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Adjustment of Nigerian Selected Macro Economic Variables to International Monetary Fund Conditionality from 1986 to 2016

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ABSTRACT

This research work examined how major macro economic variables in Nigeria such as Gross Domestic Product (GDP), Gross Fixed Capital Formation (GFCF) and National Savings (NS) reacted to International Monetary Fund (IMF) conditionality from 1986 to 2016. Many policy makers and researchers have questioned the benefits of IMF credit facilities to developing nations. This work therefore seeks to evaluate the impact of IMF conditionality like Reduction in Government Expenditure (TGE), Devaluation of Local Currencies (RER), and Trade openness (TO) on the Identified Macro Economic Variable in Nigeria. The data for the analysis were sourced from the data bank of World Bank. Granger causality test and ordinary Least Square (OLS) method were used to test the formulated hypotheses. The result revealed that IMF conditionality has significant effect on GDP, GFCF and NS of Nigeria. Devaluation of local currency is the greatest IMF conditionality that exerts great negative influence on economic growth of Nigeria. The work recommends among others that: instead of currency devaluation, protectionist policies via guided liberalization should be promoted combined with the use of fiscal policy in order to encourage local production and usage of locally produced goods. TGE that showed significant positive effect on GDP, GFCF and NS is an indication that government can positively influence the economic positions of Nigeria with the use of fiscal policy.

Keywords: *Conditionality, Trade Openness, Gross Fixed Capital Formation, Real Exchange Rate*

INTRODUCTION

The IMF is an organization of 189 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world (IMF, 2012). IMF formally came into existence on 27 December 1945, when the first 29 countries ratified its Articles of Agreement, and began its financial operations on 1st March 1947 as a cooperative fund upon which member states could draw to maintain economic activity and employment during a period of crises.

When the IMF was established as an institution for monetary cooperation, there was no reference to conditionality, but in order to safeguard the extended loans and make funds available to other potential borrowers; economic policies adjustments known as Conditionality was attached to the fund several years later in an Executive Board decision in 1952 (Buira, 2003). IMF conditionality is a set of policies that the IMF requires in exchange for financial and non financial resources. It is a means by which IMF offers support and attempts to influence the policies of borrowing nation in order to secure compliance with a programme of measures. According to Murray and King (2008) IMF conditionality mission was of three fold: to ensure the stability of the exchange rate, to promote economic growth, and to provide financial assistance to countries experiencing balance-of-payments difficulties.

Randall (2007) observed that the scope of conditionality of the IMF varies across various types of IMF facilities. Such facilities include; Stand by Facilities, Extended Fund Facilities, Extended Structural Adjustment Facilities and Poverty Reduction and Growth Facilities. Notably, there is a non-credit facility of IMF known as Policy Support Instrument (PSI). According to IMF factsheets (2016) PSI is a non financial instrument that supports low-income countries that do not want or need financial assistance but seek to consolidate their economic performance with IMF monitoring and support. The PSI is designed to promote a

close policy dialogue between the IMF and a member country, normally through semi-annual Fund assessments of the member's economic and financial policies. Currently, there are seven sub Saharan African countries that obtained PSI from IMF; Nigeria, Cape Verde, Mozambique, Rwanda, Senegal, Tanzania, and Uganda. These seven notions joined the IMF and other International Financial Institutions to solve their economic problems and attain the economic objectives, with Nigeria as the first Sub-Saharan African country to obtain this Instrument (PSI) from IMF in October 17, 2005.

Though PSI is not designed to attract fund, but it carries conditions similar to other fund facilities such as cutting of government expenditures, also known as austerity, devaluation of currencies, trade liberalization, or lifting import and export restrictions, removing price controls and state subsidies, improving governance and fighting corruption, privatization or divestiture of all or part of state-owned enterprises, increase Value Added Tax (VAT) and the price of basic products and reduction of trade union rights (Jesse & Konstantinos, 2014).

