POLAC INTERNATIONAL JOURNAL OF ECONOMICS
AND MANAGEMENT SCIENCE (PIJEMS)
DEPARTMENT OF ECONOMICS AND MANAGEMENT SCIENCE
NIGERIA POLICE ACADEMY, KANO

IMPACT OF FINANCIAL REPRESSION ON ECONOMIC GROWTH OF AFRICA

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Abstract

Financial repression is a common policy that governments use for several reasons especially in the developing countries of Africa. The study investigated the impact of financial repression on economic growth of African countries between 1995 and 2021. The study was conducted using panel datasets obtained from the World Development Indicators of the World Bank. The data were analyzed using the dynamic panel data estimation technique of System GMM. The result of the study reveals that interest rate, bank liquidity ratio and inflation were found to have a negative impact on economic growth of African countries. On the other hand, interests on deposit have positive and significant impact on economic growth of African countries. The study concludes that repressive financial policies have a negative impact on economic growth of African countries. The study recommends that the monetary authorities should ease the financial repression and raise deposit interest rate or liberalize interest rate. It also recommends that African countries to engage in gradual financial liberalization with a minimal repressive policy on restrictions such as capital account and entry into the financial sector, the government should oversee the financial liberalization process.

Keywords: Financial Repression, Economic Growth, Interest Rate, Bank Liquidity Ratio.

JEL Classification Codes: G28, O40, E43, G21

1. Introduction

Financial repression has been a common experience for many countries around the world at some point in their recent history. These practices were widespread following World War II, when numerous developed economies subjected their financial systems to repression on a large scale as a means of "liquidating" their substantial postwar debts through negative real interest rates (Reinhart & Sbrancia, 2015)

financial repression refers to government regulations, laws, and other non-market restrictions that prevent financial intermediaries from operating at full capacity. Relevant policies include interest rate ceilings, high bank reserve requirements, liquidity ratio requirements, capital controls, restrictions on market entry into the financial sector, credit ceilings or restrictions on the direction of credit allocation, and government ownership or domination of banks (Stijin, 2005)

Most developing nations have utilized financial repression to generate revenue for public spending at some point. These policies impose implicit taxes on domestic financial activities, helping the government satisfy its budget needs over time (Giovanni & Melo, 1993). Financial intermediaries play a crucial role in accelerating economic growth by collecting savings and channeling funds to borrowers (Mishkin, 2004). However, the financial sectors in less developed countries are characterized by inefficient services and mismanagement due to financial repression. In developing nations, the financial sector is typically

directed by the government rather than market forces due to a desire for stimulus spending, fear of instability, and perceived market failure (Chowdhury, 2010)

While there is consensus that financial liberalization boosts long-term economic growth, less developed country governments continue to repress their financial sectors because, without intervention, their financial systems would not cooperate in development efforts. Governments intervene extensively in the financial sector to divert large funds to priority sectors like industry, state-owned enterprises and small and medium-sized businesses (Raju, 1999). There are theories that suggest a positive relationship between financial repression and economic growth through its impact on government expenditure. The key reason for governments to implement repressive financial policies is to control fiscal resources. By directly controlling the financial system, the government can channel funds to itself without legislative procedures. Additionally, through regulations on entry and activity in the banking sector, the government can create monopolies and capture rents to finance its budget deficit (Beim & Charles, 2001)

According to Chen (2015), financial reform policies can unleash growth by improving capital efficiency when adopted gradually. However, barriers to financial markets may persist in the short term. While others argue that it is better to regulate and repress the sector because financial reform can lead to financial crises (Arnaud & Adalbert, 2003). Additionally, financial repression coupled with closed capital accounts has contributed to China's economic growth (Oster & Brand, 2015). Empirical studies also suggest that financial repression may negatively impact economic growth. Theorists argue that a repressed financial sector discourages both saving and investment because returns are lowers than in competitive markets, thereby impairing economic growth. Research has found that around 30% of Bangladesh's financial distortions stem from repression. Furthermore, repressed finance coupled with persistent inflation is harmful to an economy (Sanaz & Javad, 2012).

