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# Balancing Competition and Stability in Australian Retail Banking

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## Balancing Competition and Stability in Australian Retail Banking

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### Abstract

The Australian Government initiated two major reviews in 2014: the Financial System Inquiry and the Competition Policy Review. These have highlighted policy trade-off between competition and financial stability. Since the global financial crisis, policymakers and economic researchers internationally have highlighted the need for prudential regulation while sidelining the importance of competition. The working paper argues that competition is still essential to consumer welfare and that the evidence does not support the position that ‘competition prejudices stability’ in financial services. Instead, there is division in the academic literature and the issues are far more complex than are often assumed. This working paper uses the rich and publicly available research to consider the balance between competition and stability in the Australian context. It concludes that the evidence is that competition supports stability and that a failure to prioritise competition increases the systemic importance of large financial firms.

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## 1 Introduction

Following two decades of bipartisan Australian Government 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 ‘four 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. Fostering effective competition was germane to the Financial System Inquiry and the Competition Policy Review, both of which were conducted in 2014 at the behest of the Australian Government. Evidence on the conventional wisdom of preferencing stability over competition was not substantively analysed in either of those inquiries and remains 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.<sup>3</sup>

The literature on the role of regulators in the financial sector divides into work done between before and after the financial crisis. After the crisis, new approaches to the financial sector were sought to prevent future economic meltdown. This focus has led to the promotion of prudential regulation to maintain financial stability in the financial sector both in the academic literature and in policy. At the same time, there is a more limited literature on the role of competition in financial services in the context of stability. There are a number of policy narratives on promoting competition and the role of regulators in such promotion.

This working paper is divided into four sections. First is an outline of the regulatory thinking before the financial crisis. The section provides a review 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. It next examines the specific policies for the promotion of competition highlighted in the literature, 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 addressing the overall framework of the literature on the promotion of competition in OECD countries.

Even though the financial crisis began a number of years ago, the data used in many studies, particularly OECD reports, is restricted to pre-crisis indicators. This is despite much of the literature itself being written after the financial crisis. Much of the analysis is 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 (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, while the FSAP is more selective in its scope of data collection.

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<sup>3</sup> In doing so, 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.

Although 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 important to note that it cannot yet 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 in terms of 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 are required to find evidence on the impact of this approach on competition and, more broadly speaking, the financial system as a whole. Some literature that is more country-specific, however, 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**

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 of 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 the following section explores.

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, liberalisation promoted competition. The liberalisation entailed deregulation and breaking down barriers that may have impeded competition. Market actors left the management of financial services to self-regulation. For example, De Serres (2006a: 7) notes the period of liberalisation in the 1980s that removed price controls, eliminated barriers to cross-border capital flows and, overall, reduced regulation in the banking sector. Although this OECD working paper was written prior to the financial crisis, it demonstrates the period when liberalisation combined with technology was seen to increase competition. It argues that the crises that occurred in the early 1980s were due to a lack of regulation, macroeconomic policies and flawed incentives in the tax system. Vives (2011) also notes 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. He argues that liberalisation, coupled with inadequate macroeconomic policies and poor institutions, increased banking fragility. An OECD report (2010a: 149) provides evidence of a period of liberalisation in the OECD countries and in many developing countries. It refers to a study that found that of the 'world's 57 largest economies from 1970 onwards, 56 ... 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 implemented a series of deregulatory changes to stimulate competition and to strengthen financial integration. Deregulation and liberalisation during this period were 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 regulations that enhance competition, it is predominately concerned with regulations that inhibit competition, as does most of the literature before the financial crisis.

Prior to the financial crisis, competition was preferred over prudential regulation. The absence of regulation contributed to the liquidity crisis that spread rapidly through the globally interconnected financial system. However, the instability that the crisis caused led to a regulatory reaction, set out in the next section, which focused on stability to the exclusion of competition.

### **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). Since the global financial crisis, most policymakers and economic researchers have highlighted the need for prudential regulation and sidelined the importance of competition.

