

IMPACT OF OWNERSHIP STRUCTURE ON BANK PERFORMANCE; EVIDENCE FROM SRI LANKA

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Abstract

The banking sector in Sri Lanka plays a dominant role in the financial system that facilitates the development of the economy. The participation of private banks has been increased together with a series of financial reforms that have substantially reshaped the banking system in the country. This study investigates the impact of private and state ownership on banks' performance efficiency based on a balanced panel of 11 commercial banks for the period of 2005 to 2014. The study has employed the Minitab and SPSS statistical software to analyze the data calculated by using ten efficiency ratios. The findings revealed that state owned banks have outperformed private banks in return on equity, expenses to income, provisions to total loans, overhead cost and non-interest revenue ratios while private banks have outperformed in interest margin, non-performing loans, return on assets and employment cost ratios. These results signify that, the level of efficiency of state and domestic private banks does not significantly vary across these two ownership types. The mean value of the differences in most of the ratios where domestic private banks have recorded a higher level of efficiency compared to state owned banks is not very significant. However, in the cases where state owned banks have recorded a greater efficiency level, the differences are significant. Therefore it indicates that state banks have outperformed domestic private banks in several aspects.

Keywords: Performance efficiency, Private Banks, Public Banks

1. Introduction

Banks play a central role within the financial system as they have the capacity to provide liquidity to the entire economy. Banks are also responsible for providing payment services, thereby facilitating all entities to carry out their financial transactions. On the other hand, banks can create vulnerabilities of a systemic nature, partly due to a mismatch in maturity of assets and liabilities. Therefore, the soundness of banks is important, as it contributes towards maintaining confidence in the financial system. and any failure may have the potential to impact the activities of all other financial and non-financial entities. The banking sector in Sri Lanka is comprised of 25 Licensed Commercial Banks (LCBs), of which 12 are foreign and the rest is domestic commercial banks. LCBs dominated the financial

system with a market share of 49 percent of the entire financial system's assets and 65.5 percent of the banking sector's assets (CBSL, 2014). The financial system of Sri Lanka has been subjected to a series of reforms with the initiation of economic and financial reforms since late 1970s (Edirisuriya, 2007) and further strengthened since the early 1990s. These reforms allowed foreign banks to compete with state owned and private sector financial institutions in varying degrees. Mainly due to its practical, as well as theoretical, importance, the relationship between the ownership characteristics and the performance of financial intermediaries like banks in particular has become the subject matter for numerous studies in the recent decades (Yildirim & Philippatos, 2007).

Most of the researchers investigated the performance efficiency between state, private and foreign owned banks (Sathye, 2003; Chang, Hasan, & Hunter, 1998; De Young & Nolle, 1996; Lensink & Naaborg, 2007; Thilakweera, Harvie & Arjomandi, 2014). While some researchers argue that state-owned banks perform relatively better than their private counterpart (Sathye, 2003) some argue the contrary (Bhattacharyya, Lovell, & Sahay, 1997; Clarke, Cull, Martinez, & Sanchez, 2003; Demircuc-Kunt & Huizinga, 1999). In contrast, some authors state that the influence of ownership is different in developing countries to that of developed countries (Demircuc-Kunt & Huizinga, 1999). However, fewer studies have undertaken to investigate the ownership-performance relationship in developing countries and particularly very few have been done to assess the impact of ownership on the efficiency of Sri Lankan banks. As a result of the conflicting predictions of existing literature on the ownership-performance relationship, it is difficult to come up with the specific relationship between the efficiency in the performance and the state versus domestic private ownership of banks. There is no straightforward empirical evidence to suggest that private ownership is better. Therefore, the primary purpose of this study is to determine the efficiency variations in the performance of private and state licensed commercial banks in Sri Lanka. This study utilizes 10 different efficiency ratios to measure the efficiency of eleven LCBs comprised with two state banks and nine private banks over the period of 2005 – 2014. The SPSS and MINITAB statistical software is used in analyzing the data gathered through ratio calculations. The results confirmed that the level of efficiency of state and domestic private banks is not significantly varied across these two ownership types.

