

Bank Competition, Ownership and Stability: A Review

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This paper provides a review of the recent literature in banking around several primary themes of competition and bank ownership. This review is presented against the backdrop of the 2008 financial crisis and the revolution it caused to banking sectors in across the globe. Several themes emerge from this review, regarding bank completion, capital allocation, bank ownership and financial stability. Moreover, the overarching issue related to better understanding bank risk taking incentives through ownership and competition and the implications for financial stability are highlighted.

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1. Introduction

The banking system can contribute to social welfare and is vital for general economic stability. They act as financial intermediaries between corporates and households to conduct their businesses: banks and financial institutions transform short term liabilities to long term assets and allocate capital from households to corporates. Essentially, they allocate savings to fruitful investments through economy's credit supply and enable risk-sharing among market participants. The empirical literature on economic growth (King and Levine 1993; Levine 1997) highlights the fundamental importance of a stable banking system to a stable, growing economy. Moreover, banks are inter-connected through payment systems and the interbank repo market. Thus, a shock to one bank can be contagious to the rest of the connected banks. Moreover, due to their function of financial intermediation, capital allocation and services, bank failures can disrupt and cause significant economic and social costs as evident from the 2008 global financial crisis. Therefore, an efficient and stable banking sector has been the aims of banking supervisors, policy makers and regulators alike.

Recent 2008 financial crisis led regulators and academics to re-evaluate the governance, risk management, lending practices, performance of financial institutions. A key are in banking research explores the effects of bank competition, governance and ownership on profitability, lending and risk taking. Given this setting, this review study explores the key developments in existing literature on bank competition and ownership.

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Prior theoretical literature outlining the role and functions of banks within the real economy are as follows: Leland and Pyle (1977); Diamond and Dybvig, (1983); Diamond, (1984); Fama, (1985); Boyd and Prescott, (1986); Bhattacharya and Thakor, (1993); Holmstrom and Tirole, (1998); Diamond and Rajan, (2001); Kashyap, Rajan, and Stein, (2002); Levine, (2005); Bouvatier & Lepetit, (2007); Brown & Dinc, (2011); Dam & Coetter, (2011); and Acharya & Richardson, (2011).

Excellent overviews of banking in North America are provided by Berger et al. (1995); Jones and Critchfield (2006) and DeYoung (2009), and for EU countries by Goddard et al. (2001, 2007, 2009a). Uchida and Udell (2009) review banking in Japan, while Bonin et al. (2009); DeCarvalho et al., (2009) and Klapper et al. (2009) review banking in Eastern Europe, Latin America and developing markets in Asia. Barth et al. (2004, 2006, 2008) provide a comprehensive review of the supervisory and regulatory regimes of banking systems around the world.

The rest of the study is organized as follows. Section 2 examines evolution of bank competition and its effects on efficiency and financial stability. Section 3 assesses bank ownership and its effects on capital allocation and financial stability. Section 4 concludes the study.

2. Bank Competition

Bank competition has important implications for efficiency, economic growth, efficiency, financial stability and economic welfare. Therefore, understanding of bank competition is highly pertinent for macroeconomic policy and for adequate supervision and regulation of the banking sector. However, the view that stability can be maintained by a certain amount of market power resulted in limitations on competition in many countries. This section review the validity of this view and the effects of competition on stability and efficiency by examining prior theoretical and empirical studies.

2.1 Efficiency

Banks contribute to economic growth by efficient capital allocation, risk transference and sharing and asset transformation. Therefore, an efficient banking industry would be a key stimulant for economic growth.

Industrial Organization View

Freixas and Rochet (1997) identify benefits of competition to the banking industry through industrial organization theory. Banks are profit-maximizing price-takers in perfectly competitive markets, minimizing prices and costs. This would result in higher quantities of low priced credit supply in the economy. However, given the existence of market power, banks would be able to earn a higher price above the marginal cost for credit. This is essentially achieved by banks reducing the available credit quantity and subsequently charging higher interest rates. In general, a competitive industry is characterized by a significantly high quantity of small banks.

