

**BANKING SYSTEM POLICY IN ETHIOPIA POST-1991:
DOMESTIC AND FOREIGN RESOURCE MOBILIZATION**

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ABSTRACT

The study aims to examine the effect of public policy on the banking system in mobilizing deposit and foreign exchange resources. A quantitative research method was adopted to analyze the trend performance of the industry over the past thirty years. The findings of the study reveal that public policies have positively influenced the industry through increase in bank branches, deposit mobilized, funds channeled to the economy, and its contribution to the economic growth. Moreover, the policy instruments and derivatives like branch expansion, lending rate, exchange rate, and inflation influence the performance of the banking industry in deposit mobilization, loan disbursement, loan collection, export, and remittance. The study recommends that policies should be more flexible and farsighted in line with the changes in the global and national economic environment. Furthermore, the monitoring and supervision capability of the regulatory body should also be strengthened for successful implementation of the policies.

Keywords: Public Policy, Ethiopian Banking Industry, Bank Supervision, Deposit Mobilization, Foreign Exchange

INTRODUCTION

Banks play a key role in an economy in terms of enhancing both allocative and productive efficiency. They help to mobilize and distribute idle resources to potentially productive sectors, aiming to raise the level of economic development as a whole (Allen & Carletti, 2012). In such cases, banks are the primary component of the financial system and play very critical roles in national economic development. They mobilize savings for investment purposes that further generate growth and employment. Savings help the real sector of the economy that engines the banking sector for credit. The fiscal authority also raises funds through the banking system to finance government developmental programs and strategic objectives. This shows that the strategic role of the banking system in national development makes a sound banking system essential (CBN, 2011).

Given such strategic role of the banks, the banking sector has been an issue of policy interest focused largely on the presumed tendency towards concentration and its effects on economic efficiency, bank profitability, and financial and hence macroeconomic stability (Davis, 2004). Poorly functioning banking systems impede economic progress, exacerbate poverty, and destabilize economic development. Public policy establishes the ground rules of competition and thus creates varieties of market behaviors. Public policy has encouraged more competition by allowing the entry of private sector banks and foreign banks in leveling the playing field. Regarding financial regulations, there are two opposing theories: the financial repression school of thought where financial regulations in the form of interest rate control are considered important policy tools for developing countries; and the liberalization school of thought where it considered privatization of the government-owned financial institutions and financial liberalization as an important policy tool for the sake of efficiency, soundness and to increase competition in the financial sector (Mekonen and Melese, 2014).

The type and mix of monetary policy instruments employed vary from country to country, largely depending on the degree of sophistication and complexity of the national economy in question. Generally, the major instruments include the rate of interest, the exchange rate, legal reserve, cash and liquidity requirements, and open market operations. The major monetary policy tasks also include direct credit ceilings, discounting and rediscounting facilities, open market operations, ceilings on government borrowing, and direct monetary and inflation targeting. The public policy environment has exhibited continuous changes over the time and in recent decades, sustainable development and sustainability has become the catch phrase of different scholars and policy makers at the global level. The idea behind sustainability is that countries should not only focus on achieving economic growth and development rather they should also give attention to keeping the balance on environmental and social aspects of every economic activities (Anselm, 2017). The issue of sustainability for banking system has multiple dimensions; on one hand, banks influence environmental and social issues either in their internal processes in the form of efficient resource utilization, waste management, and their relation with the communities while on the other hand, their influence through their financing and investment activities. Hence, the recent policy environment in the banking system at the global level has become sustainable development and sustainability although the implementation of sustainable banking system differ from countries to countries (Haidar, 2021).

Immediately after the regime change in Ethiopia in 1991, the government initiated various changes in the economic sphere including the financial sector that include the banking sector. The reform in the banking sector is not very fast with the sluggish process that takes so far more than twenty years. Despite the reforms, there are still many things that remain to do, as a result of which, it has been observed that the banking sector is not efficient enough to provide its products to its customers and it is not also competitive enough to play important role in the economic growth of the country. Despite the reforms, the Ethiopian banking system appears to have several structural vulnerabilities and weaknesses in the supervisory, regulatory and legal frameworks. The Ethiopian banking system, dominated by public sector banking, is fragile (Mekonen and Melese, 2014). This can be explained by poor customer service, length of delivery time, few products, and poor technology backup. The banking system problems need major and urgent alterations to minimize the cost of restructuring, improve efficiency and enable the banking sector to perform better in resource allocation function, thereby contributing to the growth and long-term sustainability.

Despite the improvements in the institutional structure of the banking system brought about by the reforms, the banking system is still very shallow and performs very little intermediation between savers and borrowers in the private sector. The ability of the banking system to supply credit, including the priority sectors that financial policies aimed to support is weak and there is a wide gap between total investment needs and domestic resource mobilization when seen from deposit/GDP ratio in comparison with the Sub-Saharan African standard. Recently, Ethiopia implemented various domestic resource mobilization schemes like improving pension fund policies, introducing housing schemes, and issuing a long-term bond for power generation. In addition, financial sectors especially banks improved their outreach throughout the country to mobilize sufficient funds. However, as observed from the widening saving-investment gap to GDP ratio, the fast and high economic growth during the last decade relies more and more on foreign loans and grants (Fekadu, 2017).

So far, the Ethiopian banking system has been studied in its various dimensions, including in connection to the reform in the banking sector(Admasu and Asayehegn,2012); competition within the banking industry(Zerayehu, Kagnew, and Teshome,2013); the financial performance of the banking sector (Habtamu,2013); the financial regulation and supervision in Ethiopia (Addison & Alemayehu, 2001; Mekonen and Melese,2014; Alemayehu, Tony, and Getenet,2014), which does not only focus in the banking industry; and efficiency in the banking system (Tsfaye, 2014). However, research on the relationship between public policy and the banking system in Ethiopia with an emphasis on resource mobilization is not yet assessed.