The remaining of this paper is organized as follows: The second section discusses previous research findings. A third section explores the data and methodology used in deriving the output. Empirical results analysis is in the fourth section, and the conclusion of the study is presented in the final section.

2. Literature Review

2.1 Theoretical Background

The study is based on principal agent framework and the public choice theory which highlights the importance of the extent to where management is constrained by capital market discipline. Hence, the management actions are constrained by capital market discipline and consequently play a role in determining the performance of firms (Altunbas, Evans, & Molyneux, 2001). Therefore, public enterprises are expected to perform less efficiently than private enterprises due to various reasons, such as lack of capital market discipline, and mainly due to the political influence faced by the management of state-owned firms. Miles (1994), in his study, questions the hidden assumption that the managers

in privately owned banks are monitored and disciplined effectively by their shareholders whilst managers of foreign banks enjoy some freedom to follow a personal agenda.

At the same time, the presence of an effective monitoring mechanism enables the private enterprises to achieve their owners' objectives, but the absence of such a kind of clear and effective monitoring system prevents the state owned enterprises from achieving their objectives (Figueira, Nellis, & Parker, 2009). Deregulation and privatization are commonly practiced in developing countries' financial sector institutions that are under strict regulatory controls. Because of these initiatives, managers of these financial institutions are forced to make their enterprises more efficient in order to face the increased competition and capital market discipline.

2.2 Empirical Background

Saha and Ravisankar (2000) based their study on the Indian banking sector, have identified that the public sector banks in general have gained efficiency during the period of 1992 to 1995. The result of their study can be largely attributed to the increased competition resulted from the financial reforms initiated since 1992. In addition, Bhattacharyya et al. (1997) pointed out in their study that the state owned Indian banks are the most efficient form of banks operated in the country. Sathye (2003), based on his study on Indian banks during 1997 to 1998 suggests domestic private banks to be less performing than state owned banks. According to him, privately owned banks are unable to realize the benefits in the short term since they are still operating at their expansionary stage and have to incur a very high fixed cost at this stage. Kumar and Gulati (2009) identified that technical efficiency of public sector banks has been slightly increased. One common finding that can be observed in the studies undertaken based on the Indian banking sector is that most of the time, the findings in the majority of the Indian banking studies claim that publicly owned banks are superior to their private counterpart.

Cornett, Guo, Khaksari and Tehranian (2010) identified that government owned banks are significantly less efficient than the private banks. As to them, the performance of government owned banks during the Asian economic crisis in 1997 and 1998 is greater than the private banks, and these variances were severe in the countries where there is frequent government intervention in the banking system.

Mian (2003) identified that the effect of state ownership of banks typically exists in developing countries, but in the case of developed countries, it reveals mixed results. Based on his study conducted using a sample of 250 state owned commercial banks from 100 emerging economies, he confirmed that state owned banks under-perform domestic private banks in developing economies. According to Altunbas et al. (2001), in the German banking industry, there is little evidence to suggest that privately owned banks are more efficient than their public sector counterparts. According to Micco et al. (2007) when compared to private counterparts, state owned banks in developing countries operate with lower profitability and higher cost. Additionally, they have observed a strong correlation between ownership and performance in developing countries and no correlation in industrial countries.

With regard to the Sri Lankan banking sector, banks play an important role in both the process of economic development and improving social welfare through their involvement in mobilizing and investing the majority of the savings of the society. Thus, in the bank-dominant Sri Lankan financial system, it is critical to maintain the efficiency of the banking

system. Using a primarily descriptive approach, Edirisuriya (2007) found that the competition and efficiency of the Sri Lankan banking system has increased as a result of financial deregulation since the late 1970s. In his study, he measured the performance of the banking system using various financial ratios during the period from 1995 to 2005, while the competition was measured using the Five Bank Concentration Ratio (CR5).

