate for Indonesian banks because securitisation exposures are very small. Not a single Indonesian bank has adopted the use of internal models to calculate regulatory capital.

The problem is that Basel III, like Basel II and Basel I, is a one-size-fits-all approach to be implemented globally when it has been recognised that the international harmonisation of capital adequacy regulation does not work. It has been demonstrated that when capital standards are harmonised across countries that have different rescue policies, the presence of international banks leads to a spillover effect from the country with a more forbearing policy to the other country. ⁸⁶ This would boost the vulnerability of banks in the latter, forcing the authorities in that country to adopt a

⁸⁵ BCBS (2011).

⁸⁶ Acharya (2000).

more forbearing policy. The outcome is a "regression to the worst regulation". The international harmonisation of banking regulation prevents competition among different regulatory regimes and innovation in these regimes and makes it more difficult for domestic regulators to adapt the regime to the special circumstances of their own banking systems.⁸⁷

Pillar 2 and Pillar 3

Element six of the Basel III proposals (concerning Pillar 2, Pillar 3 and risk management) sounds more like rhetoric than achievable objectives. It is all about "enhancing disclosure", "boosting transparency" and "improving management"—a collection of slogans that have no corresponding real counterparts.

The BCBS seems to overlook the problems associated with Pillar 2 and Pillar 3, which have been identified in the literature. Pillar 2 contains very few specifics, focusing primarily on general principles and does not consider the wide variation in supervisory competence across countries.⁸⁸ If Pillar 2 is designed in part to allow supervisors to impose capital charges above the minimum required by Pillar 1, this boils down to admitting the inadequacy of Pillar 1 (so, why bother about the calculation of regulatory capital?). Then it is not clear how supervisors determine the required capital over and above the Pillar 1 minimum.⁸⁹ Most likely, they would tend to impose capital charges above the minimum as they endure regulatory capture.

Under Basel III, therefore, three tranches of capital have to be determined: (i) regulatory capital as required by Pillar 1, (ii) supplementary capital as required by

-

⁸⁷ Rodriguez (2002).

⁸⁸ Kaufman (2005).

⁸⁹ It is not clear whether the conservation capital buffer will be calculated under Pillar 1 or Pillar 2.

Pillar 2, and (iii) countercyclical buffers as required by the new proposals. This is a triple "Mission Impossible" that produces a number (in millions or billions of dollars) that means nothing for all intents and purposes. Last, but not least, the BCBS is not in a position to provide advice on risk management (good risk managers would rather work for banks than for the Basel Committee).

Conclusions

For all of the reasons presented thus far, the failure of the Basel Accords is not that the regime should be elaborated beyond the 4000 pages of text but that the whole system should be swept away. ⁹⁰ The way forward is to reign in banks by going back to basics, using simple but effective liquidity and leverage ratios.

The proposed provisions of Basel III are problematical, yet they do not address the fundamental shortcomings of Basel II. As long as the Basel Committee denies responsibility for the role played by its accords in the global financial crisis, banks and regulators will keep on receiving new provisions for Basel IV, Basel V and so on. They are in for enormous regulatory fatigue and regulatory capture, respectively. The biggest losers will be bank customers who will foot the bill for the implementation of the Basel III provisions. They will also endure the consequences of future financial crises that will strike either because the Basel provisions encourage malpractices or, at best, because these provisions do not prevent crises or reduce their impact.

⁹⁰ Kay (2009).

Perhaps it is entertaining as much as it is alarming to quote an observer on the demerits of the Basel accords. ⁹¹ He describes Basel II eloquently as follows:

It is impossible not to see now that the financial regulators in the Basel Committee, trying to fend off a bank and a financial crisis, constructed an incredibly faulty Maginot Line. It was built with lousy materials, like arbitrary risk-weights and humanly fallible credit rating opinions. And it was built on the absolutely wrong frontier, for two reasons. First, it was built where the risks are perceived high, and where therefore no bank or financial crisis has ever occurred, because all those who make a living there, precisely because they are risky, can never grow into a systemic risk..... Second it was built where it fends off precisely those clients whose financial needs we most expect our banks to attend, namely those of small businesses and entrepreneurs, those who could provide us our next generation of decent jobs and who have no alternative access to capital markets.

Then he moves on to Basel III to say the following:

Now with their Basel III the Basel Committee insists on rebuilding with the same faulty materials on the same wrong place and it would seem that we are allowing them to do so. I am trying to stop them... are you going to help me or do you prefer to swim in the tranquil waters of automatic solidarity with those who are supposed to know better? The implicit stupidity of the Basel regulations could, seeing the damage these are provoking, represent an economic crime against humanity!

I could not agree more with these statements. The Basel Committee and its accords should go the way of the dinosaurs. Australian regulators and policy makers are quite capable of designing rules and policies, which are suitable for our specific conditions, to safeguard Australia. Afeter all, we were spared the worst of the global financial crisis, not because we rushed to adopt the Basel rules but because of the wisdom of our policy makers.

⁹¹ Kurowski (2010).