#### **3.1 Regulatory overview**

International governance and transnational regulation have gained much international scholarly and political attention following the financial crisis (for example, Pihon 2010; Papademos 2009; Goodhart 2010; Bank of England 2009). There has been a realisation that financial globalisation requires an international response and that stability of the financial system as a whole is critical, rather than examination of 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. The financial crisis demonstrated that 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 accepts the possibility of systemic risk and the need for prudential regulation, while omitting the push for Keynesian macroeconomic regulations. It sets out a theory of systemic risk based on the idea of a loss of confidence in one major financial institution triggering 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). The conclusion is that 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 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 on this issue (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 shocks or 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).

Having shown that there are issues of interconnectedness, the next section of the paper considers the broad regulatory tools that are used in the financial services sector. These are 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 must cover its costs from this interest margin, including the risk of bad debt as well as tax. The bank is profitable when there is sufficient margin after covering costs.

There are two issues with this model. The first is that a higher margin is usually available for riskier loans. In order to assess risk, the bank conducts a review of the risk, or relies on a credit rating agency to provide its opinion on the level of risk. The second is that many countries insure deposits below a certain level 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 reduces the probability of the deposit insurer bearing losses (Hanson, Kashyap and Stein 2011: 4) by supervising the bank to ensure that makes appropriate loans.

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 in Table 1 (Borio 2003: 183).

**Table 1: Comparison of microprudential and macroprudential regulation**

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

	Macroprudential	Microprudential
		protection
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 some coordinated internationalisation of the regulation of the financial sector. 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 (Drahoš and Braithwaite 2001) global prudential regulation has ratcheted up and Levi-Faur argues that this process will continue as a result of the global financial crisis (Levi-Faur 2010). However, one of the striking results of work by the World Bank is that there has been little regulatory change as a consequence of that crisis (Čihák et al. 2012b). 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). One approach seeks governance changes at a supra-state level based on the assumption that the crisis is over (Mügge 2014). Others include changes in culture (O’Brien 2014) or the centralisation of international banking supervisory standards. Against this, the argument is that there is no successful ‘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 encouragement of orderly markets that are not distorted by anti-competitive conduct. In order to minimise such distortions, competition law focuses on four main areas:

- (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, focus on these areas and they are disseminated to developing economies through the United Nations Conference on Trade and Development (UNCTAD) 'Model Law on Competition'. In a number of countries, the national competition authority regulates the general conduct and sector specific competition regulation is in the hands of the sector regulator. In Australia the Australian Competition and Consumer Commission (ACCC) is the sector competition regulator in the telecommunications and energy sectors. National competition authorities generally have responsibility for the 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 worldwide has been consolidation. For example, there have been significant structural changes in the European Union because of the liberalisation of the banking sector. The effect has been significant concentration and the consequence that banking regulation could have unintended, and potentially undesirable, consequences in the non-financial sector (Cetorelli 2004b). In the past, the potential for competition in the financial sector to raise potential stability risks was one which was viewed as creating a complex and heightened risk. Potentially one that was too difficult to address (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 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 suggestions that there might be a sector specific competition regime for the finance sector, which have generally been resisted. The argument for not doing so is that the finance sector should not be considered as having 'natural monopoly' characteristics. Although natural monopoly is not the only reason for a sector specific competition regime, its absence means that 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 override 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 was 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 regarded 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 been insufficient to guarantee against systemic financial risks. For example, Lyons (2009: 9) highlights that the Basel II had three core principles: '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), while agreeing that the Basel II framework has a flawed approach, argue that the system of external rating is also a

key problem. Those authors point 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, the article notes that these 'ratings are based on expected default rates', but capital is meant to be there for 'unexpected losses' (Demirgüç-Kunt and Servén 2010b: 103). They also state 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.

The literature (Lyons 2009; Gossé and Plihon 2014; Larosière 2009; De Larosière 2009) indicates that the Basel II Accords were not sufficient to protect the soundness of the financial system as a whole. Post-crisis literature points to various new proposals to avert crises. For example, the OECD (2010c) report refers to the Financial Stability Board, the International Monetary Fund (IMF), the Bank for International Settlements (BIS) and the European Commission that have all recommended policies to increase economic stability and competition. The Basel III Accords have the intention of boosting stability but are broadly silent on competition. The aim of post-crisis international regulatory agreements has been to improve confidence and trust in the financial system. The focus has been on 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 anticompetitive policies that have been implemented as a result of the financial crisis. The policies include measures such as mergers of large financial institutions and intervention such as injections of capital, guarantee schemes and asset purchases. These aimed to ensure 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 need to prioritise competition and to enhance the effectiveness of the financial system to encourage long-term economic growth (OECD 2010d, 2010b, 2009; Lyons 2009).