The critics of IMF feared that IMF imposes excessive and counterproductive forms of conditionality that have very little or nothing to do with economic theory (Randall, 2007). But the IMF Managing Director; Christine Lagarde, when she visited Nigeria in 2016, noted that the fund had no policy of interference with how member-countries run their fiscal policies, Nevertheless, according to Abubakar et al (2016), the president and secretary general of the Trade Union Congress of Nigeria (TUC), Bobboi Kaigama and Musa Lawal in fear, urge the Federal Government to beware of what agreements it may reach with the IMF on how to run the economy of the country in order not to adopt policies that will further impoverish the people. This is because it is believed that IMF policies are intended to help the member country overcome its external payments problem and thus be in a position to repay the Fund in a timely manner without considering the economic internal effect of the policies.

Many scholars have argued on the relevance of the IMF facilities especially towards improving the economic conditions of developing economies. Some showed that IMF conditionality is too short-run oriented and imposes foreign groomed conditions that hardly take cognizance of local environment, thereby worsening the economic conditions of the benefiting developing nations (Randall, 2007; Willian, 2003; Ibenta, 1988; Jesse & Konstantinos, 2014).

In favour of the IMF facilities, researchers argued that IMF conditionality demands adoption of economic policy/structural adjustment programmes that redresses the problems that led to the need of the facilities. They showed that the conditionality tend to be less distressful in low-income countries, and allows market-rate interest on most of the quota subscription (Abubaka et al, 2016; Kenen, 2007; Bumba, 2008; Murray & King, 2008)

Again, holding the IMF PSI, 38% of Nigerians live below poverty line, can it be argued that PSI and accompany conditionality worsen the economic conditions of the borrowing nations? Thus, this study seeks to: analyse the effect of IMF conditionality on Gross Domestic Product (GDP) of Nigeria; ascertain the effect of IMF Conditionality on Gross Fixed Capital Formation (GFCF) of Nigeria; evaluate the effect of IMF Conditionality on National Savings (NS) of Nigeria.

The work hypothesized that: IMF conditionality has no significant effect on Gross Domestic Product of Nigerian economy; IMF conditionality has no significant effect on Gross Fixed Capital formation of Nigerian economy; IMF conditionality has no significant affect on National savings of Nigerian economy.

CONCEPTUAL FRAMEWORK

Cabello, Sekulova and Schmidt (2008) defined conditionality as the application of specific, pre-determined requirements that directly or indirectly enter into a donor's decision to approve or continue to finance a loan or grant. Conditionality has been defined as a means by which one offers support and attempts to influence the policies of another in order to secure compliance with a programme of measures. It is a tool by which a country is made to adopt specific policies or to undertake certain reforms that it would not otherwise have undertaken, in exchange for financial support. Then within the context of the IMF, conditionality refers to policies a member must adopt to secure access to Fund resources (Buira, 2003). IMF conditionality is also seen as a set of policies or conditions that the IMF requires in exchange for financial resources *(*Jensen, 2004). Ross (2000) sees conditionality as those features

of a member's program of economic reform whose successful implementation is expressly established by the Fund as a condition for the availability of Fund financial assistance.

Amadeo (2017) defined GDP as the total value of everything produced by all the people and companies in the country. That is, it doesn't matter if they are citizens or foreign-owned companies, if they are located within the country's boundaries; the government counts their production as GDP. Abel and Deitz (2008) saw Gross Domestic Product as the most comprehensive measure of economic activity and a key gauge for analysts in evaluating an economy's performance.

According to Pettinger (2012) Gross fixed capital formation is a net investment that measures the net increase in fixed capital. It includes spending on land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; the construction of roads, railways, private residential dwellings, and commercial and industrial buildings. The meaning of capital formation is that society does not apply the whole of its current productive activity to the needs and desires of immediate consumption, but directs a part of it to the making of capital goods such as: building and other structure, plant and equipment, transport facilities, tools and instruments, machines, and all the various forms of real capital that can so greatly increase the efficacy of productive effort. The term is sometimes used to cover human as well as material capital, which include investment in skills, education and health (Kusmadi, 1997)

To Pass, Lowes and Davies (2005) government expenditure refers to the purchase of goods and services, which include public consumption, public investment, and transfer payments which consist of income transfers (pensions, social benefits) and capital transfer by the government. Classical economists believe that increased government spending exacerbates an economic contraction by shifting resources from the private sector, which they consider productive, to the public sector, which they consider unproductive. So a change in government spending is a major component of fiscal policy which is used to stabilize the macroeconomic business cycle (Pass, Lowes & Davies, 2005).

