Macroprudential Regulation and Banking Regulation

Kevin Davis*
Professor of Finance, University of Melbourne
Research Director, Australian Centre for Financial Studies and Professor, Monash
University

One of the noticeable changes in banking and financial regulation over the past decade has been the increased focus on macro-prudential regulation. While financial stability was always a concern of financial regulators and policy makers, it did not find explicit recognition in the original version of the Basel Accord introduced in 1988 – although promoting financial stability was a key goal. The initial accord was "micro-prudential" in nature, focused primarily upon setting minimum capital requirements for banks based on an assessment of their individual risk rather than their potential contribution to systemic instability.

Even the very substantive changes, known as Basel 2, which were eventually agreed upon in 2006 retained primary focus upon individual bank risk, rather than interconnectedness within the financial system. They endeavoured to provide a closer link between an expanded catalogue of risks and capital requirements which also took account of recent financial innovation. But there were no mechanisms included to either adjust the intensity of regulatory requirements in response to concerns about financial stability, nor to attempt to influence the evolution and structure of the financial sector in ways thought more compatible with financial stability.

Of course, Basel II did aim to influence bank behaviour by rewarding improved risk management practices sufficient to gain accreditation as an "advanced" bank by providing lower capital requirements relative to "standardised" banks (those using less sophisticated risk management systems). While that was seen as having benefits for financial stability by improving the quality of risk management, some have questioned whether the resulting complexity and reliance on bank internal models has had the risk mitigation advantages hoped for.

This changed significantly following the global financial crisis with the subsequent amendments to the Basel Accord, generally referred to as Basel 2.5 and Basel 3 and other initiatives promulgated by the Financial Stability Board on instructions from the G20 leaders. One group of changes can be seen as addressing the cross-sectional element of systemic stability – attempting to make the structure of the financial system more consistent with stability. The second group relates to the temporal or dynamic element – providing authorities with techniques for intervening to dampen undesirable trends in financial sector aggregates which are not conducive to financial stability.

In the first category of regulatory changes are the following elements. First, the requirements for use of Central Clearing Counterparties (CCPs) for over the counter (OTC) derivatives transactions is based upon reducing interconnectedness of exposures and

^{*} Contact details: kevin.davis@unimelb.edu.au or kevin.davis@australiancentre.com.au.

¹ See BIS (2015) for a history of the Basel Committee and its role in the development of banking regulation.

enabling better understanding of risk exposures of major players in the system.² Second, the designation of certain institutions as Systemically Important Financial Institutions (SIFIs) either globally (G-SIFIs) or domestically (D-SIFIs), and application of more stringent regulatory requirements to them, is aimed at reducing too big to fail problems. (Intuitively the approach has been to offset the higher adverse consequences of a failure of such an institution, relative to other institutions, by reducing the probability of failure through higher capital requirements). Third, changes to risk weights applied in determining required capital have distinguished between exposures to other financial institutions rather than to "end-users" (business, household, government) of the financial system. While risk weights for exposures to other financial firms have been increased, it is notable that risk weights for exposures from derivatives positions have been reduced when CCPs are used. Both aim to provide incentives to reduce financial system interconnectedness and complexity.³

Also relevant in this regard are changes aimed at preventing undue complexity in the design of financial instruments such as in the case of securitisations (and resecuritisations) backed up by changes to capital requirements associated with such activities. Finally, regulatory changes such as the Volcker rule in the USA (prohibiting proprietary trading by large banks) and "retail ring fencing" in the UK (and Europe) also aim to reduce interconnections and risk spillovers between commercial and investment banking, or what some refer to as "utility banking" and "casino banking".

Another element of these changes reflects the recognition that it is the death or near-death of important financial institutions which can create major bouts of financial instability. Consequently, there have been significant enhancements to the resolution powers of financial regulators, as well as requirements for boards of SIFIs to develop recovery and resolution plans - or "living wills" as they are often referred to - should their institution experience financial distress

Underpinning these changes is increased recognition of the financial system as a "network" where structural characteristics of the network influence the nature of adjustment to shocks. Unfortunately, there is relatively little in the way of accepted theory or empirical evidence to provide guidance on how these changes will work, or interact with each other. To take one simple example, the requirement for use of CCPs envisages replacement of a tangled web of derivatives exposures between institutions with a "hub and spoke" style of exposures of each institution only to the CCP hub which is able to net off and manage its exposures to each institution. However, as Duffie and Zhu (2011) have shown, where institutions engage in bilateral netting of exposure positions across a range of derivatives, introducing a CCP for only one class of derivative prevents such bilateral netting and may not be an improvement.