The signals of a global comeback in financial repression measures, which could be made worse by the 2007–2008 global financial crisis and the COVID–19 problem that affected the entire world, are what sparked attention in this topic. Additionally, it was noted that less developed nations, particularly those in Africa, have different financial systems than other nations, notably developed nations. A country's economic growth is slowed because, according to research, the financial system's growth has not been expanding over time by a considerable percentage. The study's goal is to examine the effects of financial restraint on economic growth in African nations between 1995 and 2022. It concentrates on fewer financial restraint indices, such as interest rate ceilings, which are imposed by the government. The paper is structured into various sections consisting of introduction, literature review, methodology, results, conclusion and recommendations.

2. Literature Review

2.1 Conceptual Issues

Financial repression was characterized by Reinhart (2012) as the government's use of various tools to create income or address market imperfections. Like targeted lending, explicit or implicit interest rate caps, capital mobility regulation, and generally tighter ties between the government and banks, either explicitly through public ownership of some banks or implicitly through its knock-on effect using the monetary authorities as a weapon to handle its excess debt. As a result, there are numerous ways that financial repression manifests. Major examples include: directed lending (mandatory instructions to banks to allocate a minimum amount of loans to specific beneficiaries), high reserve requirement, restrictions on international capital movements, and entry restrictions. Interest rate controls (ceilings or, less frequently, floors on bank lending and deposits rates) are another important category.

2.2 Empirical Review

Several studies have been conducted on the impact of financial repression on economic growth. Prominent among these are the studies of Huang and Wang (2010), Kamal (2012), Mansouri, Samadi and Torkammi (2013), Feridun and Nejad (2013), Ati (2015), Aragaw (2016)

Oluleye (2017) and Jafarov, Maino, and Pani (2019), Calice, Kalan and Maseti (2020), and Wu, Xu and Yan (2022)

Using Dynamic Stochastic General Equilibrium (DSGE) model, Wu, Xu and Yan (2022) examined financial repression, SOE Reform and fiscal monetary policy coordination in China. The study discussed the interaction and optimal combination of fiscal and monetary policies when the model features SOE monopoly and financial repression. The study found that under current situation, fiscal policy should play a bigger role in stabilizing output, while monetary policy ought to pay more attention to combatting inflation. Although private firms' limited access to credit can be attributed to financial repression and SOE monopoly, financial repression is a second-best policy, in that it promotes SOE's output via cheap credit when SOEs behave like monopolists. This offsets the efficiency loss associated with monopoly.

In another study conducted by Calice, Kalan and Maseti (2020), the study examined interest rate repression on economic growth of countries. The study focuses on one of the most commonly used strategies of financial repression, using 108 countries. Data were collected through survey and used to provide a preliminary estimation of the degree of bindingness of interest rate controls and to calculate a pair wise correlation with other financial policies. The result reveals that the degree of bindingness of lending IRCs is associated with other financial repression policies. Pairwise correlations suggest that the relative bindingness of real lending ceilings is associated with a higher share of state-owned commercial banks, which governments can use to direct credit, and more stringent de jure capital controls, which can be used to influence the size and composition of capital flows. Correlations become stronger, including for other proxies of financial repression, when lending ceilings that are determined relative to a market benchmark are excluded from the sample.

Jafarov, Maino, and Pani (2019), examined financial repression is knocking at the door, again; should we be concerned? The principal variable used in the analysis was an index of "interest rate controls" (IRC) representing the presence, and importance, of administrative or legal controls on the interest rates that commercial banks apply to the deposits and loans of their customers. The index includes annual data for 90 economies7 over 45 years, from 1973 to 2017. The results suggest that, over time, countries would be better-off without financial repression. Specifically, interest rate restrictions reduce growth by about 0.4-0.7 percentage points, with the effect being larger in economies with larger financial systems. However, they also found that a full liberalization is necessary to significantly increase growth, and changes in interest rate restrictions short of full liberalization have a limited impact.

