

**OWNERSHIP AND ORGANIZATIONAL PERFORMANCE:
A COMPARATIVE ANALYSIS OF PRIVATE AND STATE OWNED BANKS**

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Declaration

I, the undersigned, declare that this study is my original work and has not been presented for a degree in any other university, and that all the sources of material used for the study have been dully acknowledged.

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Acronym

AIB	Awash International Bank
AU	Asset Utilization

BIB	Birhan International Bank
BOA	Bank of Abyssinia
BUIB	Buna International Bank
CBE	Commercial Bank of Ethiopia
CBB	Construction and Business Bank
CBO	Cooperative Bank of Oromia
DB	Dashen Bank
DBE	Development Bank of Ethiopia
DER	Debt Equity Ratio
EM	Equity Multiplier
IER	Income Expense Ratio
LADR	Liquid Asset to Deposit Ratio
LAR	Loan to Asset Ratio
LDR	Loan to Deposit Ratio
LIB	Lion International Bank
NBE	National Bank of Ethiopia
NIB	Nib Bank
OIB	Oromia International Bank
OE	Operating Efficiency
PM	Profit Margin
ROA	Return on Asset
ROE	Return on Equity
SOE	State Owned Enterprises
UB	United Bank
WB	Wegagen Bank
ZB	Zemen Bank

Abstract

This paper examines the performance of banks by classifying in terms of their ownership to explore the effects of ownership and performance. The researcher begin by documenting the extent of, theoretical rationale and measured performance of state and private owned banks around the world, and then assessed the performance of banks in Ethiopia. The empirical evidence clearly shows that state owned banks are superior in performance than privately owned banks, and from eleven ratios used to measure performance seven supports for state ownership and the remaining supports private ownership. In case of growth pattern of deposit, loan and asset, private banks show better trend than state owned banks.

Key words; ownership, private ownership, state ownership, performance

1. Introduction

In view of intense competition in the organizations, performance and factors affecting it are now of great concerns to researchers and practitioners. One of these factors is form of ownership. Ownership structure is considered as an important factor that affects a firm's health (Zeitun and Tian, 2007). Ownership gives control and bargaining power to owners to use strategies that are beneficial to them (Hart 1995). Ownership affects the choice of property rights assignments, political influence, organizational climate and job characteristics leading to different business practices and strategies. If ownership structure affects a firm's health in the above way, it is possible then to use the ownership structure to predict firm profitability, which in turn are responsible for differential performance of ownership forms.

Theoretical and empirical research on the relationship between ownership structure and company performance was originally motivated by the separation of ownership from control which has been an important research topic, and produced ongoing debate in the literature of corporate finance. Some studies favour state owned organizations while rest of them favour private organization for superior performance. Such as La Porta et al. (2002) have found that the performance of private banks is typically better than state-owned banks. A study conducted by Majumdar (1998) to evaluate the comparative performance of government owned, mixed and private enterprises with the help of Data Envelopment Analysis in India and concluded that government owned enterprises are less efficient than mixed and private enterprises. Mixed enterprises on their turn are less efficient than private enterprises. Figueira, Nellis & Parker (2009) conducted a study to investigate the effect of ownership on bank efficiency in Latin America. They used a range of financial and economic ratios, and regression modeling and study revealed that there is little difference in performance of state and private banks.

Though there is increasing empirical evidence on the impact of ownership and company performance in developed markets while ownership is deemed an important ingredient of bank operation, little attentions have been given and there is very little empirical evidence in developing economy such as Ethiopia to examine what constitutes ownership structure and its impact on company's performance.

In the rapidly growing economies of Ethiopia, as in many other emerging markets, the banks are expected to play a crucial role. Research has demonstrated that financial institutions are critically important for growth and efficient capital allocation (Levine 2005). It is, therefore, important to understand the key ingredients for maximizing the performance of banks and their role in the growing economies.

So this study has examined which of the two sectors (private or state owned banks) are superior in performance. Quantitative approach will be used in this thesis to compare performance of state and private banks in Ethiopia in terms of profitability, liquidity, solvency and efficiency. Comparative and trend analysis are used for this purpose.

1.1. Statement of the problem

Ownership and organizational performance is a topic, which has attracted the interest of a large number of scholars and has been discussed by researchers and financial scientists for a very long period of time. A large number of researchers in various parts of the world have done commendable work on it and presented their findings on the basis of facts and figures.

A review of the work done by different researchers in the world indicates three possible situations:

1. Some researchers proved that private organizations are superior in performance,
2. Others proved that ownership structure does not have any impact on performance. In their findings other factors like environment and externalities regulate the performance; and
3. Yet others proved that state owned organizations are superior in performance.

The above results are according to the different corporate environmental findings where the researchers were conducting their research. The Ethiopian financial sector has not been studied to any great extent, from the perspective of ownership and performance. What distinguishes this paper is that the study has taken a close look at the Ethiopian banking sector by utilizing banks data to analyze the performance of state-owned and privately owned banks. So the research has predominately focused on the effect of ownership on banks performance and provides evidences in a new environment (with respect to Ethiopian corporate culture). Specifically, the researcher has compared the effects of two forms of ownership (private and state ownership) on banks performance.

1.2. Objective of the Study

The main objective of this study is to provide evidence on the effects of ownership on performance of privately and state owned banks in Ethiopia. In addition the study has the following specific objectives;

- Examining the financial performance of the banking sector.
- Identify which of the two sectors are superior in performance.

1.3. Research Questions

The main research question for the study is, is there a performance difference between private and state owned banks in Ethiopia?

Specific questions are;

Is there a difference in profitability between state and private banks in Ethiopia?

Is there a difference in liquidity between state and private owned banks in Ethiopia?

Is there a difference in solvency between state and private owned banks in Ethiopia?

Is there a difference in efficiency between state and private owned banks in Ethiopia?

Which of the two sectors shows better growth trend in terms of asset, loan and deposit?

1.4. Scope and Limitations

The study highly concentrated on reviewing and measuring the performance of the Ethiopian banking industry based on the structure of ownership specifically the financial performance. For the sake of uniformity and fair comparison only data obtained from commercial banks that are established for profit motives and were in operation for more than 10 years are used for the industry analysis. Other banks with development objective like Development Bank of Ethiopia (DBE) are not included in this study. In addition only those data which can be publicly announced by the commercial banks are referenced for the study. However, the study lacks access to various research literatures specifically done on the effect of ownership in the banking industry particularly of the Ethiopian case. Discrepancies may arise from data quality, accuracy, and selection bias. Since the researcher has used annual reports, this can be less objective because

they can be made by the company management to show the best picture to their potential shareholders. Time constraint and difficulty of interpretation of the result are some of the limitations that the researcher has faced with.

1.5. Significance of the Study

More specifically this study will:

- Contribute a in assessing the currently prevalent ownership structure of the banking sector
- This research may benefit the existing and potential shareholders, bank depositors, investors, Ministry of Finance and bank managers.
- Provide a base for further study and research on assessment of the impact of the currently prevailed ownership and market structure on the performance of the Ethiopian banking industry and
- Finally, give insight to researchers and students about the problem and stimulate further investigation of the issue.

1.6. Organization of the study

Generally the study is comprised of six distinctive chapters. The first part has given the brief introduction about the study. Chapter two gives theoretical explanations and empirical evidences about ownership and performance. Chapter three provides a brief explanation about the methodologies used for the study. In what follows, chapter four gives information on the Ethiopia financial sector reform and the ownership structure from the pre reform up to the current structure of banking system. Chapter five is the analysis part which examines the performance of the two sector banks (private and state owned) by using financial performance indicators and chapter six concludes.

CHAPTER TWO

2. Literature review

2.1. Ownership

Ownership implies to legal right of possession. An owner is a person who has two formal rights: right to control firm and to take residual earning (net income after paying all obligations) of the firm.

The term ‘formal’ is used due to the fact that formal (legal) control does not mean effective (economic) control. In case of sole proprietorship, a person can have full control right and full residual right which leads to full ownership (Hansmann 2000). But in case of corporations, shareholders have formal control while effective control lies in hands of managers. In complex organizations, usually, a person does not have both control and residual rights which leads to principal-agent problems in corporations (Fama & Jensen 1983). Some firms do not have owners as in case of nonprofit organizations in which no one can take the residual earnings (Hansmann 2000).

2.1.1. Forms of Ownership

Forms of Ownership are developed by different configurations of control rights and residual rights with variations on characteristics of these rights. The configuration of rights is an assignment of property rights. There are three general ownership forms (*ibid*):

- Private ownership.
- State ownership.
- Public or communal ownership.

Private Ownership: Both control rights and residual rights are assigned to individuals or organizations. In private property right system, owner has both control rights and residual rights. He can exercise his control rights by using or modifying the property through development. He can exercise his residual right by selling or leasing the property. However, regulations can reduce exercise of residual and control rights. For example, zoning regulations can prohibit specific uses of the resource, altering the control rights. Tax authorities can increase residual gain (via tax credit for preservation or certain kind of development) or decrease the residual gain obtained from the resource (by imposing tax on return from the resource).

State Ownership; Here both control rights and residual rights are assigned to government or state. In state property right system, state is granted exclusive rights to a resource and the state can limit access of public to the resource. For example, state can limit public access to military bases or federal lands (in Ethiopia land is on the hands of government and can neither be rented nor sold) by putting restrictions on commercial activities. In this property right system, state is also granted transferability right. So government can sell or lease a government property (Carroll 2004). Chinese state property right system allows central government to distribute input to industrial enterprises and set targets for output and profit for them (He 2002).

Public Ownership; Control rights and residual rights are assigned to all members of community. It is a pure public ownership. It is an open system with lack of exclusivity. In public property right system, exclusive rights are not assigned to any individual, to any organization or even to state. So this property right system is considered as nonprofit. The examples of public property right system are waterways, public roads and ocean fisheries beyond internationally agreed limits (Carroll *Op.cit.*). Technically public property right system is very close to state property right system but has a clear demarcation. The best example that can be presented here is of public parks. State or local government develops these parks for welfare of general public. State technically has capability to limit public access from using public parks by imposing fee for entrance. If this right is used by the state frequently then parks can be identified as state-owned property. If the state does not use this right then parks can be identified as public property (Alchian & Demsetz 1973). Another example that can be presented here to differentiate between state and public property right system is the difference between the state and the government. The Queen of England represents the state while the Prime Minister of England represents the public. The main difference between these two designations is that public can elect the Prime Minister but cannot elect the Queen. So these two designations also differ by public access. Prime Minister is a political figure but Queen of England is a nonpolitical figure (*ibid*).

2.2. Performance

Performance is defined as organization's ability to achieve its objectives in a resourceful manner with consistency without seeking purpose of analysis. If analysis or measurement is carried out too often then it will consume more resources and become counterproductive (Stainer 2006).

Business firms are compared in terms of profits, sales, market share, productivity, debt ratios, and stock prices. Hospitals use cost recovery, mortality and morbidity rates, board certification of physicians, and occupancy rates. Universities use research productivity and prestige of faculties, test scores of students and rankings by popular magazines. Such comparisons become a basis for evaluating executives, for making decisions about allocation of human and other resources, for writing history, and for stimulating arrogance and shame (March and Sutton 1997).

2.2.1. Approaches to Performance Measurement

This report analyses bank performance in terms of its profitability, liquidity, solvency 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 stakeholders 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.*).

The different perspectives of performance measurement that have already been identified are also reflected in the different metrics chosen by the various analysts. It is worth noting, however, that such choices are generally dictated by the availability and quality of the data. Most analysts are therefore calling for a general improvement in the quality and disclosure of certain indicators of performance, which may thus play a central role in the future.

2.2.2. 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.

Planned Performance: Performance can be measured with targets that management developed before start of period under review. But in order to get useful results; planned level should be based on realistic assumptions.

2.2.3. Effect of Ownership on Efficiency

This part studies the effect of ownership on behavior of decision maker, on resource allocation and on efficiency.

Under private ownership system, in which individuals or organizations are assigned the rights, owner of the resource will invest the resource with objective of neoclassical profit maximization. So the private property right system promotes resource usage and exchange until the resource achieves its optimal value. Therefore, the private property right system along with individual profit maximization concept in a competitive market, promotes efficient allocation of resources in the economy (Demsetz 1967 & Alchian 1973).

In state ownership system, the state decides to invest in state-owned resources. The efficiency results will not be the same as in private property right system. In private property right system, individual or organizational wealth maximization is followed, while in state property right system, wealth maximization of whole society is followed. This outcome would require that state's decision making process should reflect and incorporate interests of all members of the society. This belief was the basis for formation of Communist Party. However if state in the state property right system does not follow profit maximization principle for the society, economic efficiency in the state property right system will be far less than private property right system (Carroll 2004). In state property right system, mostly political objectives are pursued rather than profit maximization of whole society (Shleifer *et.al.*1996).

Under the public ownership system, residual rights and control rights to a resource are effectively unassigned. Due to lack of exclusivity and transferability of property rights in the public property right system, there will be minimum investment in common property resources. The reason is that every person or organization investing in public property right system is not sure of getting profit back and profit can go to a different person who cannot be excluded but who has made no investment. Another efficiency implication of public property right system is

that it promotes overuse of resources. This overuse attempts will be made by a person who will achieve pioneer access to the resource. In public property right system we see 'first come, first served' self interest behavior. So, lack of exclusivity in the public property right system leads to lower outcome of the resource. The examples of this behavior can be seen in over fishing in oceans, overgrazing in ranges and over harvesting in timber. These types of responses to public property right system reduce value of resource to the community leading to inefficient outcome (Carroll *op.cit.*).