The principal objective of this study is therefore to explore the effect of public policy (such as directives, regulations, and supervisions) of the National Bank of Ethiopia on the banking system in mobilizing resources mainly local deposit mobilization as well as foreign exchange resources.

THEORETICAL FRAMEWORK

Public Policy

Articulating the definition of public policy seems difficult where some literatures provide broad definitions while others give narrow ones. Some of the broad definitions are given by Dye (1987) that defined policy as “whatever governments choose to do or not to do”. Similarly, Eyestone (1971) defined it as “the relationship of governmental units to their environment”. Public policy was also broadly defined as “the actions, objectives, and pronouncements of governments on particular matters, the steps they take or fail to take, to implement them, and the explanations they give for what happens or does not happen” by Wilson (2006). On the contrary, Anderson, J. E. (1994) provided a narrow definition of public policy as “a purposive course of action or inaction that is undertaken by an actor or set of actors in dealing with a problem or matter of concern”.

Although there is no precise and universal definition of public policy, nor is it likely that such a definition will be conceived in the foreseeable future, there is general agreement that public policy includes the process of making choices, the actions associated with implementing those choices, and the outputs and outcomes produced by those actions. What makes a policy “public” is that choices or actions are backed by the coercive powers of the state; and that, at its core, public policy is a response to a perceived problem (Birkland, 2001). This definition of public policy is considered for the study at hand.

Public policy is not made in a vacuum. It is affected by social and economic conditions, prevailing political values and the public mood at any given time, the structure of government, and national and local cultural norms, among other variables. To understand how these variables shape the policymaking process, it is best to understand contexts like social, political, economic, governing, and cultural contexts (Kraft and Furlong, 2004). It is also helpful to identify the policy process model.

The policy process model posits a logical sequence of activities affecting the development of public policies. These are: first, Agenda setting- how problems are perceived and defined, attract command attention, and how to make it onto the political agenda. Second, Policy formulation – the design and grafting of policy goals and strategies for achieving them - often involves the use of policy analysis. Third, Policy legitimizes–the mobilization of political support and formal enactment of policies including justification or rationales for the policy action. Fourth, Policy implementation – provisions of institutional resources for putting the programs into effect within a bureaucracy. Fifth, Policy and program evaluation: the measurement and assessment of policy and program effects, including success or failure. And, finally, Policy changes – modification of policy goals and means in light of new information or shifting political environment (Kraft and Furlong, 2003). There are various instruments, according to the same authors, of public policy that governments use to intervene. These include government management, taxing, and spending, market mechanisms, education, information and persuasion, and regulation.

Policy Environment and the Banking System

Banks are financial institutions that primarily collect deposits and issue loans to individuals, firms, and governments to finance consumption, investment, and capital expenditure; thereby contributing to economic growth (Ozili & Outa, 2017). As cited by Vo, X.V. (2018), the banking system plays a critical role in fueling economic growth and also in the transmission of monetary policy (Corelli and Goldberg, 2012). As cited by Barth and his colleagues, a well-functioning banking system exerts a first-order impact on economic growth and development (Levine, 1997, 2005). The banking sector is a pivotal segment in many countries; hence the need for continuous implementation of adequate policy measures and reforms to ensure that the banking sector performs its function efficiently.

Although adequate policy measures on banking system is important, there no agreements reached on the form of the regulation and supervision of the banking system. There are two views of public policy on banking system; public interest view and private interest view. According to the public interest view public policies and supervisions have the capabilities to eliminate market failures by directly monitoring and regulating banks. Thus, tight regulation and supervision reduce corruption in lending, improve the efficiency of capital allocation, encourage competition and hence boost the efficiency of capital the efficiency of banks (Stigler, 1971; Beck et al., 2006). On the other hand, the private interest view (Shleifer and Vishny 1998; Djankov et al., 2002; Quintyn and Taylor 2002) argues that powerful regulation and supervision are likely to lead to corruption in lending which hampers banking efficiency. The private interest view stresses that politicians and government supervisors maximize their welfare and may not have incentives to fix market failures rather they use regulation and their privileged positions to channel credit to special interest groups.

The 2008 global financial crisis has prompted a renewed interest in banking regulations and supervision to safeguard global financial systems. As a result, several reforms of the financial regulatory framework have been agreed upon internationally, most notably the Basel Committee on banking supervision's reform package known as Basel III (Basel Committee on Banking Supervision, 2010a, b). While there is growing empirical evidence documenting the relationship between bank regulation, supervision, and stability, there is limited evidence, on the effect of the regulatory environment on bank efficiency (Kouki, M. & Mabrouk, L., 2016).

Overall, studies conducted on the effect of regulations and supervision on the banking sector seem to provide inconclusive results that depends on the period and sample under consideration. It is also understood that policies and supervision evolve naturally according to economic and financial context of countries.

Sustainability and Banking System

Sustainable development or sustainability refers to the undertaking of economic activities in economically feasible way, extending benefits to the community and without harming the environment (Haidar, 2021). The traditional development narrative and the experience of many countries showed that economic growth and development was achieved at the expense of the environment, which results in adverse environmental change. Due to this, sustainable development has arisen as a new paradigm of development at the global sphere catching the attention of

policy makers, governments, and international organizations (Chandra & Sathiyabama, 2021; Haidar, 2021). The case in point is the 2030 Agenda for Sustainable Development adopted by UN member states with 17 Sustainable Development Goals (SDGs) to be achieved by all member countries over the period of 2016-2030. Given this, many countries have begun to align their public policy towards achieving these goals although the level of implementation is more pronounced in the developed countries than developing countries (Dzebo & Shawoo, 2023).

