
DETERMINANTS OF FINANCIAL PERFORMANCE OF COMMERCIAL BANKS: PANEL DATA EVIDENCE FROM ETHIOPIA

Dr. D. M. Sheaba Rani¹, M.Com, M.B.A., Ph.D.

Professor,

Department of Commerce and Management Studies,
Andhra University, Visakhapatnam, 530003, India

Lemma Nigussie Zergaw², M.B.A.

Research Scholar

Department of Commerce and Management Studies,
Andhra University, Visakhapatnam, 530003, India

ABSTRACT

This study was conducted to analyze the determinants of financial performance of commercial banks in Ethiopia. All commercial banks which have started their operation before 2005 are selected for the study. From the total of 18 commercial banks in Ethiopia, 9 banks: 2 from the public and 7 from the private sector were selected which are operated for ten or more years in the industry. Both bank specific as well as industry specific determinants of financial performance of commercial banks were considered as the independent variables; whereas, the return on asset has been taken as dependent variable. A panel data of 11 years from the annual audited financial statements was taken. Data analysis has been done using descriptive statistics, correlation analysis and multiple linear regression models. All bank specific variables: capital adequacy ratio, asset quality ratio, management efficiency ratio, earnings ratio and liquidity ratio are statistically significant determinant of Ethiopian commercial banks financial performance. Whereas, industry growth rate was found statistically insignificant, this implies that its influence on Ethiopian commercial banks' financial performance is less during the study period (2005 to 2015).

Key Words: panel data, bank specific, industry specific, performance, Ethiopia.

1. Introduction

Studies that seek to investigate the performance of banks and their various determinants are steps in the right direction to identifying the means of promoting the survival and growth of the sector that serves as the backbone of the financial system of developing economies. Notwithstanding the above, the great depression of the 1940s coupled with bank failures experienced in the United States drove considerable attention to bank performance. Since then, the attention on bank performance has grown from levels to levels. (Heffernan, 2005)

According to previous studies, determinants of bank performance are categorized into two main groups: external and internal. The Internal determinants are sometimes called microeconomic determinants or inherent performance which are specific to each bank and that, in many cases, are the direct result of managerial decisions, so such management effects will definitely affect the operating result of banks. External determinants, on the other hand, are variables that reflect economic and legal environment which are out of the control of the management of the banks. They are again grouped into two parts as factors relating to the industry structure and the macroeconomic environment within which the banking system operates.

In the Ethiopian case, the major financial institutions operating are banks, insurance companies and micro-finance institutions. The number of banks operating in the country during 2014/15 reached 19. In terms of ownership, sixteen are private commercial banks, and the remaining three state-owned. During the fiscal year, 485 new branches were opened raising the total branch network in the country to 2693 from 2208 previous years. Despite the continuous increase in the capital base, the banking industry in Ethiopia is still very small compared to some big banks in Africa, depicting the ongoing effort needed to bring Ethiopian banks to the international level. (NBE, 2014/15)

2. Review of Literature

A study by (Molyneux and John Thornton, 1992) on determinants of European banks profitability examines the determinants of bank performances across eighteen European countries between 1986 and 1989. The study replicates Bourke's methodology and finds that the results do conform to the traditional US concentration and bank profitability studies.

Another study by (Petriaa et al., 2013) on Determinants of banks' profitability: evidence from EU 27 banking systems assesses the main determinants of banks' profitability in EU27 over the period 2004-2011. The study split the factors that influence bank profitability in two large groups: bank-specific (internal) factors and industry specific and macroeconomic (external) factors. They consider as proxy for banks profitability the return on average assets (ROAA) and the return on average equity (ROAE). The empirical findings are consistent with the expected results. Credit and liquidity risk, management efficiency, the diversification of business, the market concentration/competition and the economic growth have influence on bank profitability, both on ROAA and ROAE. An interesting and valuable result is the positive influence of competition on bank profitability in EU27.

A study by (Islatince, 2015) on Analysis of the Factors that Determine the Profitability of the Deposit Banks in Turkey investigated the effects of internal factors under the control of deposit banks in Turkey and external factors that reflect the financial system in countries and that are beyond the control of the banks on the profitability of the banks. For this purpose, a multi linear regression analysis was carried out using the data of Turkish deposit banks of the period between 2008 and 2014. As a result, it was determined that there is a high correlation between the asset profitability

and equity profitability of the banks, and micro variables are more effective in the determination of a bank's performance when compared to macroeconomic variables. It was further detected that liquidity, which is determined as a micro variable, has a negative effect on equity profitability, and the expense management of the bank is the only variable affecting a bank's profitability and equity profitability.

