

Fair value accounting, credit ratings and cyclicity: implications for the stability of financial institutions

Key factors identified as contributing to the global financial crisis include 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. These issues are examined here in order to determine the lessons for Australian financial institutions.



LAKSHMAN ALLES F Fin is an Associate Professor in the Department of Banking and Finance at Curtin University of Technology, Perth. Email: lakshman.alles@cbs.curtin.edu.au

IN RECENT MONTHS, we have witnessed the unfolding of the global financial crisis in which a number of large financial institutions in the United States, Europe and Japan came close to bankruptcy and were bailed out by massive injections of government funds. Due to the integrated nature of the financial system, the effects of this crisis have been felt throughout global financial markets and financial institutions.

Stock markets around the globe fell by around one-third to one-half of their values. Debt markets had similar falls with some segments of the debt markets such as the securitised debt markets simply stalling due to the cessation of trading. Institutional lending also faltered due to the high losses suffered by financial institutions and the deepening uncertainty about their financial health. These effects are now widely known as the global credit crunch. The financial crisis inevitably fed into the real economy. The credit crunch and the collapse in trade financing resulted in a downturn in business and investment activities and consumer spending. The sudden decline in the wealth of individuals and businesses, compounded by the general uncertainty about the future, further served to stall economic activity. Most parts of the developed world are currently in recession.

Much has been written on the causes, effects and the appropriate policy responses to the financial crisis. Commentators and analysts have 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 have also been identified, and among these is 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 has also been attributed to credit rating agencies. Commentators contend that the combination of these factors has given rise to a continuing pro-cyclical destabilising effect on financial institutions (see IMF 2009).

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

The lesson to be learnt here is 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.

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 have 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 behavioural 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 that are supposed to forewarn of 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 is 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. For instance, the Reserve Bank and other regulators such as APRA must 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.

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 adopted in 2001.¹ 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 greater 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 has been 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 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).

Credit ratings

Another issue that can have an impact 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) recently 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: '... 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 rating 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

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.

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.

Accounting for asset securitisation activities

Another area with potential implications for the stability of financial institutions is the question of properly assessing the risks of banking institutions arising from their asset securitisation activities. In asset securitisation, financial institutions create Special Purpose Vehicles (SPVs) to move their assets off the balance sheet. The SPV is a bankruptcy-remote entity that will purchase assets of financial institutions and issue debt instruments secured by these assets in the debt markets.

International Accounting Standards do not require SPVs to be consolidated with the financial institution that promotes them as long as the SPV is 'bankruptcy remote', that is the losses and liabilities of the SPV are unconnected to the promoting institution. But bankruptcy remoteness is often unclear until tested in litigation. For this reason, financial statements of financial institutions may not fully represent the true extent of liabilities and risks associated with their off balance sheet activities. This has implications for the risk management processes of the banks as well as for those who read the banks' financial statements to assess their risk profiles. Ryan (2008) refers to this situation as the 'shadow banking system', because the activities of these vehicles are not only unregulated, but their financial impact on the promoting institutions is obscure.

Rectifying the weaknesses

Weaknesses in the application of fair value accounting principles were identified as a cause of potential instability in financial institutions. But abandoning fair value accounting and going back to historical cost accounting is not an option any more as the accounting profession has accepted the irrelevance of historical costs in balance sheets. Fair value is much more relevant because it is based on current market prices. But determining fair value when there is no active market for financial instruments requires all manner of valuation models and judgments to be applied in measuring value. The financial crisis and the illiquidity of markets have further compounded the problem.

Readers of financial statements want to see transparency and consistency in the preparation of the statements. The necessity to read through disclosure statements about valuation models and their underlying assumptions to make sense of financial statements is not going to make this task any easier. Both the IASB and the Financial Accounting Standards Board of the United States are initiating responses to rectify the problems and shortcomings of the Accounting Standards (Pounder 2009). Whether the recommendations would make financial statements even less user friendly is a question that needs to be addressed as well.

Numerous proposals are also being 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 Forum of the Bank for International Settlements has proposed several measures, including the 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 far from finding a satisfactory solution to the problem. (see www.financialstabilityboard.org/publications/r_0904a.pdf). ☺

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.

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.

References

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

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

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: 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.

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.