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Full Length Research Paper

The macroeconomic impact of monetization on the Nigerian economy

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An important question is asked about the relationship between output and monetization of public servants wages and salaries structure: are variations in public servants wage and salaries plus monetization of fringe benefits transmitted to increase output, and do these variations in output constitute an important component of variations in monetization? Total recurrent expenditure is regressed on wages and salaries and fringe benefits of public servants, monetization and real domestic absorption using General Moment Method (GMM). Again, the cost of governance equation which induces monetization is regressed on recurrent expenditure, labor and capital variables merged into one, capital stock and new salary package. The third equation expresses output as a function of cost of governance taking into account the possible effects of inflation, interest rate and new salary packed which include monetization booty. The empirical analysis is based on data from the Central Bank of Nigeria statistical Bulletin for the period of 1985 to 2010. The results show that wages and salaries, fringe benefits of public servants and monetization contribute significantly to recurrent expenditure while the real domestic direct resources away from recurrent expenditure towards capital expenditure. Again, variations in recurrent expenditures are transmitted; they constitute the dominant component in the variations of cost of governance. In the output estimates, new salary package which has monetization as an important component varies in the right direction with output, and the implication is that new salary package through monetization increases productivity and output.

Key words: Monetization, recurrent expenditure, capital expenditure, output, salary and fringe benefits.

INTRODUCTION

Monetization is a form of monetary policy which means benefits being enjoyed by public servants would be paid enbloc (monetized). Interestingly, some of these benefits had become fully or partially monetized before 1999 (Ekaette, 2003; Saka, 2004a; Uniamikogbo and Anthony, 2001). Some of these benefits include leave grant, meal subsidy, entertainment allowance, duty tour allowances for domestic servants. The list also includes residential accommodation, provision of vehicles (including fueling and maintenance), provision of medical treatment, utilities (electricity, water and telephone) and personal aides. The idea of monetization of fringe benefits in the public service is intended to cut costs, because over the years capital projects which is the main driving force of the economy towards achieving sustainable growth and development have not been implemented due to high cost of running political, public and judicial office holders.

The government is implored to pay an amount that would be equal to the workers benefits in terms of material item which should have been at their disposal in the course of performing government functions. If the workers' interest is not taken into consideration in the execution of the policy, public servants might feel that the programme was designed to short change them (Economic Update, 2004). The amount of monetized benefits should be commensurate with the property or other materials expected to be enjoyed by the public servant as his benefits. Thus, there has to be a balance in The Guardian (2003) the execution of the monetization policy so that we do not send any counter productive or destructive psychological signal to the minds of the public servant who might feel he is being cheated by this policy.

The purpose of the policy as contained in the government white paper (Ekaette, 2003; Ramachandran, 2003) is to remove: the burden of providing basic amenities for public officers who have contributed significantly to the continuous increase in government recurrent expenditure, leaving very little for capital development; it is further argued that it will encourage efficient allocation of resources and equity in the provision of amenities for public officers; it will reduce the high cost of accommodation fee since the policy would encourage civil servants to build their own houses. Government will also provide site and services schemes in satellite towns nation-wide to assist public servants; and the programme would stop the culture of waste in the guise of maintaining government housing estates. Civil servants who misuse the government vehicles would have to change their minds as the privileges have been withdrawn.

The main objective of this paper is to develop macro econometric models to assess the monetization impact on output in Nigeria.

LITERATURE REVIEW

Monetization can be described as a monetary policy designed, which means benefits being enjoyed by public servants would be paid enbloc (Ekaette, 2003). Some of these benefits include leave grant, meal subsidy, entertainment allowance, duty tour allowance and allowances for domestic servants. The items listed for monetization include residential accommodation, provision of vehicle (including fuelling/maintenance), provision of medical treatment, utilities (electricity, water, telephone and personal aides), and housing and transportation allowances. Ekaette (2003) states, this led to the: "passing into a law certain political, public and judicial office holders (salaries and allowances, etc), Bill in 2002. The Mobolaji (2003) law prescribes the salaries, allowances and fringe benefits of certain political, public and judicial office holders.