3. Statement of the Research Problem

Studies which examined the financial sector in Ethiopia, specifically the banking sector, are scanty. There are very few studies which have tried to examine the performance of commercial banks by considering the bank specific, or the microeconomic factors; no study has considered the industry specific factor so far. The variables included in the previous studies as determinants of bank performance in Ethiopia are quite different from one study to the other and no study has been done so far which has considered the variables taken for this study.

A study by (Eshete et al., 2013) entitled, Competition in Ethiopian Banking Industry by considering both the state and privately owned banks using descriptive, qualitative and econometric models found that the financial system is dominated by banking industry, and yet, it is amongst the major under-banked economy in the world. Others like (Kapur and Gualu, 2012) have conducted a study on financial performance and ownership structure of Ethiopian commercial banks. But none of the above studies has considered all the variables taken in this study; none of them has used the CAMEL approach of financial performance analysis model and none of them has also taken industry growth rate as determinant factor of financial performance of the public and private sector commercial banks in Ethiopia.

Thus, the main objective of this study is to analyze the bank specific and industry specific determinants of financial performance of commercial banks in Ethiopia by considering both the public and private sector banks.

4. Objectives of the Study

1. To analyze the internal factors (Bank Specific Variables) which determine the financial performance of commercial banks in Ethiopia.
2. To analyze the Industry Specific Variables which determine the financial performance of commercial banks in Ethiopia.
3. To give systematic suggestions for the banks, shareholders, public and policy makers of Ethiopia.

5. Hypotheses of the Study

Hypothesis 1:

- There is positive and significant relationship between Capital Adequacy Ratio (CAR) and financial performance of commercial banks in Ethiopia.

Hypothesis 2:

- There is negative and significant relationship between Asset Quality Ratio (AQR) and financial performance of commercial banks in Ethiopia.

Hypothesis 3:

- There is positive and significant relationship between Management Efficiency Ratio (MER) and financial performance of commercial banks in Ethiopia.

Hypothesis 4:

- There is positive and significant relationship between Earnings Ratio (EARN) and financial and operating performance of commercial banks in Ethiopia.

Hypothesis 5:

- There is positive and significant relationship between Liquidity Ratio (LIQR) and financial performance of commercial banks in Ethiopia.

Hypothesis 6:

- There is positive and significant relationship between Industry Growth Rate (INDG) and financial performance of commercial banks in Ethiopia.

6. Research Design and Methodology

The research design of this research can be considered as hypotheses testing type, because it will test the different hypotheses formulated, and it can also be of descriptive type of research design since it describes the performance of the commercial banks under study. It has also shown the correlation between the dependent and independent variables considered in the study.

6.1 The CAMEL Model

In the 1980s, the US supervisory authorities, through the use of the CAMEL rating system, were the first to introduce ratings for on-site examinations of banking institutions. These are Capital, Asset Quality, Management, Earnings and Liquidity and are seen to reflect the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution.

6.2 Determinants of Bank Performance

Bank performance is usually measured by Return on Assets (ROA), Return on Equity (ROE) or the Net Interest Margin (NIM) and is a function of internal and external determinants. Internal determinants are also sometimes called microeconomic determinants or inherent performance, while external determinants are variables that reflect economic and legal environment in which the bank operates. Many studies have attempted to explain the contribution of a particular variable on the performance of banks. It should be noted that very often, the authors found different results even contradictory. This is mainly due to the different data they use, which covers different areas and periods.

6.2.1 Bank and Industry specific Determinants of Performance

This study focuses on internal (bank specific) as well as external (industry specific) determinants of financial performance of commercial banks in Ethiopia, which may explain the differences in performance during 2005 to 2015. Internal determinants of bank performance are related to capital adequacy (CAR), asset quality (AQR), management efficiency (MER), earnings (EARN) and liquidity (LIQR), whereas, the industry specific variable is related to industry growth rate (INDG).

