

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

Addis Alemayehu, Alubel Kassaw Belete*

Department of Management, Wolaita Sodo University, Wolaita Sodo, Ethiopia

*Corresponding Author: Alubel Kassaw Belete, Department of Management, Wolaita Sodo University, Wolaita Sodo, Ethiopia, Email: alubelk@gmail.com

ABSTRACT

The main objective of the study was to examine the effects of operational efficiency on the performance of state owned and private commercial banks through examining the financial profile to explore the effects of operational efficiency on the performance. The study used secondary data, which was annual report of the selected banks (for the year 2012 to 2017). From both government and private owned banks, only those which are in the operation for at least twelve years are included in the sample then the data was analyzed using descriptive statistics. The result of this study indicated state owned banks have shown superior performance than private banks. Out of seven ratios used in performance analysis, five ratios support state owned banks for superior performance as compared to private banks and also operational efficiency has great impact on performance of commercial banks. The study recommends that all commercial banks which are included in the study ought to focus on improving operational efficiency in order to improve their performance and competitive advantage in the banking industry.

Keywords: commercial banks, operating efficiency, performance

INTRODUCTION

Banking industry play significant role for the development of nations economic and of under developed countries like Ethiopia in particular, where the financial system as a whole is bank dependent due to poor development or even absence of the stock market. Banks are one of the deposit taking financial institutions that play pivotal role for financial stability and are also engines for economic development of a given nation (Alam, 2013).

It is widely recognized that the operating efficiency of the financial institutions supports their functionality in the economy. According to Rozzani and Rahman (2013), banks should be able to function efficiently to ensure their contribution to overall economic growth. In a vibrant and competitive banking system, only strong, technically efficient and profitable bank can promise a realistic return to their stakeholders and reduce the probability of bankruptcy (Adusei, 2016). It is also indicated that an efficient banking sector will be better able to withstand negative shocks and contribute to the stability of the financial system (Delis & Papanikolaou, 2009). Thus, it is crucial to analyze the efficiency

performance of banks and the factors behind their efficiency performance. Previous studies showed that commercial bank in Ethiopia recorded varied efficiency score over the first GTP I period. That is, some of the commercial banks are deemed to be efficient while others, specially the government banks are found to be inefficient (Alemu, 2016).

The vital role of the financial institutions in countries economic development is well cited in the literature. The financial institutions in developing countries are much concerned with their operating efficiency in particular since the financial development is not anymore to certain economy but indeed guided by universal guidelines. World banks are, for example, guided by the Basel regulations. This calls for banks in the developing countries to continuously examine their operating efficiency. This paper takes a forward looking at the issue of operating efficiency through creating the link between bank operating efficiency and its performance. The latter is measured by the relative ratio of bank net interest revenue to the total net interest revenue in commercial banks. This is a well-known measure of the relative market share of financial institutions. The orientation of this paper is

based on the understanding that bank's operating efficiency has to help improve the bank's net interest income and eventually help the bank to improve the performance and expand its market share. So this study has examined how operating efficiency affect the performance of commercial banks .The operating efficiency is measured by 'operating efficiency ratio.' The objective of the statistical analysis in this research is to provide robust results of the financial determinants of operating efficiency in relation to the performance. In this case, banks financial ratios (profitability, Liquidity and efficiency) are used as the explanatory variables that affect banks' operating efficacy.

Statement of the Problem

Banks play an important role in an economy of a nation. According to Sergeant (2001), banks contribute to investments, employment creation and the process of economic growth and development. They are the corner stone of an economy of a given nation (Omankhanlen, 2012). They serve as a transmission mechanism for monetary policy (Peek & Rosengren, 2010). The economies of all nations depend on the efficient operation of a complex and delicately balance system of money and credit.

Maximizing profit is the ultimate objective of every business organization. All the strategies and activities performed are to realize this remarkable objective. Commercial banks also not exceptional they have social and economic goals.

Sahoo et al., (2007) studied the productivity performance trends in terms of technical efficiency, cost efficiency and scale elasticity among Indian commercial banks for the period 1997-98 to 2004-05. The study concludes that there is a strong positive effect of the reform process on the performance of the overall banking sector in the country as reflected by an increasing average annual trend in technical efficiency for all groups of banks (public, private and foreign).