The idea of monetization policy is intended to reverse recurrent expenditure in favor of capital expenditure. Over the years capital projects have suffered due to high cost of running political, public and judicial office holders. The Federal Government Circular titled "monetization of fringe Benefits in the Federal Public Service", cited in The Punch (2003) argues that over the years, the cost of governance has continued to escalate. The burden of providing basic amenities for public officers has contributed significantly to the increase in government recurrent expenditure, leaving very little for capital development (Iji, 2003). For more efficient allocation of resources and equity in the provision of amenities for public officers, government has approved the monetization of fringe benefits of public and judicial office holders (salaries, Allowances, etc) Act, 2002. The Fringe benefits include:

Residential accommodation

Provision of residential accommodation for political, public and judicial officers has been monetized at 100% of Annual Basic Salary to be paid enbloc, annually to enable the officers to rent houses of their choice. However, in order to avoid exerting severe strain on officers' presently occupying government quarters, in the first year of the monetization exercise, their residential accommodation allowance (100% of Annual Basic Salary) will be converted to rent for the quarters they occupy. Government residential houses across the country will be sold by public auction at the end of the first year of monetization after proper valuation. Public officer occupying such houses would be given the first option to purchase the houses, but at the price of the highest bidder.

To ensure that government quarters are properly maintained during the one year transition period all residents will pay 10% of their basic salary as service charge into a trust fund which will be managed by a Board of Trustees made up of representatives of residents, facility manager appointed to manage each estate/group of property and the federal government.

Furniture allowance

A furniture allowance of 300% of annual basic salary will be paid to political, public and judicial office holders once in every four years. This allowance will be paid annually at the rate of 75% of annual basic salary.

Utility allowance

The allowance had already been monetized and shall continue to apply as follows:

G.L 01 – 06 - ₦3,600 per annum
G.L 07 – 10 - ₦ 6,000 per annum
G.L. 12 – 14 - ₦ 7,800 per annum
G.L. 15 – 17 - ₦ 9,600 per annum
Permanent Secretary- ₦ 16,800 per annum
Head of the Civil Service of
The Federation - ₦ 16,800 per annum
Political, Public and Judicial
Office Holder 20% of Annual Basic Salary

Domestic servant allowance

The domestic servant allowance has already been monetized for public servants and the rates still apply as follows:

G.L 15 - ₦ 119,586 per annum
G.L 16 - ₦ 239,172 per annum
G.L 17 - ₦ 358,544 per annum

Permanent Secretary has four domestic servants (₦ 478.344 per annum), Head of Service has four domestic servants (₦ 478,344 per annum), while political, public and judicial office holders receive 75% of annual basic salary.

Motor vehicle loan and transport

The provision of motor vehicles to public officers is not monetized. Government will no longer provide chauffeur driven vehicles to hitherto entitled officers. Officers will be granted motor vehicle loan at the rate of 350% of their annual salary. The loan will be recovered within six years at 4% rate of interest as contained in extent regulation on motor vehicle advance (Tukur, 2004). As regards the use of Govern-ment vehicles: Government has directed as follows: no new vehicles would be purchased by any ministry, Extra Ministerial Department, Federal Government Agency or parastatal; each Ministry/Agency will be allowed a specific number of utility vehicles, including buses, for essential services; where there is the need to purchase (a) new vehicle(s) by any ministry, Extra Ministerial Department, Agency or parastatal, a request shall be made to Mr. President for approval; a committee has been set up to work out details of the disposal of the vehicles and service wide staff buses will be pooled under the management of the office of the Head of the civil service of the federation to convey staff to and from office at an approved date.

Fueling/maintenance and transport allowance

An allowance of 10% of annual basic salary will be paid to public servants and 30% of annual basic salary will be paid to political, public and judicial office holders as contained in the Act.

Medical treatment

The provisions in chapter nine of public service rules shall continue to apply until further notice.