Real Exchange Rates is the purchasing power of two currencies relative to one another. There are basically two types of exchange rates; nominal exchange rate and real exchange rate. Nominal exchanges rate simply states how much of one currency (i.e. money) can be traded for a unit of another currency. The *real exchange rate,* on the other hand, describes how many of a good or service in one country can be traded for one of that good or service in another country (Pettinger, 2017).

Cara (2011) sees Trade Openness as measure of economic policies that either restrict or invite trade between countries. To Hardison (2011), trade openness refers to the outward or inward orientation of a given country's economy. Outward orientation refers to economies that take significant advantage of the opportunities to trade with other countries. Inward orientation refers to economies that overlook taking or are unable to take advantage of the opportunities to trade with other countries.

THEORETICAL FRAMEWORK

This research work is heavily linked to Harrod-Domar theory of growth. According to Hacche (1979), capital accumulation and savings are key factors in the process of economic growth. He emphasize that capital accumulation (net investment) has a double role to play in economic growth. It generates income on one hand and increases production capacity of the economy on another side, thus the choice of our variables of interest: Investments, Savings and GDP.

This theory sees Capital Formation (investment) and Savings as two macro-economic variables that increase the output (GDP). Again the increased output can only lead to economic growth when there is adequate demand to absorb the output. Such demand can be created through import restriction policy that will encourage the use of locally produced goods. But, these oppose the policy conditions of IMF where the beneficial government is expected to increase the value added tax and reduce government expenditure. Increase in value added tax as an indirect tax will increase the general prices of goods and services which will reduce the disposable income of citizens. Reduction in the disposable income will lead to reduction in savings and investment and at long run lead to increase in unemployment and poverty level. Nigeria like most of the Sub Saharan African countries is regarded as developing country, and if developing country indeed whose economy is still at development stage, government expenditure should be

increased and not reduced. Moreover, trade liberalization of developing economy will by no means create the needed demand that will absorb the local outputs that are needed for economic growth to exist. Thus the choice of our dependent variables (GDP, GFCF and NS) rests on Harrod –Domar theory of growth.

EMPIRICAL REVIEW OF RELATED LITERATURE

Udeh, Ugwu, and Onwuka, (2016) ascertained the impact of external debt on economic growth in Nigeria from 1980-2013. The study was based on Keynesian theory of increasing government activity as catalyst to economic growth. The variables studied were Gross Domestic Product (GDP), External Debt Stock, External Debt Service Payment and Exchange Rate. They obtained the data from World Bank International Debt Statistics and Central Bank of Nigeria Statistical Bulletin, 2013. The formulated models were analyzed using Ordinary Least Square. Diagnostic tests were conducted using Augmented Dick Fuller Unit Root Test, Co-integration and Error Correction Model. They discovered that External Debt had a positive relationship with Gross Domestic Product at short run, but a negative relationship at long run, External Debt Service Payment had negative relationship with Gross Domestic Product and Exchange Rate had a positive relationship with GDP. They concluded that exchange rate fluctuation had positive impact on the Nigerian economy while external debt stock and debt service payment had negative impact on the same economy. They recommended that Debt Management Office should set mechanism in motion to ensure that loans were utilized for purposes for which they were acquired and also set a ceiling for borrowing for states and federal governments based on well-defined criteria.

Kanu and Nwaimo (2015) explored the relationship between capital expenditures and gross fixed capital formation in Nigeria from 1981 to 2011. A least square regression analysis and unit root tests were carried out on a time series data. Other econometric tools like co-integration, Vector Auto Regression technique as well as Granger causality tests were deployed to ascertain the order of co integration and the level of relationships that exist between the dependent and independent variables. Findings of study reveal that Capital Expenditures (CAPEX) maintained a negative significant relationship with Gross Fixed Capital Formation (GFCF) in Nigeria, Imports and National Savings had a positive significant relationship with GFCF at both the short and long runs. They conclude that for sustainable gross fixed capital formation to be achieved, the federal government of Nigeria should cut down on her recurrent expenditure profile in favour of an increased CAPEX. Again, efforts must be made to mobilize the desired level of gross national savings that could attract foreign direct investments. Lastly, government is also advised to work on her potentially exportable goods and services that are needed elsewhere in the larger world and to reduce the level of inflationary trends