Financial system in general and banking system in particular plays crucial role in achieving sustainable development in a country. Although it was believed that banks have limited direct impact on the environment in terms of resource usage and pollution, they have huge indirect impact given their role as intermediary for investments and economic activities. Hence, the issue of sustainability in banking system has surfaced up in many countries and different policies have begun to be issued to direct the operation of banks towards sustainability (Jeucken, 2001). Sustainability in the banking system is reflected at least in two different dimensions; first, banks influence environmental and social issues through their internal processes in the form of efficient resource utilization, waste management, and their relation with the communities. Secondly, they have also indirect influence through their financing and investment activities (Haidar, 2021). Nowadays, governments, policy makers, international organizations and other stakeholders issued different policies, standards, and operational guidelines that encourages banks to adopt socially and environmentally acceptable business operations, which is referred as sustainable banking (Mir & Bhat, 2022). Sustainable banking is a situation where banks carry out their everyday operations in due consideration of the environmental and social issues that will helps them to achieve sustainable growth in harmony with the environment and the society they work with. Sustainable banking involves efficient utilization of resources, proper waste management system, financing and investing on economic activities that have less risks on the environmental and society as well as smooth relationship with employees, local communities, and other stakeholders (Mir & Bhat, 2022).

The implementation of sustainability in the banking system is inconsistency among countries where it has gained acceptance and much attention in developed countries while the attention from the developing and underdeveloped countries is very limited. There is limited legal framework and other requirements to enforce sustainable banking system in the developing and underdeveloped countries (Mir & Bhat, 2022, Chandra & Sathiyabama, 2021). As part of the developing world, the issue of sustainable banking in Ethiopia has been given little attention from the regulatory body, policy makers, and industry practitioners. As a result, there is limited legal framework and requirements for banks to adopt sustainability in their operations (Deres, Maria & Tangl, 2022).

Overview of Ethiopian Banking System

The first bank in Ethiopia was Bank of Abyssinia established in 1905 by the National Bank of Egypt and the Bank provides all banking activities including issuing notes and coins (Belai, 1987; Hmaza Abdurazke, 1988). In 1931, Bank of Ethiopia was established owned by the joint venture of government and Ethiopian nationals. The Bank was given the authority to act on behalf of the government to issue currency notes and coins but it didn't last long due to

the invasion of Italy. However, during this invasion time, there were many Italian banks doing business in Ethiopia (Belai, 1987).

After the eviction of the Italian colonial government, the State Bank of Ethiopia was established to perform the tasks of both the central and commercial bank. A new banking law was issued in 1963 that split the State Bank of Ethiopia into National Bank of Ethiopia acting as a central bank and Commercial Bank of Ethiopia providing commercial banking. The 1963 banking law also allowed for other commercial banks to operate, including foreign banks, provided they were 51% owned by Ethiopians, which allowed the establishment of Addis Ababa Bank, partially owned by Grindlays Bank (British owned) and other Ethiopian Nationals. There were also two foreign commercial banks: the Banco di Roma and the Banco di Napoli, which had eight branches and one branch respectively in 1975 (Mauri, 2003).

After the country adopted command economy during the Dergue Regime, all private ownership of banks were nationalized and incorporated under Commercial Bank of Ethiopia. Apart from this, government owned Agricultural and Industrial Development Bank (AIDB) and the Housing and Savings Bank were also operational. Following the change of the government in 1991, the economic policy of the government changed from command economy to market-led economy. The new economic reform allowed the involvement of private sector in the financial sector as a result private banks began to flourish starting from the first private bank, Awash Bank. However, the industry was closed to foreign operators until recently where the government has allowed the entry of foreign banks and is undertaking the necessary preparation.

Conceptual Framework of the Study

The conceptual framework tells us the relationship of among various variables, which is the base for the study. The Banking system of the country is regulated by a central bank, National Bank of Ethiopia, whose policies are expressed in terms of regulations, directives, and provision acts and are also shaped by the political, economic, and social contexts at national and global level. These policies have a paramount influence on the overall performance of the banking system, which can be explained in terms deposit mobilization, the attractions of borrowings, and the level of loan collection, and foreign exchange mobilization in terms of remittance, export proceedings, the attraction of foreign direct investment, and the like. The shade of the overall national context towards the performance of the banking system via regulation, rules, directives, and supervision can be easily observed if we are going to see the performance of the industry over the last two decades with special emphasis on foreign and local resource mobilization.

