

The global financial crisis and pro-cyclical instability issues of financial institutions: the post-crisis responses

Lakshman Alles

Department of Banking and Finance
Curtin University of Technology,
Perth.

Email: lakshman.alles@cbs.curtin.edu.au

Abstract:

Key factors identified as contributing to the global financial crisis included the roles of financial accounting policies and credit rating agencies, and the combination of these factors in producing a continuing pro-cyclical destabilising effect on financial institutions. This article examines the progress made so far or the lack of it, in addressing these issues in the post-crisis period.

Keywords:

Global financial crisis, Financial Institutions stability, Fair value accounting, Financial reform

During the 2008 global financial crisis and its immediate aftermath, much was written on the causes, effects and the appropriate policy responses to the financial crisis. Commentators and analysts identified the leading causes of the crisis as flawed remuneration and incentive structures and the financial excesses in US financial institutions against the backdrop of a lax US regulatory environment. Many contributory factors were also identified, and among these was the role played by financial accounting policies, and particularly the valuation of financial instruments, in deepening the credit crisis. Some blame for the onset of the crisis was also attributed to credit rating agencies. Commentators contended that the combination of these factors gave rise to a continuing pro-cyclical destabilising effect on financial institutions (see IMF 2009).

In response to the crisis, the United States and UK governments have put forward legislative measures to reform and strengthen the regulation of their financial and banking sectors. The US government has introduced the Wall Street Reform and Consumer Protection Act of 2009, which among its many provisions establishes a new financial consumer watchdog; the Consumer Financial Protection Agency and an inter-agency Financial Stability Council to oversee activities of large financial institutions. In the UK, The Banking Act 2009 has been established, which confers new powers on UK financial regulators to deal with distressed financial institutions. Many other countries around the world have also followed with measures aimed at improving the risk management of their financial institutions.

The purpose of this article is to examine some of the measures that are being adopted to rectify the problems that led to the crisis and analyse their potential to address the deficiencies in the global financial system. The article focuses in particular, on the inherent pro-cyclical, destabilising effects on financial institutions, and the measures proposed to rectify those problems and prevent the recurrence of a similar crisis in the future.

The roots of the global financial crisis

The global financial crisis was caused initially by the sub-prime crisis that surfaced in the United States in early 2007. The sub-prime crisis involved the collapse of the values of financial securities secured by low-quality housing mortgages.

Mortgage-backed securities (MBS) are debt instruments backed by mortgage pools, created by financial institutions through a securitisation process. MBSs can be created with different credit strengths depending on the quality of the underlying mortgages. Lower quality MBSs are repackaged and re-securitised by financial institutions to create more marketable collateralised mortgage obligations (CMOs) or collateralised debt obligations (CDOs). CMOs and CDOs are composed of a range of senior to junior tranches or sub-classes of securities with higher to lower credit qualities, depending on the order of priority of the mortgage pool cash flows directed towards each tranche. When US house prices started falling in early 2007, the sub-prime mortgages lost their

value. This brought down the value of the lower quality CMOs first, which spread to the entire debt market in a domino effect due to the interwoven and obscure risk properties of the securities.

Crisis analysts identified several underlying factors and conditions that combined to create the crisis. One of these factors was the low interest rate regime in the United States that encouraged borrowing. Another was the ability of mortgage lenders and financial institutions to absorb and dispose of large volumes of mortgage loans by securitising them and selling them to investors worldwide. A third was the sustained rise in US housing prices fuelled by these two factors. The euphoria caused by these trends led mortgage lenders to loosen lending standards in order to further boost lending volumes. The combination of these factors led to unsustainably high house prices and their eventual collapse, when the pace of mortgage lending finally ran out of steam.

This phenomenon is another case of ‘irrational exuberance’ in human nature, a trait well recognised in Behavioral Finance. In an optimistic investment climate, investors expect favourable conditions to continue for ever. In such a climate it is easy for optimism to be overtaken by exuberance and disregard for risk. Rating agencies who were supposed to forewarn the onset of such risk build-ups were no exception to this. The tendency in such a climate is for investors and institutions to increase their risk exposures, for example, by undertaking high-risk investments or using excessive leverage.

The lesson to be learnt here was the importance of maintaining strict regulatory oversight of the level of risk exposures in financial institutions as well as of individual investment activities, irrespective of the prevailing investment climate. The need for regulators to continually review the exposure limits imposed on leveraged investments in the stock market as well as the minimum safety standards imposed on financial institutions, and monitor their strict compliance on an ongoing basis, was well illustrated by these events.