The first example of potentially anticompetitive policies is the large-scale government intervention in the financial system where asset purchases and injections of capital may distort the level playing field. The prevalent view of the literature is that government ownership and intervention in the financial system is negatively correlated with competition. This view is 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) 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. Although this has minimised the effects of the financial crisis in those jurisdictions, the report also points to the potential harm these initiatives could have on competition and their negative consequences for long-term growth. It therefore argues for reductions in government aid, enforcement of regulation and exit strategies for individual failing institutions. 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 more cronyism (Demirgüç-Kunt and Servén 2010b: 98-

99). The article associates state ownership with a lessening of competition and increased financial instability.

Foer (2014: 26) also argues that a level playing field must be maintained for competition. He argues that governmental interference such as artificial and 'competitively unhealthy assistance' to large financially weak companies is detrimental to the financial system as it creates an uneven playing field. He also emphasises the essential link between prudential regulation and competition policy. The article uses the EU as an example of this linkage, noting that the competition authority of the European Commission has been central in all 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 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 a necessary component of the solution to the financial crisis (Foer 2014: 13). The then European Commissioner for Competition, Neelie Kroes, demonstrated the 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 response of the EU was in contrast to that of the US. 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 the reforms made by prudential regulators of financial institutions. Foer (2014) argues that the EU provides a sound model of 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 such as that 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's 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 now, as opposed to those who have been in long-term decline. Lyons (2009) advocates that this is a model that can be applied to deal with the financial crisis.

Mergers and acquisitions, which create a high level of concentration in the financial market, are also potentially anticompetitive. Less is written on this 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 fail to take into account private mergers. There is one OECD (2009) report that does consider mergers as partial nationalisation or as the amalgamation of stronger and weaker financial institutions. The OECD (2009) report identifies mergers that lessen competition as problematic. The report acknowledges

that, in a crisis, there may only be a choice between an anticompetitive merger or nationalisation. It notes that nationalisation is preferable to private merger, as nationalisation is easier to reverse and the institution more likely to be solvent on re-privatisation.

Foer (2014) provides quantitative insight into the level of concentration of financial institutions 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 a 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 of 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 the US. He 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. 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 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, concurrently 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. However, from the September 2007 quarter to the June 2010 quarter '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 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 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 of concentration is higher in Australia than in the EU. The article, however, suggests that the level of concentration in Australia's retail banking sector remains below the HHI threshold used by the ACCC in merger analysis and consequently concludes that competition in Australia is not a cause for concern.

This issue of high concentration in the market is also linked to risks arising from 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'. As a small open economy, Australia has oligopoly (and often duopoly) industry structures in a number of sectors including the financial services sector.

The OECD (2009) report illustrates that, prior to the financial crisis, the financial sector in many countries was already oligopolistic and that this structure was partly responsible for the crisis. The oligopolistic structure meant that many of the banks were systemically important, creating 'moral hazards, guarantees and excessive risk taking' (OECD 2009: 8). The report argues that more competition would change these structures and that competitive constraints, combined with prudential regulation, will lead to 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 intervene and close them (Beck 2008a: 5). Moreover, due to the complexity of these oligopolies, it is difficult for authorities to properly supervise these businesses. That is, the entrenched oligopoly is likely to have significant levels of vertical and horizontal integration and this leads to supervision challenges. In the Australian context, supervising an entity that is both a retail bank and the provider of wealth management services is more complex than the supervision of a pure play bank.