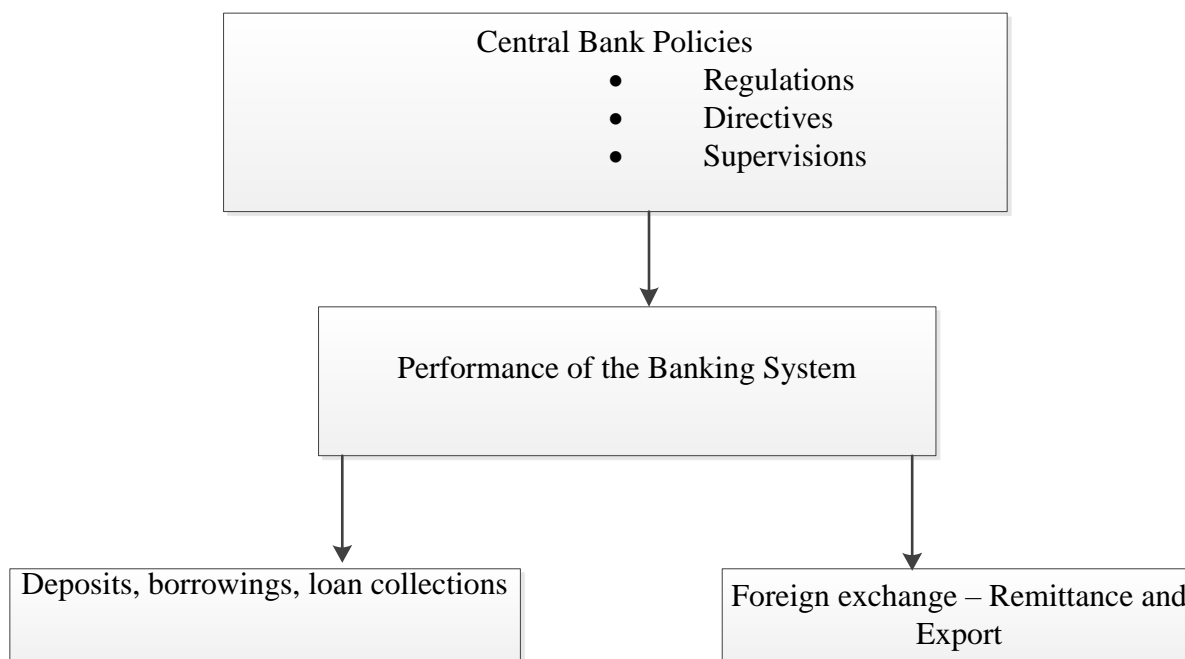


Figure 1: Conceptual Framework

Source: Authors

DATA AND METHODS

The study revolves around the banking system in Ethiopia, specifically the effect of the policy of the National Bank of Ethiopia on the banking system with due emphasis on resource mobilization. The research design adopted is a quantitative research where the historical data on the performance of the banking industry in resource mobilization over the two decades are collected and analyzed through descriptive statistics as well as multiple regression analysis. There are different variables that are considered in the study representing the public policies and the performance of the industry and these variables are categorized into dependent and independent variables.

The independent variables are highly related to regulation, directives, and their respective derivatives that affect the banking system. For the study, various banking regulations are considered such as branch expansion regulation, minimum capital regulation, remittance law, supervision directives, banking laws, regulation of credit management, foreign exchange management regulation, and other policies regulation and directives of the National Bank of Ethiopia. The effect of all these regulations and directives is reflected on certain macro-economic and bank level variables such as deposit interest rate, lending interest rate, exchange rate, inflation rate, nominal GDP, and number of bank branches. And these macro-economic and bank level variables are used as independent variables of the study. On the other hand, the dependent variables are the performance of the banking industry in terms of resource mobilization, which are deposit mobilization, loan disbursement, loan collection, value of export and value of foreign remittance as dependent variables.

As mentioned above, the study depends on the secondary data of the historical performance data of the banking industry starting from the fiscal year 1990/91 up to 2019/20. The data gathered is accurate because the performance of each bank go through successive verification by the different organs such as external auditors, shareholders and the regulatory organ. The performance data collected include deposits, borrowing, foreign exchange, collections, exports, remittance, and number of branches as well as interest rate, exchange rate, and inflation rate.

Since the study aim to examine the casual relationship between the public policy (through its derivatives) and the performance of the banking industry, a multiple linear regression model is used. The model is given by: $Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \varepsilon_i$, Where Y denotes the dependent variable and the independent variables are denoted by X_1, X_2, \dots, X_n while ε stands for the error term. Hence, the dependent variables (Y) in this study are given by Deposits, loan disbursement, loan collection, foreign currency remittance, and value of export, which are analyzed separately against the independent (explanatory) variables (X_1, X_2, \dots, X_n) given by deposit interest rate, lending rate, GDP, Inflation rate, exchange rate, and the number of branches. The given explanatory variables are believed to be the direct and indirect derivatives of the regulations, directives, and other policy instruments of the National Bank of Ethiopia.

Table 1: Expected relationship between variables

Dependent Variable	Independent Variables	Expected relationship
Deposit Mobilization	Deposit interest rate	+
	Number of bank branches	+
	Inflation rate	-
	Nominal GDP	+
Loan Disbursement	Ave. Lending rate	+/-
	Number of bank branches	+
	Loan collection	+
	Deposit mobilization	+
	Inflation rate	+
	Nominal GDP	+
Loan Collection	Ave. Lending rate	-
	Number of bank branches	+
	Inflation rate	+/-
	Nominal GDP	+
Value of Export	Ave. Exchange rate	+
	Ave. Lending rate	-
	Loan Disbursement	+
	Inflation rate	-
	Nominal GDP	+
	Number of bank branches	+
Amount of Foreign Remittance	Ave. Exchange rate	+
	Number of bank branches	+
	Nominal GDP	+
	Inflation rate	+/-

RESULTS AND DISCUSSIONS

This section discusses the performance of the banking industry and the implication of the public policies on deposit mobilization, borrowing, loan collection, foreign currency remittance, and export value.

The Performance of the Banking Industry

Here the trend analysis of the performance of the banking industry in deposit mobilization, borrowing, loan collection, foreign currency remittance, and export value over the period under review as well as certain macro-economic variables that are considered as derivatives of the public policies is presented.

The performance of the banking industry in deposit mobilization has shown an increasing trend over the past years from Birr 5.9 billion in the fiscal year 1992/93 to Birr 1 trillion in 2019/20. There was steady growth throughout 1992/93 – 2009/10 with a relative increase from 2005/06 onwards and the upward trajectory has begun to be exhibited starting from the fiscal year 2010/11. The entry of additional private banks into the industry, the increase in the number of bank branches, and the continuous economic growth can be considered as some of the main reasons behind the increase in deposit mobilization of the country.

The annual loan disbursement is used to measure the borrowings in the banking industry over the period under review, which has increased over the years from Birr 544 million in 1990/91 to Birr 199 billion in 2019/20. The trend in loan disbursement showed slow growth in the period 1990/91 to 2002/03 but it showed improvement in the period 2003/04 -2009/10, which shot up in the period 2010/11 – 2019/20. The increase in deposit mobilization and economic growth has contributed to the positive growth in loan disbursement in the industry. However, the policy of credit cap instituted by NBE to minimize the effect of inflation can be put forward as one reason for the decline notice in some years over the period.

