Balancing Competition and Stability in Australian Retail Banking

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Abstract

The trade-off between competition and financial stability as policy considerations has been the subject of much recent consideration in Australia in the context of two major Government –initiated reviews: the Financial System Inquiry (2014) and Competition Law and Policy Review (2014).

Since the global financial crisis, most policymakers and economic researchers have highlighted the need for prudential regulation, and the importance of competition has been, to an extent, sidelined.

However, evidence shows that competition is still essential to consumer welfare and that the conventional wisdom of 'competition prejudices stability' in financial services should not be taken for granted. In fact, evidence and scholarship is divided on whether that wisdom is sound, and shows that the issues are far more complex than are reflected in that rubric.

Given the richness of relevant research available which is publically available from the OECD, a survey of literature, and consideration of its lessons when applied to the Australian context, provides a timely contribution to the policy debate.

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This working paper is published to promote comments and feedback.

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1 Introduction

As a result of two decades in which successive Australian Governments have shown bipartisan support for a 'pillars' policy, the financial services industry in Australia is dominated by four major Australian-owned banks. Originally intended to promote effective competition by maintaining separation of key players (Keating 1997), the 'pillars' policy may now work to the contrary by, in effect, providing an implicit government guarantee for these banks. Further, while the fact of a concentrated supply side may not necessarily indicate a lack of competitive rivalry, the homogeneity of the business models of the four major banks (International Monetary Fund 2012), coupled with their significant incumbency benefits, may work to the detriment of effective competition and, consequently, consumer welfare.

This issue was germane to the Financial Services Inquiry and the Competition Policy Review conducted in 2014 at the behest of the Australian Government, but evidence on the conventional wisdom of preferencing stability over competition was not substantively analysed and could be considered an open question. Accordingly, to contribute to related debate, this working paper returns to scholarly literature to trace the implicit and explicit obligations of competition regulators, consumer protection regulators and financial service regulators in relation to competition.

The working paper draws heavily on material developed by the Organisation for Economic Cooperation and Development (OECD). It does this to ensure that access to sources is as widely available as is feasible.

The literature on the role of regulators is divided between before and after the financial crisis, as new approaches to the financial sector sought to prevent future economic meltdown. This transition has led to the promotion of prudential regulation to maintain financial stability in the financial sector both in the academic literature and in policy whilst there is a paucity of literature on the role of competition in financial services in this context.

Accordingly, the working paper is divided into four sections. First is an outline of the primary sources used by the literature, including background information on thinking before the financial crisis. The section provides an understanding of the root causes of the changes in economic policy. The working paper then investigates the effects of the financial crisis, including advocacy for macroprudential regulation and tolerance of policies and practices that would normally breach competition law. Following this, the working paper examines the specific policies highlighted in the literature for the promotion of competition, which include, but are not limited to, the strength and independence of the financial regulators, consumer policies, and entry and exit policies. The working paper concludes by highlighting the overall framework of the literature on the promotion of competition in OECD countries.

Even though the financial crisis began seven years ago, the data used in many studies, especially in the case of the OECD reports, is restricted to pre-crisis indicators. This is despite much of the literature itself being written after the financial crisis. The analysis is mostly based on data from two sources: the World Bank and the International Monetary Fund (IMF). The World Bank publishes the Bank Regulation and Supervision database and the latest data is from 2012 (World Bank Global Financial Development 2013). The IMF provides information on prudential regulation in insurance

markets from the Financial Sector Assessment Program (FSAP). The World Bank survey data covers all OECD countries, whilst the FSAP is more selective in its scope of data collection.

Whilst using pre-crisis indicators may be beneficial to determine why the financial system failed and what steps can be taken to improve the model such as strengthening financial regulation, it is limiting in the sense that it cannot show the results of the implementation of new regulatory roles on the promotion of competition. As is highlighted in the next section, the financial crisis has created a significant change to the structure and operation of the financial system. In particular, a new approach with an emphasis on macroprudential regulation has emerged. This means that new data is required to find evidence on the outcome of this approach on competition and, more broadly speaking, the financial system as a whole. It is important to note however, that the literature that is more country-specific tends to provide more up-to-date data. Sources include the European Central Bank (ECB) for information on countries in the European Union (EU), the Federal Deposit Insurance Corporation and the Federal Reserve for the United States (US) and the Australian Prudential Regulation Authority (APRA) for Australia.

2 Before the financial crisis: period of liberalisation

Taken as a whole, there is ample literature on the subject of liberalisation and on the opening of trade via financial globalisation and deregulation prior to the financial crisis to give a greater understanding on the failings of the financial system to prevent future crises. It is for this reason that prudential macroeconomic regulation and supervision have become important issues for policymakers – an area that is explored in the following section.

Within that whole, the academic literature points to a shift from liberalisation (starting in the 1970s) to the increase in prudential regulation after the financial crisis from 2007-2009, as economists and policymakers questioned why the supply of liquidity in financial markets failed. There is general agreement that prior to the financial crisis, competition was promoted through liberalisation, which essentially entailed deregulation and breaking down barriers that may have impeded competition. The management of financial services was left for the market actors to self-regulate. For example, De Serres (2006a: 7) notes the period of liberalisation in the 1980s that removed price controls, eliminated barriers to cross-order capital flows and, overall, reduced regulation on the banking sector. Although this OECD working paper was written prior to the financial crisis, it demonstrates the period in which liberalisation combined with technology is seen as raising competition levels. It argues that the crises that occurred in the early 1980s were due to a lack of regulation, macroeconomic policies and flawed incentives due to the tax system. Vives (2011), whilst also noting the contrast between the period of tight regulation from the 1940s followed by the liberalisation era in the 1970s that was aided by advances in information technology and financial globalisation, argues that liberalisation, coupled with inadequate macroeconomic policies and poor institutions, increased banking fragility. An OECD report (2010a: 149) provides evidence of this as a period of liberalisation in the OECD countries and in many developing countries by referring to a study that found that out of the 'world's 57 largest economies from 1970 onwards, 56 out of these 57 countries have become less regulated over the period' (the only exception being Venezuela). The following year the OECD (2011) released a further report confirming that in the last two decades, the EU and the US had been implementing a series of deregulatory changes to stimulate competition and to strengthen financial integration.

The implementation of deregulation and liberalisation during this period was coupled with a dominant discourse in the literature that endorsed these economic and financial policies. For example, De Serres (2006a: 6) notes the importance of removing barriers to promote competition and cross-border integration of financial markets. Guiso et al. (2004) also highlighted the integration of the financial market in the EU and its benefits to the economic zone as free capital mobility was encouraged. An OECD report (2005: 124) begins by stating:

> *Regulation is perhaps the most pervasive form of state intervention in economic activity… Over recent decades, however, policymakers have become increasingly concerned about the potential for regulation to be too intrusive and stifle market mechanisms, possibly affecting resources allocation and productive efficiency.*

While this report highlights the benefits of regulation that enhances competition, it is predominately concerned with regulations that inhibit competition, as is most of the literature before the financial crisis.

3 The effects of the financial crisis

Since the beginning of the financial crisis in 2008, there has been a plethora of literature that highlights the need for financial regulation and supervision to mitigate the risk of another financial crisis and to ensure economic stability (for example, Ahrend, Murtin and Arnold 2009b; Dam 2010; Barth, Caprio and Levine 2008). While most policymakers and economic researchers since the global financial crisis highlight the need for prudential regulation, the importance of competition has been, to an extent, sidelined.