2.2.4. Factors for Differential Performance

There are different factors discussed here which are linked with different ownership forms and are responsible for differential performance of state owned and private organizations.

The Effect of Incentives: Property rights that include the right to control a resource and the right to get returns from a resource, provide basis for efficient decisions of individuals who have wealth maximization as only objective in their mind. Consequently, an individual or an organization that holds property rights will invest the resources in such a way to produce highest returns. There is an incentive to acquire a resource which may be productive and then develop the resource to get maximum production from that resource. Property rights thus establish incentives for efficient use of the resource by individuals or organization that hold them. Incentives are derived from property rights while difference between incentives is evolved from different alternative property right systems. One commonly accepted view is that private owners have stronger incentives than government appointees to maximize profits because they own equity and so bear the financial consequences of their decisions. Empirically, however, the case for incentives as the reason for greater efficiency of private ownership has not yet been established. A second theory suggests that private organizations insofar select managers who are better at running firms efficiently. Managers of state firms are selected for their ability to get along with politicians, address political concerns, and lobby for assistance. In contrast, managers of private firms are selected for their ability to run them efficiently. Milgrom and Roberts (1992) have elaborated importance of level and intensity of the incentives. They have proved that by increasing intensity of the incentives, efficiency of decision maker can be improved. The private property right system thus generates highest efficiency from decisions concerning investments in

resources. The incentive to invest in and allocate resources is derived from ability to use or modify a resource or ability to get returns from a resource.

The Effect of Politics: There are two possible explanations for poor performance of state owned organizations versus private organizations. First school of thought argues that state organizations have a social and developmental role which makes them socially profitable but financially unprofitable (Stiglitz 1994). Those who are critical to this thought are supporters of public choice theory and argue that state owned organizations are controlled by politicians who use them for their political objectives and as a result efficiency of state organizations is lowered than private organizations (La Porta *et.al.* 2002). Public Choice Theory studies economic behavior of non-market decision makers like politicians, voters and bureaucrats and assumes that man is an egoist, rational and utility maximizer and consequently suggests that government ministers and civil servants have different goals than profit maximization and they exhibit individual utility maximizing behavior. They are involved in increasing their vote bank and achieving budget maximization objectives leading to waste and inefficiencies (Shleifer and Vishny 1994).

Politicians increase their vote bank and political support in number of ways which in turn lower performance of state-owned organizations as compared to private organizations. Most commonly used strategy by politicians for this purpose is;

- Excess spending. Excess spending is used by politicians to increase their political support and usually favor friends of government. Lot of evidences about excess spending is found in literature. Sapienza (2004) did a study on Italian banks and found that lending behavior of banks is affected by electoral results of political party affiliated with the bank.
- Another strategy used by politicians to get political support and enhance vote bank is excess employment (Mueller 1976).
- Another political effect is depicted by Krueger (1990) who argued that state owned enterprises are pressurized to hire politically connected persons rather than qualified person which lead to poor performance of state owned organizations as compared to private organizations.

It is evident from the discussion that politics plays a negative role in the performance of state organizations as compared to private organization which leads to poor performance of state owned organizations as compared to private organizations.

The Effects of Job Characteristics and Organizational Climate: Effectiveness of state owned and private organizations depends upon matching the internal organizational structure to demands of external task environment. So functioning in state and private organizations depends on different environmental contingencies that they have to adapt. For example, difference in these two sectors in their criteria of control and accountability, legal and political environment, funding and patterns of ownership has direct effect on the structure and practices in these two types of organization (Thompson 1962).

In private organizations, managers are rewarded on the basis of their efficiency to meet the market demands while in state owned organizations, managers have multiple and competing goals to meet with additional constraints and lower priority is given to those policies that reward efficiency. Solomon (1986) provided evidence to it. He took interview of 240 top managers of different state owned and private organizations in Israel and concluded that performance based rewards and policies that promote efficiency are more prominent in private organizations as compared to state owned organizations. The largest difference found in these two sectors was in area of reward system. Rewards were not distributed on basis of performance in state owned organizations. The differences between two sectors were more significant in efficiency-related areas including improvement of methodology, task autonomy, and task clarity and reward orientation. Further, he concluded that satisfaction with jobs and organizational characteristics is higher in private organizations than state owned organizations.

Another factor that affects efficiency of decision maker is 'degree of complexity within organization'. In case of sole proprietorship and small partnership firms, the legal control rights and legal residual rights are usually in hands of same person which leads to efficient decision making. While in complex organizations, legal control rights are assigned to decision makers (managers) while legal residual rights are assigned to other parties (shareholders). Legal residual rights are less effective than legal control rights in decision making process as legal control rights are in hands of manager who makes decisions (Carroll *op.cit*).

Another factor that affects performance of organization is job security. It is observed that employees having more secure jobs are more efficient than less secure job holders. Job security is higher in state owned than private organization.

The Effect of Competition and Regulation: Competition has effect on performance of state owned and private organizations to same or lesser extent. Competition aligns the behavior of managers in both state and private organizations. Two different views are found in literature about the effect of competition on performance of ownership. First group of scholars who are supporters of the argument that ‘primacy of competition versus ownership’ has argued that competition in product markets is more important determinant of efficiency than ownership of organization. When competitive product markets are normatively appropriate i.e. there is no product markets failure then ownership does not matter. There is no difference in efficiency of state and private organizations. It is only the competition that drives performance of state and private organizations. It can be concluded here that the introduction of competition in product market can eliminate the need for privatization. This argument was supported by Megginson et.al. (1994). The supporters of the argument witnessed that state-owned enterprises that were privatized in noncompetitive environment did not show any improvement in returns on sales. However, improvements were dramatic where privatization was carried in a competitive environment. So degree of competition and effectiveness of regulatory policy have more effects than ownership (Vickers and Yarrow 1988).

Now the question raises that in similar competitive environment which factors can be responsible for the differential performance of state and private organizations? This question is answered by Majumdar (1998). He explained that with similar competition, state owned and private enterprises can differ in performance based on their institutional environment. The choice of institutional environment is affected by form of ownership. So ownership cannot be ruled out. This conclusion is in accordance with second group of scholars.

Second group of scholars argues that competition has effect on performance of organization but ownership still matters. Boardman and Vining (1989) who belong to second group of scholars evaluated fifty-four studies about comparative performance of state and private organizations; six studies revealed that state owned organizations are more efficient than private organizations. Sixteen studies concluded that there is no performance difference between state owned and

private organizations while thirty-two studies revealed that private organizations are more efficient than state owned organizations.

2.3.Evidences on State versus Private Performance

There are a number of empirical evidences on state versus private ownership. Previous studies on comparative performance of state owned and private organizations provided different results. Some studies favor state ownership for superior performance; some favor private ownership while some concluded that ownership does not have any effect on performance. But the overall picture that emerges is extremely damaging for proponents of state ownership.

2.3.1. State ownership and firm performance

There are two conflicting views on the impact of state ownership on firm performance. One view argues that state ownership is negatively correlated with firm performance because the state may care more about social security such as maintaining low levels of unemployment (Xu and Wang, 1999). On the other hand, the other view emphasizes the positive role of state shareholders. According to Sun et al. (2002), the government has positive impact on firm performance by sending a positive signal to markets, by being effectively involved in monitoring the management, and by subsidizing SOEs in trouble. Unal et al. (2007) in the comparative performance analysis between the state-owned and private commercial banks in Turkish by using net profit-loss, return on assets and return on equity as proxies to measure profitability and net profit, net assets efficiencies relative to total employment and total number of branches to measure operating efficiency, the findings suggested that state-owned banks are as efficient as private banks.

Meanwhile, some studies reported a nonlinear relationship between state ownership and firm performance. Using the 2,660 firm-year data during 1994-1998, Tian and Estrin (2005) reported a U-shape relationship where state ownership has a negative impact on corporate value up to a certain threshold, but that it begins to have a positive impact beyond the threshold. In contrast, Sun et al. (*op.cit*) reported an inverted U-shape pattern between government ownership and firm performance using the data of listed firms in China for the period of 1994-1997. Micco et al (2006) concluded that state-owned banks located in developing countries have lower profit than

private banks. They could not find any relationship between ownership and performance in industrial countries.

Marcia et al. (2005) examined performance differences between privately-owned and state-owned banks in sixteen Far East countries. By employing cash flow and accounting based measures of performance, they found that state-owned banks generally operate less profitably and less efficiently than privately-owned banks, and bank performance worsens as the extent of state ownership increases. Moreover, the data suggest that performance differences are most significant in those countries where government involvement in the banking system is the greatest. And accordingly greater state ownership of banks results in slower economic and financial development for the countries.

On the contrary Sapienza (*op.cit*) suggested an argument in favor of state-owned banks is that these banks may be set up by benevolent social planners to pursue industrial policies directed at remedying market failures. In this view it could be argued that state-owned banks make loans that the private sector does not want to make. The argument would then be that the private sector cherry picks the best loans and the state-owned banks intervene to expand their country's financial system or to facilitate socially desirable loans that are not profitable for the private sector to undertake (Sapienza refers to this as the "social view"). Alternatively, it is possible that state-owned banks channel resources to socially profitable activities, but state-owned banks divert more resources than their private counterparts (Sapienza calls this "agency view"). A third view posited by Sapienza is the "political view" in which (similar to Shleifer's (1998) work) politicians create and maintain state-owned banks not to channel funds to economically efficient uses, but rather to maximize politicians' personal objectives. In few studies the benefits of state ownership have the efficiency arguments for state ownership been supported. Moreover Barth et al. (1999) found that state ownership of banks tends to be associated with more poorly developed banks and non-banks markets.

Generally Economists have offered three principal reasons why state ownership will be inherently less efficient than private ownership, even under the assumption of a benevolent government owner.

- First, SOE managers will have weaker and/or more adverse incentives than will managers of privately owned firms, and thus will be less diligent in maximizing revenues and (especially) minimizing costs.
- Second, state enterprises will be subject to less intense monitoring by owners, both because of collective action problems--potential monitors have less incentive to carefully observe managerial performance because they bear all the costs of doing so but reap only a fraction of the rewards--and because there are few effective methods of effectively disciplining SOE managers in the event that sub-par performance is detected.
- Third, the politicians who oversee SOE operations cannot credibly commit to bankrupting poorly performing SOEs, or even to withholding additional subsidized funding, so state enterprises inevitably face soft budget constraints. It bears repeating that these criticisms of state ownership are valid even if one grants that the politicians who create and supervise public enterprises have benevolent intentions.

2.3.2. Private ownership and performance

There are a number of empirical findings of studies that are presented and favor private ownership. Kumar (2003) compared the financial performance of state owned, private owned, and mixed state-private ownership companies in India from 1973 to 1989. Findings were suggested that the most profitable companies were the private owned followed by mixed ownership. While state owned enterprises had the worst performance. Ramaswamy (2001) evaluated the performance of 110 state-owned and private organizations in terms of profitability and operating efficiency for a three year period (1990-1992) in India and found that state-owned organizations perform poor than private organizations.

Majumdar (*op.cit.*) evaluated the comparative performance of government owned, mixed and private enterprises and concluded that government owned enterprises are less efficient than mixed and private enterprises. Mixed enterprises on their turn are less efficient than private enterprises. A study conducted by Zeitun and Tian (2007) revealed that with increasing government shares in a firm in Jordan, performance of that firm is lowered along with lowering

of risk of default. Mueller (*op.cit*) carried out a survey of many studies relevant to comparative performance of state owned and private enterprises and found that private enterprises have higher efficiency than state owned enterprises.

On the other hand some studies found little or no relationship between ownership and performance. Figueira.et.al. (2009) conducted a study to explore the effect of ownership on bank efficiency. They used a range of financial and economic ratios, and regression modeling and study revealed that there is little difference in performance of public and private banks. A study was conducted by Liu (1995) on comparative performance of public and private ports in Britain and concluded that no ownership effect was found on performance. Based on a study by Estache and Rossi (2002) they concluded that there is no performance difference between public and private water companies in Asia. A study conducted by Altunbas, et.al (2001) on German banking industry concluded that there is little evidence that private banks are more efficient than state sector banks. While both sectors took benefit from economies of scale, inefficiency measure showed that state banks have little cost and profit advantage over private banks. Demsetz and Villalonga in (2001) by their study investigate the relation between ownership structure and the performance of corporations and they found no statistically significant relation between ownership structure and firm performance.

By using new dataset to reassess the relationship between bank ownership and bank performance, Micco, et.al. (2006) provided separate estimations for developing and industrial countries. It finds that state owned banks located in developing countries tend to have lower profitability and higher costs than their private counterparts, and that the opposite is true for foreign-owned banks. The paper finds no strong correlation between ownership and performance for banks located in industrial countries.

2.3.3. Preference for state and Private Ownership

It is evident from literature review that when performance of state versus private firms are compared mixed results are found although results favor comparatively more for private ownership as depicted by many researchers. Now the situations should be discussed to where state ownership should be preferred over private ownership and vice versa.

Shleifer (*op.cit*) depicted these situations by showing interesting situations. Private ownership is preferred over state ownership when there is a strong incentive to innovate and to reduce cost. In private ownership there is an incentive to innovate because owner will get all the benefits of that innovation. While this incentive is attenuated in state ownership because public managers do not have any residual rights. Efficiency of private firms is also higher than state owned firms because they do not have any social goals and they invest only in those areas where they can earn profits.

