Journal of Business School
2018, 1(1):23-29
DOI: 10.29226/TR1001.2018.63
Journal Homepage: https://www.journalbusiness.org

Financial Deepening and Market Stability in Nigeria

Akinyede, Oyinlola Morounfoluwa (PhD)
Department of Financial Studies, Redeemer's University, Ede Osun State, Nigeria.
foluesan@gmail.com, akinyedeo@run.edu.ng

Abstract

The study examined the contribution of financial deepening to Nigeria market stability by evaluating the influence of financial deepening on financial market (Money, Capital and foreign exchange) and commodity market (energy market and agriculture).. The research employed multivariate regression in order to confirm the existence of relationship that exists between the dependent variables (financial market and commodity market) and the independent variable (financial deepening) from January 2007 to August 2017. The study empirically tested hypothesis "financial deepening has no significant effect on market stability". The results from this study shows a positive significant relationship between financial deepening, foreign exchange market, money market, energy market and the agricultural market in Nigeria while the capital market has a positive but no significant relationship.

Keywords: Financial deepening, financial market, commodity market, market stability

1. Introduction

Improvement of economic performance through increased aggressive productivity, within financial markets thereby indirectly benefiting non-financial sectors of the economy and promoting diversification which in turn reduces risk and dampens is a major objective of the financial sector (Beck, Degryse, & Kneer, 2014). This objective can only be achieved in a well-developed financial environment and a stable financial condition with is also regarded as financial deepening. Financial markets undertake this vital role of intermediation process, by channeling funds from surplus units (savers) to deficit units (investors).

The process of financial Deepening is efficient and without repression, the outcome is usually a well-developed financial sector with a sustainable economic growth (Fernández, and Tamayo, 2017). But where the contrary is the case, the result is an economy beset with "financial shallowness" which is a common problem infecting the growth of development economics. Put differently, shallow finance" is a result of lack or stagnant growth of output of any country. Where the depth of financial assets of any country is narrow, it can be referred to as a shallow financial depth which explains why countries in such situation experiences low or negative per capita income (Caglayan, Kandemir Kocaaslan, & Mouratidis, 2017). According to Arcand, Berkes, & Panizza (2015),"there have been increased activities in the banking sector as well as in the equity market". However, financial systems in developing economies are still generally shallow to bring about the needed growth (IMF, 2012).

The Nigerian financial sector has experienced different reform since 1986. Prior to the reform, the sector was highly regulated with little private sector involvement. The financial sector could not contribute meaningfully to the growth of the economy (Olu, 2009). Despite the development in the financial sector, the economy showed no marked improvement (Salami, & Oluseyi, 2013). Studies on the likely impacts of financial deepening and inclusion as means for including the 'excluded' poor in the scheme for economic development and growth are relatively scarce and the extent to which an enhanced bank intermediation and capital market activities can support economic development in the Nigerian case are not exhaustively addressed. This study bridged the gap in this essential area and thus complements existing researches designed to achieve adequate financial deepening and economic stability.

The broad objective of this study is to examine the contribution of financial deepening to Nigeria market stability by

- Evaluating the influence of financial deepening on the Nigerian financial market (Money, Capital and foreign exchange)
- Examining the effect of financial deepening on Nigerian commodity market (energy market and agriculture).

The empirical investigation of the impact of financial deepening on the Nigeria market stability was restricted to the period January 2007 to August 2017. This research further contributes to empirical literature on economic activity and financial deepening in Nigeria. The study is divided into five (5) sections and organized as follows: Section one forms the introduction part, Section two is the brief literature review of the impact of financial Deepening on the market growth of Nigeria. Section three forms the research methodology which includes sources of data, method of data analysis and model specification. Section four is the data analysis while a section five includes the conclusion and recommendations.

2. Empirical Review

Financial deepening is the increasing provision of financial services. It can refer both a wider choice of services and better access for different socioeconomic groups (Ouma, Odongo, and Were, 2017). The impacts of financial deepening are felt on individuals' and the social economy therefore causing a change in the micro economy effect of the economy. Generally, Financial deepening has an accelerate effect on liquidity measured by the ratio of money supply to GDP (access to money)causing a ripple effect opportunities for investment and growth (Uremadu, Nwokocha, and Duru-Uremadu, 2017; Lu, Guo, Dong, and Wang, 2017).