3.1 Regulatory overview

International governance and transnational regulation have gained much international scholarly and political attention as a result of the repercussions of the financial crisis (for example, Pilhon 2010; Papademos 2009; Goodhart 2010; Bank of England 2009). As such, there has been a realisation that financial globalisation requires an international response and that there is a need to look at the stability of the financial system as a whole rather than examining individual firms. Gossé and Plihon (2014) argue that, due to the interconnectedness of individual financial institutions and markets, and the pro-cyclical behaviour of the financial system, microprudential regulation is not enough. As demonstrated by the financial crisis, financial institutions will seek the least restrictive supervision system to avoid compliance with standards set by the regulator, and attempts by individual institutions to remain solvent can push the system to collapse. The article therefore argues that there is a need for an international response through macroprudential regulation.

3.2 Systemic risk

An OECD (2009) report concurs with the possibility of systemic risk and the need for prudential regulation, whilst omitting the push for Keynesian macroeconomic regulations. It sets out the theory of systemic risk that is based on the idea that if there is a loss of confidence in one major financial institution, there may be a domino effect, with the result that no participant is able to meet its obligations. (Further work in this area is provided by Haldane and May 2012; Battiston, Delli Gatti, et al. 2012; Roukny et al. 2013). Therefore, the financial system itself requires regulation to ensure systemic crises do not occur (OECD 2009: 7). Lyons (2009: 1) also refers to the problems of a

microprudential approach noting that the repercussions of a systemic crisis will not just affect the financial sector but that the contagion could impact all areas of the economy and argues for an improvement of the current international regulatory system.

The high level of interconnectedness of banks leads to the potential for systemic risk. Because banks syndicate risks between themselves, the failure of a single bank can have an impact on all of the other banks. This leads to the problem of banks that are 'too big to fail'. In the financial sector, increasing interconnectedness does not necessarily maximise resilience. Acemoglu et al. identify two separate streams of thinking (Acemoglu, Ozdaglar and Tahbaz-Salehi 2013). The first suggests 'a more equal distribution of interbank claims enhances the resilience of the system to the insolvency of any individual bank'. The second takes an opposite view and models interbank contagion as an epidemic. The Acemoglu et al. approach demonstrates that both of these approaches are correct. For small perturbations, interconnectedness provides stability. However, for large shocks, weakly connected networks show the highest resilience. Acemoglu, Ozdaglar and Tahbaz-Salehi (2013) refer to the proposition by Haldane that the interconnection might best be described as a complex adaptive system (Haldane 2009). This type of system has been extensively described (for example, Mitchell 2006; Walker and Cooper 2011; Boccaletti et al. 2006; Farmer et al. 2012; Gai, Haldane and Kapadia 2011; May, Levin and Sugihara 2008).

In that light, this section of the working paper reviews each of financial (supervisory and prudential) regulation and competition law.

3.3 Supervisory and prudential regulation

The basic business model for a bank is to borrow funds from depositors and from capital markets at one interest rate, and then to lend those funds to borrowers at a higher rate. The bank needs to cover its costs, including the risk of bad debt as well as tax from this interest margin. The bank is profitable when there is sufficient margin to more than cover costs.

There are two issues with this model. The first is that there is usually a higher margin available for riskier loans. In order to assess this risk, the bank conducts a review of the risk, or relies on a credit rating agency to provide its opinion as to the level of risk. The second is that in many countries, deposits below a certain level are insured by the state for the benefit of the depositor. This creates a moral hazard, as the lending bank knows that the state will cover losses on bad loans. Prudential regulation is concerned with reducing the probability of the deposit insurer bearing losses (Hanson, Kashyap and Stein 2011: 4) by supervising the bank to ensure that only appropriate loans are made.

In practice, there are two forms of prudential regulation. The first, microprudential regulation, is associated with a single firm. The second, macroprudential regulation, is associated with the financial system. Borio sets out the distinctions between micro prudential and macroprudential regulation and these are reproduced in Table 1 (Borio 2003: 183).

Table 1: Comparison of microprudential and macroprudential regulation

	Macroprudential	Microprudential
Proximate objective	limit financial system-wide distress	limit distress of individual institutions
Ultimate objective	avoid output (GDP) costs	consumer (investor/depositor) protection

	Macroprudential	Microprudential
Model of risk	(in part) endogenous	exogenous
Correlations and common exposures across institutions	important	irrelevant
Calibration of prudential controls in terms of:	system-wide distress; top-down	risks of individual institutions; bottom-up

One of the issues raised by the global financial crisis is the extent to which the focus of regulators has been on microprudential regulation when a global crisis required a macroprudential view (Galati and Moessner 2013).

There has been a degree of coordinated internationalisation of financial sector regulation. This global regulatory coordination has had mixed results with both 'race to the top' as well as 'race to the bottom' outcomes. Consistent with regulatory theory (Drahos and Braithwaite 2001) global prudential regulation has ratcheted up and Levi-Faur argues that this process will continue because of the global financial crisis (Levi-Faur 2010). That is, there is literature supporting the 'race to the top'. However, one of the striking results of work by the World Bank is that there has been little in the way of regulatory change as a result of that crisis (Čihák et al. 2012b). That is, some evidence that although there is no 'race to the top', there is no "race to the bottom" either. This is consistent with the analysis that there has been a post-global financial crisis response to re-regulate banking but using the traditional forms of banking regulation (Young and Park 2013) or perhaps an attempt to 'create settled stories' as part of a 'repetitive liturgical incantation' (Froud et al. 2012).

One of the critical issues is the role of the 'politics of international prudential regulation' in aligning regulatory responses to the global financial crisis (Helleiner and Pagliari 2011: 185). The issue is addressing the challenge of global regulatory alignment of when the political driver of regulatory change, which was the crisis, is over (Mügge 2014. The regulatory alternatives include changes in culture (O'Brien 2014) or the centralisation of international banking supervisory standards. Against this, the argument is that there is no 'one size fits all' approach (Garicano and Lastra 2010). Indeed, some scholars suggest that changes in financial regulation are as cyclical as the events (or crises) that trigger them (Martinez-Moyano, McCaffrey and Oliva 2014), follow a sine curve (Pan 2013), or that the search for ideal regulation should be likened to a quest to find the Holy Grail (Masciandaro and Quintyn 2013). Even if the global financial crisis was 'an elite political debacle' requiring a 'dramatic simplification of finance' (Engelen et al. 2012), this line of argument still assumes the same tools of financial regulation.

These tools and a common approach to supervision and prudential regulation are well supported. Barth et al. take the view that the regulations and supervisory practices that work best (including force accurate information disclosure, empower private-sector corporate control of banks, and foster incentives for private agents to exert corporate control), work best to promote bank development, performance and stability (Barth, Caprio Jr and Levine 2004). Additional work has shown that a strong bank supervisor can reduce total banking risk, even in the presence of acquisitive international banks (Buch and DeLong 2008).

The key difference in the implementation of financial regulation is the extent to which the supervisory element also includes self-regulation. For example, the UK has attempted to use

principles based regulation (Black, Hopper and Band 2007). The effect has been muted by a desire for 'light handed' regulation of the sector. There is also the risk that liberalisation may increase moral hazard (Hellmann, Murdock and Stiglitz 2000):

> *Financial liberalization tends to increase the intensity of competition between banks at the same time that banks are given greater freedom to allocate assets and to determine interest rates*

3.4 Competition law

Competition law is primarily concerned with the protection of consumers by promoting competition between suppliers. This promotion of competition occurs through orderly markets that are not distorted by anti-competitive conduct. In order to minimise such distortions, competition law has four pillars:

(a) cartel prohibition and dealing with anticompetitive conduct arising from horizontal coordinated conduct;

(b) dealing with anticompetitive conduct arising from vertical coordinated conduct;

(c) prohibition on the abuse of market power; and

(d) merger control.