6.3 Data Source

6.3.1 Secondary data

Secondary data was used for the study and it has been collected from the audited annual financial statements of the commercial banks in Ethiopia as well as from the different reports and publications of the National Bank of Ethiopia (NBE), Ministry of Finance and Economic Development (MoFED) and the Central Statistical Agency (CSA). The financial statements that were used include the balance sheet, income statement and the cash flow statement of the commercial banks for the year 2005 to

2015. Furthermore, literature from various books, journals, news papers, magazines, and different web sites were used.

6.4 Type of Data and Method of Analysis

In any research undertaking, the type of data and method of analysis to be used is determined by the nature of the problem statement or more specifically by the research objectives. To achieve the objectives of the study, the panel data from nine commercial banks for eleven years (2005 to 2015) was used. Panel data is used because it has the advantage of giving more informative data as it consists of both the cross-sectional information, which captures individual variability, and the time-series information, that captures dynamic natures of the data. Descriptive statistics, correlation and econometric models of data analysis are used.

6.5 Variables Description and Econometric Model Specification

6.5.1 Variables Description

This study used explanatory variables such as; capital adequacy ratio, asset quality ratio, management efficiency ratio, earnings ratio, liquidity ratio and industry growth rate while the dependent variable was return on asset.

Dependent Variable

The dependent variable of the study is the return on asset, which is taken as a proxy for the measurement of financial performance of commercial banks in Ethiopia.

Return on Assets (ROA)

The Return on Assets ratio is an important profitability ratio because it measures the efficiency with which the bank is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the bank's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratios.

Independent Variables

The major determinants (independent variables) of financial performance of commercial banks are capital adequacy, asset quality, management efficiency, earnings and liquidity status which shall be proxied by selected ratios. The CAMEL ratios are the popular indicators often used in representing bank specific factors in relation to performance and the industry specific variable used as independent variables is the industry growth rate.

Bank Specific Variables:

Capital Adequacy Ratio (CAR)

Capital adequacy ratio has emerged as one of the major indicators of the financial health of a banking entity. It is measured as a ratio of bank's own capital (new equity, retained earnings, etc.) to its total assets (loans, investments in stock markets, guarantees, etc). Well adherence to capital adequacy regime does play a vital role in minimizing the cascading effects of banking and financial sector crises.

Asset Quality Ratio (AQR)

Asset quality signifies the degree of financial strength and risks in a bank's assets, mainly loans and investments. The maintenance of asset quality is a fundamental feature of banking. A broad evaluation of asset quality is one of the most important components in assessing the current situation and future viability of a bank. Under CAMEL model of analysis, the asset quality ratios command

significant recognition. Asset Quality ratio which is proxied by nonperforming loans to total loans is adopted for analyzing the performance of commercial banks in Ethiopia.

Management Efficiency Ratio (MER)

Management efficiency is another vital component of the CAMEL model that ensures the survival and growth of a bank. It is the management which sets vision and goals for the organization and ensures that it achieves them. In the process of achieving their goals, management takes certain crucial decisions depending on its risk perception. Hence, analysts and investors use this parameter to evaluate management efficiency as to assign premium to better managed banks and discount to poorly managed ones. It is proxied by the ratio of total operating revenue to total profit.

Earnings Ratio (EARN)

Earnings quality reflects quality of a bank's profitability and its ability to earn consistently. The two most important parameters that are reviewed during inspection to assess the earning performance of the bank are the net interest margin and the net margin. It is proxied by the ratio of interest income to total asset.

Liquidity Ratios (LIQR)

For a bank, liquidity is a crucial aspect which represents its ability to meet its financial obligations. It is utmost important for a bank to maintain correct level of liquidity, which will otherwise lead to declined earnings. A high liquidity ratio indicates that the bank is more affluent. However, a bank needs to take care in hedging liquidity risk to ensure its own liquidity under all rational conditions. It is possible only when the percentage of funds ploughed in the investments with high returns is large. It is proxied by the ratio of total loan to total deposit.

Industry Specific Variable:

Industry Growth Rate (INDG)

Industry growth rate is the proxy for the industry specific variables which will have its own relationship with the financial performance of commercial banks and it is expected to have a positive and significant relationship with commercial banks in Ethiopia considered for this study. It is proxied by the ratio of total assets of the banking industry to gross domestic product (GDP) of the country.