Noroozi, and Hosseinpoor, (2017)exploited Johansen method in examining the effects of financial deepening and financial repression on the agricultural sector in Iran (1971 to 2013) in a bid to identify and determine the relationship between financial markets by financial development and value-added in agricultural sector. The results from this study shows that financial repression and increasing the exchange rate has a negative impact and financial depth, With the activities of financial intermediaries having a positive significant impact on the agricultural sector. Karimo, and Ogbonna, (2017) concluded that the growth-financial deepening nexus in Nigeria follows the supply-leading hypothesis after adopting the Toda–Yamamoto augmented Granger causality test to examine the direction of causality between financial deepening and economic growth in Nigeria between 1970–2013.

Okafor, Onwumere, & Chijindu (2016) adopted the causality and impact study on financial deepening and economic growth in Nigeria (1981 – 2013)and concluded that while broad money has positive and non-significant impact on economic growth, private sector credit has negative and non-significant impact on growth. Causality test showed that neither broad money supply nor private sector credit is granger causal for economic growth and vice versa. Nguena &Abimbola (2013) examines "Financial Deepening Dynamics and Implication for Financial Policy Coordination in a Monetary Union: the case of WAEMU". The study adopted a hypothetical-deductive theoretical approach and an empirical investigation in both static and dynamic panel data econometrics that permitted the identification of some stylized facts on this issue and have led to the following global recommendations based on the empirical investigation. The converging dynamics is evident in the sub-region and implies that after five years, financial policies harmonization would have an optimal impact. This highlights the feasibility of common effective monetary policy targeting indirectly on financial depth in the sub-region.

Keho, (2017)used the ARDL bounds testing approach to examine the relationship between financial development, economic growth and poverty reduction in nine African countries (1970-2013). The long-run relationship among the variables in height countries with GDP and financial deepening having a positive effect on poverty reduction in five countries (Benin, Cameroon, Cote d'Ivoire, Gabon and South Africa), and poverty reduction having a positive effect on economic growth in three countries (Ghana, Nigeria and Senegal). The study also revealed bidirectional long-run causality between economic growth and poverty reduction in Cote d'Ivoire, Gabon and South Africa, and bidirectional long-run causality between finance and poverty reduction in Benin, Cameroon and South Africa. These findings suggest that policies aimed at increasing economic growth and improving access to credit would reduce poverty but also that measures of poverty reduction would lead to economic growth and financial deepening in these countries.

The study by Aye (2013)who investigated the causal relationship dynamic between financial deepening, economic growth and poverty in Nigeria using annual time series covering 1960 to 2011 periods. The Johansen co-integration test is used to examine the long-run relationship between finance, growth and poverty. The short and long run causality between these variables is tested using a modified Hsaio-Granger causality within a Vector Autoregressive (VAR) and

Vector Error Correction Model (VECM) framework. The results indicate no evidence of long run equilibrium relationship between financial deepening, economic growth and poverty. The study results show a short-run unidirectional causality from growth to poverty conditional on finance. This supports the indirect channel through which finance affects poverty via growth. We also found evidence of causality from poverty to financial deepening conditional on growth.

Empirical studies show that most studies on the effect of financial deepening were done to determine the financial effect of financial deepening (effect on capital market, foreign exchange market and the money market). This study extended available research study by including commodity market in the evaluation of the impact of financial deepening.

3. Materials and Methods

This research adopted quantitative method only because the research variables can be measured and quantify with figures. This study relies solely on secondary data because it is a suitable measure for the variables used as proxy for both dependent variables (financial market and commodity market)and the independent variable (financial deepening) are quantifiable. A statistical dataset from January 2007 to august 2017 was sourced from CBN, Statistical Bulletin, Nigeria Bureau of Statistics (NBS), World Bank Development Indicator and Nigeria stock exchange fact book.