Most competition law, regardless of jurisdiction, will have these pillars and they are disseminated to developing economies through the United Nations Conference on Trade and Development (UNCTAD) 'Model Law on Competition'. In many countries, the national competition authority regulates these four pillars and sector specific competition regulation is in the hands of the sector regulator. Australia is exceptional in this respect as the Australian Competition and Consumer Commission (ACCC) is the sector competition regulator in the telecommunications and energy sectors. Regardless of structure, it is the national competition authority that has responsibility for regulation and enforcement of cartel matters.

Enforcement of competition law, and the supervisory and prudential regulation of banking, have traditionally followed distinct regulatory paths with 'regulatory pyramids' that share merely a common base (Braithwaite 1985; Wood et al. 2010). However, the liberalisation of the financial sector was one aspect of a more general liberalisation process, which relies on competition law to protect consumer interests by promoting competition in the context of the replacement of state operated monopolies with privatised businesses.

One of the outcomes of the liberalisation of the financial sector has been consolidation. For example, there have been significant structural changes in the European Union as a result of the liberalisation of the banking sector. The effect has been for there to be significant concentration and the consequence that banking regulation could have unintended, and potentially undesirable, consequences in the non-financial sector (Cetorelli 2004b). Even the concept of competition in the financial sector raises potential stability risks (Allen and Gale 2004: 478):

> *Our analysis suggests that the issue of regulation and its effect on competition and financial stability is complex and multi-faceted. Careful consideration of all the factors at work both at a theoretical and empirical level is required for sound policy*

On the other hand, competition law has the potential to ensure the public interest in financial regulation (Duke and Cejnar 2013: 156):

> *Competition law should not be subordinated in the name of promoting stability as the efficiencies brought about by the rigorous application of competition law are also in the 'public interest'*

One of the critical questions that needs to be addressed is whether competition regulation should be relaxed in times of crisis and there are increasing demands that coordination between prudential and competition regulators should be used to avoid such relaxation (Hasan and Marinč 2013). There have been alternative and resisted suggestions that there might be a sector specific competition regime for the finance sector. The resistance is in the form of an argument that the finance sector should not be considered as having 'natural monopoly' characteristics and that consequently there is little scope for control of monopoly power (Goodhart 2011). The extension of this view is that the regulation of banking should be left to bankers with an understanding of the system.

One issue arising (at least in the UK) out of the need for bank rescue was to provide a power to over-ride competition law. Specifically, (Cejnar 2011):

> *providing that financial stability, along with national security, is a public interest consideration, therefore justifying an exception to the referral of relevant merger situations to the UK Competition Commission*

There is interaction between financial services regulation and competition law and this is particularly apparent in the EU (Nicholls 2014; Nicholls and O'Brien 2014).

3.5 Basel II

The main globally agreed regulatory system for banking prior to the pre-financial crisis consisted of the Basel II Accords that provided an international framework on capital standards in the banking industry to address credit risk. Prior to the financial crisis, these international instruments were seen as sufficient. For example, De Serres (2006a) underscores the importance of instruments that have less adverse effects on competition, such as the Basel II Accords. He argues that the financial system only needs measures such as capital requirements, disclosure rules and risk-based deposit insurance to promote prudent behaviour by banks, which ensures stability, as well as competition. Moreover, he points to stronger competition not risking greater instability because authorities have 'refined the tools' for prudent behaviour with minimal effects on competition (De Serres 2006a: 32).

There is now, however, consensus that the Basel II Accords have proven to be insufficient to guarantee against systemic financial risks. For example, Lyons (2009: 9) highlights that the Basel II had three found three foundation stones: 'minimum capital requirements; regulatory supervision; and risk disclosure to facilitate market discipline', which he argues proved to be inadequate. Gossé and Plihon (2014) further note that until recently the Basel approach, based on principle, was to ensure the soundness of individual institutions against the risk of loss on their assets. It was based on the idea that actions by individual firms would provide for the overall stability of the financial market, which failed to encompass a macroeconomic approach. Demirgüç-Kunt and Servén (2010b: 103), whilst agreeing that the Basel II framework has a flawed approach, argue that the system of external rating is also a key problem. The article points to the fact that capital requirements are

based on external ratings, and these proved to be too optimistic. It adds that a conflict of interest arises as issuers pay agencies for ratings required by regulators. Moreover, these 'ratings are based on expected default rates', but capital is meant to be there for 'unexpected losses' (Demirgüç-Kunt and Servén 2010b: 103). Demirgüç-Kunt and Servén (2010b) also note that the other key problems in the Basel Accords were the weaknesses in its disclosure provisions and the lack of investigation into transparency of financial firms.

As concluded by scholars and economic researchers such as those already mentioned (Lyons 2009; Gossé and Plihon 2014; Larosière 2009; De Larosière 2009), these measures held that the Basel II Accords to deal with the increased globalisation and integration of the financial sector were insufficient for the soundness of a system as a whole. Since the financial crisis, however, the literature points to various new proposals to avert further crises. For example, the OECD (2010c-b) report refers to the Financial Stability Board, the International Monetary Fund (IMF), the Bank for International Settlements (BIS) and the European Commission that have recommended policies to increase economic stability and competition. It further gives reference to the Basel III Accord , a new instrument with the aim of boosting stability whilst having minimal effects on competition. The OECD (2010c) also released guidelines for financial regulation. These aimed to improve confidence and trust in the financial system by providing a framework to guide financial enterprises. They underscores the importance of not just having a vibrant competitive market, but also one with a sound regulatory and supervisory framework with a balanced tax system, transparency and legal infrastructure, as well as ethical prudent risk-taking behaviour.

3.6 Anticompetitive policies

There has been a dominant narrative about concerns with anticompetitive policies implemented as a result of the financial crisis. These were aimed at ensuring stability, but may have negative consequences for the competitiveness of the financial sector. A number of recent OECD reports along with economic researchers highlight the importance of competition and the need to enhance the effectiveness of the financial system, which will, in turn, foster long-term economic growth (OECD 2010d, 2010b, 2009; Lyons 2009). in this context measures such as mergers of large financial institutions and intervention such as injections of capital, guarantee schemes and asset purchases are important.

The first example of a policy that is potentially anticompetitive is large-scale government nationalisation of financial services providers by way of acquisition of equity or provision of debt. The prevalent view of the literature is that government ownership and intervention in the financial system are negatively correlated with competition, based on empirical studies such as Barth, Caprio and Levine (2004a) and La Porta, Lopez-De-Silanes and Shleifer (2002). For example, the OECD (2010d) report notes the number of OECD countries such as Iceland, Ireland, the Netherlands, Portugal, the UK and the US, which have nationalised some of their banks, while Germany, Ireland, Korea, Switzerland, the UK and the US have also moved to purchase and/or 'ring-fence toxic assets' following the financial crisis. Whilst noting that this has minimised the effects of the financial crisis in those jurisdictions, the Report points to the potential harm these initiatives could have on competition, and their negative consequences for long-term growth. It argues for reduction in government aid, and enforcement of regulation and exit strategies. Demirgüç-Kunt and Servén (2010b: 97) concur, referring to *The Economist* newspaper and stating: 'By the end of 2008 governments will be the largest shareholders in most developed economies' financial industries,

reversing a trend of state retreat over the last 20 years'. They argue that empirical research shows that state intervention in the financial sector correlates with less innovation, growth, productivity and cronyism (Demirgüç-Kunt and Servén 2010b: 98-99). The article overall associates state ownership with a lessening of competition and increased financial instability.