Oluleye (2017) examined the Implications of financial repression on economic growth: evidence from Nigeria. This study set out to examine the effects of financial repression on economic growth using Nigeria's data and adapted form of McKinnon (1973) and Shaw (1973) models. McKinnon (1973) and Shaw (1973) found that financial repression retards economic growth. Their study found that they were right, that interest rate regulation and control negatively affect investment as low interest rate will discourage savings thereby depriving investment the needed funded and hence retard economic growth.

Aragaw (2016) examined Financial Repression - Economic Growth Nexus in Ethiopia: Evidence from Multivariate Analysis. The study examines empirically the short run and long run relationships and the causality between financial repression proxies and economic growth, utilizing time series data over the period 1980 to 2015 in Ethiopia. Bound test of co integration and estimation of short run and long run relationships, based on ARDL model frame work and Toda Yammato causality test based on VAR model were employed. The ARDL bound test suggests that there is a long run relationship between financial repression proxies and economic growth. The long run estimates also suggest that there is a positive significant effect of financial repression proxies on economic growth. While in a short-run there is statistically negative significant effect of financial repression proxies on economic growth but the magnitude is lower. Unidirectional and bi-directional

causalities also found from financial repression proxies to economic growth.

In a study conducted by Ati (2015), which examined financial repression; the always presumed guilt from 1986 to 2006 of 16 countries. He employed the use of panel least squares and found that policies of financial liberalization, which is imposed after a quarter century of economic development, has yielded mixed results. In effect, this new approach is unable to find a definitive and precise therapeutic, necessary for the stability and the development of the financial system. To share these conditions, financial liberalization has become more and more binding and risky.

Mansouri, Samadi, and Torkamani, (2013) explored the effect of financial repression on decomposed element of economic growth in Iran using a data ranging from 1962 to 2007. They suggest that, financial repression has negative effect on the decomposed element of economic growth (agricultural sector growth). For the guys required reserve ratio which is considered as proxy for repression measures has negative magnitude which shows their unhealthy relationship.

In another study in Iran, Feridun and Nejad (2013) investigated "Financial development under financial repression: the case of Iran". The study investigated the determinants of financial development in Iran to assess whether financial repression has a significant impact on financial development using annual data spanning the period between 1965 and 2006 using Autoregressive Distributed Lag (ARDL) bounds testing procedure and Error Correction Models (ECM). The results suggest that trade openness, savings and economic growth have a positive impact on financial development. On the other hand, composite financial repression index has a negative impact on financial development, which suggests that repressive financial policies have a negative impact on financial development process.

Kamal, (2012) examined financial development, financial repression, and growth in developing economies. The study used panel approach and a unique proxy for financial repression that is the ratio of currency outside the banking system to real output (CB). This proxy is unique in that it is related to the degree of financial repression, and thus relates differently to economic growth depending on the level of financial development. The study found that CB relates negatively to growth in countries that are less financially liberalized and positively with growth in countries that are more financially liberalized.

Huang and Wang (2010) examine the impacts of financial repression on economic growth during China's reform by period using both time series and provincial panel data. The aggregate financial repression index suggests that China's financial liberalization has been nearly half way through. Empirical estimation confirms that repressive policies held down GDP growth by 3.0-3.6 percentage points in 1978 and by 1.7-2.1 percentage points in 2008. Various robustness checks validate these findings. Financial repressions hurt growth probably through inhibition of financial development. Specifically, they found out that state sector's share of bank loans and capital account controls have the greatest impacts on economic growth, while those of interest rate and reserve requirement regulations are important but relatively more modest in magnitudes.

2.3 Theoretical Framework

McKinnon and Shaw Theory of Repression

Ronald McKinnon (1973) and Edward Shaw (1973) were the first to explicate the notion of financial repression. While theoretically, an economy with an efficient financial system can achieve growth and development through efficient capital allocation, McKinnon and Shaw argue that historically, many countries, including developed ones but especially developing ones, have restricted competition in the financial sector with government interventions and regulations. According to their argument, a repressed financial sector discourages both saving and investment because the rates of return are lower than what could be obtained in a competitive market. In such a system, financial intermediaries do not function at their full capacity and fail to channel saving into investment efficiently, thereby impeding the development of the overall economic system. Theoretically, financial repression is perceived to have a number of

macroeconomic consequences (Mckinnon, 1973).

