

Banking sector Performance Evaluation in Ethiopia for the Period of Growth and Transformation Plan (GTP-II): Private vs. Public Commercial Banks

Bekana Dembel Tura (✉ dembelbest@gmail.com)
Ambo University

Research Article

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Abstract

The main objective of this study was to evaluate and compare the financial performance of commercial banks in Ethiopia during the implementation of growth and transformation plan II. Moreover, determinants of financial performance were examined. The study was conducted using secondary data obtained from National Bank of Ethiopia, and official website of each commercial bank. Multiple panel regression and independent sample t-test were used to show the relationship and to compare the financial performance of commercial banks between the study periods. The ratio of non-interest expenses to total expense, log_net profit per employee, interest income to total income, and exchange rate were variables with positive and significant effect on the financial performance of commercial banks while log_total loans per branch and inflation affected negatively the financial performance measured by return on assets. Whereas, the ratio of debt to equity, log_net profit per employee, total liquid assets to total deposits, interest income to total income, and exchange rate have positive and significant impact while the ratio of loan loss provision to total loan, log_total loans per branch, and inflation negatively and significantly affected financial performance measured by ROE. The independent sample t-test shows that except the ratio of total loans to total deposits, and total capital to total assets the remaining variables did not show significant different between state and public owned banks.

JEL classification: M14 M4 M1

Introduction

Ethiopia's banking system dominates the country's financial sector. By channeling funds from surplus parties to parties with an investment idea, the banking sector contributes to the country's goal of growth and prosperity. The financial system which is the combination of both banks and non-bank is the lifeblood of any economy by mobilizing savings from surplus economic units to deficit economic units (Shuaib, 2018). Besides, it also ensures the efficient allocation of resources by channeling funds for different development projects. By doing so, they transfer funds from those with surplus funds to those that need them for productive activities which in turn stimulate investments and improve economic growth and development (Olokoyo et al., 2020).

The banking sector failures have many consequences on the economy so that the sector requires periodical investigation concerning their performances. Because of this reason, the Ethiopian government has been taking necessary measurements to keep the efficiency and profitability of the banking sector on track. The major objective of a business organization is to maximize both the profit and wealth of its owners. Since the banking sector is known by profit-seeking business organizations, to act as an intermediation role they have to be profitable. The pliability of the banking sector is even more important in transitional economies that are continuously restructuring their legal and macroeconomic environment to comply with the international policies introduced by the World Bank and International Monetary Fund (Hasanov et al., 2018).

Since April 25, 2018, the Ethiopian government is found to be in the political reform which includes economic reforms. As economic reform, the banking sector obtained necessary focus by Ethiopian government since bank plays a vital role in the growth and development of the nation. Therefore, the regulatory bodies carried out various banking reforms to improve the performance of the sector.

One of the major goals of the Ethiopian government during GTP-II is strengthening the financial sector intending to establish an accessible, efficient, and competitive financial system. In addition, the strategy in the financial sector will continue to be geared towards ensuring a favorable environment for the banking sector. This will help increase domestic savings to sustain the rapid growth and to provide the required resources for expanding and improving public services. Measures in reducing information asymmetry, strengthening the existing credit information sharing system, encouraging the discipline of loan repayments, and creating internal dynamism will be pursued to foster efficiency and effectiveness in the financial sector. The financial industry is expected to finance huge projects both in the public and Private sector during GTP II.

(FDRE, 2016 PP.110)

The Ethiopian banking sector is owned by both government and private sectors. Currently, there are sixteen privately owned, and two public-owned commercial banks operating in the country under the supervision of the National Bank of Ethiopia. Both

structures of the banks ought to support the development goals that the country planned during GTP-II particularly by financing the manufacturing industry to support the country's strategy to transform the economy from agriculturally dominated to industry lead economy. Besides, according to the GTP-II strategy, since the focus is given to support the private sector that invests in the export-oriented manufacturing sector, and in the tradable modern service sector, the financial services given to these activities need to be sufficient.