The effect of operational efficiency on the performance of commercial banks is a topic, The Ethiopian financial sector has not been studied to any great extent, from the perspective of operating efficiency and performance. What distinguishes this paper is that the study has taken a close look at the commercial banks by utilizing banks data to analyze the operating efficiency effects on the performance of

commercial banks. So the research has predominately focused on the effect of operating efficiency on performance of both private and state owned banks.

Research Questions

- Does operation efficiency affect banks performance?
- Is there a performance difference between state owned and private banks?

General Objective of the Study

The main objective of this study is to analyze the effects of operational efficiency on performance of commercial banks in Ethiopia.

LITERATURE REVIEW

Determinants of Efficiency and Performance for the Banking Sector

Competition in the financial sector – especially banks- is of great importance to country's economic growth. The degree of competition in the financial sector results in higher efficiency of financial services, better quality of financial products and improves the degree of financial innovation. The access of firms and households to financial services is also influenced by the degree of competition in the financial sector (Classens and Laeven 2004). (Besanko and Thakor 1992) confirmed that governments can achieve the desired economic growth rate by increasing banking sector competitiveness.

According to the relevant literature, bank competition can be measured by two main streams which are the structural and non-structural approaches. The structural approach constitutes a natural link between concentration and competition (Bikker and Haaf 2000). It includes two models. The first model is the structure-conduct-performance paradigm and the second model is efficiency hypothesis. The former model states that market performance is greatly affected by exogenous factors related to market structure, explicitly basic demand and supply condition which affect banks' performance in the industry. It is used to test whether higher level of concentration in the market causes collusive behavior among the larger banks and thus results in superior performance (Gilbert 1984; Molyneux, Lloyd-Williams et al. 1993).

The second alternative view is the "Competition-stability" contending that more market power in the loan market will increase

bank risk as high interest rates on loans result in the default of loan customer and aggravate moral hazards incentives of borrowers to shift into risks. It is noted that highly concentrated banking market motivate institutions to accept more risk as they believe that they are too big to fail and that they are explicitly or implicitly protected by the government safety net. This is well supported by recent empirical studies stating that the risk of bank failure rises in more concentrated markets e.g. (Boyd, Nicolo et al. 2006; Nicolo and Loukoianova 2006). The competitive condition in banking system has been investigated in many papers. (Berger and Hannan 1989) main objective was to examine the relationship between market concentration and profitability using U.S. banks data during the period from 1983 to 1985. They conclude that noncompetitive price behavior could explain that relationship. Other studies have focused on how bank performance is affected by regulations and other factors supposed to relate to the competitive environment. It has been found that tighter entry restrictions are negatively linked to bank efficiency, leading to higher interests margins and overhead expenditures as well as increasing bank fragility (Barth, Jr. et al. 2004). An efficient banking sector is able to absorb negative shocks and enhance financial system stability.

Thus, many researchers focused in their publications on the best methodology to employ whether parametric or non-parametric to estimate bank efficiency (Aiger, Knoxlovel et al. 1977; Chames, W. et al. 1978). Bank efficiency is usually measured through both internal and external determinants. Bank accounts (balance sheet and/or profit and loss accounts) are used as internal determinants.

In this paper, the author seeks to contribute to the banking efficiency literature in emerging markets. To the best of author's knowledge, this research contributes to the literature of banks' operating efficiency, especially in the case of Ethiopia as a developing country adopting major banking reforms. This is supported by the fact that emerging countries are known for highly inefficient banking sector, resulting in losses to financial development and stability. Thus, research in different regions with different environmental and economic factors, may help regulators and managers achieve an efficient banking system.

Approaches to Performance Measurement

This report analyses bank performance in terms of its profitability, liquidity, and efficiency.

Profitability is a bank's first line of defense against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings. An institution that persistently makes a loss will ultimately deplete its capital base, which in turn puts equity and debt holders at risk. Moreover, since the ultimate purpose of any profit-seeking organization is to preserve and create wealth for its owners, the bank's return on equity (ROE) needs to be greater than its cost of equity in order to create shareholder value. According to European Central Bank (2010) although banking institutions have become increasingly complex, the key drivers of their performance remain earnings, efficiency, risk-taking and leverage. In detail:

While it is clear that a bank must be able to generate

Earnings, it is also important to take account of the composition and volatility of those earnings

Efficiency refers to the bank's ability to generate revenue from a given amount of assets and to make profit from a given source of income.

