Determinants of competition in South African banking sector

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ABSTRACT

The South Africa banking sector listed among the well-developed banking system across the world, which links to economic development and has a highly concentrated market characterised by few number of banks dominating the market. Specifically, the banking sector is categorised by the dominance of big five banks which accounts more than 90% of what the sector generates. Furthermore, the banking sector of South Africa has high cost of banking, low financial inclusion, exposed to collusion, and lack of innovation hence low levels of competition. However, the evidence does not present the link and there has been paucity of literature; previous studies have inadequately addressed the issue of competition in South African context. Hence, the purpose of this research was to identify the determinants of competition in the banking sector of South Africa. Doing so, I have used Tobit regression model from 2002-2017, draw conclusion and recommendations.

The results revealed that market structure, market contestability, institutional and inter-industry variables do positively influence and determine competition in South African banking sector. Additionally, the study has contributed to extension of the existing knowledge and modification of the model through addition of the controlling variables and helps in policy creation. However, South Africa was the place of the study; one could explore for the research to other developing countries and different period.

Keywords: Competition, Market Structure, Market contestability, Institutional, Inter-industry, Banking sector, South Africa

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INTRODUCTION AND BACKGROUND TO THE STUDY

Financial system allows the flow of funds among lenders, borrowers, and investors (Miller, 2017). Therefore, banks help with the facilitation of these exchanges; and there is no economy that can properly run without a sound banking system (Jiang & Yao, 2017). Competition in the financial industry is a matter of concern to benefit the economy and lead to effective allocation of financial resources (Mirzaei & Moore, 2014). Thus, the banking system is very critical for any economy. A well-developed financial system should be contributing to growth of the economy however, in the financial system there are high costs associated with banking which triggers the access to financial services leading to financial exclusion for those who cannot afford. South Africa ranks among the top ten in Financial Sector Development, out of 140 countries meaning it has a well-functioning financial system (Schwab, 2015). In addition, a well-functioning financial sector benefits the economy because it develops financial inclusion in the financial system where more stakeholders and the more people are participating in the banking that would promote spending since it will be easy to access their finances. Furthermore, Banking Association South Africa detailed that in spite of the way that the South African banking segment is profound focused, it is still extremely aggressive and keeps on expanding its items and widen its administrations inside the setting of universal best practice.

Concentrated markets have also been seen to be having competition, and it is of greater interest to investigate competition in concentrated markets - SA is a good case study for that. Simatele, Mishi and Ngonyama (2018) highlights that the banking sector of South Africa has a highly concentrated banking sector. A highly concentrated banking sector leads to financial exclusion of the customers and this is due to an increased cost banking SARB (2017). African banking system operates in oligopolistic market to avoid competition. The oligopoly market is defined as the market structure dominated by small firms with large market power, that nature in the market could be seen leading to collusion resulting into reduced competition and increased price levels for services (Ohno, 2012). Although literature seem to find that there is relative competition within the SA banking sector; however, in 2017 a case of collusion was investigated for price fixing e.g., Investec, Nedbank and Standard Bank were reported to be in collusion for low cost which that could affect traders (Competition Commission South Africa, 2017). Therefore, this raises a course for concern about the measure of competition that are used. In as much too much competition leads to the benefit to of the economy but a country could be experiencing instability if there is too much of competition. Thus, an industry needs a controllable competition where banks are serving the best to the interest of the clients and for the benefit of the economy. Hence, if there the financial sector does not serve the best to its customers that could result into a cost to an economy and resulting to inefficiency within banks.

Studies for example Cheung and Shen (2017), Owen and Pereira (2018) as well as authorities like SARB have used concentration as a measure of competition. A number of authors have talked about presence of competition in a concentrated banking sector as South Africa, such as (Barbosa, de Paula Rocha, & Salazar, 2015; Beck, Demirgüç-Kunt, & Levine, 2006; Berger et al., 2004; Bikker & Haaf, 2002). Indeed, competition is possible within a highly concentrated sector and it is important to investigate its determinants in such a constrained environment. Constrained in the sense that the players within the sector face different cost functions, a few enjoy low cost functions compared to the majority. Supposedly, such banking sector leads to a better competition by the banks in pursuit of provision of better financial services leading to economic developments. Therefore, the study will be looking beyond the literature to identify the determinants of competition in the banking sector of South Africa.

