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EFFECT OF INCOME POLICIES ON REAL WAGES IN NIGERIA (1980 – 2017)

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Abstract

This study investigated the effects of income policies on real wages in Nigeria, 1980 – 2017 using time-series data. The major aim of the study was to determine the major impacts of income policies on real wage rates in Nigeria.The specific objectives are to: investigate the relationship between Personal Income Tax Revenue (PITR,) on real wage rate in Nigeria. Determine the effect of Company Income Tax Revenue (CITR) on real wages in Nigeria. Examine the relationship between value Added Tax Revenue on real wages in Nigeria Examine the relationship between inflation rate and the real wage rates in Nigeria. Four hypotheses were formulated and these laid the foundation for the analysis. The research design adopted for the study was based on quasi-experimental research design. The data used for this study were obtained from classroom discussion, CBN Statistical Bulletin and various issues (1980 - 2017), World Bank data, text books and international journals. The researcher used the method of ordinary least square of regression analysis in the analyzing the data collected. Single multiple regression model was designed and used for the analysis. First order regression analysis were conducted which indicated the presence of spurious regression result as the R^2>DW. Second order analyses were also conducted using co-integration tests, Granger Causality Tests, and Augmented Dickey-Fuller, and Error Correction Mechanism Tests. The study separated income policies into Personal Income Tax Revenue, Company Income Tax Revenue, Value Added Tax Revenue and a check explanatory variable, Inflation Rate. The results shows that Personal Income Tax Revenue (PITR) is negatively related to the Real wages revenue rate over the period as expected a prior. As the PITR increases by a unit income, the RWR decreases by 2.45% and vice versa. The Company Income Tax Revenue (CITR) result also reveals that it has a negative but significant relationship with Real Wages Revenue RWR, over the period understudy. The result shows that as CITR increases by a unit, RWR decreases by 2.48 units and vice versa. The Value Added Tax Revenue (VATR) result reveals that it has a negative and significant relationship with RWR. It shows when VATR increases by a unit, RWR also decreases by 335.6 and vice versa. The result shows that as INFR (Inflation Revenue Rate increases by a unit percentage, RWR also decreases by 704.2% and vice versa. Findings indicates personal income taxes have become an increasingly source of revenue for state government in Nigeria. Since personal income tax Amendment Act of 2011 all the 36 states including Abuja use personal income tax. Income policy represent compulsory payments that reduces workers spendable income after payment of taxes, which is detrimental to work effort. The study found, among others, that the PITR, CITR, VATR, and INFR have negative but significant impact on real wage rates over the period of the study. The study concluded that these variables representing income policies have strong impact on the real wage rates and recommended, among others, that the government and other financial authorities should ensure the income policies should have a human face on the workers as they bear the final brunt of the consequences of the income policies.

Introduction

Background to the Study

Workers are more than abstract factors of production as described by economist. Nigeria economy is primarily designed to provide people with good jobs with high wages so that they can buy the things they need and demand. Labours need to eat; they have feelings, so government naturally worry about both the quantity and the quality of jobs to provide. Basically, however, real wages earners in Nigeria economy are comprising the size of labour force which is predominantly engaged in agriculture, mining and querying manufacturing and processing, building and construction, distribution, electricity, gas and water, transport and communication services (Fashoyin, 2007); (Moro, 1995) and (CBN, 2011). Additionally, are the millions of informal nooks and crannies of similar activities around our rural and urban communities (Fashoyin, 2007).

The distribution of income between labour and property, and within different labour groups has been a continual source of social strife and political ferment all over the world, there is battles between labour and capital over wages, working conditions and the right to organize. This is why government expenditure is financed mainly by taxes. Real wages are the amount of income a person earns relative to some past date while correcting for the impact of inflation. Real wages provide insight into the actual purchasing power a worker has. The higher your real wages the more goods and services you can buy with your incomes. Nominal wages is the naira amount of wages earned without taking inflation into account. Nominal wages do not depend on costs in the economy and require no calculation. A normal wage is simply the amount of money a person makes. For example, if your employer pays your wages is ₦2000 a month; your normal monthly wage is ₦2000.

