

A Study on the Factors Affecting the Financial Performance of Select Commercial Banks of Ethiopia

Dr. Alaparathi Maruthi Varaprasad

Associate Professor of Accounting and Finance, Ambo University, Ambo, Ethiopia

Dr. Kota Madhusudhana Rao

Professor of Accounting and Finance, Ambo University, Ambo, Ethiopia

Abstract

This study examines the Analysis on financial performance determinants: A study on selected commercial Banks in Ethiopia. Among the total of 17 public and private sector banks by using Purposive sampling technique 9 banks have been selected for the study. Quantitative research approach was adopted by using secondary data by using panel data of banks over a period of ten years (2006-2015). The fixed effect model was chosen rather than random effect model based on the hausman specification test result. In order to realize the objectives of the study multiple regression models was employed. Banks specific factors considered CAMEL approach and the key macroeconomic factors such as gross domestic product, inflation rate and foreign exchange rate were also included to analyze the banks financial performance in terms of ROA and ROE, Accordingly, the result revealed that Capital adequacy has positive and significant impact on bank financial performance of return on asset, and Earning ability and liquidity management has negatively and significant impact on bank financial performance of return on equity, On the other hand, variables such as Gross Domestic Variable has positively impact on both return on asset (ROA) and return on equity (ROE).

Keywords: Financial performance, Banks.

DOI: 10.7176/RJFA/10-9-02

Publication date: May 31st 2019

INTRODUCTION

Commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. They can do so, if they generate necessary income to cover their operational cost they incur in the due course. In other words for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussions on the economic growth. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It is also a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or

Statement of the problem

Nowadays, examining the performance of commercial banks become very crucial for their profitable survival. The survival of commercial Banks in this dynamic economic environment is very dependent upon their good performance that based on scientific investigation. So, its wellbeing and successful operation captures the interest of different researchers and other professionals. Thus, a number of studies have examined the determinants of banks performance in many countries around the world.

Objective of the study

General objective

The main objective of this study to assess the factors affecting the financial performance of selected commercial Banks of Ethiopia.

Specific objectives

- To identify the impact of Capital Adequacy on the financial performance of selected commercial banks of Ethiopia.
- To see the effect of Asset Quality of selected commercial banks of Ethiopia
- To examine the effect of Management Efficiency on the financial performance of selected commercial in Ethiopia.
- To see the effect of Earning Ability of selected commercial banks of Ethiopia.
- To examine the effect of Liquidity Management of selected commercial banks of Ethiopia.

- To study impact of Gross Domestic Product on the financial performance of selected commercial banks of Ethiopia.
- To study impact of Foreign Exchange Rate on the financial performance of selected commercial banks of Ethiopia.
- To study impact of InflationRate on the financial performance of selected commercial banks of Ethiopia.

Hypotheses

Hypothesis 1: There is positive and significant relationship between capital adequacy and financial performance of commercial banks.

Hypothesis 2: There is positive and significant relationship between asset quality and financial performance of commercial banks.

Hypothesis 3: There is positive and significant relationship between management efficiency and banks financial performance.

Hypothesis 4: There is negative and significant relationship between earning ability and financial performance of commercial banks.

Hypothesis 5: There is positive and significant relationship between liquidity management and financial performance of commercial banks.

Hypothesis 6: There is positive and significant relationship between Gross domestic products and financial performance of commercial banks.

Hypothesis 7: There is negative and significant effect between inflation rate and financial performance of commercial banks.

Hypothesis 8: There is negative and significant effect between foreign exchange rate and financial performance of commercial banks

Significance of the study

This study is beneficial for different stakeholders such as

- management/Administration in identifying indicators of success and failure to take the necessary actions to improve the performance of the company and choose the right decisions,
- for Government in making better policies and necessary measures to avoid crises of the bankruptcy ,
- for Investors to understand and to protect their investment by revising the portfolio of their investment and
- Customers are interested in knowing the ability of Commercial banks to deposit their make deposit based on the indicators of their success.
- Furthermore, this study has a paramount significance in providing a better enlighten for bank managers.
- The study will also concentrate on the management issues to identify the key variables that will boost profit.

Scope of the Study

- At present there exist 18 commercial banks excluding the construction and business bank which is recently merged with commercial bank of Ethiopia. Among the 18 commercial banks the study considered nine commercial banks
- The scope of the study is limited to 9 Commercial banks of Ethiopia including Awash International Banks, Dashen Bank S.C (DB), Bank of Abyssinia S.C (BOA), Wegagen Bank S.C (WB), United Bank S.C (UB), Nib International Bank S.C (NIB), Cooperative Bank of Oromia S.C (CBO) and Lion International Bank S.C (LIB) only.