Different scholars conducted a study on the factors affecting the performance of banks in Ethiopia at different times. Abera (2013), conducted a study on the financial performance of the Ethiopian banking sector by selecting seven private commercial banks using a simple random sampling technique and using six years (2005-2010) financial data. The study found that between the study period the banks showed a persistent increase in the volume of deposits, granting of the loan, and possession of assets throughout the study periods. Furthermore, the profitability of the banks revealed remarkable improvement during the study periods. Lelissa (2014), studied the determinants of Ethiopian commercial banks performance between the study period of 1990-2012 taking Return on Assets (ROA) as a financial performance measurement tool, and found that bank size and macroeconomic variables do not affect the banks' profitability while the inflation rate has a significant effect on profitability measured by ROA. The study conducted by Abara (2015) on financial performance analysis in the banking sector on selected commercial banks in Ethiopia for the years from 2007 to 2011 discloses that state-owned Commercial Bank of Ethiopia possessed the first rank in terms of assets management while private-owned bank Awash International Bank and United Bank stands first in terms of profitability and solvency respectively between the study periods.

Alemu and Negasa (2015) investigated the determinants of the financial performance of commercial banks in Ethiopia using panel data over the years of 2003 to 2013 with a quantitative data analysis approach. The findings of the study reveal that, except inflation, all bank-specific, industry-specific, and macroeconomic variables have a significant impact on the financial performance of banks measured by ROA, while variables considered as independent significantly affect the financial performance of banks measured by NIM. Shanko, Abera, and Mengesha (2019) examined factors affecting the profitability of the Ethiopian banking industry from 2010 to 2017. The study's result shows that while loan and advance, current deposit, other liabilities, and gross domestic product have a statistically significant and positive relationship with banks' profitability, fixed deposit, and market concentration has a negative and statistically significant relationship with banks profitability measured by ROA. In contrast, the impact of deposit with other banks, the sum of investment, saving deposit, and inflation is found to be statistically insignificant.

Leykun (2016) conducted a study to examine factors affecting the net interest margin of commercial banks in Ethiopia from 2005 to 2014 by using pooled ordinary multiple regression models. The result of the study shows that capital adequacy, credit risk, operating costs, degree of competition, and deposit growth rate have a positive and significant effect on the financial performance of banks as measured by NIM. The study conducted by Abate and Mesfin (2016) to investigate the impact of bank-specific, industry-specific, and macroeconomic factors on the profitability of commercial banks in Ethiopia between the years of 2007 and 2016 using a random effect regression model shows that capital adequacy, leverage, liquidity, and ownership have a statistically significant and positive relationship with banks' profitability. Furthermore, operational efficiency, GDP, inflation, and interest rates have a negative and statistically significant relationship with banks' profitability.

The findings of the study conducted by Assfaw (2018) to investigate the bank-specific factors which can affect the financial performance of private commercial banks in Ethiopia over the periods of 2011 to 2017 by using panel data of six private banks reveal that there is a positive and significant relationship between capital adequacy, management efficiency, and size of banks and financial performance of private commercial banks in Ethiopia measured by ROA, ROE, and NIM, while liquidity management has a negative and significant effect on ROE. Moreover, Abdissa (2019) found that, except for credit risk and management expense, all bank-specific factors have positive and significant effects on bank profitability. Besides, all of the macroeconomic variables, including economic growth, interest rate spread, and exchange rate, have statistically significant and positive relationships with banks' profitability.

LITERATURE GAP

As stated in the introduction, various scholars have conducted studies on the financial performance of Ethiopian banking sectors at various times. This study is unique because of the following reasons. First, as far as the researcher's knowledge there are no significant studies conducted to compare private and state-owned commercial banks' performance throughout Growth and Transformation Plan II (GTP-II). Second, the financial statements used in this study were prepared and audited according to International Financial Reporting Standard (IFRS). There were no sufficient studies that used financial statements prepared according to the standards of IFRS. Therefore, in this study, the author tried to examine and compare the financial performance of private and public-owned commercial banks in Ethiopia. Third, some of the variables used in this study were not applied in the previous studies to examine the financial performance of banking sectors. These variables are the efficiency ratio and national investment. Fourth, the direction of (Zenebe, 2017) about the future studies upon his conclusion of the first Growth and Transformation Plan I(GTP-I).

To sum up, to fill the above literature gap, this study tried to examine the financial performance of the banking sector measured by ROA, ROE, NIM, Efficiency Ratio, and other measurement tools: bank-specific which includes capital adequacy, assets management, management quality, earning management, and liquidity management. Besides, macroeconomic variables like inflation rate, GDP, national investment, and exchange rate were applied as the determinant of the financial performance of the banking sector.

Therefore, this study tried to investigate and compare the financial performance of private and state-owned commercial banks of Ethiopia throughout GTP-II (2016-2020). Consequently, the researchers were intended to conduct a study on the title "Banking sector Performance Evaluation in Ethiopia for the Period of GTP-II: Private vs Public Banks".