6.5.2 Model Specification

As it is clearly indicated in the previous sections, panel data regression model was adopted for this study. Panel data was generated using both time series and cross-sectional data from the audited financial statements of the banks. It was also ideally used because it helps in the identification of effects that cannot be easily pointed out using purely cross-section or time series data, and other important features.

Econometric Model for ROA

$$ROA_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 AQR_{it} + \beta_3 MER_{it} + \beta_4 EARN_{it} + \beta_5 LIQR_{it} + \beta_6 INDG_{it} + \epsilon_{it}$$

Where,

ROA_{it} = Performance of bank i at time t as expressed by Return on Asset

β_0 = intercept, $\beta_1 - \beta_6$ = Coefficients of Parameters

CAR_{it} = Capital Adequacy Ratio of Bank i at time t

AQR_{it} = Asset Quality Ratio of Bank i at time t

MER_{it} = Management Efficiency Ratio of Bank i at time t

$EARN_{it}$ = Earnings ratio of Bank i at time t

$LIQR_{it}$ = Liquidity Ratio of Bank i at time t

$INDG_{it}$ = Industry Growth Rate at time t

ϵ_{it} = Error term where i is cross sectional and t time identifier

Table 1. Variables Description in the Study

Variable Type	Proxy	Hypothesized Relationship
Dependent Variable:		
Return on asset (ROA)	Net Profit / Total Asset	N/A
Independent Variables:		
Capital adequacy ratio (CAR)	Equity / Total Asset	Positive
Asset quality ratio (AQR)	Nonperforming Loan / Total Loan	Negative
Management efficiency ratio (MER)	Operating Revenue / Total Profit	Positive
Earnings ratio (EARN)	Interest Income / Total Asset	Positive
Liquidity ratio (LIQR)	Total Loan / Total Deposit	Positive
Industry growth (INDG)	Total Asset / GDP	Positive

Source: Adopted by the Researcher from different Literatures

7. Results and Discussion

7.1 Results of Descriptive Analysis

Table 2. Descriptive Statistics for the Dependent and Independent Variables

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
ROA	99	0.0256	0.0088	0.0085	0.0466
CAR	99	0.1320	0.0955	0.0420	0.8680
AQR	99	0.0426	0.0422	0.0000	0.2130
MER	99	2.0521	1.7817	-1.1480	12.3060
EARN	99	0.0450	0.0141	0.0020	0.0670
LIQR	99	0.3375	0.1257	0.1280	0.9380
INDG	99	6.7936	7.5723	-0.2800	21.7800

Source: Financial statement of the commercial banks and Own Computation through Stata 12

Table 2 presents the descriptive statistics of the variables used in the study. On average, the overall banks' return on asset is 0.026 and with smaller variation across banks and periods; with standard deviation of 0.009, while maximum and minimum values are 0.047 and 0.009 respectively. This implies that on average each bank generates 3 cents from each 1 birr investment on the assets of the bank. The highest amount of profit in the form of return on asset was 5 cents and that of the least was only 1 cent during the study period.

On the other hand, capital adequacy ratio amounts to 0.132 on average, varies between 0.042 and 0.868, asset quality amounts 0.043 on average with minimum and maximum value of 0 and 0.213 respectively. Management efficiency ratio has an average value of 2.05; and 12.31 and -1.15 of maximum and minimum values respectively. With regard to earnings ratio and liquidity ratio, the average values are 0.0445 and 0.3375 respectively. While industry growth on the other hand amounts to 6.79 on average, ranging between 0.2178 to -0.28 of maximum and minimum values respectively.

7.2 Correlation Analysis

Correlation coefficient shows the relationship between the dependent and the explanatory variables. Therefore, Correlation Analysis is implied to forecast how the selected independent variables can influence the performance indicator (ROA). It is also used to test the model if there is any multicollinearity amongst the independent variables.

Table 3. Correlation Matrix between Dependent and Independent Variables

	CAR	AQR	MER	EARN	LIQR	INDG
ROA	0.3182	-0.0587	-0.5139	0.3401	-0.2359	0.0562

Source: Financial statement of the commercial banks and Own Computation through Stata 12

Table 3 above presents the output of correlation analysis represented in matrix of pair-wise correlation. It has the calculated values of correlation coefficient of dependent variables with bank specific and industry specific variables. It has been shown that ROA is negatively correlated with asset quality ratio, management efficiency ratio and liquidity ratio with a correlation coefficient of -0.0587, -0.5139 and -0.2359 respectively. On the other hand, return on asset has been positively correlated with capital adequacy ratio, earnings ratio and industry growth with a correlation coefficient of 0.3182, 0.3401 and 0.0562 respectively.