Risk-taking is reflected in the necessary adjustments to earnings for the undertaken risks to generate them (e.g. credit-risk cost over the cycle).

Leverage might improve results in the upswing – in the way it functions as a multiplier but, conversely, it can also make it more likely for a bank to fail, due to rare, unexpected losses. There are a multitude of measures used to assess bank performance, with each group of stakeholder having its own focus of interest. Inevitably, different stakeholders in a bank view performance from different angles. For example

Depositors are interested in a bank's long-term ability to look after their savings; their interests are safeguarded by supervisory authorities

Debt holders, on the other hand, look at how a bank is able to repay its obligations; a concern taken up by rating agencies.

Equity holders, for their part, focus on profit generation, i.e. on ensuring a future return on their current holding. This focus is reflected in the valuation approaches of banks' analysts, who try to identify the fundamental value of the firm.

Managers, too, seek profit generation but are subject to principal-agent considerations and

need to take employee requests into consideration. The view of bank consultancies might also encompass the internal struggle of managers.

Bank analysts tend to consider efficiency, asset quality and capital adequacy indicators as key elements of banks' performance measures. Hence, explicit indicators of credit risk and shock absorption capacity are considered essential in assessing the performance of a bank and encompassing risk in the analysis. Their analyses also rely upon detailed revenue and cost indicators (e.g. the structure, sustainability and rate of change of revenue and cost items), as well as market-based indicators of profitability and valuation. On the other hand, in assessing banks' performance, bank analysts tend not to use liquidity indicators, market-based indicators of credit risk, the systemic significance of the bank and efficiency indicators related to capital, primarily because these indicators provide less reliable information. With efficiency indicators, for example, it is often difficult to gauge the actual amount of capital allocated to each line of business, whereas with market-based indicators, the problem is more that they mirror other indicators and are already reflected in the bank's valuation.

Rating agencies follow a more holistic approach, in line with their objective of assigning grades for the overall assessment of the banks. They consider all types of prudential returns (e.g. capital, asset quality, liquidity) to be integral in measuring the performance of a bank. They also assign equal weight to efficiency indicators and revenue/cost composition. Moreover, they take a more dynamic approach, paying attention to changes in the level and composition of revenue and cost elements, as well as trying to incorporate market-based indicators into their analysis (*ibid.*).

Benchmarks for Measuring Performance

Variation in performance or effectiveness is one of the more enduring ideas in the study of organizations. It is manifested most distinctively in studies with a focus on "management" but extends to a wide range of research that seeks to understand competitive survival and to construct interpretations of organizational histories that emphasize the adaptation of organizations to feedback from their environments. Organizational performance can, of course, be considered at a disaggregated level, as for example in studies of the direct costs of producing a particular product using a specific technology or of efficiency in performing a

particular task (March and Sutton *op.cit.*). Measurement of performance alone does not provide any useful information about organization until it is carried out in relation to some benchmark. Without benchmark it cannot be determined that whether performance of organization is good, bad or indifferent. Following benchmarks are commonly used in performance measurement (Atrill & McLaney 2006). Past Periods: By comparing performance of an organization with previous years, it can be deduced that performance of organization is improving or deteriorating. Problem can occur by selecting past periods as benchmark as some industries have business cycles. So performance can be improved or deteriorated due to these business cycles and it is difficult to exclude effect of business cycles from performance. So in this case results of performance measurement will not be reliable. Similar Businesses: In a competitive environment, businesses are usually compared with other businesses of similar industry. In this way problem of business cycles is removed. Some problems still can occur as different businesses have different accounting policies and different year's ends. In current research, similar business benchmark is taken, as this research is going to compare state versus private banks. All banks in Ethiopia have similar accounting policies and similar year's ends.