Besanko and Thakor (1992) develop a theoretical model for deposit and loan markets where banks are able to distinguish themselves from other key competitors. They show that the entrance of additional banks into the market results in decreased loan rates and increased deposit rates. Guzman (2000) utilises a general equilibrium model to analyze the differences in capital accumulation effects in an economy with a monopolistic versus competitive banking sector. He finds that monopolistic banking sectors results in downward pressures on capital accumulation. Unlike in a competitive banking sector, a monopolistic banking sector would ration the supply of credit resulting in every bank offering the same rates. However, monopolistic banks would offer lower deposit rate and given the absence of credit rationing monopolistic banks would charge higher loan interest rates. Therefore, both models insinuate the detrimental effects of market power to corporates, households and economic growth.

Information Asymmetry View

Alternative theoretical approaches of banking state that effects of market power on efficiency may not necessarily be negative. Prior literature shows that the credit supply would significantly affect a bank's net worth. Moreover, Bernanke, Gertler, and Gilchrist (1996) show that economic growth declines due to lending reductions by banks experiencing shocks to their net worth. Petersen and Rajan (1995) state that banks with significant market power lend to smaller firms at lower costs even in competitive banking sectors. Boot and Thakor (2000) develop a model of transactional and relationship lending for banks and find that competitive banking sectors foster more relationship lending.

Cetorelli and Peretto (2000) analyze optimal competitive banking structure by developing a general-equilibrium capital accumulation model.

Theories discussed earlier have contradictory effects on economic growth via credit supply. According to traditional Industrial Organization theory market power results in increased loan interest rates leading to reduced credit supply resulting in downward pressures on economic growth. However, another set of theories posit that market power improve information creation and dissemination at banks via better screening and relationship lending resulting in efficient capital allocation. In empirical literature, market power is generally proxied by the degree of concentration or number of banks in the industry.

Most of the prior academic literature that explores the dynamics between concentration and bank profitability utilize U.S. data. Berger and Hannan (1989) find a negative relationship between reduced deposit rates and concentration. Hannan (1991) shows that higher concentration results in increased loan interest rates. Prior academic literature generally identifies a positive association between concentration and profitability.

However, a majority of these studies do not consider differences in productive efficiencies. For example, a significantly efficient bank would generate higher profit margins due to superior profit maximization, subsequently increasing concentration.

Therefore, contradicting the negative effects of market power theories, higher profits may be linked to concentration. Several studies consider this issue of controlling for efficiency variations. Berger (1995) finds a negative relationship between banking sector concentration and profitability when controlled for efficiency. Punt and Van Rooij (2001) conduct a similar study for European countries and find mixed results. Cetorelli and Gambera (2001) show a negative effect from concentration on economic growth, which is heterogeneous across firms for a cross country-industry data set.

Corvoisier and Gropp (2002) utilize a European dataset and control for cost structures, competitive conditions and risk to explore the relationship between loan pricing and concentration. They develop various price and concentration variables for savings, time deposits and loans given their varying sensitivities to concentration. Beck, Demirgüç-Kunt, and Maksimovic (2003) find that concentrated banking sectors result in firms encountering higher financing obstacles for a set of developing countries and the effect is insignificant for developed countries. Finally, Demirgüç-Kunt, Laeven, and Levine (2003) shows that net interest margins at banks are increased by policies affecting competitions and also concentration. Therefore, although early academic literature identify a positive relationship between profitability and concentration, the findings fail to be robust across time and various profitability measures. However, more recent literature identify that this positive relationship is mitigated when controlled for efficiency and within sector competition such as barriers to entry.

