

IMPACT OF TREASURY BILLS ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This study examined the impact of treasury bills on economic growth in Nigeria. Its specific objectives were to examine the impact of treasury bills bought by Deposit Money Banks on Real Gross Domestic Product of Nigeria; and to assess the impact of treasury bills bought by Non-Bank public on Real Gross Domestic Product of Nigeria. The study used ex-post facto research design. Auto-regressive Distributed lag model was applied. It was found that treasury bills bought by Deposit Money Banks on had no significant impact on Real Gross Domestic Product of Nigeria. In addition, it was revealed that treasury bills bought by Non-Bank public had no significant impact on Real Gross Domestic Product of Nigeria. In line with the findings it was concluded that treasury bills had no significant impact on economic growth in Nigeria. Thereafter, it was recommended that the use of treasury bills should go towards enhancing investment potentials in the real sector of the Nigerian economy. This will strengthen the nation's productive capacity to expedite the desired economic growth.

Keywords: Treasury bills; Economic growth; financial market; Nigeria

1.0 INTRODUCTION

1.1 Background of the study

The Nigerian economy has been going through lots of problems. It suffered two recessions within five years (Nnodim et al, 2020). In 2014 Nigeria was identified as the largest economy in Africa after it rebased its gross domestic product, GDP. That was years ago. Currently the country is facing development challenges with the statistics of its economic growth not very encouraging. Presently a minimum of 33percent of Nigerians are in extreme poverty. The country has surpassed China and India, as the country having the highest number of people in extreme poverty. It's of out-of-school children is the highest number in the world. The second-highest number of persons living with HIV/AIDS globally is found in Nigeria (Obioha, 2022). Maternal deaths during childbirth among Nigerian women account for 13 per cent of the world's maternal mortality. There is more tuberculosis cases in Nigeria than the rest of Africa put together. From a food basket the country had reduced to a net food-importer as its agriculture sector continues to suffer neglect. The story of decline does not stop in the agriculture sector but is spread across almost every productive sector. For the

telecommunications, trade and finance sectors, economic growth has been highly variable regionally, with the primary target of international and Nigerian investment being the coastal Southwest around Lagos, unlike the highly populated North falling further behind in almost all economic indicators (Inyang & Okonkwo, 2021). Also, there is unreliable electric power supply forcing individuals and firms to invest in private power generation, which drives up costs, slows down economic activity, and worsens air pollution (Udegbunam, 2021). In terms of the business environment, Nigeria remains one of the most difficult places in the world to do business. Conflict has become an epidemic in Nigeria and links strongly to the theme of poor governance. In the oil-rich Delta region conflict has arisen over the lack of widespread benefits from petroleum and the devastating environmental impacts of massive oil spills. In the Middle Belt, population pressures have sparked deadly disputes over land usage that have gone unattended to by official institutions and are being exacerbated by religious affiliations of the affected communities (Obioha, 2022).

Bringing improvement will ensure deeper growth of the economy. Economic growth requires adequate stock and allocation of capital to the various sectors of the economy. These resources are needed to strengthen the operational capacity of entrepreneurs, firms and provision of infrastructure to encourage private sector investments, initiatives and growth. Finance is one approach to providing an economy, the resource needed to grow (Center for Strategic and International Studies, 2022). The growth process of any economy is hinged of the ability of the financial sector of a country to develop the capacity to mobilize fund required for short and long term investments as investors differs in risk preference (Akpotor and Egharevba, 2022). One of the instruments often deployed in efficient allocation of resources in an economy is financial intermediation. This refers to process whereby intermediaries take funds from depositors (who are deemed to have surplus) and lend to borrowers (who are deemed to be in deficit supply of funds). In other words, they mediate the transfer of funds from economic surplus units (lenders) to economic deficit units (borrowers) (Ezema et al. 2022). Among the various ways of financial intermediation, government issuing treasury bills has been a very popular option in the Nigerian fiscal policy space (Akpan, et. al, 2022). Treasury Bills refer to short term investment securities issued by governments to finance national borrowing requirements (UBA, 2022). The Nigerian government issues Treasury bills to fund various public projects, regulate liquidity and its deficit financing. Treasury bills issued in Nigeria are bought either by Deposit Money Banks or Non-Bank public.