OBJECTIVES OF THE STUDY

The main objective of the study is to evaluate the banking sector's performance for the period of GTP-II (2016-2020). Parallel with the main objective, the following specific objectives were devised to examine the performance of commercial banks in Ethiopia during the study period. These are:-

- To evaluate the financial performance of commercial banks in Ethiopia during the study period
- To compare the financial performance of state and privately owned commercial banks between the study periods.
- To examine factors that affect the financial performance of banks in Ethiopia during Growth and Transformation Plan II.

THE HYPOTHESIS OF THE STUDY

H_0 : GDP growth rate has no significant effect on the financial performance of commercial banks

H_0 : Inflation rate has no significant effect on the financial performance of commercial banks

H_0 : Exchange rate has no significant effect on the financial performance of commercial banks.

H_0 : National investment has no significant effect on the financial performance of commercial banks

H_0 : Capital adequacy has no significant effect on the financial performance of commercial banks

H_0 : Assets quality has no significant effect on the financial performance of commercial banks

H_0 : Management efficiency has no significant effect on the financial performance of commercial banks

H_0 : Earning quality has no significant effect on the financial performance of commercial banks

H_0 : Liquidity position has no significant effect on the financial performance of commercial banks

SCOPE AND LIMITATION OF THE STUDY

The research was carried out in Ethiopia using financial data from 2016 to 2020. In Ethiopia, this period was known as the Growth and Transformation Plan II (GTP-II) period. Between the study periods, both bank-specific and macroeconomic factors were examined for their impact on the financial performance of Ethiopia's banking sector. Macroeconomic factors that include GDP, annual inflation rate, national investment, and exchange rate were taken as independent variables, while capital adequacy ratio, debt to equity ratio, total loans to total assets, total loans to total deposits, loan loss provision to total loans, net profit per employee, non-interest expense to total expenses, total loans per branch, total liquid assets to total deposits, total income to total assets, total interest income to total income, and cash to deposits were taken as bank specific independent variables. Return on Assets (ROA) and Efficiency Ratio (ER) were taken as dependent variables. Moreover, the main limitation of this study is the financial performance for the year after and before GTP-II was excluded from the study, and unpublished works were not included in the investigation.

REVIEW OF RELATED LITERATURE

Historical Development of Banking in Ethiopia

The history of banking in Ethiopia was back to the reign of emperor Minilik II. The banking business was started with the establishment of Abyssinia Bank in 1905 which was affiliated with the national bank of Egypt. The country established the State Bank of Ethiopia, which went operational on the 15th of April 1943 has a status of a central and principal commercial bank with powers to issue banknotes and coins as an agent of the then Ministry of Finance and to engage in all commercial banking activities (Abera, 2013). Since 1964 private commercial banks were started to established and nowadays the number of banks including private commercial banks is 19. The following table depicts the name of banks, year of establishment, and affiliation:

Table 1. Historical Development of Banks in Ethiopia

No.	Bank Name	Year of Establishment	Owners/Affiliation
1.	Abyssinia Bank	1905	Ethiopia/National Bank of Egypt
2.	Bank of Ethiopia	1931	Ethiopia/Dissolved after Italian Occupation in 1936
3.	Banca d'Italia, Banco di Roma, Banco di Napoli, and Banca Nazionale del Lavoro	Established during Italian occupation	Owned by foreigner
4.	Barclays Bank	1941	Foreign bank by British
5.	State Bank of Ethiopia	1943	Dissolved by the Ethiopian Government in 1963.
6.	National Bank of Ethiopia	1963	Ethiopia
7.	Commercial Bank of Ethiopia	1963	Ethiopia
8.	Addis Ababa Bank	1964	The first private bank dissolved by the Derg regime

(Source: National Bank of Ethiopia: <https://nbebank.com/history-of-banking/>)

Bank Performance And Its Determinants

Performance in the banking industry can be expressed in different ways. Profitability, efficiency, and soundness are some of the tools that can be applied to measure banks' performance. Profitability can be measured using ROA, and ROE while the overall efficiency can be observed using CAMELS, data envelopment analysis, and other tools.

“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 a 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.”

(ECB, 2010 PP. 8)

Theoretical Reviews of Bank Performance

Pure Expectations Theory

The theory points out that the rising term structure of rates means the market is expecting short-term rates to increase. This implies the two successive years rate is higher than the single-year rate so that the rate should rise. The market is expecting that short-term rates will remain low or hold constant in the future if the curve is flat (Cekrezi, 2015). Besides, it is believed that a declining rate structure indicates it will continue to decline. The states that, the expected return from holding long-term money or capital market investment until maturity is equal to the expected return from rolling over a series of short-term investments with a total maturity equivalent to that of the long-term investment (Korir and Oluoch, 2019).