In analysing labour earnings, economists tend to look at the overage real wage, which represent, the purchasing power of an hours work or the money wages divided by the cost of living. By that measure Nigerian workers today are not better off than they were 50 years ago. (Gbosi, 2003).

Adam Smith (1776) asserts that money wages of labour have to be those which at least represent the subsistence and it on tax is imposed on presumably subsistence wages its incidence will necessarily be shifted. In the case of agricultural wages, it will be shifted to the landlords, and in the case of manufacturing industries the incidence will be borne by the consumers through higher prices of goods. A tax on profession would raise the cost of their services. It is assumed that taxes on personal income are the only taxes being utilized by government authorities and that on fixed proportional rate of taxation is applied, with no exclusions, exemptions or deductions allowed from the tax base.

Statement of the Problem

Income policy or fiscal policy is the government policy instrument that operates across all sectors of an economy. Income policy plays critical roles for good and ill, in the mobilization of domestic saving. Income policies have effects on income distribution, employment efficiency, and economic stability.

The significant functions of Board of Internal Revenue Service (BIRS) are to increase tax and collect revenues by implementing changes in tax administration that permit more taxes to be collected from existing tax sources at unchanged tax rates. But in Nigeria BIRS are shortage of well-trained tax administrators excessively complex tax laws, light penalties for tax evasion, corruption and out-dated techniques of tax administration all combine to make up tax evasion one of the most intractable problems of economic policy in Nigeria. Higher taxes on real wages has a relatively greater impact on saving, (Gillis, Perkins, Roemer and Snodgrass (1996). With high income tax rates, tax payer everywhere tends to react in five ways.

1. They evade taxes by conceding income.
2. They avoid taxes by altering economic behaviour to reduce tax liability.
3. They bribe tax assessors to accept false returns.

The following research questions serves as guides to the study.

1. To what extent do Personal Income Tax Revenue and Rate (PITR) impact on real wages in Nigeria?
2. What is the relationship between Company Income Tax Revenue and Rate (CITR) and the real wage rates in Nigeria?
3. What is the effect of Value Added Tax (VAT) on real wage rates in Nigeria?
4. What is the relationship between inflation rate (INFR) and the real wage rate in Nigeria?

Objectives of the Study

The broad objective of this study is to evaluate the impact of Income policies on real wage rates in Nigeria (1980 – 2017). The specific objectives were to:

1. Investigate the relationship between Personal Income Tax Revenue (PITR) on real wage rates in Nigeria.
2. Determine the effect of Company Income Tax Revenue (CITR) on real wages in Nigeria.
3. Examine the relationship between Value Added Tax Revenue on real wages in Nigeria.
4. Examine the relationship between inflation rate and the real wage rates in Nigeria.

Hypotheses

$H0_1$: Personal Income Tax Revenue and Rate (PITR) have no significant effect on real wage rates in Nigeria.

$H0_2$: There is no significant relationship between Company Income Tax Revenue (CITR) and real wage rates in Nigeria.

$H0_3$: Value Added Tax Revenue (VAT) has no significant effect on real wage rates in Nigeria.

$H0_4$: There is no significant relationship between inflation rate and real wage rates in Nigeria.

Significance of the Study

The study is of benefit to governments and shall help tax officers and public fund managers in making adequate financial planning. It helps government in finding solution to the problem of income in equality tax system in Nigeria. Individuals and groups shall benefit from this study. It serves as an avenue for better public participation in budget and budgetary implementation. This research work shall be of great intellectual value to students of economics and other disciplines who would want to make further research on income policy on real wages as an evaluation of the effectiveness of income policy in Nigeria.

Scope and Limitation of the Study

The main objective of this study was to determine the income policy on real wages in Nigeria over the period (1980 – 2017). The choice of the period was dependent on data availability, and the periods captured the various income policies under the different government in Nigeria.

Literature Review

Ability to Pay Theory

According to Pigous (1920), any citizen of a given state or country should pay tax to the constituted authorities that government should base on his or her ability to pay which is in line with the principle of equity and justice in taxation. According to this approach a citizen is to pay taxes just because he can, this relative share in the total tax burden is determined by his relative paying capacity. The basic tenet of the ability to pay doctrine is that their burden of taxation should be shared by the members of society on the principles of justice and equity. These principles necessitated the, tax burden should be apportioned according to their relative ability to pay. The ability to pay principle states that taxes should be distributed among tax payers in accordance with their ability to pay system. Ability to pay can be measure by income, consumption wealth or some combination of all the three. Using income as the measure of ability, this would mean that tax payers with more income would pay more taxes. Indeed the redistributive impacts of taxation are always expressed in terms of its effects on income.