Meal subsidy

The allowance has already been monetized as contained in the circular Nos. SWC 04/Vol.IV/991 of 5th May 2000 issued by the National Salaries, Incomes and Wages Commission (NSIWC) and will continue to apply as follows:

G.L 01 – 06 - ₦ 6,000 per annum
G.L 07 – 10 - ₦ 8,400 per annum
G.L 12 – 14 - ₦ 9,600 per annum
G.L. 15 – 17 - ₦ 10,800 per annum
Permanent Secretary - ₦ 16,200 per annum
Head of the Civil Service of
The Federation ₦ 16,200 per annum

Entertainment allowance

Entertainment allowance for entitled civil servants has already been monetized and shall continue to apply as contained in the circulars NOS. SWC. 04/Vol.IV/911 of 5th May 2000 and SWC. 04/S.I/VOL. IV of 5th May 2000, issued by the National Salaries, Incomes and Wages Commission as follows:

G.L 15 - ₦ 8,400 per annum
G.L 16 – 17 - ₦ 10, 800 per annum
Permanent Secretary - ₦ 27,000 per annum
Head of the Civil Service
of the federation ₦ 27,000 per annum
Political, Public and Judicial Office Holders 10% of annual basic salary.

Leave grant

The provision of the public service rules number 13213 shall continue to apply, which means that "Leave allowance shall be 10% of annual basic salary".

Personal assistant allowance

An allowance of 25% of basic salary will be paid to entitled officers as listed in the circular, political, public and judicial office Holders (Salaries and Allowance, etc) Act, 2002. To facilitate the implementation, Ekaette (2003) cited in The Punch (2003), Nigerian Tribune (2003) and Saturday Tribune (2003) states that the policy on the monetization of Fringe Benefits for public officers, the Budget Office of the Federal Ministry of Finance will issue a call to all ministries, extra ministerial departments and agencies to prepare supplementary budget for the remaining part of the year 2003 to take account of monetization, exercise. Igbokwe (2003), appeals to the government to be fair to workers in the course of implementing its monetization policy. The government is implored to pay an amount that would be equal to the worker's benefits in terms of material items which should have been at their disposal in the course of performing government functions (Soriwei, 2003). It is argued that if the workers' interests were not taken into due consideration in the execution of the policy, public servants might feel that the programme was designed to short change them. The amount of monetized benefits should be commensurate with the property or other materials expected to be enjoyed by the public servant as his benefits. Thus, there has to be a balance in the execution of the monetization policy so that we do not send any counter productive or destructive psychological signal to the minds of the public servant who might feel he is being cheated by this policy.

THE SPIRIT BEHIND MONETIZATION POLICY

To reduce the high cost of governance, since the cost of administration of government affairs is high in Nigeria; to make the public servant adopt a better productive approach to public property; the prevalent mismanagement of public property by public servants would be over as such persons would be offered money to acquire such property elsewhere, and the policy also offered the government the opportunity to renovate and add value to its property in order to generate income for the business of governance.

The monetized fringe benefit which is an innovation in the public sector in Nigeria is envisaged to improve productivity and efficiency in resource allocation since the country is inching towards full economic liberalization. Saka (2004b) argues that the socialist inclined political office holder are not comfortable with the luxurious paraphernalia of office but prefer to live a simple life. Forced status (Anyawu, 1998), which the government imposes on the officer boosting his image in new office, may appear to him as outright deception as it could heighten expectation and demands of the society on him, tempting him to get involved in profit making ventures while in office. It is better then to opt for a low profile life without doing injury to the officer's performance. Ekaette (2003) argues that time without number, government vehicles have been vandalized, damaged on slight and flimsy excuses and cases of involvement in road accidents and stolen vehicles are quite rampant in the service. But once transportation is monetized, misuse of such government properties will be completely eradicated as officers assume full responsibility for their belongings.

THE MAIN OBSTACLES (PROBLEMS)

Some forces within the presidency, Ekaette (2003) argues that there are some forces out there to make sure the programme does not outlive the Obasanjo administration. The forces are many and some of which are: the lackadaisical attitude of top civil servants to the policy for two reasons: most of the civil servants have been stripped naked with the monetization policy, and most of the political appointees in the presidency are not happy with it, but just playing along with Mr. President that hired them. They seem to be dancing along the drum being beating by Mr. President. But they would be happy to listen and dance to the same old style (status quo), should the opportunities present itself and understanding the Nigerian terrain of bureaucracy indicates that the top civil servants are a great threat to the success of any change in the status quo, because they often benefit immensely from the same old style (Alifa, 2003). Bureaucracy seems to be the major bain in the successful execution of laudable programmes. The grievances from this angle, lie in the withdrawal of certain privileges, which they were used to.