With repayment guaranteed at maturity, treasury bills have become a regular attraction from investors in the Nigerian economy (Dipo, 2022). It has consistently recorded improved patronage as the amount of bills demanded by investors exceeded the amount offered (Komolafe, 2022). In extension treasury bills in 2022 has increasingly generated more fund for government, deepening its use as instrument to influence the economy. In view of its growing patronage, this study seeks to investigate the extent to which it impacts on economic growth in Nigeria.

1.2 Objectives of the Study

The broad objective of the study is to investigate the impact of treasury bills on economic growth in Nigeria. The specific objectives of the study are to:

1. Examine the impact of treasury bills bought by Deposit Money Banks on Real Gross Domestic Product of Nigeria
2. Assess the impact of treasury bills bought by Non-Bank public on Real Gross Domestic Product of Nigeria

1.3 Statement of Hypotheses

H01: Treasury bills bought by Deposit Money Banks on had no significant impact on Real Gross Domestic Product of Nigeria

H02: Treasury bills bought by Non-Bank public had no significant impact on on Real Gross Domestic Product of Nigeria

1.4 Scope of the Study

The period of the study was from 1985-2021. The base year 1985 marked the year in which Nigeria adopted the Structural Adjustment Programmer, an economic reform that sought to provide loans (financial intermediation) while removing “excess” government controls and promoting market competition. The end year of 2021 marked the latest data on the variables in the study.

2.0 REVIEW OF LITERATURE REVIEW

2.1 Conceptual Review

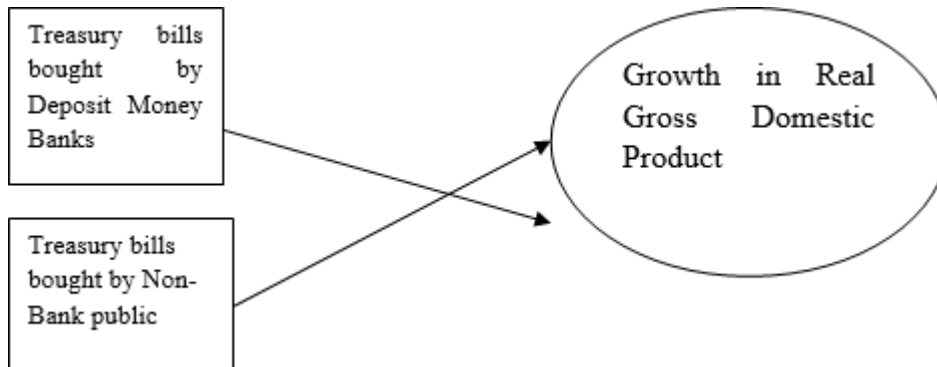
2.1.1 Treasury Bills

Treasury Bills are government guaranteed debt instruments issued by CBN on their behalf to finance expenditure. Treasury bills are temporary sovereign obligation securities which have a duration of less than one year or maximum one year (Omodero and Agege, 2018). They are short term instruments issued by the government under varying tenor to finance its operations. When an investor buys a Treasury bill, they are lending money to the government. They can be redeemed at par after being offered at a discount and maturing in a year or less. In other words, Treasury Bills are debt securities issued by the government to finance its deficit budget. Treasury bills are usually issued through a competitive bidding process, quoted and traded on the Financial Market Dealer’s Quotation (FMDQ) platform. These bills are by nature, the most liquid and marketable money market instrument due to its ease of access, affordability and government guarantee (Central Bank of Nigeria, 2008). It was first issued in Nigeria following the Treasury Bill Act of 1959. The tremendous achievement made in the process gave a boost that led to the continuous issuance of monetary debt instrument of this nature.

2.1.2 Real Gross Domestic Product

Real gross domestic product (RGDP) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year. Real GDP is expressed in base-year prices. It is a measure of the total economic output of a country and is adjusted for changes in price. Real GDP just measures actual increases in output — it accounts for inflation or deflation, stripping away any price changes.

2.2 Conceptual Framework



Source: Researcher’s design

2.3 Theoretical Framework

The theoretical basis for this study is the Endogenous “AK” Growth Theory as propounded by Pagano (1993). The theory holds that an economy’s long-run growth rate depends on its saving rate. Pagano (1993) assumes that financial intermediation could affect economic growth through three channels namely: changing productivity of capital, savings funneled to investment and savings rate. In other words, financial intermediation reduces the loss of resources needed to allocate resources, encourage greater savings ratio, and increase capital productivity. The theory assumes that only one type of goods is produced with capital as the only input factor.

$$Y_t = AK_t \dots\dots\dots(1)$$

Where Y_t = Output, t = Time, K = Capital, and A = Capital Productivity.