Foer (2014: 26) also argues that a level playing field for competition must be maintained. He argues that governmental interference such as large financially weak companies receiving artificial and 'competitively unhealthy assistance' is detrimental to the financial system as it creates an uneven playing field. In assessing these issues he emphasises the essential link between prudential regulation and competition policy. Foer uses the EU as an example of appropriate linkage, noting that the competition authority of the European Commission has been central in all such decision-making processes. This is because under the Treaty Governing the Function of the European Union, it is the responsibility of the Competition Authority to monitor and respond to industrial policies implemented by Member States. Policies of particular relevance are those that give special rights or advantages to local companies, including banks. Moreover, any bailout of a bank by a Member State calls for the approval of the Competition Directorate. As outlined by the College of Commissioners, competition policy is viewed as a necessary component of the solution to the financial crisis (Foer 2014: 13). The then European Commissioner for Competition, Neelie Kroes, demonstrated this importance of competition policy by pointing out that 'in the midst of massive government intervention, we need to make sure that we do not along the way also lose the level playing field and the future dynamics that comes from competition' (Foer 2014: 12). Even when a bail out was approved, the Commission required that government aid was conditional on the unsound bank restructuring itself (Foer 2014: 15). This was in contrast to the response of the EU to that of the US financial crisis, noting that the US regulatory system did not harmonise its regulatory reforms with competition policy, as the antitrust authorities did not take an active role in the implementation of these reforms made by prudential regulators of financial institutions. Foer (2014) therefore, argues that the EU provides a sound model on the role of competition regulators such that competition is maintained and enhanced, even during crises. However, this model does not apply in jurisdictions outside of the EU as there is no obligation on states as set out in Article 4(3) of the Treaty on the European Union which gives members a duty of:

> *sincere co-operation to facilitate the achievement of the Union's tasks and refrain from measures which could jeopardise the Union' objects*

Lyons (2009: 20) concurs with this line of argument, noting that the European Commission relied on Article 87(3) (b) of the European Commission Treaty. This allows Member States to provide aid when there is a serious disturbance in the economy and adopts a 'temporary framework' for Member States to remedy the financial situation in a minimally distortive way. With the objective of keeping a level playing field in Europe, the idea was to provide aid only to firms that are struggling as a result of the GFC, as opposed to those who have been in long-term decline. Lyons (2009) also finds that this is a model that can be applied to deal with the financial crisis.

A second potential anticompetitive policy is the issue of mergers and acquisitions which create a high level of concentration in the financial market. Whilst there is less literature written on this subject, particularly in the case of OECD reports, it is still an important issue. Ahrend, Murtin and Arnold (2009b), as a part of the OECD Working Papers, briefly mention in a footnote that

concentration has increased as a result of public ownership and intervention in the financial industry, but fails to take into account private mergers. There is one OECD (2009) report that does consider mergers as being either partial nationalisation, or as the amalgamation of stronger and weaker financial institutions. The latter being a usual form of merger, subject to the competition law of the jurisdiction. The OECD (2009) report identifies this as a problem that leads to less competition followed by lower deposit interest rates and higher loan interest rates and one that should only be used as an emergency measure to avoid a systemic crisis. It does however, note that nationalisations are preferable to private mergers, as they are easier to reverse and are more likely to be solvent.

Foer (2014) provides quantitative insight into the level of concentration in both the EU and the US as a result of the financial crisis. The article first refers to the *Wall Street Journal* noting that the four biggest US banks by assets (J.P. Morgan, Bank of America, Citigroup, and Wells Fargo) have combined assets of more than $7 trillion, which amounts to an increase of more than fifty per cent since the end of 2007. This can be attributed to 'J.P. Morgan's takeover of failed Washington Mutual Inc., Bank of America's acquisition of mortgage lender Countrywide Financial Corp. and Wells Fargo's purchase of Wachovia Corp' (Foer 2014: 18). Foer (2014: 18) gives further evidence to this accumulation of concentration as a result of mergers through economist Simon Johnson's observation that the 'Big Six' (JP Morgan, Bank of America, Citigroup, Wells Fargo, Goldman Sachs, and Morgan Stanley) have total combined assets equivalent to sixty per cent of gross domestic product. This is in contrast to the EU where Gert-Jan Koopman, Deputy Director General for State Aid in the European Commission Competition Directorate reported that, in the EU, there has not been much more concentration as a result of state aid.

Vives (2011) also measures bank concentration by examining the largest banks in the EU and in the US. She uses data from the Federal Deposit Insurance Corporation and the Federal Reserve for the US and the European Central Bank for information on the EU in order to determine the level of concentration. The review concurs with Foer's findings that there were smaller increases of concentration in the EU in comparison to the US, although, prior to the financial crisis, concentration in the EU was already high. It found that in the US, 'the ratio for assets rose from 23 per cent in 2001 to 36 per cent in 2008.' (Vives 2011: 482). This is in contrast to the first fifteen member of the EU known as the EU-15, which had a smaller increase: from 52 to 54.5 per cent (Vives 2011: 482). Applying the Herfindahl-Hirschman Index (HHI) (Hirschman 1964), using the methodology of the United States Department of Justice (DOJ and FTC 2010), shows that concentration went up in Germany, Greece, Spain, Italy, the Netherlands, Portugal, Finland, and the UK, whilst it decreased in Belgium, Denmark, France, Austria and Sweden. Vives (2011) therefore concludes that the financial crisis signifies a pull towards greater concentration in the EU and, to a greater extent, in the US.

Neal (2011), with the aim of understanding whether competition in the financial market in Australia has decreased since the financial crisis, uses data from the Australian Securities Exchange. She notes that at the end of September 2010, the four major banks accounted for 56.3 per cent of the financial market and 19.3 per cent of the 'total market capitalisation of the domestic stock market' (Neal 2011: 3). The article further notes that prior to the financial crisis, major banks' control over the financial market had dropped significantly as a result of the ability of regional and foreign-owned banks' to compete using securitisation as a major funding source. From the September 2007 quarter to the June 2010 quarter however, 'the major banks' share of total banking assets rose more than 10 percentage points to 77.6 per cent' (Neal 2011: 4). The article attributes this sharp increase to the

acquisitions of St George by Westpac and BankWest by the Commonwealth Bank in 2008/2009. Her evidence was HHI data derived from Australian Prudential Regulation Authority (APRA) reports. These figures reflect the increased level of concentration in the Australian banking industry between 2002 and 2010, particularly in 2009/2010. Rajapakse and Rajapakse (2011: 291) also note this high level of concentration, finding that 76.1% of all banking transactions in Australia come from the four pillars and worry that these banks have almost become 'too big to fail'.

The Deloitte Access Economics (2014b: 28) report also underscores the change since the financial crisis in Australia and refers to the comments of the ex-ACCC head Graeme Samuel who publicly stated that some of the mergers that occurred may not have been allowed if financial stability had not been prioritised over competition. The report further underscores the level of concentration in retail banking in Australia by comparing it to European countries. Based on ECB statistics and APRA, the article finds that the level is higher in Australia than in the EU. The article however, suggests that the level of concentration in Australia's retail banking sector means that mergers which are vertical acquisitions (such as mortgage aggregators) would be below the 'substantial lessening of competition' threshold. In subsequent work, the Financial System Inquiry's Recommendation 30 suggests that there are some concerns that should be addressed on a regular basis (Murray et al. 2014: 254):

> *Review the state of competition in the sector every three years, improve reporting of how regulators balance competition against their core objectives, identify barriers to cross-border provision of financial services and include consideration of competition in the Australian Securities and Investments Commission's mandate.*

This issue of high concentration in the market is also linked to the risk of the formation of oligopolies, whereby there are a few firms that become systemically important and are therefore, as popularly referred to in the literature, 'too big to fail'. The extent to which this is a problem in the financial sector and not a more general issue is also worth considering. As a small open economy, Australia has evidence of oligopoly (and often duopoly) industry structures in many sectors.