2.2 Financial Stability

It is the general consensus that banking stability is an essential by product of market power. Banks that are well-capitalized and profitable are better able to withstand balance sheet shocks. The literature on financial institutions states that more risk is taken by highly leveraged firms. Shareholders have unlimited upside from risky projects and creditors bear the cost with limited upside (Jensen and Meckling 1976). The banking business model of high leverage and deposit insurance features further increase this agency problem for banks, reducing and inducing higher risk taking. However, systematically important banks may prefer to maintain charter value, thus reducing risk taking. However, as seen in the above efficiency literature, this issue remains highly debated in the literature with no general consensus.

Charter Value

Regarding the charter value¹ of banks, Keeley (1990) states that the increase in 1980's U.S. bank failures was due to an increase in banking industry competition. In general, a trade-off between the moral hazard view of increased risk taking and charter value view. Keeley (1990) finds that banks with significant market power have higher margins subsequently resulting in higher charter values. Higher opportunity for bankruptcy reduces risk taking incentives. However, charter value maybe reduced via increased competition, subsequently leading to higher risk taking. Besanko and Thakor

¹Charter value is the benefit accrued to bank shareholders and managers from future operations and represents the bankruptcy opportunity costs.

(1993), shows that relationship lending increase charter value through proprietary information in consolidated markets. Demsetz, Saldenber, and Strahan (1996), building on Keeley (1990), also find a significant positive relationship between capital and charter value and a negative relationship between charter value and bank risk. Hellman, Murdock, and Stiglitz (2000) implement a dynamic banking model with deposit competition and find that competitive markets result in increased deposit rates. De Nicolo (2000) finds a significant positive relationship between charter value and bank size. In Perotti and Suarez (2002), show that policies supporting failed bank take overs by solvent banks increase charter value through increased rents for incumbents. Salas and Saurina (2003), apply a similar model to the Spanish banking system and find that higher charter values results in lower credit risk. Repullo (2003) models deposit market competition and finds a gambling equilibrium in in very competitive and monopolistic markets without capital requirements.

Monitoring

Shaffer (1998) implements a market where banks provide loans to borrowers deemed as safe via screening. However, rejected borrowers reapply to another bank in the market, but that particular bank would not observe the borrowers previous loan application rejections.

The above theories suggest that a larger number of banks may result in low quality loan portfolios. Cordella and Yeyati (2002) analyse competition effects on monitoring which is associated with loan portfolio risks. They find that negative effects of competition on risk maybe mitigated by risk-based deposit insurance and public disclosures. Two main theoretical views on bank competition state the following: The competition-fragility view state, reduced competition creates increased lending opportunities, profitability and charter values. This in turn increases banking stability by better enabling them to weather supply and demand shocks in the credit cycle. Moreover, less competition would create a dis-incentive for risk managers' excessive risk taking (Allen and Gale, 2000, 2004; Carletti, 2008). However, the competition-stability view state that competition actually decreases banking stability. Higher market power results in banks charging higher interest rates from borrowers resulting in higher loan defaults increasing the risk of the bank's loan portfolio (Boyd and De Nicolo, 2005). Empirical evidence in support of both views remain inconclusive. For example, Boyd et al. (2006) and De Nicolo and Loukoianova (2006) show that less competitive markets increase the risk of bank failures. Jiménez et al. (2007) finds the risk decreasing effects of increasing market power in the banking sector. Ariss (2009) explores the effects of different market power levels on banking stability and efficiency in developing countries and find that increased competition results in instability. Uhde and Heimeshoff (2009) use aggregate 25 EU country data to show that local market concentration is associated with increased instability in European banking sectors. Casu & Girardone (2009) shows that the EU banking market is becoming more concentrated and less cost efficient. Berger et al (2008) support the "competition-fragility" view by identifying that banks with larger market power have less overall risk exposures. However, they also find that market power increases loan portfolio risk which maybe partly offset by higher capital ratios.

Zhao et al. (2009, 2010) assesses the effects of increased competition supported by deregulatory measures on Indian banks' risk taking. Their findings show that bank risk is increased through higher competition.

