

# Review on Profitability Difference among Large Commercial Banks

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**Abstract – Banks and financial institutions are the backbone of the economy of the country everywhere in over the world. Profitability is one of the major criteria for evaluating the performance of a bank. Besides bank-specific factors, we include determinants of bank profitability and variable selection. The study final conclusion indicates that size effect exists, that small and medium sized banks exhibits higher overall performance compared to large banks.**

**Keywords: Banking Profitability, Commercial Banks etc.**

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## I. INTRODUCTION

Banking sector in all countries has an important effect on economy movements, due to the essential role played by banks for improvement of the overall economic activities, including out its mediation and its financial activities that are necessary for the economic growth of any country [1]. Accordingly, bank is defined as a financial institution that invests the money of its clients and investors, and works as a financial broker between the investors who have a surplus of money (depositors) and the investors who borrow this money to cover their investment needs (borrowers) [2].

However, banks are considered one of the most important financial entities that invest deposits of investors to gain profit. This profit is calculated as the difference between the interest that banks take from borrowers and the interest that paid to depositors. Furthermore, banks also provides other financial activities to their clients, such as credit services, cashing cheques, issuing letters of credit and letters of guarantee, safety deposit boxes, portfolio management, foreign currency exchange services, trading of commercial papers, bank acceptance and underwriting of financial instruments [3].

In all countries is no exception banking sector plays a vital role in economy improvement and stability in order to increase economic growth. Moreover, Banks activities are also highly important in the process of money creation which in turn impacts the payment system. Therefore, banks funds and money support are an important for growth to other industrial and service sectors.

The banking sector of many developing countries, recently witnessed an important change and many

improvements over the last two decades. These improvements highly affected by the growth of banks profitability. For instance, Jordanian banks have benefited from the new advances banking technology and from the growth of investors' numbers particularly those coming from close Arab oil countries.

Interestingly, the banking industry has also expanded over the last two decades, this expansion witnessed through an increase in the number of bank branches and in the size of its investments. It is always had been argued that, the smaller the bank size the higher the profitability of bank, this can be justified by many reasons. On one hand the difficulty of large banks to invest their high liquidity in comparison to small and medium sized banks, another reasons that might explain the decrease of profitability for large banks is the huge start-up costs for these banks like technological high costs such as computer mainframes which is too expensive software costs that lowers the profitability rates. Research and development costs are also considered another main problem for large banks that might decreases the bank profitability. Furthermore, high political costs are always found in large banks rather than small ones. All of these reasons could be a major cause for the decrease of profitability ratios for large banks.

Profit is the prima facie object of every business. A business cannot breathe well without profits. It may be considered as a mirror of the operating performance of a company. In the words of Lord Keynes, "Profit is the engine that drives the business enterprise." A business needs profit not only for its existence but also for the expansion and diversification. "Profit is the barometer of the

success of the business. It is indeed, a magic eye that mirrors all aspects of entire business operations including the quality of output." Profits are the soul of the business without which it is lifeless. In fact, profits are useful intermediate beacon towards which a firm's capital should be directed. M.E. Murphy has rightly remarked that "Business cannot exist without profits, as an economy cannot exist without sound business. Profits must be something for all to be proud of; they should not be suspected." In accounting, profit is defined as "excess of revenues over related cost applicable to transaction a group of transactions or to the transactions of an operating period." In the words of R.L. Smith "The term 'profit' carries a variety of meanings not only in technical sense but in interpretative sense as well."

## II. THE FACTORS DETERMINING THE PROFITABILITY OF BANKS

### ► Asset structure

Most of the banking literature agrees that a bank's profitability is expected to increase as its portfolio of loans grows in relation to other more secure assets (such as government securities), taking into account the known relationship between risks and return (the so-called risk-return trade-off). Despite the higher operating costs of holding a large portfolio of loans, bank profitability should increase with a higher ratio of loans to assets as long as interest rates on loans are liberalized and the bank applies mark-up pricing [4]. This greater relative proportion of loans in the portfolio of the bank is usually coupled with a greater liquidity risk arising from the inability of banks to accommodate decreases in liabilities or to fund increases on the assets side of the balance sheet; consequently, a bank holding a low proportion of liquid assets (with greater liquidity risk) is more likely to earn high profits. Among the studies that report a direct relationship between relative percentage of loans in bank assets and profitability or, similarly, an inverse relationship between liquidity and profitability [5] [6].