This implies that capital stock in time $t + 1$ is given as:

$$K_t = I_t + (1-d) K_{t-1} \dots\dots\dots(2)$$

Where d = rate of depreciation and I = investment. The implication is that if a fixed fraction(s) of output (y) is saved and there is a fixed rate of depreciation (d), the rate of aggregate net investment is given as:

$$dk/dt = sy - \partial t \dots\dots\dots(3)$$

This implies that the growth rate (g) is driven by:

$$g = (1/y) (dy/dt) = (1/k) (dk/dt) = SA - \partial \dots\dots\dots(4)$$

The raising of fund from Treasury bill sale provides the government with a pool of fund to channel as large scale resource for use in minimizing the overall fiscal deficit in the economy of the country. The Nigerian government uses the money to fund its debt and pay ongoing expenses. This is able to influence the liquidity in the economy and ensure there is continuous

redistribution of financial capital across board for increased number of members of the public to access and put to economic use. With more money in supply in the economy it increases the availability of finance which ensures that more investment can be made. This way more businesses are able to spring up as the old ones access more fund to sustain their operations. With more investment in the economy more economic activities keep taking place and the possibility of economic growth will increase.

2.4 Empirical Review

Onogbosele and Ben (2016) examined the impact of domestic debt on economic growth of Nigeria for the period 1985-2014. The variance decomposition analysis revealed that federal government of Nigeria bonds exerts more pressure on the growth rate of gross domestic product in Nigeria. This was followed by shocks received from treasury bonds, while development stocks and interest rate contributed the least to shocks in gross domestic product. The findings of the impulse response function in support of the variance decomposition analysis showed that economic growth responded positively to shocks in federal government of Nigeria bonds and negatively to shocks in treasury bonds throughout the ten year period. Akinsokeji et al. (2016) examined the impact of the bond market on aggregate investment and the Nigerian economy. The study employed Granger Causality. The causality test indicates that the flow of bond market goes from bonds to savings, then from savings to investment, and then from investment to real GDP growth. Omodero and Alege (2018) addressed public-sector bonds and economic growth in Nigeria. The findings indicate that treasury bills and FGN bond impact positively and significantly on economic growth of Nigeria. On the contrary, Treasury bond and inflation affected growth negatively and substantially. Chukwuani and Osita (2018) examined the impact of financial sector development on investment in government treasury bills in Nigeria. The study applied multiple regression technique and revealed that the level of intermediation and lending interest rate had significant effect on investment in treasury bills in Nigeria as a unit increase in interest rate resulted in 52 percent increase in treasury bills. Also a unit increase in lending rate of banks led to 11 percent increase in investment in treasury bills in Nigeria. Juma (2019) looked into the relationship between bond market development and growth of the economy in EAC member countries. Regression analysis was used to examine data and it was concluded that bond market development impacted positively on economic growth in EAC countries. Andabai et. al (2019) examined the impact of monetary policy on economic growth in Nigeria for the period 1990-2017. Hypotheses formulated were tested using Ordinary Least Square (OLS) techniques. The study revealed a significant impact of Treasury Bills on Gross Domestic Product in Nigeria.

Adsina-Uthman et.al (2020) re-examined money market impact on economic growth in Nigeria. Structural vector autoregressive model was used. The findings from the structural VAR model suggest that, while shocks to money supply growth, prime- and maximum lending rates have negative instantaneous impacts on economic growth, shocks to treasury bills rate has a positive instantaneous impact on output growth. Oke et. al (2021) examined the impact of bond market development on the growth of the Nigerian economy from 1986–2018. The study revealed that Government bond exhibited an insignificant positive relationship; corporate bond and value of bond traded were positive and statistically significant (prob. <0.05) while bond yield indicated a negative relationship with the growth of the Nigerian economy. Akpan et. al (2022) examined the impact of treasury bills on private sector credit in Nigeria. The

behavior of variables was captured in an autoregressive distributed lag (ARDL) model. The result of the estimated model shows that treasury bills held by commercial banks, treasury bills held by the public and treasury bill rate has significant negative effect on credit to private sector, showing that treasury bills have a crowding out effect on private sector credit. Akpotorand Egharevba (2022) addressed the question, can treasury bills issued influence economic growth in Nigeria? Vector Error Correction Model (VECM) Regression was applied and the findings revealed that Treasury bills have insignificant negative effects on economic growth in Nigeria.