References

- Acharya, V.V. (2000) Is the International Convergence of Capital Adequacy
 Regulation Desirable? Mimeo, Stern School of Business New, York
 University.
- Acharya, V.V. (2010) The Dodd-Frank Act and Basel III: Intentions, Unintended Consequences, Transition Risks, and Lessons for India. http://w4.stern.nyu.edu/blogs/riskintelligence/Dodd-Frank-Basel-and-India-by-Viral-Acharya.pdf.
- Allen, L. (2004) The Basel Capital Accords and International Mortgage Markets: A Survey of the Literature, *Financial Markets, Institutions and Instruments*, 13, 41-108.
- Allen, L. and Jagtiani, J. (1997) Risk and Market Segmentation in Financial Intermediaries' Returns, *Journal of Financial Services Research*, 12, 159-173.
- Allen, L., Jagtiani, J. and Landskroner (1996) Interest Rate Risk Subsidization in International Capital Standards, *Journal of Economics and Business*, 48, 251-267.
- Atik, J. (2009) Basel II and Extreme Risk Analysis, Unpublished Paper, May.
- Avery, R.B. and Berger, R.B. (1991) Risk-Based Capital and Deposit Insurance Reform, *Journal of Banking and Finance*, 15, 847-874.
- BCBS (2010) The Basel Committee's Response to the Financial Crisis: Report to the G20, Basel: Bank for International Settlement, October.
- BCBS (2011) *Progress Report Table on the Basel 2.5 Adoption*, Basel: Bank for International Settlements, September.
- Bikker, J.A. and Hu, H. (2002) Cyclical Patterns in Profits, Provisioning and Lending of Banks and Procyclicality of the New Basel Capital Requirements, *BNL Quarterly Review*, 221, 143-175.

- Blum, J. (1999) Do Capital Adequacy Requirements Reduce Risks in Banking? *Journal of Banking and Finance*, 23, 755-771.
- Blundell-Wignall, A. and Atkinson, P. (2010) Thinking Beyond Basel III: Necessary Solution for Capital and Liquidity, *OECD Journal: Financial Market Trends*, 1, 1-23.
- Business Mirror (2008) Is Basel II Dead? 2 November. Available at http://businessmirror.com.ph.
- Byres, W. (2010) Reform of Global Financial Regulation: Balancing National and International Interests, Paper presented at the Bond University Symposium on the global financial crisis, 9 April.
- Byres, W. (2011) Basel III: The Journey and the Destination, Paper presented at the La Trobe finance and corporate governance conference, 29 April.
- Calem, P.S. and Rob, R. (1996) The Impact of Capital-Based Regulation on Bank Risk-Taking: A Dynamic Model, Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, 96, 12.
- Calomiris, C. and Herring, R. (2002) The Regulation of Operational Risk in Investment Management Companies, *Perspective*, 8, 1-19.
- Caruana, J. (2010) Why Basel III Matters for Latin American and Caribbean Financial Markets, ASBA-FSI High-Level Meeting on "The emerging framework to strengthen financial stability and regulatory priorities in the Americas, Antigua, Guatemala, 19 November 2010. http://www.bis.org/speeches/sp101125.pdf.
- Cifuentes, A. (2007) Weak Basel II may not be Enough to Calm Credit Fears, Financial Times, 18 December.

- Credit Suisse Group (2001) The Basel Capital Accord Consultative Paper of January 16, 2000: Comments, 30 May.
- Doerig, H.U. (2003) Operational Risks in Financial Services: An Old Challenge in a New Environment, Working Paper, Credit Suisse Group.
- Dolan, E. (2010) Financial Reform: What is Basel III and why Should we Regulate Bank Capital? http://dolanecon.blogspot.com/2010/08/financial-reform-what-is-basel-iii-and.html.
- Edey, M. (2011) Basel III and Beyond, Paper Presented at the Basel III Conference, Sydney, 24 March.
- Evanoff, D.D. and Wall, L.D. (2001) SND Yield Spreads as Bank Risk Measures, *Journal of Financial Services Research*, 19, 121-146.
- Financial Crisis Inquiry Commission (2011) *The Financial Crisis Inquiry Report*. www.gpoaccess.gov/fcic/fcic.pdf.
- Flannery, M. (1989) Capital Regulation and Insured Banks' Choice of Individual Loan Default Risks, *Journal of Monetary Economics*, 24, 235-258.
- Furlong, F.T. and Keeley, M.C. (1989) Capital Regulation and Bank Risk-Taking: A Note, *Journal of Banking and Finance*, 13, 883-891.
- Gennotte, G. and Pyle, D. (1991) Capital Controls and Bank Risk, *Journal of Banking* and *Finance*, 13, 883-891.
- Goldstein, M. (2008) The Subprime and Credit Crisis, Paper based on transcript of speech presented at the Global Economic Prospects meeting, Peterson Institute for International Economics, 3 April.
- Greenspan, A. (1998) Wanted: Bank Regulators who Act More Like the Market, Secondary Mortgage Markets, 15, 6-10.