Banks have the responsibility to collect the fund channeled as loans to different economic sectors to create a stable financial system. The performance of the banking industry in loan collection showed improvement over the years increasing from Birr 510 million in 1990/91 to Birr 162 billion in 2019/20. The trend in loan collection of the banking industry follows similar pattern with the loan disbursement. The continuous economic growth observed in the country coupled with NBE's policy on asset classification and provisioning has contributed to the growth in loan collection over the period under review.

The foreign remittance data in the period under review revealed that there is up and downs in remittance, with continuous growth in remittance from the period 1998/99 to 2008/09 while the period after 2008/09 observes a continuous downward trend in remittance until 2013/14, after which there were up and downs. The global financial crisis that occurred in 2008 can be considered the major turning point for the performance of the banking industry in remittance and it has taken a long time for the international economic condition to revive. The increase in the illegal foreign exchange market has also contributed much to the decline in remittance through formal banking channels. Over the years, the country's export proceeds have grown from USD 260 million in 1990/91 to USD 3 billion in

2019/20 although there were ups and downs over the period. There was relatively continuous export growth proceed up to the fiscal year 2013/14, however, the remaining years observe the decline in export proceeds in general with a sign of revival in 2019/20.

Over years, the number of branches in the industry has shown noticeable growth from 202 branches in 1995/96 to 6511 branches in 2019/20. The new private banks entering the market play their role in increasing the number of branches but the expansion from 2009/10 onward is a clear policy change from the government regarding financial inclusion. The trend in other policy derivatives considered in the study such as deposit interest rate, lending rate, exchange rate, and inflation rate is presented in the figure below.

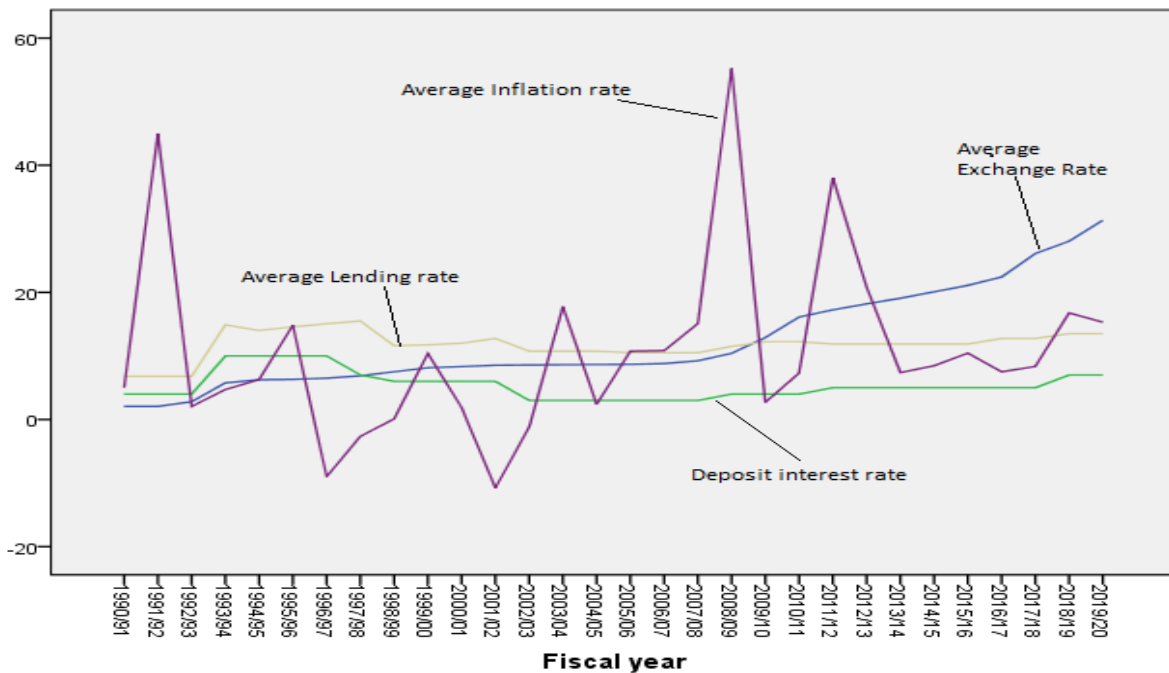


Fig. 2. Trends in Deposit and Lending Rate, Exchange Rate and Inflation Rate

Source: - NBE data

Results of the Regression Analysis

The result of the multiple regression analysis conducted on each of the dependent variables against the independent variables are presented as follows.

Deposit Mobilization

The independent variables considered for deposit mobilization were deposit interest rate, number of bank branches, inflation rate, and nominal GDP, but in the initial regression analysis through the “Stepwise” method, the variable “nominal GDP” is excluded. Hence, the remaining three factors are considered for further analysis and these factors are directly and indirectly affected by public policies targeting the banking system.

Table 2: Model Summary and ANOVA – Deposit Mobilization

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.996a	.993	.992	26714.567	.993	977.494	3	21	.000

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2092819720763.288	3	697606573587.763	977.494	.000b
	Residual	14987030305.418	21	713668109.782		
	Total	2107806751068.707	24			

a. Dependent Variable: Total Deposit of the Banking Industry

b. Predictors: (Constant), Inflation rate, Number of Branches of the Industry, Average Deposit rate

As can be seen in the model summary of the above table, the R square (or the coefficient of determination) is given by 0.993, which means that 99% of the variation in a dependent variable is explained statistically by the independent variables, which is accepted given the F value and significance level.