The OECD (2009) report illustrates that, prior to the financial crisis, the financial sector in many countries was oligopolistic and that this structure, not competition, was partly responsible for the crisis. This was because the oligopolistic structure meant that many of the banks were systemically important, creating 'moral hazards, guarantees and excessive risk taking' (OECD 2009: 8). Thus, the report argues that more competition (combined with prudential regulation) is required for stability. Beck (2008a: 5) concurs, noting the major reports by the Bank for International Settlements (2001), International Monetary Fund (2001) and the Group of Ten (2001) that have raised concerns about the accelerated concentration of banks within countries and across countries in the past decades. The article notes that, as a result of this, institutions that are 'too big' or 'too-important-to-fail' may make it more difficult for authorities to interfere and close them (Beck 2008a: 5). Moreover, due to the complexity of these oligopolies, it is difficult for authorities to effectively supervise these businesses.

Most of the literature however, focuses on governments providing blanket guarantees to 'too big to fail' banks due to the systemic risk and increased oligopolistic nature of the financial sector. For example, Lyons (2009: 6) refers to moral hazard in which major banks take excessive risks as they know that they will be bailed out by their governments to reduce the risk of systemic failures.

Demirgüç-Kunt and Servén (2010b: 91) also exemplify this issue by referring to the US and European governments providing 'blanket guarantees' to bank depositors and creditors. Foer (2014: 10) also notes this problem by referring to the comments made by then Federal Reserve Board Chairman Ben Bernanke "having institutions that are too big to fail also creates competitive inequities that may prevent our most productive and innovative firms from prospering…Firms that do not make the grade should exit, freeing up resources for other uses".

It is also important to note that there is a strand of literature which argues that the level of concentration is a good indicator of competition. For example, Neal (2011: 5) contends that, as illuminated by economists, the level of concentration, measured by concentration ratios or by HHI, is not enough to determine the level of competition. The article takes the view that contestability must also be examined, that is, evaluating the ability for firms to enter and exit markets. Contestability is an issue that will be examined in the next section on promoting competition.

Overall, the literature underscores the various economic policies such as mergers and acquisitions which would not be permitted other than in the financial crisis and governmental intervention to tackle the financial crisis, but which may have negative effects on competition in the long run.

4 Promoting competition

4.1 Strength and independence of regulators

In the context of regulation as an important aspect of creating a stable and financially competitive market, the strength and independence of regulators themselves is important. As encapsulated by Ahrend, Murtin and Arnold (2009b), prudential regulation reflects the law but not necessarily the implementation of regulations in practice or reality. Accordingly, the strength and independence of supervisory institutions are crucial. This is a central issue in the literature, as it is viewed as one of the reasons that led to the financial crisis. For example, the OECD (2010d) report underscores the importance of effective global regulatory institutions following the financial crisis, which demonstrated the weakness in the operation of financial regulatory and supervisory frameworks. Demirgüç-Kunt and Servén (2010b) concur, pointing to the lack of transparency in the financial sector and the need for regulators to be able to identify gaps in information and to respond appropriately. The article specifically finds that there is a lack of supervisory examination of private accountants and credit-rating organisations. Where there is regulatory review, the prudential regulator may lack the authority to publish associated regulatory decisions. Demirgüç-Kunt and Servén (2010b: 105) and Čihák et al. (2012a) provide further insight on this issue by analysing the World Bank's 2011-2012 Banking Regulation and Supervision Survey (BRSS) that found for example: 'in 83 percent of non-crisis countries the regulator had the power to request banks to put up new equity. This was true only in 65 percent of crisis countries', which meant, 'regulators in crisis countries were less able to demand banks to put up more equity'. The study found similar results that demonstrated regulators in crisis countries were less likely than non-crisis countries to enforce 'greater provisions or to suspend bonus and management fee payments' (Čihák et al. 2012a: 9). It concludes that the evidence suggests that crisis countries suffered from a weakness in their bank regulations and supervision frameworks and that, whilst there have been reforms since the financial crisis, improvements in regulatory and supervisory frameworks are essential for bank stability and efficiency.

While the literature does tend to reflect on the regulatory and supervisory roles in the context of stability post the financial crisis, there are a few scholars and financial advisors who also examine the role of supervisors in competition policy. For example, Ahrend, Murtin and Arnold (2009), and the OECD (2010a) report, use empirical evidence to highlight that strong supervisors enhance not only stability, but also competition. They noted evidence indicating that when supervisors are not very strong, capital requirements appear to hamper competition as the system can be abused, resulting in an uneven playing field. In the case where the regulatory institutions are relatively weak, incumbent financial players can exploit this weakness to ensure that entry and ownership regulations favour them over potential entrants. They also note that, when supervisory institutions use their enforcement powers fully, abuses of the regulations are less likely and this is beneficial for competition. It is for these reasons that they support a stronger and more independent competition law regime for the banking sector. The OECD (2010c, 2011) reports also advocate stronger independent competition authorities. It also notes that many countries were also strengthening their supervisory agencies following the Basel II framework. In terms of the current strength of supervisory and regulatory frameworks, Lyons (2009) compares the EU with the World Trade Organization (WTO), arguing that the EU as a supervisory and regulatory force is a powerful tool to enhance competition policy. It is backed by law and is a good model of effective regulatory implementation. This contrasts with the WTO, whose role is to reduce impediments to international trade. The WTO has a reporting role surrounding national trade policies but has fewer enforcement powers and a limited mandate (Lyons 2009: 20).

Thus, the literature highlights the need for supervisory and regulatory frameworks that are independent and have the strength to ensure that regulations are implemented and enforced, which serves most notably stability, but also competition.

4.2 Competition and consumer policies

One of the current discussions is that competition and consumer policy share a common goal and purpose, that is, the maximisation of consumer welfare. For example, the OECD (2010a) argues for competition and consumer authorities to be more integrated to prevent anticompetitive restrictions. It also investigates the issue of integrating consumer and competition policy into one single agency (as is already the case with the ACCC in Australia) and notes that there are both benefits and disadvantages in this approach. The report identifies benefits such as:

(a) it ensures there is a more holistic approach when imposing polices;

(b) both require similar expertise which means that when expertise is limited, they could provide information to both, making the agency more efficient; and

(c) as consumer policy is seen by the public as a more positive institution than competition, combining the two could facilitate a more favourable view of competition policy.

The OECD (2009: 52) suggests that it may be beneficial for competition policy to be extended past consumer welfare to economic and systemic stability, or otherwise for competition authorities to focus on consumer welfare, while another institution looks at the importance of consumer welfare against other concerns. It refers to countries that already have this system in place, such as Canada, the Netherlands, Switzerland and in the European framework. For example, in Austria, concentration is permitted if it allows for international competitiveness and if it is sound in terms of macro-economic stability (OECD 2009: 52). In Australia, mergers that are likely to substantially lessen

competition, yet are to the public benefit, can be authorised. The OECD (2007) report also acknowledges that competition authorities and economists generally agree that the main objective of competition authorities is consumer welfare.

As is evidenced by the literature, there is a question on the role of consumer and competition policies in the financial sector. There is also a push for tighter co-ordination between the two policy areas.