In many ways most compelling, critique of state ownership is that SOEs will be inefficient by design, since they are created specifically so that politicians can use them to benefit their own supporters at the expense of another group in society.

Since state firms answer to political masters, rather than the market, wide divergences from profit-maximizing behavior are not only possible, they are in fact desired. Even in fully competitive markets, Shleifer and Vishny (*op.cit*) show that SOEs will be inefficient because politicians force them to pursue non-economic objectives, such as maintaining excess employment, building factories in politically (but not economically) desirable locations, and pricing outputs at below market clearing prices.

In their analysis of political control of state-owned firms' decision making processes, Shleifer et.al. (*op.cit*) argue that transferring control rights from politicians to managers (i.e. increasing managerial discretion) can help improve firm performance largely because managers are more concerned with firm performance than are politicians. Banks and other financial institutions are most likely to be risk averse because of their concern with profit maximization. An organization that is heavily leveraged lacks the capacity to pursue risky investment options as these would jeopardize their chances of honoring loan repayment schedules, especially in loss making situations. Banks will also try to discourage further indebtedness as more loans might lead to liquidity problems and perhaps insolvency (Hansmann, *op.cit*).

As general and conclusion, it is evident that majority studies shown negative result when looking on state ownership and performance or company valuation. There are many reasons that may lead to why government ownership results in poor financial performance. First, the government is guided by social unselfishness, which may not be in line with the profit motive. Second, the government is not the ultimate owner, but the agent of the real owners – the citizens. And it is not

the real owners who exercise governance, but the bureaucrats. There is no personal interest that bureaucrats have to ensure that an organization is run efficiently or governed well since they do not have any benefits from good governance.

CHAPTER THREE

3. Overview of the Banking System in Ethiopia

3.1. Financial Sector Reform

Economic liberalization began just before the fall of the Derg regime. However, with the initiation of the economic reform program of the current government, two proclamations were issued in 1994, Monetary and Banking Proclamation (No. 83/1994), and the Licensing and Supervision of Banking Business (No. 84/1994). The first proclamation in addition to increasing the role of the National Bank of Ethiopia made illegal any NBE lending other than the government while the second proclamation empowered the Central Bank to supervise the financial institutions. Moreover, two further proclamations, 200/1994 and 203/1994 restructured and renamed the Agricultural and Industrial Bank, and Housing and Saving Bank into Development Bank of Ethiopia and Construction and Saving Bank of Ethiopia, respectively. It was also noted in the proclamations that the two banks were recapitalized as public enterprises and hence, the financial sector reform did not invite private sector participation in the present government owned banks else entry of foreign banks in full share as well as with restricted share as partners with Ethiopian citizens.

After the 1994 financial liberalization measures, the authorities concentrated their efforts on building capacity in the financial sector as well as on other priority areas of economic transition, in particular further liberalization of the foreign exchange system and trade liberalization measures. In tandem with such institutional arrangement of the financial sector, sequence of policy measures, which include interest rate marketing and exchange rate reforms among others were undertaken. But financial liberalization accelerated again when the lending rate was decontrolled and left to be determined by the banks themselves as late as January 1998 as compared to October 1992 when the bias between public and private charging of deposit rate was abolished. Now National Bank of Ethiopia (NBE) has set only the floor of the interest rate and it is up to the banks to calculate and offer higher interest and compete to attract customers. Which shows that national bank is trying to homogenize private and state owned banks. In all the reform period a positive lending interest rate was recorded except in 2002/03, which was markedly

known as severe draught year. However the floor for saving deposit was set at 3 percent commencing the year 2002; this resulted in a negative real deposit interest rate to be recorded triggered by the increasing inflationary pressure. The financial sector liberalization was also strengthened by reform on financial instruments which includes devaluation of exchange rate, introduction of treasury bills, interbank foreign exchange market and others. In addition, a framework for an interbank money market, in which banks and non bank financial institutions can borrow and lend at market determined rates has been laid down.

3.2. Ownership Structure of the Ethiopian Banking System (during the Pre-Reform and the Post- Reform Period)

The Ethiopian banking industry has exhibited different ownership structure following the changes in government and the subsequent economic reforms. With such instance the pre- reform period can be categorized in to two distinct time periods as the Pre-Socialist and Socialist period. In both times of the pre-reform period the ownership structure of the banking system can be distinctly identified. The pre socialist period can be identified as the time for the existence of fully foreign owned banks, banks owned by private and foreign partners, and fully government owned banks and the socialist period can be distinguished as the time of fully government owned banks. In addition, the ownership structure in the post reform period can easily be identified as the time for the prevalence of fully government owned and fully private owned banks. Such facts are briefly explained here under.

3.2.1. The Pre- Reform Period (1905-1991)

The beginning of the modern banking business in Ethiopia has started with foreign ownership, after the entry of the foreign- owned Bank of Abyssinia, which is based on 50 years franchise agreement with the Anglo-Egyptian National Bank. Moreover, Foreign banking activities particularly that of the Italian banks were expanded during the five years of the Italian occupation. However, except Banco di Roma and Banco di Napoli they all ceased operation soon after liberation. Then after the Italian occupation of 1933-1941, banks of Britain became active participants in the Ethiopian banking sector due to the political reasons and hence Barclay's bank had been established and was in operation in the country from 1941-1943. However, the emergence of a nationally owned bank called the State Bank of Ethiopia in 1931 changed the

foreign dominated ownership structure of the Ethiopian banking system. Even the bank has been quoted as the first nationally state owned bank in the African continent (NBE 1999).

Further change in the ownership structure occurred after the introduction of the 1963, Monetary and Banking Proclamation No. 206 .According to the proclamation a license to carry on banking business in Ethiopia was granted only to partnerships with Ethiopian nationality with at least the Ethiopian nationals have owned 51% of the capital. Accordingly, foreign banks, which had already started their operations in the country re-applied for license (National Bank of Ethiopia, 1999). The biggest of these was the Addis Ababa Bank. This first privately owned bank, Addis Ababa Bank Share Company, was established by Ethiopians initiative and in association with Grind lay Bank, London which had 40 percent of the total share. Moreover, the proclamation has separated the functions of commercial and central banking. Accordingly the National Bank of Ethiopia and Commercial Bank of Ethiopia were created in 1963. The Commercial Bank of Ethiopia took over the commercial banking activities of the former State Bank of Ethiopia.

In addition to the commercial banks, the government established two development banks, both of which were 100% state owned. The Agricultural and Industrial Development Bank (AIDB) was set up in 1970, taking over two earlier development banks. The Housing and Savings Bank which was under full government ownership was created in 1975 out of a merger between two earlier housing and finance institutions created in 1962 and 1965.

Following the emergence of military government in 1974, however, all foreign banks operating in the country in the form of partnership were nationalized and re-organized creating one national bank (re-institutionalized in 1976), two specialized banks (the Agricultural and Industrial Bank and Housing and Saving Bank), which currently re-named as the Development Bank of Ethiopia (DBE) and the Construction and Business Bank (CBB), respectively (Berhanu and Befakedu 1999//2000). As far as ownership of banks was concerned, the new Ethiopian government shifted, therefore from owning most of the banking system to owning it completely by nationalizing and concentrating the remaining private commercial banks in to Commercial Bank of Ethiopia (CBE).

3.2.2. The Post Reform (Pure private and pure government ownership)

Since economic reform of 1992 under the new government, the existing government banks have been re-organized so as to operate based on market-oriented policy framework but with 100% ownership of the government. Moreover, new Ethiopian private-owned financial institutions are allowed to participate in the country's financial sector. However, from the time of nationalization onwards (or since 1974), no foreign bank has been allowed to operate in Ethiopia and participation of the private sector to the ownership of government banks has been prohibited. This might be one cause for the concentration in the banking sector as well as it greatly restricted the advantages that the Ethiopian banking sector could earn by incorporating foreigners in to its ownership structure.

The Money and Banking Proclamation No. 83/1994 identifies banking business as an operation that involves such activities like receiving funds, discounting and negotiating of promissory notes, drafts, bills of exchange and other evidences of debt; receiving deposits of money and commercial paper, lending money, and buying and selling of gold and silver bullion and foreign exchange. We can divide the formal banking in Ethiopia as commercial banks and specialized development bank. The non-bank financial institutions may encompass insurance companies, pension fund, saving and credit cooperatives and micro-finance institutions.

Currently the banking industry in Ethiopia is characterized by little and insufficient competition and perhaps can be distinguished by its market concentration towards the big government commercial banks and having undiversified ownership structure. Ethiopia's financial sector remains closed and much less developed than its neighbors and has no capital market and very limited informal investing in shares of private companies. The Ethiopian Government has also maintains strong control over international capital movements. According to Kiyota et al. in their study, by the financial liberalization index, which measures banking security and independence from government control, on a scale of 10 to 100 (100 being the most liberal), is only 20 for Ethiopia ,the lowest in Sub Saharan Africa. This indicates that the Ethiopian financial sector is highly regulated and controlled by the government, the finding that is consistent with Dailami (2000), who ranked Ethiopia as the most closed country in the 96 countries for 1997 covered in his study.

Mattoo et al. (2006) found a positive relationship between financial sector openness and economic growth. Mattoo et al. emphasized that the key elements of financial openness are domestic market competition, foreign ownership, and limited capital controls, all of which are lacking in Ethiopia. That is, high bank concentration indicates a lack of competition in Ethiopia's banking sector. I may also note the study by Beck et al. (2004), who concluded that increase in bank concentration were an obstacle to obtaining finance. They found that the constraining effects of bank concentration were exacerbated by more restrictions on bank activities, more government interference in the banking sector, and a larger share of government-owned banks. It would appear therefore that the highly closed nature of Ethiopian financial sector would serve to negate the positive effects that would otherwise come from greater financial intermediation.

The banking sector currently comprised of fifteen banks, of which two of them are owned by government and one is a state owned development bank leaving the rest for private banks. In addition, half of the 12 private commercial banks are established as recently as October 2004 and one of them is operating as a cooperative bank by restricting its area of operation only to Oromia region.

In terms of branch expansion, bank branches have increased from 596 at the end of June 2008 to 656 branches at the end of September 2009 with largest expansion in branch network taking place in Oromia and Addis Ababa region. The number of private banks' branches grew from 328 in June 2008 to 393 in September 2010, while the state owned banks leisurely grow from 268 to 273 during the same period. This indicates that private banks have expanded rapidly, where as the state owned banks have been slow-moving to open new branches.

With regard to the performance of the banking industry, at the end of June 2009, the assets of the banking sector excluding DBE totaled Birr 100.97 billion: loans Birr 40.205 billion; deposit liabilities of Birr 75.300 billion; and capital and reserves Birr 10.1 Billion. Loans and deposits accounted for 17.74% and 33.24%, respectively. However, CBE continued to be a single industrial giant accounting for 58.84% of assets, 52% of net loans, 57.75% of deposits and 49.91% of capital in the banking system. State owned banks (CBE and CBB) accounted for 69.6% of assets, 90.48% of loans, 60.2% of deposits and 52.57% of capital in the sector.

In terms of advancement in information technology, the Ethiopian banks are exceedingly slow to cope up with advancement in Information Technology around the globe. For instance out of the fifteen banks in the country only few banks have networked all their city branches and partly their outlying branches. The other has attempted to link only some of their city branches. The National Bank of Ethiopia (NBE) will soon introduce a mandatory networking regulation. The law would compel the rapidly growing sector to be networked in order to make monitoring for the sector's regulator, the NBE, easy and quick. Among other things, the regulation, which the bank has not yet given an introduction date for, could prohibit the long standing use of manual transactions.

The current ownership structure of Ethiopian banks is as indicated below.

Table 3.1: Currently Operating Banks by Ownership

Banks	License date	No of branches
State owned		
Commercial Bank of Ethiopia (CBE)	1963	209
Construction and Business Bank (CBB)	1975	32
Development Bank of Ethiopia (DBE)	1970	32
Total		<u>273</u>
Private banks		
Awash International Bank S.C.(AIB)	1994	60
Dashen Bank S.C. (DB)	1995	55
Bank of Abyssinia S.C. (BOA)	1996	47
Wegagen Bank S.C.(WB)	1997	50
United Bank S.C.(UB)	1998	41
Nib Bank S.C.(NIB)	1999	45
Cooperative Bank of Oromia S.C. (CBO)	2004	38
Lion International Bank S.C.(LIB)	2006	20
Zemen Bank S.C.(ZB)	2008	1
Oromia International Bank S.C. (OIB)	2008	25
Birhan International Bank S.C. (BIB)	2009	10

Buna International Bank S.C.(BUIB)	2009	1
Total		<u>393</u>
Sub total		<u>666</u>

National Bank of Ethiopia 2010

Moreover, looking ahead, banks will surely be challenged by the entry of six new banks (Abay, Enat, Hawassa, Dehub Global, Noah, Zam-Zam), by the very rapid growth of micro-finance institutions (more than 30 of which are now active), and by the creation of share company formations that are working to raise more than Birr 5 billion in funds directly from the public rather than going to banks for loans.