Most of the literature focuses on the impact of governments which provide blanket guarantees to 'too big to fail' banks due to the systemic risk and the increased oligopolistic nature of the financial sector. For example, Lyons (2009: 6) refers to moral hazard in which major banks take excessive risks knowing that they will be bailed out by governments to reduce the risk of systemic failures. Demirgüç-Kunt and Servén (2010b: 91) in particular refer to the US and European governments providing 'blanket guarantees' to bank depositors and creditors. Foer (2014: 10) also refers to the comments made by then Federal Reserve Board Chairman Ben Bernanke that "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".

There is a strand of literature which argues that the level of concentration is a not good indicator of competition. For example, Neal (2011: 5) contends that, as described by economists, the level of concentration, measured by concentration ratio or by HHI, is not enough to determine the level of

competition. Her article takes the view that contestability, and the ability for firms to enter and exit markets, must also be examined. The next section on promoting competition examines contestability.

The crisis-driven government decisions to intervene in the financial services sector in ways that would not usually be permitted under competition law may have prevented bank failures and this may have increased consumer welfare temporarily. However, it is likely that they will have negative effects on competition in the long-run. This section has shown the lurch from deregulatory liberalisation to regulatory intervention that ignored competition principles. That is, the financial crisis created a preference of stability over competition.

## **4 Promoting competition**

### **4.1 Strength and independence of regulators**

The strength and independence of regulators themselves is relevant to creating stable and competitive financial markets. Ahrend, Murtin and Arnold (2009b) argue that even if the law provides prudential regulation, there may be significant weaknesses in the practical implementation of regulations. The strength and independence of supervisory institutions is crucial. The absence of such strength is viewed as one of the reasons that led to the financial crisis. For example, the OECD (2010d) report found weakness in the operation of a number of financial regulatory and supervisory frameworks. Demirgüç-Kunt and Servén (2010b) pointed 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. 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 crisis countries suffered from a weakness in bank regulation and supervision frameworks and that, although there have been reforms since the financial crisis, further improvements in regulatory and supervisory frameworks are essential for bank stability and efficiency.

While the literature tends to consider the regulatory and supervisory roles in the context of stability post the financial crisis, a few scholars and financial advisors examine the role of supervisors in competition policy. For example, Ahrend, Murtin and Arnold (2009), and the OECD (2010a) use empirical evidence to demonstrate that strong supervisors enhance not only stability but also competition. They find evidence shows 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. This also applies to entry and ownership regulations that can impede competition when the institutions are weak, as the regulations may be exploited. 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. They also note that many countries were also strengthening their supervisory agencies following the failure of 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 points to the potential for supra-state regulatory drivers and the G20 has adopted this mantle using the recommendations of the FSB in the quest to eliminate banks which are too big to fail on a global basis (FSB 2015).

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.

## 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 where these arguments have been accepted for many years) 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 to consumer welfare when imposing policies;
- (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 have overriding public benefit, can be authorised.

As is evidenced by the literature, there is a question about 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 switch easily from one financial institution to another is crucial for competition as consumers are then able to choose the best options, creating competition and forcing competitors to keep costs to a minimum, thereby enforcing efficiency. The ability of consumers to make sound decisions when choosing financial products and, in particular, when switching from one financial institution to another is an important issue. The importance of a customer's ability to switch is underlined in the OECD (2011, 2009) reports, which emphasise that



consumer-switching policies are a necessary element of competition. An appropriate regulatory and competitive framework in the financial sector is key to ensuring consumer welfare. The report urges increased consumer education, and greater financial literacy about alternatives and transparency. It also urges consideration of the practicalities of implementing account number portability schemes to make it easier for consumers to switch, which would promote competition between 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 in practice.

Lumpkin (2010) specifically investigates the role of consumer policies and finds that the ability of customers to switch is essential to competition, and that 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. Each of these could be addressed by the providers of financial services providing information that is clear to consumers and not to leverage the asymmetry of information between financial services providers and their retail customers.