The ability of customers to easily switch is crucial for competition as consumers are then able to choose the best options for themselves , creating competition and forcing competitors to keep costs to a minimum thereby enforcing efficiency. Thus another important issue in the literature is that of the ability of consumers to make sound decisions when choosing financial products and, in particular, when switching from one financial institution to another. The importance of customer ability to switch is underlined in the OECD (2011, 2009) reports, which emphasise that consumer policies are a necessary element of competition. Minimising the cost and other friction associated with consumer switching requires appropriate regulatory and competitive settings in the financial sector. The report urges increased consumer education, and greater financial literacy about alternatives and transparency of the services provided to facilitate consumer comparisons . It also urges consideration of the practicalities of implementing account number portability schemes to make it easier for consumers to switch and thereby promote competition between the financial institutions. That said, the OECD (2009: 12) report demonstrates through a recent OFT paper and sector inquiry report by DG Competition that retail customer switching is low.

Lumpkin (2010) specifically investigates the role of consumer policies and also finds that the ability of customers to switch is essential to competition. Without this component, financial businesses have fewer incentives to compete. Lumpkin (2010: 128-133) also notes that retail financial consumers rarely switch to new service providers and finds that there are essentially three reasons for this: first, switching costs are too high, secondly, there are high search costs and, thirdly, from the perspective of the providers of financial services, there is an adverse selection problem. The search costs dilemma is that financial products tend to be very complex with cryptic information and prices. Switching costs, such as financial information, high up-front fees and charges, mean that there are less incentives for customers to switch. In terms of the adverse selection problem, Lumpkin (2010: 129) notes that when a customer switches, the new institution does not have all of the information attained from the last provider, meaning that the new provider may have lower quality customers and potentially unfavourable terms. To counter the impediments to switching and for customers to make proper informed consumer choices, Lumpkin (2010: 134) argues for specific rules by regulators to prevent unfair and deceptive practices that exacerbate information asymmetry. The article highlights the importance of consumer access to information on prices, quality and the range of products available through improved disclosure, financial education and liberalisation of trade in financial services or the removal of other barriers to entry to allow for more choices and switching opportunities (Lumpkin 2010: 136).

Neal (2011: 2) investigates the ability of switching in the financial sector in Australia and the perception that switching banks is difficult and that there is no point as ‘banks are all the same’. The article takes the view that competition increases when consumers can easily switch providers, but finds through quantitative research, that their ability to do so is limited. The article refers to ANZ’s

submission to the Senate Inquiry, which found that research by consumer advocacy group Choice discovered that 78.5 per cent of customers had not considered switching, whilst 7.6 per cent had switched and 11.8 per cent had considered switching but had not done so. Importantly, the reason given by the half who had not switched was the effort required (Neal 2011: 19). The article also refers to the commission of a poll in 2010 by the Association of Building Societies and Credit Unions, which found that:

> *40 per cent of respondents had considered changing their banks in the previous two years but two-thirds of this group hadn't because: 41 per cent said it was too difficult; 23 per cent said there were fees and charges attached to shifting; and 28 per cent said there was no point as all banks were the same.' (Neal 2011: 19)*

In light of this data, the article explores the issue of exit fees impeding switching financial institutions. It refers to the government's ban on mortgage exit fees that came into effect on 1 July 2011 and raises the issue of the effect of this on regional banks and mortgage originators that rely on exit fees to compete against major banks (Neal 2011: 19). The removal of mortgage exit fees eliminates an explicit consumer switching cost. However, the costs of switching are greater than the charges for switching. The article also cites the argument of Phil Naylor, the head of the Mortgage and Finance Association of Australia, in a complaint to the Senate Inquiry:

> *the banning of exit fees will have the reverse effect of increasing competition by causing non-bank lenders to lose their most effective weapon in competition with banks*

He concludes that the new legislation will mean higher upfront costs, higher ongoing fees, or higher interests rates (Neal 2011: 19). As a final possible solution, the article briefly highlights the possibility of the implementation of full account portability making switching easier, but notes the technical and financial difficulty in changing the current Bank, State and Branch (BSB) account numbering system, as surmised by the ANZ and Westpac submissions to the Senate Inquiry (Neal 2011: 29).

Minor (2012) also gives insight into consumer policy in the EU by highlighting the research by the consumer enforcement authorities and financial services authorities of 500 financial providers in the EU that found over 70% of financial providers appeared to breach the rules such as failing to display the annual percentage rate of charge directly. This demonstrates that, similarly to Australia, information provided to the consumer by the financial institutions is opaque and that switching, which benefits consumers by encouraging competition, is far from easy (Minor 2012: 167).

The literature on consumer choices in the US follows the same trend as the literature on other OECD countries. For example, Lusardi and Tufano (2009) analysed a national sample in the US and found that debt literacy is low, which correlates with high-cost borrowing. In other words, financial illiteracy is related to indebtedness. Their work corresponds with other research studies, such as Hilgert, Hogarth and Beverly (2003), Moore (2003), and National Council on Economic Education (NCEE) (2005), (as cited in Lusardi and Tufano 2009), each pointing to the same conclusion on the low levels of financial literacy among US consumers. Research of Campbell et al. (2011) also points to a lack of financial information being provided to consumers. The article however, asserts that the US has taken an important step in addressing this issue by enacting the Wall Street Reform and Consumer Protection Act of 2010 that authorised the Consumer Financial Protection Bureau (CFPB) to 'safeguard consumer interest in many financial markets' (Campbell et al. 2011: 106). Part of the

CFPB's role is to provide the necessary information for consumers to make informed decisions. Whilst the article is in favour of regulation for the benefit of consumers and competition, it warns that the CFPB must encourage financial innovation, whilst not imposing 'one size fits all' solutions, and be aware of the economics of consumer financial markets (Campbell et al. 2011: 107-108).

In the wake of a State push for statutory mandates to improve consumer financial literacy, Williams (2007) questions this empowerment of consumers through financial literacy to make financially educated choices and to advance competition. The article contends that regulatory encouragement of financial literacy among consumers is a form of the government enforcing 'responsibilization' on individual 'entrepreneurship of the self' rather than protecting its citizens (Williams 2007: 233). Responsibility to regulate is thus shifted from regulators to consumers as they are expected to be self-reliant, while regulators only need to ensure that consumers are financially literate. The consumer is further expected to force the exit of firms that are 'dishonest, incompetent, or indifferent' to consumer interests and to promote competition by making the right choices according to their needs (Williams 2007: 233). The article questions this perception of consumers as regulators, noting that consumer access to financial information may be difficult to achieve if firms try to exploit consumers by providing complex information and advertising in ways that manipulate consumer behaviour. It refers to recent behavioural studies that suggest that the rationality of consumer decision-making may be flawed due to reasoning biases (Williams 2007: 245). The article concludes by suggesting further research is required to improve regulatory management, and that this should focus on:

(a) how regulators interpret financial education mandates; and

(b) the role of financial firms in providing financial literacy mandates.

The literature therefore points to a trend in many OECD countries that policies designed to benefit consumers are not sufficiently addressing switching costs, financial literacy education and transparency in the financial sector. Not least, the complexity of finance in the modern globalised world leads to information asymmetry risk, which in turn hinders the ability of consumers to stimulate competition. For this reason, the dominant view in the literature is that competition authorities and consumer protection laws are required to help increase consumers' ability to make informed decisions, and to be able to switch and thereby increase competition.

4.3 Barriers to entry and exit

This section underlines the particular barriers to the entry and exit of financial institutions and possible responses. It is divided into three sections. First, it investigates barriers to entry, followed by a particular focus on foreign entry, and then exit issues. Lastly, it explores cases in Australia, Europe and the US.