Five internal variables like

1. Capital adequacy,
2. Asset quality,
3. Management,
4. Efficiency,
5. Liquidity management, (CAMEL) and

three external variables like

1. Gross Domestic Product,
2. Inflation Rate and
3. Foreign Exchange Rate are considered for the study.

The period of the study is limited to ten years (2006 -2015 GC).

Research Design

Explanatory research design is adopted. Besides, this study used quantitative research approach to examine stated objectives.

Data Analysis

The panel data by combining time series of cross section observations, panel data give more revealing data, more inconsistency, less collinearity among variables, more degrees of freedom and more efficiency (Gujarati, 2004). By using STATA version 13 software, the collected panel data was analyzed using the descriptive statistics, correlation matrix and multiple regressions. In case of the descriptive statistics, the mean, standard deviation, maximum and minimum values were used to analyze the trends of the data while the correlation matrix was used to show the relationship exist between the variables used in the study. Moreover, the diagnostic tests were undertaken in order to check the rationality of the model and fulfill the assumptions of the Classical Linear Regression Model.

Dependent variables

$$\text{Return on Asset (ROA)} = \frac{\text{Net income before taxes}}{\text{Total asset}} \quad \text{Return on Equity (ROE)} = \frac{\text{Net income after taxes}}{\text{Total Equity capital}}$$

Independent variables

A) Internal factors

$$\begin{aligned} \text{Capital adequacy} &= \frac{\text{Total capital}}{\text{Total asset}} & \text{Asset quality} &= \frac{\text{Nonperforming loan}}{\text{Total loan}} \\ \text{Management efficiency} &= \frac{\text{Total operating revenue}}{\text{Total profit}} & \text{Earning ability} &= \frac{\text{Interest income}}{\text{Total income}} \\ \text{Liquidity management} &= \frac{\text{Total loan}}{\text{Total deposit}} \end{aligned}$$

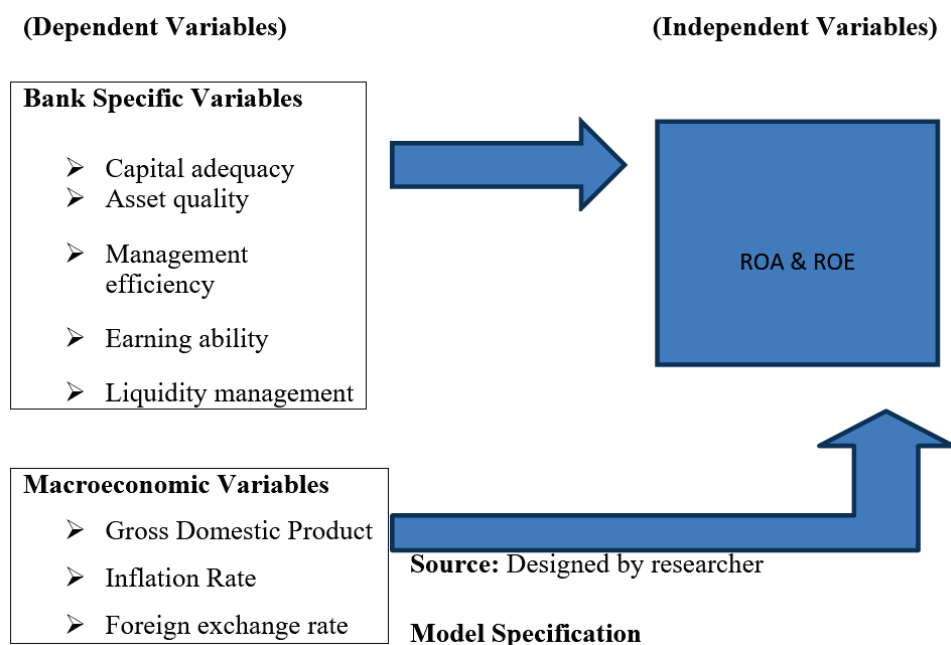
B) External factors:

Gross domestic product = Yearly Gross Domestic product

Inflation rate = Yearly average rate

Foreign exchange rate = yearly exchange rate

CONCEPTUAL FRAMEWORK:



