Competition and Financial Sector Development in Sri Lanka[1]

*W. M. Hemachandra**

Abstract

This paper analyses competition in the banks and its contribution to financial sector development in Sri Lanka during 1960 - 2010. Competition is analyzed by considering trends in the identified indicators for state banks and other banks, and it observes that there has been an intensified competition among the commercial banks. The paper recognizes that banks' competition has positively contributed to improve services and the products of the financial sector. However, it concludes that favorable developments in the financial sector are not only due to competition but also due to other macro-economic and policy changes, which cannot be separately measured and the financial sector has grown remarkably in Sri Lanka.

Keywords : Assets - Banks - Deposits - Financial Sector - Growth Liberalization - Loans

Introduction

The relationship between competition in the financial sector and associated growth is ambiguous in theory (Claessens & Luc Laevan, 2005). Measuring competition is furthermore complex. However, in the recent past there has been an intensified competition and favourable developments in the financial sector in Sri Lanka.

---

1 *The views expressed in this paper are those of the author, and do not necessarily indicated the views of the Central Bank of Sri Lanka*

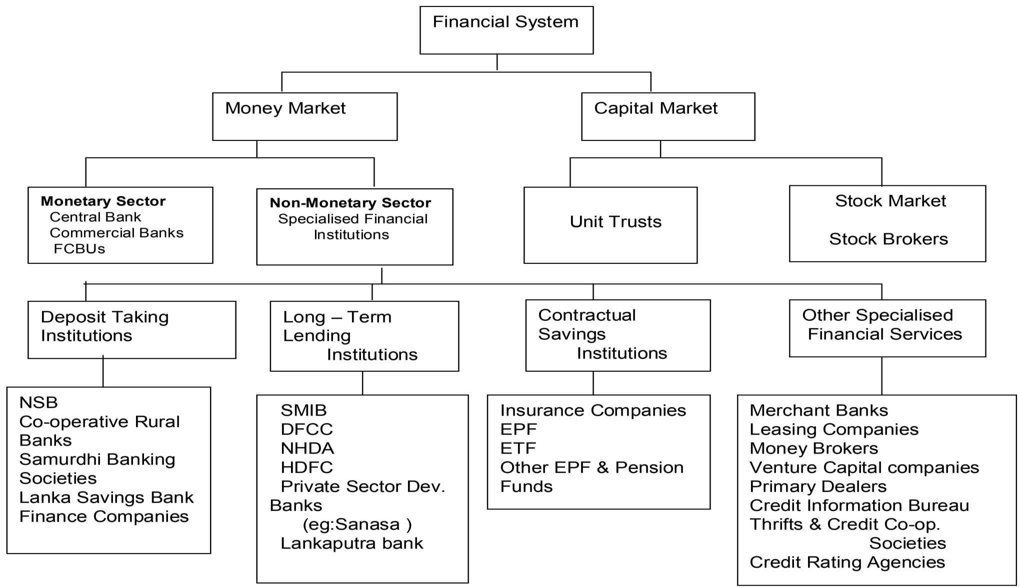
** Assistant Governor, Central Bank of Sri Lanka, Colombo, Sri Lanka*
e-mail: wmhem@cbsl.lk

Sri Lanka's financial sector has achieved its current level of development in different areas relatively to many other countries. Developments in financial institutions, markets and instruments, Improvements in the quality of financial products and innovations, efficiency in services offered by financial institutions and application of technology which were supported by proactive and timely interventions by the Central Bank and more liberalized exit/entry permissions to financial institutions have contributed to avail current status in the financial system in Sri Lanka. This paper attempts to analyze the competition and associated financial sector developments in Sri Lanka based on its historical performance.

Although the financial sector consists of many institutions, in this study only the commercial banking sector is analyzed with a breakdown of two groups, namely, state banks and other banks. State banks considered are the Bank of Ceylon and the People's Bank which have been in existent for the last five decades. Other domestic and foreign commercial banks are categorized as other banks. The period selected for this study is from 1960 to 2010, considering the availability of data.

Favourable developments in the financial sector could contribute to a faster economic growth. The Central Bank of Sri Lanka (CBSL) being the apex institution in the financial sector, many varieties of financial institutions are currently in operation in Sri Lanka. Some of these financial institutions did not exist in Sri Lanka prior to the 1960s. Due to liberalization policies introduced after 1977, the economy was open for a wider array of financial institutions to function in the country under a more open exit/entry policy. Financial liberalization for economic growth was advocated by Mckinnon (1973) and Shaw (1973) during 1970s. In Sri Lanka the financial sector institutions prior to liberalization consisted of only a few types of institutions. However, the financial sector at present consists of Licensed Commercial Banks, Licensed Specialised Banks, Registered Finance Companies, Primary Dealers, Leasing Establishments, Merchant Banks, Savings and Loan Associations, Venture Capitals, Unit Trusts, Contractual Serving Institutions such as Employees Provident/Trust Funds and Insurance Companies. These institutions form a competitive financial market in the country while providing a variety of domestic and international financial services which are presently available in many other countries. However, it is difficult to separate the growth in services and products that took place due to competition and that of due to other reasons.

Table 1: Present Structure of Financial Institutions in Sri Lanka



NSB = National Savings Bank SMIB = State Mortgage & Investment Bank
DFCC = Development Finance Corporation of Ceylon EPF = Employees' Provident Fund
ETF = Employees' Trust Fund HDFC = Housing Development Finance Corporation

Most of the institutions given in the boxes at the bottom of Table 1 have emerged after the implementation of economic liberalization policies in 1977 which led to more product differentiation, more access to financial services and greater stability. Prior to those reforms most of the institutions indicated in the boxes in the Figure did not exist. As a result of the increase in the number of financial institutions, the competition among them has intensified during the recent decades. For instance, in 1960 there were only 2 domestic commercial banks and 6 foreign commercial banks. By 2010 there were 12 domestic banks and 12 foreign banks, which undoubtedly contributed to increase the competition. Studies have found that entry of foreign banks improves competition and makes domestic banking system more efficient (Claessens, et al., 2001). The branch network of these banks has also expanded rapidly from 28 branches for domestic banks and 17 branches for foreign banks in 1960 to 2,329 branches and 46 branches respectively for domestic and foreign banks in 2010. Wide spread bank branch net-works improve competition (Northcott, 2004). The total number of commercial bank branches and other outlets operating was 5,164 in 2010. The increased number of bank branches has reduced the number of persons served by a bank branch dramatically from 219,911 in 1960 to 8,696 in 2010. These developments in the institutional sector have led to promote competition in attracting deposits from the general public and the services offered by financial institutions based on deposits they mobilized.