The Portfolio Theory

One of the important theories concerning banking performance is portfolio theory which states that several factors such as the vector of rates of return on all assets held in the portfolio, a vector of risks associated with the ownership of each financial asset, and the size of the portfolio are the building block of asset diversification. This is to means that portfolio diversification and the desired portfolio composition of commercial banks are the results of decisions taken by the bank management (Cekrezi, 2015).

Liquidity Preference Theory

Liquidity preference theory is different from Pure Expectations Theory (Abdirizak et al., 2019). It essentially provides a top rate to the PET-calculated yield for long-time period debt to account for investor desire for short-time period bonds over long-time period ones (Dolphine, 2018). According to Abdirizak, Willy, and Mohamed (2019), this premium is called the term premium or the liquidity premium. It recognizes the dangers worried in conserving long-time debt, that’s much more likely to be exposed to catastrophic activities and rate uncertainty than is short-time debt. The second top rate is likewise covered in LPT, for default risk, which is much more likely whilst maintaining a bond for an extended length of time, yet again because of uncertainty (Dolphine, 2018).

CONCEPTUAL FRAMEWORK

Figure1. Conceptual Framework

Materials And Methods

The study used explanatory and descriptive research designs. The first was used to examine the relationship between determinants and financial performance and the later design was applied to describe the status of the banks during the study periods respectively.

TYPE OF DATA, SOURCE, POPULATION, AND SAMPLING METHOD

The study aims to examine the determinants of performance of commercial banks in Ethiopia during growth and transformation plan- II. Besides, the performance of government-owned and private commercial banks was compared. To achieve the stated objectives, a secondary type of data was used. The data were obtained from the National Bank of Ethiopia and the official

websites of the banks under study. Moreover, private commercial banks with no sufficient audited financial data between the study periods were excluded from the investigation.

VARIABLES OF THE STUDY

Table 2. Description of variables understudy

No.	Variables	Formula/Description of Variables	Remark	
Case I: Dependent Variable				
1.	Return on Assets (ROA)	$ROA = \frac{Net\ Income}{Total\ Assets}$		
2.	Efficiency Ratio (ER)	$ER = \frac{Noninterest\ Expenses}{(Operating\ Income - Loan\ Loss\ Provision)}$		
3.	Return on Equity (ROE)	$ROE = \frac{Net\ Income}{Total\ Equity}$		
Case II: Independent Variables				
4.	Capital Adequacy Ratio	$CAR = \frac{Tier\ 1\ Capital + Tier\ 2\ Capital}{Risk-Weighted\ Assets}$	Bank Specific Variables	
5.	Total Capital /Total Assets	The Ratio of total capital to total adequacy		
6.	Debt/ Equity	The ratio of total debt to total equity		
7.	Loan Loss Provision/Total Loan	The ratio of Loan Loss Provision to total loans		
8.	Total Loan/Total Assets	The ratios of total loans to total assets		
9.	Non-Interest Expense/Total Expenses	The ratio of Non- Interest expenses to Total expenses		
10.	Total loans to total deposits	The ratio of total loans to total deposits		
11.	Net Profit/ No of Employees	The ratio of net profit to the total number of employees		
12.	Total Loans/Branches	The ratio of total loans to the total number of branches		
13.	Interest Income/Total Income	The ratio of interest income to total income		
14.	Total Income/Total Assets	The ratio of total income to total assets		
15.	Total Liquid Assets/Total Deposits	The ratio of Total Liquid Assets total Deposits		
16.	Cash/Total Deposit	The ratio of cash to total deposits		
17.	National GDP	The logarithm of national GDP		Macroeconomic Variables
18.	Inflation rate	Annual inflation rate		
19.	Exchange rate	Rate of exchange		
20.	National Investment	The logarithm of national investment		

(Source: Author construction)

MULTIPLE REGRESSION MODEL

One of the aims of the study is to examine factors affecting the financial performance of commercial banks in Ethiopia during Ethiopian Growth and Transformation Plan-II (i.e. 2016 to 2020). Those factors were categorized into two mainly: bank-specific and macroeconomic variables. The Financial performance was measured by ROA and ROE. The following two econometrics models were developed to examine the effect of each variable on the performance of commercial banks under study:

Model I

$$ROA_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 DER_{it} + \beta_3 LLPTL_{it} + \beta_4 NPEM_{it} + \beta_5 NIETE_{it} + \beta_6 TLBR_{it} + \beta_7 CTD_{it} + \beta_8 TLATD_{it} + \beta_9 TITA_{it} + \beta_{10} IIT_{it} + \beta_{11} Natln_{it} + \beta_{12} INF_{it} + \beta_{13} EXC_{it} + \beta_{14} GDP_{it} + \varepsilon_{it}$$

Model II

$$ROE_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 DER_{it} + \beta_3 LLPTL_{it} + \beta_4 NPEM_{it} + \beta_5 NIETE_{it} + \beta_6 TLBr_{it} + \beta_7 CTD_{it} + \beta_8 TLATD_{it} + \beta_9 TITA_{it} + \beta_{10} IIT_{it} + \beta_{11} Natln_{it} + \beta_{12} INF_{it} + \beta_{13} EXC_{it} + \beta_{14} GDP_{it} + \varepsilon_{it}$$

Where,

ROA = Return on Assets

ROE = Return on Equity

CAR = Capital Adequacy Ratio

DER = Debt to Equity Ratio

LLPTL = Loan Loss Provision to Total Loans

NPEM = Net Profit per Employee

NIETE = Non-Interest Expense to Total Expense

TLBR = Total Loans per Branch

CTD = Cash to total Deposit

TLATD = Total Liquid Assets to Total Deposit

TITA = Total income to Total Assets

ε = Error term

Results And Discussions

Table 3
Average Financial Ratios of Commercial Banks between the Study Periods

Group	No	Bank	ROE	ROA	NIM	TC/TA	D/E	L/A	LLP/TL	TI/TA	TL/TD	TLA/TD
Government Banks	1.	CBE	0.306	0.021	0.039	0.073	14.33	0.305	0.010	0.021	0.402	1.249
	2.	DBE	0.085	0.016	0.037	0.097	12.25	0.481	0.07	0.35	0.449	0.585
Privately Owned Banks	1.	AIB	0.212	0.027	0.049	0.128	6.91	0.575	0.019	0.183	0.733	1.120
	2.	OIB	0.174	0.029	0.046	0.116	7.68	0.459	0.005	0.209	0.595	1.175
	3.	DB	0.179	0.021	0.038	0.121	7.26	0.529	0.004	0.132	0.667	1.186
	4.	CBO	0.164	0.014	0.046	0.091	10.19	0.531	0.013	0.181	0.639	1.082
	5.	ZB	0.190	0.029	0.028	0.148	5.79	0.459	0.006	0.200	0.570	1.057
	6.	ABYB	0.153	0.018	0.046	0.122	7.22	0.562	0.004	0.191	1.042	1.099
	7.	AnB	0.237	0.026	0.055	0.123	7.09	0.542	0.009	0.159	0.673	1.103
	8.	AB	0.139	0.030	0.036	0.219	3.58	0.474	0.004	0.185	0.688	1.334
	9.	NIB	0.161	0.024	0.047	0.138	6.25	0.531	0.002	0.224	0.665	1.124
	10.	HB	0.175	0.019	0.045	0.114	7.79	0.560	0.003	0.214	0.768	1.248
	11.	DGB	0.162	0.032	0.037	0.199	4.07	0.462	0.006	0.203	0.692	1.37
	12.	WB	0.162	0.023	0.047	0.147	5.81	0.526	0.005	0.227	0.688	1.202
	13.	EB	0.132	0.022	0.027	0.179	4.58	0.528	0.003	0.197	1.092	0.919
	14.	BIB	0.165	0.025	0.050	0.154	5.53	0.550	0.006	0.211	0.729	0.713

(Source: Author construction)

Table 3 reveals that the average financial ratios between the study periods. The highest average of ROE belongs to a commercial bank of Ethiopia followed by Anbesa and Awash International Banks. The lowest ROE is recorded by the Development Bank of Ethiopia followed by Enat and Abyssinia Banks. Regarding ROA, Debub Global Bank positioned first followed by Addis and Awash International Banks. The other very important ratio is the net interest margin. Anbesa international Bank ranked first followed by Buna International and Awash International Banks. The lowest performance was recorded by Enat Bank followed by Zemen and Addis Bank. Besides, according to graph one below, CAR of state-owned banks was indicating continuous improvements.