3. Research Methodology

In Sri Lanka, by the end of 2014, the commercial banking system consists of 25 banks, thirteen of which are domestic commercial banks and twelve of which are branches of foreign commercial banks. From the domestic LCBs, a sample of eleven domestic LCBs which comprises with two state banks and nine private banks was selected for this study. Two local commercial banks were excluded as they were not uniformly in operation for the considered time period.

Thus, the analysis is based on bank-level financial statement data on a balanced panel of 11 banks over a ten year period from 2005 to 2014. The study has utilized 10 efficiency ratios that have already been used by the researchers in their previous studies to measure the efficiency of financial institutions. The names of these ratios have been coded in the process of analysis, and those codings are listed in Table 1.

Table 1: Coding of the efficiency ratios

RATIO	CODE
Return On Equity	ROE
Return On Assets	ROA
Employment Cost to Total Assets	EMPTA NINTRT
Non Interest Revenue to Total Assets	A
Overheads to Total Assets	OHTA
Non - Performing Loans to Total Loans	NPL
Provisions to Total Loans	PROVTL
Interest Margin to Loans and Deposits	IMARLD
Interest Margin to Total Assets	IMARTA
Expenses to Income Ratio	EXPINC

This study employs the Minitab and SPSS statistical software to analyze the data. Since this study measures a broader concept such as efficiency of state and domestic private banks, it is difficult to use a regression analysis for the purpose of measuring efficiency of the banks. Due to that reason, this study has used the descriptive statistics and ANOVA to make decisions on ownership efficiency relationship of the state and domestic private banks in Sri Lanka.

4. Empirical Results

The Table 2 provides a summary result of the descriptive statistics obtained for each efficiency ratio using statistical software with respect to state and domestic private ownership of banks.

Table 2: Descriptive Statistics

Variable	Sta-pri	Mean	StDev	Minimum	Maximum
ROE	Private	0.125	0.059	0.008	0.353
	State	0.225	0.148	0.033	0.663
ROA	Private	0.024	0.022	-0.019	0.163
	State	0.019	0.012	-0.005	0.053
EMPTA	Private	0.015	0.003	0.010	0.024
	State	0.019	0.006	0.009	0.031
NINTRTA	Private	0.022	0.015	0.007	0.133
	State	0.008	0.006	0.001	0.019
OHTA	Private	0.010	0.007	0.000	0.026
	State	0.005	0.003	0.001	0.012
NPL	Private	0.083	0.050	0.016	0.282
	State	0.141	0.133	0.014	0.413
PROVTL	Private	0.018	0.014	0.000	0.057
	State	0.003	0.003	0.000	0.009
IMARLD	Private	0.036	0.028	-0.001	0.137
	State	0.016	0.042	-0.069	0.086
IMARTA	Private	0.039	0.018	-0.001	0.092
	State	0.025	0.050	-0.074	0.095
EXPINC	Private	0.646	0.202	0.144	1.459
	State	0.624	0.182	0.309	1.181

The above statistics, clearly explained with the graphical representation under each ratio calculated, measure the efficiency of state and domestic private banks in Sri Lanka.