Fair value accounting and BASEL II

Fair value accounting principles have been identified as a contributory factor for the liquidity crisis faced by financial institutions. The International Accounting Standards Board (IASB) prescribed the principle of fair value accounting for the valuation of financial assets and liabilities as per the International Accounting Standards (IAS) 32 and 39 in 2001 and the US Financial Accounting Standards Board (FASB) prescribed the counterpart SFAS 157 and 159.¹ The basic premise underlying fair value accounting for financial instruments is that their value presented in the balance sheet should be marked-to-market or valued at market prices, as far as possible. These standards have a significant impact on financial institutions because a large part of their balance sheets comprise financial assets and liabilities. During the financial crisis, when debt markets froze, financial institutions that had invested in these markets had no way of determining the value of their investments. This led to large write downs of these assets in their balance sheets.

The risk management framework for financial institutions is prescribed in BASEL II. BASEL II is the international standard for computing capital adequacy in banks,² and was recommended for adoption by internationally active banks from 2008 onwards. A key requirement of the guidelines, known as the Pillar I requirement, is that a bank must maintain a minimum regulatory capital equal to at least 8% of the risk-weighted market value of its assets. (The complete BASEL II document can be found at <http://www.bis.org/publ/bcbsca.htm>.)

Pro-cyclicality

Crisis analysts contend that fair value accounting combined with the BASEL II capital adequacy computation methods gives rise to an inherent ‘pro-cyclicality’ of the banking system. Pro-cyclicality is the tendency of banks’ actions to exacerbate periods of market growth and market downturns. They contend that this is because the bank’s minimum regulatory capital computed according to BASEL II would vary widely between bull market periods and bear market periods.

During growth periods, bank balance sheet assets recorded at market prices will be marked up, following fair value accounting rules. The bank capital base will correspondingly increase. In a growth climate, risk perceptions of assets will be low and risk ratings provided by rating agencies will be favourable. Regulatory minimum capital, which is calculated as a proportion of risk-weighted assets according to BASEL guidelines, may correspondingly decrease or show only modest increases. The bank capital base relative to minimum regulatory capital will thereby increase, giving the appearance of the availability of excess capital over the regulatory capital. This will motivate banks to increase their assets by undertaking more lending and also more risky lending in order to increase profits. Many banks acting in this manner will fuel further market growth, exacerbating the growth cycle.

In a declining market or economic downturn, the opposite effect takes place. Balance sheet asset values will decrease as assets are marked down in accordance with mark-to-market principles. In such an economic climate, the risk ratings of assets will also deteriorate. When assets become more risky the regulatory minimum capital required to be maintained by BASEL II will increase. With the erosion of the bank’s asset base due to declining asset values, the bank will now struggle to fulfill the higher regulatory minimum capital levels. This will affect banks’ solvency and impair their capacity to maintain their normal lending activities. Such a systemic effect across the banking sector will further aggravate the economic downturn (Adrian and Shin 2008; Heid 2007; and International Financial Law Review 2009).

Numerous proposals have been made to rectify the pro-cyclical problems of BASEL II. Himino (2009) proposes to make the regulatory capital computations counter-cyclical by building in automatic stabilisers, by means of applying an adjustment factor in calculating the capital ratio. The Financial Stability Board of the Bank for International Settlements has proposed several measures, including holding of counter-cyclical capital buffers, larger loan loss provisions and the imposition of further constraints on leverage.

But they also recommend undertaking further research into this problem, which means that the authorities are still in the process of finding a satisfactory solution to the problem. (see http://www.financialstabilityboard.org/publications/r_0904a.pdf). The Basel Committee on Banking Supervision (BCBS) has also issued for consultation a comprehensive package of proposals to strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector. The proposals consist of five key requirements for internationally active large banking institutions. The first proposal is to raise the quality, consistency, and transparency of the capital base. Secondly, the risk coverage of the capital framework is to be strengthened by including capital requirements for counterparty credit risk exposures arising from derivatives, repos, and securities financing activities. The third proposal is to introduce the leverage ratio as a supplementary measure to the Basel II risk-based framework. Fourthly, a series of measures are introduced to promote the build up of capital buffers in good times that can be drawn upon in periods of stress. The last proposal introduces a global minimum liquidity standard for internationally active banks that includes a 30-day liquidity coverage ratio requirement underpinned by a longer-term structural liquidity ratio (for details see <http://www.bis.org/publ/bcbs164.htm>). The Spanish provisioning model, adopted by the Spanish central bank for Spanish banks, which largely escaped the financial crisis, is a method for providing countercyclical buffers similar to BCBS's fourth proposal, mooted by Restoy and Roldan (2009).

