International Journal of Advanced Trends in Multidisciplinary Research
Volume 1 Issue 1
Dec 2025, PP 06-12

Factors Affecting Deposit Growth of Selected Private Commercial Banks in Ethiopia

Worku Desalegn Adelegn
Lecturer at Department of Accounting and Finance,
Collage of Business and Economics, Kabridahar University, Kabridahar, Ethiopia.

Abstract – The aim of this study was to examine the factors that affect the deposit growth of selected private commercial banks in Ethiopia. This study also examines both macroeconomic and bank-specific factors affecting the deposit growth of selected private commercial banks. The researcher used an explanatory research design and collected data from a secondary panel dataset covering the years 2013 to 2022. Those 12 private commercial banks were selected through purposive sampling. Quantitative data was gathered from the national banks of Ethiopia, the World Bank, and the annual reports of private commercial banks. The researchers used multiple linear regression models and Stata software to analyze the data. The study found that factors such as customer growth rate, capital adequacy, Treasury bill rate, and foreign remittance growth rate have a positive and statistically significant effect on deposit growth in private commercial banks. However, branch expansion rate had a positive effect that was not statistically significant. Government expenditures had a negative and significant effect on deposit growth, while the effects of inflation and GDP growth were negative but not statistically significant. To conclude that, The growth of deposits in private commercial banks in Ethiopia was mainly affected by the customer growth rate, capital adequacy ratio, foreign remittance growth rate, government expenditure growth rate, and the Treasury bill rate. Finally, the researcher advised private commercial banks to attract more foreign remittances by enhancing their marketing strategies and online systems. Additionally, banks prioritized customer satisfaction by providing easy access to savings and ensuring security. Banks are actively encouraging individuals to invest in Treasury bills, following the guidelines set by NBE Directive Number 2011. Governments should spend more on infrastructure and job creation, leading to an increase in bank deposits as they open more branches and encourage saving to fund these projects. Banks must prioritized deposit accumulation and capital levels for financial stability assessments.

Keywords - macroeconomic factor, bank specific, deposit growth, financial stability and private commercial banks.

I. INTRODUCTION

Robust financial institutions, particularly in the banking sector, have a positive impact on economic growth by enhancing the size of the banking system and the liquidity of stock markets. In comparison to developing nations outside of Africa, the banking systems in African nations are notably less advanced, with limited access to capital and a lower level of depth. In [1] financial institutions play a vital role in promoting a healthy and prosperous financial system and achieving long-term economic growth. This study highlights the significance of exploring the factors influencing deposit growth in Ethiopia's private commercial banks, juxtaposed with the dominance of the Commercial Bank of Ethiopia, which captures two-thirds of the country's deposits. It investigates both macroeconomic and bank-specific determinants affecting the deposit expansion of selected private banks, aiming to provide insights for banks and monetary authorities to enhance financial stability and contribute to the national economy. The research seeks to empirically analyze the reasons behind the relatively low deposit share held by private banks compared to government-owned entities.

Over the past ten years, private commercial banks in Ethiopia have seen an average deposit collection growth of 11.8%, significantly lagging behind public banks. Ethiopian private banks accounted for 44.1% of total deposits, while the Commercial Bank of Ethiopia (CBE) dominated with 55.9%. Research on deposit growth in Ethiopia has been limited, indicating a need for more comprehensive studies in this area.

In Ethiopia, where the banking sector is pivotal for economic growth, the reliance on customer deposits for commercial banks is crucial for maintaining operations and facilitating investments across various sectors. As of 2021/2022, private commercial banks collected 1.5 trillion birr in deposits, with the Commercial Bank of Ethiopia (CBE) holding a majority. Although the number of private banks has increased, their market share of total deposits has slightly declined, indicating that public banks dominate deposit accumulation. Research on factors influencing deposit growth in Ethiopia remains sparse, with limited empirical studies focusing specifically on private banks, in contrast to more comprehensive investigations in other countries.

Statement of Problem

Deposits are a major factor in a commercial bank's ability to serve business because they serve as both a source of funding and a basis for profitability. Commercial banks are significantly reliant on deposits in both developed and developing economies. The problems with bank deposits have become more significant for the banking sectors of developing countries like Ethiopia. The report highlights the importance of understanding and managing the factors that affect the level of deposits held by private banks in the country [2].