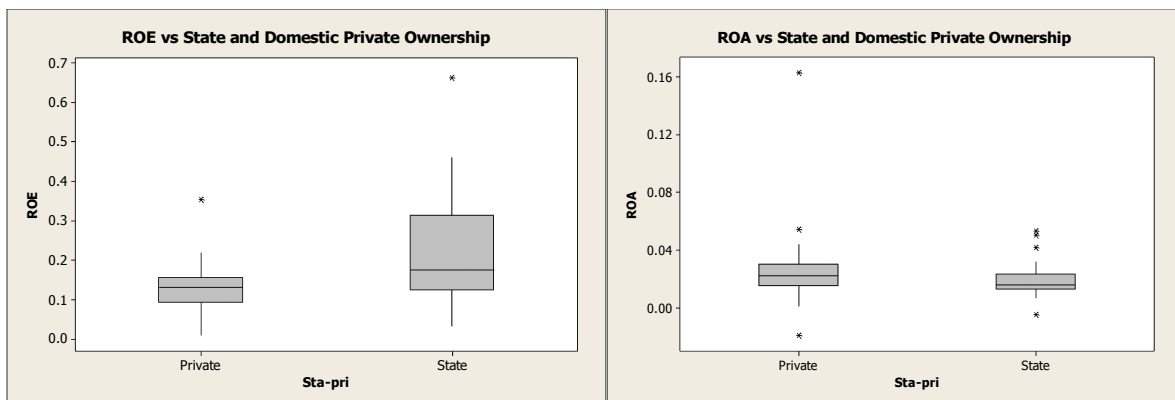


Figure 1: Impact of State and Domestic Private Ownership on ROE and ROA

According to table 2, state banks have outperformed their private counterparts in terms of ROE. State banks have generated an average ROE value of 0.225 while private banks have recorded an average value of 0.125. State banks have a higher variability in ROE (Figure 1) and a higher average efficiency when compared to domestic private banks. ROA ratio indicates that the private banks have outperformed state banks. The difference between the ROA value of state and private banks is amounted to 0.5 percent and this is not a very significant variation. As to Figure 1, domestic private banks have a higher average efficiency value and higher variability of the values of ROA around the mean.

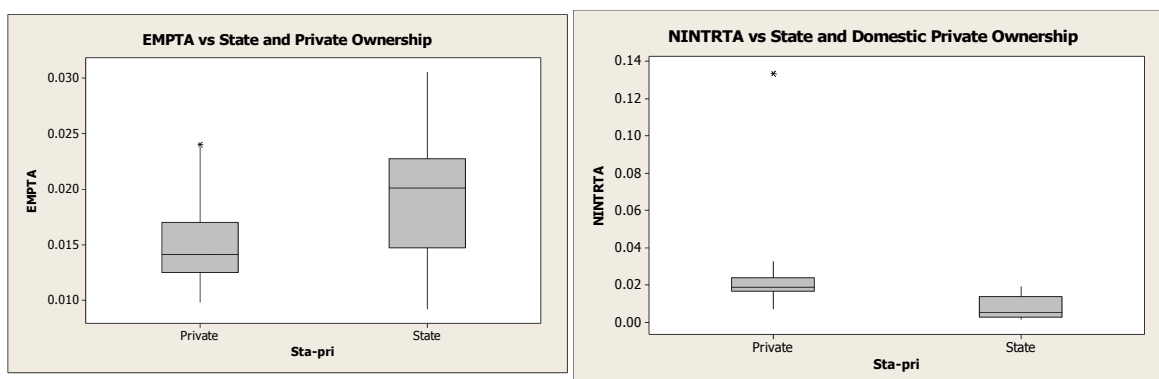
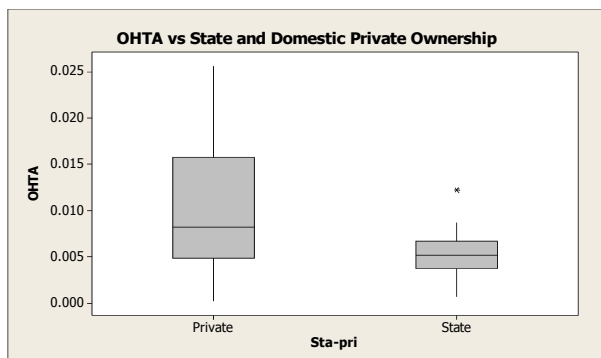