CHAPTER FOUR

4. Research Methodology

4.1. Sample selection

Both private and state sectors of banks are selected. There are four state owned and twelve private banks in Ethiopia which are in operation now. Two of the state banks are different from the other commercial banks, so they are excluded from the sample. The 12 private banks can be classified into two broad categories when it comes to size, based on whether they were established more than a decade ago (Awash, Dashen, Abyssinia, Wegagen, United and NIB) or set up only within the last five years (Cooperative Bank of Oromia, Lion, Zemen, Oromia International Bank, Bunna and Berhan). So from these private banks, only those which are in operation for at least ten years are included in the sample. The study has focused on state and privately owned banks for two reasons. First, banks have substantial impact on the Ethiopian economy. The other practical reason is financial information about these firms is relatively easy to obtain. Industry factor is controlled as all the samples belong to banking sector. Country factor is also controlled as all sample banks are domestic banks in Ethiopia. Due to control of country factor, all banks are facing similar competitive forces. The following banks are included in the study.

Table 4.1; Sample Banks

Name of Bank	Owner ship	Year of Establishment	Number of Branches
Commercial bank of Ethiopia (CBE)	state	1974	209
Construction and business bank(CBB)	state	1975	32
D ashen bank (DB)	Private	1995	55
Awash international bank(AIB)	Private	1994	60
Wegagen (WB)	Private	1997	50
Abyssinia (BOA)	Private	1996	47
United Bank(UB)	Private	1998	41
NIB Bank(NIB)	Private	1999	45

Source: National bank of Ethiopia in 2010

4.2. Source of data

For the purpose of this study, secondary data derived from published balance sheets and income statements (for the year 2005 to 2010) of selected sample of banks are utilized. Balance sheets and income statements are edited to remove double entries.

4.3. Data analysis

Due to varying size of businesses different comparison of two businesses is not possible. Certain techniques have to be applied in simplifying the financial statements and making them comparable. These include financial ratio analysis and common-size financial statements. For the purpose of this study to answer the first research question, the results of financial ratio analysis are 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 are 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.

So 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. For each ratio, average ratio of banks is calculated for each sector. Then every average ratio of both sectors is compared in form of table and graph. As every ratio is calculated for the last six years for each bank, trends in comparative performance of each sector is also visible from the graphs. Then has compared each sector financial ratios by benchmarking the industry average and also one sector is used as a benchmark for the other and then checked for deviations. This analysis has provided evidence on whether there is a difference in performance between state or private owned banks in Ethiopia. In addition, it has evaluated if there is difference in profitability, solvency, liquidity and efficiency in each banking sector. For the purpose of clarity by conducting a one way ANOVA the researcher has checked the significance level of the difference between the performance measures of private and state owned banks. This has explained that

which of these two ownership forms generates better performance results and which performance measures are significantly different.

4.4. Variables Used

4.4.1. Ownership variables

Ownership has long been considered as an important variable explaining firm performance. The common argument is that performance will be different in the private and state owned sector firm, because ownership objectives and monitoring arrangements deviate from each other. The theoretical work of many scholars supports this idea. In the current study, two ownership variables were used. This ranges from banks that are owned entirely by private investors to banks owned entirely by the government i.e. private and state owned banks. In the context of this research state ownership is to mean banks which are under the control of government and private banks are those which are established by individual investors and by issuing shares for the public.

4.4.2. Performance variables

The literature points to a number of variables that have been used to measure firm performance. This study, however, has focused on some indicators like profitability, solvency, liquidity and efficiency to measure firm performance which is described in detail below. The entire questions have got answered by using the following variables.

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 private or state owned banks are more profitable, 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 (Net Profit / Total Assets). Other indicators of profitability are Return on Equity (ROE) (Net Profit / 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 which of the two sectors are 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.

Solvency and Risk: These ratios measure risk and solvency of firms by determining how much the firm depends on debt financing rather than equity capital and determine the probability that the firm default on its debts. Greater the debts, greater is the probability that the firm will become unable to fulfill its contractual obligations leading to bankruptcy and financial distress. Although debt is important source of financing and provide significant tax advantage but it may create conflict of interest between debtors and shareholders (Ross, Westerfield & Jaffe 2005). If amount of assets held by a firm is greater than all types of liabilities then firm is considered solvent. Variables that are used to measure solvency in this study are Debt-Equity Ratio (DER) $(\text{Total Debt} / \text{Shareholders' Equity})$ and Equity Multiplier (EM) $(\text{Total Assets} / \text{Shareholders' Equity})$.

Efficiency;-To measure which sector (private or state owned banks) are more efficient in assets or 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) $(\text{Total Operating Income} / \text{Total Operating Expense})$.

Growth performance; for the purpose of examining growth performance the trends of Assets, Loans and Deposits are used.

CHAPTER FIVE

5. RESULT AND DISCUSSION

In this chapter, analysis of data gathered and empirical findings are presented. As it is a comparative study of two banking sectors i.e. state and private, one sector is used as a benchmark for the other sector and the industry average has also used as a benchmark. First empirical findings of ratio analysis are presented along with comparative analysis of performance of state and private banks. In the end, the growth of lending, assets and deposit of both state and private banks is studied. Description of financial statement items used in ratio analysis and ratios is presented in Appendix I. Ratio analysis of individual sample banks is presented in the Appendix II and the growth trend of assets, loan and deposit has also shown in appendix III.

5.1. Profitability Ratios

In this section, analysis and empirical findings of those ratios are presented that provide information about profitability of banks. The ratios included in this section are Return on Assets (ROA), Return on Equity (ROE) and Profit Margin (PM)

5.1.1. 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. ROA calculated for state and private sector banks provides the basis for comparison of profitability between these two sectors. As shown below in table 5.1 ROA of state banks increases from 2005 to 2006 moving from 1.44 % to 2.55% and then shows decreasing trend from 2007 to 2008 moving from 2.59% to 2.46%. State banks have shown little increase in the last couple of years i.e. 2009 by the value of 0.93% and in 2010 by 2.95.

But it is somewhat different in the case of private banks except that it does not show any dynamic changes. It increases from 2.98% to 3.32% in year 2005 to 2006 and further increase in 2007 to 3.42. From the year 2008 it starts decreasing trend and ends with 2.98% in 2008, 2.90% in 2009 and finally in 2010 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 2008 although drop of ROA of private banks is more pronounced. State banks have shown little increase in the year 2009 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 2008 which shows a little (0.01) above the industry average. The opposite is true in private banks (except 0.04 below in the year 2009).

From table 5.1, it is clear that ROA of private banks is higher than state banks in every analysis year from 2005 to 2010 but higher in 2009. 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 state owned banks. Overall, the mean ROA of private banks i.e. 3.51% 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. Trends in performance of ROA of both sectors are visible from the figure 5.1.

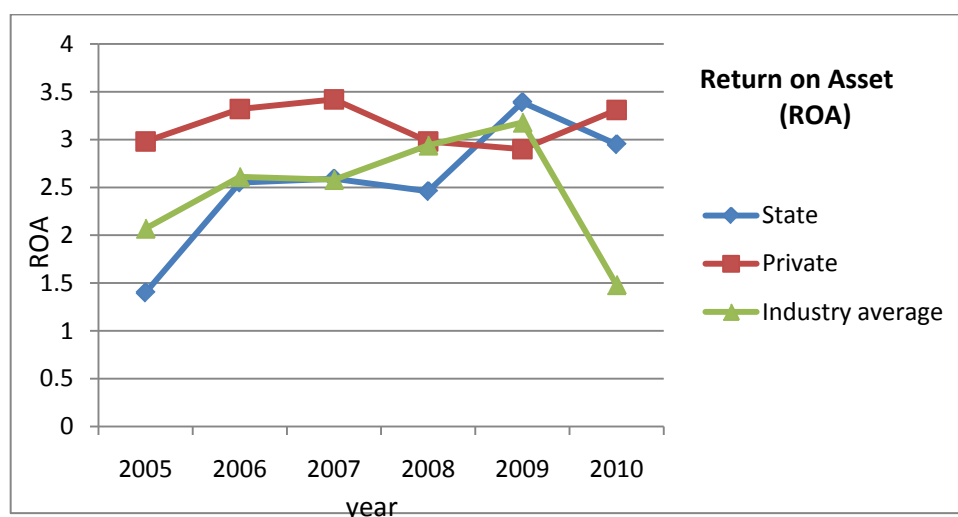


Figure-5.1 Return on Assets

Table-5.1. Return on asset

Sector	2005	2006	2007	2008	2009	2010	Average	Std. Deviation
State	1.40	2.55	2.59	2.46	3.39	2.95	2.56	0.605191
Private	2.98	3.32	3.42	2.98	2.9	3.31	3.15	0.222568
Industry average	2.07	2.61	2.58	2.94	3.18	1.48		

The bank with a higher equity capital will report a higher ROA than a bank with a lower equity capital, even if all other spreads and costs are the same. Ethiopian state owned banks (CBB and

CBE) constitutes more than half (52.57% in 2009) of the total capital of the banking sector. However from the debt equity ratio, state owned banks have higher debt than equity, which shows a high debt of state owned banks. As a result, and as already noted above, a higher equity capital increases most operating asset ratios, such as the interest margin, gross income margin and ROA, but lowers operating income ratios (such as the share of noninterest income and the cost/income ratio) and operating equity ratios. This resulted in the higher ROA of privately owned banks. The reason for this is very simple. A bank with a higher equity capital needs to borrow less in order to support a given level of assets. As a result its interest expenses are lower and this causes the interest margin to be higher. This is then reflected in a higher gross income to assets ratio. If costs and provisions are unaffected by the higher level of equity, the result is a higher net income.

5.1.2. Return on Equity (ROE)

This ratio is also an indicator of profitability. It measures profitability of banks in terms of their equity. Higher the ratio, more profitable is the bank. ROE of state and private banks is shown in table 5.2. From the table ROE of state owned banks starts increasing from the year 2005 with the value of 28.74 to 43.22 in 2006 and decreases by 9.38 % (to 32.70) in 2007, 35.73% in 2008 and shows again a little fall in 2009 (35.29%). Finally it yields a little improvement in the year 2010 (35.55%). ROE of private banks increases in the start from 2005 to 2006 (27.29% to 30.22%) and then shows decreasing trend from 2007 with value 29.03%. In 2008 & 2009 with same value 23.4% and finally begun to increase in the year 2010 (27.5%) that is the second highest in the study period.

When compared with the industry average state banks are above the industry average in all years except in 2005 which is a 5.04 below the industry average. In the case of private banks it is above the industry average only in 2007 and 2010 but below in the rest of the analysis year.

It can be seen from the chart below that in the period analyzed at the level of the Ethiopian banking system state owned 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 banks i.e. 36.31% is greater than that of private banks i.e. 26.81% which explains that state banks are more profitable than private banks in terms of ROE. So from

the table 5.2, 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 the figure 5.2

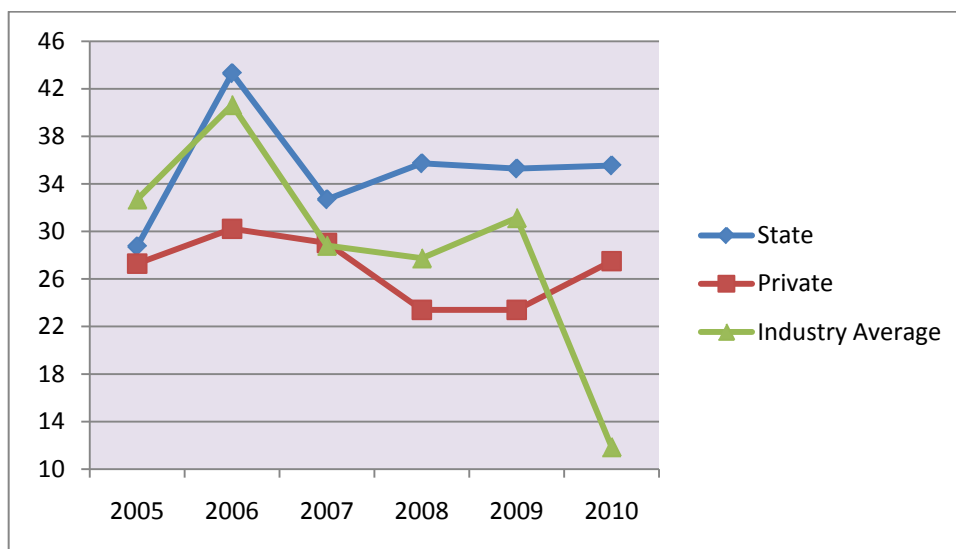


Figure-5.2 Return on Equity

Table-5.2 Return on Equity

Sector	2005	2006	2007	2008	2009	2010	Average	Std. Deviation
State	28.74	43.32	32.7	35.73	35.29	34.55	36.31	0.605191
Private	27.29	30.22	29.03	23.4	23.4	27.5	26.81	0.203176
Industry Average	32.71	40.65	28.81	27.75	31.14	11.86		

5.1.3. Profit Margin

Profit margin is another measure of banks profitability. It is the margin left after meeting all expenses. The higher the profit margin the lower the external financing requirement and increases net income. The PM of state owned banks has shown an increasing trend from 28.3% in 2005 to 39.71% in 2006. And in 2007 it decreased to 32.08% but shows an improvement then after to 41.98 % in 2008. After that it decreased until the end of the analysis period and ends with 39% in 2010. PM of private banks is the same as state owned banks shows the same trend up to 2007 but private banks again show a down ward trend in 2008. In 2009 it shows a little improvement, from 28.96% (2008) to 31.53% in 2010. Finally show an increment and arrived at 34.92%.