REGRESSION RESULT

Table 4. Multiple Regression result of model I

ROA	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
CAR	.0112902	.0133857	0.84	0.399	-.0149453	.0375257
Debt/Equity	.0002923	.0003037	0.96	0.336	-.0003029	.0008876
Loan Loss/Total Loans	-.053102	.0533083	-1.00	0.319	-.1575843	.0513803
Net Profit per Employee	-1.38e-08	6.06e-09	-2.27	0.023	-2.57e-08	-1.88e-09
NonInterest Expense/TotalExpen	.0257242	.0106048	2.43	0.015	.0049392	.0465092
Log_Net Profit per Employee	.0122596	.0019209	6.38	0.000	.0084948	.0160244
Log_Total Loans per Branch	-.0010559	.0003585	-2.95	0.003	-.0017585	-.0003533
CashTotal/Deposits	.006036	.0055151	1.09	0.274	-.0047734	.0168454
TotalLiquidAssets/TotalDeposit	.0064572	.0040255	1.60	0.109	-.0014326	.0143471
TotalIncome/TotalAssets	.0862962	.0670247	1.29	0.198	-.0450697	.2176621
InterestIncome/Total Income	.005913	.0025405	2.33	0.020	.0009337	.0108923
Log_National Investment	-.0968196	.0304226	-3.18	0.001	-.1564468	-.0371924
Inflation	-.3613413	.0923755	-3.91	0.000	-.542394	-.1802887
Exchange Rate	.0098252	.0025437	3.86	0.000	.0048396	.0148109
Log_GDP	-.0308932	.0422745	-0.73	0.465	-.1137497	.0519633
_cons	1.407937	.495152	2.84	0.004	.437457	2.378417
R-square:						
within = 0.5148						
between = 0.7765						
overall = 0.6188						

(Source: Author)

Table 4 depicts the econometrics result of the model I with a 5% level of significance. Accordingly, non-interest expense, the logarithm of net profit per employee, Interest income to total income, log of national investment, and exchange rate are positively and significantly affect the profitability of commercial banks measured by ROA while logarithm of total loans total branches and inflation have a negative and significant effect on the financial performance of banks measured by ROA.

Table 5. Multiple Regression result of model II

ROE	Coef.	Robust Std. Err.	z	P>z	[95% Conf. Interval]
CAR	.1234283	.1223472	1.01	0.313	-.1163678 .3632245
Debt/Equity	.0171599	.0028415	6.04	0.000	.0115907 .0227292
LoanLoss/Total Loans	-2.733369	.447331	-6.11	0.000	-3.610122 -1.856616
TotalLoans/Total Deposits	.0057441	.0110031	0.52	0.602	-.0158214 .0273097
Log_Net Profit per Employee	.0343281	.0143309	2.40	0.017	.00624 .0624161
Log_Total Loans per Branch	-.0188693	.0032885	-5.74	0.000	-.0253147 -.012424
Total Liquid Assets/Total Deposits	.0279955	.0145899	1.92	0.055	-.0006002 .0565912
Interest Income/Total Income	.0200826	.0093965	2.14	0.033	.0016658 .0384994
Inflation	-1.921611	.9156515	-2.10	0.036	-3.716255 -.1269673
ExchangeRate	.0494151	.0212965	2.32	0.020	.0076748 .0911554
Log_GDP	-1.161601	.4386432	-2.65	0.008	-2.021325 -.3018759
_cons	15.62848	5.930425	2.64	0.008	4.005057 27.2519
R-square within = 0.4905 between = 0.7948 overall = 0.5939					

(Source: Author)

Table 5 reveals the regression result of model II. From the result Debt to equity, loan loss provision to total loans, the logarithm of net profit per employee, interest income to total income, and exchange rate positively and significantly affect the profitability of commercial banks measured by ROE while logarithm of total loans per branch, inflation and logarithm of GDP have a negative and significant effect on the profitability of commercial banks measured by ROE.