- Hawkins, J. and Turner, P. (2000) International Financial Reform: Regulatory and other Issues, Paper Presented at a Conference on International Financial Contagion, Washington DC, 3-4 February.
- Hovakimian, A. and Kane, E.J. (2000) Effectiveness of Capital Regulation at US Commercial Banks, 1985 to 1994, *Journal of Finance*, 55, 451-468.
- Jobst, A.A. (2007) The Treatment of Operational Risk under the New Basel Framework: Critical Issues, *Journal of Banking Regulation*, 8, 316-352.
- Kaufman, G.G. (2005) Basel II vs. Prompt Corrective Action: Which is Best for Public Policy?, *Financial Markets, Institutions and Instruments*, 14, 349-357.
- Kay, J. (2009) *Narrow Banking: The Reform of Banking Regulation*, London: Centre for the Study of Financial Innovation.
- Keeley, M.C. (1980) Deposit Insurance, Risk and Market Power in Banking, American Economic Review, 80, 183-200.
- Keeley, M.C. and Furlong, F.T. (1990) A Reexamination of Mean-Variance Analysis of Bank Capital Regulation, *Journal of Banking and Finance*, 14, 69-84.
- Kilavuka, M.I. (2008) Managing Operational Risk Capital in Financial Institutions, *Journal of Operational Risk*, 3 (Spring), 67-83.
- KPMG (2005) Managing Operational Risk Beyond Basel II, KPMG Financial Services.
- Kurowski, P. (2010) Comment, 15 September. http://blogs.reuters.com/financial-regulatory-forum/tag/basel-iii/.
- Llewellyn, D.T. (2010) The Global Banking Crisis and the Post-Crisis Banking and Regulatory Scenario, Research Papers in Corporate Finance, University of Amsterdam, June.

- Masters, B. and Murphy, M. (2010) Banking Reform: Suspense Over, *Financial Times*, 18 August.
- McConnell, P. (2006) A Perfect Storm--Why are Some Operational Losses Larger than Others? Unpublished Paper, July.
- Moosa, I.A. (2008a) A Critique of the Advanced Measurement Approach to Regulatory Capital against Operational Risk, *Journal of Banking Regulation*, 9, 51-164.
- Moosa, I.A. (2008b) Quantification of Operational Risk under Basel II: The Good, Bad and Ugly, London: Palgrave.
- Moosa, I.A. (2010a) The Myth of Too Big to Fail, London: Palgrave.
- Moosa, I.A. (2010b) Basel II as a Casualty of the Global Financial Crisis, *Journal of Banking Regulation*, 11, 95-114.
- Moosa, I.A. (2011) Basel II to Basel III: A Great Leap Forward? Chapter 20 in La Brosse, J.R., Olivares-Caminal, R. and Singh, D. (eds) *Managing Risk in the Financial System*, Cheltenham: Edward Elgar.
- Moosa, I.A. (2012) The Regulation of Short Selling: A Pragmatic View, *Journal of Banking Regulation* (forthcoming).
- Moosa, I.A. and Li, L. (2012) An Operational Risk Profile: The Experience of British Firms, *Applied Economics* (forthcoming).
- Moosa, I.A. and Silvapulle, P. (2012) An Empirical Analysis of the Operational Losses of Australian Banks, *Accounting and Finance*, 52, 165-185.
- Pezier, J. (2003) A Constructive Review of the Basel Proposals on Operational Risk, in Alexander, C. (ed) *Operational Risk: Regulation, Analysis and Management*, London: Prentice Hall-Financial Times.

- Rime, B. (2000) Capital Requirements and Bank Behavior: Empirical Evidence for Switzerland, *Journal of Banking and Finance*, 25, 789-805.
- Risk (2008) Basel II Backlash, 1 January. Available at www.risk.net/public/showPage.html.
- Rochet, J.C. (1992) Capital Requirements and the Behavior of Commercial Banks, *European Economic Review*, 36, 1137-1178.
- Rodriguez, L.J. (2002) International Banking Regulation: Where's the Market Discipline in Basel II?, *Policy Analysis*, No 455, October.
- Schachter, B. (2008) Kooky Science for Value-at-Risk, Asia Risk, March, 8.
- The Economist (2008a) Make Them Pay (Special Report on International Banking), 17 May, 16-17.
- The Economist (2008b) Professionally Gloomy: Risk Mangers Take a Hard Look at Themselves (Special Report on International Banking), 17 May, 11-13.
- The Economist (2011) Where Angels Fear to Trade, Special Report on International Banking, 14 May, 13-16.
- The Economist (2012) The Mathematics of Markets, 14 January, 78-79.
- Topping, S. (2008) Reassessing Basel II, Source+, October.
- Walter, S. (2010) Basel II and Revisions to the Capital Requirements Directive.

 Available at http://www.bis.org/speeches/sp100503.htm.
- Wellink, N. (2008) Basel II Might Have Prevented Crunch. Available at www. Bobsguide.com/cgi-bin/guide/newsExtras.
- Whalen, C. (2007) Basel II: Do Big Banks Need More Capital? *Seeking Alpha*, 24 October.
- Wood, D. (2008) A Model Model?, OpRisk & Compliance, March, 35-37.

Zuberbuhler, D. (2008) Global Credit Crisis: Consequences for Banking Supervision, Media Conference of the Swiss Federal Banking Commission, 1 April.