In comparison with the industry average state banks are at the top of the industry average only in two analysis years i.e. 2008 and 2009 in the rest of the analysis year it is below the industry average but with not much difference. Private Banks are below the industry average in all years. From table 5.3 it can be seen that PM of state owned banks are greater than private banks in all the analysis period except a little above in 2005 and 2007. Over all the average PM of state owned banks i.e. 37.03% is greater than that of private banks i.e.33.12%. So it can be concluded that state owned banks are better in terms of profit margin than private banks.

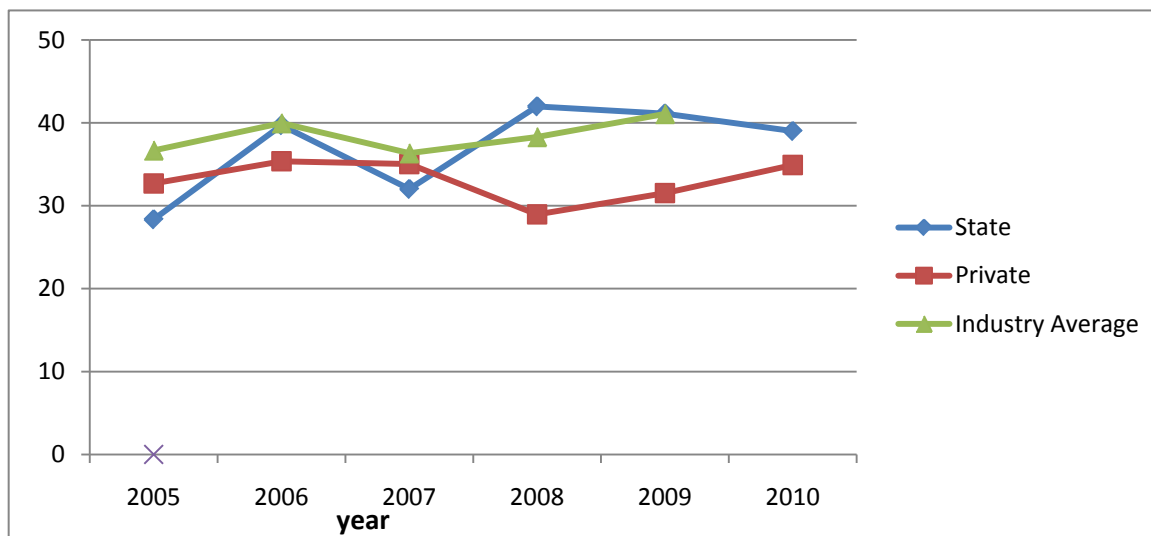


Figure -5.3; Profit margin

Table-5.3 Profit Margin

Sector	2005	2006	2007	2008	2009	2010	Average	Std. Deviation
state	28.36	39.71	32.02	41.98	41.12	39	37.03	
Private	32.69	35.37	35.03	28.96	31.53	34.92	33.12	
Industry Average	36.68	39.97	36.34	38.30	41.08			

Generally from the above three measures the profitability of the private banks as a group has shown improvement through time; however it remained lower than the profit registered by the state owned banks and the single largest bank. Even if the share currently is reduced it can be briefly explained that state owned banks 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 concentration, has a significant and positive impact on bank profitability

5.2. Liquidity Ratios:

In this section, analysis and empirical findings of those ratios are presented that 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).

5.2.1. 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 5.4 LADR of state banks increases from the year 2005 (63.74%) to 2006 (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 banks decreases from 44.89 % in 2005 to 36.5 in 2006. After that it shows a continuously increasing trend ending with 66.87% in 2009 and reveals a slight decrease in 2010 (to 66.1%).

Compared to the industry average, state banks are above the industry average in all analysis years except in 2009 which is 2.74 below the industry average. On the contrary private banks are below the industry average for the first three years (2005, 2006 and 2007) and starts to make progress and became above the industry average for the rest of the analysis year (2008, 2009 and 2010). The average LADR of both sectors is more than two times above the statutory requirement, which shows their excess liquidity.

From the table 5.4, it is clear that LADR of state banks is greater than private banks in every analysis year except in 2009 and 2010 which shows that state 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 banks have stronger liquidity position than private banks in terms of LADR. Moreover, trends in performance of LADR of both sectors are visible from the figure 5.4.

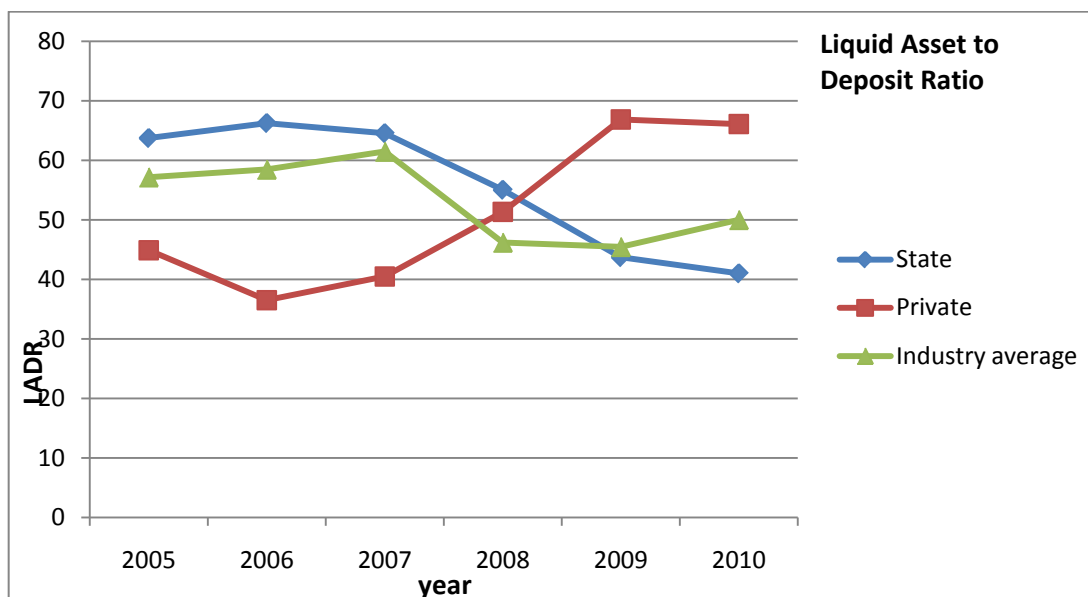


Figure-5.4 Liquid Asset to Deposit Ratio

Table-5.4 Liquid Asset to Deposit Ratio

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	63.74	66.26	64.56	55.04	43.72	41	55.72	10.12175
Private	44.89	36.50	40.48	51.34	66.87	66.1	51.04	12.94782
Industry average	57.17	58.47	61.48	46.19	45.46	50		

5.2.2. Loan to Deposit Ratio (LDR)

This ratio is important indicator of liquidity of banks. Lower LDR means that banks have more deposits than loans offered to customers and banks have higher ability to meet their short term obligations. It reduces risk of bank and also reduces chances of earning from deposits. As shown in table 5.5 below LDR of state banks decreases from the year 2005 (39.47%) to 2006 (35.80%) and again shows a slight fall in 2007 (32.60%). In 2008, it starts to move up to 47.87% and again

slightly increased in 2009 to 49.60. Finally it impressively increased to 84.09 in 2010 which is the highest of all the analysis periods of the sector. The trends in LDR of private banks are different from that of state banks. In case of private banks it demonstrates a decreasing trend from year 2005 (76.55) to 2006 (59.84) but shows the highest growth in 2007 i.e. 84.25 which confirms their high level of risk taking in order to earn profit as banking industry major profit still flows from this source. Then it continuously decreased till the end of the study period i.e. 2010 ending with value of 55.43%. Private Banks' loan- to-deposit ratio has fallen dramatically in recent years (from 86 percent in 2001 to just 56 percent at present) as banks kept accumulating deposits but were restricted from lending out most of these deposits because of the credit caps. When it is compared with the industry average state banks are less than the industry average in the whole year of the analysis period. On the contrary private banks are beyond the industry average in all years.

It is clear from the table 5.5 that LDR of state banks is less than private banks in all the analysis year. Overall, the mean LDR of state banks i.e. 48.24% is less than that of private banks i.e. 63.44% which leads to the conclusion that state banks are more liquid than private banks in terms of LDR. The trends in differential performance of LDR of state and private banks are visible from the figure 5.5.

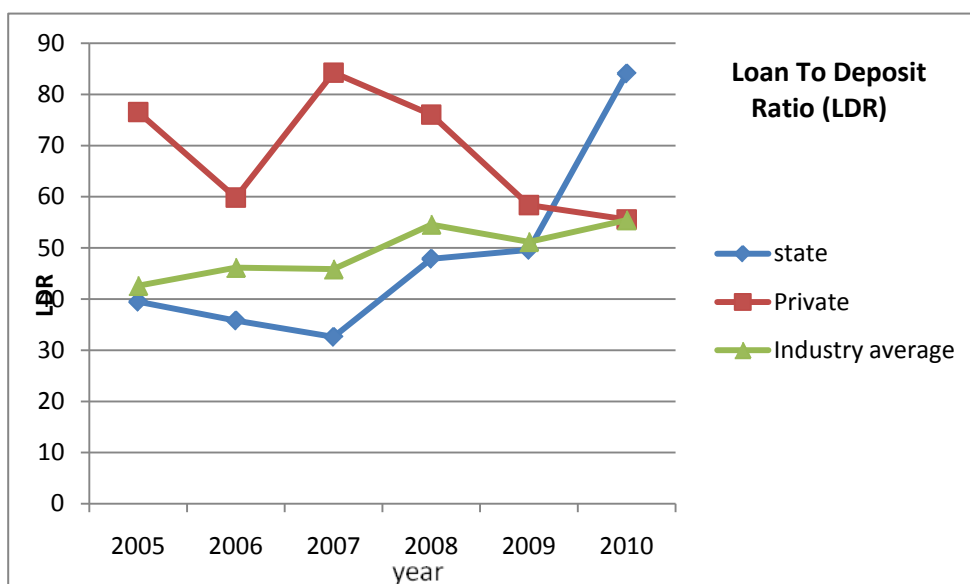


Figure-5.5 Loan to Deposit Ratio

Table-5.5 Loan to Deposit Ratio

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. deviation
State	39.47	35.80	32.60	47.87	49.60	84.09	48.24	17.14393
Private	76.55	59.84	84.25	76.05	58.37	55.56	63.44	10.91558
Industry average	42.62	46.15	45.85	54.57	51.19	55.43		

As we can see from the findings the LDR of private banks is higher than state banks. This can be a good reason for the lower profitability compared to state owned banks. According to Valentina et.al (2009) banks that rely on deposits for their funding are less profitable, possibly due to the required extensive branch network and other expenses that are incurred in administering deposit accounts.

5.2.3. Loan to Asset Ratio (LAR)

This ratio measures liquidity of banks in relation to loan and total assets comparison. Among the variables that are common to measure bank specific risk is loan to asset ratio. Higher the ratio, less liquid is the bank. It means that banks have offered more loans than their capacity and may feel difficulty in meeting their short term obligations.

LAR of state and private owned banks is shown below in table 5.6. From the table LAR of state owned banks decreases from the year 2005 (29.75%) to the year 2006 (28.82%). It decreases again in 2007 to 24.45 and then starts to increase in the year 2008 to 35.46% and 36.25 in 2009. Finally drops to 35.63 in 2010. LAR of private banks shows different pattern. It decreases from 2005 (61.72) to 49.77 in 2006. And starts to increase in 2007 to 65.87 and continuously go down and ends to lowest level of the analysis year in the year 2010 (42.96%).

When it is compared to the industry average as benchmark, state owned banks are below the industry average in all years whereas the reverse is true for private banks which are on top of the industry average in all the analysis year.

It is clear from the table 5.6 that LAR of state owned banks is less than private banks in all the analysis years. Overall, the mean LAR of state owned banks i.e. 31.56 % is less than that of private banks i.e. 53.94 %. So it can be concluded that state banks are more liquid than private

banks in terms of LAR. This means that state owned banks are relatively better in meeting their short term obligation. Trends in performance of LAR of both sectors are visible from the figure 5.6.

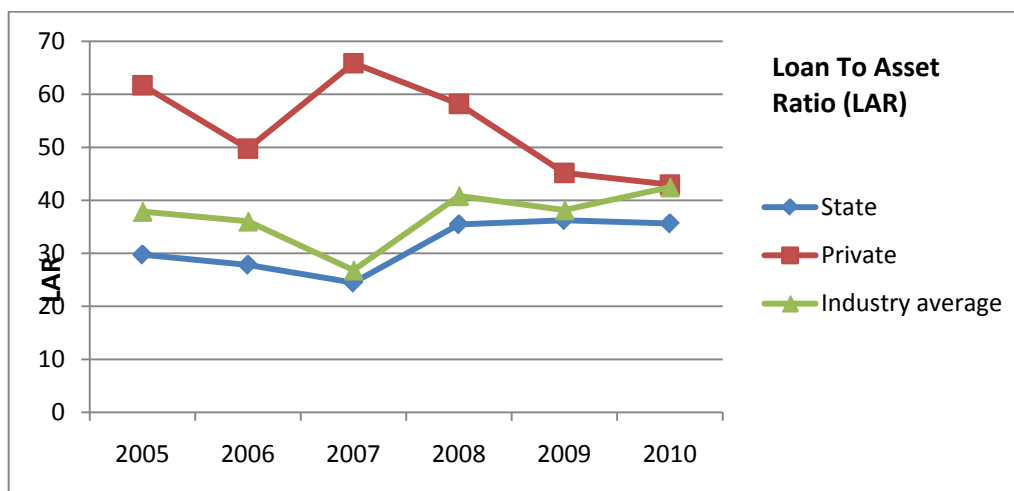


Figure-5.6 Loan to Asset Ratio

Table-5.6 Loan to Asset Ratio

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	29.75	27.82	24.45	35.46	36.25	35.63	31.56	4.501607
Private	61.72	49.77	65.87	58.18	45.17	42.96	53.94	8.521472
Industry average	37.88	36.05	26.82	40.84	38.17	42.49		

In terms of liquidity measures both sectors are above the statutory requirement. But the results of all ratios of liquidity show that state banks are more liquid than private banks i.e. state owned banks have greater ability to meet their short term obligations and lower risk than private banks. It is somewhat unfamiliar that the result is opposed to theories. Theories suggested that excess liquidity of banks can reduce earning capacity. Even if both sectors have shown excess liquidity the state owned banks are more pronounced. However their excess liquidity doesn't inhibit them from becoming profitable. While most banks in Ethiopia generate most of their income from interest income, they are maintaining their excess liquidity. This can be an indication of the behavior of less developed financial market.

