

Financial Deepening and Economic Growth in Zambia

Yordanos Gebremeskel* and Malizyani Chilanga

Department of Economics, Mulungushi University, Zambia

ABSTRACT

A strong financial system with a wide range of financial services has an impact on economic growth and development. In this paper, we examine the effects of financial deepening on Zambia's economic growth using data from 1986 to 2017. Financial deepening is approximated by domestic credit to the private sector as a ratio of GDP (DCPY), liquid liabilities as a ratio of GDP (LLY), and financial system deposits as a ratio of GDP (FSD). We use bound test approach to co-integration that justified the use of the Autoregressive Distributed Lag (ARDL) model. The study found that DCPY had an insignificant effect in the short-run but a significant negative effect in the long-run, whilst the variables LLY and FSD had insignificant effects in both the long-run but their two previous values had significant effects in the short-run. LLY's values had positive significant effects while FSD's values had negative significant effects. Therefore we concluded that there is weak link between financial deepening variables and GDP growth rate in Zambia.

*Corresponding author

Yordanos Gebremeskel, Department of Economics, Mulungushi University, Zambia.

Received: December 20, 2022; **Accepted:** December 26, 2022; **Published:** December 31, 2022

Key words: Financial Deepening, Economic Growth, Zambia

Introduction

There is ongoing discussion over the influence of financial deepening on economic growth; some believe it to be small, while others believe it to be significant. According to Ndebbio [1]. Economic growth will be attained when financial deepening is combined with employment and investment. Financial sector development has been a driver of economic growth as it indirectly lessens poverty and inequality, while suitable financial services for the poor have boosted their welfare [2]. Therefore, a developed financial system is a genuine way to enhance economic growth and development because of its ability to ensure improvement in the provision of efficient services, creation of saving opportunities and acceleration of the capital of creation amongst the poor [3].

Financial deepening is a term widely used by economists to refer to increasing provision of financial services with a wider choice of services geared to all levels of society whether through the formal banking sector or through informal channels. It is an increased ratio of money supply to gross domestic product (GDP) [4]. Financial depth is often understood to mean "the size of banks, other financial institutions and financial markets taken together and compared to a measure of economic output" (World Bank, 2016). When the supply of financial assets increases in an economy, their variety of quality widens, new borrowers participate in the financial sector, and the financial system develops further [4]. Therefore, development of the financial system creates a feedback effect between financial and real development along with international integration. So, domestic financial deepening is strongly related with both higher investment and faster productivity growth (World Bank, 1997). The more liquid money is accessible in an economy, the more chances exist for continual growth. Financial deepening stimulates higher investments, faster growth and more rapidly

rising living standards [5]. The financial deepening indicators are provision of financial services across level of society and the growth per capital of real cash in hand.

The history of financial deepening in Zambia is linked to the political economy. It dates back to the period after independence when the government adopted a state-led development process in which most major institutions, including financial institutions were nationalized. At independence in 1964, the Zambian financial sector was dominated by foreign owned banks namely Barclays Bank, Standard Chartered Bank, the National and Grindlay's Bank, and the Netherlands Bank of South Africa. These banks primarily served the interests of foreign corporate entities. In order to correct the imbalance, after independence, the government established a number of financial institutions to serve the interests of the local population in need of small and medium scale financial services. By 1969, the Zambian Government established the Zambia National Commercial Bank and the National Building Society for the sole purpose of meeting the banking needs of indigenous Zambians in both urban and rural areas [6]. Zambia National Commercial Bank was the only Zambian owned commercial bank in the country. It was incorporated on the 21 August 1968. The state owned more than 99% of shareholding in the bank while private Zambian individuals owned the rest of the shares [7]. Other additions since 1964 included Citi Bank and the Bank of Credit and Commerce [8].