In addition, contagion is generally the risk of liquidity and credit shocks being spilled over from one bank to another bank. Therefore, interconnectedness of banks may affect the financial system's shock resiliency. Allen and Gale (2000b) explore contagion in a regional banking system connected by interbank deposits and show the higher susceptibility of incomplete markets to contagion. Beck, Demirgüç-Kunt, and Levine (2003) find a less likelihood of crises in banking sectors with higher concentration and competition. There is a plethora of literature that examines the link between bank competition and bank performance. Prior research analyzed structure-performance dynamics beginning from the Chicago Revisionist and Structure-Conduct-Performance (SCP) paradigms. The latter view states that a small group of banks may utilize independent market power or collude to command higher prices (i.e. high interest rates on loans and lower rates on deposits and fees etc.). The former view argues that a positive association between profitability and competition need not insinuate collusive behavior. It may simply portray size and efficiency associations. Large banks obtain economies of scale etc., hence more concentrated markets maybe more profitable. Prior literature regarding higher profitability through collusion, market power or superior efficiency remains inconclusive (Berger, 1995a; Goddard et al., 2001, 2007; Degryse and Ongena, 2006; Casu and Girardone, 2006, 2009; Dick and Hannan, 2009, Calderon and Schaeck 2012). In addition, contestable market and industrial organisation theories further concentrate on the responses to demand and supply changes by firms. Prior literatures identify several divergences in bank competition (Molyneux et al., 1994, Claessens and Laeven, 2004; Goddard and Wilson, 2009, Berger et al 2014). Moreover, abnormal return persistence is affected by information asymmetry and competition barriers (Berger, 2000; Goddard et al. (2004). Having concluded our review of bank competition and effects on efficiency and stability we move on to another core area in banking research, namely: Bank ownership.

3. Bank Ownership

Firm ownership is generally segregated as private, state and foreign owned as is similar for banks. State banks primarily follow socio-economic development objectives resulting in lesser profitability relative to private and foreign owned banks. Jensen and Meckling (1976), Fama (1980) and Fama and Jensen (1983) state that reduced market discipline limits shareholders' control of management, leading to moral hazard behavior. Shareholders seek profit maximization while, managers may forgo profits to pursue firm growth and reduce risk by choosing less risky projects. (Berger and Hannan, 1998; Hughes et al., 2003; Goddard et al., 2004a). Karas et al (2008) studies the association of bank efficiency is with ownership and finds foreign banks to be significantly efficient relative to local private banks in Russia. Moreover, they find that local private and public banks have similar efficiency levels. Duprey (2013) finds less cyclicity in state banks relative to private banks. State banks limit credit rationing during economic downturns. They have a positive association with economic development and are better able to withstand macroeconomic shocks. Berger (2006) examines bank relationships of state,

private and local Indian banks. They find foreign banks tend to serve as the primary bank for transparent firms. Moreover, multiple banking relationships are observed more when the primary bank is a foreign bank. Beck et al. (2009a) identify private banks to possess significantly more profit volatility relative to their mutual counterparts in Germany. Loukoianova (2008) finds that private banks are both more cost effective and efficient revenue wise compared to their regional counterparts in Japan. Kane et al (2013) examines whether foreign participation in the financial industry is optimal for developing economies.

3.1 Bank Ownership and Capital Allocation

Prior literature views on bank ownership and capital allocation remains mixed at best and in this section attempts to consolidate this evidence.