7.3 Results of the Regression Analysis

Table 4. Regression results for ROA

Variables	Observation	Coefficient	Robust Std. Err.	Z	P-value	Results
C	99	0.0355195	0.0205978	1.72	0.085	-
car	99	-0.0328645	0.0123766	-2.66	0.008	Rejected
aqr	99	-0.0033298	0.0179226	0.19	0.005	Accepted
mer	99	-0.0028754	0.0002833	-10.15	0.000	Rejected
earn	99	0.1886422	0.0561551	3.36	0.001	Accepted
liqr	99	0.0007587	0.0072523	0.10	0.003	Accepted
indg	99	-0.0000429	0.0000989	-0.43	0.664	Rejected

Source: Financial statement of the commercial banks and Own Computation through Stata 12

(Dependent Variable: ROA and Explanatory Variables: car, aqr, mer, earn, liqr and indg and P-values indicate coefficients at statistical significant level of 1%, 5% and 10 %.)

7.3.1 Discussion of the Regression Results

Bank Specific Variables: As we have seen in the model used for this study, the bank specific variables considered are five, namely; capital adequacy ratio(CAR), asset quality ratio(AQR), management efficiency ratio(MER), earnings ratio(EARN) and liquidity ratio(LIQR).

➤ Capital Adequacy Ratio

According to Table 4 above, the capital adequacy ratio is negatively related with return on asset with a coefficient estimate of -0.0328645. Holding other factors constant, a 100 per cent increase in the capital adequacy ratio of the bank reduces return on asset by 3.3 per cent and the P-value of CAR (i.e. 0.008) reveals that it is statistically significant at 1 per cent level of significance. This is because an increment in the capital adequacy ratio of the bank implies an increment in the total asset, as the

capital adequacy ratio is the ratio of total equity to total asset, and this in turn will reduce the return on asset of the bank since the return on asset of the bank is the ratio of net profit to total asset.

This result is against the first hypothesis of the study which was stated as; there is positive and significant relationship between capital adequacy ratio and financial and operating performance of commercial banks in Ethiopia. Hence, we reject this hypothesis. This result is consistent with the works of (Suvita Jha and Xiaofeng Hui, 2012), Ali et al., (2011), Saganga M. Kapaya and Gwahula Raphael, (2016), and Xuezhi Qin& Dickson Pastory, (2012).

➤ **Asset Quality Ratio**

According to Table 4 above, the asset quality ratio is negatively related with return on asset with a coefficient estimate of -0.0033298. Holding other factors constant, a 100 per cent increase in the asset quality ratio of the bank reduces return on asset by 0.33 per cent but the P-value of the AQR (i.e. 0.005) reveals that it is statistically significant at 1 per cent level of significant. This is because as the asset quality ratio of the bank increases, it implies an increment in the nonperforming loan of the bank, which in turn reduces the net profit of the bank that can be generated from the total loan in the form of interest income. The lower the interest income implies the lower will be the net profit of the bank which in turn implies the lower will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset.

This result is in line with the second hypothesis of the study which was stated as; there is negative and significant relationship between asset quality ratio and financial and operating performance of commercial banks in Ethiopia. Hence, we accept this hypothesis. This result is consistent with Xuezhi Qin & Dickson Pastory, (2012) and Syed Qasim Shah and Rizwan Jan, (2014).

➤ **Management Efficiency Ratio**

According to Table 4 above, the management efficiency ratio is negatively related with return on asset with a coefficient estimate of -0.0028754. Holding other factors constant, a 100 per cent increase in the management efficiency ratio of the bank, measured by total income to profit before tax, reduces return on asset by 0.29 per cent and the P-value of the MER (i.e. 0.000) reveals that it is statistically significant at 1 per cent level of significance. This is because as the management efficiency ratio of the bank increases, it implies an increment in the total income of the bank, which in turn increases the tax rate and this reduces the net profit of the bank that can be generated. The lower the net profit of the bank implies the lower will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset.