In line with the goal of improving the country's financial system, the government came up with financial sector strategies such as the financial sector development program (FSDP), the capital market development strategy and the rural finance program. The key objectives outlined included restoration of economic growth and macro-economic stability, deepening of the financial markets as well as deepening and broadening the non-bank financial sector

to achieve a more balanced financial structure that promotes competition [9]. The government also opted to establish an insurance sector that would adequately protect business and individuals from catastrophic events as well as a pension system that would provide a secure retirement. In order to strengthen and manage financial sector regulators, legal, accounting and auditing systems were enhanced and proper mechanisms were put in place to prevent and detect money-laundering activities through market discipline and transparency in the conduct of financial institutions [9]. These developments in the financial sector have not only increased competitiveness but also improved financial access and inclusion across the country. The country has made remarkable progress in financial inclusion. This has been witnessed by an increased proportion of adult's with financial access from 37.3 percent in 2009 to an impressive 59.3 percent in 2015. Despite the fact that the economy was growing in the early 2000's, a weak financial sector, has been exhibited visibly in Zambia with the majority of money in the economy residing outside the banking system. The problem of having a weak financial sector has consequently been a foremost economic challenge which has received the attention of various governments over the past decades. The main objective of this paper is to determine whether financial sector development has affected growth or whether growth has affected financial sector development positively through increased credit to the financial sector, growth of the financial sector or by increased deposits to the financial system by financial intermediaries.

The rest of the study is organized as follows. The literature from Zambia and other developing nations is briefly covered in the next section. Section 3 describes our data, definition of variables used, and methodology. Our findings are presented in Section 4, and a discussion of the results is covered in Section 5. Section 6 finally concludes.

Related Literature

Several empirical studies have attempted to look into the relationship between financial deepening and economic development or growth, however the results vary widely among countries. Their research is not just restricted to the role that financial deepening plays, but also to investigate if there are either unidirectional or bidirectional linkages. Some studies, particularly those focused on Zambia and other developing nations, include Apergis et al, Adu et al, (Odhiambo, Chileshe Pal, Samargandi et al, Thornton, among others [7, 10-15].

Findings from Apergis et al. [10]. provide evidence in favor of the existence of a single long-run equilibrium relationship between financial depth, economic growth, and a group of control variables. Additionally, there is evidence of a causal relationship between financial deepening and growth in both directions. In his study on Zambia, Odhiambo found a bidirectional relationship between financial sector development which is measured as a ratio of broad money supply to GDP and poverty reduction [12]. Chileshe, using Zambia data 1965 – 1998, found that that the development of a financial system has an indirect effect on economic growth [7]. A more recent paper from Zambia, Pal, concluded that a high level of financial deepening is a necessary condition for accelerating growth in an economy [13].

Based on 52 middle income nations, Samargandi et al, [14]. Demonstrate that there is no substantial association between financial development and economic growth in the short term but a U shape in the long run. According to research by Adu,

Marbuah, and Mensah on financial development and economic growth in Ghana, the results vary depending on the indicator used to measure financial development's impact on growth [11]. Financial deepening does not significantly affect economic growth, according to data from 22 developing economies in Asia, Latin America, and the Caribbean, according to Thornton [15].

Data and Methodology

Our study is based on a time series of financial and macroeconomic indicators data from Zambia for the years 1986 to 2017. Data was collected from annual financial reports of the Bank of Zambia (BoZ), Zambia Statistics Agency publications (ZAMSTATS), the World Bank (WB) and the Global Economy. The dependent variable growth rate of GDP is measured at market prices based on constant local currency. The independent variables are Domestic credit to private sector (% of GDP); Liquid liabilities to GDP; and financial system deposits to GDP (%).

Private credit refers to the financial resources provided to the private sector by domestic money banks as a share of GDP. On the other hand Liquid liabilities encompasses the sum of 'currency and deposits in the central bank (M0); transferable deposits and electronic currency (M1); time and savings deposits, foreign currency transferable deposits, certificates of deposit and securities repurchase agreements (M2); traveler's checks, foreign currency time deposits, commercial paper, and shares of mutual funds or market funds held by residents'. Finally, financial system deposits to GDP represents demand, time and saving deposits in deposit money banks and other financial institutions as a share of GDP [16].