Private sector

Saka (2004a) compares private and public sectors, monetization of fringe benefits has received wider application and for a very long period in the private sector in Nigeria. In practice most of the fringe benefits have always been in monetary terms (Nina et al., 2004). These include housing, transport, and leave allowances; pension, redundancy, gratuity and retirement benefits etc. For the senior and management staff who hitherto were provided official residence with stewards, gardeners and security personnel such benefits are now being converted to cash for the beneficiaries. Very attractive rent allowances are offered. Sometimes the affected staffs are even encouraged to own their houses. An interesting phenomenon in the monetization policy in the private sector is the trend at monetizing company products that are issued to staff member during major or national festivals.

THEORETICAL BACKGROUND

Every empirical study is based on some hypotheses as a base on which findings may be generated, validated or repudiated. In this study the following hypothesis are made: The general belief of the all tiers of government in Nigeria – Federal government, state government and local government is that the recent increase in government recurrent expenditure is due to increase in salaries and fringe benefits of the workers employed by government particularly the public servants (Francis, 2004). It is therefore hypothesized that there exists a positive correlation between recurrent government expenditure and fringe benefits of the public servants. Thus:

$$RE = f(wf)$$

$$\frac{dRE}{dwf} > 0 \qquad (1)$$

Where RE denotes recurrent government expenditure, wf is wages and salaries and fringe benefits of public servant dRE is change in recurrent government expenditure and dwf is change in wages and salaries and fringe benefits. Increase recurrent government expenditure often lead to an increase in cost of governance in Nigeria, that is, the cost of governance in Nigeria is a function of an increase in recurrent government expenditure (RGE). Therefore, we have:

$$CF = F(RE)$$
$$\frac{dCT}{dRE} > 0 \qquad (2)$$

Where: CT is cost of governance, ΔCT is change in cost of governance, ΔRE is change in government recurrent expenditure.

Thus, test of hypotheses shall be carried out on the basis of econometric result of multiple regression analysis that shows the relationship between recurrent government expenditures, wages and salaries and fringe benefits of the public servants among other variables.

ANALYTICAL METHODOLOGY

The methodology for the model is essentially a Cobb Douglas production function in which some modifications have been made. Here, we developed an (Nyang, 1998) augmented neoclassical production function to link the employment of capital with capital government expenditure (CGE) and the employment of labor services with recurrent government expenditure (RGE) to output, and introduce corruption, misuse, abuse and misallocation of resources to capture cost of governance which the government intend to cut with a view to enhance productivity and economic development.

In order to isolate the size effects of RGE and CGE on economic development (output), a growth equation from neoclassical production function is applied adding the two variables plus other variables as explanatory variables. Thus, we note that monetization policy enters the growth equation through CGE and labor employed. It is hypothesized that the higher the amount on recurrent expenditure, the lower the amount that may be spent on capital formation. Hence, a negative effect is experienced on output growth. There will also be the need to control for other variables which affected Nigerian development record during the period under review. These include inflation (INF) which is the government main bug-bear (macroeconomic instability indicated by the high rates of inflation), absorptive capacity and volume of money in circulation (M_1) because monetization simply means more money pump into circulation through enhancement of workers salary.

How a country uses its resources, no matter how abundantly endowed is a critical factor affecting growth and hence its economic development. This is because any country, however, rich in resources could be impoverished if it is unfortunate enough to be run by inept, corrupt and bad government. Any country, however poor in natural resources, could achieve prosperity happiness, sustainable high quality growth and economic development if it is fortunate to have a purposeful government.

The variable-absorptive capacity refers to the additional amount of capital required to produce an additional unit of output. Igbokwe (2003) argues that there is low absorptive capacity in Nigeria and that monetization policy no matter how well conceived is unlikely to translates into substantial improvement in economic development because much of the resources are likely to wasted through official corruption, inefficient administration, misuse, abuse and misallocation of resources.

High rate of inflation (INF) and interest rates (INR) are postulated to be detrimental to economic development for the familiar reasons including uncertainty about the profitability of long term investment, and tendency towards speculative activities. The size effect of each component such as administration of government expenditure (AGE), economic government services (EGS), social and community government services (SCGS) and transfers (T) are composed into recurrent government expenditure, and use as single variable among the explanatory variables. The recent increase in INF and INR rates which compounded the country's economic problems was as a result of large expenditure in one or more of these components.