Government Bank Ownership

Arthur Lewis (1950) explicitly advocated for state ownership of banks, as part of the commanding heights approach. Subsequently, the state would have direct ownership and control of the finance sector via the state banks and can create other strategic industries by directly controlling capital allocation. Alexander Gerschenkron (1962) highlights the importance of financial development for economic growth and advocates for state ownership for firms in key industries central to the economy (Shleifer (1998)). He argued that private commercial banks play a key role in channelling capital to the industry sector during the latter part of the nineteenth century, especially in Germany. State ownership of banks allow governments to control the financing of projects in any sector while leaving the project implementation to corporates. Thus, state ownership of banks promote both the development and political banking views. According to the development view state ownership of banks allow the government to accumulate savings and allocate that capital towards economic growth oriented long term projects. According to the latter view, state banks finance inefficient yet politically desirable projects due crony capitalism. However, according to both views, state banks subsequently fund projects that would otherwise have difficulty being funded privately. However, contrary to the view of political theories, development theory posits that these state bank funded projects are socially desirable. Political theories generally imply that state ownership of banks crowd out private firm financing to a certain degree. Moreover, although, state banks may encourage capital accumulation and savings, the projects funded by these banks are more likely to inefficient and have negative effects on productivity.

Myrdal (1968) shows that governments acquire control stakes in banks and corporates to provide subsidies, employment and benefits to political supporters. Moreover, these supporters subsequently provide political contributions, votes and bribes as a response to these favours by the government owned banks and firms (Kornai (1979), and Shleifer and Vishny (1994)). However, several prior academic literature provide contradictory evidence against this particular view of state ownership. They show that state ownership of banks result in inefficiencies of government enterprises, create political

motives behind public services (Megginson, Nash and Randenborgh (1994), Barberis et al. (1996), Lopez-de-Silanes, Shleifer and Vishny (1997), Frydman et al. (1999).

Prior literature document the popularity of state ownership of banks since 1995 primarily in developing countries (Barth, Caprio and Levine, 1999, La Porta, et al., 2002). King and Levine (1993), Levine and Zervos (1998), Rajan and Zingales (1998), Beck, Levine, Loayza (2000), Levine (1999, 2000), Wurgler (2000), and Cetorelli and Gambera (2001) all examine the association between economic growth and financial structure development. Sapienza (1999) finds support for the political view for Italian banks where they pursue political objectives in their lending practices. Barth, Caprio and Levine (1999) develop an extensive government banking regulation cross country database. They provide support for both the political and development views by identifying that significantly higher state ownership of banks exist in less developed economies. La Porta (2000) shows that state ownership results in significant economic and financial development. La Porta et al. (2002) associates higher bank state ownership in the 1970s with reduced financial and economic development. Several more key papers also find that state ownership of banks limits financial and economic development (Barth, Caprio and Levine, 2004; Galindo and Micco, 2004). Barth et al. (2004) identify that state bank ownership is associate with higher corruption and unfavourable outcomes for banks.

Sapienza (2004) finds lending by state owned banks is affected by connected party political election results in Italy. Dinç (2005) states state banks increase their lending in election years relative to private banks in emerging economies. The author interprets this as evidence of crony capitalism where politicians support their allies and punish rivals through their influences at state owned banks. Megginson (2005) provides an in-depth review of this particular literature.

Several prior literature document significant reduced state owned bank performance relative to their foreign, local private owned counterparts (Micco, et al., 2004; Berger, Clarke, Cull, Klapper and Udell, 2005; Mian, 2006). Micco et al. (2006) identifies a expansion in the performance divergence of state banks relative to private banks during election years. This further supports the political view and crony capitalistic driven lending behaviour at state banks. Thus, the majority of studies link state bank ownership with poor bank performance, decreased economic developments and reduced efficient capital allocation. There is little evidence supporting the more optimistic development view (Gerschenkron, 1962) of state bank ownership.