This result negates with the third hypothesis of the study which was stated as; there is positive and significant relationship between management efficiency ratio and financial and operating performance of commercial banks in Ethiopia. Hence, we reject this hypothesis. This result is consistent with the result of Oluwafemi et al., (2014) in Nigeria, who have got an inverse relationship of management efficiency with ROA having a negative coefficient of -0.275512, this means that an increase in the level of management efficiency of the commercial banks lead to decrease in the ROA.

➤ **Earnings Ratio**

According to Table 4 above, the earnings ratio is positively related with return on asset with a coefficient estimate of 0.1886422. Holding other factors constant, a 100 per cent increase in the earnings ratio of the bank, measured by interest income to total asset, increases return on asset by 18.9 per cent and the P-value of the EARN (i.e. 0.001) reveals that it is statistically significant at 1 per cent level of significance. This is because as the earnings ratio of the bank increases, it implies an increment in the interest income of the bank, which in turn increases the net profit of the bank that

can be generated. The higher the net profit of the bank implies the higher will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset.

This result is in line with the fourth hypothesis of the study which was stated as; there is positive and significant relationship between earnings ratio and financial and operating performance of commercial banks in Ethiopia. Hence, we accept this hypothesis.

➤ **Liquidity Ratio**

According to Table 4 above, the liquidity ratio is positively related with return on asset with a coefficient estimate of 0.0007587. Holding other factors constant, a 100 per cent increase in the liquidity ratio of the bank, measured by total loan to total deposit, increases return on asset by 0.1 per cent and the P-value of the LIQR (i.e. 0.003) reveals that it is statistically significant. This is because as the liquidity ratio of the bank increases, it implies an increment in the total loan of the bank, which in turn implies an increment in the interest income of the bank that can be generated from the total loan in the form of interest income. The higher the interest income implies the higher will be the net profit of the bank which in turn implies the higher will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset.

This result is in line with the fifth hypothesis of the study which was stated as; there is positive and significant relationship between liquidity ratio and financial and operating performance of commercial banks in Ethiopia. Hence, we accept this hypothesis. The result is consistent with the results obtained by Oluwafemi et al., (2014), Xuezhong Qin & Dickson Pastory, (2012), Zawadi Ally, (2016), and Md. Shahidul Islam and Shin Ichi Nishiyama, (2016).

Industry Specific Variable: the industry specific ratio used in this study is the industry growth rate (INDG)

➤ **Industry Growth Rate (INDG)**

According to Table 4 above, the industry growth rate is negatively related with return on asset with a coefficient estimate of -0.0000429. Holding other factors constant, a 100 per cent increase in the industry growth rate, measured by total asset of the banks to the gross domestic product, reduces return on asset by 0.0043 per cent but the P-value of the INDG (i.e. 0.664) reveals that it is statistically insignificant. This is because as the industry growth rate increases, it implies an increment in the total asset of the banks. The higher the total asset of the banks implies the lower will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset.

This result is against the sixth hypothesis of the study which was stated as; there is positive and significant relationship between industry growth rate and financial and operating performance of commercial banks in Ethiopia. Hence, we reject this hypothesis. This result corroborates with Owoputi et al., (2014).

Table 5. Summary of Hypotheses Testing

Hypotheses	Result
Hypothesis 1: There is positive and significance relationship between Capital adequacy ratio and financial performance of commercial banks in Ethiopia.	Rejected
Hypothesis 2: There is negative and significance relationship between Asset quality ratio and financial performance of commercial banks in Ethiopia.	Accepted
Hypothesis 3: There is positive and significance relationship between Management efficiency ratio and financial performance of commercial banks in Ethiopia.	Rejected
Hypothesis 4: There is positive and significance relationship between Earnings ratio and financial performance of commercial banks in Ethiopia.	Accepted
Hypothesis 5: There is positive and significance relationship between Liquidity ratio and financial performance of commercial banks in Ethiopia.	Accepted
Hypothesis 6: There is positive and significance relationship between Industry growth rate and financial performance of commercial banks in Ethiopia.	Rejected

8. Conclusions

1. This study conducted to analyze the determinants of the financial performance of commercial banks in Ethiopian has considered both the internal (bank specific) and the external (industry specific) factors.
2. From the bank specific variables; capital adequacy ratio, asset quality ratio and management efficiency ratio have negatively and significantly determined the financial performance of commercial banks in Ethiopia.
3. From the bank specific variables; earnings ratio and liquidity ratio were positively and significantly determined the performance of commercial banks in Ethiopia.
4. The industry growth rate was negatively but insignificantly determined the financial performance of commercial banks in Ethiopia.