There are risks to economic outlook, the highly expansionary fiscal stance as implied by the 2005 appropriation bill would complicate conduct of monetary policy and jeopardize the INF and economic growth objectives (Okonjo, 2004; Onyendi, 2004; Okunrounmu, 2003). According to Thiam (2005), the ₦ 1.8 trillion of 2005 budget was 52% above the 2004. It would be practically impossible for any monetary policy to mop up excess liquidity as high as 52%. Inflation would be on the rise while the interest rate would also increase, thus compounding the nation's economic problems. And the external reserves ($21.5 billion) now on the positive side may be stagnated. The significant expansion in domestic liquidity following from loose-fiscal policy would reignite inflationary pressures and undermine the achievement of 2004.

MODEL SPECIFICATION

Beginning with a standard Cobb-Douglas production function hypothesized above. The function is of the form:

$$Y = f(K, L) \qquad (3)$$

$$or \quad Y = AK^{\alpha}L^{1-\alpha} \qquad (4)$$

Where Y is output, L is labor, K is capital and A is efficiency parameter. α and 1- α are elasticities.

Since the objective of the government is to promote both physical and human capital. Growth model is adopted; L and K are merged to form variable N. Further, in order to finance the development of both the physical and human capital, government needs to mobilize both domestic and other financial resources to finance monetization policy. The financing of labor variable in the form of recurrent government expenditure is very important to Nigeria because labor resources are an important variable in any development matrix of a nation. In order to examine the relationship that exists between monetization and economic growth in the context of this study, a monetization augmented Cobb-Douglas production function representing the growth function is specified as follows:

$$Y = f\left[N, \dot{k}, (RE + M) + Z\right] \qquad (5)$$

Where Y is real GDP, $\dot{k}$ is capital stock (that is, physical and human), RE is recurrent expenditure, M is monetization, (RE + M) is new salary package (NSP) and Z denotes other variables (that is, Stock of money in circulation – M2), INF, INR and real domestic absorption (ABC).

Yekini (2002) argues that Cobb-Douglas production function adopted is an optimization model; therefore it is suitable to Nigerian case because any additional financial resources to the existing one if well targeted and implemented in the form of monetization will have positive effects on the growth of the economy in the long run all things else being equal. Thus, there is the need to increase the take home of public servants and implement monetization policy fully to raise their morale and improve productivity and output.

Table 1. Dependent variable: RE.

Variable	Coefficient	Standard error	t-statistic
Wf	99.81	53.45	1.87**
M(-1)	3.62	0.93	3.91**
Log (ABC)	-6001.89	22159.18	-0.27

R^2 = 0.79, F – Statistic = 13.27, Adjusted R2 = 0.73, DW Statistic = 2.39. ** Significant at 5% level of significance.

The model below therefore presents macro-econometric model that permit the simulation of the effect of monetization on economic growth in the long run. The model is deemed fit for the Nigerian economy on the premise that it is based on the theoretical relationship that exists between recurrent government expenditure, monetization and economic growth as specified in Equation 5.

$$RE = \alpha_0 + \alpha_1 Wf + \alpha_2 M - \alpha_3 ABC + U_1 \quad (6)$$

$$CT = \beta_0 + \beta_1 RE + \beta_2 N + \beta_3 \dot{k} + \beta_4 NSP + U_2 \quad (7)$$

$$Y = \phi_1 + \phi_1 CT + \phi_2 NSP + \phi_3 INF + \phi_4 INR + U_3 \quad (8)$$

We estimate Equations (6), (7) and (8) for analysis:

$$\alpha_1 \ \ and \ \alpha_2 \ > \ \alpha_3 \ < \ 0$$

$$\beta_1, \beta_2, \ \beta_3 \ and \ \beta_4 > 0$$

$$\phi_1, \ \phi_2, \ \phi_3, \ \phi_4 \ > \ 0$$

The apriori expectations of Equation (6) α_1 have a positive sign because these variables merged into one (wages and salaries and fringe benefits of public servant) are the fringe benefits of public servant workers. The monetization policy was actually implemented and they benefited in the short run given the cash reward in favor of official benefits; α_2 is the money supplied paid, hence it is positive; α_3 is negative because absorptive capacity was very low in Nigeria during the period under consideration.