Family Bank Ownership

Now we concentrate on family ownership of banks. A common view of financial superiority is the emergence of an elite, rich and influential group due to the initial financial growth spurt (Rajan & Zingales 2004). Subsequently, these elite business groups establish barriers to entry for new entrants due to displacement fears (Morck *et al.* 2005). Moreover, control of an economy's financial sector allows such business elitists to entrench themselves and establish an oligarchy (La Porta *et al.* 2003; Perotti and Vorage, 2008). Dysfunctional financial markets are thus generally a signal of such

oligarchies and entrenchment by business elites (Morck, Wolfenzon, and Yeung, 2005; Stulz, 2005; Perotti and Volpin 2006). Morck, Stangeland and Yeung (2000) shows that the presence of a higher number of wealth by inherited billionaires in an economy scaled by GDP, have low innovation spending, growth and more barriers to entry. Rajan and Zingales (2004) state that the capture of a country's private sector financial system negatively affects financial and economic growth. They highlight the importance of regulatory and legal safeguard measures to prevent such scenarios. Fogel (2006) identifies that the presence of family-controlled business sectors maybe associated with corrupt governments, significant bureaucratic red tape, reduced efficient legal systems and higher barriers to entry. In addition, the control and the governance of large banks by family owned firms is significantly correlated with inefficiencies similar to state bank ownership without the equality results of state ownership.

Foreign Bank Ownership

While state banks are generally associated with poor performance the opposite result is found for foreign banks by the majority of prior literature. In addition, foreign banks have been shown to be more profitable and efficient relative to their local counterparts in emerging economies. Demirgüç-Kunt and Huizinga (1999) conduct a cross country study of banks from 80 countries for the sample period of 1988-1995. They find foreign banks to be more profitability relative to local banks in developing nations and the opposite result for industrial economies. Claessens, et al. (2001) shows that the presence of foreign banks in an economy reduces local bank profitability, overall expenses and non-interest income. They state that these results are consistent with the view of foreign banks increasing efficiencies at local banks via healthy competition. Several other country studies also support the view that local bank efficiencies are improved by foreign bank penetration (Barajas, Steiner and Salazar, 2000; Unite and Sullivan, 2003). Clarke, Cull, and Martínez-Peria (2001) show that access to credit is increased via foreign bank penetration. Micco et al. (2004) finds lower costs and employment ratios and higher profitability at foreign banks relative to their local counterparts in developing economies.

Bonin et al. (2005) analyse six eastern european countries and show that relative to local private and state banks, foreign banks have costs, efficiencies and profitability. Furthermore, they support privatisation of local banks to foreign investors. Detragiache et al. (2008) develops a banking model predicting that foreign bank penetration results in lower credit supply to the private sector. Their model implications are supported for 89 low middle and low income economies. Foreign banks are found to be superior in monitoring hard information relative to local banks (e.g. accounting, collateral value information). However, they are at a significant disadvantage when monitoring soft information (e.g. manager and entrepreneurial skill). Thus, foreign banks generally lend to higher quality borrowers who are more safer and transparent and avoid opaque lending to firms (Berger, Klapper and Udell, 2001; Mian, 2006). In summary, majority of prior literature supports that foreign banks generally outperform their local counterparts and provide healthy competition in the banking sector. However, mixed evidence is found with regard to the impact of foreign bank penetration and credit access in an economy. Giannetti and Ongena (2007) find that foreign bank entry reduces connected

party lending, expand capital allocation, increases firm sales and asset growth (especially younger firms) for eastern European economies. However, research on the direct effects of foreign bank ownership and capital allocation is quite limited.

3.2 Financial Stability

In the past couple of decades, academic studies have examined the consequences of primarily state and private ownership of banks. In this section we focus on ownership, risk, lending and profitability. We primarily focus on three theories:

Social View: State banks facilitate financing projects geared towards economic development that are unable to obtain such financing from private banks (Stiglitz, 1993).