Our model followed the form by Ghildiyal, et al (2015):

$$GDPGR = \alpha + \beta_1 DCPY + \beta_2 LLY + \beta_3 FSD + \mu t$$

Where GDPGR is GDP growth rate per capita, DCP is Ratio of Private Credit to GDP, LLY is Ratio of Liquid Liabilities (M3) to GDP, and FSD is Ratio of Financial System Deposits to GDP.

Results

Descriptive Statistics

The descriptive statistics below have been used to provide information on the measures of central tendency and dispersion, to find out if there any outliers and to check for normality of the individual variables namely; Gross Domestic Product Growth Rate (GDPGR), Ratios of Domestic Credit to the Private Sector, Liquid Liabilities (LLY) and Financial System Deposits (FSD) to GDP.

Table 1: Descriptive Statistics

	GDPGR	DCPY	LLY	FSD
Mean	4.167992	10.83344	19.60781	15.98750
Median	4.674091	9.855000	18.13000	15.82500
Maximum	10.29822	19.76000	34.66000	22.88000
Minimum	-8.625442	5.570000	13.87000	9.290000
Std. Dev.	3.887241	4.079375	5.421721	3.450261
Skewness	-1.154819	0.424174	1.715288	0.159961
Kurtosis	4.851315	1.866272	4.889401	2.598267
Jarque-Bera	11.68239	2.673378	20.45159	0.351652
Probability	0.002905	0.262714	0.000036	0.838764
Sum	133.3758	346.6700	627.4500	511.6000
Sum Sq. Dev	468.4299	515.8803	911.2467	369.0334

Multicollinearity Test

Correlation is a statistical technique which shows the relation between two or more variables.

Table 2: Variance Inflation Factors (VIF) of the variables under study

Variable	Coefficient Variance	Centered VIF
C	8.500447	NA
DCPY	0.039264	1.740169
LLY	0.029752	2.329144
FSD	0.10452	3.313705

The VIF for all the variables is between 1 and 5 hence there is moderate to no multicollinearity amongst study regressors (DCPY, LLY and FSD)

ARDL Bounds Test for Co-Integration

The Standard Vector Auto Regression (VAR) lag length test is used to determine the number of lags to use for the model.

Table 3: Lag Length Determination

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-288.352	NA	6706.322	20.1622	20.3508	20.22127
1	-225.6152	103.8402	270.8014	16.93898	17.88194	17.2343
2	-204.0992	29.67724	198.6834	16.55856	18.2559	17.09015
3	-162.4609	45.94574*	40.97704*	14.79040*	17.24211*	15.55825*

* indicates lag order selected by the criterion

The asterisks all point to lag order 3 of which the AIC has the smallest value and thus, a maximum lag order of 3 was used for the automatic selection of the ARDL model as shown above. The model selection based on AIC criteria shows how strongly the ARDL (3, 3, 3, 3) is preferred over other models. The following are the results from the selected ARDL (3, 3, 3, 3).

Table 4: Model Selection Criteria

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDPGROWTH (-1)	-0.23578	0.13806	-1.7078	0.1114
GDPGROWTH (-2)	0.305509	0.118988	2.56756	0.0234
GDPGROWTH (-3)	0.2011	0.122917	1.63606	0.1258
DCPY	0.300851	0.268346	1.12113	0.2825
DCPY (-1)	0.105195	0.30833	0.34118	0.7384
DCPY (-2)	0.307506	0.40726	0.75506	0.4637
DCPY (-3)	-1.124443	0.349762	-3.21488	0.0068
LLY	0.132825	0.424212	0.31311	0.7592
LLY (-1)	0.557735	0.380468	1.46592	0.1664
LLY (-2)	1.182747	0.320545	3.6898	0.0027
LLY (-3)	-2.014932	0.272161	-7.40347	0.0000
FSD	-0.347793	0.606591	-0.57336	0.5762
FSD (-1)	-1.131057	0.584672	-1.93452	0.0751
FSD (-2)	-0.449845	0.519801	-0.86542	0.4025
FSD (-3)	1.958028	0.342191	5.72203	0.0001
C	10.57856	2.451685	4.31482	0.0008
R-squared	0.93129			
Adjusted R-squared	0.852009			
F-statistic	11.74675			
Prob(F-statistic)	0.000033			
Durbin-Watson stat	2.396178			