All adult individual who is resident and capable, in anywhere within the geographical area called the federal republic of Nigeria is subject to Nigeria tax in respect of all incomes whether from employment, investment, and enterprise or adventure accuring to that person during the assessment year. Most societies do largely define equity in taxation as requiring taxation on the basis of ability to pay such as, being progressive, proportional or regressive. In a progression rate structure the ratio rises as income rises, in a proportional rate structure the ratio stays and in a regressive rate, the ratio of tax payments to income declines as income rises, according to Ajie Akekere of Ewubare (2014) Bhatia (2003); Musgrave and Musgrave (2010).

Haig-Simons Theory of Comprehensive Income

There are two dimensional units of taxation; All individuals who earn income regardless of age or the aim earned is subject to tax. Business income in one form or another such as projects dividends, retained earnings, accrues to the person(s) who own the business, (director). A comprehensive personal income tax require all incomes of the corporate proportion to their ownership of shares, secondly, is the time period relevant for measuring personal income. The concept income is meaningless except a period is specified. Income is a flow over time and the amount involves vary with the time interval chosen.

In an economic sense, income is usually view as a measure of person power to purchase goods and services in a given year. According to Simon in Hyman, 2005, it is an indicator of the exercise of control over the society scarce resources then it can be measure according to it sources or it uses. Sources of income are calculated from the beginning to the end of the period. Uses of income as a consumption or purchase of goods and services, taxes, donation and savings, whereas net worth is the value of a person’s assets held at any points in time less the value of a person liabilities or debts. An individual might save negatively by borrowing of funds or by liquidating some assets into cash and spending the cash on daily transaction items, basically, comprehensive income is the sum of a person annual consumption expenditures and the increment in that persons net worth in a given year. The concept of comprehensive inco is also call the Haig – Simon definition of income (Hyman, 2005) consumption includes all voluntary expenditures including donations to charity and gifts. Comprehensive income is defined in terms of it sources. A comprehensive income tax is levied on all income irrespective of its use or its source.

Concept of Policy

Policy is a deliberate system of principles to guide decisions and achieve rational outcomes. Longman Dictionary (2009). A policy is a statement of intent, and is implemented as a procedure or protocol. Policy is to assist in subjective decision making usually assist senior management. The term policy may apply to government, private sector organizations and groups as well as individuals.

Policy are the actions initiated by the institutions in power, such as monetary policy initiated from Central Bank of any country Fiscal policy initiated from federal and State Ministry of finance of any country etc, are the policies deliberately on tax system. Policies can be understood as political, managerial, financial, and administrative mechanism arranged to reach expected goals. Gbosi (2005) defined "fiscal policy" as the deliberate change of levels of government expenditures, taxes and borrowing in order to achieve such national economic goals as full employment, price stability, growth in gross domestic product and balance of payments equilibrium. The instruments of fiscal policy include government taxes, expenditure and borrowing.

Income Tax Institution in Nigeria

Ever since joint Tax Board was constituted under section 27 of the Income Tax management Act (ITMA 1961) and under schedule 1 section 2 (4) (b) and 78 the companies Income Tax Act (CITA) 1979, and the state Board of Internal Revenue was established by section 33 A of the Income management Act of 1961. (Ajie, Akekere and Ewubare 2014). The state board is the relevant tax authority in charge to collecting the following taxes due from individual (personal income tax) from business, partnership and sale traders. PAYE (Pay As you earn) based on graduated scale from those in employment. Taxes on personal income represent the dominant source of revenue for the federal and state government in Nigeria. Personal income taxes accounted progressively to three time of government revenue. Personal income taxes have become an increasingly important source of revenue for state governments in 36 states including Federal Capital Abuja. (Ajie et al., 2014).