The signs in Equation 7 show positive signs for all the parameters because $\dot{k}$ is capital stock (that is, physical and human), RE is recurrent expenditure, (RE + M) is new salary package (NSP); L and K are merged to form variable N and all these variables increased in Nigeria during the period covered.

These parameters exhibit positive signs that is, ϕ_1, $\phi 2$, $\phi 3$, $\phi 4 > 0$ because they are associated with capital expenditure, new salary package for parameters 1 and 2 respectively. Parameters 3 and 4 also have positive signs because each time salary of public servants increase general prices rises as well and this in turn leads to high interest rate in Nigeria (the Central Monetary Authority uses it instruments to leverage the quantity of money in circulation by hiking up the rate of interest). And this brings the issue of "money illusion" to the reality of the take home of public servants in the long run.

ECONOMETRIC RESULTS

Equation 6 was estimated to examine the effects of real domestic absorption (ABC), monetization (M) and annual basic salaries and wages on recurrent expenditure. The estimation results revealed that recurrent expenditure is significantly determine by basic salaries and wages, and monetization. These variables are significant at 5% level. With respect to the direction of impact, real domestic absorption impinged negatively on recurrent expenditure which confirms the theoretical expectations that real domestic absorption directs resources away from the total recurrent expenditure to total capital expenditure. Both basic salaries and wages and monetization are positively related to the dependent variable (recurrent expenditure) as expected (Table 1).

Although, the real domestic absorption has the expected sign, its effects on the recurrent expenditure is not significant. The explanatory power of the equation is very high judging from the value of the coefficient of determination of 79 and 73% of R^2 and adjusted R^2 respectively (Maddala, 2002; Upender, 2003). This is again reinforced by the F-statistics of 5% significance at the overall significant of all the variables. The DW $\simeq$ 2.0 shows that there is absence of positive autocorrelation (Charenmza and Deadman, 1993). Thus, there exist a positive relationship of wages and salaries and fringe benefits (W_f) and monetization leads to an increase in cost of governance in line with the theoretical expectation of our model. Standard errors for Wf and Log (ABC) are too large, these could be due to data source.

A close examination of Table 2 reveals that cost of governance (CT) depends on recurrent expenditure, sum of labor and capital (N), capital stock ($\dot{K}$) and new salary package-old salary structure plus monetization (NSP) significantly. RE and N variables are significant at 5% level and this shows that they are the factors affecting cost of governance. It can be seen that RE and N variables are positive as expected. The $\dot{K}$ and NSP are negative, although contrary to expectation, which confirms the theoretical specification that capital stock is a potential source of increment to capital expenditure. And that a negative NSP direct resources away from recurrent expenditure towards capital expenditure when the morals of workers are lifted as a result of improve wages and salary and fringe benefit which in turn translate to collective psychological mobilization of workforce with a view to improve productivity and output. This shows that the higher the level of recurrent expenditure, the higher the cost of governance. Thus, a

Table 2. Dependent Variable: CT.

Variable	Coefficient	Standard error	t-Statistic
RE	0.95	0.80	1.19**
N	1.34	0.38	3.54**
$\dot{K}$	-0.25	0.54	-0.45
NSP	-0.49	0.69	-0.71

R^2 = 0.91, F – Statistic = 23.92, Adjusted R^2 = 0.73, DW Statistic = 2.06. ** Significant at 5% level of significance.

Table 3. Dependent variable: Y.

Variable	Coefficient	Standard error	t-statistic
CT	0.014	0.007	1.990*
NSP	0.001	0.03	0.247
INF	40.445	67.815	0.596
INR	-237.372	203.932	-1.163*

R^2 = 0.84, F – Statistic = 12.47, Adjusted R^2 = 0.77, DW Statistic = 2.14, *Significant at 10% level of significance.

direct relationship exists between cost of governance and the recurrent expenditure which is in line with the argument of the present government, hence the introduction of monetization to reverse the trend towards a higher budget in favor of capital expenditure. The explanatory power of the equation is quite satisfactory with R^2 and adjusted R^2 of 91 and 87% respectively. Finally, the DW = 2.06 shows there is absence of positive autocorrelation (Table 3).

