AN EMPIRICAL ANALYSIS OF INVESTMENT IN SECURITIES ON THE NIGERIAN ECONOMY GROWTH

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DOI: https://doi.org/10.56293/IJMSSSR.2022.4518

Abstract: This study examined the empirical impact of investment in securities on the Nigerian economy by applying a disaggregated approach. This approach effectively demonstrated the separate effects of money market securities and capital market securities on the economic performance. It is a known fact that investment in financial assets such as stock, treasury bills, bonds etc increases the productive capacity of an economy by allocating funds mobilized through deposits in security investment process to critical areas where funds are needed. Using data covering the period 2015 to 2021, a dynamic framework was devised for the study in order to identify both the short term and long term effects of securities investment on economic performance. Moreover, the empirical strategy in the study employed the Granger Causality test to indicate the direction of causality between investment in securities and economic growth in Nigeria. The empirical results obtained show that it is economic growth that Granger causes the deepening of securities investment in Nigeria and not the other way round. Money market securities investment was shown to have strongest positive effect on the level of economic activities given the $R^2$ value of 0.62 in the short run and 0.91 in the long run. Capital market securities investment only delivers long run economic effects in Nigeria given that the $R^2$ value for the short run model was 0.32 while that of the long run was 0.76. Thus, this study concludes that securities have positive-mixed effects on economic growth within a dynamic framework.

Keywords: Investment Securities Economy Growth

INTRODUCTION

Investment in securities such as stock and bonds (securities) increases the productive capacity of an economy by allocating funds through investment process to critical areas where funds are needed. The allocation and channeling of funds for investment involves the activities of the financial market. The financial markets are traditionally segmented into money market and capital markets which deal with short and long term securities (Bodie et al., 2008). Investment in securities is critical for the growth and development of the Nigeria economy. The roles it plays cannot be overemphasized and is very crucial to both real and financial sector’s growth and development (SEC, 2010). The securities are significant in short term and long term savings mobilization and investment. This creates opportunities for investment in financial assets (treasury bills, stock and bonds) which thus promote availability of liquidity.

Due to the recent global financial meltdown in other words world recession 2007 and most recently the global pandemic2020, Nigeria securities investment witnessed low patronage, decline investment activities and loss of confidence as more portfolio investment in the Nigeria securities markets were withdrawn and other prospect withheld and or divest to hold more cash as uncertainty raises the risk level. The objective of the study is 1) To examine the extent to which investment in money markets securities (financial assets) affects the Nigeria economy growth (GDP). 2) To examine the extent to which investment in capital market affects Nigeria’s economy growth (GDP).

RESEARCH HYPOTHESIS

In the course of the study, the following hypothesis will be tested:
1) Ho: There is no significant relationship between investment in money market securities and GDP.
2) Ho: There is no significant relationship between investment in capital market securities and GDP.

REVIEW OF RELATED LITERATURE

Conceptual Framework

The Concept of Investment

According to (Bodie et al., 2008), investment is the current commitment of money or other resources in the expectation of reaping future benefits. Investment is the process of applying resources so as to increase wealth. According to Ezirim (2005), Investment is the application of resources to financial assets (securities) or real assets. Investments in financial assets are investment in securities,

The Concept of Securities

Securities are instruments that represent an interest in, or claim on other assets. (SEC, 2010) securities separate ownership from possession and management of assets. This separation allows widespread ownership and easy transfer, dispersion of wealth over investment, use of professional management and access to broader source of capital. This in turn helps create financial markets with more efficient allocation of resources encouraging economic growth.

Ezirim (2005.

➢ Fixed – Income Securities

These are those financial assets which guarantee and ensure constant proportion of income to the investors. They are securities that promise either a fixed stream of income or a stream of income that is determined according to a specified formula. (Bodie et al., 2008; Ezirim, 2005). They are exemplified by such securities as treasury bills, commercial papers, central bank certificates, bonds, debentures and / or loan stocks. Thus a 9% bond or a 12% debenture implies that a fixed rate of income of 9% or 12% accrues to holders of the bond or debentures, as the case may be. Federal and state government bonds or loan stocks also fall into this category of capital market fixed - income securities. The holders are entitled to regular payment of the interest payment, which is a function of the coupon rate, and also the principal, or nominal value of the security at maturity. Other types of fixed – income accounts, securities include savings deposits, current accounts, term or time-deposit accounts, open market instruments like short term government obligations, bankers’ acceptances, negotiable certificates of deposits commercial papers (unsecured short term) promissory roles issued by companies, finance companies, Banks or other government securities (treasury bills and certificates, stabilization securities, securities of government agencies and government-sponsored institutions), bonds of international agencies, government- guaranteed bonds and municipal government securities. These securities are presumed to involve less risk, which accounts for their considered low income-earning potentials.