Taxation of Companies

The Companies Income Tax Act (CITA) 1979 as amended by subsequent Decree including the 1996 Finance (Miscellaneous Provisions) Decree govern the assessment of the profits of limited liability companies. The Federal Board of Inland Revenues is responsible for company Taxation white the Internal Revenue is responsible for personal income taxation.

Value Added Tax – VAT

Value Added Tax – VAT, as it is known is the tax on consumption that comes into effect from the first of January 1994. It is regulated by the VAT DECREE of 1993. VAT is indirect form consumption behaviour of the people. It is a tax on spending expects to be borne by the final consumer of goods and services. It covers manufactured goods, imports as well as professional and Banking services, Values Added Tax is managed by the Federal Inland Revenue Services (FIRS) and aimed at replacing the existing sales tax which has failed to generate money for the Government.

Concept of Income

According to economists expression "income" is a measure of a person's power to purchase goods and services in a given year, Hyman, (2005). In view of Henry Simons (1938); it is an indicated of the exercise of control over the use of society scare resources. Income is any payment or increment in a person net worth that increases that person ability to purchase or use goods and services in a given year. The three major sources of personal income: earnings from the sale of productive services, transfer payments received from government and private organizations or people, and capital gains on existing assets currently held. Earnings include both income from labor and income from capital. Labour income is measured by wages and salaries from the sale of labour services check income.

An earned income to a person is that which the person makes to exert physical,, intellectual, or aristic efforts to earn (Sample and Ewubare, 2006). Components of earned income are the basic salary bonus, transport allowance, housing allowance, benefit in cash project from trade business and vocation, income from trusts and settlements. Other income earned directly but legal are activities as immoral smuggling, drugs trafficking, and prostitution etc.

Unearned income are generally called investment income which a person receives for what he does not directly participate or make physical efforts to earn. Such incomes are received monthly yearly of any time profit are declared. These incomes include dividends interest, rental income royalties etc.

Empirical Literature

According to Hyman (2005) some empirical research has suggested that substitution effect of wage reductions on income taxes is fairly large. This indicates that income tax can cause losses of efficiency in labour markets. The results of the researchers indicate that the efficiency – loss ratio of taxes on labour income in the United States in the 1970s was in the range of 5 to 30 cents of revenues collected by government. Henry and Joseph (1981) investigated on "labour supply in how taxes affect economic behaviour, the study revealed that in the tax system of the 1970s efficiency – loss ratio for the average married male was 22 percents. The studied indicates taxes on married males in the 1970s in the United States created distortions in resource by excess burden of 22 cents for each dollar revenue collected by government.

Hausman and Poterba (1987) investigated Household behaviour and the tax reform Act of 1986. Viewed was that the efficiency – loss ratio for income taxes had reduced to 13.5 percent. This indicated that a dollar of revenue generating from taxes on labour incomes in

1988 was resulted in only 13.5 cents of excess burden. This was caused due to lower tax rates based on 1970 and 1988 estimates on the same labour supply elasticity.

Auerbach and Slemrod (1997) investigated that economic effects of the tax reform Act of 1986. The results indicate that there was insignificant increased in labour supply as a result of the tax declines. The results showed modest increases in hours worked in response to reductions in marginal tax rates mean of eight percent Hausman (1981) study “labour Supply” in how taxes affect economic behaviour, the investigation showed that males increased labour hours by one percent as relation to tax reductions, while female workers increased labour hours worked only by one third percent in response to the lower marginal tax rates.

The results favour married females with lower tax rates to highest tax rates with 18 percent. The finding was the effects of the tax reform Act of 1986 on labour supply were not significant. Ziliak and Kniesner (1999) investigated life cycle labour supply tax effects applied sophisticated econometric techniques, to estimate the results. The variables were impact of income tax on labour and interest income. Their findings were tax reforms of the 1980s, reduced the income tax rate increased male labour supply in the United States by 3 percent and decrease, the excess burden of income taxation by 16 percent, while wage of labour for male was 0.15. The estimated result was – 0.6 which shows that hours worked by prime age males reduced by 0.05 percent in the short run from a 10 percent increase in marginal income tax rates. Their recommendations were eliminating income taxes completely inferred young married males on average to work more 4 percent hours than before and those in the highest income quartile population will increase by 7 percent more hours. Inclusion income taxes affects household labour supply in influencing labour supply decisions spouses (Hyman, 2005).