Table 3: Coefficients – Deposit Mobilization

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		1	(Constant)	-42067.453				
	Number of Branches of the Industry	156.508	2.984	.992	52.441	.000	.947	1.056
	Average Deposit rate	2840.366	2899.716	.019	.980	.338	.923	1.084
	Inflation rate	259.966	414.307	.012	.627	.537	.922	1.085

Among the three independent variables, only the coefficient of “number of branches” 0.992 (standardized beta) is statistically significant at a t-value of 52.4 with a significant level of 0.000 at 95% confidence interval. *This means that the existing data only support the effect of the number of branches on deposit mobilization while the effect of deposit interest rate and inflation are not supported. The result implies that the government’s policy change regarding branch expansion has positively impacted the deposit mobilization efforts of the banking industry.*

Loan Disbursement

The initial regression conducted on loan disbursement against average lending interest rate, number of bank branches, loan collection, deposit mobilization, Nominal GDP, and inflation rate through the “stepwise” method revealed that only the average lending interest rate and the number of bank branches remain in the analysis while the remaining factors were excluded.

The model summary shows that 97% of the variation in the dependent variable is explained by the independent variables with the F-value of 409 and a significance level of 0.000, and hence the regression model fits the data and the adjusted R square value is accepted.

Table 4: Model Summary and ANOVA – Loan Disbursement

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.987 ^a	.974	.971	9086.193	.974	409.199	2	22	.000

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67566058068.804	2	33783029034.402	409.199	.000 ^b
	Residual	1816296019.065	22	82558909.958		
	Total	69382354087.870	24			

a. Dependent Variable: Amount of Loan Disbursement of the Banking Industry

b. Predictors: (Constant), Average Lending rate, Number of Branches of the Industry

As seen from the table below, the standardized betas are given by 0.989 for the number of branches and - 0.011 for the average lending interest rate but the t-test conducted shows that only the coefficient of the number of branches is statistically significant at a significant level of 0.000 at 95% confidence interval. *This shows that the available data only support the number of branches to affect loan disbursement in the industry, which implies that the government’s policy of branch expansion has paid a dividend in positively affecting the loan disbursement endeavors of the banking industry.*

Table 5: Coefficients – Loan Disbursement

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		1	(Constant)	6214.389	16653.558		.373	.713

	Number of Branches of the Industry	28.327	1.015	.989	27.896	.000	.946	1.057
	Average Lending rate	-442.437	1381.583	-.011	-.320	.752	.946	1.057

Loan Collection

Through “stepwise” regression, nominal GDP was excluded and the other variables average lending interest rate, number of bank branches, and inflation rate were considered for further analysis.

Table 6: Model Summary and ANOVA – Loan Collection

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.997 ^a	.994	.993	3749.161	.994	1149.540	3	21	.000

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48474518963.795	3	16158172987.932	1149.540	.000 ^b
	Residual	295180395.581	21	14056209.313		
	Total	48769699359.376	24			

a. Dependent Variable: Amount of Loan Collection of the Banking Industry

b. Predictors: (Constant), Inflation rate, Number of Branches of the Industry, Average Lending rate

The adjusted R square of the analysis is given by 0.993, implying that 99% of the variation in the dependent variable is explained by the independent variables, which is confirmed by the F –test conducted with F-value of 1149.5 at a significance level of 0.000.

Table 7: Coefficients – Loan Collection

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-2629.981	7357.344		-.357	.724		
	Number of Branches of the Industry	23.739	.429	.989	55.298	.000	.901	1.110
	Average Lending rate	123.615	597.013	.004	.207	.838	.862	1.159
	Inflation rate	140.089	59.096	.043	2.371	.027	.892	1.121

As indicated in the above table, the coefficients of the regression are given by 0.989 for the number of branches, 0.04 for the lending rate, and 0.43 for the inflation rate but the t-test result showed that the coefficient of the lending

rate was not statistically significant. *This means that the existing data supported the effect of the inflation rate and the number of branches on the loan collection of the industry but the influence of the number of branches is much higher, which implies that the branch expansion policy of the government has a positive impact on loan collection.*

Value of Export

The average exchange rate, average lending interest rate, loan disbursement, inflation rate, Nominal GDP, and numbers of bank branches were considered as policy derivatives that may have effect on the value of export. Through the initial “stepwise” regression analysis, only the average lending rate and exchange rate were considered for further analysis as the remaining variables were excluded from the analysis.

The model summary shows that about 96% of the variation on the dependent variable is explained by the independent variables, which statistically significant with an F-value of 315.3 at a significance level of 0.000.

Table 8: Model Summary and ANOVA – Value of Export

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.979 ^a	.959	.956	6151698.578	.959	315.336	2	27	.000

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23866758358835684.000	2	11933379179417842.000	315.336	.000 ^b
	Residual	1021771675556863.200	27	37843395390994.940		
	Total	24888530034392548.000	29			

a. Dependent Variable: Value of Export of the Country

b. Predictors: (Constant), Average Lending rate, Average Foreign Exchange rate

As seen from the table below, the coefficients of the regression are presented as 1.011 for the foreign exchange rate and -0.108 for the lending rate. Both coefficients are statistically significant as indicated by the t-test with a significance level of 0.000 for both.

Table 9: Coefficients – Value of Export

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-3709173.595	6268735.551		-.592	.559		
Average Foreign Exchange rate	3769663.076	154645.289	1.011	24.376	.000	.885	1.130
Average Lending rate	-1438769.946	554525.802	-.108	-2.595	.015	.885	1.130

The result implies that both the foreign exchange rate and lending rate affect the value of the export proceeds of the country. Hence, the policy instrument to support exporters through the foreign exchange rate and the lending rate has an impact on the value of export.

Amount of Foreign Remittance

For purposes of this study, the average exchange rate, number of bank branches, Nominal GDP, and inflation rate were initially considered as factors that affect inward remittance. After going through the initial “stepwise” regression analysis, only the average exchange rate and inflation rate were considered for further analysis as the remaining variables were excluded from the analysis.