3.0 METHODOLOGY

3.1 Research design Source of Data and Area of Study

The research design was Ex-post facto. Secondary data used in the study were taken from Central Bank of Nigeria Statistical Bulletin 2021. The area of the study is Nigeria.

3.2 Model Specification

The functional relation of the model used in the study is given as:

$$RGDP = f(\text{TRDMB}, \text{TRNBP}) \dots \dots \dots (ii)$$

The multivariate model is specified as:

$$GDP = \beta_0 + \beta_1 \text{TRDMB} + \beta_2 \text{TRNBP} + \mu \dots \dots \dots (iii)$$

Where: RGDP = Real Gross Domestic Product; TRDMB = Treasury bills bought by Deposit Money Banks; TRNBP = Treasury bills bought by Non-Bank public; β_0 = Constant parameter; β_1 = Coefficient parameter of TRDMB; β_2 = Coefficient parameter of Treasury bills bought by Non-Bank public; μ = error term

3.3 Description of variables

3.3.1 Independent variable

Treasury bills bought by Deposit Money Banks: This refers to the total monetary value of all treasury bills bought by Deposit Money Banks in Nigeria.

Treasury bills bought by Non-Bank public: This refers to the total monetary value of all treasury bills bought by other entities other than Deposit Money Banks in Nigeria.

3.3.2 Dependent variable

Real Gross Domestic Product: this is a measure of the monetary value of final goods and services produced in Nigeria in a year and adjusted for changes in price.

Considering that the study had to do with growth all data used in the study were expressed in growth rate.

3.4 Description of Variables in Growth Rate

Table 1 presents data on the variables in growth rate. Real Gross Domestic Product grew by 1.86% from 1985 to 1986. From 1990 to 1991 it dropped by -0.55202%. Between 1998 and 1999 it fell by 0.521832%. From 2000 to 2001 there was -27.7441% decline. 2010 to 2011 saw a decrease of 5.307929%. Between 2020 and 2021 was an increase of 3.398302%. Treasury Bills bought by deposit money banks declined by -185.443% from 1985 to 1986. From 1990 to 1991 it dropped by -13.4831%. Between 1998 and 1999 it rose by 280.2656%. From 2000 to 2001 there was 6.666841% growth. 2010 to 2011 saw an increase of 119.1725%. Between 2020 and 2021 was an increase of 37.55185%. Treasury Bills bought by non-bank public grew by 20.6278% from 1985 to 1986. From 1990 to 1991 it dropped by 7.041252%. Between 1998 and 1999 CBN recorded there was no non-bank public purchase of treasury bills. From 2000 to 2001 there was -27.7972% drop. 2010 to 2011 saw a decrease of -100%. Between 2020 and 2021 was an increase of 27.22673%.

Table 1 - Data on all variables in growth rate

Year	RGDP (%)	TRDMB (%)	TRNBP (%)
1985	0	0	0
1986	1.864288	-185.443	20.6278
1987	0.170232	74.36709	146.6368
1988	6.233257	-1.45191	36
1989	6.656092	-51.7495	38.23529
1990	11.62756	205.7252	35.97679
1991	-0.55202	-13.4831	7.041252
1992	2.193493	-10.6782	6.245847
1993	5.18E-12	9.98E-08	6.92E-09
1994	0.256574	-3.47712	104.7484
1995	1.872355	-46.3164	14.66041
1996	4.052041	181.1302	-8.21093
1997	2.88593	-20.2441	-6.37461
1998	2.495606	10.14851	13.02886
1999	0.521832	280.2656	0
2000	5.518497	48.15193	105.8255
2001	6.666841	-27.7441	-27.7972
2002	14.60439	98.88086	-11.1093
2003	9.502616	8.718363	160.0113
2004	10.442	44.48287	35.88337
2005	7.008456	-6.01777	-0.6161
2006	6.72596	-11.0182	-24.7862
2007	7.318098	5.926196	-87.516
2008	7.199293	-36.0905	577.9169
2009	8.353335	82.96303	26.60566
2010	9.539775	17.36716	217.0889
2011	5.307929	119.1725	-100
2012	4.205888	-14.4115	0