Other econometric studies highlighted a positive linkage example Coe (1990) found that payroll taxes may have increased the natural rate of unemployment in Canada in the 1970s, he estimates that income tax and indirect taxes pay no part. Layard and Nickel (1999). Came to the same conclusion for the United Kingdom.

According to them, a decline of 10% in all mandatory contributions would on average reduce the unemployment rate by around 25%. Nickell (1997) estimates that changes to the structure of the tax wedge have no long – term effect on unemployment.

The study of Daveri and Tabellini (2000) also examines how taxes on earned income affect gross wages. To that end, they estimated an equation in which the dependent variable is the growth rate of gross real wages.

The explanatory variable is the increases in the rates of taxation taken into consideration as well as the growth rate of the GDP per capita. The results of the estimation by ordinary least squares suggest that the effect of taxes on unemployment is transmitted in the form of an increase in the cost of labour.

The conclusions have been partially confirmed by the work of Padoa - Schieppa (1990) for Italy and by that of Hansen et al. (2000) for Denmark. Padoa – Schieppa has shown that the wages received by workers fall when the degree of progressivity rises on Danish data covering the period 1970 – 1992, Hansen et al (2000) estimated wage equatitions analogous to that of Lockwood and Manning (1993).

Furthermore, income tax affects the labour supply decision of spouses and this results in efficiency losses by decreasing their incentive to participate in the labour force. Income taxes affect labour supply influencing retirement decisions intensity of work, willingness to acquire skills that increase labour income and choice of occupation.

Methodology

Research Design

The research design adopted for the study was based on quasi-experimental research design.

Method of Data Collection and Source

The data used for this study were obtained from the CBN Statistical Bulletin and World Bank Data Bank on Various Issues (1980 – 2017).

Techniques of Data Analysis

The researcher used the method of Ordinary Least Square of regression analysis in the analysing the data collected. Specifically, the researcher conducted a short-run analysis based on: Apriori test to check whether the signs and sizes of the variables used conform with the apriori expectations in the economy. Error Correction Mechanism (ECM) was used in correcting the short-term disequilibrium of the long-term analysis.
Eview 7.0 software was used for this purpose.

Model Specification

Model specification is defined as step econometrician has to take in attempting the study of any relationship between variables. Koutsoyiannis (2003), Gujarati (2005). However, analysis was based on multiple linear regression model.

The mathematical functional form of the model:

$RWR = f(PITR_t, CITR_t, VAT_{t,} INF_{t,})$ - - - - - - 3.1

Where:

RWR = Real Wage Revenue

PITR = Personal Income Tax Revenues/Rates are revenues generated by the government through the changes of its income policies. An increment in PITR makes more money for the government and a reduction in it achieves the opposite aim but leaves more money in the pockets of the employees.

CITR= Company Income Tax Rate/Revenue are revenue generated by the government through companies in Nigeria. As the income policies of the government changes, CITR changes and these changes also affect the real wages of the employees.

VAT = Value Added Tax Revenue/Rate is one of the income policies of the government that affects the real wages of workers through the reduction in their disposable income.

Inflation Rate = Income policies of the government can trigger the inflation rate of the economy or vice versa. This will also have an effect on the real wages of the workers through their disposable incomes.

U_i= Stochastic Term (It covers all the other variables that affect real wage rates but were not included in the model).

This is further stated in econometric form in model below;

$RWR_t = b_0 - b_1PITR_t - b_2CITR_t - b_3VAT_t - b_3INF_t + U_i$ - - - - 3.2

Where

RWR = Real Wages Revenue Rate
bo = Constant parameter
b1, b2, b3 = Estimation parameter or coefficients of the independent variables.
U = Error term

Results

Table 4.1 Regression Results

Dependent Variable: RWR
Method: Least Squares
Sample: 1980 2017
Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.10400	0.289702	52.13635	0.0000
PITR	0.005722	0.000989	5.783542	0.0000
CITR	-4.27E-06	1.14E-06	-3.745206	0.0007
VATR	-5.35E-06	3.46E-06	-1.546939	0.1314
INFR	0.003995	0.006405	0.623806	0.5370