Measurements of Competition

Several indicators can be used to measure competition. There is a large number of empirical studies on bank competition. There are traditional and non-traditional ways of measuring competition . This study uses several non-traditional methods to measure the degree of competition among banks. Some studies have found that more concentrated markets are more collusive (Goldberg & Rai, 1996) and (Smirlock, 1985) as quoted in (Leuvensteijn et al., 2007) and bank concentration is proxied by taking the market shares measured in terms of total assets of the largest banks (Brewer & Jackson, 2004) Some of the indicators used in the literature are empirical while others are based on factual analysis. (Saha & Sensarma, 2009) have studied the competition between private banks and public banks focusing on deposit and loan markets. In this analysis, the following trend indicators are used for the period under reference to study the pattern of competition.

(a) Trends in deposit base of state banks in comparison to other commercial banks.

(b) Trends in loans and advances provided by state banks as against that of other commercial banks.

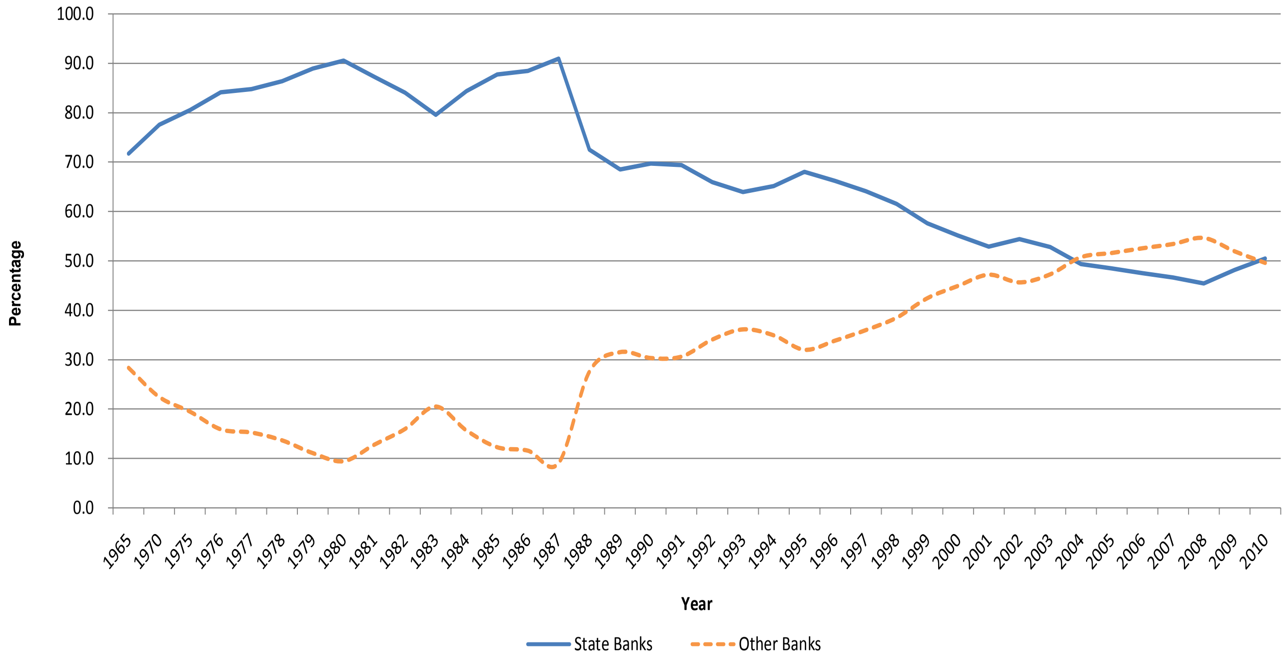
(c) Trends in asset composition of state banks as against that of other commercial banks.

The Bank of Ceylon, which is a state bank, has been functioning in Sri Lanka since 1939 and it was nationalised in 1961. In addition to that bank, People's Bank was established in 1961 as another state bank. These two banks held more than 70 per cent of deposits of the banking sector in 1965. As other banks started functioning in the country, the proportion of activities of these state banks has declined during the period up to 2010. Hence, in this study it is assumed that this was due to the competition from other banks established in the country. The market for deposits, loans and assets has been captured by other banks in the country as analyzed below.

(a) Trends in the Deposit Base

As depicted in (Figure 1), the share of deposits held by state banks declined from 1987, showing that private sector banks have acquired a higher market proportion towards 2010, confirming that the competition from other banks has increased. The state banks held more than 90 per cent of total deposits in 1987. This declined to 50 per cent in 2010. The state banks' share may have been acquired by new banks such as the Regional Rural Development Banks (RRDBs) which were set up after 1985 and new private banks which started functioning after 1987.

Figure 1: Market Share of Deposits of State Banks and Other Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL & Annual Reports of Respective Banks