➢ Variable – Income Securities

These are mainly ordinary shares floated by various corporate concerns. Income receipts are not predetermined and are subject to the performance of the concerned corporate body. When times are good for the company in forms of profitable operations, holder enjoys high income receipts in the form of dividends, and receives less or nothing at all in times of gloom for the firm. Holders reserve ownership rights attendant to this type of investment, such as voting rights, protective rights in terms of possible transfer of ownership interest, right of first consideration in subsequent issues of corporate stock, right to inspect corporate books of accounts, right to residual income receipts, and right to a pro-rata share of assets in event of winding up (Okafor, 1983).
The Concept of Economic Growth

Economic growth as a concept is viewed differently by deferent scholars. This was due to the condition prevailing at the time of these scholars. Majority accept it as an increase in the level of national. Income and output of a country. Todara and Smith (2006), defined economic growth as a steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national output and income. Jhinga (2006), viewed economic growth as an increase in output. He explained further that it is related to a quantitative sustained increase in the country's per capital income or output accompanied by expansion in its labour force consumption, capital and volume of trade. According to Dewett (2005), it implies an increase in the net national product in a given period of time. He explained that economic growth is generally referred to as quantitative change in economic variables, normally persisting over successive periods. He added that determinants of economic growth are availability of natural resources, the rate of capital formation, capital output ratio, technological progress, dynamic entrepreneurship and other factors.

EMPIRICAL LITERATURE

Grilli and Milesi-Ferretti, (1995), Kraay, (1998) and Rodrick, (1998) found that capital market does not affect growth, while others stood their ground that the effect is positive (Levine, 2001, Bekaert et al., 2003 and Bonfiglioli and Mendicino, 2004), others noted that it is negative (Eichengreen and Leblang, 2003). Empirical evidences are divided as to the relationship between money market and economic growth. Greenwood and Jovanovic (1990) show that financial intermediation promotes economic growth. Similar conclusion was arrived at by Ajakaiye (2002) and Adebiyi (2005) while authors like Ebhodaghe (1996) and Lucas (1988) suggest otherwise. Related cross country studies by King and Levine (1992) gave empirical evidence that money market investment enhances economic growth. With respect to African economies, provides evidence that although there remains much to be done, financial reforms in many African countries has contributed positively to economic growth (Shaibu, Wakeel and Nwonsu, 2009). Agha et al (2005) in a study of the transmission mechanism of monetary policy in Pakistan asserted that the role of bank lending is prominent because of the dominance of the banking sector. Garcia and Liu (1999) argued further that sound macroeconomic environments and sufficiently high income levels; GDP per capita, domestic savings, and domestic investments are important determinants of stock market development in emerging markets. Investments in financial assets (Securities) are of two types – direct and indirect investments (Ezirim, 2005). Direct investments relate to the commitment of resources to the fixed-income, variable-income and Hybrid securities as distinguished above.

PROBLEMS OF INVESTMENTS IN SECURITIES

The process of investing in securities can be visualized in terms of three problems. The first problem is choice-which of the individual assets will be acquired. The second problem is allocation-how the assets will be combined into a portfolio. The final problem is one of timing - how to respond to changing market conditions. This description is helpful in understanding the process, but in practice all three problems are interrelated and must be solved together.