Ogege and Ekpudu (2010) as certained the effect of debt burden on the growth of the Nigerian economy from1970-2007. They employed ordinary least squares (OLS) to test the relationship between debt burden and the growth in the Nigerian economy. The finding shows that there is a negative relationship between debt stock (internal and external debt) and gross domestic product, meaning that an increase in debt stock will lead to reduction on the growth rate of Nigerian economy. Thus they recommended that the nation should avoid both external and internal borrowing in other to avoid huge debt problem.

Randall (2007) studied the politics of IMF on conditionality from 1992 to 2002 in order to ascertain the degree of the IMF autonomy. He used the probability of participation to test for effects of bargaining on the design of conditionality and concluded that the IMF does not impose a one-size-fits-all template of conditions to borrowers; lending to important recipients who received United State (U.S.) foreign aids is associated with narrower conditionality; that Fund as a bureaucratic agency pushes for influence and strives to maximize conditionality; and that the bargaining between the Fund and the borrowing member can be adversarial.

Nancy, Geoffrey and Bruce (2004) determined the impact of International Financial Institutions (IFI) conditionality on privatization in countries that owe the IMF. They found that IMF conditionality, in particular, has an important indirect economic benefit to countries that owe the IMF, as that will attract foreign investors and the additional capital drawn into developing countries as a result of the IMF - privatization nexus is no doubt helpful to these economies,

though this may not justify the policy conditions typically imposed by the IMF.

James (2003) examined whether IMF should impose specific policy prescription known as conditionality in other to promote economic growth of member nations. He studied the percentage change in GDP to foreign reserve, inflation, current account budget deficit etc. He concludes that IMF should focus on crisis prevention instead of providing loans with condition after the country has entered into crisis.

Ibenta (1988) evaluated the effect of IMF supported Structural Adjustment Programme on economies of third World countries with special reference to Nigeria. Studying some macro-economic indicators like exchange rate, balance of payment and external reserve, he concluded that Structural Adjustment Programme has not helped in the development of Nigerian economy because SAP does not take into account the particular circumstances of the developing countries.

METHODOLOGY

This study employed a panel research in evaluating the effect of IMF conditionality on selected Nigerian macroeconomic. The data used for analysis are secondary data sourced from data bank of Word Bank from 1986 to 2016. The formulated research hypotheses were tested using Panel OLS and Granger Causality Tests.

This study adopted the models of Kanu and Nwaimo (2015) that evaluated the effect of capital expenditures on gross fixed capital formation in Nigeria for various years.

The functional form of Kanu and Nwaimo's model is stated as:

$$Y1 = \beta0+\beta1x1+\beta2x2 + \beta3x3 + \beta4x4 + \beta5\ x5+ \beta6x6+ \beta7x7 + e.$$

Where Y1 = dependent variable and x1, x2, x3, x4 x5, x6 and x7 = independent variable

GFCFt = F(CAPEX ,EXP , IMP , FDI , TNSV ,INFL, GDP)

While the econometric form of the model is stated below:

$$GFCFt = \beta0+ \beta1\ CAPEXt + \beta2EXPt + \beta3\ IMPt + \beta4\ FDIt + \beta5\ TNSVt + \beta6\ INFL\ t + \beta7\ GDPt + \varepsilon$$

Explanation Variables

Where GFCFt = Gross fixed capital formation in Nigeria in year t

CAPEX t = Capital expenditure profile of Nigeria in year t

EXP t = Total exports out of the country in year t

IMP t = Total imports into the country in year t

FDIt = Foreign direct investments into the country in year t

TNSVt= Total national savings in the country in year t

INFLt =Inflationary trends in the country in year t

GDPt = Gross domestic product of Nigeria in year t

and ε = The error term assumed to be normally and independently distributed with zero mean and constant variance, which captures all other explanatory variables which influences gross fixed capital formation in a country but are not captured in the model

The models for this study are as follows;