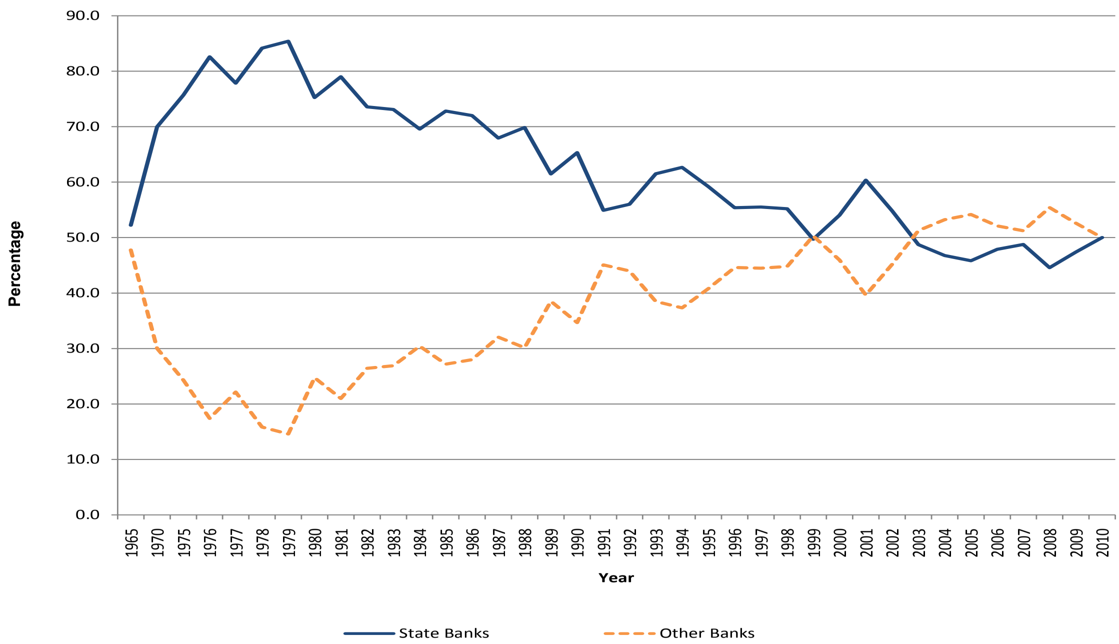
(b) Trends in Loans and Advances

The proportion of loans and advances granted by state banks declined from 1975. The share of loans and advances held by state banks declined from 85 per cent in 1979 to 50 per cent in 2010. During 1970 to 1977 the controlled regime of the government encouraged using state banks by government institutions and the public following which activities and loans/advances granted by state banks have increased. Liberalization policies implemented after 1977 encouraged entry of domestic private banks and foreign banks which have contributed to increase the share of loans and advances by other banks. The open economic policies have resulted in increase in activities in many areas of the economy following which a credit expansion by the private sector banks has taken place. As shown in Figure 2, the most remarkable feature in the trend in the share of the loans and advances of the private sector banks was the bypassing of the share of loans and advances of state banks since 2003, implying that competition has further intensified.

(c) Trends in Assets held

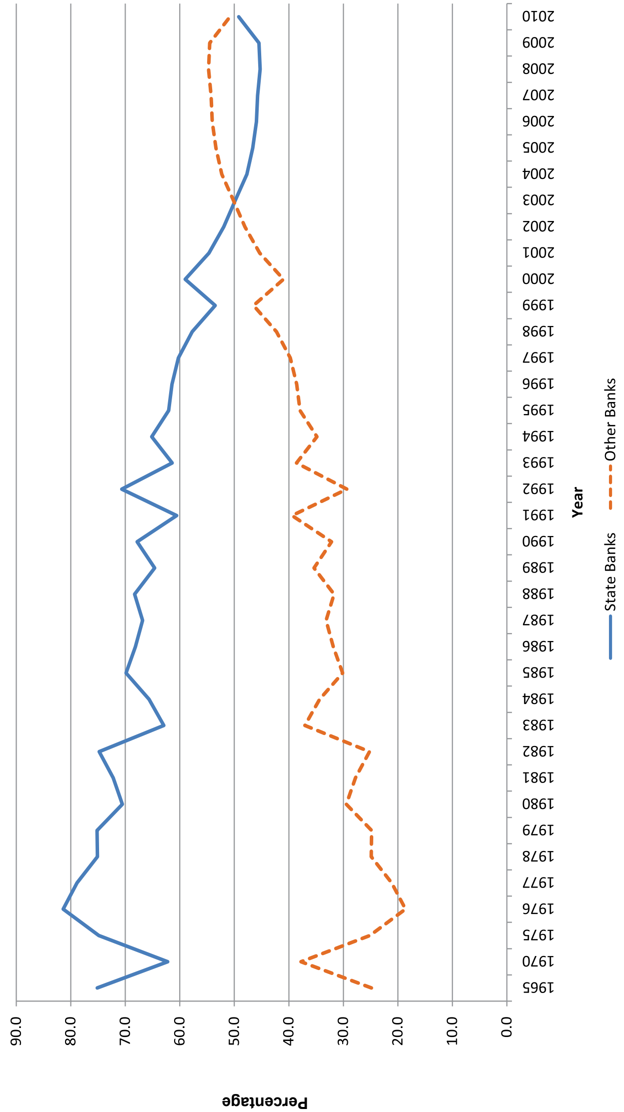
Similar to the trends in loans and advances, the proportion of assets held by private banks has been increasing since 1977. The share of assets held by state banks has declined from 81 per cent in 1976 to 49 per cent in 2010. This is clear from the fact that whenever loans and advances, which form a part of assets, are decreasing total assets also may be decreasing. The decline in the share of assets of state banks, as opposed to private banks, is clearly seen (Figure 3). Similar to trends in loans and advances, in the asset base to the private sector has further exceeded the proportion of assets held by state banks from 2003 onwards. Government policy changes too followed by the increase in private sector banking activities have contributed to increase assets held by other banks.

Figure 2 : Market Share of Loans of State Banks and Other Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL & Annual Reports of Respective Banks

Figure 3: Market Share of Assets of State Banks and Other Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL & Annual Reports of Respective Banks

It can be concluded that as the market for private banks has increased, the proportion of the market for state banks has declined and it has been captured by private banks showing that the competition has increased. Based on these trends, it can be concluded that competition among the banks in Sri Lanka has been increasing for the last five decades.

Results of Competition

Increased competition in the financial sector influences the access of firms and households to financial services and external financing thus affecting economic growth. Competition promotes institutions and their services, rendering wider benefits to a country. Financial institutions with integration to international markets currently offer a wide range of services compared to a limited number of services that had been offered 50 years ago. The key driver for these developments was the opening of the financial sector by allowing international banks to operate in the country with the initiation of the CBSL and the Government contributing to improve institutional competition and sophistication of the industry products. The horizon for services offered by financial institutions, especially banks, has expanded covering many areas. Services that were limited to mobilize savings, lending and money transfers have been replaced by a broad range of services with a wider domestic and international coverage. The degree of competition in the banking sector has an effect on their services and quality of products (Klein, 1971). Technological developments associated with those services have enabled financial institutions to improve efficiency and quality of services offered to general public. Table 2 indicates the variety of services currently offered by the banking sector as compared to those offered at the time of independence. Financial services presently available are not limited to typical banking services such as mobilizing savings and granting loans, but cover a wider variety of services including financial advice and legal services.

Table 2: Services Offered by the Banking Sector

At Independance	***Today***	
Exchange Banking	**Domestic Banking**	**International Banking**
Mobilising Savings	Mobilising Savings	Mobilising Foreign Savings
Loans	Loans and Advances	Loans in Foreign Currency
Transfer Payments	Financial Advice	Financial Advices
Money Transfers	Payment Systems	Legal Services
	Money Transfers	Electronic Fund Transfers
	Standing Orders	Foreign Trade Financing
	Trustee / Administrative Services	Mail / Telegraphic Transfers
	Legal Services	Inward Remittances
	Electronic Fund Transfers	Guarantees
	Corporate Services	Status Reports
	Cheque Imaging System	

Source: Compiled b the Author

As almost all banks currently offer these services, there is heavy competition among them. The competition is seen from the efforts taken by the financial institutions to publicize their sophisticated products through aggressive advertising and other means.