THEORETICAL FRAMEWORK

The theoretical foundation of this discussion is rooted in Harrod-Domar model and the Duesenbery cash flow theory. Harrod-Domar model emphasized the key role of investment in economic growth process. To Roy Harrod-Domar (1960) and Evsey Domar (1946) investment creates income (demand effect) and increase in capital stock. For expansion of productive base, the model explains a long-run steady state of capital output and saving investment flow equilibrium for economic growth. The model holds that national saving(s) mobilization and capital formation (1) in one next period (t+1). i.e. capacity of the economy for increased productivity in future.

\[ I_t - Y_{t+1} > 0 \]  \(1a\)
\[ Y_t = 0 = \text{growth} \]  \(1b\)

Increase in saving-output ratio(s) propensity to save) S/Y or J/Y divided by a lower capital-output ratio (k), Y magnifies economics growth recall that for a two factor model

\[ Y = C+I \]  \(2a\)
\[ Y = C+S \]  \(2b\)
\[ Y - C = 1 \quad \text{........... (3a)} \]
\[ Y - C = S \quad \text{........... (3b)} \]
Therefore S = I saving-investing identify ................. (4a)
\[ S/Y = I/Y = \text{saving-output ratio(s)} \quad \text{........ (4b)} \]
\[ K(K - K_Y) = \text{net investment (I)} \quad \text{........... (5a)} \]
Therefore K/Y = I/Y = capital-output
\[ \text{Ratio (K)} \quad \text{........... (5b)} \]

Note that a lowering of the capital-output ratio increase the effectiveness of the capital stock used in production.
Dividing equation 4b by 5b give the growth rate (g) of the economy
\[ G = S/K = I/Y \]
\[ \frac{S}{K} = \frac{I}{Y} \]
\[ G = \frac{S}{K} \text{ or } Y \]

RESEARCH METHODOLOGY

RESEARCH DESIGN

According to Baridam (1995) research design is the framework or plan used as a guide in collecting and analyzing data for the study. The overall research design for this research is the quasi-experimental design.

TARGET POPULATION AND SAMPLE

The focus of this study is to examine the effect of investment in securities on the Nigeria economy. For this study, the target population is the Nigerian financial markets comprising securities in the capital market and money market. The research work depended mostly on secondary data collected from central bank of Nigeria, Statistic bulletin and annual report (2021), Nigeria capital market statistic (NBS) annual abstract report (2021). Debt management office annual report (2021), Nigeria stock exchange fact book (2021) and other government publication.

DATA ANALYSIS TECHNIQUES

The data generated was subjected to strict analysis so as to get good result to aid decision making. However, the study adopted series of econometric analysis involving test of co-integration which was conducted, to ascertain if the independent variables and the dependent variables share common stochastic drift. The preliminary test of stationarity of the dependent and independent variable would be conducted before the test of co-integration, as a non-stationary variable and may yield spurious and inconsistent parameter estimates. The Granger casualty is used to estimate the direction of casualty among the variables.

MODEL SPECIFICATION

Explicitly, the model for the study is specified using a general linear regression model of the form:
\[ Y = b_0 + b_1X_1 + b_2X_2 + \ldots \ldots + b_kX_k + e \quad \text{........... (1)} \]
Where \( y \) = Dependent variable
\[ b_0 \quad = \quad \text{Independent variable} \]
\[ b_0 \quad = \quad \text{Intercept} \]
\[ b_1 \quad = \quad \text{Unknown parameters} \]
\[ e = \text{Error Term} \]

**MODEL 1**

This model shall be used to capture the first purpose of the study. Thus, we specify the model as

\[
\text{GDP} = F (\text{VTB}, \text{VCD}, \text{VCP}, \text{VBA})
\]

Where:

- \( \text{GDP} \): Gross Domestic Product (proxy for Economic Growth)
- \( \text{VTB} \): Value of Treasury Bill
- \( \text{VCD} \): Value of Certificate of Deposit
- \( \text{VCP} \): Value of Commercial Papers
- \( \text{VBA} \): Value of Banker Acceptance

To make equation (1) amenable for empirical verification, we transform it into an econometric equation

\[
\text{GDP} = \beta_0 + \beta_1 \text{VTB} + \beta_2 \text{VCD} + \beta_3 \text{VCP} + \beta_4 \text{VBA} + u
\]

**MODEL 2**

Model 2 shall be used to capture the second purpose.

Thus the model \( \text{GDP} = F (\text{VCS}, \text{VBS}, \text{VDS}) \)

Where:

- \( \text{GDP} \): Gross Domestic Product
- \( \text{VCS} \): Values of common stocks
- \( \text{VBS} \): Values of bonds
- \( \text{VDS} \): Values of debentures

When transformed equation 4 becomes

\[
\text{GDP} = \beta_0 + \beta_1 \text{VCS} + \beta_2 \text{VBS} + \beta_3 \text{VDS} + u
\]

**DATA PRESENTATION**

**UNIT ROOT ANALYSIS**

According to Gordon (1995), most economic time series are non-stationary and only achieved stationary at the first difference level or at a higher level.