The five largest banks by assets collectively held 90.5% of the market thus; the industry market share that there is high concentration in the sector where the whole industry in dominated by five banks out of 17 registered banks (SARB, 2017). High concentrated industries tend to breed platforms for larger banks. As such, some banks may grow at a level where deemed too big to fail. The too big to fail notion may create bad incentives such banks will there be dependent and will be having debts from government. Therefore, the banks may start taking greater risks as they know that bailed out should borrowers default (Mishkin, 2009). The inability of other banks to access financing facilities will lead to pull out of small banks from the market, leading to a decreased number of banks hence competition.

The banking industry has a history of attracting a lot of interest from abroad and there are foreign banks that established in SA and obtaining stakes in major banks. This becomes a quagmire situation because it becomes to establish local banks as well the cost of capital required, the financial sector is well rated in terms of sophistication and regulation which makes it to be a so sound banking system (Sanchez, 2014; Egbuna, Oduh, Ujunwa, & Okoyeuzu, 2018). The soundness of the banking sector makes it more difficult for new entrants to the industry due to regulations and costs associated with the sector. An increased number of bank will put pressure to the existing banks and increases competition levels hence the benefit to the economic growth. A well-regulated and sound financial system should be contributing towards economic growth. However, in the case of South Africa, the growth levels do not tally with the level of financial development. Thus, the problem of competition in the banking sector need to be clearly measured in the banking sector to fill the gap that existing in the sector.

Competition in banking sector promotes financial inclusion through easy access of financial services at better costs to the poor. Mirzaei and Moore, (2014), Leon (2015) Beck, Demirgüç-Kunt, and Peria (2008) are of the view that more concentration leads to more competition. Greater competition would improve the efficiency of the banks with positive implications for economic welfare and more competition would lead to more creativity in the banking sector. Similarly, more competition will promote small firms to access of capital to exercise their entrepreneurship and create stability to banks that are prone to devastating crises. A competitive banking sector is significant for the effectiveness of the economy and banking industry is a pillar of every economy. The general idea is that competition improves effectiveness.

The work done provides no census on the level of competition in a concentrated banking sector. Hence, the study will be identifying the determinants of competition by doing so, the study help to bridge the gap that is existing in literature and adding to literature on the field of study. Furthermore, this study will pave way in giving direction to policy makers on the determinants of competition in the in a more concentrated banking sector.

HISTORICAL ACCOUNT IN THE BANKING SECTOR OF SOUTH AFRICA

There is history in the banking sector of South Africa. According to the South African Reserve Bank website, the first bank established in South Africa was the Lombard Bank in Cape Town and it started its operation for business on 23 April 1793. Moreover, there were proposals for the establishment of a central bank in South Africa that were made in 1879. Then, the calls were repeated in the following years, until a selection committee, consisting of the ten members of parliament was established on 31 March 1920 to observe the feasibility of establishing a central bank in South Africa. Furthermore, following the recommendations of the committee, the South African Reserve Bank opened for business on 30 June 1921, thus, making it the oldest central bank in Africa. As the oldest central bank in African continent, the bank is today an internationally respected and recognised central bank looking forward to its centenary celebrations on 30 June 2021 (Rossouw, 2011).

Based on SARB website and according to Kock and Smith (2005), the central bank among other things, issues bank notes and coins, conducts monetary policies, provides credit to banks, manages South Africa's foreign exchange reserves, supervises and regulates the banking sector, and acts as a lender of last resort to the banking system. The South African banking sector is managed and facilitated by the South African Reserve Bank and has prudential and regulatory authority over the banking sector and other financial institutions within the country. According to the Bank Supervision Department of the South African Reserve Bank, currently there are three new banks granted temporary licences and the South African banking sector has developed with 19 registered banks, 15 branches of international banks, 3 cooperative banks, 3 mutual banks and 31 foreign representative offices (Bank Supervision Department Annual Report, 2017).