4.3.1 Barriers to entry

Most of the literature points towards the need to reduce barriers so that firms are able to enter the financial system, thereby improving efficiency and optimising competition. This is especially important as a response to the financial crisis and to help remedy the 'too big to fail' dilemma and high concentration levels in the financial sector (for example, De Serres 2006; Neal 2011; OECD 2009, 2011). A common source used in the literature is from Barth, Caprio's et al. (2004, 2008) analysis' from the World Bank's Regulation and Supervision Survey, which showed that restrictions

on the entry of banks are detrimental to the performance of the banking system. This correlates with the view that contestability is a measurement for determining the level of competition in the financial sector, and that bank entry can be used as an indicator as it is a necessary element of competition. For example, Beck (2008a), and Cetorelli and Strahan (2006), highlight this issue, and link reducing barriers to entry to a reduction in the negative repercussions of high levels of concentration (such as the ability for banks to exploit their market power).

The OECD reports offer some insights into how to promote new firms entering the market. For example, the OECD (2010c) report, whilst concurring that entry barriers to new firms inhibit productivity, provides policies that have already been implemented in OECD countries to ease the entry of new firms. Some of these policies include (OECD 2010c: 38):

> *simplifying business start-up procedures, speeding up of administrative procedures and adaptation of bankruptcy procedures to facilitate rapid restructuring*

Similarly, the OECD (2009: 14) report suggests that, as a response to increased concentration, reducing regulatory barriers that inhibit new entry should be encouraged by competition authorities, allowing for the entry process to be as 'easy and inexpensive as possible'.

4.3.2 Barriers to foreign entry

A particular concern in the literature is that of barriers on foreign entry. The literature predominately uses empirical evidence from studies such as Claessens, Demirgüç-Kunt and Huizinga (2001) and Claessens and Laeven (2004), which found that foreign bank participation and reduced barriers to bank entry are necessary for effective competition. The OECD (2011), whilst agreeing that bank entry encourages competition, notes that foreign bank entry also reduces concentration, which means there is less chance of financial crises. This assumes that foreign entry is more likely than domestic entry. Further, Claessens (2009: 97) points to the fact that foreign entry into local markets not only stimulates competition, but also improves the quality of regulation and supervision, and thus argues for foreign entry to be promoted in all countries, including those that have not become fully institutionalised.

Whilst it is clear that there are key benefits for allowing foreign entry in the financial sector, Amel et al. (2004: 2512) highlight the numerous barriers to foreign entry. These include not only rules against foreign competitors, but also adverse selection problems. These include different regulatory or supervisory structures, and language and cultural barriers that require local expertise, which often means a loss of competitive advantage. The OECD (2011: 116) report however, notes that problems such as not having access to 'soft' information, which is required for lending to small firms, may be mitigated by improving communication and 'information processing technology'.

4.3.3 Barriers to exit

Exit policies to enhance competition have become a focal point within the literature especially as a result of the financial crisis. This strand of literature focuses on the benefits of exit as an essential tool to make room for new firms to enter and avoid systemic crises. It is also linked to reduced concentration as it allows financial firms to leave rather than merge with a stronger financial institution. For example, academic literature such as De Serres (2006) and Lyons (2009) draw on empirical evidence suggesting that financial businesses that are the least efficient will leave first, which allows for the most efficient and innovative firms to dominate the market leading to a more

competitive financial sector. Demirgüç-Kunt and Servén (2010: 95) also emphasise the importance of the endorsement of exit policies to promote efficiency and competition instead of 'providing liquidity support' that can often protract crises.

The OECD (2009) report outlines the necessity for financial corporations to have the capacity to fail and for competition authorities to have a role in the design and implementation of regulations that ease exit to enhance competition, and encourage new businesses to enter. Ahrend, Murtin and Arnold (2009), using data provided by the World Bank, find that tougher exit and disciplining rules, such as a credible risk of exiting, allow for inadequately capitalised banks to exit, whilst remaining banks are pressured to hold larger capital to remain in the industry.

4.3.4 Australia

The Deloitte Access Economics (2014b: 31) report provides an insight into the key barriers in Australia for bank entry and exit, which are: costs with licensing, regulatory obstacles, compliance costs, increasing standards set by institutions such as the capital requirements set by Basel III, and the need for 'approval from the Treasurer for ownership in excess of 15%'. The report further notes that the same rules apply for exit. That is, a barrier to exit can also form a barrier to entry if a player is considering evaluating entry. The report notes that, whilst concentration in the retail-banking sector remains high in Australia and higher than in most European countries, foreign financial entry in Australia is increasing and there are still new banking licences being issued. It argues that the financial market is contestable and that barriers to entry and exiting are not particularly high. It provides examples such as the *Australian Financial Review 2013* which found that Asian bank lending to non-financial corporations in Australia has recently exceeded that of European banks (Deloitte Access Economics 2014b: 46). The report further points to services such as Google that are offering financial products such as the Google Wallet, which it argues will create more of a competitive edge in the Australian financial market.

Although writing three years before the Deloitte Access Economics Report, Neal (2011: 21) provides some insight into the entry of foreign banks in Australia. Using data collected by APRA (2014) she notes that, after the financial crisis, Australia experienced a decline in foreign banks from 19.1 per cent in the September 2007 quarter to 12.9 per cent in the September 2010 quarter. The article highlights particular policies that could allow foreign banks to re-enter Australia such as those provided by submissions to the Senate Inquiry that advocate the abolition of interest withholding tax. Neal (2011) concurs with this view suggesting that this would promote competition between foreign and domestic banks in Australia.

4.3.5 Europe

The literature on barriers to entry and exit focuses on the high level of cross-border services especially within the EU. For example, the Bank of England (2009) report notes that through single market rules imposed by the EU, it has allowed for banks headquartered in the EU to open branches in other member states or other forms of cross-border services. Similarly, the De Larosière (2009: 71) report finds that:

> *EU banks have become more international than ever, expanding into foreign markets both in Europe and beyond. Currently around 70% of EU banking assets is in the hands of 43 banking groups with substantial cross-border activities. Especially in the Central and Eastern European*

countries, the banking sectors are dominated by foreign (mostly Western European) financial groups.

Carletti and Vives (2008: 38-39) add that institutions such as the Committee of European Banking Supervisors have helped in allowing cross-border activities prosper in the EU as they set 'common standards, guidelines and interpretative recommendations'. Moreover, the article shows that the EU regulation 2560/2001 has permitted consumers to be charged the same for cross-border transfers as for domestic transfers, which evens the playing field between domestic and foreign firms. Despite this however, the article argues that there are still regulatory differences that make it more difficult for cross-border financial institutions.

4.3.6 The US

The literature on the subject of entry and exit in the US is mostly constrained to interstate banking. Academic writers such as Morgan and Strahan (2003) and Cetorelli and Strahan (2006) note that, in the US, the barrier to entry for banks operating in other states of the US was a challenge as they were also considered foreign. This barrier to state entry of banks was in force until 1994 when the Reigle-Neal Act was implemented, making it illegal for states to block entry. Morgan and Strahan (2003) and Cetorelli and Strahan (2006) further note that, with restrictions dismantled, entry barriers were reduced, proving beneficial as it allowed for more competition in the US. Stiroh and Strahan (2003) concur, finding that, after interstate banking restrictions were dismantled, the number of banks that exited increased by 3.6% per year. The work further illustrates that after deregulation, weak banks experienced increased pressure as they were forced to compete against more profitable banks from other states, and were either acquired or forced to exit. The article argues for exit policies to be eased. In other words, deregulation should continue in order to promote competition and thereby ensure that only efficient banks remain in the market.