**Table 1 Unit Root Test for Variables in Levels**

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF Test Statistic</th>
<th>95% Critical ADF Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>2.329</td>
<td>-2.935</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>VTB</td>
<td>0.801</td>
<td>-2.937</td>
<td>Non-stationary</td>
</tr>
<tr>
<td>VCD</td>
<td>-5.706</td>
<td>-2.957</td>
<td>Stationary</td>
</tr>
<tr>
<td>VCP</td>
<td>-2.079</td>
<td>-2.939</td>
<td>Non-stationary</td>
</tr>
<tr>
<td>VBA</td>
<td>0.802</td>
<td>-2.964</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>VCS</td>
<td>-0.987</td>
<td>-2.964</td>
<td>Non-stationary</td>
</tr>
<tr>
<td>VBS</td>
<td>19.38</td>
<td>-2.964</td>
<td>Stationary</td>
</tr>
<tr>
<td>VDS</td>
<td>-4.904</td>
<td>-2.935</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

*Result extracted from the Eviews 7 output.*
The result of the unit root test on these variables in first differences is reported in table 2 below. From the result, it is seen that the ADF test statistic for each of the variables is greater than the 95 percent critical ADF values (in absolute values). With these result, these variables are adjudged to be stationary. This implies that the variables that were initially non-stationary are actually difference-stationary, attaining stationarity after the first differences of the variables. Thus, we would accept the hypothesis that the variables possess unit roots. Indeed, the variables are integrated of order one (i.e. $I[1]$).

**Table 2 Unit Root Test for Variables in First Difference**

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF Test Statistic</th>
<th>95% Critical ADF Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>ΔRGDP</td>
<td>-5.204</td>
<td>-2.935</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVTB</td>
<td>-7.172</td>
<td>-2.937</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVCD</td>
<td>-5.334</td>
<td>-2.957</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVCP</td>
<td>-10.26</td>
<td>-2.939</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVBA</td>
<td>-6.217</td>
<td>-2.964</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVCS</td>
<td>-7.344</td>
<td>-2.964</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVBS</td>
<td>-9.298</td>
<td>-2.964</td>
<td>Stationary</td>
</tr>
<tr>
<td>ΔVDS</td>
<td>-12.24</td>
<td>-2.935</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Result extracted from the Eviews7 output.

**Cointegration Test**

Having established that the series in the analysis are not stationary in their levels, we move on to determine if they are cointegrated. The Engle and Granger residual-based cointegration method is used for this analysis. The results from the cointegration test are presented in Table 3 below. As can be seen from the table, models one and two all have stationary error terms since their respective ADF test are greater than the critical values. Thus, there is cointegration for each of the three models. This implies that a long run relationship exists between GDP and both the money market and capital market securities investments. These variables tend to drift together in the long run.

**Table 3: Residual-based Cointegration Test Results.**

<table>
<thead>
<tr>
<th>Model</th>
<th>ADF Test Statistic</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-6.078</td>
<td>-2.960</td>
</tr>
<tr>
<td>2</td>
<td>-3.214</td>
<td>-2.998</td>
</tr>
</tbody>
</table>

Result extracted from the Eviews7 output.

**Investment in Securities and the Nigerian Economy: The Facts**

The macroeconomic outlook of the variables used in the analysis may imply interrelationships among them. Hence, the Granger causality test, which is a preliminary aspect of an autoregressive-based analysis, is used to provide the background for estimating dynamic relationships. The reverse or cause-effect relationship between the securities investment and economic growth is captured in the test. The results of the Granger causality tests are reported in Table 4 below. As is generally the case, the F-test is conducted on the null hypotheses in order to determine the direction of causality between each pair of variables. The rejection of each of the null hypothesis is
based on the significance of the F-value for the particular relationship.