Inevitably, banking institutions covered by the proposals will have concerns about the cost of implementing the new standards, if adopted. But if the proposals are effective in preventing a future crisis, the cost of implementing the proposals will be a small price to pay for future stability.

Credit ratings

Another issue that impacts on the stability of financial institutions is the quality of credit ratings of bank assets. Since the minimum regulatory capital under BASEL II is computed on the risk-weighted value of assets, the risk ratings of assets are key inputs to this computation. A major component of the risk associated with banks' assets is credit risk. Banks generally rely on the ratings provided by external rating agencies to determine credit risk. This raises the question of the reliability of this advice.

The major credit rating agencies (Moody's Investor Services, Standard and Poor's and Fitch Ratings) came under heavy criticism from financial media commentators for their alleged role in creating the US sub-prime crisis. The official investigation conducted by the US Securities and Exchange Commission (SEC) into the activities of rating agencies in the aftermath of the crisis revealed numerous problems and shortcomings relating to the processes and procedures followed by them for ratings decisions. Among these were the absence of proper procedures and models for determining ratings, non-disclosure of models and procedures, deviations from models etc. (SEC 2008). Industry analysts believe that the potential for fee generation by the growth of the structured finance market provided an incentive for ratings agencies to give overly optimistic ratings for structured financial products. The SEC (2008) has identified this conflict of interest in the

‘issuer pays’ model as: ‘... which the arranger or other entity that issues the security is also seeking the rating and pays the rating agency for the rating. The conflict of interest inherent in this model is that rating agencies have an interest in generating business from the firms that seek the rating, which could conflict with providing ratings of integrity’.

Rating agencies also have less incentive to monitor and downgrade securities after the initial rating issuance. This is because the re-rating of securities is usually paid for by a maintenance fee that is collected in advance (Herring and Kane 2009).

Under BASEL II the ratings agencies have an indispensable and key role to play in the risk management of banks, because to assess credit risks, banks have to rely on the credit ratings provided by external credit rating agencies. Given the shortcomings and flaws identified in the market for credit ratings, and the processes for determining ratings within the recognised rating issuing institutions, the fact that the risk management of financial institutions is so heavily reliant on the information provided by the rating agencies is a matter of concern.

Credit ratings agencies have so far largely escaped legal liability even though investors who relied on their ratings suffered massive losses during the crisis. Advocates of financial sector reform have argued for the need to make credit rating agencies more accountable for their ratings decisions either by imposing a more effective regulatory process³ and/or by opening up the ratings industry itself to greater competition, ensuring better market discipline. The rating industry at the global level is an oligopoly of three major players enjoying significant barriers to entry⁴. Although reform proponents hoped that the Wall Street Reform and Consumer Protection Act of 2009 would address this shortcoming effectively, the provisions in the Act have fallen far short of expectations. The Act enhances the existing oversight powers of the Securities and Exchange Commission over rating agencies with more funding and also mandates rating agencies to provide more clarity and transparency in the rating determination process. It is doubtful whether these provisions are sufficient to make a meaningful impact on the ratings industry shortcomings.

Derivatives reform

The freezing up of the derivative products market was a major cause of the liquidity crisis faced by financial institutions and which resulted in the deepening of the global financial crisis. Derivative products are traded mainly in the Over the Counter (OTC) market where counterparty credit risk is not centrally managed or known. The UK financial regulator, the Financial Services Authority, along with European Union authorities have proposed reform of the OTC market by recommending moving towards greater standardization of derivative contracts. They hope this would lead to greater transparency of trading risks and the use of a Central Counterparty (CCP) for clearing and trading of derivatives on organized platforms. This would facilitate the management of counterparty risks. In the US, the Wall Street Reform and Consumer Protection Act of 2009 also provides for the standardization of swap transactions and the use of CCP for clearance

and trading on exchanges or electronic platforms. The effectiveness of these measures would largely depend on the extent to which derivative transactions move towards 'standardization'. The complexity of derivative products and the ongoing innovation of new derivative products in the market are some of the factors that would prevent a substantial movement towards standardization.