RESEARCH METHODOLOGY

This research was used descriptive research design to examine the impact of operational efficiency on the performance of both private and state owned banks. The target population was all commercial banks registered by NBE and under operation in the country presently. Currently, there are 18 banks in Ethiopia, in which two of them are government owned and the rest 16 are private banks. From both government and private owned banks, only those which are in the operation for at least twelve years are included in the sample. The sampling technique used is purposive sampling. The seven banks which were established earlier (Commercial, Awash, Dashen, Abyssinia, Wegagen, United and Nib banks) were selected for the purpose of the study. The study used secondary data, which was annual report of the selected banks (for the year 2012 to 2017) of selected sample of banks, was utilized. The researcher was used financial ratio analysis, the results of financial ratio analysis was used to measure performance of state owned and private sector banks. Financial ratio analysis involves

calculating certain standardized relationship between figures appearing in the financial statements and then using those relationships called ratios to analyze the business' financial position and financial performance. It is used to examine the trend, industry norm and peer-group comparison. It helps to analyze the business operations. So in this study the current operations were compared to the past performance by implementing trend analysis. Industry ratios are compared to the firm's ratios to know where the company stands in its respective industry and sector ratios are also compared to sector ratio to know which of the two sectors is performing better. Therefore, based on data obtained by the ratio analysis the results are described by using tabulation and graphs and a comparative analysis has carried out between private and state owned banks.

Variables Used

Operating Efficiency Variables

The literature points to a number of variables that have been used to measure firm operational efficiency. This study, however, has focused on some indicators efficiency, profitability, and liquidity to measure firm performance which is described in detail below.

Profitability

Banking profitability is commonly measured by return on equity (which gives an indication of the return a shareholder can expect) and return on assets (which gives a measure of the income generated from a given asset base). However in this study, to measure whether operational efficiency affect banks performance , the following variables are used to assess ability of the bank to earn profit in comparison with all its expenses. Return on Assets (ROA); the return on assets (ROA) is financial ratio used to measure the relationship of profits or earnings and total assets. (ROA) measure assesses the profitability performance of total assets, and could be treated as measure of financial performance in this study. As mentioned earlier, ROA reflects the bank management ability to generate profits by using the available financial and real assets.

It is calculated as $(\text{Net Profit} / \text{Total Assets})$. Other indicators of profitability are Return on Equity (ROE) $(\text{Net Profit} / \text{Shareholders' Equity})$ are used as a measure of banks performance in terms of profitability. The last one is profit margin which can

be measured as $(\text{Interest Income} + \text{Noninterest Income} / \text{Net Profit})$.

Liquidity

Liquidity ratios measure ability of the firm to meet its short-term (less than a year) obligations and reveal short-term financial strength and weakness (Ross, Westerfield & Jaffe 2005). Higher liquidity ratio means bank has higher margin of safety and ability to meet its short-term obligations. Variables that are used to measure how operating efficiency affect the liquidity more liquid is Liquid Asset to Deposit Ratio (LADR) $(\text{Total Cash Holdings} / \text{Total Deposits})$, Loan to Deposit Ratio (LDR) $(\text{Loans} / \text{Total Deposits})$ and Loan to Asset Ratio (LAR) $(\text{Loans} / \text{Total assets})$. Higher liquidity ratio means bank has higher margin of safety and ability to meet its short-term obligations.

Efficiency

To measure how efficiency affects commercial banks performance and resource management efficiency ratios are utilized. These ratios measure overall effectiveness of the firm in utilizing its assets to generate sales, quality of receivables and success in collection, effectiveness of inventory management practices and efficiency of the firm in controlling its expenses. While variables to be used to measure efficiency of sample banks for this study includes; Asset Utilization (AU) $(\text{Total Revenue} / \text{Total Assets})$, Operating Efficiency (OE) $(\text{Operating Revenue} / \text{Total Operating Expenses})$ and Income Expense Ratio (IER) $(\text{Total Operating Income} / \text{Total Operating Expense})$.