The previous prototype products and services for mobilizing savings and lending by the financial institutions are presently equipped with modern technology and multiple characteristics. All banks are competing to introduce new schemes of savings and lending to meet the needs of different segments of the market. These segments may vary with age, gender, type of profession of the clients, level of income, type of necessity, tenure, size of business, degree of technology, etc. A number of innovative schemes catering to these different segments can be found in the operations of the financial institutions. The benefits offered under these services vary from one scheme to another. Attaching new incentives such as lotteries, gifts and free baskets of goods for a specific period, the schemes operated by financial institutions have been attractive. As a result of these competitive schemes, the terms for depositors and that for lending and services have become competitive. Awareness among the general public about these schemes are also wider and therefore, attempts to offer competitive terms and the services are on the rise. For instance, during the 1960's financial institutions, especially the banks, offered their services during a particular limited time in a day from around 9.00 a.m. to 1.00 p.m. However, at present there are banks offering services round - the - clock and during seven days of the week. New schemes such as phone banking and internet banking which provide facilities for savers / borrowers operate throughout the day. Further, there are many schemes operated by the banks to offer services at the door steps of the households. Hence, the competition among financial institutions has created time saving practices for their clients at the cost of the institutions. These have brought forward a new thinking to other customer oriented service providers, failing of which, as may be known by financial institutions, may lead to collapse their businesses.

Competition has promoted usage of new financial instruments on competitive terms. Among the instruments, there are credit cards, debit cards, internet banking and phone banking. The volume and value of transactions of these instruments have grown rapidly. These instruments which provide round-the-clock services were not in use prior to liberalization policies were introduced in the country.

Time and the labour used to complete a banking transaction in the past have been saved by the operations of these instruments which are evident from the increased volume and value of cards and transactions. In Sri Lanka there were 13 financial institutions issuing credit cards while 18 institutions were issuing debit cards in 2010. Internet and mobile banking facilities are offered by 9 financial institutions. The same institution may not necessarily issues both instruments.

Since the number of financial intuitions which offer these services and the customers who use the systems are higher, it may be concluded that there is a competition. Table 3 shows the volume and value of these services as at end of 2010. These services were not in existence in Sri Lanka, or in any other country, for that matter, at the time of gaining her political independence partly due to the fact that these products were not available even amongst the global products.

Table 3: Usage of Financial Instruments

		At Independence	**2010* Volume'000 Value Rs Mn.**	
(a)	Credit Cards in Use	-	16,450	74,917
(b)	Debit Cards in Use	-	5,340	15,768
(c)	Internet Banking Transactions	-	4,319	268,934
(d)	Tele Banking/Mobile Banking Transactions	-	229	5,095
(e)	ATM Transactions	-	98,483	612,668

* Volume of Transactions and their Values
Source: Compiled by the Author

Competition has also promoted usage of technology by financial institutions for which the development in IT industry is partly responsible. The necessity of promoting international banking practices along with globalization has encouraged usage of modern IT systems for the financial institutions. At present, all commercial banks use computers with required infrastructural developments for their operations. The staffs of financial intuitions are well trained locally and internationally to handle these systems. Globalization has necessitated the application of new technology as well as capacity building processes for institutions. The current IT systems were not in existence prior to liberalization policies that were implemented in Sri Lanka during latter part of 1970s. At present, there are local systems as well as systems linked to internationally operated payments and settlement systems. Sri Lanka Interbank Payment System (SLIPS), Credit and Debit Card payments, Phone / Mobile / Tele-banking / Internet Banking, and Automated Teller Machines (ATMs) for retail transactions and Real Time Gross Settlement System (RTGS) and Cheque Imaging and Truncation System for bulk transactions were available in the country by 2010. New technology has facilitated the financial institutions to offer global services round-the-clock, satisfying the requirements for international transactions and providing services in response to increased demand for them. Systems such as Telebanking/Mobil banking, ATMs have been adopted by financial institutions competitively due to technological developments. In Sri Lanka, volume and value of ATM transactions in 2010 amounted to Rs. 98 million and Rs. 613 billion. respectively (CBSL). There were 19 financial institutions that offered ATM services to customers using 2,221 machines in the regions of the country in 2010. The ATM services provide an uninterrupted service for customers throughout the day thus saving their time, labour and cost of obtaining such services. The financial intuitions cannot be complacent in providing these services due to competition which has promoted their usage. Technology has led to improve the service quality maintaining accuracy and efficiency. The transactions like cheque clearance that had been previously carried out by financial institutions spending a number of days can now be performed instantly by pressing a few computer buttons or by a telephone call without physically being present at a bank counter which was the practice during 1960s. Competition among financial institutions has encouraged the use of technical systems which are available at their peer institutions and groups locally and internationally. The management of financial institutions are aware of the potential loss of their business if they fail to apply technology, as competition among institutions is growing amidst the increased customer awareness of those services.