Addressing the deficiencies in accounting standards

Fair value accounting for financial instruments require that their values presented in the balance sheet should be marked-to-market or valued at market prices Determining fair value when there is no active market for financial instruments is however a major problem. Such a situation requires all manner of valuation models and judgments to be applied in measuring value. During the global financial crisis the markets for financial instruments became illiquid or simply froze, further compounding this problem. The problems were so severe that there were calls by the financial services industry to suspend fair value accounting.

In the aftermath of the crisis the FASB initiated public responses to provide guidance for preparing financial statements using fair value accounting. After short consultative periods a number of Standards were issued. The accounting standards FAS 157-4 'Determining fair value when the volume and level of activity for the asset or liability have significantly decreased and identifying transactions that are not orderly', FAS 115-2 'Recognition and presentation of other-than-temporary impairment' and FAS 157-3 'Determining fair value when the market for that asset is not active' were issued as fair value accounting implementation guidelines in response to the problems associated with the financial crisis. These guidelines raise the possibility that depending on market conditions, fair value determining methods will also be quite different (Cheng 2009, Pounder 2009).

In response to the concerns relating to the complexity of applying IAS 39, the IASB has also initiated actions to replace IAS 39 in three phases, the first of which is a new International Financial Reporting Standard – IFRS 9: 'Financial Instruments'. This standard deals with the classification and measurement of financial assets and is purportedly an attempt to improve the decision-usefulness of financial statements for users by simplifying the classification and measurement requirements for financial instruments. The two measurement categories are fair value and amortised cost. The two remaining phases relating to Impairment and Hedge Accounting are currently in progress.

Readers of financial statements want to see consistency and transparency in the preparation of the statements. The necessity to read through disclosure statements about subjective valuation models and their underlying assumptions in order to make sense of financial statements will make this task more onerous. Whether the new recommendations for implementing fair value accounting would make financial statements even less user-friendly and more confusing, remains to be seen.

References

Adrian, T. and Shin, H. 2008, 'Liquidity and financial cycles' Bank for International Settlements, working paper no. 256. <http://www.bis.org/publ/work256.pdf?noframes=1>

Anonymous 2009, *International Financial Law Review*, 'How Basel should change', Dec. 2008/Jan. 2009.

Cheng, K. 2009 'Fair value's how meets when' *The CPA Journal* - August

Financial Services Authority, UK 2009 'Reforming OTC derivatives markets – A UK perspective'

Heid F. 2007, 'The cyclical effects of the BASEL II capital requirements', *Journal of Banking and Finance*, vol. 31, pp. 3885–3900.

Herring, R. and Kane, E. 2009, 'Financial Economists roundtable statement on reforming the role of the rating agencies in the securitization process', *Risk*, vol. 21, No. 1 pp. 28–32.

Himino, R. 2009, 'A counter cyclical BASEL II', *Risk*, March, pp. 72–74.

IASB 2009 website:

<http://www.iasb.org/About+Us/About+the+IASB/Response+to+the+credit+crisis.htm>

IMF 2009, 'Global Financial Stability Report – Responding to the financial crisis and measuring systemic risk', April.

Pounder, B. 2009, 'Financial Instrument and the Financial Crisis' *Strategic Finance*, April, p.19.

Restoy, F. and J. Roldan 2009 'Towards consensus on dynamic provisioning' *The Banker*, August.

Ryan, S.G. 2008, 'Accounting in and for the subprime crisis', *The Accounting Review*, Nov., vol. 83, no. 6, pp. 1605–1638.

US Securities and Exchange Commission 2008, 'Summary report of issues identified in the Commission staff's examination of select credit rating agencies', Washington DC.

Notes

¹ The Australian counterparts of the fair value accounting standards issued by the Australian Accounting Standards Board are AASB 32: 'Financial Instruments: Presentation' and AASB 39: 'Financial Instruments: Recognition and Measurement'

² The standard is formulated by the BASEL Committee for Banking Practice of the Bank for International Settlements.

³ The regulator of the ratings agencies is the US Securities and Exchange Commission.

⁴ In the US, credit ratings are required to be issued by a 'Nationally recognized statistical ratings organisation' (NRSRO), a status conferred by the US Securities and Exchange Commission.