Table 10: Model Summary and ANOVA – Foreign Remittance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.927 ^b	.859	.846	1026725.177

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	134982354254043.050	2	67491177127021.520	64.023	.000 ^c
	Residual	22137456351542.360	21	1054164588168.684		
	Total	157119810605585.400	23			

a. Dependent Variable: Amount of Foreign Inward Remittance

b. Predictors: (Constant), Average Foreign Exchange rate, Inflation rate

The coefficient of determination of the regression is given by an adjusted R square of 0.846, which means that the independent variables explain about 85% of the variation in the dependent variable. The ANOVA analysis with an F-value of 64 and a significance level of 0.000 also showed that the model is statistically fit.

Table 11: Coefficients – Foreign Remittance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-999636.671	462073.996		-2.163	.042		
	Average Foreign Exchange rate	302017.393	29531.325	.864	10.227	.000	.941	1.063
	Inflation rate	34923.550	15796.458	.187	2.211	.038	.941	1.063

a. Dependent Variable: Amount of Foreign Inward Remittance

b. Predictors: (Constant), Average Foreign Exchange rate, Inflation rate

The coefficients of the regression are given by the standardized coefficients of 0.864 for foreign exchange and 0.187 for the inflation rate, both having a positive effect on inward remittance. The t-test also confirms that both coefficients are statistically significant with their t-significant level being below the confidence interval level of 0.05. *The result of the regression indicates that the data support the impact of both the foreign exchange rate and inflation rate on inward remittance but the magnitude of the exchange rate is much higher. Hence, the public policy on the exchange rate has positive implications to enhance inward remittance of the country.*

CONCLUSION AND POLICY IMPLICATION

In 1991, Ethiopia has made a shift in economic policy from command economy to market led economy and the government initiated various changes in the economic sphere including the financial sector that include the banking sector. Despite the improvements in the institutional structure of the banking system brought about by the reforms, the banking system is still very shallow and performs very little intermediation between savers and borrowers in the private sector. So far, research on the relationship between public policy and the banking system in Ethiopia with an emphasis on resource mobilization is not yet assessed. Thus, the principal objective of this study is to explore the effect of public policy (such as directives, regulations, and supervisions) of the National Bank of Ethiopia on the banking system in mobilizing resources mainly local deposit mobilization as well as foreign exchange resources.

Quantitative method of analysis through descriptive analysis and multiple regression was employed. The result of the study revealed that the banking industry has exhibited continuous growth in deposit mobilization, loan disbursement, loan collection, the value of export, and foreign inward remittance over the period under review. The analysis to examine the effect of policy instruments and other policy derivatives on the banks' performance indicates that the policy on *branch expansion* has a positive impact on deposit mobilization, loan disbursement, and loan collection. Similarly, the policy derivative of *inflation* influences loan collection and foreign inward remittance. Moreover, the *lending rate*, as a policy instrument, has influence the value of export of the country, whereas the *foreign exchange rate* has implications for both the value of export and foreign inward remittance.

The finding of the study revealed that the public policies issued by the National Bank of Bank more or less achieved their major targets manifested by increasing number of private banks, branches, savings mobilized, and funds

channeled to the economy, and overall contribution of the banking industry to the economic growth. The regression analysis also showed the effect of the macro-economic and bank level variables such as branch expansion, interest rate, inflation rate and exchange rate on the different aspects of resource mobilization of the banking industry. Based on the findings, the study recommends that the policy environment should be more flexible and farsighted in line with the changes in the global and national economic environment. Furthermore, the monitoring and supervision capability of the regulatory body should also be strengthened for successful implementation of the policies. Finally, sustainable development and sustainability is gaining momentum as a new development paradigm and the country should not lag behind in this aspect. Hence, the government, the regulatory body, and policy makers should give focus on sustainable banking by issuing appropriate policies as the banking system pay critical intermediary role in achieving sustainable development in the country.

REFERENCE

- Addission, T. & Alemayehu Geda (2001). Ethiopian's New Financial Sector and its Regulation. Discussion Paper No.2001/55. World Institute for Development Economics Research. UN University
- Admasu B. & Asayehgn D. (2014). "Banking Sector Reform in Ethiopia". *International Journal of Business & Commerce*. Vol. 3. No 8
- Alemayehu, G. Addison, T. & Getnet A. (2014). *The Current State of Ethiopia Financial Sector & its Regulation: What is New after a Decade and Half Strategy of Gradualism in Reform 2001 - 2017*. Unpublished, Department of Economics, Addis Ababa University
- Allen, F. & Carletti, E. (2012). "The Roles of Banks in Financial Systems". in the *Oxford Handbook of Banking* edited by Allen Berger, Phil Molyneux, and John Wilson, pp 37- 57, Oxford University Press.
- Anderson, J. E. (1994). *Public Policy-Making: An Introduction*. 2nd ed. Geneva, IL: Houghton Mifflin.
- Anselm, A. J. (2017), China's Efforts in Sustainable Development: A Test Case for Nigeria's Environmental Sustainability Goals, *Modern Economy*, 8, 770-790
- Barth, J.R., Caprio, G., & Levine, R. (2004). "Bank Regulation and Supervision: What works best?" *Journal of Financial Intermediation*.13, 205-248.
- Barth, J.R., Caprio, G., & Levine, R., (2006). *Rethinking Bank Regulation: Till Angels Govern* Cambridge University Press. New York
- Barth, J. R, Lin, C., Ma, Y. Seade, J. & Song, F. M. (2013)."Do Bank Regulation, Supervision, and Monitoring Enhance or Impede Bank Efficiency?" *Journal of Banking & Finance*. 37 (80), 2879-2892.
- Barth, J.R., Caprio, G., & Levine, R. (2013). "Bank Regulation and Supervision in 180 countries from 1999 to 2011". *Journal of Financial Economic Policy*, Vol. 5 No.2, pp.111-219.
- Basel Committee on Banking Supervision, (2010a). *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems*. Basel Committee on Banking Supervision, Basel.
- Basel Committee on Banking Supervision, (2010b). *Basel III: International Framework for Liquidity Risk Measurement, standards and monitoring*. Basel Committee on Banking Supervision, Basel.
- Beck, T., Demirguc-Kunt, A., Levine,R., (2006). "Bank Supervision and Corruption in Lending". *Journal of Monetary Economics*. 53, 2131-2163.