RESULT AND DISCUSSION

Operating Efficiency Return on Assets (ROA)

It measure the way in which all assets of the bank are involved in profitability. Higher the ratio, more profitable is the bank. As shown below in table 4.1 ROA of state commercial banks increases from 2012 to 2013 moving from 1.40 % to 2.55% and then shows decreasing trend from 2014 to 2015 moving from 2.59% to 2.46%. State banks have shown little increase in the last couple of years i.e. 2016 by the value of 0.93% and in 2017 by 2.95. But it is somewhat different in the case of private commercial banks except that it does not show any dynamic changes. It increases from 2.98% to 3.32% in year 2012 to 2013 and further increase in 2014

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

to 3.42. From the year 2015 it starts decreasing trend and ends with 2.98% in 2015, 2.90% in 2016 and finally in 2017 it shows a little increase and reached 3.15, a 0.25 above the previous year. Both sectors are showing downward trend in the year 2015 although drop of ROA of private banks is more pronounced. State banks have shown little increase in the year 2016 but private sector banks are still observed decreasing. While in all other years performance of private banks is much better than state owned banks. In comparison with the industry average, state banks are below the industry average in all years except in 2015

Table4.1. Operating Efficiency and return on asset

Sector	2012	2013	2014	2015	2016	2017	Average
State	1.40	2.55	2.59	2.46	3.39	2.95	2.56
Privet	2.98	3.32	3.42	2.98	2.9	3.31	3.15
Industry average	2.07	2.61	2.58	2.94	3.18	1.48	

Source: Annual reports of Banks

Operational Efficiency and Return on Equity (ROE)

This ratio is also an indicator operating efficiency and profitability. It measures operating efficiency and profitability of banks in terms of their equity. Higher the ratio, more profitable is the bank. ROE of state and private commercial banks is shown in table 4.2. From the table ROE of state owned commercial banks starts increasing from the year 2012 with the value of 28.74 to 43.22 in 2013 and decreases by 9.38 % (to 32.70) in 2014, 35.73% in 2015 and shows again a little fall in 2016 (35.29%). Finally it yields a little improvement in the year 2017 (35.55%). ROE of private commercial banks increases in the start from 2012 to 2013 (27.29% to 30.22%) and then shows decreasing trend from 2014 with value 29.03%. In 2015 & 2016 with same value 23.4% and finally begun to increase in the year 2017 (27.5%).

When compared with the industry average state commercial banks are above the industry

Table4.2. Return on Equity

Sector	2012	2013	2014	2015	2016	2017	Average
State	28.74	43.32	32.7	35.73	35.29	34.55	36.31
Privet	27.29	30.22	29.03	23.4	23.4	27.5	26.81
Industry average	32.71	40.65	28.81	27.75	31.14	11.86	

Source: Annual reports of Banks

Operating efficiency and Profit Margin

Profit margin is another measure of banks Operating efficiency and profitability. It is the margin left after meeting all expenses. The

which shows a little (0.01) above the industry average. The opposite is true in private banks (except 0.04 below in the year 2016). From table 4.1, it is clear that ROA of private banks is higher than state banks in every analysis year from 2012 to 2017 but higher in 2016. Higher value of this ratio means better managerial performance (Ross, Westerfield & Jaffe 2005). Hence it can be said that private banks are better in managerial performance than sate owned banks. Overall, the mean ROA of private banks i.e. 3.15% is greater than that of state banks i.e. 2.56% which shows that private banks are more profitable than state banks in terms of ROA.

average in all years except in 2012 which is a 5.04 below the industry average. In the case of private commercial banks it is above the industry average only in 2014 and 2017 but below in the rest of the analysis year. It can be seen from the table below that in the period analyzed at the level of the Ethiopian banking system state owned commercial banks was registered a level of the ROE slightly above the industry average and higher than the private sector. There can be noticed a stable trend of this indicator, the first explanation for this phenomenon could be the lack of competition in the banking system. Generally, mean ROE of state commercial banks i.e. 36.31% is greater than that of private commercial banks i.e. 26.81% which explains that state banks are more profitable than private banks in terms of ROE. So from the table 4.2, it is clear that performance of state banks is more profitable than private banks in terms of ROE in all years. Trends in the performance of ROE of both sectors are visible from table 4.2

higher the profit margin the lower the external financing requirement and increases net income. The PM of state owned commercial banks has shown an increasing trend from 28.3% in 2012

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

to 39.71% in 2013 and in 2014 it decreased to 32.08% but shows an improvement then after to 41.98 % in 2015. After that it decreased until the end of the analysis period and ends with 39% in 2017. PM of private commercial banks is the same as state owned commercial banks shows the same trend up to 2014 but private commercial banks again show a down ward trend in 2015. In 2016 it shows a little improvement, from 28.96% (2015) to 31.53% in 2017. Finally show an increment and arrived at 34.92%.