The time-series aspect of macro-prudential regulation has attracted more attention. Here there are two substantive elements. One is the inclusion in the Basel 3 arrangements of a

² See IOSCO (2012) for details of the G20 initiated requirements and approaches.

³ BIS (2015b) provides an overview of these and other post-crisis changes in banking regulation.

⁴ Haldane (2009) provides an overview.

"countercyclical capital buffer". This provides for the regulatory authorities to impose an additional capital requirement (up to an additional 2.5 per cent of risk weighted assets) on banks in situations where a "bubble", or movement of asset prices to significantly above fundamental values is occurring. This is a clear reversal of the prior strategy of macroeconomic policies around the world of an unwillingness to "prick a bubble" but instead attempt to ensure a soft landing when a bubble burst. There are significant issues involved in regulators being able to identify such situations, and delicate balancing issues involved in deciding to reduce the capital buffer when conditions worsen (and when risk of banks is presumably increasing).

In addition to this explicit capital buffer mechanism, a number of regulators around the world have adopted ad-hoc regulatory interventions targeted at specific parts of the economy in which stability is threatened. Excessive growth in property prices is one such area, and several regulators have imposed loan to valuation (LVR) limits on bank lending, aimed at reducing the size of loans and thus the leverage available to property investors. Because regulators have substantial powers, "open-mouth" techniques (or guidance) can also have effect, such as requirements by regulators that lending to investors in housing should be limited in amount relative to lending to owner-occupiers.

These developments are reminiscent of the era of use of "direct controls" as a fundamental component of monetary policy prior to the deregulation of financial markets in developed economies around the start of the 1980s. There is, however, less apparent sign of use of, or interest in, such options as changing liquidity requirements or adjusting risk weights to achieve desired outcomes. And while more policy instruments than a short term interest rate target may be needed to meet multiple objectives, the lesson of that period was that activity was often shifted to unregulated parts of the financial sector, rather than reduced in total.

In those earlier times, monetary policy and bank supervision were the responsibility of one organisation such as the Central Bank in many countries such as Australia and the UK. One complication introduced by the emergence of macro-prudential policy is that of the assignment of responsibility between regulatory agencies. For some time after the introduction of the Basel Accord there was a tendency towards creation of a (micro) prudential regulator (such as APRA) separate from the Central Bank. But with significant overlap between micro and macro prudential regulation, and monetary policy, there is either a need for close collaboration between the two entities, or allocation of both responsibilities to one institution. In the UK, for example, responsibility for prudential regulation has been restored to the Bank of England (from the FSA). In Australia, separation of APRA and the RBA remains, with collaboration both informally and via the Council of Financial Regulators seen as mechanisms for ensuring consistency between micro and macro prudential activities. This was endorsed by the recent Financial System (Murray) Inquiry, based on the successful collaboration to date, but it remains to be seen how well such an allocation of responsibilities will work when macroprudential policies are put to the test.

⁵ The CGFS (2012) does however refer to a range of such tools in providing guidance to national regulators on use of macroprudential tools.

REFERENCES

BIS (2015a) A Brief History of the Basel Committee, Basel Committee on Banking Supervision, Bank for International Settlements, October, http://www.bis.org/bcbs/history.pdf

BIS (2015b) Finalising post-crisis reforms: an update. A report to G20 Leaders, Basel Committee on Banking Supervision, Bank for International Settlements, November, http://www.bis.org/bcbs/publ/d344.pdf

CGFS (2012) Operationalising the selection and application of macroprudential instruments, CGFS Papers Number 48, December, Committee on the Global Financial System, http://www.bis.org/publ/cgfs48.pdf

Duffie, D and H Zhu (2011) "Does a Central Clearing Counterparty Reduce Counterparty Risk?" *Review of Asset Pricing Studies*, 1, 1, 74-95

Haldane, A (2009) "Rethinking the Financial Network" *BIS Review*, *53/2009* http://www.bis.org/review/r090505e.pdf

IOSCO (2012) *Requirements for Mandatory Clearing,* Report ORO5/12, February, http://www.iosco.org/library/pubdocs/pdf/IOSCOPD374.pdf