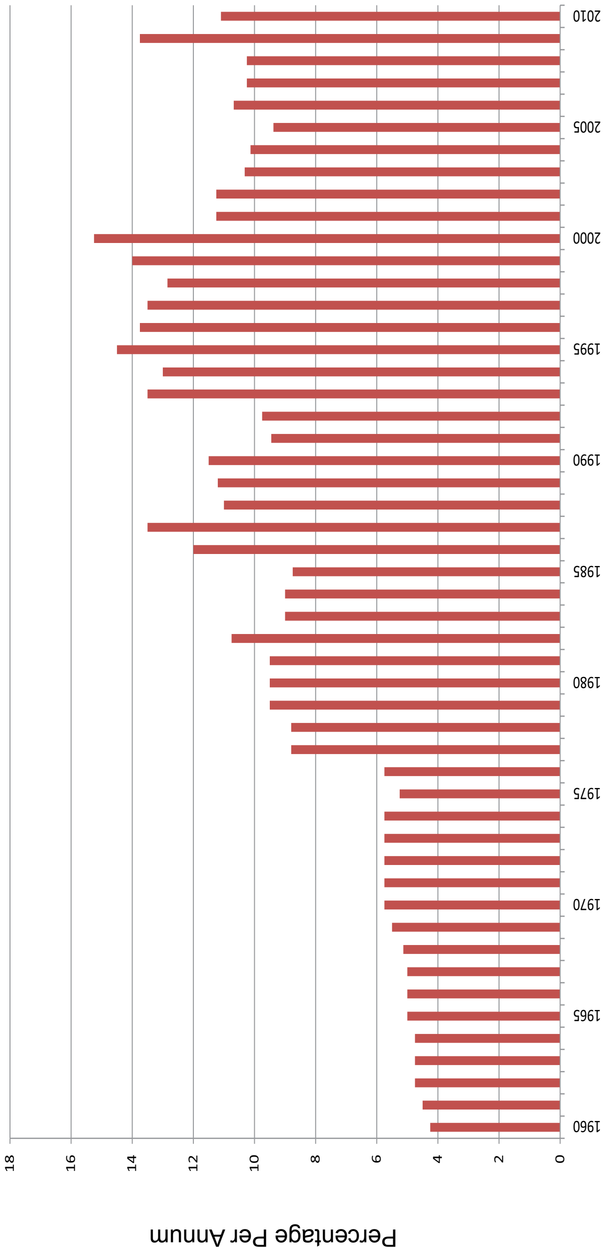
Since the financial institutions are competing for scarce resources, they have attempted to reach to the grass root level. Evidence shows that the informal financial sector activities have declined over time in place of organized sector financial businesses in the rural sector. This has led the public to use organized financial institutions more for their day to day financial requirements. Expansion in branch net-work, improvements in awareness, technological developments, improvement in communications have encouraged the usage of organized sector financial institutions for the needs of the public. For instance, according to Consumer Financial Surveys conducted by the CBSL, the percentage of loans obtained from the organized financial institutions by individuals has increased from 14.3 per cent in 1963 to 61.1 per cent in 2003 / 2004. The same percentage for commercial banks has increased from 7.8 per cent to 35.9 per cent during the same period. Usage of money lenders, friends, relatives and others for financial needs of the individuals have declined considerably in place of expansion in the activities of organized sector in Sri Lanka, according to the Consumer Finances and Socio Economic Survey Reports of the Central Bank of Sri Lanka. They are partly due to competitive financial activities initiated and developed by financial institutions and therefore competitive financial business has prompted organized financial institutions to go to grass root level thus expanding the financial deepening in the country.

The decline in cost of funds is one of the positive developments expected when competition is increased. It has found in some studies that stronger competition leads to lower spreads (Leuvensteijn et al., 2008). However, in Sri Lanka this has not taken place as seen from the cost of funds and the revenue of the funds depicted in Figure 3. Difference between deposit rates and lending rates have widened over time in contrast to what could be expected from the competition. This may have been due to a fact that the cost of the financial institutions is high and therefore, it does not permit to reduce the lending rates followed by reduction in margins.

Contributory Factors for the Performance

The developments that have taken place in the financial sector have not been only due to improvements in the competition. Other supportive factors such as technological developments, proactive role of the regulators, infrastructure development and the Government support have also contributed to developments in the financial sector.

Figure 4: Interest Margin of the Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL

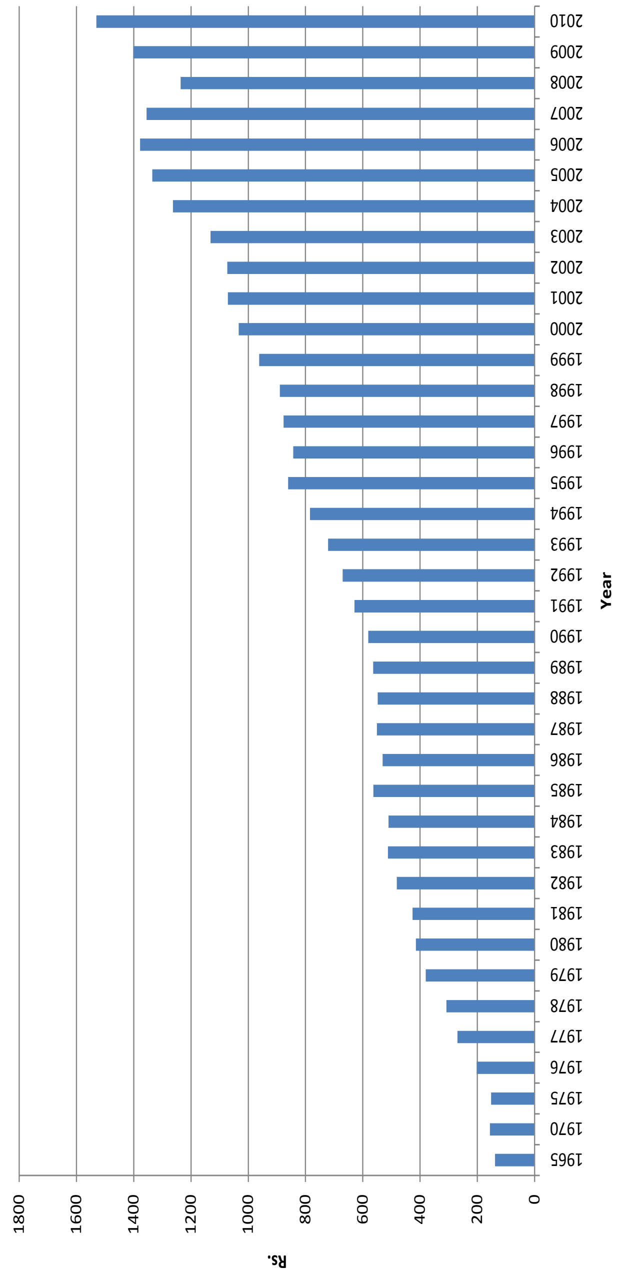
The role of the Government and the Central Bank has provided the necessary grounds for the financial institutions to foster competition. As the financial sector regulator, the CBSL has been able to maintain a trouble-free regulatory framework which is a requirement to protect financial institutions from adverse domestic and international turbulences. The CBSL, being proactive, has maintained the system stability so as to protect competition among financial institutions. In this process, the CBSL has introduced the necessary amendments to legislation thus protecting the financial market from breakdowns. Amendments were introduced to several laws while introducing new legislation that was required to cope up with the new challenges emerged around the world. Based on these laws the CBSL has issued guidelines and directions to the financial market as and when necessary. These have helped Sri Lanka's regulatory system to be on par with international regulatory systems and to protect the financial institutions from adverse developments such as financial crises. Current macro-economic conditions and the prevailing peaceful environment have provided a conducive environment to maintain competition among the market players.