In comparison with the industry average state commercial banks are at the top of the industry

Table 4.3. Profit Margin

Sector	2012	2013	2014	2015	2016	2017	Average
State	28.36	39.71	32.02	41.98	41.12	39	37.03
Privet	32.69	35.37	35.03	28.96	31.53	34.92	33.12
Industry average	36.68	39.97	36.34	30.30	41.08	38.01	

Source: Annual reports of Banks

Generally from the above three measures the profitability of the private commercial banks as a group has shown improvement through time; however it remained lower than the profit registered by the state owned commercial bank and the single largest bank. Even if the share currently is reduced it can be briefly explained that state owned commercial bank dominance both in concentration and market share has resulted in higher profitability of the state banks. So this finding is consistent with the notion that bank operating efficiency, has a significant and positive impact on bank profitability.

Operating Efficiency and Liquidity Ratios

In this section, analysis and empirical findings of those ratios are presented which provide information about liquidity position of banks. The ratios included in this section are Liquid Asset to Deposit Ratio (CDR), Loan to Deposit Ratio (LDR) and Loan to Asset Ratio (LAR).

Operating Efficiency and Liquid Asset to Deposit Ratio (LADR)

This ratio shows liquidity position of banks and their ability to meet cash withdrawal demands of depositors. It increases customer trust but reduces chances of earning profit from cash. Higher the ratio, more liquid is the bank. In other words, bank has higher margin of safety and ability to meet their short term obligations. Assessing liquidity has the objective of ensuring that each bank is capable of meeting the day-to-day cash deposit withdrawal needs of customers. In this regard, taking prudential mix of liquid

assets is important in the operation of banks. NBE supervises this and such analysis needs to be carried more frequently since liquidity problems can easily lead to the collapse of banks. According to NBE's Directive No SBB/44/2008, any licensed bank shall maintain liquid assets of not less than 25% of its total demand, saving and time deposits and similar liabilities with less than one month maturity period.

From table 4.4 LADR of state commercial banks increases from the year 2012 (63.74%) to 2013 (66.26%) and then shows downward trend till the end of the year i.e. (64.56, 55.04, 43.72 and 41). On the contrary, the LADR of private commercial banks decreases from 44.89 % in 2012 to 36.5 in 2013. After that it shows a continuously increasing trend ending with 66.87% in 2016 and reveals a slight decrease in 2017 (to 66.1%). Compared to the industry average, state banks are above the industry average in all analysis years except in 2016 which is 2.74 below the industry average. On the contrary private banks are below the industry average for the first three years (2012, 2013 and 2014) and starts to make progress and became above the industry average for the rest of the analysis year (2015, 2016 and 2017).

The average LADR of both sectors is more than two times above the statutory requirement, which shows their excess liquidity. From the table 4.4, it is clear that LADR of state commercial banks is greater than private commercial banks except in 2016 and 2017

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

which shows that state commercial banks are more liquid than private banks in terms of LADR. Overall, the mean LADR of state banks i.e. 55.72 is greater than that of private banks i.e. 51.03% which leads to the conclusion that state owned commercial banks have stronger

liquidity position the results in table 4.4 show that state owned commercial adjusts their operating efficiency to a target level than private banks in terms of LADR. Moreover, trends in performance of LADR of both sectors are visible from the table4.4.

Table4.4. Operation Efficiency and Liquid Asset to Deposit Ratio

Sector	2012	2013	2014	2015	2016	2017	Average
State	63.74	66.26	64.56	55.04	43.72	41	55.72
Privet	44.89	36.50	40.48	51.34	66.87	66.1	51.04
Industry average	57.17	58.47	61.48	46.19	45.46	50	

Source: Annual reports of Banks

Efficiency or Activity Ratios

In this section, analysis and empirical findings of those ratios are presented that provide information about efficiency of banks. The ratios included in this section are Asset Utilization (AU), income expense ratio (IER) and Operating Efficiency (OE).