The P(F-statistic) value of the model = 0.0000033 < 0.05 so the model is statistically significant. The adjusted R-squared = 0.852009, which indicates that the model can explain 85.20% of the subject being researched. That is, 85.2% of the variations in the economic growth rate are explained by variations in credit to the private sector, liquid liabilities and financial system deposits, while the rest of the 14.8% percent is explained by all other variables that affect economic growth but are not captured within the model. This number shows that economic growth is also influenced by many other factors besides the selected financial deepening indicators. Thus, the results from the ARDL analysis indicate that the model is good fit. Furthermore, the Durbin-Watson statistic of 2.396178 indicates that the model does not suffer from the problem of auto-correlation.

Bounds Test Estimates

In order to assess the long run equilibrium relationship among the variables, a co-integration test was carried out through the bound testing technique. Following the ARDL approach proposed by Pesaran and Shin (1997, 1999) and Pesaran, Shin, and Smith, the null hypothesis of $H_0 = \beta_1 = \beta_2 = \beta_3 = 0$ (not co-integrated) was tested against the alternative $H_1 = \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ (co-integrated) by conducting the F-test for the joint significance of the coefficients of the lagged variables [17].

Table 5: Bound Test

Variables	F-statistic	Results
GDPGR, DCPY LLY FSD	10.00053	Co-integration
Critical Value Bounds	Lower Bound	Upper Bound
10%	2.37	3.2
5%	2.79	3.67
2.5%	3.15	4.08
1%	3.65	4.66

As it can be seen from the table, the calculated F-statistic of 10.00053 is greater than all the critical value bounds at 1%, 2.5%, 5% and 10%. This implies that the null hypothesis of no co-integration is rejected and thus we conclude that the variables exhibit a long run relationship. The detailed output of the bounds test is given in the appendix.

Long Run Estimates

Since the existence of a long-run co-integration relationship among the variables has been confirmed. The long-run and short run coefficients of the model are then estimated.

Table 6: Long-Run Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DCPY	-0.563504	0.19374	-2.9085	0.0122
LLY	-0.194227	0.2836	-0.6849	0.5055
FSD	0.040227	0.58212	0.0691	0.946
C	14.50766	5.88708	2.46432	0.0284

The results show that all the variables are statistically insignificant except for the variable DCPY, thus, this implies that the ratio of domestic credit to GDP has a negative significant impact on economic growth in the long run. The results further entail that the variable LLY has a negative insignificant impact on economic growth. Whereas the variable FSD has a positive but insignificant impact on economic growth in the long run.

Short Run Estimates

The results of the short run equilibrium relationship between the variables are tabulated below

Table 7: Short-Run Estimates

Variable	Coefficient	t-Statistic	Prob.
D (GDPGROWTH (-1))	-0.506609	-5.0786	0.0002
D (GDPGROWTH (-2))	-0.2011	-2.4638	0.0285
D(DCPY)	0.300851	1.57877	0.1384
D (DCPY (-1))	0.816937	3.603	0.0032
D (DCPY (-2))	1.124443	4.40288	0.0007
D(LLY)	0.132825	0.54302	0.5963
D (LLY (-1))	0.832185	3.72054	0.0026
D (LLY (-2))	2.014932	10.4127	0.0000
D(FSD)	-0.347793	-0.923	0.3728
D (FSD (-1))	-1.508183	-4.3509	0.0008
D (FSD (-2))	-1.958028	-7.5977	0.0000
Error Correction Term-CointEq(-1)*	-0.729171	-8.0863	0.0000

As depicted in the table above, the error correction mechanism (ECM) was used to estimate the short-run parameters of the model. The short-run causality was confirmed by the significant values of all the lags of the independent variables. From the tabulated results it was concluded that variables DCPY, LLY and FSD at not significant at both 5% and 10% in the short-run. However, their first and second probability values of their lags are all significant at both 5% and 10% levels.