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. In particular, the acquiring institution does not know if it is acquiring a poor quality customer (in terms of risk). The effect is that the acquiring provider may treat newly acquired customer on less favourable terms than other customers. This reduces the incentive to switch. To counter the impediments to switching and for customers to make proper informed consumer choices, Lumpkin (2010: 134) argues for specific regulations 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, while 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 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 customers from switching financial institutions. It refers to the government's ban on mortgage exit fees that came into effect from 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 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, which stated that:

*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*

She concludes that the new legislation would 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. He highlights 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 consumers 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 US national sample, finding that debt literacy is low, which correlates with high-cost borrowing. In other words, indebtedness and financial illiteracy are related. Their work corresponds with other 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 points 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 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 necessary information for consumers to make informed decisions. Although the article is in favour of regulation for the benefit of consumers and competition, it warns that the CFPB must encourage financial innovation, without 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. It argues that improving financial literacy is the government enforcing 'responsibilization' on individual 'entrepreneurship of the self' (Williams

2007: 233). That is, improving financial literacy is a form of consumer empowerment. 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 in any event 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 identifies a trend in many OECD countries that policies designed to benefit consumers in the financial sector do not sufficiently address switching costs, financial literacy education and transparency. 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 assist consumers' ability to make informed decisions, and their ability to switch, thereby increasing competition.

### **4.3 Barriers to entry and exit**

This section underlines the particular barriers to entry and exit and possible responses. It is divided into three parts. 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 to 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 in the financial sector as a response to the financial crisis and to help remedy high concentration levels and the 'too big to fail' dilemma (for example, De Serres 2006; Neal 2011; OECD 2009, 2011). A common source 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 reduced 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 insights into the promotion of new firm entry. For example, the OECD (2010c) report, although concurring that entry barriers inhibit productivity, outlines policies

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 to 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**

The literature is particularly concerned about barriers to foreign bank entry. It 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 essential to effective competition. The OECD (2011), agrees that bank entry encourages competition, but 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. 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 as regulators are exposed to different business practices. He argues for foreign entry to be promoted in all countries.

It is clear that there are key benefits from allowing foreign entry in the financial sector. However, Amel et al. (2004: 2512) highlight the numerous barriers to foreign entry. These include rules against foreign competitors and adverse selection problems, such as different regulatory or supervisory structures, and language and cultural barriers that require local expertise. Together they can result in the 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**

Policies around barriers to exit to enhance competition have become a focal point within the literature following 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. The literature is also linked to reduction in concentration, as it allows financial firms to leave the market rather than merge with stronger financial institutions. For example, academic literature such as De Serres (2006) and Lyons (2009) draws 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 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, Murin and Arnold (2009), using data provided by the World Bank, find that exit and disciplining rules which allow for inadequately capitalised banks to exit mean that 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 of 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%'. If exit is difficult the risk of joining the market increases and will act as a disincentive to enter in the first place. The report notes that while 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 exit 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 new services by providers such as Google offering financial products such as the Google Wallet, which it argues will create more of a competitive edge in the Australian financial market.

Although written 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, the latest version of which was published in 2014 she notes that after the financial crisis, Australia experienced a decline in the operation of 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 submissions to the Senate Inquiry that advocate the abolition of interest withholding tax. Neal (2011) concurs with the Senate Inquiry submissions, 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 single market rules imposed by the EU have allowed 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 [are] 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 allows consumers to pay 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 is mostly confined 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, allowing 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 for 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, and thus creating a more competitive industry. However, this promotion will only be effective if it is easy for consumers to switch banks. Reducing switching costs and promoting financial literacy are critical elements to a competitive sector.

## 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 involving the interactions of buyers and sellers. The nature of the service, perceptions about alternatives or substitutes, and 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 through 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 compensate retail deposit holders.

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 are 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, a 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).

This section has shown that the competition/stability balance is important but that the evidence supports competition as a key driver of productivity and efficiency in the financial services sector. Disruptive entry can occur without the need for regulatory intervention, unless the disruptor is creating money.

## 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.

The evidence set out in this working paper suggests that there has been a violent swing from the liberalisation before the financial crisis to the preference of stability over competition after the crisis. The evidence suggests that the policy settings in both cases were problematic and that preferencing competition over stability is a relatively low-risk strategy. If the promotion of competition in retail financial services is adopted with both a reduction of entry and exit barriers and a policy of improved financial literacy, then the consumer welfare benefits of competition in the financial services sector can be enjoyed without increasing systemic risk.

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