In records, the South African banking sector is highly concentrated banking sectors in emerging economies, operating in an economy, which ranks amongst the top twenty of world economies according to its size, being the sixth largest economy in Africa, (Economic Development, 2015). Even though it is holding the sixth largest in Africa, it is only accounting for something less than 1% of global gross domestic product. Which indicates that the financial institutions still have got a vast role to play in developing the economy because it is well expected that a well-developed financial sector should led to economic development not the other way around. However, the financial institutions in South Africa play a key role in savings mobilization, giving out credit to surplus units and enhancing the development throughout the economy (Okeahalam, 2001)

The feature of South Africa’s commercial and financial system is its large size and concentration within the market. Therefore, the entire commercial structure of South Africa is characterised by concentration and follows by explaining this tendency on a later section as a product of South Africa’s historical development. Moreover, a competitive banking sector is the foundation of a sound economy as competitive banking system signifies efficient allocation resources in the provision of banking products and services to the lenders also referred to as savers and borrowers. Hence, a lack of competition between banks is unfavourable to the general competence of the economy in light of their role in the transmission of monetary policy via the scope banks have on the deposits and loans market.

Additionally, the banking sector performs different types of efficiency to maintain their cost as low as possible but high levels of concentrations always tend to a reduced level of efficiency on the banking sector (Rodriguez, Bovila & Reyes, 2017). Commercial banks increase the level of entry, which then make banking more contestable in their strategy of trying to improve their efficiency, as they are oligopolistic by their nature. The fact that the banking sector is highly concentrated, that is leading to the problem of inefficiency, according to the banking survey conducted by (PriceWaterHouseCoopers, 2013) the South African banking industry evaluated as being in a healthy shape with many banks generating reasonable returns on equity and when these returns are being compared to their international correspondents, they are better.

OVERVIEW OF LITERATURE

After a study by King and Levine (1993) in checking the causality amid the financial development and growth and have found that there is correlation between the two variables. The author argues that, financial development should improve the levels of competition and the economic performance as perceived by the economic literature. However, there is still a trigger to these developments and one of the most challenging that even literature highlights is the banking market structure and its impact on competition within the banking sector.

Furthermore, a rise in competition ought to affirm anticipation for better services at lower prices at the bank and create more credit availability that should reduce the barriers to entry of new small firms and the encouragement to borrow and invest. Tarter, (2015), SARB (2014), SARB (2012), Nasrat (2016) are in support of this view, finding that greater concentration and higher limitations on competition in the banking sector lead to increased barriers to entry of new firms, and less economic growth and development. Therefore, the structure of the market should be considered in promoting competition, as it is perceived to be a contributing factor of growth.

The focal point of these papers has been diverse. Some endeavour to keep just the level of competition the banking sector, Bongini, Iwanicz-Drozdowska, Smaga, and Witkowski (2017); Dwumfour (2017) and Sawyer (2018) attempt to recognize additionally structural and institutional variables which help clarify and variety in viable competition across the banks. Approximately, others explore more and try to begin the impact of competition thereof on bank efficiency, access to financing, stability and growth of the country. The banking sector with more banks is likely to have competition; the study seeks to identify the drivers of competition in a more concentrated banking sector- more competition will yield to an improved financial inclusion within the industry. To have a closer look at the banking sector of SA, contestability variables determine effective competition should be considered, it is more significant where there are no barriers to entry of foreign banks. Therefore, the banking industry structures with abundant policies concerning foreign bank contribution in domestic banking and less limitations on entry and scope of activities tend to lead to more competitiveness, more stability and more efficiency.