In countries such as Ethiopia, where the banking sector forms the backbone of the financial system, the efficient and effective functioning of banks is vital for supporting and accelerating economic growth [3]. The main source of financial resources for banks largely comes from funds mobilized from customers. Deposits [4]. Commercial banks heavily rely on consumer deposits to sustain their operations. Low deposit growth can lead to a lack of loan distribution, inability to pay for expenses and debts, and frequent changes in leadership due to dissatisfaction among members. As investment in various sectors increases in Ethiopia, commercial banks play a crucial role in facilitating the distribution of these resources to meet demand [5].

In the annual report of NBE, (2021/2022) it was reported that private commercial banks had collected a total deposit of 1.5 trillion birr. Out of this, Ethiopian private commercial banks had a share of 44.1%, while the Commercial Bank of Ethiopia (CBE) had 55.9% of the country's total deposit. Presently, there are 30 banks operating in Ethiopia, including two state-owned banks and 28 private banks. Despite the establishment of new private banks and expansion of existing ones, their share of deposit collection has slightly decreased from 44.6% to 44.1%. Over the past decade, private commercial banks have only experienced an average increase of 11.8% in deposit collection compared to public commercial banks in Ethiopia. This suggests that deposit collection is mostly controlled by the two public banks.

II. LITERATURE REVIEW

Empirical Review Outside of Africa

Kanj and El Khoury [6] examined the factors affecting non-resident deposits in Lebanese commercial banks and found that demographic and socioeconomic characteristics play an important role in saving behavior. Their results indicate that age, income, and education level have a positive and statistically significant effect on the decision to deposit funds. In contrast, larger household size, greater distance from formal financial institutions, and employment status were found to discourage saving. The study also showed that the amount saved by households declines significantly with increases in household size, unemployment, and remoteness from banking services, while higher income, better education, land ownership, and involvement in small-scale trading activities contribute to higher savings. Based on these findings, the authors emphasized the importance of implementing targeted strategies to encourage deposit mobilization.

Islam et al. [7] examined the factors influencing deposit mobilization in private commercial banks in Bangladesh. The study showed that deposits tend to grow with higher interest rates on deposits, a stronger loan-to-deposit ratio, increasing inflation, and expansion in the money supply. In contrast, deposit mobilization was adversely affected by the expansion of bank branches, greater bank size, and higher rates of GDP growth.

In another empirical study, Yakubu and Abokor [8] analyzed the factors influencing bank deposit growth in Turkey. The results demonstrated that, in the long run, deposit growth is significantly affected by bank stability, efficiency within the banking sector, expansion of the money supply, economic growth, and inflation. The study further revealed that, in the short term, a broad money supply and effective branch expansion play a crucial role in enhancing deposit mobilization.

Summery &Knowledge Gap

Most existing studies on deposit growth, both within Ethiopia and internationally, tend to examine total bank deposits in isolation or focus on a limited set of influencing factors, often producing mixed results. In Ethiopia, empirical research on deposit growth is particularly limited and largely concentrated on the Commercial Bank of Ethiopia, with relatively little attention given to private commercial banks. Since deposits are the primary funding source for banks and are influenced by both macroeconomic conditions and bank-specific characteristics, this gap is significant. To address it, the present study investigates the combined impact of macroeconomic and bank-specific factors on deposit growth in twelve private commercial banks in Ethiopia over the period 2012/13 to 2022/23. Unlike earlier studies, it examines eight key determinants using ten years of data and incorporates additional variables such as the Treasury bill rate and government expenditure. The study is motivated by the comparatively smaller share of deposits held by private banks and aims to provide a more comprehensive empirical understanding of deposit growth in the Ethiopian banking sector.

III. RESEARCH METHODOLOGY

This research used a quantitative methodology, meaning it involved gathering and analyzing data represented in numerical form. The approach centered on utilizing statistical analysis and numerical data, typically presented in tables, to explore the connections between different variables. The main reason for selecting this method was to collect numerical information that could be used to examine possible relationships between variables. Data was obtained from sources such as the National Bank of Ethiopia, the World Bank, and annual reports from private commercial banks.