Asset Utilization (AU)

This ratio determines that how efficiently the bank is utilizing its assets in generating revenues. Higher value of it reveals that bank is efficient in utilizing its resources. The AU ratio of private and state owned banks is shown in table 5.9. The AU of state owned banks frequently increased from the year 20012 to 2016 ranging from 4.24% to 6.57%. In 2017, it

slightly drops to 6.15%.The AU of private banks shows an increasing trend from the year 2012 to 2015 continuously ranging in values from 7.23% to 8.90% and decreased to 7.96 in 2016. Finally it shows an improvement in 2017 with the value of 8.49. It is clear from the table 4.5 that the AU of private banks is greater than state banks in all the analysis years which mean that private banks are using their assets efficiently in generating total revenue.

Generally, the mean AU of private banks i.e. 8.08% is greater than that of state owned banks i.e. 5.61% which leads to the conclusion that private banks are more efficient than state banks in terms of AU. Trends in performance of AU of both sectors are evident from the table 4.5.

Table4.5. Asset Utilization

Sector	2012	2013	2014	2015	2016	2017	Average
State	4.24	5.23	5.45	6.04	6.57	6.15	5.61
Privet	7.23	7.48	8.43	8.90	7.96	8.49	8.08

Income Expense Ratio (IER)

This ratio determines efficiency of banks in generating profit while controlling their expenses. Higher the ratio, is higher the efficiency of banks in generating income and in controlling expenses. As shown in table 4.5 IER of state owned banks dramatically increases from 0.42 to 8.24 in year 2012 to 2013 respectively. However it then drops in the next year (2017) as the way it increased in the previous year to 1.16. In 2015 and 2016, it displays a little upturn and gains the value of 2.67 and 3.33 respectively. Unlike state owned banks the IER of private banks show an increasing trend except a little declining from the year 2015 to 2016 by the value 1.61 to 1.41respectively.

Even if the IER of private banks shows an increasing trend in almost all years, the IER of state owned banks is greater than private banks in all the analysis years except in the year of 2012 and 2015. From their financial statements report, state owned banks expense reduced from year to year. This is an implication of their efficiency in controlling expenses and further contributes for their superior profitability. In general, the mean IER of state owned banks i.e. 2.97 is greater than that of private banks i.e. 1.53 which concludes that state owned banks are more efficient in generating income and in controlling expenses than private banks. Trends in performance of IER of both sectors are visible from the table 4.6

Table4.6. Income Expense Ratio

Sector	2012	2013	2014	2015	2016	2017	Average
State	0.42	8.28	1.16	2.67	3.33	1.99	2.97
Privet	1.40	1.62	1.65	1.41	1.44	1.67	1.53

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

Source: Annual reports of Banks

Operating Efficiency (OE)

This ratio measures efficiency of banks in generating operating revenues and in controlling operating expenses. Higher the ratio, more efficient is the bank. The OE of state owned banks increased from 2012 to 2013 by the value 1.94 to 2.12 respectively. In 2014, it drops to 1.37 and in 2015 it shows an improvement and becomes 2.66 and increased to 4.21 in 2016. Finally it ends up with 2.86 in 2017.

The OE of private banks increased from 2012 to 2013 having value 1.76 and 2.02. Again in

2014, it increased to 2.12. In 2015 it drops to 1.80 and in 2016, it shows little improvement to 1.88 and dropdown to 1.65 in 2017.

The OE of state banks is greater than private banks in all the analysis years but OE of private banks is greater than state banks only in the year of 2014. Overall, the mean OE of state owned banks i.e. 2.54 is greater than that of private banks i.e. 1.87 which recommends to the conclusion that state banks are more efficient in generating operating revenues and controlling their operating expenses than private banks. Trends in performance of OE of both sectors are observable from the table 4.7.