### ► Asset quality

There seems to be a consensus that bank profitability is directly related to the quality of the assets on its balance sheet; i.e., poor credit quality has a negative effect on bank profitability and vice versa. This relation exists because an increase in the doubtful assets, which do not accrue income, requires a bank to allocate a significant portion of its gross margin to provisions to cover expected credit losses; thus, profitability will be lower. Therefore, the evolution of the impairment losses on loans and receivables explains a large part of the profitability of both commercial and savings banks. Among the studies that show a direct relationship between profitability and asset quality [6].

### ► Capitalization

There are several reasons to believe that a better capitalized bank should be more profitable. First, Berger (1995b) points to the expected bankruptcy costs hypothesis as a cause of all or part of the observed positive relationship between capital and profitability. For a bank with capital below its equilibrium ratio, expected bankruptcy costs are relatively high, and an increase in capital ratios raises expected profits by lowering interest expenses on uninsured debt. In this same vein, Athanasoglou et al. (2008) state that this positive impact can be due to the fact that capital acts as a safety net in the case of adverse developments. This relation would help the bank to finance its assets at more favourable interest rates, increasing expected profitability and offsetting the cost of equity, which is considered to be the most expensive bank liability in terms of expected return [7]. Another alternative theory that developed to explain this direct relationship between capital and profitability is the signaling hypothesis. Under this theory, bank management signals private information that future prospects are good by increasing capital. Finally, a third interpretation relies on the effects of the Basel Accord, which requires banks to hold a minimum level of capital as a percentage of risk-weighted assets. Higher levels of capital may therefore denote banks with riskier assets, which translate, in turn, to higher revenues that increase the profitability of the bank [8].

### ► Financial structure

Over the past decade, against a background of credit growth and favorable conditions in international financial markets, many European banks have financed an increasing portion of their growth by resorting to the medium- and long-term wholesale markets; although this decision has afforded banks greater flexibility in their financial structure, the cost has been greater than it would have been if the financing had been in the form of bank deposits. In this context, a higher share of customer deposits in bank liabilities should increase a bank's profitability, considering that deposits constitute a cheap and stable financial resource compared with other financing alternatives [9].

## III. DETERMINANTS OF BANK PROFITABILITY AND VARIABLE SELECTION

### *Dependent variables*

The return on average assets (ROAA) is defined as net profits of average total assets and is expressed in percent. As an alternative profitability measure,

the return on average equity (ROAE), i.e., the net profits over average equity, expressed in percent.

The ROAA reflects the ability of a bank's management to generate profits from the bank's assets. It shows the profits earned per USD of assets and indicates how effectively the bank's assets are managed to generate revenues, although it might be biased due to off-balance-sheet activities. Average assets are being used in order to capture changes in assets during the fiscal year points out; the ROAA has emerged as key ratio for the evaluation of bank profitability and has become the most common measure of bank profitability in the literature.

Second profitability measure is the return on average equity ROAE, which is the return to shareholders on their equity. Banks with a lower leverage ratio (higher equity) usually report a higher ROAA, but a lower ROAE. However, note that the ROAE disregards the higher risk that is associated with a high leverage; at the same time, financial leverage is affected by regulation.

### **Independent variables**

#### ***Bank-specific determinants***

The following twelve bank-specific characteristics as internal determinants of bank profitability:

**Equity over total assets:** As a proxy for the bank capital, the ratio of equity to assets. Banks with higher capital to asset ratios are considered relatively safer compared to institutions with lower ratios. Given that banks with low capital ratios are also riskier in comparison with better capitalized financial institutions, it expects to have higher returns. In line with the conventional risk-return hypothesis, it expects a negative impact of the capital ratio on bank profitability.

**Cost-income ratio:** The cost-to-income ratio is defined as the operating costs (such as the administrative costs, staff salaries and property costs, excluding losses due to bad and non-performing loans) over total generated revenues. It is used to measure the impact of efficiency on bank profitability. Therefore expect higher cost-income ratios to have a negative effect on bank profitability.

**Loan loss provisions over total loans:** The ratio of loan loss provisions over total loans is a measure of a bank's credit quality. The loan loss provisions are reported on a bank's income statement. A higher ratio goes together with a lower credit quality and, therefore, a lower profitability. Thus expect a negative effect of the loan loss provisions relative to total loans on bank profitability.