### Table 4: Granger Causality Test results

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>F-statistic</th>
<th>Decision</th>
<th>Causality</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTB does not Granger Cause RGDP</td>
<td>2.196</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VTB</td>
<td>4.924</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VCD does not Granger Cause RGDP</td>
<td>0.312</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VCD</td>
<td>2.960</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VCP does not Granger Cause RGDP</td>
<td>0.233</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VCP</td>
<td>4.218</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VBA does not Granger Cause RGDP</td>
<td>2.374</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VBA</td>
<td>3.769</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VCS1 does not Granger Cause RGDP</td>
<td>0.145</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VCS1</td>
<td>7.689</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VBS does not Granger Cause RGDP</td>
<td>0.0002</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VBS</td>
<td>5.312</td>
<td>Reject</td>
<td></td>
</tr>
<tr>
<td>VDS does not Granger Cause RGDP</td>
<td>0.219</td>
<td>Accept</td>
<td>Unidirectional</td>
</tr>
<tr>
<td>RGDP does not Granger Cause VDS</td>
<td>3.315</td>
<td>Reject</td>
<td></td>
</tr>
</tbody>
</table>

For each of the pairs in the test, the result shows that the F-value for the second null hypothesis is always significant. That is, the F-values indicate that we reject the null hypotheses of GDP not Granger-causing each of the securities variables, but we accept the hypotheses that neither of the securities market variables Granger causes GDP. Thus, it can be seen that causality runs from economic growth to securities investment growth and not the other way round. In Nigeria growth in economic activities generally leads to higher income levels which are partly used for investment including buying of securities. This findings support the long-standing and highly celebrated results and argument by Shaw (1973) Levine (1997) that the impact of economic development on financial market development is stronger than the reverse effect. Next, we seek to identify the marginal effects of securities investment on economic growth in Nigeria using dynamic tools.

**DYNAMIC ANALYSIS**

The short-run dynamics of the behaviour the economy within the context of movements in securities investment in Nigeria is captured within an error correction model (ECM). We now turn to this analysis. The autoregressive distributed lags (ARDL) approach is used for the ECM. Based on the specifications in the previous models are analysed. The error correction representations for the selected ARDL models are reported in Table 5. The R-Bar squared criterion was used for the selection of the parsimonious equation.

**The Money Market Securities Result**

The error correction mechanism result for the first model, as reported in table 5 below, indicates that the model has highly impressive diagnostic statistics. The goodness of fit of the model is relatively high. The R-squared value of 0.621 indicates that over 62 percent of the systematic variation in GDP at any given time is explained by the explanatory variables and the ECM term. The overall performance of the model is determined by observing the F-statistic in the model. The F-statistic value of 8.18, passes the significance test at the 1 percent level, since this value is greater than the 1 percent critical F-value of 5.01. Thus, we cannot reject the hypothesis of a significant linear relationship between economic performance and all the independent variables combined in the short run. Indeed, the model has a very high overall significance level.
Table 5: Model for Money Market Securities Investment and the Economy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>T-Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>17544.14</td>
<td>3.353</td>
</tr>
<tr>
<td>ΔVTB</td>
<td>0.100</td>
<td>2.478</td>
</tr>
<tr>
<td>ΔVCD</td>
<td>0.156</td>
<td>0.438</td>
</tr>
<tr>
<td>ΔVCP</td>
<td>0.097</td>
<td>2.039</td>
</tr>
<tr>
<td>ΔVBA</td>
<td>1.073</td>
<td>2.072</td>
</tr>
<tr>
<td>ECM1(-1)</td>
<td>-0.627</td>
<td>-6.142</td>
</tr>
</tbody>
</table>

R² = 0.621  F = 8.18  D.W = 1.86

The particular contribution of each of the variables to short term movements in capital market development is determined by observing the individual coefficients of the explanatory variables in terms of sign and significance. A close investigation of the individual coefficients of the variables reveals that only the coefficient of lagged VCP fails the significance test at the 5 percent level, all the other coefficients pass the significance test. This result indicates that investment activities in Treasury bills, certificate of deposits and bankers acceptances contribute positively to economic activities in Nigeria. Any growth in these securities will cause economic activities to expand in the country.

The result shows that government participation in the market through Treasury bills and certificate of deposits presents a strong short run stimulating feature for economic growth in Nigeria. This could be due to the fact that income derived from such investment revenue is used by government to develop infrastructural base of the country. Bankers acceptance is also shown to have a strong short term influence on the economy since it tends to regulate and enhance banking sector short term liquidity.

The error correction term has the correct negative sign and also passes the significance test at the 5 percent level. This goes to show that any short-term deviation of the economy from equilibrium in the short-run will be restored in the long run. The very relatively moderate value of the error correction term (-0.62) means that adjustment to equilibrium in the long run is fast as over 62 percent of the adjustment of the economy to long run equilibrium is achieved in the first year.