Table 4.7. Operating Efficiency

Sector	2012	2013	2014	2015	2016	2017	Average
State	1.94	2.12	1.37	2.66	4.21	2.86	2.54
Privet	1.76	2.02	2.12	1.80	1.88	1.65	1.87

Source: Annual reports of Banks

From the results of all efficiency measures, it can be concluded that state owned banks in Ethiopia are more efficient than private banks. This can be the main reason for the better profitability of state owned banks

CONCLUSIONS

The main objectives of this study were to examine how operating efficiency affect the performance of both private and state owned commercial banks performance. As the finding of the study indicated state owned banks have shown superior performance than private banks. This finding is the same as that of Unal et al. (2007). Out of seven ratios used in performance analysis, five ratios support state owned banks for superior performance as compared to private banks and only two ratios quote that privately owned banks are superior in performance than state owned banks. So from the findings it can be concluded that performance of state owned banks is superior to private banks in Ethiopia in terms of profitability, liquidity, and efficiency and also operational efficiency has great impact on performance of commercial banks.

RECOMMENDATIONS

The study recommends that all commercial banks which are included in the study ought to focus on improving operational efficiency in order to improve their performance and competitive advantage in the banking industry.

REFERENCES

[1] Alchian and Demsetz, (2008).The Property

- right Paradigm. *The Journal of Economic History*, 33(1), 16-27. Altunbas,
- [2] Atrill and McLaney,(2006). *Accounting and Finance: for Non-specialist*. Pearson Education Limited, England
- [3] Barth, Caprio and Levine, (1999). *Financial Regulation and Performance: Cross-Country Evidence*
- [4] Beck, Demirgüç-Kunt, and Maksimovic, (2004). Bank Competition and Access to Finance: International evidence. *Journal of Money, Credit and Banking*, 36(3), 649-654.
- [5] Birhanu and Befkadu, (2000). Annual Report on Ethiopian Economy. *Ethiopian Economic Association*.
- [6] Boardman and Vining, (2005). Ownership and Performance in competitive environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises. *Journal of Law and Economics*, 32, 1-33.
- [7] Boycko, Shleifer and Vishny, (2002). A theory of Privatization. *The Economic Journal*, 106(435), 309-319.
- [8] Carroll, (2004). *Property Rights and Managerial Decisions in For-profit, nonprofit, and Public Organizations*. Palgrave Macmillan, New York.
- [9] Cornett, Guo, Khaksari and Tehrani, (2005). *The impact of corporate governance on Performance differences in privately-owned versus state-owned banks: An International Comparison*.
- [10] Dailami, (2000). Financial Openness, Democracy and Redistribution Policy. *World Bank. Policy Research Working Paper*, 2372,
- [11] Demsetz and Villalonga, (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7, 209–233

Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia

- [12] Evans and Molyneux,(2001). Bank Ownership and Efficiency, *Journal of Money, Credit and Banking*, 33(4), 926-954.
- [13] Kumar, S., & Gulati, R. (2008). Evaluation of Technical efficiency and ranking of public sector banks in India: An analysis from cross-sectional perspective. *International Journal of Productivity and Performance Management*, Vol. 57, No. 7, pp. 540-56
- [14] M. Sathye, (2003) "Efficiency of banks in a developing economy: The caseof India," *European Journal of Operational Research*
- [15] Mihir, Dash, & Christabel, Charles. (2009). the study of the Technical efficiency of Banks in India. <http://ssrn.com/abstract=1417376> (Accessed on 26th April 2015)
- [16] Mukherjee, A., Nath, P., & Pal, M.N. (2002). *Performance benchmarking and strategic homogeneity of Indian banks. International Journal of Bank Marketing*, Vol. 20 No. 3, pp.
- [17] Sahoo Biresh, K., & Sengupta, Jati. & Mandal, Anandadeep. (2007). Productive Performance Evaluation of the Banking Sector in India Using Data Envelopment Analysis. *International Journal of Operations Research*
- [18] *World Bank Policy Research Working Paper*,(2007). Washington, DC, United States: World Bank.

Citation: Addis Alemayehu, Alubel Kassaw Belete, "Assessing the Effect of Operational Efficiency on the Performance of Private and State Owned Commercial Banks in Ethiopia", *Open Journal of Economics and Commerce*, 2(4), 2019, pp.18-27.

Copyright: © 2019 Alubel Kassaw Belete. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.