The estimation results of real GDP (Y) equation shows that the movement in real GDP is determined by cost of governance (CT) and negatively by interest rate (INR). The two variables are significant at 10% level. With respect to the direction of impact, negatives were not anticipated for interest rate since it represent the supply of credit to the public for further investment and increase in output (real GDP) but we obtained a negative sign for only INR. Inflation (INF) is positive as expected. The unanticipated negative sign given by the interest rate may have been due to the nonchalant attitude of the general public towards credit facilities over the years due to high rate of interest and inside abuse of most bank managers in Nigeria. The implication of this is that interest rate does not contribute to increase real GDP and consequently retard real GDP accumulation. Given the strong explanatory power of the equation as indicated by the R^2 of 84 and 77%, the equation is a good fit.

In sum, it can be concluded that the estimation results are quite satisfactory. All the coefficients have plausible signs except interest rate, capital stock, and new salary package in the real GDP equation. The unanticipated sign observed with respect to these variables may be attributed to non-diversification of the domestic base of the economy. Since the three behavioral Equations (6), (7) and (8) estimated have high explanatory powers and most of the coefficients are statistically significant at conventional level, it is therefore important to use these models for further research in order to make comparison with these findings.

The study observed large standard errors in explanatory variables in Tables 1 and 3. We noticed that log of absorptive domestic capacity (log ABC) has a large standard error, but the great fit (R^2) of 79% is unlikely to be a coincidence. Again, a similar thing occurred in Table 3 both INF and INR exhibit high standard errors. We noticed an endogeneity problem and tried to fix it, the problems of which instrumental variables to use first arose, because instrumental variable/s are always a subject of controversy in literatures (Greene, 2004), there is no hard and fast rule to the classification of instrumental variable/s. We applied instrumental variables but the variances become bigger, and this is in line with the features with mode/sl associated with endogeneity problem (Greene, 2012:259-296; Hill et al., 2012).

Therefore, the study sees this as a basis for further research.

Conclusion

In this study, the macro-economic impact of monetization on output (Y) has been analyzed empirically from the Nigerian context. Also, the trends of recurrent expenditure severity of the cost of governance and administration of the country over the period of 1985 and 2010 were analyzed with a view of gaining insights into monetization issues vis-a-vis real GDP in the Nigerian economy.

The quantitative magnitude of the monetization on output reveals that recurrent expenditure and cost of governance move in the same direction. The higher the cost of governance the higher the recurrent expenditure. Thus, a change in cost of governance, (new wages and salary package and inflation variables) produces a proportionate change in output (real GDP) whereas interest rate was negatively related to output.

If the total fringe benefit increases by 1 naira, on average holding all other variables constant, recurrent expenditure goes up by 99.81 billion Naira (Hill et al., 2012). Monetization also increases by 3.62 billion Naira holding other variables constant while the real domestic absorptive capacity decreases by 6001.89 billion Naira when other variables are fixed.

The impact of recurrent expenditure is actually depicted in Table 2; here the parameter associated with recurrent expenditure is 0.95 suggesting that if recurrent expenditure goes up by a Naira, the average capital expenditure goes up by 0.95 holding all other variables constant. This in turn affects capital stock, in this case if

Capital stock rises by one Naira (Naira is the Nigeria Official Currency), capital expenditure goes down by about 0.25 billion Naira when other variables are fixed.

Finally, if on the average cost of governance rises by 1 Naira when other variables are fixed, output increases by 0.014 billion Naira and interest rates falls by 237.372 billion Naira when other variables are constant. Thus, interest rate is inversely related to output. This finding corroborates the findings of earlier works such as Kumar (2009, 2010). This is also consistent with Odhiambo's (2009) finding on interest reforms, financial deepening to promote stability and output in Kenya.

REFERENCES

Alifa D (2003). Monetization Policy. The Battle from the Senate The Guardian, pp. 8-9.

Anyawu CJ (1998). Revenue Allocation and Stable Fiscal Federalism in Nigeria. J. Econ. Manage. 2(2).

Charenmza WW, Deadman FD (1993). New Directions in Econometric Practice U.S.A. Edward Elgar Publishing Limited.

Economic Update (2004). Monetization of Public Officers pay News Magazine on Nigeria Economic Development, 1:2.

Ekaette U (2003). Monetization of Fringe Benefit for public Officers. The Punch. Thursday December 11.