The considerable role of the banks is the fact that they offer financial products and services to customers through a process of intermediation. Consequently, the existence of competition in the financial markets confirms the level of quality of the bank's output and at highly affordable price for consumers. However, an anticompetitive banking sector indicates monopoly power in the market and the market inadequacies of this market structure entail that consumers will be paying high prices (Slate, 2016) cited in Chitamba, (2018). Kjosevski & Petkovski (2014) argues that due to high prices, consumers will be demotivated to take loans, which will consequently have a negative impact on the overall competitiveness of a country. Additionally, to the role of banks, they act as the principal administrators of a country's monetary policy. As a result, the presence of competition in the industry warrants an effective execution of the monetary policy (Fungacova, Solanko and Weill, 2013).

The South African banking sector intensified the levels of competition since the inception and entrance of Capitec Bank into in the market (KPMG, 2014). Due to the relaxation of global financial markets, there has been a growth in the number of foreign banks in developing countries. Gontarczyk & Wrobel (2015) holds a view that there is a benefit from the presence of competition by customers. The benefits involve quality of products and the low cost of borrowing, amongst others.

The study seeks to achieve a goal of identifying the determinants of competition and further to look at the overview of the banking sector of South Africa. Competition is so linked to concentration, where more concentration leads to lower levels of competition leading to growth in number of people being financially excluded. (Fatine, Zakaria & Hakam 2013; Wong, Wond, Fong & Choi, 2006; Bikker, van Leuvenstejn, Gan & Hu, 2016 have found that competition in the banking sector has been proved to be having a relationship with concentration as discussed, and there is a negative relationship of competition and concentration. This point now brings a point of role of the number of banks and also draws attention of time frames. Bikker, van Leuvensteijn and van Rixtel (2008) looked at the impact of bank competition on the interest rate pass-through in Euro area applying panel data and they found that banks charges high interest rates on their lending in relation to the market where competitive pressures are stronger.

DATA COLLECTION

In order to measure the determinants of competition in the banking sector and to allow for credibility and frequency of observations, a time series quarterly data for the period of 2002 to 2017 used. The selection of the data period is based on inflation targeting monetary policy framework in South Africa. The following databases will be used to gather data of the variables; South African Reserve Bank, Statistics South Africa, World Bank, Bloomberg and BankScope. The data collected was first sorted out for meaningful analysis to take place. Data was checked for completeness as well as internal consistency.

RESEARCH FINDINGS

The main objective of this section is to establish if there is a relationship between two variables being the dependent and independent variable in the regression. More specifically, is to establish if there is a statistically significant relationship between these variables.

Starting with the constant of this equation, 3.440728 could be interpreted as the level of competition with all other variables held constant at 0. Most generally, intercept does not have intuitive interpretation. Therefore, constant of this equation is found significant and relevant to competition holding all variables to 0.

Five-bank concentration ratio has a negative coefficient of -0.017882 indicating a negative relationship with Lerner index and is statistically significant at 1% level of significance. An increase in the level of concentration in the banking industry will reduce the level of competition among the banks operating in the sector because the more banks are concentrated is the high the banks are likely to be in collusion or is the likely they will be involved in unlawful trades and terms. Therefore, if we assume a 1% increase in the five bank concentration that will results into -0.017882 decrease in the level of competition, holding all other variables constant. Hence, a negative relationship and it conforms to the expected relationship between competition and level of five-bank concentration. The results are in consistence with Allen and Gale (2004) and Akins, Li, Ng, & Rusticus, (2016), furthermore the authors have alluded that competition in the banking sector is complicated and more especial to financial stability. In all and all, the market structure variables proxy by five-bank concentration has a negative relationship with competition and it is strongly significant.

The number of foreign bank entry is positively related to competition and the results conform the expected sign (positive) showing that there is a relationship and it is positive. There is no statistically significance of this variable to competition. However, Ghosh (2016) confirms that there is an impact of number of banks foreign banks to competition as proposed by the study and further highlighted that competition enhances with the number of foreign banks. Furthermore, Claessens and Laeven (2003) have stated that contestability determines effective competition, especially through allowing (foreign) bank entry and reducing activity restrictions on banks. Therefore, the sign of the variable is in line with the definition of the relationship between the dependent variable and independent variable. Hence, an increase of 1% in the number of foreign banks would cause an increase of about 0.000306 in the level of competition, holding all other variables constant.