Hence, state owned banks should also compensate for the restriction of credit supply during recession periods and increase (and not decrease) their lending activity during negative economic cycles. A larger share of state owned should therefore be associated to higher economic growth and a smoother economic cycle¹. Barth et al. (2004) find that once controlled for supervisory regimes and bank regulation, state ownership has no significant impact on bank fragility. Sapienza (2005), focusing on the Italian bank lending practices find state bank lending to borrowers from depressed areas. Micco and Panizza (2006) find Italian state bank lending to be more responsive to macroeconomic shocks relative to private banks. Adrianova et al. (2009) find that countries with high degrees of state banks have grown faster than countries with lesser state ownership. Iannotta et al. (2011) find no significant differences in lending practices for private and state European banks. Cull and Martinez Peria (2012) identify countercyclical lending in Latin America and the opposite result for Eastern European state banks during the 2008 financial crisis.

Political View: This alternative view to the social view states that state banks are utilized for providing low cost financing to political supporters who in return gives campaign contributions and votes. Several studies find state banks to be inefficient due to politicians' deliberately transfer funds to loyal connected parties (Shleifer and Vishny, 1986; Shleifer, 1998). Moreover, politicians may have conflicting goals dictated by private benefits that adversely affect social welfare. Caprio and Peria (2000) show higher state ownership of banks result in an increase in banking crises. Barth et al. (2001), and La Porta et al. (2002) conducts a cross country study and associate state ownership of banks with lower economic and financial growth. Beck and Levine (2002) fail to identify a positive relationship between state banks and economic growth. Several studies find state banks to have higher default risk and poor loan quality relative to private banks (Berger et al., 2005; Iannotta et al., 2007).

Several studies show foreign banks to have higher performance relative to private and state banks in developing economies (Claessens et al., 2001; Bonin et al, 2005; Micco et al., 2007).

Focusing on emerging markets, Dinç (2005) identifies increased lending with regard to election years for state banks relative to private banks. Beck, Demirguc-Kunt and

Martinez Peria (2007) show that state ownership of banks reduces banking sector penetration, leading to wider margin spreads and lower economic growth. Berger et al. (2005) show that low performance of Argentinian state banks in the 1990's significantly improved following privatization. Several cross country studies show crony capitalistic motives of politicians with connected party lending at state banks leading to misallocation of capital (See for example Sapienza (2004) for Italy; Khwaja and Mian (2005) for Pakistan; Cole (2009) for India; Carvalho (2010) for Brazil). Moreover, politically driven inefficient state bank lending fail to service credit generation to financially constrained small to medium enterprises and the population in general (Berger et al., 2008; Ongena and Sendeniz-Yuncu, 2011). Lin and Zhang (2009) identify reduced efficiency, profitability and asset quality at the largest four state owned banks in China relative to their foreign and private owned counterparts. Cornett et al. (2010) show lesser profitability and higher credit risk at Asian state banks prior to 2001 relative to private banks.

3.3 Bank Governance and Risk

Financial institutions are highly regulated to provide stability, efficiency and protect depositor interests. Stability is achieved through regulatory capital and liquidity requirements aimed at building up reserves required for long term bank solvency. Moreover, the banking regulatory system provides the lender of last resort, bank resolution, bail outs and deposit insurance to ensure stability. Market discipline enforced by investors may be another channel of partial regulation on financial institutions. Assessing a banks' loan and investment portfolio quality still remain a difficult task for most investors due to information asymmetry. Flannery (2009) states that a banks' stock price observable to all investors may provide a signal on its investment and loan portfolio quality.

Several studies find that monitoring and subsequent market discipline of banks by shareholders depends significantly on shareholder rights protection (Levine, 2004; Adams and Mehran, 2008; Adams et al., 2009). This describes the presence of dispersed bank ownership in countries with significantly stronger laws for shareholder protection.