R-squared	0.888381	Mean dependent var	17.65429
Adjusted R-squared	0.874851	S.D. dependent var	1.744130
S.E. of regression	0.617010	Akaike info criterion	1.994217
Sum squared resid	12.56315	Schwarz criterion	2.209688
Log likelihood	-32.89011	Hannan-Quinn criter.	2.070880
F-statistic	65.66199	Durbin-Watson stat	1.078232
Prob(F-statistic)	0.000000		

Table 4.2: Augmented-Dickey Fuller Tests Results

Coefficients	Critical Values at 5%	ADF Values	Probability	Comments
RWR	-2.95	5.9	0.000	I(1)
PITR	-2.95	-7.8	0.000	I(1)
CITR	-2.95	-9.97	0.000	I(1)
VATR	-2.95	-6.0	0.000	I(1)
INFR	-2.95	-5.7	0.000	I(1)

Source: *Authors Computation (Eviews 7.0)*

Johansen Cointegration Test

This reveals whether there is a long-term relationship among the variables used.

Table 4.3: Johansen Cointegration Test

Sample (adjusted): 1982 2017
Included observations: 36 after adjustments
Trend assumption: No deterministic trend

Series: RWR PITR CITR VATR INFR
Lags interval (in first differences): 1 to 1
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.747151	77.34351	60.06141	0.0009
At most 1	0.375053	27.84490	40.17493	0.4749
At most 2	0.192754	10.92171	24.27596	0.7900
At most 3	0.085331	3.213141	12.32090	0.8204
At most 4	6.11E-05	0.002199	4.129906	0.9695

Trace test indicates 2 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Regression Analysis Results

$RWR_t = 15 + 0.005722PITR_t - 4.27E\text{-}06CITR_t - 5.35E\text{-}06VATR + 0.003995INFR$ - - 5.1
t-tests = (PITR 5.783542) (CITR -3.745206) (VATR -1.546939) (INFR 0.623806)
f-test = 65.6, R^2 = 0.89, DW = 1.07

Error Correction Mechanism (ECM)

$RWR_t = 0.178 - 2.45PITR_t - 2.48CITR_t - 335.6VATR - 704.2INFR$ - - - 5.2
t-tests = (PITR 3.74) (CITR -4.7) (VATR 3.5) (INFR 2.2)
f-test = 6.3, R^2 = 0.84, DW = 2.4

Discussion

Descriptive Statistics

The table 4.1 above shows the changes that have taken place over the years on the income policies and their effects on the real wage rates of Nigeria. The variables have had different effects on the rate of real wage rates at different times. According to the table, the realwage rate incidence in Nigeria peaked in 2016 at 20%, the same with PITR (N1.3b), CITR (N18b), and N33b for VATR. The inflation rate slowed down at 11% having peaked at 15% in 2016.

However, the table showed that changes in the income policies of the government resulted to real wage rates slowing down to a minimum of 13.9% in 1993.

Explanation of some terms

The result shows that R^2 = 89% of the changes in the dependent variable are explained by the changes in the independent variables. The goodness-of-fit is seen to be very strong implying that less than 11% of the changes in the independent variable could not be explained by the independent variables in the short run. F-test shows that the overall model is statistically significant at 5% level while the DW shows there is the presence of serial autocorrelation.

Short Run Analysis

The apriori signs for the explanatory variables PITR and INFR are violated as they showed a different sign while that of CITR and VATR showed the expected signs. The result shows that only PITR and CITR are statistically significant at 5% level of significance.

Granger Causality Test

Granger Causality Test

The test shows there are two unidirectional causes between the dependent variable, RWR and the INFR. This shows that RWR granger causes INFR at f = 6.7, and INFR granger causes RWR at 5.3 at second levels. The result also shows that PITR granger causes RWR at f = 4.4; RWR granger causes CITR at f = 2.5; and RWR granger causes VATR at f = 2.1

Augmented-Dickey Fuller (ADF) Tests

The unit root tests show that all the variables are non-stationary at second differencing as shown in the table 4.3 above. However, this non-stationary does not show whether there is a long run relationship among the variables or not. Nonetheless, the tests met the criteria for the conduct of cointegration test using Johansen method due to its applicability in multiple and known breakpoint test results.