**Yearly growth of deposits:** It measures a bank's growth by the annual growth of its deposits. A faster growing bank might be able to expand its business and to generate more profits. However, the contribution of an increasing amount of deposits to

the profit depends upon a number of factors. First, it depends on the bank's ability to convert deposit liabilities into income earning assets. Growth is often achieved by lowering the credit quality, which then has a negative effect on bank profitability.

Difference between bank and market growth of total loans: Furthermore, it include a variable measuring the growth of a bank's loan volume relative to the average market growth rate of the loans. On one hand, a bank with a higher growth rate of its loan volume (relative to the market's growth rates) might be more profitable due to the additional business generated.

**Bank size:** It measure bank size by total assets. In order to identify potential side effects, they build dummy variables for small, medium and large banks. One of the most important questions in the literature is if there exists an optimal bank size in order to maximize bank profitability. It has been argued that a growing bank size is positively related to bank profitability [10].

**Interest income share:** Commercial banks are usually active in both traditional banking (interest operations) and, to a lesser extent, in asset management. As margins in asset management are usually higher than margins in interest operations, it expects banks with a higher share of interest income relative to their total income to be less profitable.

**Bank age:** It classify bank age into three different groups. The first group consists of banks founded after 1990. The second group contains banks founded between 1950 and 1990. The third group is composed of banks that were established before 1950.

**Bank ownership:** As pointed out above, there exists strong empirical evidence that ownership affects bank profitability. At the same time, some studies find no significant relationship between the ownership status and the performance of a bank.

**Nationality:** In addition, it consider the nationality of the bank owner, i.e. whether the bank is a domestic or a foreign bank. An institution is defined as a foreign bank if at least 50 percent of the bank's stocks are in foreign hands.

#### ***Macroeconomic and industry-specific characteristics (external factors)***

Furthermore, it includes a set of six macroeconomic and industry-specific characteristics, which are expected to have an impact on bank profitability as well.

**Effective tax rate:** The effective tax rate, defined as taxes paid divided by before-tax profits, reflects

the explicit taxes paid by the banks (mostly corporate income taxes).

Taxes have a direct impact on a bank's profitability: The higher the tax rate levied, the lower the post-tax profit. In line with the results a higher effective tax rate to have a negative impact on bank profitability.

**Yearly change of regional population:** An increase in the size of the market potentially increases a bank's business opportunities. If banks are able to expand their business by generating higher margins than the existing opportunities offer, profitability will be affected positively. However, increasing business opportunities do not necessarily always go together with a higher profitability, given that profit margins of additional business activities do not always increase, and even the opposite might sometimes be true. Furthermore, an increasing market potential also attracts additional competitors, which also reduces the profit opportunities for all market participants. Therefore, the effect of this variable on bank profitability is either positive or negative.

**Real GDP growth:** GDP growth is expected to have a positive impact on bank profitability according to the literature on the association between economic growth and financial sector profitability.

**Stock market capitalization:** Stock market capitalization refers to the value of listed shares relative to the GDP. On the one side, an increasing stock market capitalization can be interpreted as an indicator for financial disintermediation and growth in market-based finance. The threat of substitution of bank finance by market-based finance might lead to lower interest rate margins and thus to less profitable bank.

**Bank concentration:** As collusion may result in higher rates being charged on loans and lower interest rates being paid on deposits, it expect that a higher bank concentration has a positive impact on profitability. On the other hand, a higher bank concentration might be the result of a tougher competition in the banking industry, which would suggest a negative relationship between performance and market concentration.

#### IV. REVIEW OF LITERATURE

Rasidah (2011) Performance and Financial Ratios of Commercial Banks in Malaysia and China. This study aims to investigate the impact of bank-specific factors which include the liquidity, credit, capital, operating expenses and the size of commercial banks on their performance, which is measured by return on average assets (ROAA) and return on average equity (ROAE). The results imply that ratios employed in this study have different effects on the performance of banks in both countries, except credit and capital ratios. Operating ratios influence

performance of banks in China, but this influence is not true for Malaysian banks regardless of the measure of performance [11].