Research Design

The study exclusively employed explanatory research designs, chosen based on its objectives. These designs aim to identify cause-and-effect relationships between variables by testing hypotheses or drawing conclusions about causality. The purpose was to explore how different factors—such as GDP growth, inflation, capital adequacy, foreign remittance growth, branch expansion, government expenditure growth, Treasury bill rates, and customer growth—relate to the deposit growth of a private commercial bank.

Sample Size and Sampling Techniques

This research examined the financial performance of private commercial banks in Ethiopia. Out of the 28 private commercial banks in the country, the researcher chose 12 banks that had at least ten years of financial data. The selection was made through purposive sampling, ensuring that the banks chosen had substantial industry experience and reliable data. The study relied on secondary data sources, which are advantageous due to their cost-effectiveness and efficiency. Over a ten-year period, data from these 12 banks were analyzed using both descriptive and inferential statistical methods to identify factors influencing deposit growth in the banks.

Model Specification

The study uses a multiple linear regression model to analyze the past effects of different quantitative factors on bank deposits. It's important to note that the factors must be stationary and the residuals must be homoscedastic and not auto correlated to use the linear regression model. Therefore, the regression model was specified as follows:

The regression model

$$LOGDGR = \alpha + \beta 1\ (CAP)nt + \beta 2\ (RGDP)nt + \beta 3\ (GEX)nt + \beta 4\ (BR)nt + \beta 5\ (FRMGR)nt + \beta 6\ TBR)nt + \beta 7\ (CGR)nt + \beta 8\ (IFR)nt + \varepsilon i$$

Where:

LOGDGR = Logarithm of Deposit Growth Rate (Dependent Variable)
A = Intercept Of the Regression Line
B1 to β8=Slope Coefficient of the Regression Line
n = 1…2…12 (Private Commercial Banks of Ethiopia)
t = 1…2…10 years (2012/13---2021/22 years)
CAP = Capital Adequacy (Independent Variable)
GDP = Real Gross Domestic Product Growth Rate (Independent Variable)
IFR= Inflation Rate (Independent Variable)
GEX= Government Expenditure (Independent Variable)
TBR=Treasury Bill Rate (Independent Variable)
BR=Branch expansion rate (independent variable)
CGR= Customer growth rate (independent variable)
εi =is the error term associated with the observation

IV. DATA ANALYSIS AND INTERPRETATION

In this study, the growth rate of bank deposits is taken as the outcome variable, while the analysis considers several influencing factors, including branch expansion, capital adequacy, foreign remittance growth, Treasury bill rates, government spending growth, customer growth, inflation, and overall GDP growth.

Table 1 Summary of descriptive statistics.

Variable	Obs	Mean	Std. dev.	Min	Max
Log dgr	120	0.4984342	0.2774933	0.0113	1.2816
Br	120	0.2608	0.1509123	0.0242	0.9421
Cap	120	0.2896467	0.1265322	0.51	0.8502
Cgr	120	0.2903417	.184112	0.0291	0.8624
Frmgr	120	.2378892	.0737799	.0266	.4243
Tbr	120	.03318	.0289946	.0142	.0946
RGDP	120	.0686	.0345717	.008	.104
Govex	120	.2027917	.0584489	.075674	.3006516
Ifr	120	.15086	.0862064	.074	.3716

Source: from STATA 14 output results 2023

The average GDP growth rate in Ethiopia was 6.8% with a standard deviation of 3.4%, meaning there wasn't much variation in each observation from the average rate from 2013-2022. On average, banks experienced a 23.78% growth rate in foreign remittances, with a standard deviation of 7.37%. The data presented in the above table 1 indicates that private commercial banks show an average deposit growth rate of 49.8% between 2013 and 2022.

Correlation Matrix

Correlation describes the extent to which two or more variables move in relation to one another. Whether a correlation coefficient is statistically significant largely depends on the sample size used in the analysis. The value of a correlation coefficient always lies between −1 and +1. A value of +1 indicates a perfect positive linear relationship, while −1 represents a perfect negative linear relationship between the variables. When the correlation coefficient is below 0.8, it generally suggests that there is no strong or direct relationship between the variables [8].

The table below presents the expected relationships among the variables considered in this study.

Table 2 correlation table.