5.3.Solvency and Risk Ratios

In this section, analysis and empirical findings of those ratios are presented that measure ability of banks in meeting long term obligations. The ratios included in this section are Debt-Equity Ratio (DER) and Equity Multiplier (EM).

5.3.1. Debt-Equity Ratio (DER)

This ratio measures the extent to which a bank depends on debt financing than equity financing. Higher the ratio, more risky is the bank operations and higher will be the chances that bank will default on its debts. So this ratio measures ability of banks to absorb financial shocks. As shown in table 5.7 DER of state owned banks decreases from the year 2005 with value of 16.94 to the year 2008 with value 9.38 and shows no change in 2009. In 2010, it rises to the value of 10.50. The trends in DER of private banks are same except that it goes on rising in the year 2009 to 7.37 and again roughly increased to 7.58 in 2010.

Correspondence to the industry average in all years DER of state owned banks is above the industry average. On the contrary private banks are below the industry average in all years except in 2010 which is 0.41 above the industry average. It is clear from the table 5.7 that DER of private banks is less than state owned banks in all the analysis year. Taken as a whole, the mean DER of state owned banks i.e. 12.45 is greater than that of privately owned banks i.e. 7.7 which leads to the conclusion that private banks are more solvent and less risky than state owned banks in terms of DER. The trends are visible below in Figure5.7.

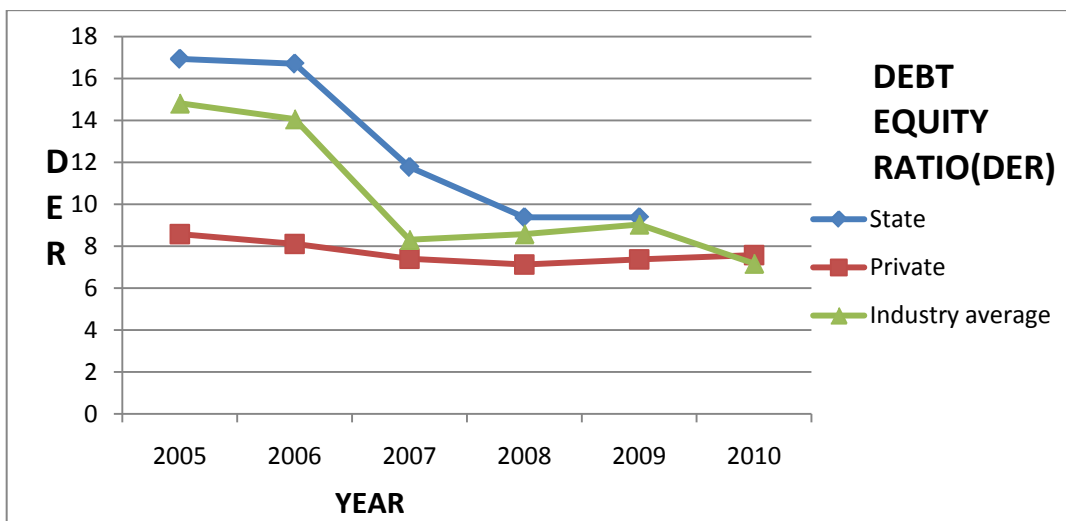


Figure-5.7 Debt-Equity Ratio

Table-5.7 Debt-Equity Ratio

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	16.94	16.711	11.78	9.38	9.38	10.5	12.45	3.199412
Private	8.58	8.11	7.4	7.13	7.37	7.58	7.7	0.496748
Industry average	14.82	14.07	8.31	8.58	9.04	7.17		

5.3.2. Equity Multiplier (EM)

This ratio is another important indicator of solvency of banks. It measures how much the banks have converted their debts to assets in comparison to their equity. Higher value of this ratio leads to risky situations. From table 5.8 EM of state owned banks show a decreasing trend from the year 2005 to 2008 (17.94, 17.71, 12.78 and 10.38 respectively) and shows no variation in the year 2009. EM finally increased to 11.5 in the year 2010. The EM of private banks shows the same pattern except that it starts to increase in the year 2009 to 8.37 and 2010 to 8.58.

In association with the industry average, although it has registered a significant decrease in the analysis period the rate of EM of the state owned banks remains slightly higher than the average rate of the banking industry in all the analysis year. But private banks are below the industry average in all years except in 2010.

It is clear from the table 5.9 that the EM of state banks is higher than private banks in all the analysis year. By and large, mean EM of state owned banks i.e. 13.45 is greater than that of private banks i.e. 8.69 which leads to the conclusion that state owned banks are more dependent on debt financing than private banks and denotes risky situations. Trends in performance of EM of both sectors are visible from the figure 5.8.

Table-5.8 Equity Multiplier

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	17.94	17.71	12.78	10.38	10.38	11.50	13.45	3.19919
Private	9.58	9.11	8.40	8.13	8.37	8.58	8.69	0.496748
Industry average	15.82	15.57	11.19	9.45	9.79	8.00		

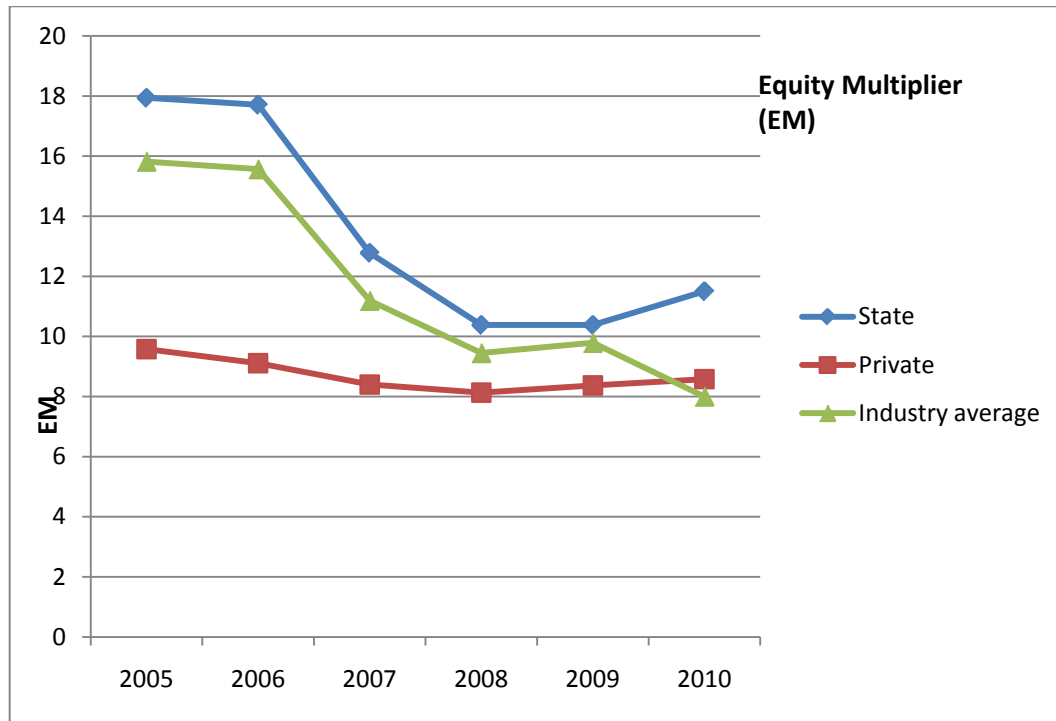


Figure-5.8 Equity Multiplier

The above two ratios of solvency i.e. DER and EM concluded that state owned banks has lower ratios of solvency than private banks. It stands for how much the banks have converted their debts to assets in comparison to their equity and depends on debt financing than equity financing. Based on the findings state owned banks are converting most of their debts in to asset compared to their equity and more dependent on debts which show lower ability of state owned banks to meet long term obligations than their counterparts. It is the reliability of a financial institution in terms of solvency and of whether customers can be sure to get their money back. Overall, from the results it can be concluded that private banks are more solvent than state owned banks.

5.4. 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).

5.4.1. 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 2005 to 2009 ranging from 4.24% to 6.57%. In 2010, it slightly drops to 6.15%. The AU of private banks shows an increasing trend from the year 2005 to 2008 continuously ranging in values from 7.23% to 8.90% and decreased to 7.96 in 2009. Finally it shows an improvement in 2010 with the value of 8.49.

It is clear from the table 5.10 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 figure 5.9.

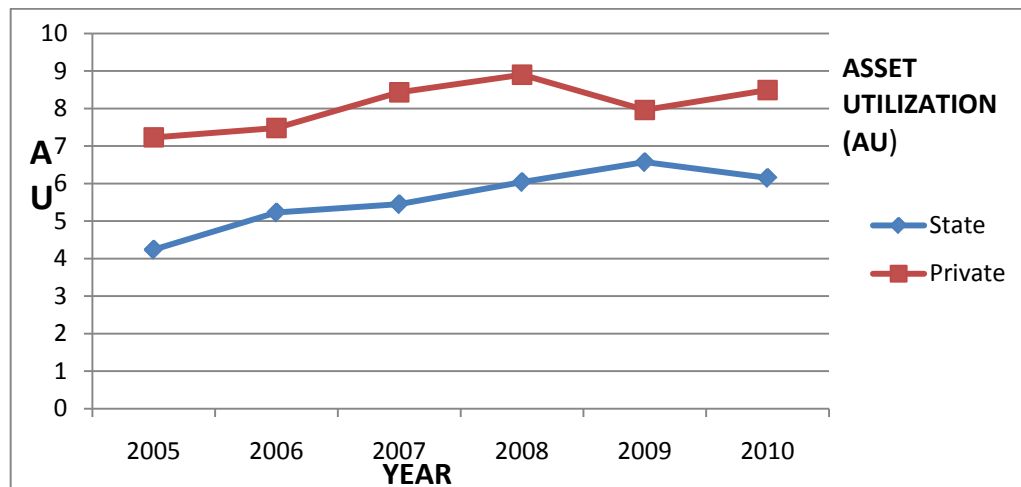


Figure-5.9 Asset Utilization

Table-5.9 Asset Utilization

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	4.24	5.23	5.45	6.04	6.57	6.15	5.61	0.757731
Private	7.23	7.48	8.43	8.90	7.96	8.49	8.08	0.641854

5.4.2. Income Expense Ratio (IER)

This ratio determines efficiency of banks in generating profit while controlling their expenses. Higher the ratio, higher is the efficiency of banks in generating income and in controlling expenses. As shown in table 5.10 IER of state owned banks dramatically increases from 0.42 to 8.24 in year 2005 to 2006 respectively. However it then drops in the next year (2007) as the way it increased in the previous year to 1.16. In 2008 and 2009, 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 2008 to 2009 by the value 1.61 to 1.41 respectively.

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 2005 and 2008. 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 figure 5.11.

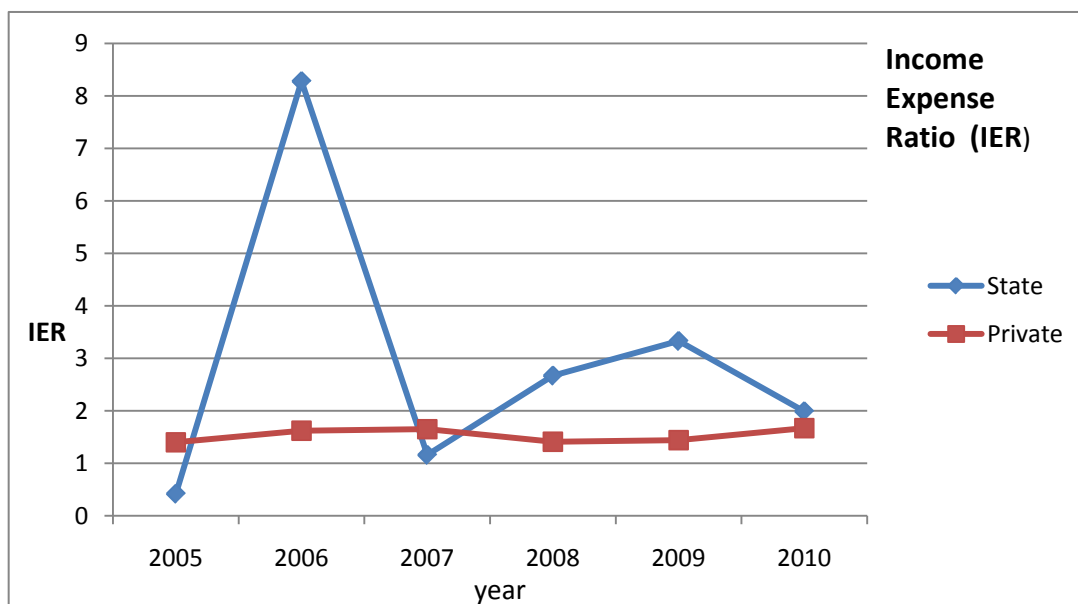


Figure-5.10 Income Expense Ratio

Table-5.10 Income Expense Ratio

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	0.42	8.28	1.16	2.67	3.33	1.99	2.97	2.554556
Private	1.40	1.62	1.65	1.41	1.44	1.67	1.53	0.116536

5.4.3. 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 2005 to 2006 by the value 1.94 to 2.12 respectively. In 2007, it drops to 1.37 and in 2008 it shows an improvement and becomes 2.66 and increased to 4.21 in 2009. Finally it ends up with 2.86 in 2010.

