A COMPARATIVE PROFITABILITY AND OPERATING EFFICIENCY ANALYSIS OF PUBLIC AND PRIVATE BANKS IN BANGLADESH

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ABSTRACT

In this study, a comparative performance analysis between public banks and private commercial banks of Bangladesh is carried out over the period between 2000 and 2010 having data of 15 banks. This study was explorative research. On the contrary to expectations, statistical findings of the study produce surprising results. The results suggest that public banks are as efficient as private banks but private banks have much higher mean values relative to public banks. Thus, it raises the question of ''whether to privatize banks or not?'' The study found that there was no significant difference between the profitable performances of public banks and private banks.

Key words: Bank, performance, public bank, private bank

INTRODUCTION

Banks in Bangladesh fall into two groups of scope; one is commercial banks and other is investment and development banks, which do not accept deposits. The number of banks in all now stands at 49 in Bangladesh. Out of the 49 banks, four are Nationalized Commercial Banks (NCBs), 28 local private commercial banks, 12 foreign banks and the rest five are Development Financial Institutions (DFIs). Sonali Bank is the largest among the NCBs while Pubali bank is leading in the private ones. Among the 12 foreign banks, Standard Chartered has become the largest in the country. Besides the scheduled banks, Samabai (Cooperative) Bank, Ansar-VDP Bank, Karmasansthan (Employment) Bank and Grameen bank are functioning in the financial sector. The number of total branches of all scheduled banks is 6,038 as of June 2000. Of the branches, 39.95 per cent (2,412) are located in the urban areas and 60.05 per cent (3,626) in the rural areas. Of the branches NCBs hold 3,616, private commercial banks 1,214, foreign banks 31 and specialized banks 1,177. Since financial system is vital for an economy and banks play a pivotal role in the financial system, it is important for economy to have a sound financial and banking system. In this concept, liberalization policies have been employed all over the world especially after the 1980s. Bangladesh has made some constructing process to make a liberal structure of the banking system. As a result, financial sectors and especially banking sector have been in a gradual evolution towards liberal structure. Like many other researchers, La Porta *et al.* (2002), Caprio and Peria (2000) and Barth *et al.* (2001) report that state ownership of banks does not serve the purpose of promoting economic growth and development but even lead to worsening economic development. Despite the supporters of development view in the 1960s and 1970s, empirical findings of many researches like World Bank report (2001), Galindo and Micco (2004), Sapienza (2004), Dinc (2005), and Micco *et al.* (2007) are consistent with the political view. It should be also noted that here arises an important discussion issue in public bank ownership and performance. That is, as argued by Yevati *et al.* (2004), public banks should be evaluated by their function on stabilizing effect but not by their profitability. The current picture of Bangladesh's banking industry gives us the chance of addressing the issue of public banks' relative performance. In addition, Micco and Panizza (2004) suggest that public banks may play a positive role in credit-smoothing. Nevertheless, efficiency studies on banks have been producing contradictory results. Omran (2007) analyzes both private and government banks' relative performances and also evaluates bank privatization process in Egypt by comparing the pre and post privatization performances of privatized banks; and reports that private banks outperform government banks. On the other hand, carried out a study on a developed country other than the US, Altunbas *et al.* (2001) provide evidence that public banks in Germany are as efficient as their private counterparts. In this respect, considering that

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government bank-ownership is still common in this global modern world La Porta *et al.* (2002), several studies attempt to reveal reasons behind state bank-ownership. Among conclusions, first, government bank ownership is positively associated with countries' level of poverty and underdevelopment by Barth (2001), La Porta *et al.* (2002), and Beck and Levine (2002). Second, countries' legal structure appears to be a key determinant that affects government bank-ownership. Studies of La Porta *et al.* (1998) and Porta *et al.* (1999) reflect that in civil law countries, especially French civil law countries, government intervention into economic life is much broader than in common law countries. This is important for both the rationale behind bank privatization and the policy implications. In addition, it provides valuable information for further researches to make meaningful comparisons before and after privatization performances of government banks when their privatizations are observed in the future. According to market forces theory, private banks have an advantage over state banks with respect to financial and operating efficiency. However, our study suggests that government banks are as profitable as private banks. The study, firstly, updates the regarded findings with most current data on Bangladeshi banking industry. Secondly, most studies of this kind apply economies of scale and technical productivity measures whereas our study uses operating efficiency and profitability as the measures. This study is organized on three main parts. In the first part, theoretical and empirical researches related to the subject, are supplied. In the following part, a summary on the history and working of banking system in Bangladesh is given. The data set employed is described in the third part. Testable hypotheses, methodology and empirical findings are also supplied in this part. The main objective of this study is to focus on the comparative profitability and operating efficiency analysis of public and private banks in Bangladesh.