Variable	LOGDGR	BR	CAP	CGR	GDP	FRMGR	TBR	GOVEX	IFR
LOGDGR	1.0000								
BR	0.1097	1.0000							
CAP	0.1866	0.3505	1.0000						
CGR	0.4555	0.0841	0.1367	1.0000					
GDP	-0.0101	-0.0841	0.1967	0.0325	1.0000				
FRMGR	0.2024	-	-	-	0.2283	1.0000			
		0.0639	0.0344	0.1547					
TBR	0.1831	-0.2347	-0.2331	-0.0195	-0.1237	-0.0026	1.0000		
GOVEX	0.0049	-0.1572	0.0186	-0.0082	0.2106	0.2003	0.5638	1.0000	
IFR	0.1428	-0.2674	-0.3022	-0.0131	-0.1900	-0.0633	0.7658	0.4111	1.0000

Source: from S TATA 14 output results 2023

The correlation matrix presented in Table 2 indicates that the deposit growth rate, which is the dependent variable, has a positive relationship with several explanatory variables, such as branch expansion rate, capital adequacy, government expenditure rate, Treasury bill rate, customer growth rate, inflation rate, and foreign remittance growth rate.

Table 3. Fixed effect Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	P value
Cross-section fixed	667.56	8	0.0000

Source: from STATA 14 output results 2023

Fixed Effects versus Random Effects Model

Random effect model

In panel data analysis, the random effects model assumes that individual-specific effects vary randomly across entities, while the fixed effects model considers these effects to be constant for each individual unit. To choose between these two approaches, the Hausman test was applied. The alternative hypothesis (Ha) assumes that individual effects are correlated with the explanatory variables, favoring the fixed effects model, whereas the null hypothesis (H_0) assumes no such correlation, supporting the random effects model.

Panel unit root tests are widely used in empirical economic studies, although their interpretation can sometimes be ambiguous [9]. According to this testing approach, accepting the null hypothesis suggests the presence of a common unit root. Before applying the Ordinary Least Squares (OLS) method for model estimation, the panel data for deposit growth rate were transformed into logarithmic form and tested for stationarity.

Table 4: Levin-Lin-Chu unit-root test

Variable	Method	Unit root at	Statistic	p-value
Log DGR	Levin-Lin-Chu unit-root test	Level	-3.9649	0.0000
BR	Levin-Lin-Chu unit-root test	Level	-4.3098	0.0000
CAP	Levin-Lin-Chu unit-root test	Level	-1.6549	0.0490
CGR	Levin-Lin-Chu unit-root test	2nd difference	-3.1433	0.0008
RGDP	Levin-Lin-Chu unit-root test	Level	-7.7630	0.0000

FRMGR	Levin-Lin-Chu unit-root test	Level	-2.9444	0.0016
TBR	Levin-Lin-Chu unit-root test	2nd difference	-5.3857	0.0000
GOVEXR	Harris-Tzavalis unit-root test	Level	0.3088	0.0000
IFR	Hadri LM test	Level	9.6090	0.0000

Source: from STATA 14 output results 2023

The mean value of the residual term is zero

One of the key assumptions of the classical linear regression model is that the error (residual) term has a mean value of zero. In testing this assumption, the null hypothesis states that the residuals are normally distributed. The normality assumption is important because it ensures the reliability of statistical inferences, model specification tests, and forecasting results. If this assumption holds, the conclusions drawn from the regression analysis are more valid and dependable [10].

Table 4.5. Normality test

Variable	Obs	Pr(skewness)	Pr(kurtosis)	adj chi(2)	Prob>chi2
Log dgr	120	0.2509	0.2637	2.62	0.2695

Source: from STATA 14 output results 2023

Test for Heteroscedasticity

Another fundamental assumption of the Classical Linear Regression Model (CLRM) is that the error terms have constant variance across all observations. This condition implies that the spread of the residuals remains uniform and does not systematically change with the level of the explanatory variables. In simpler terms, the residual terms showed constant variance and there was homoscedasticity in the model (see appendix3). Based on stata output the tests of Heteroscedasticity by Breusch-Pagan / Cook-Weisberg test there is no heteroscedasticity that means homoscedasticity.