The OE of private banks increased from 2005 to 2006 having value 1.76 and 2.02. Again in 2007, it increased to 2.12. In 2008 it drops to 1.80 and in 2009, it shows little improvement to 1.88 and dropdown to 1.65 in 2010. 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 2007. 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 figure 5.12.

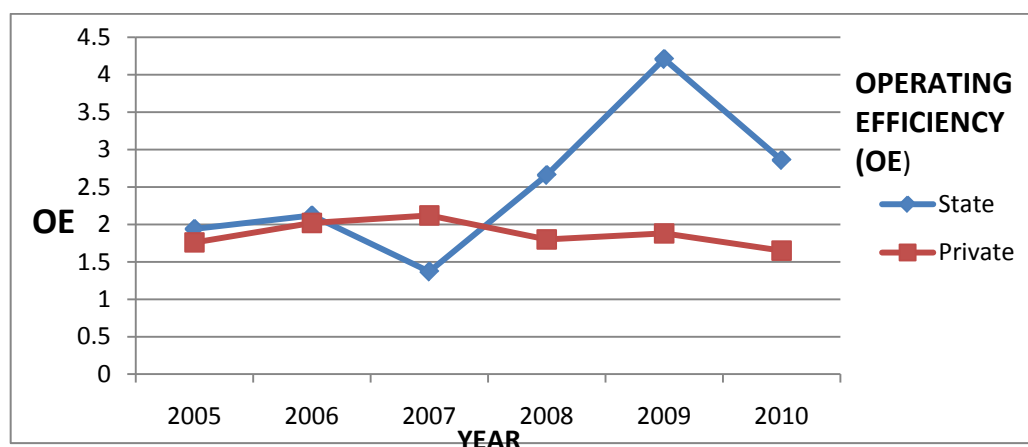


Figure-5.11 Operating Efficiency

Table-5.11 Operating Efficiency

Sector	2005	2006	2007	2008	2009	2010	Mean	Std. Deviation
State	1.94	2.12	1.37	2.66	4.21	2.86	2.54	0.895352
Private	1.76	2.02	2.12	1.80	1.88	1.65	1.87	0.158368

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.

5.5. Growth of Asset, Deposit and Loan of Banks

In this section, lending, deposit and asset of both state and private sector banks is analyzed to determine the growth performance of banks. Amount of lending, asset and deposit and percent increase or percent decrease of each sector banks for the year 2005 to 2010 is presented in the Appendix III. Individual percent increase or percent decrease of all the sample banks in each sector is added and average is taken and results are presented in appendix III.

Deposit growth analysis: Deposit growth at Ethiopia's private banks has averaged 28.55 percent per year in the study period. Indeed, it is remarkable that annual deposit growth has never fallen below 21.92 percent in the study period and 25 percent at any time since the start of private banking 17 years ago. Whereas the growth trend of state owned banks is somewhat different. Even if it is increasing the rate is lower than private banks growth. This is an implication for the reduction of share of deposit of state owned banks and can help for better profitability of private banks since the main source of business for banks is their deposit. This rate of growth has taken place when real savings rates were both positive (as in early 2000s) and significantly negative (as in recent years). Even if inflation does pick up, the national bank has recently adopted a major policy shift that links minimum deposit rates to inflation, thereby ensuring strong incentives for savers and in the years ahead will drive deposit growth.

Loan growth analysis: It is clear from the figure 5.12 that both sector banks have increased their lending in all years although it is more obvious in case of private banks. In the year 2006, private banks have further increased their lending but lending of state owned banks is lower. Another fact which is depicted by appendix III is that both sector banks are enjoying the increasing trend

of loan with an average increasing rate of 22.97% for private banks and 22.08 %for state owned banks. Generally from these evidences we can conclude that private banks has better increasing rate of loans which helps them to reduce the total share of loans by state owned banks.

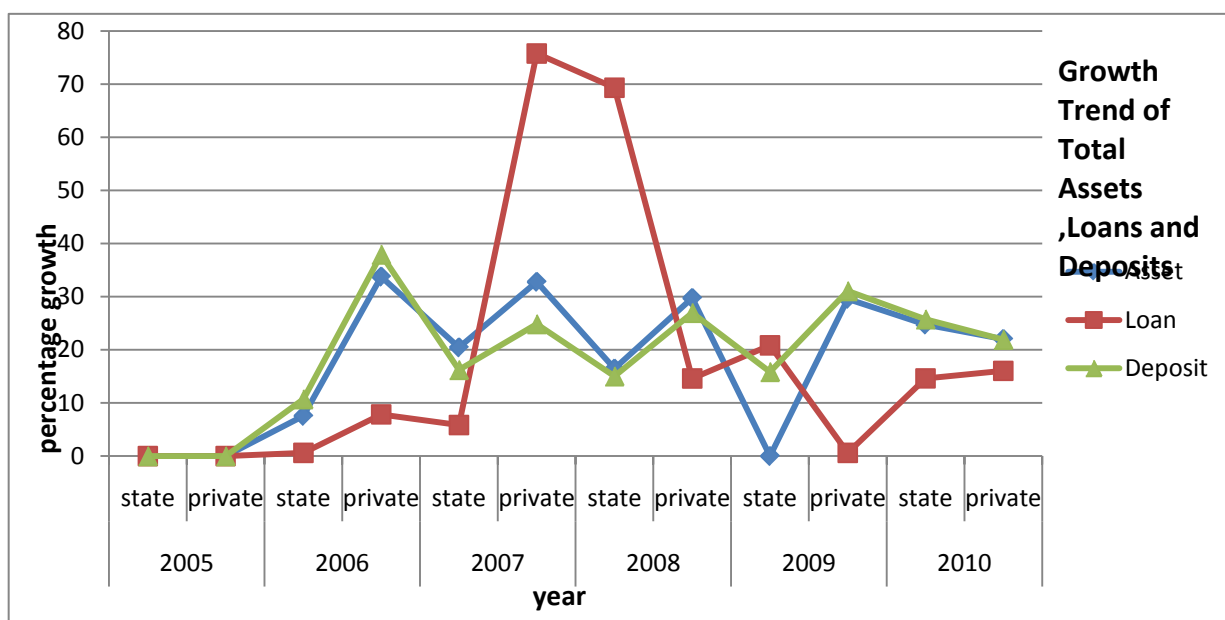


Figure 5.12 Growth trends of Assets, Loans and Deposits

Growth in bank lending should match and even exceed deposit growth in the coming years as long as credit ceilings on private banks are removed. Such growth in private banks’ loan portfolio will imply similar growth in profits as long as interest spreads are broadly unchanged. Private Banks’ loan- to-deposit ratio has fallen dramatically in recent years (from 86 percent in 2001 to just 56 percent at present) as banks kept accumulating deposits but were restricted from lending out most of these deposits because of the credit caps.

Asset growth analysis; In results reported from figure 5.12, the study found that without exception banks expand their asset holdings by amounts ranging from 7.55 percent to 33.77 percent within the analysis year. But the growth trend significantly differs in each sector. Comparatively the growth trend of private banks is much better than state owned banks. On average the asset of private banks is grown by 29.58 percent whereas state owned banks increased by 17.38 percent in the analysis year. This implies that the Ethiopian banking sector is growing swiftly. It is also evident that private banks show generally better performance than state-owned banks.

Generally the growth trend of the above three most important sources of business for the banking system are positive and encouraging in both sectors. This suggests that the Ethiopian banking sector has grown rapidly. However the average growth trend of private banks has been much faster than state-owned banks, although more assets, deposit and loan are still held by state owned banks.

5.6. Findings

It is clear from the results of all the four performance measures that state owned banks are greater in mean performance measures than private banks. Out of eleven ratios, only four ratios (DER, ROA, AU & EM) proved that private ownership is greater. In terms of profitability state owned banks are greater than private banks. Private Banks are greater only on ROA. State owned banks are greater in all liquidity measures. It is only in terms of solvency and risk in which private banks are greater. Where as in case of efficiency ratio state banks are better than private banks in terms of IER and OE but private banks are better in asset utilization. From the table below the difference in performance measures are significantly different from zero, it is undeniable. But the difference significant for ROE, LAR, DER, EM and AU measures at 5% levels.

The complete comparison for state and private sector banks for all the 11 ratios and growth performance of asset, deposit and loan is presented in table 5.12.

In terms of general growth trend private banks show a better trend than state owned banks.

Specifically on a 22.08 percent loan and 16.72 percent in deposit per year. Whereas private banks show a percentage growth of 29.58 of asset, 22.97 of loan and 28.55 of deposit on average from 2006-2010

Table-5.12 Overall comparison of state and private banks

	Ownership	Mean	Mean difference	t-statistics
Return on asset	state ownership	2.56	-0.59	.064
	private owned	3.15		
return on equity	state ownership	36.31	9.50	.005*
	private owned	26.81		
profit margin	state ownership	37.03	3.95	.142
	private owned	33.12		
liquid asset to deposit ratio	state ownership	55.72	4.69	.516
	private owned	51.04		
loan to asset ratio	state ownership	31.56	-22.38	.000*
	private owned	53.94		
loan to deposit ratio	state ownership	48.24	-20.20	.051
	private owned	68.44		
debt equity ratio	state ownership	12.45	4.76	.008*
	private owned	7.70		
equity multiplier	state ownership	13.45	4.76	.008*
	private owned	8.69		
asset utilization	state ownership	5.61	2.47	.000*
	private owned	8.08		
income expense ratio	state ownership	2.97	1.44	.236
	private owned	1.53		
operating efficiency	state ownership	2.53	0.65	.138
	private owned	1.87		

Significant at the 5% level using a two-tailed test.

CHAPTER: 6

6.1. Conclusions and suggestions

6.1. Conclusions

The main objectives of this research was to examine the performance of banks based on ownership (private and state ownership) and provide evidence on which of the two sectors show superior performance. The study has conducted in a new environment that is in case of the corporate culture of Ethiopia. The study mainly utilized a quantitative study by using financial ratio analysis along with qualitative analysis of empirical findings of ratios. From the empirical findings, state owned banks have shown superior performance than private banks. This conclusion is the same as that of Unal et al. (2007).

Out of eleven ratios used in performance analysis, seven ratios support state owned banks for superior performance as compared to private ownership and only four ratios quote that privately owned banks are superior in performance than state owned banks. So from empirical findings it can be concluded that performance of state owned banks is superior to private banks in Ethiopia in terms of profitability, liquidity, solvency and efficiency.

Two of the profitability indicators, return on assets (ROE) and net profit margin are consistently larger for state-owned banks than private-owned banks. For example, the average annual profit margin from 2005-2010 is 37.03% for state-owned banks and 33.12% for private-owned banks. The difference, 3.9 is not significant at the 5 percent level. While ROA for the period 2005-2010 is greater for private banks but the mean difference 0.59 is not significant at 5 %. The average annual ROE of state owned banks 36.31 is greater than private banks (26.81) and the difference 9.5 is significant at 5 % level. Moreover, from three ratios to measure liquidity of the banking sector, evidences suggested that state owned banks are more liquid in two ratios and private banks are more liquid only in one ratio. So it can be concluded that state owned banks are more liquid. But in terms of solvency and risk ratios, private banks are more solvent and less risky than state owned banks in both ratio measures. From the ratio measure which are used as an indicator of efficiency of banks in using its asset or resource management, state owned banks shows

superiority in two measures whereas private banks are superior in one of the ratio. So it can be concluded that state owned banks are more efficient than private banks.

In terms of growth performance of loans, assets and deposit of banks in Ethiopia, both private and state owned banks have better growth trend, but the growth trend of private banks has shown superiority.

From the findings even if state owned banks have shown some superiority, the difference is not that much greater. This is because ownership based advantages may have very limited impact on performance outcomes for banks in Ethiopia which are operating in environments that are weakly competitive and highly regulated.

It can also be concluded from the empirical findings that privatization is not the only solution to poor performance of state ownership. The introduction of competition can substantially improve the performance of both state and private ownership. With regard to the competitiveness of the banking sector, there is a lot to be desired yet.

6.2. Suggestion for Future research

Current research only compares the performance of some private and state banks in terms of profitability, liquidity, solvency and efficiency by using only secondary data. Further research can be carried out by including all the state and private banks in Ethiopia by using primary sources of data and including non financial performance indicators. As results obtained are opposite to most findings and theories, more empirical research can be carried out to find the reasons of these findings.