2013	5.487796	-7.16409	87.92705
2014	6.222951	49.41573	-29.8892
2015	2.786392	-46.8356	76.78992
2016	-1.58306	20.85646	34.61139
2017	0.82398	32.94552	-5.05983
2018	1.911142	-36.14	-4.81908
2019	2.274916	5.384723	-33.9544
2020	-1.92394	-18.2184	-23.3849
2021	3.398302	37.55185	27.22673

Source: Researcher’s calculation, 2022

3.5 Unit Root Test Result

Table 1 reveals that the time series RGDP was stationary at first difference while TRDM Band TRNBP were stationary at level. This was evidenced by their respective Phillips-Perron test statistic being less than their respective Critical value @ 5%. This was corroborated by their respective p-values being lower than 0.05 (the level of significance) which shows statistical significance. In view of the 1(0) and 1(1) order of integration, the Auto-regressive Distributed lag model was used in analyzing the data.

Table 2 - Result of Unit Root test

Variable	Phillips-Perron test statistic	Critical value @ 5%	Order of Integration	P-value
RGDP	-10.98355	-2.948404	1(1)	0.0000
TRDMB	-7.228737	-2.945842	1(0)	0.0000
TRNBP	-7.333179	-2.945842	1(0)	0.0000

Source: Author’s Eviews 10 output, 2022

Where:

RGDP = Real Gross Domestic Product

TRDMB = Treasury Bills bought by deposit money banks

TRNDP = Treasury Bills bought by non-bank public

3.6 Result of the Analysis and Discussion of Findings

The analysis result in table 3 shows that if each index for Treasury Bills bought by deposit money banks and Treasury Bills bought by non-bank public is held constant, Real Gross Domestic Product will increase by an intercept value of 1.880312. That is to say for any unit increase in Treasury Bills bought by deposit money banks and Treasury Bills bought by non-bank public, Real Gross Domestic Product will increase by 1.880312 basis points. The Adjusted Co-efficient of Determination which was 0.288082 shows that in the model used the independent variables (Treasury Bills bought by deposit money banks and Treasury Bills

bought by non-bank public) can only explain 28.8082 percent of any variation seen in Real Gross Domestic Product. The remaining 71.1918 percent can be attributed to other variables not used in the model. The p-value of Treasury Bills bought by deposit money banks at 0.2150 is higher than the level of significance of 0.05. The p-value of Treasury Bills bought by non-bank public at 0.4713 is higher than the level of significance of 0.05. Both show there was statistical insignificance. In other words, there was not enough evidence against the null hypothesis. The findings agreed with Akpotor and Egharevba (2022) who revealed that Treasury bills have insignificant negative effects on economic growth in Nigeria. The finding of the study was also in agreement with Oke et. al (2021) who found that government bond exhibited an insignificant positive relationship with the growth of the Nigerian economy. On the other hand, the findings disagreed with Omodero and Alege (2018) whose finding indicated that treasury bills and FGN bond impact positively and significantly on economic growth of Nigeria. Also, the findings of Andabai et. al (2019) that treasury bills had a significant impact of treasury bills on gross domestic product in Nigeria.

Table 3 - Result of Hypothesis test

Dependent Variable: RGDP

Method: ARDL

Date: 12/05/22 Time: 19:30

Sample (adjusted): 2 37

Included observations: 36 after adjustments

Maximum dependent lags: 4 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (4 lags, automatic):

Fixed regressors: TRDMB TRNBP C

Number of models evaluated: 4

Selected Model: ARDL(1)

Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
RGDP(-1)	0.518360	0.142387	3.640494	0.0010
TRDMB	0.008801	0.006957	1.265049	0.2150
TRNBP	0.003691	0.005063	0.728997	0.4713
C	1.880312	0.840436	2.237307	0.0324
R-squared	0.349104	Mean dependent var	4.501911	
Adjusted R-squared	0.288082	S.D. dependent var	3.891236	
S.E. of regression	3.283240	Akaike info criterion	5.319978	
Sum squared resid	344.9492	Schwarz criterion	5.495924	
Log likelihood	-91.75960	Hannan-Quinn criter.	5.381388	
F-statistic	5.720988	Durbin-Watson stat	2.140037	
Prob(F-statistic)	0.002981			

*Note: p-values and any subsequent tests do not account for model selection.