MATERIALS AND METHODS

The study is exploratory in nature. The study is conducted mainly based on secondary data. Data and information have been collected and analyzed from various published reports of Asian Development Bank, Bangladesh Enterprise Institute, Centre for Policy Dialogue, and World Bank. Moreover, the secondary data for the study have been gathered from different articles published in different journals, daily newspaper and websites. The data used in the study are gathered from the annual balance sheets and income statements of commercial banks, published by the DSE, Bangladesh. The data cover a five year period between 2000 and 2010. Due to the differences in their unique scope, investment and development banks are not included in the study. Instead, we rather perform our analysis on the commercial banks. In the application part of this

study, the main goal is discovering whether there are any performance differences or not between public and private banking in Bangladesh. Profitability and operating efficiency are chosen to test the hypotheses of this study. Return on Assets (ROA) which shows the percentage of profitability of company's asset in making revenue and Return on Equity (ROE) which indicates the company's profitability having how much profit a company makes the investment of shareholders ROA and ROE are the proxies used to measure profitability indicator. Net Asset Efficiency (NAE) is the indicators of the efficiency with which a company is deploying its assets and relative to total employment and total numbers of branches to measure operating efficiency. A non-parametric approach is used to see whether private banks perform better than public ones. In order to analyze performance differences, mean values and all other statistics are calculated by using Microsoft excel. Following the calculations, t tests are used for mean equality hypotheses.

The simple format used in the hypotheses is as follows:

$H0: \mu_i^{pub} = \mu_i^{Pri}$

$H1: \mu_i^{Pub} \neq \mu_i^{Pri}$

Notes: 1) Superscript pr means private

2) Superscript pub means public

3) Subscript i mean the proxy to measure profitability or operating efficiency.

RESULTS AND DISCUSSION

The commercial banking system dominates the financial sector with limited role of Non-Bank Financial Institutions and the capital market. The Banking sector alone accounts for a substantial share of assets of the financial system. The banking system is dominated by the 4 public Commercial Banks, which together controlled more than 30% of deposits and operates 3383 branches (50% of the total) as of June 30, 2008. Bank Company Act, 1991, empowers BB to issue licenses to carry out banking business in Bangladesh. Pursuant to section 31 of the Act, before granting a license, BB needs to be satisfied that the following conditions are fulfilled: "that the company is or will be in a position to pay its present or future depositors in full as their claims accrue; that the affairs of the company are not being or are not likely to be conducted in a manner detrimental to the interest of its present and future depositors; that, in the case of a company incorporated outside Bangladesh, law of Bangladesh grants to banking companies incorporated outside Bangladesh and that the company complies with all applicable provisions of Bank Companies Act, 1991." Licenses may be cancelled if the bank fails to comply with above provisions or ceases to carry on banking business in Bangladesh. Researchers could not reach strong evidence that the mean levels of profitability and

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operating efficiency of public and private banks are statistically different than each other. In fact, all 5 proxies to measure profitability and operating efficiency could be accepted as the same for the private bank and public banks according to our statistical results. Pre-test expectations about the performances of public and private banking are as follows: Bangladeshi economy has a more liberal structure. In this respect, it is expected that privately owned firms perform better. Therefore the primary hypothesis of this study is: "Performance efficiency will be better for private banks than for public banks". All testable hypotheses are given below in Table 1. Most of the performance criteria researches on banking sector are specifically about the consequences of privatization Omran (2007), Bonin *et al.* (2005), Clarke *et al.* (2005). These studies basically compare financial and operating performances of firms before and after privatization. Most of these studies Omran (2007), Nakane and Weintraub (2005), Clarke *et al*. (2005) find that firms show better performances after privatization. The very first idea of this study emerges at this point. Then we decided that the performance comparison of current public and private banks should have been analyzed in Bangladesh. This analysis firstly aims to compare the financial and operating efficiency in the banking sector. Secondly, it is targeted to get beneficial results on the performances of public and private banking before privatization initiates in the sector. When the profitability performances of public and private banks are compared, it is found that statistically, there are no meaningful differences in means. Three proxies are used to test whether profitability performances are different or not. When net profit/loss levels are controlled, it could be easily observed from Table 2 that public banks' net profits are much higher than those of private banks. T value is 0.43 at most and the test gave the result of no difference. Similar results are seen when ROA and ROE figures of public and private banks are employed. It could not be claimed that public banking or private banking would give better results in terms of these ratios. However, when mean values are taken into account, there is a difference relative to net profit figures. This time, private banks have stronger means than public banks. Still, t test reports no difference in means in terms of ROA and ROE statistically. When the results are gathered to see general view in terms of profitability, it is found that there is no performance difference between public and private banks in Bangladesh for the period between 2000 and 2010. In order to see whether there is any difference between public and private banking in terms of operating efficiency, net profit-loss and net assets are presented in terms of total employment and total number of branches. After the tests, there is no clear conclusion to say that private banks show better results than public ones in operating efficiency performances. When net profit-loss is used, whether in terms of employment or branches, t values are so small that we could not reject the null hypothesis stating that operating efficiency in terms of net profit-loss is the same for private and public banks. When net assets are used in description of operating efficiency, the test results show the same result. As a result of our analyses, it could be claimed that there is no clear difference between public and private banking in terms of profitability and operating efficiency performances in Bangladesh between 2000 and 2010. Private Banks have much higher mean values of ROA, ROE, net profit efficiency and net asset efficiency relative to public bank. In terms of net profit public banks seem to perform better results. However, when statistical tests are run, the whole picture gets new meanings. These mean differences in related indicators are losing their values in terms of statistical meanings.