The CBSL has also provided an efficient payments and settlement systems in the country. Systems such as Real Time Gross Settlement System (RTGS) and Scripless Securities Settlement System (SSSS) have created a conducive environment to complete payments and settlements promptly and accurately. These systems facilitate financial institutions to maintain competition.

As a result of financial sector developments there are notable improvements in the key macro-economic variables. Increasing activities of commercial banks which have been partly due to improvements in competition encouraged customer deposits of the banks. As depicted in Figure 5, the real per capita deposits of commercial banks have increased from Rs.138 in 1965 to Rs.1,530 in 2010 showing that together with improved economic activities, the competition of the banks has promoted deposits in the organized sector.

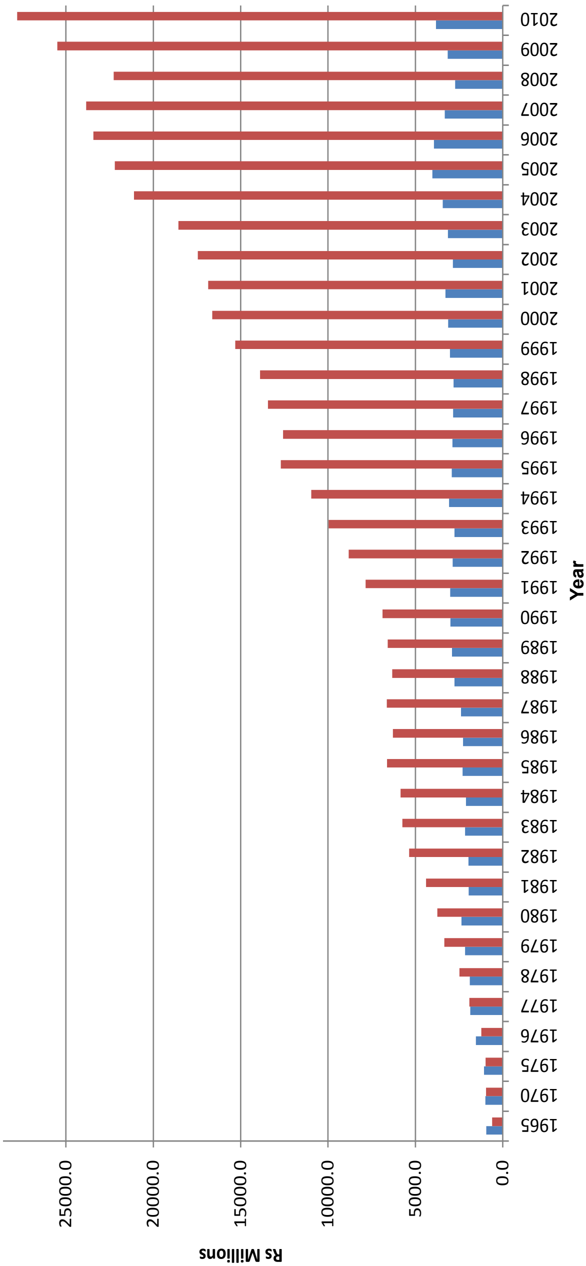
Total real deposits of commercial banks have grown by more than 28 times from Rs. 1,546 million in 1965 to Rs. 31,602 million in 2010. Trends in total real demand deposits and real time and savings deposits are depicted in Figure 6.

Figure 5 : Real Per Capita Deposits of Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL

Figure 6:Total Real Deposits of Commercial Banks



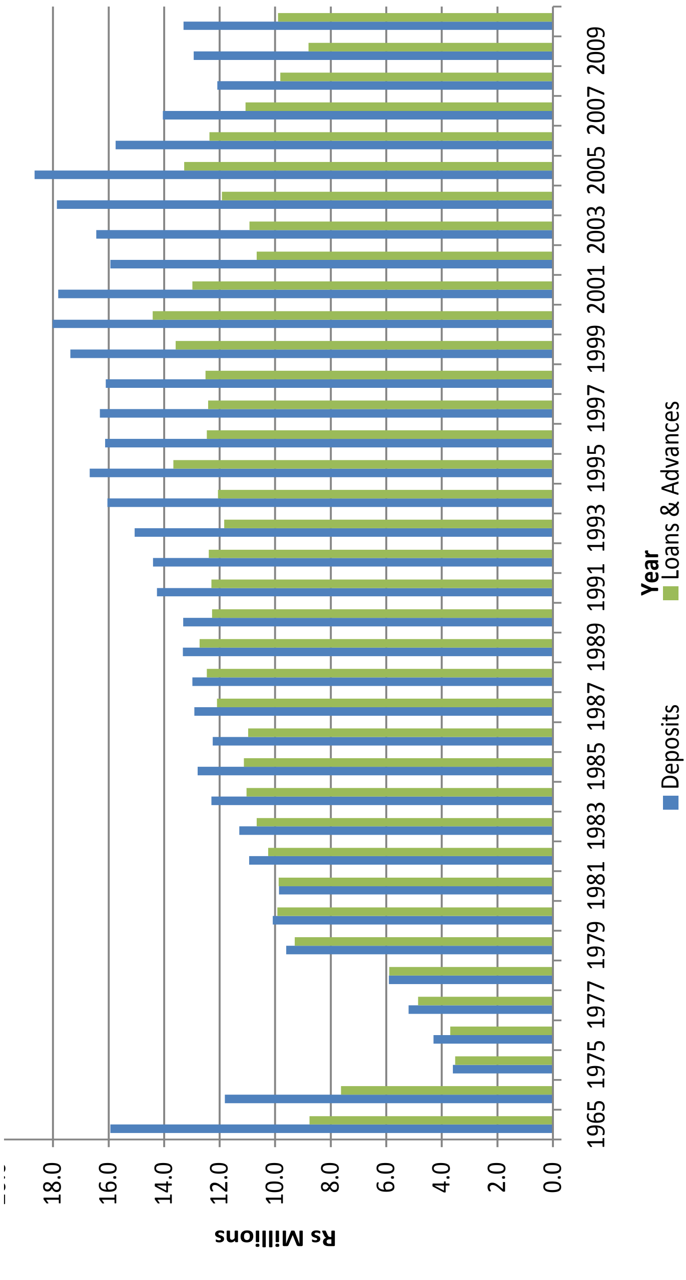
Source: Compiled by the Author, Data from Annual Reports of the CBSL

Along with the expansion of the bank branch network, deposit mobilisation and lending of banks have also increased. The increased activities of banks are reflected in the increasing trends in deposits mobilised and credit granted by bank branches. As depicted in Figure 8, real deposits per branch have grown from Rs.3.6 million in 1975 to more than Rs.13.3 million in 2010 with a peak of Rs. 18.7 million in 2005. Similarly, the real loans and advances granted by a bank branch have also increased from Rs.3.5 million in 1975 to more than Rs.9.9 million in 2010. All these positive results are a part of the development of the financial sector. The competition among financial institutions has partly contributed to increase in deposits collected and loans and advances granted by bank branches. Total real deposits consisting of demand, time and savings deposits of commercial banks amounted to Rs.31.6 billion in 2010 which is an increase of more than 20 times as compared to 1965.