Model one: $Y_1= ß_o + ß_1\ x\ 1+ ß_2\ x\ 2+ ß_3\ x\ 3 +\mu_t$

Model two: $Y_2= \gamma_o + \gamma_1\ x\ 1+ \gamma_2\ x\ 2+ \gamma_3\ x3 + \varepsilon_t$

Model three: $Y_3 = \alpha_o + \alpha_1\ x\ 1+ \alpha_2\ x2+ \alpha_3\ x3 + \xi_t$

Model one: $LGDN_t = ß_o + (ß_1LTGEN + ß_2LRERN+ ß_3LTON) + \mu_t$

Model two: $LGFCFN_t = \gamma_o + (\gamma_1LTGEAN + \gamma_2LRERN+ \gamma_3LTON) + \varepsilon_t$

Model three: $LNSN_t = \alpha_o + (\alpha_1LTGEN + \alpha_2LRERN+ \alpha_3\ LTON) + \xi_t$

Explanation of the Variables

LGDPN =log Gross Domestic Product of Nigeria

LGFCFN = log Gross Fixed Capital Formation of Nigeria

LNSN = log National Savings of Nigeria

LTGEN = Log Total Government Expenditure of Nigeria

LRERN = Log Real Exchange Rate of Nigeria

LTON = Log Trade Openness of Nigeria

$ß_o$, $\gamma_{o,}$ and α_o = Intercepts of models 1, 2, and 3 respectively.

$ß_{1-}$ $ß_3$, γ_{1-} $\gamma_{3,}$and α_{1-} $\alpha_{3,}$ = slope of the intercepts of the models

$\mu_{t,}$ ε_t, and ξ_t, = error terms of models 1, 2 and 3 respectively

Data Presentation and Analysis of Data

Table 1. *Selected macroeconomic data of Nigeria*

Year	Trade Openness (%)	Total Exports ($ Million)	Total Imports ($ Million)	Official Exchange Rate (per 1 USD)	Government Expenditure ($ Million)	Gross Fixed Capital Formation ($ Million)	National Savings ($ Million)	Gross Domestic Product ($ Million
1986	44.32	5,150.0	4,034.0	1.75	2,607.1	3,140.1	2,296.5	20,721.5
1987	46.81	7,365.0	3,912.0	4.02	1,736.1	3,278.5	3,580.8	24,093.2
1988	49.81	6,875.0	4,717.0	4.54	1,779.3	2,762.7	4,189.3	23,272.2
1989	58.55	10,000.0	4,187.0	7.36	1,319.9	2,845.3	7,567.6	24,231.2
1990	62.50	13,596.0	5,627.0	8.04	1,526.9	4,382.9	7,0659.2	30,757.1
1991	77.57	12,264.0	8,986.0	9.91	1,324.0	3,761.8	7,141.1	27,392.9
1992	68.81	11,886.0	8,275.0	17.30	1,746.9	3,735.3	5,653.0	29,300.9
1993	110.30	9,908.0	7,508.0	22.07	1,033.0	2,139.4	2,123.1	15,789.0
1994	88.62	9,415.0	6,613.0	21.99	3,245.4	2,019.4	1,311.2	18,086.4
1995	72.04	12,342.0	8,222.0	21.90	3,449.9	2,017.1	3,956.0	28,547.0
1996	64.57	16,153.0	6,438.0	21.88	3,504.8	2,550.6	3,643.7	34,988.0
1997	68.97	15,207.0	9,501.0	21.89	4,655.9	2,993.6	5,075.6	35,822.3
1998	59.57	9,855.0	9,211.0	21.89	4,472.1	2,752.9	671.0	32,004.6
1999	62.57	13,856.0	8,588.0	92.34	2,504.8	2,508.8	6,597.0	35,870.8
2000	64.02	20,975.0	8,721.0	101.70	3,869.8	3,255.3	13,621.0	46,386.0
2001	66.95	18,045.0	11,506.0	111.23	3,642.0	3,345.6	4,632.3	44,138.0
2002	42.33	17,475.0	7,547.0	120.58	3,966.7	4,144.0	4,519.2	59,116.8
2003	51.12	24,031.0	10,853.0	129.22	3,486.2	6,700.7	3,046.3	67,655.8
2004	60.10	38,631.0	14,164.0	132.89	5,913.3	6,494.7	9,325.9	87,845.4
2005	63.45	50,467.0	20,754.0	131.27	7,641.3	6,127.6	22,026.6	112,248.4
2006	58.62	58,726.0	26,522.5	128.65	9,975.8	12,021.0	56,619.6	145,429.8
2007	60.94	66,606.1	34,830.0	125.81	16,944.9	15,396.1	27,090.1	166,451.2
2008	65.47	86,274.0	49,951.0	118.55	24,221.6	17,318.2	53,352.0	208,064.8
2009	53.49	56,742.0	33,906.0	148.90	21,960.3	20487.2	24,846.7	169,481.3