First, in the developing countries financial context money is held as a store of value rather than for transaction purpose. As a result low interest earning from saving due to financial repression depresses private saving. This reduction in saving also directly reduces physical investment and thereby decreases economic growth. Second, such repressed financial market may give the path for the introduction of informal financial sectors to meet the existent demand with their inefficient service and evil practice of usury as an alternative vehicle for saving. The McKinnon (1973) model rests on the basic assumption that the higher the real interest rate, the greater will be the accumulation of money balances and the larger will be inducement to invest.

3. Methodology

3.1 Data and Source

The study employed the use of panel data covering the period (1995-2022). The data were obtained from world development indicator of the World Bank. The choice of the period of coverage in this study is subjective solely decided by the data availability. The dependent variable is the Gross Domestic Product (GDP), the independent variables are interest rate (IRT), Deposit Interest Rate (DIR), Bank Liquidity Ratio (BLR), and Inflation rate (INF).

3.2 Method of Data Collection

Model Specification

The model used to examine the impact of financial repression on economic growth of Africa is expressed as:

$$GDP = GDP_{t-1} + \log\beta_1 IRT_{it} + \log\beta 2 DIR_{it} + \log\beta_3 BLR_{it} + \log\beta_4 INF_{it} + \mu_{it} \quad (1)$$

Where; GDP= Gross Domestic Product

IRT= Real Interest Rate

DIR= Deposit Interest Rate

BLR= Bank liquidity ratio, and INF= Inflation rate

INF= Inflation rate

3.3 Method of Data Analysis

The Generalized Method of Moment (GMM) is the method for constructing estimators analogous to Maximum Likelihood (ML). GMM use assumption about specific moment of the random variable instead of assumption about the entire distribution, which make GMM more robust than ML, at the cost of some efficiency. These assumptions are called moment conditions. GMM generalizes the method of moment (MM) by allowing the number of moment conditions to be greater than the number of parameters. Using theses extra moment conditions makes GMM more efficient than MM. however, when there are moment conditions than parameters, the estimator is said to be over-identified. GMM can efficiently combine the moment conditions when the estimator is over identified (Drukker & Pinzo, 2015).

A typical panel data model is expressed as;

$$yit = \alpha + Xit\,\beta + uiti = 1, \ldots, N;\ t = 1,\ldots, T \quad (2)$$

with *i* denoting households, individuals, firms, countries, etc. and *t* denoting time. Th *i* subscript, therefore, denotes the cross-section dimension whereas t denotes the time-series dimension whereas *t* denotes time-series dimension. α is a scalar, β is $K \times 1$ and *Xit* is the *it*th observation on *K* explanatory variables. Most of the panel data applications utilize a one way error component model for the disturbances, with

$$uit = \mu i + vit \quad (3)$$

where μi denotes the unobservable individual-specific effect and *vit* denotes the remainder disturbance.

Dynamic relationships in panel data analysis are characterized by the presence of the lagged dependent variable;

$$yit = \delta yi_{,t-1} + x'_{it}\beta + uiti = 1,\ldots, N;\ t = 1,\ldots, T \quad (4)$$

The Arellano-Bond estimator is a GMM estimator used to estimate dynamic panel data models. This method was proposed by Arellano Manuel and Bond Stephen in 1991 (Arellano and Bond, 1991). The GMM-SYS estimator is

a system that contains both levels and first difference equations. It is an alternative for the standard first difference GMM estimator. The original estimator is often entitled difference GMM, while the expanded estimator is commonly termed System GMM. The cost of the System GMM estimator involves a set of additional restrictions on the initial conditions of the process generating (Baum, 2013). Therefore, because of the superiority of the System GMM estimator, it was adopted in this study over the difference GMM estimator

4. Results and Discussions

The result of the system GMM are presented in a tabular form to show the one step system GMM result and the two-step system GMM result and the two-step system GMM with robust standard errors. The result of the post estimation tests associated with GMM analysis; which is the Sargan test of validity of instruments and the Autocorrelation tests are also presented in the table.