9. Suggestions

1. Since the internal (bank specific) determinants of bank performance are controllable, the bank managers should search for a way out to keep appropriate amount of capital adequacy and management efficiency ratios, so that they can improve the financial performance of the commercial banks in Ethiopia.
2. Banks should develop an appropriate strategy that will enable them to exploit the opportunities created from the growing banking industry in Ethiopia and improve their financial performance.

References

1. Deepak Kapur and Abebaw Kassie Gualu, (2012), "**Financial performance and ownership structure of Ethiopian commercial banks**", Journal of Economics and International Finance, Vol. 4 (1), pp. 1-8, 7 January
2. James Ayodele Owoputi, Olawale Femi Kayode, and Felix Ademola Adeyefa,(2014), **Bank Specific, Industry Specific and Macroeconomic Determinants of Bank Profitability in Nigeria**, European Scientific Journal, vol.10
3. Khizer Ali, Muhammad Farhan Akhtar and Hafiz Zafar Ahmed,(2011), **Bank-Specific and Macroeconomic Indicators of Profitability - Empirical Evidence from the Commercial Banks of Pakistan**, international Journal of Business and Social Science Vol. 2 No. 6; April 2011
4. Md. Shahidul Islam and Shin Ichi Nishiyama,(2016), **The Determinants of Bank Profitability: Dynamic Panel Evidence from South Asian Countries** , Journal of Applied Finance & Banking, vol. 6, No. 3,
5. National Bank of Ethiopia, (2014/15), "**Annual Report**", Addis Ababa, Ethiopia
6. Nicolae Petriaa, Bogdan Caprarub, Iulian Ihnatov (2013), **Determinants of banks' profitability: evidence from EU 27 banking systems**, Procedia Economics and Finance
7. Nuray Islatince (2015),**Analysis of the Factors that Determine the Profitability of the Deposit Banks in Turkey** ,Journal of Applied Finance & Banking, vol. 5, No. 3
8. Philip Molyneux and John Thornton (1992), **Determinants of European bank profitability: A note**, Journal of Banking and Finance 16 (1992) 1173-I 178
9. Saganga M. Kapaya and Gwahula Raphael,(2016), **Bank-specific, Industry-specific and Macroeconomic Determinants of Banks Profitability: Empirical Evidence from Tanzania**, International Finance and Banking , ISSN 2374-2089, Vol. 3, No. 2
10. Shelagh Heffernan, "**Modern Banking**", (2005), John Wiley & Sons Ltd, the Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England,
11. Stephen Oluwafemi, Adeusi Funso, Tajudeen Kolapo, Adewale Olufemi Aluko, (2014), **Determinants of Commercial Banks' Profitability Panel Evidence from Nigeria** , International Journal of Economics, Commerce and Management United Kingdom Vol. II, Issue 12,
12. Suvita Jha and Xiaofeng Hui, (2012), "**A comparison of financial performance of commercial banks: A case study of Nepal**", African Journal of Business Management Vol.6 (25),
13. Syed Qasim Shah and Rizwan Jan, (2014), **Analysis of Financial Performance of Private Banks in Pakistan**, Procedia - Social and Behavioral Sciences 109 1021 – 1025
14. Xuezhi Qin& Dickson Pastory, (2012), **Commercial Banks Profitability Position: The Case of Tanzania**, International Journal of Business and Management; Vol. 7, No. 13,
15. Zawadi Ally, (2016), **Determinants of Banks' Profitability in a Developing Economy: Empirical Evidence from Tanzania**, European Journal of Business and Management, ISSN 2222-1905 (Paper), ISSN 2222-2839 (Online), Vol.6, No.31, 2016
16. Zerayehu Sime Eshete, Kagne Wolde Tesome and Teshome Ketama Abebe, (2013),"**Competition in Ethiopian Banking Industry**", African Journal of Economics, Vol. 1 (5), pp. 176-190.