Total real assets of commercial banks have increased by more than 22 times during the period under reference. Total real assets held by commercial banks increased from Rs.1,814 million in 1965 to Rs.41,491 million in 2010 as depicted in Figure 8. Although it is clear that these developments have taken place due to progress in overall economic activities in the economy, some contributions may have come from the competition.

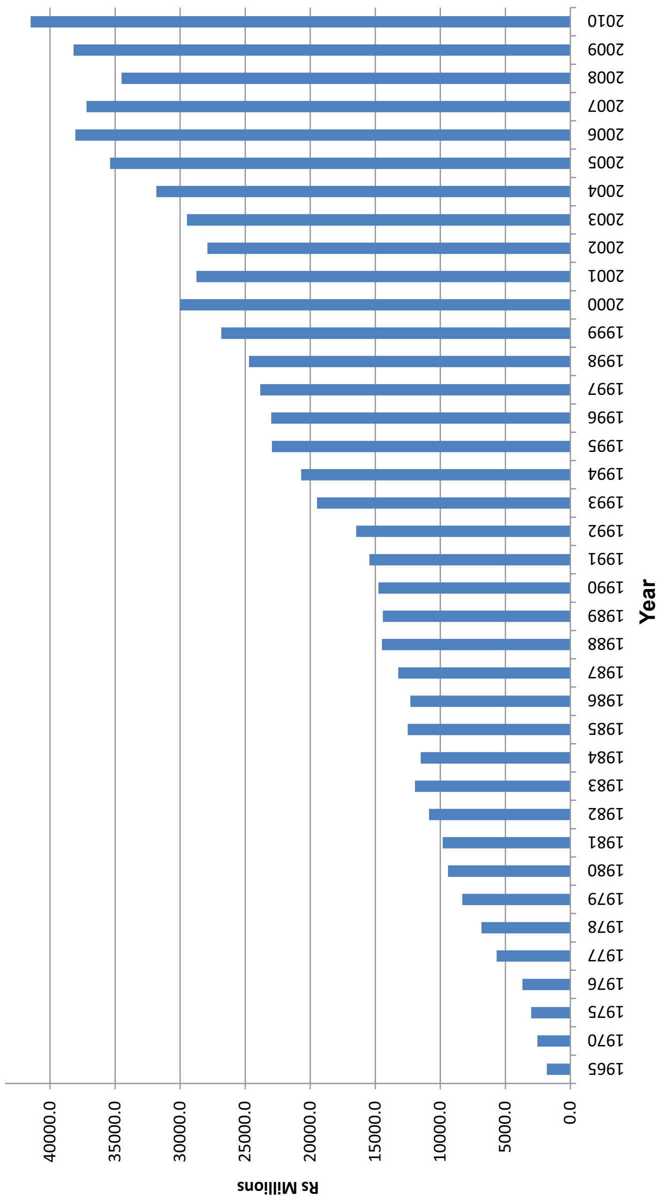
Numerous employment opportunities have been created during the recent past as a result of developments of the financial sector. It is rather difficult to guage the total employment created by financial sector due to absence of sector-wise data. However, as a proxy to show the increase in employment generated by the financial sector the employment opportunities provided by state banks can be used. The employment in the state banks has increased from 8,018 in 1975 to 16,603 in 2010. There can be similar increase in employment opportunities in the other banks as well. The expansion in financial institutions, their branch network and activities have contributed to this increase, although the contribution to this from the competition along cannot be measured.

Figure 7: Per Branch Real Deposits and Loans of Commercial Banks



Source: Compiled by the Author, Data from Annual Reports of the CBSL

Figure 8 : Real Assets of Commercial Banks



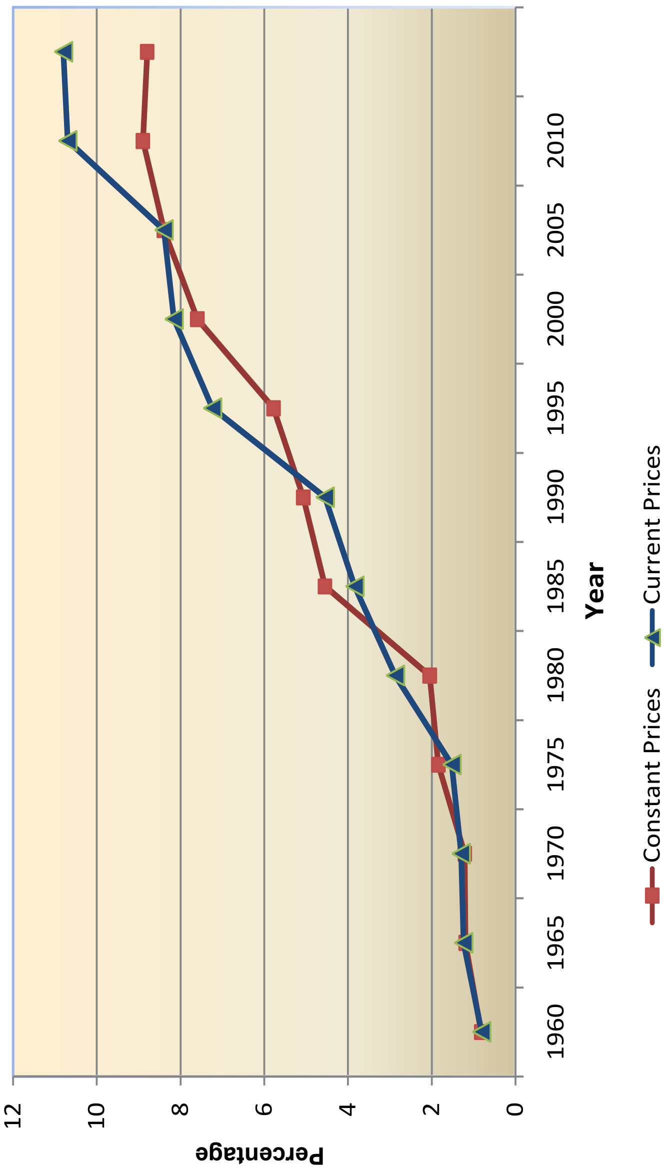
Source: Computed Using Data from Annual Reports of the CBSL