Model Specification

The econometric model utilized for regression analysis is illustrated here below:

$$ROA_{it} = \alpha_0 + \alpha_1 CA_{it} + \alpha_2 AQ_{it} + \alpha_3 ME_{it} + \alpha_4 EQ_{it} + \alpha_5 LM_{it} + \alpha_6 GDP_{it} + \alpha_7 INFL_{it} + \alpha_8 FEX_{it} + \epsilon_{it}$$

$$ROE_{it} = \alpha_0 + \alpha_1 CA_{it} + \alpha_2 AQ_{it} + \alpha_3 ME_{it} + \alpha_4 EQ_{it} + \alpha_5 LM_{it} + \alpha_6 GDP_{it} + \alpha_7 INFL_{it} + \alpha_8 FEX_{it} + \epsilon_{it}$$

ROA_{it} = Performance of Bank i at time t as expressed by ROA

ROE_{it} = Performance of Bank i at time t as expressed by ROE

α_0 = Intercept

CA_{it} = Capital Adequacy of bank i at time t

AQ_{it} = Asset Quality of bank i at time t

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

EQ_{it} = Earnings Quality of Bank i at time t

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

GDP_{it} = Gross domestic of i at time t

INFL_{it} = Inflation of bank i at time t

FEX_{it} = Foreign exchange i at time t

$\alpha_1 - \alpha_5$ = Coefficients parameters

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

Model Assumptions

Normality test: To check for normality, kurtosis and skewness of the distribution of the data will be examined descriptive statistics were used.

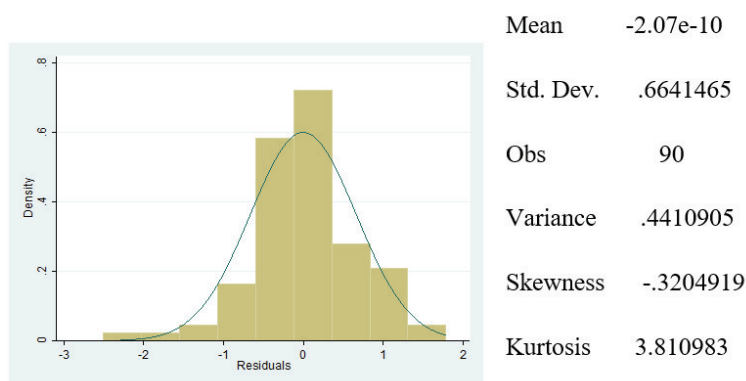
Multicollinearity: To check whether there is a strong correlation among the independent variables exists or not. There was different arguments towards the multicollinearity problem. (Gujarati D. N., 2004) Stated that multicollinearity problems exist when the correlation coefficient among variables greater than 0.75. (Cooper & Schendlar, 2003) Suggested that a correlation coefficient value is above 0.8 between explanatory variables should be corrected for. Lastly, (Hair JF, 2006) argued that also correlation coefficient below 0.9 may not cause serious multicollinearity problem. In contrary to this, (Kennedy, 2008) argued that as any correlation coefficient above 0.7 could cause a serious multicollinearity problem leading to inefficient estimation. A correlation matrix is used to ensure the correlation of explanatory variables.

Heteroscedasticity: If the errors do not have a constant variance, they are said to be heteroskedastic. According to (Brooks, 2008), heteroscedasticity means that error terms do not have a constant variance. There are several tests to detect the heteroscedasticity problem, which are Park Test, Glesjer Test, Breusch-Pagan-Goldfrey Test, Whites Test and Autoregressive Conditional heteroscedasticity test. In this case, this study chooses to use Autoregressive Conditional heteroscedasticity test to detect heteroscedasticity.

DATA ANALYSIS AND PRESENTATION

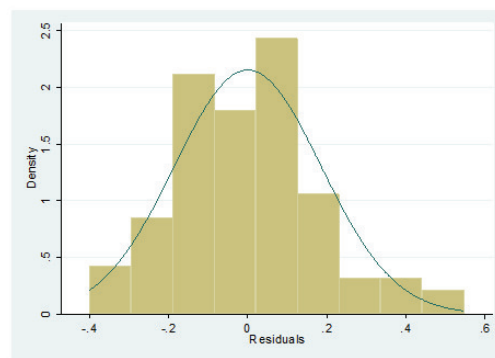
The data are analyzed by using STATA software version 13.