2010	34.75	84,000.0	44,235.7	150.30	32,150.4	61,099.0	94,080.0	369,062.5
2011	41.77	116,000.0	56,000.0	153.86	34,974.8	63,960.0	106,523.8	411,743.8
2012	35.95	114,700.0	51,000.0	157.50	37,798.5	65,282.8	153,651.7	460,953.8
2013	30.76	102,400.0	56,000.0	157.31	36,847.0	72,964.2	99,044.3	514,966.3
2014	27.12	94,200.0	60,000.0	158.55	36,750.5	72,964.7	125,771.6	568,499.0
2015	20.66	51,400.0	48,000.0	192.44	28,552.0	71,328.5	85,044.6	481,066.2
2016	17.72	32,800.0	39,000.0	253.49	32,651.0	72,146.6	105,408.1	405,082.7

Source: *World Bank; www.worldbank.org*

The data in table 4.1 as extracted from data bank of World Bank are the selected Nigerian macroeconomic variables which form the dependent and independent variables of this study. The variables include; trade openness which is a function of exports plus import divided by GDP, Real Exchange Rate, Total Government Expenditure, Gross Domestic Product, Gross Fixed Capital Formation and National Savings.

This section portrays the short and long run relationship between International Monetary Fund conditionality (total government expenditure, real exchange rate and trade openness) and economic growth in Nigeria. The ARDL was employed in ascertaining the short run and long run relationship, while effect determination was aided by granger causality analysis.

The Relationship between IMF Conditionality and GDP in Nigeria

Table 2. *ARDL Short and Long Run Relationship GDP→TGE, RER and TO*

Short Run Co-integrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(GDP(-1))	1.005276	0.245268	4.098689	0.0021
D(GDP(-2))	0.832578	0.371631	2.240335	0.0490
D(TGE)	3.343784	1.851405	1.806079	0.1010
D(TGE(-1))	-7.089169	6.574923	-1.078213	0.3063
D(TGE(-2))	-17.973203	7.965482	-2.256386	0.0477
D(RER)	-679.738391	277.276734	-2.451480	0.0342
D(RER(-1))	-392.391301	464.041944	-0.845594	0.4176
D(RER(-2))	-865.184705	461.364395	-1.875274	0.0902
D(TO)	314.923755	448.603048	0.702010	0.4987
D(TO(-1))	-420.160143	434.803243	-0.966322	0.3567
D(TO(-2))	366.479211	495.601639	0.739463	0.4766
D(TO(-3))	868.119166	516.658051	1.680259	0.1238
CointEq(-1)	-2.011677	0.432891	-4.647080	0.0009
Long Run Coefficient				
TGE	12.275515	0.356151	34.467143	0.0000
RER	275.623999	75.144775	3.667906	0.0043
TO	-190.322849	334.106522	-0.569647	0.5815
C	12223.031385	25433.914010	0.480580	0.6412

Source: *Data output via E-views 9.0*

Table4.2 depicts that two IMF conditionality: total government expenditure and trade openness has positive but insignificant relationship with gross domestic product, while real exchange rate has negative and significant relationship with gross domestic product in Nigeria in the short run. On the other hand, total government expenditure and real exchange rate have positive and significant relationship with gross domestic product, whereas trade openness has negative insignificant relationship gross domestic product in the long run.