In general, most regulators, shareholders and depositors also focus on a banks' corporate governance mechanisms. Furthermore, corporate governance of banks are made more complex due to different regulatory requirements relative to nonfinancial firms (Adams and Mehran, 2003; Adams, 2009). Majority of banking corporate governance studies focus on how risk and profitability is affected by ownership concentration, regulation and shareholder protection laws. Caprio et al. (2007) conducts an extensive cross-country study of 244 banks for 44 countries. They observe a higher percentage of family or state ownership of banks rather than dispersed ownership. Bank valuation is increased by concentrated ownership and decreased by weaker shareholder protection laws. Iannotta et al. (2007) conduct a cross-country study of large banks for 15 European countries to assess the ownership impact on bank risk and performance. They lower loan quality and higher failure probabilities for state banks relative to local private or mutual banks. Mutual banks are observed to have better loan

quality and lower asset risk relative to state and private banks. Laeven and Elyasiani and Jia (2008) show that institutional ownership increases performance of bank holding companies. Levine (2009) find higher risks at banks with concentrated ownership and significant cash flow rights with the effect being weaker for countries with strong shareholder protection laws. They state that large cash flow rights play a key role reducing negative effects of weak shareholder protection laws on bank valuation.

Kirkpatrick (2009) states the significance of the global financial crisis and the failures in corporate governance and risk management mechanisms to limit excessive risks by key financial institutions. Moreover, regulatory, credit rating and accounting standards have also proved to lacking in several areas with regard to financial institutions as shown during the 2008 crisis. Berger & Turk-Ariss (2010) shows that the discipline effects by depositors varies across bank size, public versus private and EU and U.S leading up to the crisis. Moreover, large concentrated ownership levels are observed to increase loan portfolio quality and reduce risk.

Kunt & Huizinga (2014) examines risk, return, funding and activity dynamics of banks and find that market discipline effects depend on bank size. Mohsni & Octere (2010) find that government liquidity support to Canadian banks reduced their risk. They observe the risk reduction due to shifts from non-interest income to interest income related banking activities. Laeven et al (2014) finds regulation aimed at limiting individual bank risk taking to be inadequate for systematically important large banks. This highlights the importance of regulation focusing on systemic risk to deal with external shocks of distressed large banks. Regulation such as capital surcharges, reducing market-based investments and bank organizational complexity may help alleviate the too big to fail subsidy and corporate governance issues. Economies of scale achieved by large banks cannot be dismissed resulting in optimal bank size being an elusive uncertainty.

4. Conclusion

This review paper discusses two core areas in the Banking literature. Namely Bank Competition and Bank Ownership. In more detail, bank competition literature is reviewed with regard to efficiency/ capital allocation and financial stability. According to prior literature, competition is generally associated with increased bank efficiency. However, the competition-fragility view states that increased competition results in banking fragility and the competition-stability view states the opposite effect.

It is evident from this literature review that further research is needed in terms of using alternative competition and risk measures to obtain more robust evidence regarding competition effects.

In addition, bank ownership is reviewed with regard to capital allocation and financial stability. Bank Ownership and its effects on economic growth, risk, lending, profitability and bank governance are one of the most debated issues in banking literature. More empirical research on various bank ownership types and their association with banking stability especially during crisis periods are key avenues for future research.

Developments in these particular core areas in banking research is vital for the continuous growth of the banking industry, its regulations and the continuation of stable economies.

Since the 2008 financial crisis there have been calls to rethink bank governance. Further research is required to understand the effects of bank governance on securitisation, risk management practices and the overall financial sector efficiency. Future research may specify methods that bank corporate governance mechanisms can be designed for provisioning less pro-cyclicality at banks with regard to lending.

From the above literature survey it is evident that bank competition is an important factor with regard to bank performance and risk. However, prior literature provides mix evidence supporting or contradicting the popular competition stability or fragility views. Moreover, we show that according to prior literature bank ownership is an important factor to be considered when analysing the correlation between banks risk, lending and profitability, economic growth and capital allocation. In sum, prior literature associates family and state owned banks with inefficient capital allocation with the former being associated with lower economic growth, elevated macroeconomic instability and greater income inequality. In contrast, foreign banks in general leads to economically significant positive implications to capital allocation efficiency.

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