As set out in this section, entry and exit strategies are ways to promote competition. The financial crisis has underlined this view. The solution offered by the literature is to ease barriers to entry and exit of financial institutions so that, instead of mergers and acquisitions being the only option, firms can more easily leave the industry, making room for new firms to enter, thus creating a more competitive industry.

5 Stability and fragility

This section examines some of the issues that flow from arguments that the financial sector is distinct from other parts of the real economy and requires forms of protection from competition.

Competition in banking acts to increase social welfare in the same way that competition works in any other sector. The academic literature on the balance between competition and stability in the financial services sector follows two competing views (Beck 2008b; Beck, Demirgüç-Kunt and Maksimovic 2004; Berger et al. 2004; Berger, Klapper and Turk-Ariss 2009; Cetorelli 2004a):

(a) the 'competition-fragility' view, in which competition lowers bank margins and encourages adverse risk taking; and

(b) the 'competition-stability' view, in which market power in the provision of loans exacerbates moral hazard and adverse selection problems.

These simple contrasts are made more complicated with the more nuanced pair of competing views (Cetorelli and Peretto 2012):

(a) the 'more credit' view, in which bank competition leads to more credit availability, more firm entry and more growth; and

(b) the 'less credit' view, where credit availability may be higher in less competitive environments.

5.1 Examining banking sector

Determining the vibrancy of competition in any of the financial services sectors is complex. The delivery of financial services, even at the relatively simple retail level, can be an opaque cocktail of conduct representing the interactions of buyers and sellers. The nature of the service, perceptions about alternatives or substitutes, power relationships connecting buyers to sellers make analysis difficult. In the current environment, interactions can be facilitated or impeded by technological innovation. However, more vibrant competition improves consumer outcomes, not least by the combination of engendering greater rivalry among sellers and shifting the balance of bargaining power towards buyers to some extent.

This view places policy problems at either end of the competition scale. Too little competition adversely affects consumers and results in higher prices or less value embodied in the service. Too much competition may lead to firm failures though pressure on prices and resultant lack of profitability. Firms that fail exit. In advanced economies such as Australia, the exit of a deposit taker means that the government will pay to make retail deposit holders whole.

As shown in this working paper, there are arguments that competition is diametrically opposed to financial system stability. That is, less competition is somehow in the public interest, as banks need significant rents for stability and to play their part in enabling productive enterprise in the rest of the economy. Failure to provide those rents will lead to a capital call on the government. That is, the invisible costs of lesser competition, most likely in lower levels of service and less motivation for innovation, have been preferred to the more visible costs of bank failure. Despite this, there is a growing body of scholarship on banking in which '[it] turns out that the widely accepted trade-off between competition and stability does not generally hold' (Carletti and Hartmann 2002). This is worthy of serious consideration in formulating policy options.

At an OECD roundtable in 2010 (at which Australia was represented), the question was put in stark relief (OECD 2010b):

> *A controversial question has arisen in the context of the ongoing global financial crisis: Is financial stability enhanced or weakened by competition? [A] clear causal link between either competition or concentration and stability in the financial sector can be found neither in theory nor in the data.*

Other work, in the immediate aftermath of the financial crisis found (Berger, Klapper and Turk-Ariss 2009: 100):

> *Under the traditional 'competition-fragility' view, more bank competition erodes market power, decreases profit margins, and results in reduced franchise value - the on-going concern*

> *or market value of the banks beyond their book value. … [More recently, the 'competition-stability' view contends] that more market power in the loan market may result in higher bank risk as the higher interest rates charged to customers make it harder to repay loans and exacerbate moral hazard incentives of borrowers to shift to riskier projects [and] it is also possible that a highly concentrated banking market may lead to more risk taking if the institutions believe that they are too big to fail and more likely to be explicitly or implicitly protected by the government safety net*

Berger et al. found that 'more market power is associated with riskier loan portfolios and results are consistent across the three different proxies of market power'. The three proxies being the Lerner index, HHI-deposit index and HHI-loan index. However, they also argue that 'even if market power in banking results in riskier loan portfolios, the bank's overall risk need not increase' (Beck, Demirgüç-Kunt and Maksimovic 2006: 113), particularly if banking institutions hold significantly more equity capital.

Anginer, Demirgüç-Kunt and Zhu (2012: abstract) found that 'greater competition encourages banks to take on more diversified risks, making the banking system less fragile to shocks.' Examining the impact of the institutional and regulatory environment on systemic stability shows that banking systems are more fragile in countries with weak supervision and private monitoring, high government ownership of banks, and in countries with public policies that restrict competition. Furthermore, lack of competition has a greater adverse effect on systemic stability in countries with generous safety nets and weak supervision.' Anginer, Demirgüç-Kunt and Zhu (2012: 2) summarise that 'greater competition in the banking sector has no doubt led to greater innovation and efficiency, [but] there is still no academic consensus on whether this competition has also led to greater fragility, with conflicted theoretical predictions and mixed empirical results.'

5.2 A money creation problem

One of the issues that arises from disruptive entry is the extent to which the function of money creation will be affected (Kohler 2015). The mechanism by which money is created by banks has been described by the Bank of England (McLeay, Radia and Thomas 2014). The basic premise is that when a bank issues a loan, it places a matching amount in the borrower's deposit account. Elements of the paper's overview are helpful:

> *The reality of how money is created today differs from the description found in some economics textbooks:*
>
> - *Rather than banks receiving deposits when households save and then lending them out, bank lending creates deposits.*
> - *In normal times, the central bank does not fix the amount of money in circulation, nor is central bank money 'multiplied up' into more loans and deposits.*
>
> *Although commercial banks create money through lending, they cannot do so freely without limit. Banks are limited in how much they can lend if they are to remain profitable in a competitive banking system. Prudential regulation also acts as a constraint on banks' activities in order to maintain the resilience of the financial system. And the households and companies*

> *who receive the money created by new lending may take actions that affect the stock of money — they could quickly 'destroy' money by using it to repay their existing debt, for instance.*

The issue that Kohler raises is that many disruptive plays recycle money rather than create it. However, his assertion that 'Quantitative easing' (QE) is the modern name for central bank money creation' is dispelled by the Bank of England. (McLeay, Radia and Thomas 2014: 24) shows that the commercial banks are necessary intermediaries in the mechanism by which QE works.

This is a critical issue in the competition stability balance. If commercial banks are a necessary part of the creation of money, it becomes important that disruptive entry should, at some point, also become part of money creation. This leads to the question as to when entrants should be subject to prudential regulation. The answer from the Bank of England's perspective is that money creation must be subject to prudential regulation (Tucker, Hall and Pattani 2013; Farag, Harland and Nixon 2013).

6 Conclusion

This working paper has provided an overview of issues in financial regulation and competition in OECD countries, since this material is available to all researchers on a public basis. Noting the shift in focus associated with the financial crisis, a serious factor in the narrative has been that of ensuring stability while still promoting competition. With the financial crisis still a predominant factor in the literature, some key issues are worth noting.

First, there has been an increased focus on macroprudential regulation. Second there has been an increasing focus on regulations that respond to the globalisation of the financial market. Third, there was the introduction of anti-competitive policies such as government intervention and consolidation after the financial crisis.

To offset the detriments from the third response, OECD reports and other academic sources have offered key policies to promote competition, which include the independence and strength of regulators, consumer policies such as the facilitation of switching, financial literacy, and easing entry and exit restrictions. These are central to the policy debate in small open economies such as Australia to complete the discussion of whether continuing to preference stability over competition is the most appropriate policy stance for the future.

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