- Belai Giday (1987). *Currency and Banking: Ethiopia*. (s.n., Addis Ababa)
- Birkland, Thomas. (2001). *An Introduction to the Policy Process*. Armonk, NY: M.E. Sharpe.
- Central Bank of Nigeria (CBN) (2011), Annual Report. CBN, Abuja, Nigeria
- Chandra, S. M.C. & Sathiyabama, B. (2021) Designing Sustainable Banking Services: A Study of Indian Banks, *YMER*, Vol. 20, Issue 12
- Corelli, N., Goldberg, L.S. (2012). "Banking Globalization and Monetary Transmission". *Journal of Finance*. 67(5), 1811-1843.
- Davis, E.P. (2004), Financial Development, Institutional Investors, and Economic Performance; in ed. CAE Goodhart (ed), *Financial Development and Economic Growth*, Palgrave Macmillan, New York
- Deresa, G. D., Maria, F.F. & Tangl, A. (2022), Greening Bank Financial Innovation for Better Financial Performance. Evidence from Ethiopia, *Economics & Working Capital*, 1 -2 issue
- Dye, Thomas R. (1987). *Understanding Public Policy*. 6th ed. Prentice-Hall.
- Djankov, S., La Porta, R., Lopez-De-Silanes, F. & Shleifer, A. (2002). "The Regulation of Entry". *The Quarterly Journal of Economics*. Vol. 17, No.1, pp. 1-37.
- Dzebo, A. & Shawoo, S. (2023), Sustainable Development Goal interactions through a climate lens: A Global Analysis, SEI report, Stockholm Environment Institute, Stockholm, Sweden
- Eyestone, Rober. (1971). *The Threads of Public Policy: A Study in Policy Leadership*. Indianapolis: Bobbs-Merill.
- Fekadu, Degife. (2017). *The Long-run Linkage between National Saving and Investment in Ethiopia*. Birrittu, No. 124, National Bank of Ethiopia, pp10-19.
- Habtamu B. A. (2013). "Financial Performance of the Ethiopian Banking Sector". *International Journal of Science and Research (IJSR)*.
- Haidar, H. M. (2021), Historical Perspectives and the Emergence of the Sustainability Concept in Organizations, *Open Journal of Business and Management*, 9, 2277-2298
- Hamza Abdurezak (1988) "*Monetary Institutions and Policy in Ethiopia: An Outline of Historical Inclusion*" (mimeo, Addis Ababa University).
- James, C. (1996, October) *RAROC Based Capital Budgeting and Performance Evaluation: a case study of Bank Capital Allocation*. Working Paper presented at the Wharton Financial Institutions Center on Risk Management in Banking
- Jeucken, M. (2001). *Sustainable Finance and Banking: The Financial Sector and the Future of the Planet* (1st ed.). Routledge. <https://doi.org/10.4324/9781849776264>
- Kouki, M. & Mabrouk, L. (2016), "Bank Governance, Regulation, and Risk Taking: Evidence from Tunisia", *International Finance and Banking*, Vol. 3, No. 2
- Kraft, M.E. & Furlong, S. R. (2003), *Public Policy: Politics, Analysis, and Alternatives*, 1st edition, Sage CQ Press
- Levine, R. (1997). "Financial Development and Economic Growth: Views and Agenda". *Journal of Economic Literature*, 35, 688-726.
- Levine, R. (2005). "Finance and Growth: Theory and Evidence". In: Aghion, P Durlauf, S. (Eds.), *Handbook of Economic Growth*. North-Holland Elsevier publishers, Amsterdam.

- Mauri, A. (2003). "Origins and Early Development of Banking in Ethiopia". Working Paper N.04.2003 Marzo Dipartimento di Economia Politica e Aziendale Università Degli Studi di Milano via Conservatorio, 7 20122 Milano.
- Mekonen, H. & Melese, A. (2014). "Financial Regulation & Supervision in Ethiopia". *Journal of Economics & Sustainable Development*, Vol. 8, No. 17.
- Mir, A. A. & Bhat, A. A. (2022), Green Banking and Sustainability – A Review, *Indi Arab Gulf Journal of Scientific Research*, Vol. 40 No. 3, 2022 pp. 247-263 Emerald Publishing Limited.
- Ozil and Outa (2017). "Bank Loan Loss of Provisioning Research: A Review". *Borsa Istanbul Review*, 17-3(2017), 144-163
- Quintyn, M. & Taylor, M.W. (2002). Regulatory and Supervisory Independence and Financial Stability (IMF working paper no 02/46)
- Shleifer, A. & Vishny, R. (1998). *The Grabbing Hand: Government Pathologies and Their Cures*. Harvard Univ. Press, Cambridge M.A.
- Stigler, G., (1971). "The Theory of Economic Regulation", *Bell Journal of Economics and Management Science*. Vol. 2, pp. 3-21
- Tesfaye Boru (2014). "Efficiency in Ethiopian Banking Systems: an Application of Data Envelopment Analysis". *European Journal of Business and Management*, Vol. 6, No. 23
- Vo, X. V. (2018) "Bank Lending Behavior in Emerging Markets". *Financial Research Letters*, Vol. 27, pp.129-134.
- Wilson, Richard (2006). "Policy Analysis as Policy Advice." In the *Oxford Handbook of Public Policy* ed. Michael Moran, Martin Rein, and Robert E. Goodhin, 152-168. New York: Oxford University Press.
- Zerayehu, S., Kagne, W. and Teshome, K. (2013). "Competition in Ethiopia". *African Journal of Economics*. Vol. 1(5), pp. 176-190.

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