4.0 SUMMARY OF FINDINGS

The following are the findings of the study:

1. Treasury bills bought by Deposit Money Banks on had no significant impact on Real Gross Domestic Product of Nigeria
2. Treasury bills bought by Non-Bank public had no significant impact on Real Gross Domestic Product of Nigeria

5.0 CONCLUSION

This study looked into the extent to which treasury bills as financial intermediation instruments impacted on economic growth in Nigeria. Specifically the study looked into the significance of Treasury bills bought by Deposit Money Banks and Treasury bills bought by Non-Bank public on economic growth in Nigeria measured by its Real Gross Domestic Product. Based on the findings of the study it was concluded that treasury bills had no significant impact on economic growth in Nigeria.

6.0 RECOMMENDATIONS

To have significant effect on the economy the use of treasury bills should go towards enhancing investment potentials in the real sector of the Nigerian economy. The real sector of Nigeria's economy has arguably been the engine of the country's economic transformation over the years. Importantly, the sector has metamorphosed into an emerging industrial workhorse from a hitherto rudimentary agrarian economy that can hardly be ignored. On the domestic front, the sector comprises agriculture, industry, building and construction, wholesale and retail and the services sectors. Use of treasury bills must adequately address issues related to enhancing the capacity of the real sector to drive the economy towards achieving higher levels of economic growth. This will strengthen the nation's productive capacity to expedite the desired economic growth.

REFERENCES

- Adesina-Uthman, G., Olatunde, A. & Ahmed, I. (2020). Re-examining money market and economic growth nexus in Nigeria: A SVAR model approach. *West African Journal of Monetary and Economic Integration*, 20(1a), 45-65
- Akinsokeji, R.A., Adegboye, A.C., Edefe, J. (2016). The bonds market, aggregate investment and economic growth in Nigeria. *Journal of Research in National Development*, 14, 82-71
- Akpan, O., Effiong, U. & Ukere, I. (2022). Impact of Treasury Bill on Private Sector Credit in Nigeria. *Research in Social Sciences*. 5(1), 30-42. DOI: 10.53935/26415305.v5i1.229
- Akpotor, V. & Egharevba, E. (2022). Can treasury bills issued influence economic growth in Nigeria? An empirical answer. *British International Journal of Applied Economics, Finance and Accounting*, 6(02), 1-8

- Andabai, P., Ikeora, J. & Anah, S. (2019). Impact of monetary policy on economic growth in Nigeria (1990-2017), *International Journal of Developing and Emerging Economies* 7(3), 14-21
- Chukwuani, V. & Osita, N. (2018). Impact of Financial Development on Investment in Government Treasury Bills in Nigeria. *IDOSR Journal Of Arts and Management*, 3(2), 31-41
- Center for Strategic and International Studies (2022). Supporting small and medium enterprises in sub-saharan africa through blended finance. <https://www.csis.org/analysis/supporting-small-and-medium-enterprises-sub-saharan-africa-through-blended-finance>
- Dipo, O. (2022). Traders Anticipate Higher Rates as CBN Sells N191bn T-Bills Today <https://businesspost.ng/economy/traders-anticipate-higher-rates-as-cbn-sells-n191bn-t-bills-today/>
- Ezema, C., Ugwu, N., Ojo, M., Aroh, M., Udeji, B., & Idigo, J. (2022). Financial Intermediation Activities and Output: Econometrics Evidence from Insurance intermediation in Nigeria, 1997-2022. *Global Journal of Finance and Business Review*, 5(2), 28-39.
- Inyang, U., & Okonkwo, I. V. (2021). Information and Communication Technology in Nigeria Insurance Industry: Developments, Challenges and Prospects. *Journal of Economics, Finance and Management Studies*, 4(07), 1159-1171.
- Juma, N. Effect of bond market development on growth of economy amongst East African Community member countries. A research project submitted in partial fulfillment of the requirement for the award of Masters of Science degree in Finance, School of Business, University of Nairobi.
- Komolafe, B. (2022). DMO raises interest rate on treasury bills, sells N150bn bills. <https://www.vanguardngr.com/2022/08/dmo-raises-interest-rate-on-treasury-bills-sells-n150bn-bills/>
- Nnodim, O., Popoola, N., Asu, F. & Ajaja, T. 2020). Nigeria suffers worst economic recession in 36 years – World Bank. <https://punchng.com/nigeria-suffers-worst-economic-recession-in-36-years-wbank-data/>
- Obioha, K. (2022). Nigeria: The tragic truth hidden in plain sight. <https://www.vanguardngr.com/2022/09/nigeria-the-tragic-truth-hidden-in-plain-sight/>
- Oke, M., Dada, O. & Aremo, N. (2021). Impact of Bond Market Development on the Growth of the Nigerian Economy. *Folia Oeconomica Stetinensia*. 21(1), 60-75. DOI: 10.2478/fofi 2021-0005
- Omodero, C.O & Alege, P.O. (2022). Public-Sector Bonds and Economic Growth in Nigeria, *Montenegrin Journal of Economics*, 18(2), 95-103