Stock market capitalisation is a measure of inter-industry variables in banking sector, there is a neutral relationship between competition and stock market capitalisation. This means any sign of its coefficient explained, hence, a positive coefficient be explained and be concluded that the variable carries an expected sign. Wang and Wang, (2017) stated that competition among traders can reduce losses, this means that the stock market will be better performing and investors will have excess income to invest. Hence, bank performance will be competitive for those investments by investors. Therefore, assuming a 1% increase in the level of stock market capitalisation will lead to an increase of about 0.000376 in the level of competition, holding all other variables constant. Furthermore, stock market capitalisation is statistically significant in determining competition at 10% level of significance.

Financial freedom is a proxy as a measure of institutional variables in the banking sector. There is a positive insignificant relationship between competition and the financial freedom. However, (Luo, Tanna & De Vita, 2016) argued that the freedom in the banking sector reduces bank profits and reduced profits would discourage the firms in the banking sector to advance their banking. Therefore, there is a significant competitive pressure to sustain their existing consumers. Hence, an increase of 1% in financial freedom would lead 0.001482 increases in competition in the banking sector of South Africa.

Property rights carry a negative coefficient, it does not conform to the expected results, and it is statistically significant in competition at 1% level. Therefore, an increase 1% in property rights would lead to a decrease of -0.027189 in the level of competition. The more property rights is the high the number of people investing in property and given the good state of economy and people have better incomes to invest in.

GDP_Capita, a measure of gross domestic product per capita is not significant; the positive relationship of competition and GDP_Capita shows that an increase in GDP will lead to an increase in the level of competition. The better the country is performing measured by GDP per capita signifies the country's ability for its economic participants in participating in banking and availability of money to spend or invest. The sign conforms to the apriory expectations which were discussed in chapter 4. Therefore, an increase of 1% in GDP per capita would lead to an increase of about 1.13E-05 in the level of competition, holding all other variables constant.

CPI, a measure of inflation is insignificant in specification; the negative coefficient of this variable in the regression suggests that a decrease in inflation will lead to a decrease in level of competition. This corroborates the priori expectations and theoretical relationship. This is not surprising as Tan and Floros (2017) stated that competition in the banking sector decreases with the level of prices and bank profitability have a positive relationship with inflation. This means that the impact of inflation affects all the banks in the industry. Therefore, an increase of 1% in CPI would lead to a decrease of about -0.003907in competition, holding all other variables constant. However, the variable is not statistically significant.

CONCLUSION OF THE STUDY

As has been noted, the South African banking sector is beset with serious issues, which include high transaction costs, low levels of competition, collusion, lack of financial innovation, and cost of banking at large, which goes with low levels of investments and savings. Hence, the study carried out to identify the determinants of competition in a concentrated banking sector of South Africa and has applied time series secondary data from online sources for the period of 2002 to 2017. In addition, the hypothesis the study intended to respond to is: the identified variables does not determine competition in the South African banking sector

A model seeking to find the determinants of competition estimated and findings presented above. Thus, it has been revealed that competition in South African banking sector is determined by market structure variables. Where bank concentration ratio of five banks used as a proxy, it concludes that such variables need to be considered in decision-making the banking sector of the country and that will be a solution to the issues mentioned on previous chapters. Market contestability variables were found statistically insignificant in the model but it has an impact in determining competition. Moreover, institutional and inter- industry variables were found significant in determining competition in SA banking sector. Overall, the South African banking sector competition is determined by the identified variables and the other controlling variables (i.e. inflation and the GDP per capita).

As mentioned, the main objective of this study was to find the determinants of competition in a concentrated banking sector of South Africa, hence, the variables were estimated in the model. Therefore, the study rejects the null hypothesis and conclude that the identified variables do determine competition in the South African banking sector. In overall, this study contributed in literature by specifically identifying the identified determinants of competition and will pave a way for future researchers and help policy makers in advancing their policies.

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