Figure 2: Impact of State and Domestic Private Ownership on EMPTA and NINTRTA

EMPTA ratio has performed better for private banks with a mean value of 0.015 with compared to state banks, which recorded a mean value of 0.019 (Table 2). This indicates that the private banks are more efficient in managing their employment cost. In addition (Figure 2) the average EMPTA value is higher for state banks, and this reflects that the state banks are relatively inefficient than the private banks. However, the variability of the efficiency values around the mean is higher for state banks and the variability of private banks is comparatively less. Average value of NINTRTA ratio indicates that the state banks are efficient in utilizing their total assets since they have used their assets efficiently in generating their main source of income, which is considered to be the interest income rather than utilizing them in generating non-interest income. As to Figure 2, private banks have recorded the highest mean value of NINTRTA, and this signals that domestic private banks are less efficient compared to state banks in Sri Lanka. At the same time, variability in the value of efficiency scores around the mean is higher for state banks.



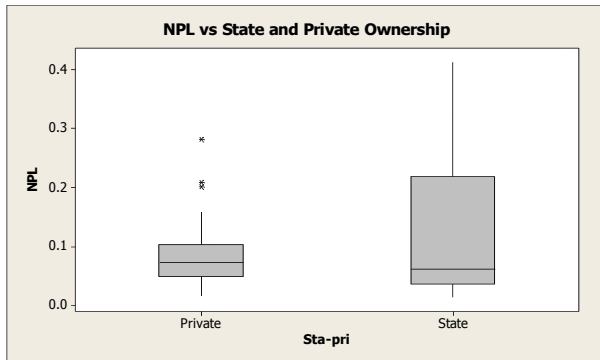


Figure 3: Impact of State and Domestic Private Ownership on OHTA and NPL

As average value of OHTA ratio is 0.010 for private banks and 0.005 for state banks (Table2), a conclusion can be derived that state banks are more efficient than the private banks. Figure 3 shows that the mean value is higher for private banks and they are less efficient compared to state banks. At the same time, variability in the efficiency scores is higher for state banks, and this indicates that the efficiency level of domestic private banks are significantly vary with respect to OHTA ratio. Private banks are considered to be more efficient than the state owned banks with respect to their ability in managing the non-performing loans (NPLs). Average NPL ratio of 0.083 of private banks and 0.141 of state signals that the private banks are efficient in terms of NPL ratio (Table 2). According to the Figure 3, it is clear that the private banks are more efficient and their efficient scores do not vary significantly compared to the efficiency scores of state banks in Sri Lanka.