Table 1. Summary of Testable Hypotheses

Characteristics	Proxies	Hypothesis
Profitability	Net Profit- Loss (NPL)	$NPL_{pub} = NPL_{pri}$
	Return on Assets (ROA)	$ROA_{Pub} = ROA_{Pri}$
	Return on Equity/ROE)	$ROE_{Pub} = ROE_{Pri}$
Operating Efficiency	Net Profit Efficiency (NPE)	$NPE_{Pub} = NPE_{Pri}$
	(NPE1)=Net profit/Total employment	
	(NPE2) = Net profit/ Total number of Branches	
	Net Assets Efficiency (NAE)	
	(NAE1)= Net assets/Total employment	
	(NAE2) = Net assets/Total number of branches	$NAE_{Pub} = NAE_{Pri}$

Table 2. Results of the Tests for Equality of Means

Series (Profitability)	t value
NPL$_{Pub}$ and NPL$_{Pri}$	0.432
ROA$_{Pub}$ and ROA$_{Pri}$	0.345
ROE$_{Pub}$ and ROE$_{Pri}$	0.346
Series (Operating efficiency)	
NPE1$_{Pub}$ and NPE1$_{Pri}$	0.342
NPE2$_{Pub}$ and NPE2$_{Pri}$	0.021
NAE1$_{Pub}$ and NAE1$_{Pri}$	0.278
NAE2$_{Pub}$ and NAE2$_{Pri}$	0.007

Table 3. Means and Standard Deviation

Variables	Means	Std. dev.	Variables	Means	Std. dev.
NPL$_{Pub}$	2,322,749,646.60	1234592225	NPE$_{1Pub}$	230,767.32	104964.085
NPL$_{Pri}$	255,913,290.98	16171440021	NPE$_{1Pri}$	255,913,290.98	565665975
ROA$_{Pub}$	1.11	0.859094928	NPE$_{2Pub}$	3,048,726.21	1556923.74
ROA$_{Pri}$	3.23	589.9689116	NPE$_{2Pri}$	16,437,936.11	10325190
ROE$_{Pub}$	22.04	18.67443603	NAE$_{1Pub}$	17,361,710.98	8882758.69
ROE$_{Pri}$	24.23	2337947357	NAE$_{1Pri}$	228,020,021.34	405271212
NAE$_{2Pri}$	1,304,551,846.26	658512973	NAE$_{2Pub}$	221,313,261.06	105470928.6

Note: Except for ratios, all figures are in Taka

CONCLUSION

Although bank privatizations have accelerated all over the world since the beginning of the 1990s, the case of Bangladesh it is also same. Bangladeshi banking system is also coping with the privatization process. Even more interestingly, a number of troubled public banks have been

privatized in recent years. Despite the fact that they were either liquidated or sold to private capital again after restructuring, this cannot be treated as privatization. Therefore, the researchers currently had the chance to identify relative performances of public banks and private banks, and to reach insights whether our results are in line with findings on other countries' experiences. First, it should be noted that even though the number of public banks are considerably less than that of private banks, public banks' financial figures are massive in amount. That is attributable to their much larger sizes as a result of over branching. The study's statistical test results clearly show that performance of public banks does not differ from that of private banks with respect to the proxies employed. Moreover, public banks even outperform their private counterparts. The results are important for both the rationale behind bank privatization and the policy implications. Moreover, the study provides valuable information for further researches to make meaningful comparisons before and after privatization performances of public banks when their privatization occurs in the future. Majority of privatization studies in the literature stand in favor of privatization regarding both non-banking and banking firms. However, there are a number of studies presenting inconclusive results. As opposed to the majority, our study finds its place in the latter. Its findings make bank privatization appreciable in our country.

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