In terms of the effect of IMF conditionality on economic growth fundamentals in Nigeria, with regard to gross fixed capital formation, Table 4.3rreveal that, IMF conditionality: total government expenditure and trade openness have positive short run relationship with gross fixed capital formation, while real exchange rate

negatively and significantly relates with gross fixed capital formation. In the long run, all the IMF conditionality related positively with gross fixed capital formation with total government expenditure showing significant relationship.

The Relationship between IMF Conditionality and GFCF in Nigeria

Table 3. *ARDL Short and Long Run Relationship GFCF→TGE, RER and TO*

Short Run Co-integrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(GFCF(-1))	1.720437	0.293695	5.857904	0.0006
D(GFCF(-2))	1.425433	0.225506	6.321048	0.0004
D(GFCF(-3))	0.721186	0.194327	3.711194	0.0075
D(TGE)	0.153172	0.197440	0.775790	0.4633
D(TGE(-1))	-2.497059	0.419207	-5.956620	0.0006
D(TGE(-2))	-3.475963	0.586284	-5.928799	0.0006
D(TGE(-3))	-1.076526	0.724944	-1.484978	0.1811
D(RER)	-125.694433	34.333273	-3.661009	0.0081
D(RER(-1))	-120.701136	43.419587	-2.779878	0.0273
D(RER(-2))	-52.816820	51.071623	-1.034172	0.3355
D(RER(-3))	-41.675474	40.285343	-1.034507	0.3353
D(TO)	57.801851	51.395100	1.124657	0.2978
D(TO(-1))	-165.516516	41.771566	-3.962421	0.0054
D(TO(-2))	42.127924	44.429007	0.948208	0.3746
D(TO(-3))	179.794094	42.187010	4.261835	0.0037
CointEq(-1)	-2.698077	0.410463	-6.573244	0.0003
Long Run Coefficient				
TGE	1.930115	0.042646	45.258701	0.0000
RER	6.640867	6.322831	1.050300	0.3285
TO	17.918902	25.211901	0.710732	0.5002
C	-2065.458979	1868.551573	-1.105380	0.3055

Source: *Data output via E-views 9.0*

The Relationship between IMF Conditionality and NS in Nigeria

Table 4. *ARDL Short and Long Run Relationship NS→TGE, RER and TO*

Short Run Co-integrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(NS(-1))	1.487360	0.368156	4.040026	0.0024
D(NS(-2))	1.005930	0.300142	3.351510	0.0073
D(NS(-3))	0.304924	0.260122	1.172234	0.2683
D(TGE)	1.714608	1.527845	1.122239	0.2880
D(TGE(-1))	-3.692665	1.615980	-2.285093	0.0454
D(TGE(-2))	0.152330	1.718729	0.088629	0.9311
D(TGE(-3))	-4.022593	1.685283	-2.386894	0.0382
D(RER)	-546.166851	168.200862	-3.247111	0.0088
D(TO)	594.149863	344.864674	1.722849	0.1156
D(TO(-1))	107.083848	265.108775	0.403924	0.6948
D(TO(-2))	503.144179	246.568476	2.040586	0.0686
D(TO(-3))	834.610322	240.553037	3.469548	0.0060
CointEq(-1)	-3.067650	0.470211	-6.523990	0.0001
Long Run Coefficient				
TGE	3.411507	0.158658	21.502211	0.0000
RER	-110.247411	32.119613	-3.432402	0.0064
TO	-404.863308	182.645569	-2.216661	0.0510
C	33883.822108	13979.043669	2.423901	0.0358

Source: *Data output via E-views 9.0*

On the analysis of the short run relationship of IMF conditionality with national savings in Nigeria, Table 4.4 reveals that total government expenditure and trade openness have positive

but insignificant relationship with national savings, whereas real exchange rate has negative significant relationship with national savings. From the long run perspective, total government expenditure was found to have positively and significantly related with national savings, while real exchange rate and trade openness have negative significant relationship.