Onogbosele, D. & Ben, M. (2016). Impact of domestic debt on economic growth of Nigeria for the period 1985-2014. *Asian Research Journal of Arts & Social Sciences*, 1(3), 1-13

UBA (2022). Treasury bills. <https://www.ubagroup.com/nigeria/corporate-banking/treasury-products/treasury-bills/>

Udegbonam, O. (2021). Nigeria businesses lose \$29 billion annually to poor electricity. <https://www.premiumtimesng.com/news/top-news/456904-nigeria-businesses-lose-29-billion-annually-to-poor-electricity.html>

APPENDIX

RGDP = Real Gross Domestic Product

TRDMB = Treasury Bills bought by deposit money banks

TRNDP = Treasury Bills bought by non-bank public

Year	RGDP (₦' Billion)	TRDMB (₦' Billion)	TRNDP (₦' Billion)
1985	14,953,910,000,000	9,020,000,000	1,770,000,000
1986	15,237,990,000,000	3,160,000,000	2,230,000,000
1987	15,263,930,000,000	5,510,000,000	5,500,000,000
1988	16,215,370,000,000	5,430,000,000	7,480,000,000
1989	17,294,680,000,000	2,620,000,000	10,340,000,000
1990	19,305,630,000,000	8,010,000,000	14,060,000,000
1991	19,199,060,000,000	6,930,000,000	15,050,000,000
1992	19,620,190,000,000	6,190,000,000	15,990,000,000
1993	19,927,990,000,000	38,250,000,000	17,690,000,000
1994	19,979,120,000,000	36,920,000,000	36,220,000,000
1995	20,353,200,000,000	19,820,000,000	41,530,000,000
1996	21,177,920,000,000	55,720,000,000	38,120,000,000
1997	21,789,100,000,000	44,440,000,000	35,690,000,000
1998	22,332,870,000,000	48,950,000,000	40,340,000,000
1999	22,449,410,000,000	186,140,000,000	40,340,000,000
2000	23,688,280,000,000	275,770,000,000	83,030,000,000
2001	25,267,540,000,000	199,260,000,000	59,950,000,000
2002	28,957,710,000,000	396,290,000,000	53,290,000,000
2003	31,709,450,000,000	430,840,000,000	138,560,000,000
2004	35,020,550,000,000	622,490,000,000	188,280,000,000
2005	37,474,950,000,000	585,030,000,000	187,120,000,000
2006	39,995,500,000,000	520,570,000,000	140,740,000,000
2007	42,922,410,000,000	551,420,000,000	17,570,000,000
2008	46,012,520,000,000	352,410,000,000	119,110,000,000
2009	49,856,100,000,000	644,780,000,000	150,800,000,000
2010	54,612,260,000,000	756,760,000,000	478,170,000,000
2011	57,511,040,000,000	1,658,610,000,000	0.00
2012	59,929,890,000,000	1,419,580,000,000	641,020,000,000
2013	63,218,720,000,000	1,317,880,000,000	1,204,650,000,000
2014	67,152,790,000,000	1,969,120,000,000	844,590,000,000
2015	69,023,930,000,000	1,046,870,000,000	1,493,150,000,000
2016	67,931,240,000,000	1,265,210,000,000	2,009,950,000,000
2017	68,490,980,000,000	1,682,040,000,000	1,908,250,000,000

2018	69,799,940,000,000	1,074,150,000,000	1,816,290,000,000
2019	71,387,830,000,000	1,131,990,000,000	1,199,580,000,000
2020	70,014,370,000,000	925,760,000,000	919,060,000,000
2021	72,393,670,000,000	1,273,400,000,000	1,169,290,000,000

Source: Table C.1.2: Gross Domestic Product at 2010 Constant Basic Prices - Annual1 (₦ Billion) and Table A.23.4: Holdings of Treasury Bills Outstanding, CBN Statistical Bulletin, 2021