Table 6. Independent sample test result

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
ROE	EVA	46.211	.000	-.637	14	.534	-.023787	.037336	-1.03864	.056290	
	EVNA			-.215	1.009	.865	-.023787	.110761	-1.402576	1.355001	
ROA	EVA	.425	.525	1.484	14	.160	.005672	.003821	-.002524	.013867	
	EVNA			1.884	1.587	.232	.005672	.003010	-.011111	.022455	
NIM	EVA	3.621	.078	.752	14	.464	.004294	.005708	-.007949	.016537	
	EVNA			1.733	8.192	.120	.004294	.002477	-.001395	.009983	
CAR	EVA	.339	.570	.050	14	.961	.002680	.053834	-.112783	.118143	
	EVNA			.037	1.144	.976	.002680	.071788	-.677681	.683041	
TCTA	EVA	.877	.365	2.212	14	.044	.057541	.026009	.001757	.113326	
	EVNA			3.701	2.454	.048	.057541	.015546	.001213	.113870	
DER	EVA	.150	.705	-5.354	14	.000	-6.879743	1.285077	-9.635959	-4.123526	
	EVNA			-6.076	1.427	.055	-6.879743	1.132329	-14.200677	.441191	
LA	EVA	12.022	.004	3.295	14	.005	.127284	.038635	.044421	.210147	
	EVNA			1.438	1.030	.382	.127284	.088538	-.922529	1.177098	
LLTL	EVA	139.641	.000	-3.609	14	.003	-.034833	.009652	-.055535	-.014132	
	EVNA			-1.100	1.003	.469	-.034833	.031658	-.434176	.364510	
TITA	EVA	150.824	.000	.169	14	.869	.008544	.050691	-.100178	.117265	
	EVNA			.052	1.003	.967	.008544	.165053	-2.071620	2.088708	
TLTD	EVA	.962	.343	2.768	14	.015	.305681	.110422	.068849	.542513	
	EVNA			6.548	9.470	.000	.305681	.046682	.200872	.410490	
TInTA	EVA	3.531	.081	.444	14	.664	.006369	.014333	-.024372	.037109	
	EVNA			1.148	13.807	.270	.006369	.005545	-.005541	.018278	
TLATD	EVA	6.691	.022	1.353	14	.198	.206341	.152521	-.120783	.533465	
	EVNA			.617	1.035	.645	.206341	.334654	-3.718916	4.131599	
ER	EVA	6.388	.024	.309	14	.762	.050571	.163714	-.300560	.401702	
	EVNA			.148	1.041	.906	.050571	.342441	-3.914096	4.015239	

(Source: Author)

The independent sample t-test is used to decide whether the unknown means of two independent populations are varied. This implies the test compares the means of two independent populations and is used to check whether there is a significant difference between the means of two independent groups (Tekatel and Nurebo, 2019). The result of the independent sample test

in table 5 depicts that there is a significant difference between private and state-owned commercial banks concerning the ratio of total loans to total deposit (TLTD) and the ratio of total capital to total assets (TCTA). Besides, there is no significant difference between private and state-owned commercial banks with the rest of the performance measurement tools.

Conclusion And Recommendations

Conclusion

The main aim of this study is to examine the financial performance of both private and state-owned commercial banks in Ethiopia in the periods of the Growth and Transformation Plan (GTP-II) (i.e. 2016 to 2020). The financial sector of any economy requires maximum attention since it is the engine of economic sectors. The failure of this sector leads to the failure of any economy. In developing countries, the financial sector is dominated by banks so that it needs special care to save the economy from collapse. The Ethiopian financial sector is not unique from this since it is dominated by banks. In this study, the financial performance was measured by ROE and ROA. The econometrics result reveals that DER, LLP/TL, logNP/Employee, II/TI, and exchange rate have a positive and significant effect on the financial performance of commercial banks while logTL/Branches, inflation, and log_GDP have a negative and significant impact on the financial performance of commercial banks measured by ROE. Besides, NIE/TE, log_NP/Employees, II/TI, and exchange rate are the variables that have a positive and significant impact while log_national investment, log_TL/Branches, and inflation have a negative and significant impact on the financial performance measured by ROA. Moreover, the independent sample t-test enumerates that there is a significant difference between state and privately owned commercial banks regarding the TLTD and TCTA. There were no significant differences between both banks concerning the remaining variables. Lastly, Table 6 shows that state-owned commercial banks revealed better performance between the study periods illustrated by negative sign of Confidence Interval column with 95% confidence level.

Recommendations

The dominance of banks in the Ethiopian financial sector is one of its distinguishing features. Failures in the banking sector lead to the demise of any economy. Therefore, continuous monitoring and support can protect banks from bankruptcy and improve their economic performance. That is why, during GTP-II, the Ethiopian government attempted to take the necessary measures to strengthen competitive and healthy financial institutions, particularly banks, resulting in improvements in operational efficiency and coverage during the study periods. World Bank (2019) reported that over the last decade, Ethiopia's financial sector has been operating within a framework of financial repression used by the government to manage its monetary and foreign exchange policy, as well as to finance large infrastructure projects and state-owned enterprises (SOEs).