Sayeed, Edirisuriya and Hoque (2012) Bank Profitability: The Case of Bangladesh, This study attempts to examine the impact of asset and liability management on the profitability of commercial banks in Bangladesh. Commercial banks are segmented into high profitable and low profitable and private and public banks. While applying Statistical Cost Accounting (SCA) methods study finds high earning banks experience higher returns from their assets and lower returns from their liabilities than the low earning banks. Results are inconclusive with regard to private banks' and public banks' returns. This study finds that assets management of large commercial banks is better than those of small banks, but they are not better than small banks in respect of liability management [12].

Manzoor, Sumra and Abbas (2011) under the title, "The Impact of E-Banking on the Profitability of Banks: A Study of Pakistani Banks" This research paper aims at examining the impact of electronic banking on the profits of Pakistani banks. E banking has increased the competition among the banks and both domestic and foreign banks are offering more and more modern ways of e-banking. The study investigates the services provided by the banks and their impact on their profitability in particular. It is significant due to the proliferation of the service sector and its importance in the economy. It also discusses about the services provided by the banks to its customers and also reveals the major rationales for the banks to use internet and other electronic mediums as the means to providing services to their customers. It is a distinguished one because it reveals the factors which lead to the success of the operations, giving more profits and the ability to manage risks of using electronic means and using the electronic services for the benefit of the bank and how they differentiate through these services in the market and the factors which lead to the increased profitability of banks, be it public or private [13].

Xuezhi & Dickson, (2012) Commercial Banks Profitability Position: The Case of Tanzania. The study examines commercial banks profitability in Tanzania for the period of ten years (2000-2009). The study used National Microfinance Bank (NMB), National Bank of Commerce (NBC) and CRDB as the case study. The study employed the profitability measures of commercial banks, and the evidence of performance in terms of profitability was established based on return on average asset, net interest income to average bearing assets and non-interest expenses to average assets. The paper utilized panel secondary data from National bank of commerce, CRDB and National Microfinance bank in Tanzania for the period of ten years, and the hypothesis was tested to know



whether there is a significant difference in terms of profitability by using ANOVA test. Finally the regression model was run to see the effects of capital adequacy, liquidity and asset quality on the profitability of commercial banks. The findings revealed that there is no significant difference on profitability among the commercial banks, in the context of regression model it has been noted that liquidity and asset quality has positive impact in profitability with exception to the level of nonperforming loans which has a negative influence on profitability. Also capital adequacy has shown negative impact on profitability. The study confirmed the profitability of commercial banks to stable and meeting the regulatory requirement of the Bank of Tanzania (BOT) [14].

In the Gulf, Samad (2004) investigated the performance of seven locally-incorporated commercial banks during the period 1994-2001. Financial ratios were used to evaluate the credit quality, profitability, and liquidity performances. The performance of the seven commercial banks was compared with the banking industry in Bahrain which was considered a benchmark. The article applied a Student's t-test to measure the statistical significance for the measures of performance. The results revealed that commercial banks in Bahrain were relatively less profitable, less liquid and were exposed to higher credit risk than the banking industry, in which wholesale banks are the main component [15].

Kiyota (2009) in a two- stage procedure investigated the profit efficiency and cost efficiency of commercial banks operating in 29 Sub-Saharan African countries during 2000-2007. The article employs the SFA for the estimation of profit and cost efficiency, financial ratios and the Tobit regression to provide cross-country evidence on the performance and efficiency of African commercial banks [16]. The findings based on a range of performance ratios as well as stochastic cost and profit frontier estimation, suggest that foreign banks tend to outperform domestic banks in terms of profit efficiency as well as cost efficiency. The results are also in line with the research by Kirkpatrick et al (2007) who used a sample of 89 banks from Sub-Sahara African countries for the period 1992-1999 and found that banks are on average 67% profit efficient and 80% cost efficient, as indicated by the results from both the distribution free approach and SFA methods [17].

## V. CONCLUSION

Besides the common bank-specific factors, the influence of previously ignored factors such as, e.g., the growth of a bank's loans relative to the growth rate of the market, the share of interest income relative to total income, the effective tax rate, bank age or the yearly change of regional population. These factors together with other included characteristics about the macroeconomic

development as well as the industry environment contribute to a better understanding of banking performance in general and for the banking market in particular. The study final conclusion indicates that size effect exists, that small and medium sized banks exhibits higher overall performance compared to large banks.

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