The Capital Market Securities Investment and Economic Performance

The result of the capital market securities investment on the economy is shown in table 6 below. The diagnostic statistics of the result are not very impressive. The coefficient of determination is low, with R squared value of 0.315. This shows that just above 31 percent of the systematic variation in GDP is explained in the model. The F value is also low and fails the significance test at the 5 percent level, suggesting that a short run relationship may not actually exist between the capital market securities investment variables used in the sample and economic performance in Nigeria.
Table 6: Model for Capital Market Securities Investment and the Economy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>T-Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>26796.66</td>
<td>5.771</td>
</tr>
<tr>
<td>ΔVCS</td>
<td>-2.693</td>
<td>-0.769</td>
</tr>
<tr>
<td>ΔVBS</td>
<td>6.534</td>
<td>0.341</td>
</tr>
<tr>
<td>ΔVDS</td>
<td>-1.698</td>
<td>-0.747</td>
</tr>
<tr>
<td>ECM1(-1)</td>
<td>0.141</td>
<td>2.033</td>
</tr>
</tbody>
</table>

R² = 0.315                                 F = 2.07                                    D.W = 1.04

Considering the individual significance of the coefficients of the explanatory variables, the result indicates that none of the coefficients passes that significance test at the 5 percent level. This implies that the capital market securities investment indicators do not predict the level of economic performance in the short run. Compared with the money market instruments, it can be shown that money market instruments deliver more short term effects on the economy than the capital market instruments. This may be as a result of the fact that in Nigeria, capital market investment is composed more of long term investment instruments that only yields economic benefits after a longer period of time. The coefficient of the ECM term has a rather paversive positive sign, suggesting that capital market securities instruments can quickly plunge the economy into destabilization when there is a shock in their behaviour. A good example is the recent slowdown in the economy resulting from the crash of the capital market in Nigeria.

THE LONG RUN RESULTS

The long run steady state result of the GDP functions is shown in table 4.5 below. The estimation of the long run behaviour of GDP with investment in securities is determined based on the outcome of the cointegration analysis. The results are therefore presented in terms of the coefficients and the Standard error values of the estimates. In order to determine the level of relevance of each of the explanatory variables in determining GDP changes in the long run, we consider each of the coefficients in terms of their signs and significance level. Apparently, apart from the VCD coefficient in the money market and VDS in the capital market, all of the coefficients are significant at the 5 percent level. All the coefficient are positively signed, indicating positive effect of these securities on economic growth in the long run. This implies that a sustained growth in both the money market and capital market securities investment will ensure perpetual economic growth in the country.

Table 4.6: The Long Run Relationship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Money Market</th>
<th>Capital Market</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>T-ratio</td>
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<td>18.58</td>
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</table>
CONCLUSION

The empirical results obtained show that it is economic growth that Granger causes the deepening of securities investment in Nigeria and not the other way round. Money market securities investment was shown to have strongest positive effect on the level of economic activities given the $R^2$ value of 0.62 in the short run and 0.91 in the long run. Capital market securities investment only delivers long run economic effects in Nigeria given that the $R^2$ value for the short run model was 0.32 while that of the long run was 0.76. Thus, this study concludes that securities have positive-mixed effects on economic growth within a dynamic framework.

- Money market securities investment has strong positive effect on the level of economic activities. As these investments grow, the economy also tends to improve. These positive effects occur both in the short run and in the long run. This result is in line with findings by King and Levine (1993) for other developed economies.
- That capital market securities investment only delivers long run economic effects in Nigeria. In the short run investment in capital market securities does not have any significant impact on the economy.

RECOMMENDATIONS

a) The functioning of existing securities in the markets should be strengthened. This may be achieved by improvement in the dissemination of information on securities options available and securing security investment that outperforms inflation. This should increase the average saving culture.

b) The private and public sector should be encouraged to invest in capital market through increase market transparency. This can be done through educating and enlightenment programs to show evidence and build investor confidence. When prospects cannot give credence especially with the recent fall of some brokerage firms, economic meltdown 2007, pandemic 2020 – introduction of an effective investor compensation fund and making sure that only institution of good reputable standing are licensed to operate it.

REFERENCES

reproduced in Domar (1957a), pp. 70-82