Table 4.6. Multicollinearity test

Variable	VIF	1/VIF
TBR	7.43	0.134598
IFR	6.38	0.156765
GOVEX	1.86	0.539081
CAP	1.32	0.756113
BR	1.27	0.790472
RGDP	1.25	0.798126
FRMGR	1.16	0.862386
CGR	1.06	0.942977
Mean VIF	2.72	

Source: from STATA output results 2023

Test for Model Specification: - Ramsey Reset Test

The Ramsey Regression Equation Specification Error Test (RESET) is a widely used diagnostic tool for examining whether a linear regression model is correctly specified. It helps identify potential issues such as omitted variables, incorrect functional form, or neglected nonlinear relationships in the model.

Test for Serial Autocorrelation Serial autocorrelation refers to the extent to which current residuals are correlated with their past values [8]. The presence of autocorrelation violates one of the key assumptions of regression analysis and can lead to inefficient estimates. To examine this issue, the Wooldridge test for autocorrelation was applied using STATA output to assess whether serial correlation exists in the regression model.

$$Logdgr = \alpha i + \beta 1*BRnt + \beta 2*IFRnt - \beta 3*GDPnt + \beta 4*FRMGRnt - \beta 5*GOVEXnt + \beta 6*CAPnt + \beta 7*CGRnt + \beta 8*TBRnt + \varepsilon nt$$

International Journal of Advanced Trends in Multidisciplinary Research
Volume 1 Issue 1
Dec 2025, PP 06-12

Table 4.7. Regression analysis

Source	SS		Df		MS	Number of observations = 100
						F(8, 111) = 17.40
Model	5.16831798		8		.646039747	Prob > F = 0.0000
Residual	4.12053041		111		.037121896	R-squared = 0.5564
						Adj R-squared = 0.5244
Total	9.28884839		119		.078057549	Root MSE = .19267
Variable	**Coefficient**	**Std. Err.**	**T**	**P>|t|**	**[95% Conf.**	**Interval]**
Constant	-1.204571	.118891	-10.13	0.000	-1.440161	-.9689802
BR	.2418594	.1320001	1.83	0.070	-.0197077	.5034264
CAP	.5950271	.154476	3.85	0.000	.2889227	.9011316
FRMGR	1.447004	.257782	5.61	0.000	.9361922	1.957817
IFR	-.1865257	.5174602	-0.36	0.719	-1.211908	.8388562
CGR	. 9588151	.1088595	8.81	0.000	.7431028	1.174527
GDP	-.291003	.5718546	-0.04	0.967	-1.157003	1.109333
TBR	4.847194	1.660371	2.92	0.004	1.557057	8.13733
GOVEX	-1.416195	.4115641	-3.44	0.001	-2.231737	-.6006534

Source: from STATA output results 2023

Specifically, capital adequacy, customer growth rate, foreign remittance growth rate, and Treasury bill rate all have positive and significant beta coefficients. This suggests that the model needs to consider a diverse range of factors or explanatory variables that can effectively explain the dependent variable, which is the deposit growth rate. The beta coefficient for government expenditure growth rate is negative and significant, meaning that it has a negative effect on the outcome being studied.

Based on the regression outcomes, the causal and impact relationships between the dependent variable (logDGR) and the explanatory variables and discussed accordingly.

$$LOGDGR = -1.204571 + 0.2418594 *BR + 0.5950271*CAP - 0.0238347 *GDP + 1.447004 *FRMGR + 0.9588151 *CGR + 4.847194 *TBR - 1.416195 *GOVEX - 0.1865257 IFR*+ \varepsilon_{it}$$

Other studies have concluded that capital adequacy has a negative and negligible impact on private commercial bank deposit growth. H1: capital adequacy has a positive significant effect on Deposit growth private c The capital adequacy ratio (CAR) is a measure that shows a bank's available capital as a percentage of its risk-weighted credit exposures.

The customer growth rate is a key bank-specific factor affecting deposit growth in private commercial banks in Ethiopia. The empirical results indicate that customer growth has a statistically significant impact on deposit growth; therefore, the null hypothesis is not rejected. This finding is consistent with the study by [11], which also reported a positive and significant relationship between customer growth and deposit growth in Ethiopian private commercial banks.