The lags of the variables DCPY and LLY have a positive significant impact on economic growth in the short run. The lags of FSD have a negative but significant impact on economic growth. These results indicate that an expansion of the financial sector in the short run will impact the economy both positively and negatively. Furthermore, the value of the error correction term (CointEq) of -0.729 indicates a strong speed of adjustment to equilibrium. That is, the short-run disequilibrium converges to the long-run equilibrium at the speed of 72.9%.

The negative significant value of the error correction term (ECT) depicts the existence of the long-term relationship between the dependent and independent variables. This implies that DCPY, LLY and collectively impact the growth rate of the economy in the long run.

Short Run and Long Run Diagnostic Tests Model Specification Test

The null hypothesis of correctly specified was tested against the alternative of not correctly specified. The results from the Ramsey reset test indicate that the model is correctly specified as we failed to reject the null hypothesis of correct specification with the F-statistical probability value of 0.1215. Therefore, the model is correctly specified.

The Breusch-Godfrey test indicated that the residuals are not serially correlated as we failed to reject the null hypothesis of no auto correlation. The chi-square probability value of the observed R squared (0.2181) is greater than 5%. For this reason, we can conclusively say that the residuals are not auto correlated.

Heteroskedasticity Test

In the Breusch-Pagan-Godfrey heteroskedasticity test the null hypothesis of homoscedasticity was tested against the alternative of heteroskedasticity. The test indicated that the model is homoscedastic because we failed to reject the null hypothesis of homoscedasticity. Hence, with the chi-square probability value of 0.7887 we decisively conclude that the model is homoscedastic.

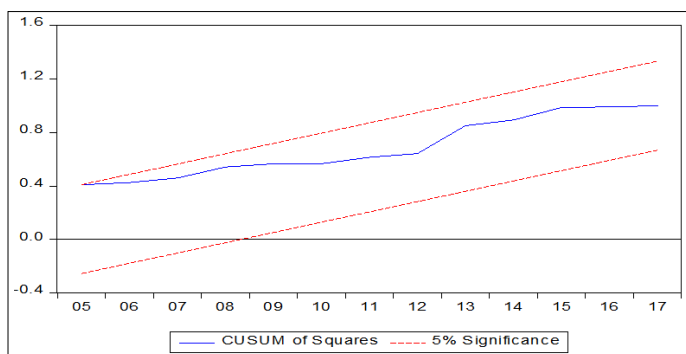
Normality Test

The results from the Histogram normality test indicate that the residuals are normally distributed. The null hypothesis of normal distribution was tested against the alternative of not normally distributed. With a corresponding p-value of 0.385933 to the Jarque-Bera statistic, we failed to reject the null hypothesis of normal distribution. Hence the residuals are normally distributed.

Stability Test

In addition to the above diagnostic tests, the stability of the estimates was tested through the use of both the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of squares of recursive residuals (CUSUM-SQ) tests. Both the results suggested that the estimated coefficients are stable since the plot of the CUSUM statistic moves between the critical bounds (at 5% significance level).

Furthermore, it is essential to mention that since the test statistics of this stability tests can be graphed, we can identify not only the parameter significance but also at what point of time a possible instability (structural break) occurred.



Therefore, from the graphs of both the CUSUM and CUSUM-SQ it can be confirmed that the long and short runs estimates are stable and have no structural break. Thus, the results of the estimated model are reliable and efficient. From these results it is imperative to mention that the global financial crisis of 2007- 2009 did not have an adverse effect on the GDP growth rate for Zambia under the period of study.