Francis O (2004). "Monetization of Fringe Benefits in the Public Service. Issue of Policy Implementation, Monitoring and strategy, the Nigerian Accountant." Official J. Inst. Chartered Account. Nigeria. January/March, 2004 edition, 37:1.

Greene HW (2004). Econometric Analysis (Fifth ed.) India. Pearson Education (Singapore) Pre. Limited.

Greene HW (2012). Econometric Analysis (Seventh ed.) India. Pearson Education (Singapore) Pre. Limited.

Hill CR, Griffths EW, Lim CG (2012). The Principles of Econometrics (fourth ed.), John Wiley & Sons (Asia) Pie Ltd.

Igbokwe E (2003). Implementing Monetization Policy The Punch. Thursday, December 11.

Iji A (2003). Monetization. The Punch. Thursday December 11.

Kumar S (2010). "Efficacy of Monetary Policy in Curtailing Consumption: Empirical Evidence from Fiji." IUP J. Monet. Econ. IUP Publ. 0(3):60-68.

Kumar S (2009). "An Investigation of the Long-Run Private Investment in the Asia-Pacific Developing Countries." IUP J. Appl. Econ. IUP Pub. 0(3-4):38-47.

Maddala GS (2002). Introduction to Econometrics (Third ed.) India. Pearson Education (Singapore) Pre. Limited.

Mobolaji A (2003). The Monetization of Fringe Benefits in the Public Service (on Line ed. of DAWODU Com). Dedicated to Nigeria's Socio-Political Issue of July 15.

Nina P, Blom A, Goldberg KP, Schady N (2004). Trade Liberalization and Industry Wage Structure: Evidence from Brazil. World Bank Econ. Rev. 18(3):319-344.

Nigerian Tribune (2003). Monetization. Friday 27, June Saturday Tribune (2003) Bureaucracy May Frustrate Monetization Policy. December 6.

Nyang OM (1998). Fiscal Federation, Revenue Allocation Formula and Economic Development in Nigeria. Niger. Finan. Rev. 7:3.

Odhiambo NM (2009). "Interest Rate Reforms, Financial, Deepening and Economic Growth in Kenya: An Empirical Investigation." J. Dev. Areas 43(1):259-313.

Okonjo IN (2004). Managing a Ravaged Economy Economic Update, 1:6.

Onyendi O (2004). Monetization: Workers Lockout, The Punch, Wednesday, July 21st, p. 8.

Okunrounmu F (2003). Merits and Demerits of Monetization. *The* Vanguard, Monday, September 29, p. 26.

Ramachandran M (2003). Monetization as a Preferred Option. The Hindu on Line Edition of India's National Newspaper, Monday, August 11.

Saka A (2004a). The Effects of Industrial Trade Dispute(s) on Output Change in Nigeria. A research Thesis submitted to the Department of Economics, University of Ilorin in Partial Fulfillment of the Requirement s for the Award of Master of Science (M.Sc.) Degree in Economics.

Saka A (2004b). Macroeconomics Today (1st ed.), Ilorin Oyinwola Printing Works.

Saturday Tribune (2003). Bureaucracy May Frustrate Monetization Policy. December 6.

Soriwei O (2003). Workers' Benefits. The Punch. Thursday, December 11.

The Punch (2003). Lawmaker Pleads Fairness to Workers on Monetization Implementation Thursday, December 11.

The Guardian (2003). Monetization. Federal Government Abolishes Direct Car Loan. December 10.

Tukur AA (2004). Monetization of Public Officer Pay, Economic Update 1:2.

Thiam C (2005). Mouridism: A Local Re-invention of Modern Senegalese Socio-Economic Order. West African Review. ISSN: 1525-4488 (online).

Uniamikogbo S, Anthony E (2001). The Impact of Monetary and Fiscal Policies on Manufacturing Industry in Nigeria: A Simultaneous Equation Model (1980–1997). Niger. Econ. Finan. Rev. 6(1).

Upender M (2003). Applied Econometrics. Delhi Vrinda Publications (P) Limited.

Yekini KT (2002). External Debt Burden and Macroeconomic Performance in Nigeria: 1970-1999. Nigeria Institute of Social and Economic Research (NISER). Monograph Series No. 12, 2002.