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APPENDICES

APPENDIX A

Description of financial ratio variables used

Performance Measurement variables	Definition	Instrument to measure	Method of analysis
<i>Profitability</i>		Secondary data (published income statement and balance sheet)	Comparative analysis based on the results of the ratio analysis. And trend analysis
ROA	It measures the profit of the firm after tax for each birr invested in assets. It is indicator of managerial performance.		
ROE	represents profitability of shareholders of the firm after meeting all expenses and taxes usually high for high growth firm		
PM	It is the margin left after meeting all expenses. Measures the overall efficiency of production, administration, financing, pricing and tax management.		
<i>Liquidity</i>		Balance sheet and income statements	Comparative analysis based on the results of the ratio analysis. And trend analysis
LADR	Measures cash holding by commercial banks. It is important in maintaining customer trust. But on the other hand, it reduces opportunity to earn income from cash.		
LDR	Bank with lower LDR is considered to have excessive liquidity, potentially lower profit and hence less risk as compared to bank of higher LDR.		
LAR	LAR measures liquidity of bank in terms of its assets. Higher the ratio, less liquid is the bank.		
<i>Solvency</i>		Balance sheet and income statement	Comparative analysis based on the results of the ratio analysis. And trend analysis
DER	Measures the extent to which a bank depends on debt financing than equity financing.		
EM	Indicates amount of assets per Birr of shareholders' equity		
<i>Efficiency</i>		Balance	Comparati
AU	Measures how efficiently the firm is utilizing its assets.		

		sheet and income statement	ve analysis based on the results of the ratio analysis. And trend analysis
OE	It provides information about managerial efficiency in generating operating revenues and controlling its operating expenses		
IER	measures managerial efficiency in generating total income while controlling its operating expenses		

Loans = Advances.

Net Interest Income = Interest Income – Interest expense.

Net Profit = Profit before tax – Taxation (net income before tax and provision)

Profit before Tax = Gross income – Total expenses.

Total Assets = Cash on hand + Cash at Bank + Reserve Account with NBE + Deposit with foreign banks + Treasury Bills + Other Investment Bonds + Trust funds + Sundry Debtors & Other debit balances + Loans & advances + Net fixed assets + Customers' liability for L/C.

(Liquid asset) Total Cash Holdings = Cash & balances with treasury banks.

Total Deposits = Deposits and other accounts.

Total Income = Profit before tax.

Total Operating Expenses = Employees Salary & benefits + Provision for Doubtful Loans + General Expenses

Total Operating Revenue = Interest Income.

Gross (Total) Revenue = Total interest income + Total Noninterest income.

Appendix B
FINANCIAL RATIOS OF BANKS

Dashen Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	2.33%	34.22%	30.34%	29.85%	78.78%	65.26	13.69	14.69	6.84	1.14	1.41
2006	3.34%	42.29%	36.24%	25.27%	85.69%	69.6%	11.66	12.66	11.60%	1.61	1.61
2007	3.53%	40.19%	38.56%	27.66%	82.04%	66.01%	10.38	11.38	12.16%	1.92	1.92
2008	3.45%	37.50%	35.69%	37.24%	71.23%	55.97%	9.88	10.88	15.29%	1.90	1.90
2009	2.85%	30.49%	33.07 %	48.32%	56.18%	45.74%	9.71	10.71	16.98%	1.73	1.72
2010	2.93%	31.89%	33.60%	42.54%	49.77%	40.87%	9.87	10.87	19.11%	1.77	1.78

Awash International Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	1.9%	19.8%	25.5%	44.6%	66.50%	57.95%	9.4	10.4	8.91	0.92	0.92
2006	3.0%	29.3%	34.2%	36.2%	72.92%	63.37%	8.7	9.7	9.61%	1.61	1.61
2007	4.2%	38.8%	41.7%	36.2%	80.71%	65.59%	8.2	9.2	13.67%	2.65	2.65
2008	3.3%	27.7%	33.8%	47.7%	70.75%	56.80%	7.4	8.4	15.45%	1.81	1.80
2009	2.5%	21.2%	29.9%	64.2%	54.67%	42.24%	7.3	8.3	17.58%	1.3	1.30
2010	3.4%	29.3%	36.1%	66.2%	82.69%	39.59%	7.5	8.5	21.81	1.94	1.94

Bank of Abyssinia

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	3.3%	27.3%	40.1%	36.9%	75.84%	56.005	7.1	8.1	12.32	2.22	2.21
2006	3.5% %	25.9%	38.6% %	27.6%	90.17%	69.27%	6.5	7.5	11.21%	2.14	2.14
2007	2.2%	16.6%	25.1%	30.1%	84.71%	67.87%	6.7	7.7	11.58%	0.85	0.85
2008	0.4%	3.5%	4.19%	33.8%	81.00%	65.97%	8.3	9.3	12.33%	0.094	0.094
2009	2.1%	21.4%	24.8%	49.2%	60.28%	49.46%	9.4	10.4	14.94%	0.98	0.99
2010	2.4%	25.5%	30.0%	47.2%	61.35%	50.21	9.6	10.6	14.87	1.35	1.35

Wegagen Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	3.5%	31.1%	32.0%	48.1%	46.04%	36.69%	7.9	8.9	25.29	0.97	0.97
2006	3.7%	32.6%	32.3%	37.2%	56.47%	44.44%	7.9	8.9	21.91%	1.03	1.03
2007	3.9%	34.0%	35.0%	48.5%	51.76%	40.51%	7.7	8.7	22.69%	1.37	1.37
2008	3.7%	27.5%	32.3%	60.8%	62.71%	45.09%	6.5	7.5	23.12%	1.26	1.66
2009	3.9%	25.1%	38.2%	78.2%	57.74%	42.04%	5.4	6.4	21.98%	1.92	1.92
2010	4.1%	23.7%	39.5%	77.4%	66.63%	45.76%	4.8	5.8	21.61	1.85	1.85

United Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	3.5%	28.1%	34.1%	56.0%	115.83%	93.38%	6.9	7.9	9.08	1.39	1.39
2006	3.3%	27.8%	34.9%	48.6%	130.54%	99.62%	7.5	8.5	7.91%	1.62	1.62
2007	3.4%	23.2%	33.3%	49.2%	139.84%	72.21%	5.9	6.9	8.91%	1.34	1.34
2008	3.4%	22.0%	32.6%	56.7%	96.07%	45.40%	6.6	6.6	11.93%	1.38	1.38
2009	2.4%	18.9%	27.1%	68.7%	58.41%	53.36%	7.0	8.0	16.33%	1.08	1.08
2010	3.3%	30.1%	34.2%	69.3%	52.36%	41.96%	8.1	9.1	20.65	1.56	1.56

Nib International Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	3.1 %	23.2%	34.1 %	37.9%	92.64%	65.41%	6.5	7.5	11.91	0.44	1.47
2006	3.1 %	22.8 %	36.0 %	30.0%	101.58%	72.77%	6.4	7.4	10.91%	0.489	1.72
2007	3.3 %	21.4 %	36.5 %	37.0 %	96.70%	69.7%	5.5	6.5	11.44%	0.5	1.77
2008	3.6 %	22.1 %	35.7 %	54.0 %	85.59%	57.92%	5.1	6.1	14.99%	0.48	1.65
2009	3.6 %	23.2 %	36.1 %	70.8%	67.35%	46.18%	5.4	6.4	19.19%	0.5	1.66
2010	3.7 %	24.4 %	36.1 %	74.3 %	61.69%	42.63%	5.6	6.6	21.84	0.46	1.57

Commercial Bank of Ethiopia

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	1.87 %	39.11 %	41.27 %	68.87%	37.67%	28.81%	19.90	20.90	4.18%	2.58	2.58
2006	2.32%	54.65 %	43.97%	74.97%	32.86%	17.49%	22.52	23.52	5.09%	2.99	15.3
2007	2.18 %	30.18%	38.35 %	78.06%	29.69%	22.45%	12.85	13.85	5.18%	1.60	1.6
2008	2.90 %	31.00 %	45.79 %	47.40%	46.07%	34.39%	9.69	10.69	5.89%	3.28	3.45
2009	3.50 %	40.01 %	49.92%	35.91%	48.07%	35.19%	10.44	11.44	6.48%	5.24	5.24
2010	1.87 %	39.11 %	41.27 %	68.87%	84.91	32.37	19.90	20.90	6.06%	2.86	2.22

Construction and Business Bank

	ROA	ROE	PM	CDR	LDR	LAR	DER	EM	AU	IER	OE
2005	1.23%	18.38%	15.45	58.62%	81.08%	46.75%	13.99	14.99	5.29	0.45	0.42
2006	3.9%	46.67	35.44%	57.55%	121.2%	65.61%	10.89	11.89	8.85%	1.44	1.42
2007	3.01	35.22%	25.69 %	51.06%	116.99%	70.35%	10.70	11.70	11.54%	0.74	0.73
2008	4.02 %	40.46%	38.17%	62.69%	93.15%	57.98%	9.07	10.07	9.19%	1.89	1.88
2009	3.2%	30.57%	32.32%	51.53%	85.76%	60.69%	8.31	9.31	8.76%	1.43	1.43
2010	3%	32%	34%	53%	74.3%	55.31	9	10	8.41%	1.77	1.99

Appendix C

The means of the selected variables for privately-owned and state owned commercial banks. The t-statistics test for the difference in mean between privately-owned and state-owned banks.

ROA	State	Private	Mean Difference	ROE	State	Private	Mean Difference
2005	1.4	2.98	1.58	2005	28.74	27.29	1.45
2006	2.55	3.32	0.75	2006	43.32	30.22	13.12
2007	2.59	3.42	0.83	2007	32.7	29.03	3.67
2008	2.46	2.98	0.52	2008	35.73	23.4	12.33
2009	3.39	2.9	0.49	2009	35.29	23.4	11.89
2010	2.95	3.31	0.36	2010	34.55	27.5	7.05
Mean	2.556667	3.151667		Mean	35.055	26.80667	

PM	State	Private	Mean Difference	LADR	State	Private	Mean Difference
2005	28.36	32.69	-4.33	2005	63.74	44.89	18.85
2006	39.71	35.37	4.34	2006	66.26	36.5	29.76
2007	32.02	35.03	-3.01	2007	64.56	40.48	24.08
2008	41.98	28.96	13.02	2008	55.04	51.34	3.7
2009	41.12	31.53	9.59	2009	43.72	66.87	-23.15
2010	39	34.92	4.08	2010	41	66.1	-25.1
Mean	37.03167	33.08333		Mean	55.72	51.03	

LAR	State	Private	Mean Difference	LDR	State	Private	Mean Difference
2005	61.72	44.89	16.83	2005	39.47	76.55	-37.08
2006	49.77	36.5	13.27	2006	35.8	59.84	-24.04
2007	65.87	40.48	25.39	2007	32.6	84.25	-51.65
2008	58.18	51.34	6.84	2008	47.87	76.05	-28.18
2009	45.17	66.87	-21.7	2009	49.6	58.37	-8.77
2010	42.96	66.1	-23.14	2010	84.09	55.56	28.53
Mean	53.945	51.03		Mean	48.23833	68.43667	

DER	State	Private	Mean Difference	EM	State	Private	Mean Difference
2005	16.94	8.58	8.36	2005	17.94	9.58	8.36
2006	16.71	8.11	8.6	2006	17.71	9.11	8.6
2007	11.78	7.4	3.74	2007	12.78	8.4	3.74
2008	9.38	7.13	2.25	2008	10.38	8.13	2.25
2009	9.38	7.37	2.01	2009	10.38	8.37	2.01
2010	10.5	7.58	2.47	2010	11.5	8.58	2.47
Mean	12.44833	7.695		Mean	13.44833	8.695	

AU	State	Private	Mean Difference	IER	State	Private	Mean Difference
2005	4.24	7.23	-2.99	2005	0.42	1.4	-0.98
2006	5.23	7.48	-2.25	2006	8.28	1.62	6.66
2007	5.45	8.43	-2.98	2007	1.16	1.65	-0.49
2008	6.04	8.9	-2.86	2008	2.67	1.41	1.26
2009	6.57	7.96	-1.39	2009	3.33	1.44	1.89
2010	6.15	8.49	-2.34	2010	1.99	1.67	0.32
Mean	5.613333	8.081667		Mean	2.975	1.531667	

Significantly different from zero at 5%, using a two-tailed test

OE	State	Private	Mean Difference
2005	1.94	1.76	0.28
2006	2.12	2.02	0.1
2007	1.37	2.12	-0.75
2008	2.66	1.8	0.86
2009	4.21	1.88	2.33
2010	2.86	1.65	1.21
Mean	2.526667	1.871667	

Significantly different from zero at 5%, using a two-tailed test

Appendix D
Loan, Asset and Deposit Growth Trend in millions of birr

	2005		2006		2007		2008		2009		2010	
	state	private	state	private	state	private	state	private	state	private	state	private
A	35,002	12,124	37,646	16,219	45,345	21,537	52,808	27,944	62,003	36,210	77,349	44,187
Pc	–	–	7.55	33.77	20.45	32.79	16.46	29.75	17.71	29.58	24.75	22.03
L	10,413	7,484	10,475	8,071	11,088	14,187	18,726	16,258	22,479	16,358	25,766	18,982
Pc	–	–	.60	7.84	5.85	75.78	69.33	14.60	20.04	0.6	14.62	16.04
D	26,424	9,776	29,259	13,486	34,009	16,838	39,122	21,379	45,323	28,021	57,000	34,165
PC	–	–	10.72	37.95	16.23	24.85	15.03	26.97	15.85	31.07	25.76	21.92

A, total asset

Pc, percentage change

L, total loan

D, total deposit