3.1model Specification

The model below was formulated based on the variables used contained research in the hypotheses:

FMkT= f (FDP) ……………..……………………………………………… 1
FMkT = MCR, PLR, AER

CMkT= f (FDP) ………………………………………………………………. 2
CMkT= CAP, EGP

Table 1 Variables Definition and measurement

	Variable	Sub variables		Proxy
1	Financial Deepening		FDP	Money supply to GDP
2	Financial markets	Money market	PLR	Prime Lending Rate of Commercial Banks
		Capital market	MCR	Market Capitalization - Equities Only (Naira Billion)
		FOREX market	AER	Exchange Rate
3	Commodity market	Energy market	EGP	Basket Composition of Composite Consumer Price Index (Base November 2009 = 100) Housing Water, Electricity, Gas and Other Fuel (weight = 167.34)
		Agriculture	CAP	Basket Composition of Composite Consumer Price Index (Base November 2009 = 100) Food (weight = 507.06)

Source: Researcher's Compilation from Literature

4. Data Analysis and Discussion

Table 2 Descriptive statistics

	Mean	Std. Deviation	N
AER	200.0963	94.75	128
MCR	8979.7297	2521.13	128
PLR	16.9014	1.07	128
EGP	145.3439	51.97	128
CAP	139.8704	50.84	128

Table 2 shows the descriptive statistics of the independent variables used in this study. The mean value of the independent variable Average Exchange Rate (AER) has a mean value of 200.09and a standard deviation of 94.76. The mean and standard deviation of value Market capitalization rate (MCR) is 8979.73 and 2521.13 respectively. Prime Lending Rate of Commercial Banks (PLR) has mean and standard deviation of 16.90 and 1.07 respectively. Energy and Gas price (EGP) has mean and standard deviation of 145.34 and 51.96 respectively while Consumer Agriculture Price (CAP) has139.87and 50.84 as their respective mean and standard deviation.

4.2. Hypotheses Testing

The research employed multivariate regression in order to confirm the existence of relationship that exists between the independent variable and the dependent variables. The study empirically tested hypothesis "financial Deepening has no significant effect on Market stability"

4.2 .1. Multivariate Tests

Table 3 Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	1.000	26748.392[b]	5.000	27.000	0.000
	Wilks' Lambda	.000	26748.392[b]	5.000	27.000	0.000
	Hotelling's Trace	4953.406	26748.392[b]	5.000	27.000	0.000
	Roy's Largest Root	4953.406	26748.392[b]	5.000	27.000	0.000
FDP	Pillai's Trace	4.205	1.707	480.000	155.000	0.000
	Wilks' Lambda	.000	3.527	480.000	140.585	0.000
	Hotelling's Trace	182.284	9.646	480.000	127.000	0.000
	Roy's Largest Root	137.577	44.426[c]	96.000	31.000	0.000

a. Design: Intercept + FDP
b. Exact statistic
c. The statistic is an upper bound on F that yields a lower bound on the significance level.
d. Computed using alpha = .05

The Pillai's trace is the most preferred approach for the F value as this is the least sensitive to the violation of the assumption of the covariance of matrices. The Pillai's Trace value is 4.205 with F value of 1.707. This is significant at 5% level as the p value is 0.000. So we reject the null hypothesis that the FDP are at same level for all the dependent variables. This is concluded on the basis of the MANOVA derived by combined dependent variable.

4.2.2. Test of Homogeneity

Table 4 Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
	AER	1123225	96	11700.3	21.235	0.000
	MCR	6.23E+08	96	6488424	1.091	0.403
	PLR	135.228	96	1.409	4.078	0.000
	EGP	315153.8	96	3282.85	3.653	0.000
FDP	CAP	301539.4	96	3141.04	3.641	0.000

a. R Squared = .985 (Adjusted R Squared = .939)

b. R Squared = .772 (Adjusted R Squared = .064)

c. R Squared = .927 (Adjusted R Squared = .699)

d. R Squared = .919 (Adjusted R Squared = .667)

e. R Squared = .919 (Adjusted R Squared = .666)

f. Computed using alpha = .05

The tableabove is the Tests of Between-Subjects Effectsshows the separate ANOVA for each dependent variable. The independent variable AER has F-value of 21.235 which is significant at 5% significance level. So the null hypothesis can be rejected. Market capitalization rate (MCR) is not significant at F-value of 1.091 (0.403). Prime Lending Rate of Commercial Banks (PLR),Energy and Gas price (EGP)and Consumer Agriculture Price (CAP) has F-value of4.078, 3.653, 3.641 respectively and they are all significant.