The results further show that a one-unit increase in the Treasury bill rate leads to an increase of approximately 4.85 units in deposit growth. This implies that higher Treasury bill rates are associated with increased deposits in private commercial banks, suggesting a strong and positive relationship between these two variables.

In addition, foreign remittances were found to have a significant positive effect on deposit growth. Specifically, a one-unit increase in the growth rate of foreign remittances results in about a 1.45-unit increase in bank deposit growth. This supports earlier findings that rising foreign remittance inflows contribute substantially to the expansion of deposits in private commercial banks in Ethiopia, highlighting a strong positive association between remittance flows and deposit mobilization.

Notably, the customer growth rate, capital adequacy, Treasury bill rate, foreign remittance growth rate, and government expenditure growth rate all showed significant effects on deposit growth. Particularly the significant variables were the customer growth rate, capital adequacy, and foreign remittance growth rate, which displayed the highest significance value of 0.000. These variables include real GDP growth, capital adequacy, foreign remittance,

government expenditure, customer growth, inflation, Treasury bill, and branch expansion rate.

V. CONCLUSION AND RECOMMENDATION

Branch expansion rate, GDP growth rate, and inflation rate did not have significant correlation with deposit growth rate. However, GDP growth rate and inflation rate had a negative effect that was not statistically significant, while branch expansion rate had a positive effect that was also statistically insignificant. Banks with higher customer growth rates, better capital adequacy ratios, higher Treasury bill rates, and increasing foreign remittance growth rates tend to have higher deposit growth.

Recommendations

Since the major source of resources for all private commercial banks is deposit, banks should give necessary attention to its factors that affect deposit growth (Table4. Based on the results obtained through the analysis conducted private commercial banks take a remedial action periodically for those influential factors that affect bank deposit.

Private commercial banks should prioritize increasing their deposits through foreign remittances as they heavily rely on deposits for funding. Private commercial banks in Ethiopia are mandated to give utmost importance to accumulating deposits and ensuring that they maintain adequate capital levels in order to consistently assess and evaluate their own financial stability. This means that these banks have a responsibility to actively seek and secure deposits from customers while also maintaining a robust capital base, which enables them to regularly assess and evaluate their own financial standing.

It is also recommended that the government increase spending on infrastructure and employment initiatives, prompting banks to expand their branch networks and encourage savings to support these projects. This government expenditure has played a role in the expansion of bank deposits.

REFERENCE

1. Salami, G. O., & Oluseyi, A. A. (2013). Impact of financial sector development on Nigerian economic growth. American Journal of Business and Management, 2(4), 347–356.
2. Eriemo, N. O. (2014). Macroeconomic determinants of bank deposits in Nigeria. Journal of Economics and Sustainable Development, 5(10), 49–58.
3. Bargicho, S. (2015). Determinants of commercial bank deposits in Ethiopia: A case of Commercial Bank of Ethiopia (Unpublished master's thesis). School of Graduate Studies.
4. Namazi, M., & Salehi, M. (2010). The role of inflation in financial repression: Evidence from Iran. Applied Sciences, 11(6), 653–661.
5. Getachew, K. (2017). Determinants of commercial bank deposits.
6. Islam, S. N., Islam, S. N., Ali, M. J., & Wafik, H. A. (2019). Determinants of deposit mobilization of private commercial banks: Evidence from Bangladesh. International Journal of Business and Management Invention, 8(10), 26–33.
7. Yakubu, I. N., & Abokor, A. H. (2020). Factors determining bank deposit growth in Turkey: An empirical analysis. Rajagiri Management Journal, 14(2), 121–132.
8. Wang, S., Jiao, H., Young, M. J., Brooks, T., & Olson, J. (2008). Comparability of computer-based and paper-and-pencil testing in K–12 reading assessments: A meta-analysis of testing mode effects. Educational and Psychological Measurement, 68(1), 5–24.
9. Pesaran, M. H., & Yamagata, T. (2012). Testing CAPM with a large number of assets. In AFA 2013 San Diego meetings paper.
10. Das, K. R., & Imon, A. H. M. R. (2016). A brief review of tests for normality. American Journal of Theoretical and Applied Statistics, 5(1), 5–12.
11. Muhammed, S. (2021). Factors affecting deposit growth of private commercial banks in Ethiopia.