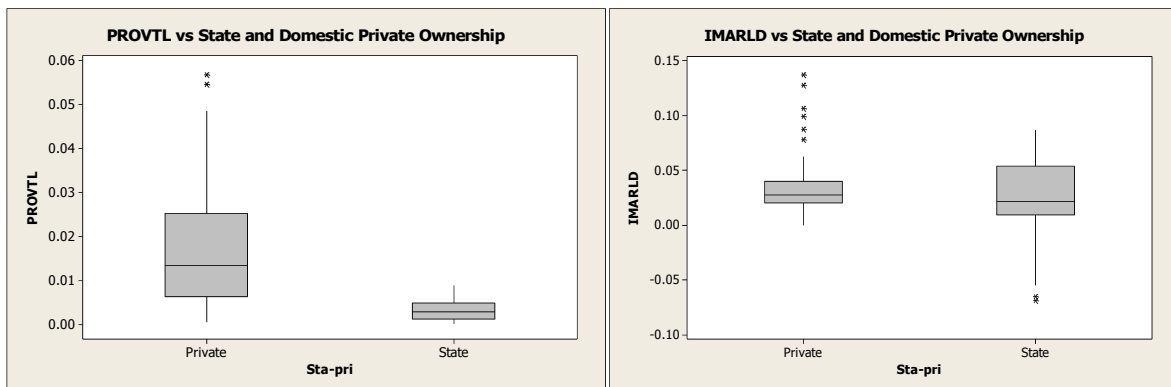


Figure 4: Impact of State and Domestic Private Ownership on PROVTL and IMARLD

Private Banks have recorded an average PROVTL ratio of 0.018 while state banks recorded 0.003 (Table 2). Therefore state banks are more efficient in managing their loan loss provision. However, there is a 1.5 percent variation in the level of efficiency of state and domestic private banks with respect to the PROVTL ratio. Figure 4 demonstrates that the average efficiency of state banks are greater than that of private banks. At the same time, there are significant variations in the efficiency levels of private banks. But, when considering the efficiency level of state banks, they do not vary significantly across banks. State banks have recorded an average IMARLD value of 0.016 and an IMARTA value of 0.025. The difference between IMARLD values for these two ownership types is 2 percent and the variation is 1.4 percent for IMARTA ratio. Private banks are more efficient than

state banks with respect to both ratios, IMARLD and IMARTA and the difference in this efficiency level is greater for IMARLD ratio.

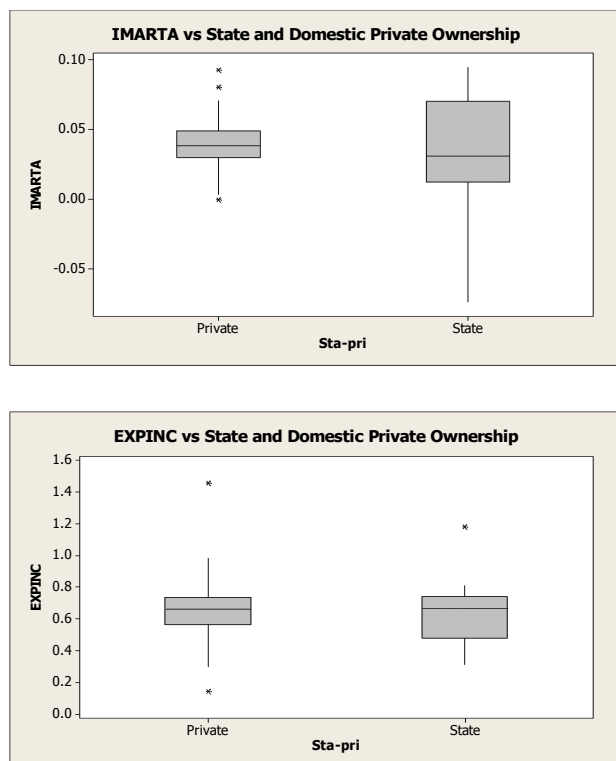


Figure 5: Impact of State and Domestic Private Ownership on IMARTA and EXPINC

Figure 4 and Figure 5 clearly demonstrate that the average value of IMARLD and IMARTA is higher for private banks. Therefore, domestic private banks are more efficient. State banks are more efficient with respect to EXPINC ratio since they have incurred a lesser amount of operating expenses to earn a one rupee of operating income. Private banks have incurred 2.2 percent more expenses to earn their operating income.

5. Conclusion

This study is based on the bank-level financial statement data on a balanced panel of 11 banks over ten years from 2005 to 2014. These 11 banks are composed with two state-owned banks and nine domestic private banks. In order to measure the relationship between state and domestic private ownership of banks and their performance efficiency, this study utilized ten efficiency ratios that have already been used by many researchers in their previous studies to measure the performance efficiency of financial institutions. Furthermore, this study has employed the Minitab and SPSS statistical software to analyze the data.

According to the findings of the study, it is clear that the state owned banks have outperformed their private counterparts with respect to ROE, EXPINC, PROVTL, OHTA and NINTRTA ratios and domestic private banks have outperformed in ratios such as, IMARLD, IMARTA, NPL, ROA and EMPTA. This results signal that the level of efficiency of

state and domestic private banks does not significantly vary across these two ownership types. When summarizing the results of this study, it is clear that a statistically significant difference in efficiency could not be observed among state-owned and domestic private banks. However, this may result from the competitive pressure in the industry that has forced domestic private banks and state banks to be more efficient.

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