Discussion of Findings

The main objective of the study was to analyze the impact of financial deepening on economic growth in Zambia using GDP growth rate, as a proxy for economic growth. The study employed the augmented dickey fuller (ADF) unit root test and applied the Auto Regressive Distributed Lag, bound testing approach and the error correction technique. The results indicated that the variables DCPY and LLY and were stationary at first difference while FSD was stationary at level form. The bound test estimation confirmed that the variables were co-integrated since the f calculated statistic was greater than the f critical upper bounds at 1%, 2.5% 5% and 10% levels of significance.

The empirical results of the short-run parameters suggest that the current DCPY, LLY and FSD have insignificant effects on the economic growth rate in the short-run as indicated by their respective prob values. However, the first and second previous values of these variables have positive significant effects on the economic growth rate with the exception of FSD whose values show a negative but significant impact on the economic growth rate. Precisely, changes in the first and second previous values of DCPY cause the economic growth rate to change by 0.82 and 1.12 percentage points, changes in the first and second previous values of LLY cause the economic growth to change by 0.83 and 2.01 percentage points while changes in the first and second previous values of FSD cause the economic growth rate to change by 1.5 and 1.9 percentage points respectively. Furthermore, in the long-run DCPY has a negative significant effect on economic growth. That is, a unit change in DCPY leads to a 0.56 percentage reduction in the economic growth rate while LLY and FSD have insignificant effects on the economic growth rate in the long-run. The coefficient of DCPY in the long-run was negative, which is contrary to the findings of King and Levine (1992) ‘that the measure of asset distribution by savers (or financial intermediaries in general) to the non-bank private sector was positively and significantly related to economic growth.’

With respect to Zambia, the findings are consistent with Chileshe who concluded that the size of the financial system indicators are not significantly related to economic growth through various channels [7]. His study alluded that the ratios of quasi-liquid liabilities to GDP, M1 to GDP, private domestic credit to GDP and liquid liabilities of financial system to GDP were important measures of financial size of the economy through the investment channel but do not influence economic growth through per capita income. Thus, developments in the size of the financial system have no direct impact on economic growth [18-33].

Conclusion

This study set the objective of investigating the impact of financial deepening on economic growth in Zambia using annual data from 1986 to 2017. The first objective was to determine the impact of credit to the private sector on GDP growth in Zambia. Empirical findings indicated that credit to the private sector that measures the activity of the financial sector through the channelling of funds from savers to investors in the private sector, had not influenced the growth of the economy in the short-run but in the long run it negatively influenced the growth rate of the economy during the period of the study. The implication of this finding is that an increase in credit released to the private sector enhanced the growth of the economy negatively. The second objective was to determine the effects liquid liabilities on GDP growth in Zambia. The findings suggest that liquid liabilities that measure the size of the financial sector had an insignificant impact on the GDP growth rate. Based on the period of the study, this implies, that an expansion of the size of the banking sector measured by its level of monetization is not related to economic growth in both the short and long run. The third objective was to determine the effects of financial sector deposits on GDP growth rate in Zambia. The empirical findings indicated that funding to the banking system had an insignificant impact of the economic growth rate both in the short and long run. We therefore can conclude that the link between the indicators of the financial system used in this study and the GDP growth rate in Zambia is weak.