The Effect of IMF Conditionality on Nigeria Economic Growth

Table 5. *Effect of IMF Conditionality on Nigeria Economic Growth*

Null Hypothesis:	Obs	F-Statistic	Prob.	Remarks
TGE does not Granger Cause GDP		18.2113	0.0002	Causality
GDP does not Granger Cause TGE	30	3.44462	0.0744	No Causality
RER does not Granger Cause GDP		5.61893	0.0078	Causality
GDP does not Granger Cause RER	30	1.61596	0.2145	No Causality
TO does not Granger Cause GDP		0.00533	0.9424	No Causality
GDP does not Granger Cause TO	30	7.17092	0.0125	Causality
TGE does not Granger Cause GFCF		11.2906	0.0023	Causality
GFCF does not Granger Cause TGE	30	1.82694	0.1877	No Causality
RER does not Granger Cause GFCF		5.77536	0.0025	Causality
GFCF does not Granger Cause RER	30	1.32632	0.2596	No Causality
TO does not Granger Cause GFCF		0.04029	0.8424	No Causality
GFCF does not Granger Cause TO	30	5.92878	0.0218	Causality
TGE does not Granger Cause NS		20.3123	0.0001	Causality
NS does not Granger Cause TGE	23	2.63691	0.1160	No Causality
RER does not Granger Cause NS		5.28810	0.0294	Causality
NS does not Granger Cause RER	23	0.12889	0.7244	No Causality
TO does not Granger Cause NS		2.50801	0.1249	No Causality
NS does not Granger Cause TO	22	2.34178	0.1376	No Causality

Source: Data output via E-views 9.0

In considering the effect of IMF conditionality on economic growth of Nigeria, Table 4.5 discloses that IMF conditionality: total government expenditure and real exchange rate has significant effect on gross domestic product, gross fixed capital formation and national savings, while the rate at which gross fixed capital formation (domestic investment) affects IMF conditionality in Nigeria is low.

FURTHER DISCUSSION OF FINDING

Table 4.6 Summary of effect of IMF conditionality on the Nigerian economy

Independent Variables	Dependent Variables			Nature of the Effect
	GDP	GFCF	NS	
TGE	Positive	Positive	Positive	Positive
RER	Negative	Negative	Negative	Negative
TO	Negative	Positive	Negative	Negative

Source: summary of conditionality on Nigeria

In Nigeria, at long run, total government expenditure and real exchange rate have positive and significant relationship with gross domestic product, whereas trade openness has negative and insignificant relationship with gross domestic product. Considering the GFCF; all the IMF conditionality related positively with gross fixed capital formation especially the total government expenditure that shows significant relationship. Looking at NS, total government expenditure was found to be positively and significantly related with national savings, while real exchange rate and trade openness have negative significant relationship with NS.

The result of the granger causality test in table 4.5 shows that TGE and RER affect GDP, GFCF and NA, while TO do not affect GDP GFCF and NS, rather it was the GDP and GFCF that effected TO. That means that reduction in government expenditure and devaluation of Nigerian currency effects the economic growth of Nigeria. On the other hand, TO being affected by both GDP and GFCF indicates that the economy affects trade liberalization instead of trade liberalization affecting the economy. This means that both individual and government

tend to import more when there is increase in revenue. That is to say that opening our boarder for free trade is not at our advantage because we have the tendency of importing more than we are exporting. Excess importation will further depreciate our exchange rate, leading to many more economic problems.

SUMMARY OF FINDINGS

The result of the analysis reveals there is significant relationship between the dependent and independent variables, and that the independent variables have significant effect on the dependent variable. Thus the findings are summarized below:

Reduction in government expenditure has a significant positive effect on economic growth in Nigeria.

Devaluation of local currency displayed a significant negative relationship with economic growth in Nigerian economy.

Trade Openness showed a non significant positive effect on economic growth in Nigeria.

RECOMMENDATIONS

Based on the result of this study, I recommend that in exchange of devaluation of local currency, Nigeria should employ protectionist policy in order to encourage local production and use of locally produced products. In so doing, employment will be created, leading to increase in savings and investment, which at long run will lead to persistent increase in GDP. This is because; devaluation of local currency is the greatest IMF conditionality that exerts great negative influence on Nigerian economic growth. Again, devaluation of local currency hardly favours any developing economy as most developing economies are import base, and those few that export, exports mainly raw materials.

TGE showing significant positive effect on GDP, GFCF and NS is an indication that government can positively influence the economic positions of the countries through the adjustment of government capital expenditure, instead of adopting economic policies that are detrimental to growth of the economy.

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