As a result of the progress of overall economic activities including competition, there is a growth in the financial sector during the reference period. The financial sector has well contributed to economic growth in the recent past which is seen from the percentage of the financial sector contributed to Gross Domestic Production (GDP) as depicted in Figure 9. In real terms, the financial sector contribution to GDP has increased from 1.2 per cent in 1965 to 8.9 per cent in 2010. Although this growth may include increase in profits and dividends of financial institutions, the upward trend can be considered as a positive growth recorded by the sector during the reference period. The growth in the financial sector has been a combined result of competition and other developments over time.

There are untapped areas for financial institutions to improve competition, one area being the capacity in the unorganised sector. Although due to increase in formal banking activities in the rural sector, the unorganised financial activities have declined over time according to the Consumer Finances and Socio Economic Survey Reports of the Central Bank of Sri Lanka, the capacity available in the rural areas shows that there is further room for financial institutions to improve their activities. Although the state banks and some other domestic private banks have made a remarkable contribution to improve financial deepening in the grass-root level, there is still room in the unorganized sector for the banks to expand their activities. Improving awareness among the public about the formal financial sector activities would demand for more activities of the formal financial institutions at the grass root level.

The attention of the financial institutions has to be paid to improve not only the domestic market competition but also the international competitiveness in opening branches, extending services to international community including Sri Lankans working abroad, developing financial instruments, developing skills and further acquiring talents and utilizing technology. It is no doubt that Sri Lanka's financial institutions have to face international competition when they attempt to improve their activities beyond the boundaries of the country.

Figure 9: Financial Sector Contribution to GDP



Source: Compiled by the Author, Data from Annual Reports of the CBSL

Conclusion

The Sri Lankan financial sector, which has developed specially after 1977, when the liberalization policies were implemented, consists of many varieties of financial institutions available in many other countries. This paper analysed the Competition among financial institutions after 1960s along with the financial sector achievements in Sri Lanka. Although there are many indicators that can be used to measure competition, this study has used three indicators to observe competition among commercial banks in Sri Lanka. The indicators used are trends in the share of deposits, share of the loans and advances and that of assets held by state commercial banks and other commercial banks in the country. By examining the trends of these indicators it concludes that there has been an intensified competition among banks in Sri Lanka.

This study also reveals some favourable developments taken place due to competition in the financial sector. It identifies that improvements in banking services, procedures used by banks, new instruments and markets, technology, service quality and accuracy, spread to grass root levels as some of the favourable developments due to intensified competition. However, it also points out that reduction in the margins of cost of funds has not taken place, as expected from an intensified competition. According to the study favorable developments in the financial sector have taken place not only due to competition but also due to a series of other factors such as government and regulatory interventions, policy changes, infrastructure and technological improvements, the contributions of which cannot be separated. As revealed in the study, the financial sector has grown remarkably in Sri Lanka while contributing to growth in employment and GDP. It is also highlighted that there is enough room in the unorganised and international markets for the banking sector to improve competition.

References

Bank of Ceylon (Various years). *Annual reports.* Colombo: Author.

Brewer, E. & Jackson, E. W. (2004). The risk–adjusted price–concentration relationship in banking. Working Paper Reserve Bank of Atlanta, Atlanta, no. 2004/35.

Central Bank of Sri Lanka (Various years). *Annual reports.* Colombo: Author.

Central Bank of Sri Lanka (Various years). *Consumer finance and socio-economic survey reports, Part I and Part II*. Colombo: Author.

Central Bank of Sri Lanka (1988). Economic progress of independent Sri Lanka.Colombo: Author.

Claessens, S., Demirgiiu-Kunt, A., & Huizinga, H. (2001). How does foreign entry affect domestic banking markets?. *Journal of Banking and Finance, 25*, 891 - 911.

Claessens, Stijn. (2009). Competition in the financial sector: Overview of competition policies. March, IMF working paper, WP/09/45, Washington D.C: International monetary fund.

Claessens, Stijn., & Luc, Laevan. (2005). Financial dependence, banking sector competition and economic growth. *Journal of European Economic Association, 31*, 179 - 201.

Claessens, Stijn., Asli Demingue-Kunt., & Harry Huizinga, (2001). How does foreign entry affect domestic banking markets?. *Journal of Banking and Finance, 25*, 891 - 911.

Goldberg, L.G., & Rai, A. (1996). The structure-performance relationship for European banking. *Journal of Banking and Finance 20*, 745 - 71.

Hemachandra, W.M., (2005). Financial deepening and its implications for the Sri Lankan economy. Colombo: Central Bank of Sri Lanka.

Klein, M. (1971). A theory of the banking firm. *Journal of Money, Credit, and Banking, 3*, 205 - 218.

Lerner, A.P. (1934). The concept of monopoly and the measurement of monopoly power. *Review of Economic Studies, 1*(3), 157 - 175.

Leuvensteijn, M.V., Bikker, J.A., Adrian A.R.J.M., Rixtel, V., & Sorensen, C.K. (2007). A new approach to measuring competition in the loan markets of the Euro area. European Central Bank working paper series no.2007/768.

Leuvensteijn, M.V., Sorensen, C.K., Bikker, J.A., & Rixtel, A.V. (2008). *Impact of bank competition on the interest rate pass-through in the Euro area. Retrieved from* http://ssrn.com/abstract=1319325

Mckinnon, Ronald. I. (1973). Money and capital in economic development. Roking Institute.

Northcott, C.A. (2004). Competition in banking: A review of the literature. Working Papers, Canada: Bank of Canada.

People's Bank (Various years). *Annual reports.* Colombo: Author.

Saha, B., & Sensarma, R. (2009). State ownership and bank competition: A mixed oligopoly approach.

Shaw, Edward S. (1973). Financial deepening in economic development. Oxford: Oxford University Press.

Smirlock, M. (1985). Evidence on the (None) relationship between concentration and profitability. *Journal of Money, Credit and Banking, 17* (1), 69 - 83.