References

1. Ndebbio J (2004) Financial Deepening, Economic Growth and Development: Evidence from Selected Sub-Saharan African Countries. AERC, RP 142.
2. Yomi AI, Nwafor MC (2018) The Nexus between Financial Inclusion and Economic Growth: Evidence from Nigeria. International Journal of Research and Innovation in Social Science (IJRISS) 2: 143-145.
3. Dupas PD, Karlan JR, Ubfal D (2016) Banking the Unbanked: Evidence from three Countries. NBER Working Paper No 22463.
4. Shaw ES (1973) Financial Deepening in Economic Development. New York: Oxford University Press.
5. Alrabadi D, Kharabsheh B (2016) Financial Deepening and Economic Growth: The case of Jordan. Journal of Accounting and Finance 16.
6. Chiumya C (2004) Banking Sector Reform and Financial Regulation: Its Effects on Access to Financial Services by Low Income Households in Zambia. Development economics and public policy; working paper series 5-15.
7. Chileshe AM (2003) The Impact of Financial Development on Economic Growth in Zambia. Lusaka: University of Zambia.
8. Musokotwane S (1985) Financial Institutions and Economic Development in Zambia.
9. Bank of Zambia (2004) Background to the Financial Sector Development Plan (FSDP). [Online] available from <http://www.boz.zm/fsdp/chapter1-background.pdf>.
10. Apergis N, Filippidis I, Economidu C (2007) Financial Deepening and Economic Growth Linkages: A Panel Data Analysis.
11. Adu G, Marbuah G, Mensah JT (2013) Financial Development and Economic Growth in Ghana: Does the Measure of Financial Development Matter? Kumasi: Kwame Nkrumah University of Science and Technology.
12. Odhiambo N (2010) Financial deepening and poverty reduction in Zambia: an empirical investigation. International Journal of Social Economics 37.
13. Pal M (2018) Financial Sector Reforms and Economic Growth in Zambia, Delhi: University of Delhi.
14. Samargandi N, Fidrmuc J, Ghosh S (2015) Is the Relationship Between Financial Development and Economic Growth Monotonic? Evidence from a Sample of Middle-Income Countries. World Development 68: 66 -81.
15. Thornton J (1996) Financial deepening and economic growth in developing economics. Applied Economics Letters 3: 243-246.
16. World Bank (2016) World Development Indicators.
17. Pesaran MY, Shin, Smith R (2001) Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics 3: 289-326.
18. Adeyeye PO, Fapetu O, Aluko OA, Migiro SO (2015) Does Supply-Leading Hypothesis hold in a Developing Economy? A Nigerian Focus. Durban: University of KwaZulu-Natal.
19. Andersen SR (2003) The Influence and Effects of Financial Development on Economic Growth, Bergen: Michelson Institute.
20. Bank of Zambia (2015) Progress report on the implementation of the financial sector development plan (FSDP) phase ii. Phase ii report for the period ending 31 December 2014, December 5-35.
21. Bank of Zambia (2015) Zambanker. Bank of Zambia 9.
22. Financial Sector Deepening Zambia (2020) FinScope Zambia Survey Report.
23. Gujarati D (2004) Basic econometrics. 4th ed. S. l.: McGraw-Hill companies.
24. Jalil A, Abu WN, Shahbaz M (2010) Financial Development and Growth: A Positive, Monotonic Relationship? Empirical Evidences from South Africa. [Online] Available from <http://mpra.ub.uni-muenchen.de/27668/>.
25. King RG, Levine R (1993) Finance, entrepreneurship and growth: Journal of Monetary Economics 32: 30-71.
26. Kónya L (2006) Exports and Growth: Granger Causality Analysis on OECD Countries with a Panel Data Approach. Economic Modelling 23: 978-992.
27. Levine R (1997) Financial development and economic growth: views and agenda. Journal of Economic Literature 35: 688-726.
28. Levine R (2005) Finance and growth: theory & evidence, in Aghion, P. & Durlaff, S. (eds.), Handbook of Economic Growth.
29. Ministry of Finance and National Planning (2004) Financial Sector Development Plan for Zambia (2004-2009), Lusaka: Ministry of Finance and National Planning.
30. Ministry of Finance (2017) National Financial Sector Development Policy, Lusaka: Ministry of Finance.
31. Mohd-Nor HH (2015) Financial Development and Economic Growth: A Survey of Literature. Selangor: Kolej Universiti Islam Antarabangsa.
32. Robinson J (1952) The generalization of the general theory. In Robinson, J., editor, The Rate of Interest and Other Essays. London: MacMillan 67-146.
33. World Bank (2019) World Development Indicators.

Copyright: ©2023 Yordanos Gebremeskel. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.