Table 1;

Result of System GMM estimation for financial repression on economic growth of Africa (1995-2022).

Variables	**One step System GMM**	**Two step System GMM**	**Two step System GMM with robust standard errors (SE)**
$LGDP_{t-1}$	0.8988937*	0.8989508***	0.8989508
IRT	0.018513***	-0.01484012***	-0.01484012
DIR	0.129336**	0.1209524***	0.12952403
BLR	0.0219***	-0.02749***	-0.0274986
INF	0.0032944	-0.0313464***	-0.0313464
Sargan test P-value	374.4678 0.0000	27.02242 1.0000	- -
AR (1) P-value	- -	-2.8325 (0.0046)	0.04278 (0.9619)
AR (2) P-value	- -	-1.4765 (0.1398)	-0.02381 (0.9810)
N	53	53	53
T	27	27	27

Source: Author's computation using STATA 12, 2023.

Note: The variables are defined as follows: GDP =Gross Domestic Product; IRT= Interest rate; DIR= Deposit interest rate; BLR= Bank liquidity ratio; INF= Inflation rate. ***, ** and * indicate significance at 1%, 5% and 10% respectively.

Based on the result of the system GMM estimation for the impact of financial repression on economic growth of African countries, the two-step result is more efficient than the one step result as the Sargan test of validity of instruments suggests. Based on the two-step result summarize in table 1, the lagged dependent variable (GDP_{t-1}) has a positive and statistically significant impact on economic growth of African countries. The coefficient of the lagged dependent variable being 0.8989508 suggests that the lagged values of the dependent variable accounts for about 89% increase in economic growth of African countries. The coefficient of interest rate (IRT) being -0.01484012 suggests that a 1% increase in interest rate of African country will lead to 1.48% decrease in economic growth of African countries. The coefficient of deposit interest rate (DIR) being 0.129524 suggests that a 1% increase in deposit interest rate of African countries will lead to 12% increase in economic growth of African countries. The coefficient of bank liquidity ratio (BLR) being -0.02749 suggests that a 1% increase in bank liquidity ratio will lead to 0.2% decrease in economic growth of African countries. The coefficient of inflation rate (INF) being -0.031344 suggests that a 1% increase in inflation of

African countries will lead to 0.3% decrease in economic growth of African countries.

The result of validity of instruments (Sargan test) being 27.02242 with a probability value (1.0000) suggests that the instruments are valid. Similarly, the results of the autocorrelation test AR (1) and AR (2) being -2.8325 (0.0046) and -1.4765 (0.1398) suggests that there is no autocorrelation among the residuals in the model.

4.1 Discussion of findings

The study found a negative impact of interest rate on economic growth of Africa. This result is consistent to the findings of Huang and Wang (2010) who found out that a repress interest rate held down the GDP growth by 3.0-3.6 percentage points. On the other hand, Deposit interest rate was found to be positive and have significant impact on economic growth. This is consistent to the findings of Aragaw (2016) who found out that there is positive relationship between financial repression proxy (interest on deposit) on economic growth, the higher the interest rate, the more willing people are to save their money rather than hold it, these savings will make more funds available for investment. In the same vein, lower interest rate will induce people to hold their money in cash rather than save it which will deprive investment the needed. Inflation on the other hand was found have a negative but insignificant impact on economic growth. This is consistent with the findings of Islam (2008) whose result reveals that financial repression measured by inflation tax has a negative effect on economy of Bangladesh.

5. Conclusion and Recommendations

The result of the study reveals that interest rate, bank liquidity ratio and inflation were found to have a negative impact on economic growth of African countries. On the other hand, interests on deposit have positive and significant impact on economic growth of African countries. The study concludes that repressive financial policies have a negative impact on economic growth of African countries.

The study makes the following recommendations in line with the findings of the study;

i. It is recommended that the monetary authorities should ease the financial repression and raise deposit interest rate or liberalize interest rate.

ii. It is recommended that African countries to engage in gradual financial liberalization with a minimal repressive policy on restrictions such as ceilings on interest, high reserve requirement, the government should oversee the financial liberalization process.

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