In other words there is at least one difference in different financial Deepening with respect to the Average Exchange Rate, Prime Lending Rate of Commercial Banks, Energy and Gas Price and Consumer Agriculture Price

5. Conclusion

The study examined the impact of financial deepening to Nigeria market stability by Evaluating the influence of financial deepening(Money supply to GDP) on financial market (Money, Capital and foreign exchange) and commodity market (energy market and agriculture) from January 2007 to August 2017. The study employed multivariate regression in order to confirm the existence of relationship that exists dependent variables (financial market and commodity market) and the independent variable (financial deepening) by testing the hypothesis "financial Deepening has no significant effect on Market stability".

In conclusion, the study revealed that there is a significant relationship between financial deepening and foreign exchange market, money market also has a significant relationship whereas the capital market has a positive but no significant relationship. This implies that financial depth of the economy translate to the development of both money market and the foreign exchange market but has no effect on the capital market. Financial deepening is said to have a positive significant relationship with the commodity market has it positive significant relationship on both the energy market and the agricultural market in Nigeria

The study recommends the implementation of a carefully planned financial inclusion programme that would enhance financial deepening. There should be concrete improvements in the activities of the Nigerian capital market by enhancing Laws that would make the Nigerian stock market more globally competitive and accessible.

References

Beck, T., Degryse, H., & Kneer, C. (2014). Is more finance better? Disentangling intermediation and size effects of financial systems. *Journal of Financial Stability*, *10*, 50-64.

Fernández, A., & Tamayo, C. E. (2017). From Institutions to Financial Development and Growth: What Are the Links?. *Journal of Economic Surveys*, *31*(1), 17-57.

Caglayan, M., Kandemir Kocaaslan, O., & Mouratidis, K. (2017). Financial depth and the asymmetric impact of monetary policy. *Oxford Bulletin of Economics and Statistics*, *79*(6), 1195-1218.

Arcand, J. L., Berkes, E., & Panizza, U. (2015). Too much finance?. *Journal of Economic Growth*, *20*(2), 105-148.

IMF Annual Report 2012: Working Together to Support Global Recovery:*www.imf.org/external/pubs/ft/ar/2012/eng. Last accessed: September 2014.*

Olu, O. J. O. (2009, November). Impact of microfinance on entrepreneurial development: The case of Nigeria. In *The International Conference on Economics and Administration, Faculty of Administration and business* (pp. 536-545).

Salami, G. O., & Oluseyi, A. A. (2013). Impact of financial sector development on the Nigerian economic growth. *American Journal of Business and Management*, *2*(4), 347-356.

Ouma, S. A., Odongo, T. M., & Were, M. (2017). Mobile financial services and financial inclusion: Is it a boon for savings mobilization?. *Review of development finance*, *7*(1), 29-35.

Uremadu, S. O., Nwokocha, A. C., & Duru-Uremadu, C. E. (2017). Effect of Financial Intermediation and Regulations on Financial Deepening and Growth: Evidence from Nigeria. *Journal on Management*, *11*(4).

Lu, X., Guo, K., Dong, Z., & Wang, X. (2017). Financial development and relationship evolvement among money supply, economic growth and inflation: a comparative study from the US and China. *Applied Economics*, *49*(10), 1032-1045.

Noroozi, B., & Hosseinpoor, A. (2017). The Effects of the Financial Deepening and Repression on Value Added: Evidence from the Agricultural Sector of Iran. *International Journal of Economic Perspectives*, *11*(1), 1049-1054.

Karimo, T. M., & Ogbonna, O. E. (2017). Financial deepening and economic growth nexus in Nigeria: Supply-leading or demand-following?. *Economies*, *5*(1), 4.

Okafor, I. G., Onwumere, J. U. J., & Chijindu, E. H. (2016). Financial Deepening Indicators and Economic Growth in Nigeria: A Causality and Impact Analysis. *Asian Journal of Economics, Business and Accounting*, *1*(2), 1-11.

Igwe, A., Edeh, C. E., & Ukpere, W. I. (2013) Financial Deepening and Economic Growth in Nigeria (1981-2012): A Managerial Economic Perspective. *Risk Governance & Control: Financial markets and institutions*, 120.

Keho, Y. (2017). Financial Development and Poverty Reduction: Evidence from Selected African Countries. *International Journal of Financial Research*, *8*(4), 90.

Aye, G. C. (2013). Causality between Financial Depending, Economic Growth and Poverty in Nigeria. The Business & Management Review, 3(3), 1-12