ROA model normality test



ROA model normality test

Source: from regression output



ROE model normality test

Mean	-6.38e-10
Std. Dev.	.1852466
Variance	.0343163
Skewness	.4609682
Kurtosis	3.34

Source: from regression output

CONCLUSIONS

Based on table 12, in relation to financial performance indicators measured by ROA, Management efficiency, capital adequacy, Inflation rate and gross domestic product are positively impact on banks financial performance measured by return on asset (ROA) but, asset quality, earning ability, liquidity management and Foreign exchange rate are negatively impact on the banks financial performance measured by return on asset (ROA) of Ethiopian commercial banks.

Capital adequacy and Asset quality have a p-value of 0.004 and 0.002 respectively and are significant at 5% level but the Earning ability and Liquidity management have both p-values are 0.000 and statically significant at 1% level on banks financial performance measured by return on asset.

The Earning ability, Liquidity management, and foreign exchange rate have significant impact on financial performance measured by return on equity (ROE), whereas capital adequacy, asset quality, gross domestic product and Management efficiency have statically insignificant impact on banks financial performance measured by return on equity (ROE), Earning ability and Liquidity management are both have a p-value of 0.000 each and are statically significant at 1% level respectively, and foreign exchange rate have the p-value of 0.043 and is significant at 5% level of significant.

Management efficiency, earning ability, Liquidity management, gross domestic product and foreign exchange rate are positively impact on banks financial performance measured by return on equity but Capital adequacy, asset quality and inflation rate, are negatively impact on banks financial performance measured by return on equity.

With regard to macroeconomic factors, gross domestic product and inflation rate are positively insignificant influence to banks financial performance measured by return on asset but foreign exchange rate have negatively and insignificant impact on to banks financial performance measured by return on asset, but gross domestic product positively insignificant impact and foreign exchange rate have positively and significant influence on ROE, where a inflation rate negatively in significant influence on ROE.

Recommendation

Earning ability and Liquidity management have statically significant at 1% level, Capital adequacy, Asset quality have statically significant at 5% impact on bank financial performance measured by return on asset and earning ability and liquidity management have statically significant at 1% level impact on bank financial performance measured by return on equity.

- Furthermore, from the macroeconomic factors foreign exchange rate have statistically significant impact on bank financial performance measured by return on equity at 5% level. Thus, the Ethiopian commercial banks cannot ignore the macroeconomic factors while formulating policies to improve the performance of the bank.
- Moreover, by carefully predicting the impact of macroeconomic factors commercial banks in Ethiopia can improve their performance.
- Since the management of the bank has control over the bank internal factors, it is possible to improve the performance of the bank by giving more attention on the identified bank specific factors such as, Capital adequacy, Asset quality, management efficiency, Earning ability and Liquidity management.
- Finally, we conclude that in order to investigate the determinants of financial performance of commercial banks in Ethiopia the variables included in the study were not enough. Future researchers may include the rest unseen bank specific and macroeconomic variables to conduct study on determinants of financial performance of commercial banks in Ethiopia.

References

- Zerayehu et al., (2013) a sound financial system is indispensable for a healthy and vibrant economy.
- Geda(2006) these banks were criticized for being wholly foreign owned.
- (Gedey 1990, pp. 83, cited in Geda 2006).During the five-years of Italian occupation i.e during the period.
- Goddard, J., Molyneux, P. and Wilson,S. J., 2004), Return on Assets (ROA) used by (Flamini, McDonald, & Schumacher, 2009), the Return on Equity (ROE) and Return on Assets (ROA) utilized by (Athanasoglou, Delis, &Staikouras , 2006).
- Khrawish, 2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital.
- DemirgucKuntetal.,(1998), Bikkeret al (2002), and Athanasoglouet al., (2008),
- (Badola&Verma , 2006) Made an attempt to identify the key determinants of profitability of Kosmidou, Tanna, &Pasiouras, 2006, Investigates the impact of bank-
- Kumbirai& Webb, 2010 ,Made study on the performance of South Africa"s commercial banking sector for the period 2005-2009.
- Gul, Faiza, & Khalid, 2011, examined the relationship between bank specific and macro-economic characteristics of bank profitability by using data of top fifteen Pakistani commercial banks over the period 2005-2009.
- Alkhatib, 2012, Empirically examine the financial performance of five Palestinian commercial banks listed on Palestine securities exchange (PEX).to assess the financial performance of Palestinian commercial banks.
- Lamarana, 2012,Examines the performance of the Malaysians local banks and foreign banks and compares their profitability in the financial sector.