The goal of this paper was to look at the financial performance of commercial banks in Ethiopia during the periods covered by GTP-II. The financial performance of state and privately owned commercial banks was compared, and factors influencing the financial performance of Ethiopian commercial banks were investigated. Based on the study findings, the managing bodies of privately owned commercial banks should have to endeavor to improve ROE, and CAR compared with state-owned commercial banks. Besides, to improve the state-owned banks' performance measured by ROA and NIM, drastic measures have to be taken. In general, the government must implement effective regulatory remedies to avoid a future financial crisis and its impact on critical policy issues.

Declarations

ETHICAL CONSIDERATION

The research, entitled "Banking Sector Performance Evaluation in Ethiopia for the Period of Growth and Transformation Plan (GTP-II): Private vs. Public Commercial Banks," was done independently by the author. It has not been submitted to any other institution for a degree or diploma, nor has it been published in any other journals. The reviewed literature was acknowledged and cited properly. Because the article was scholarly written, it provides new ideas and new opportunities for future research to fill gaps in previous studies. As a result, the paper was original.

AUTHORS' CONTRIBUTIONS

The author of this study was solely responsible for the conception and design of the study's ideas, data collection, data analysis and interpretation, and manuscript preparation. Therefore, the author designed, directed, and conducted the study.

CONFLICT OF INTEREST

The author declares that they have no competing interests

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Figures

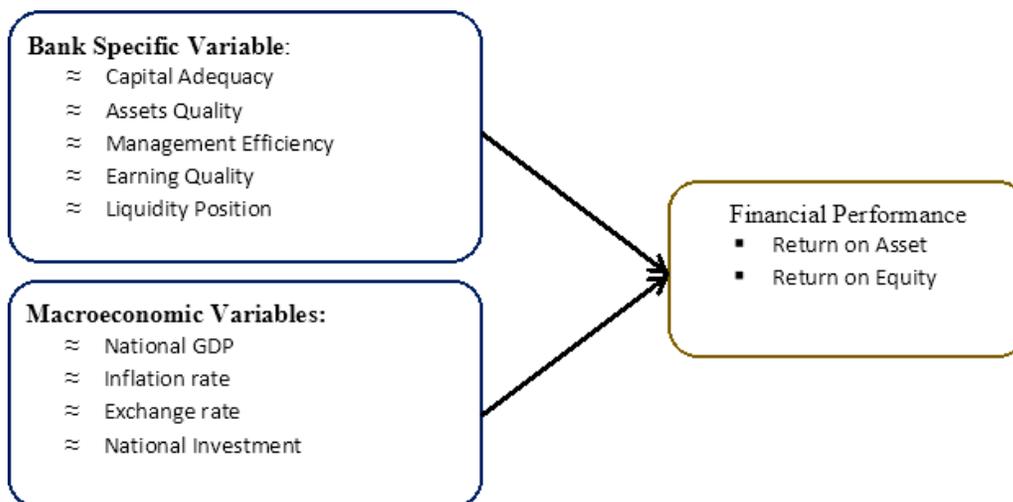


Figure 1

Conceptual Framework. (Source: Author construction)

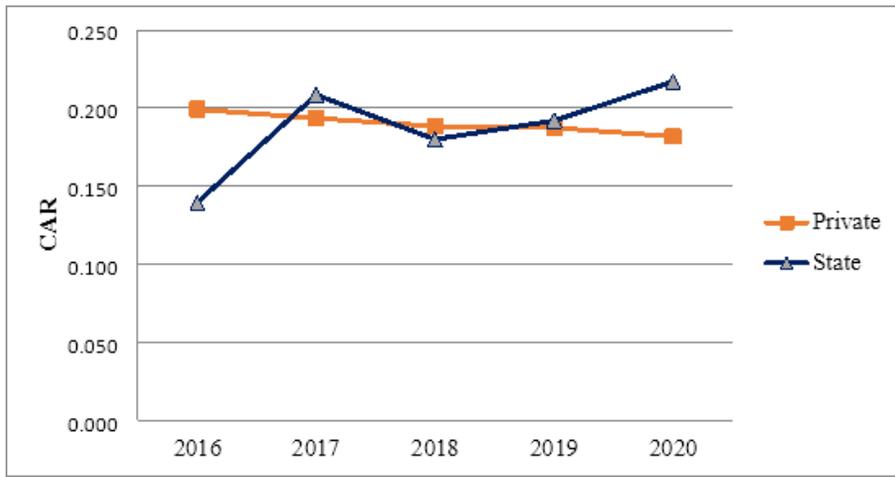


Figure 2

Average Capital adequacy Ratios of commercial. (Source: Author construction)