The result shows, with the trace statistics, there is a long-term relationship among the variables used. There are at least 2 cointegrating equations in the analysis to necessitate for the analysis of the Error Correction Mechanism (ECM).

Error Correction Mechanism (ECM)

The Interpretation and Explanation of the Hypotheses was based on the use of the ECM results.

H_{01}: The result shows that PITR is negatively related to the RWR over the period as expected apriori. As the PITR increases by a unit income, the RWR decreases by 2.45% and vice versa. Further, the result shows that PITR is statistically significant at 5% level of significance using the t-value at 3.74. We therefore accept the alternative hypothesis, reject the null and conclude that there is a significant relationship between PITR and RWR over the period. The finding of the present study is in agreement with those of Ziliak and Kniesner (1999) use sophisticated econometric techniques to estimate life cycle labour – supply tax effects. They considered the impact of the income tax on labour and interest, income and took a more long range look at the way income tax effects work decisions. The researcher concluded that the tax reforms of the 1980s, which reduced the income tax rate stimulated, male labour supply in United States by about 3 percent and reduced the excess burden of income taxation by about 16 percent. Their estimated compensated wage elasticity of labour for prime age males was 0.15.

Personal Income Tax Revenue is one of the income policy measures undertaken by the government to achieve a particular economic aim over a period of time. When this policy bothers on personal income increment, the effect on real wage rate is negative and vice versa. An increase in personal income tax increases the personal income revenue of the government but decreases the real wages of the workers.

H_{02}: The Company Income Tax Revenue [CITR] result also reveals that it has a negative but significant relationship with RWR over the period understudy. The result shows that as CITR increases by a unit, RWR decreases by 2.48 units and vice versa. As shown in the result, the t-value (-4.7) is statistically significant at 5%. We therefore reject the null hypothesis, accept the alternative and conclude that there is a significant relationship between CITR and RWR. The present result is in agreement with some past research findings. For example the study of Daveri and Tabellini (2000) also examines how taxes on earned income affect gross wages. To that end, they estimate an equation in which the dependent variable was the growth rate of gross real wages. The explanatory variable was the increases in the rates of taxation taken into consideration as well as the growth rate of the GDP per capita. The results of the estimation by ordinary least squares suggest that the effect of taxes on unemployment is transmitted in the form of an increase in the cost of labour. Company Income Tax Revenue, as one of the income policies usually embarked upon by the government to achieve its economic goals, has a direct effect on the real wages of the workers through the companies' taxed. An increment in the company tax payment results to more expenses on the company and a possible freeze or reduction in the wages/salaries paid or an increase in the prices of its products. Either way, the real wages of the workers were affected.

H_{03}: The VATR [Value Added Tax Revenue] result equally reveals that it has a negative and significant relationship with RWR. The result shows that as VATR increases by a unit, RWR also decreases by 335.6 and vice versa. As shown in the result, the t-value (3.5) is also statistically significant at 5%. We therefore reject the null hypothesis, accept the alternative and conclude that there is a significant relationship between VATR and RWR. The finding of the present study is in line with Coe (1990) and other econometric studies highlighted a positive linkage example Coe (1990) find that payroll taxes may have increased the natural rate of unemployment in Canada in the 1970s, he estimates that income tax and indirect taxes pay no part. Layard and Nickel (1999). Come to the same conclusion for the United Kingdom. According to them, a decline of 10% in all mandatory contributions would on average reduce the unemployment rate by around 25%. Nickell (1997) estimates that changes to the structure of the tax wedge have no long – term effect on unemployment.

VATR is a major revenue earner for the government of any country. In Nigeria, the government uses VAT to raise its revenue used in executing various capital and recurrent projects. VAT is one of the income policies used by the government to achieve their aim over time. VATR has its direct effect on the real wage rates of the workers. Companies raise the prices of their products and services in order to cover the expenses on VAT and vice versa. The indirect taxes are usually passed down to the consumers who bear the brunt of it.

H_{04}: The INFR [INFLATION RATE] result, again, reveals that it has a negative and significant relationship with RWR. The result shows that as INFR increases by a unit percentage, RWR also decreases by 704.2% and vice versa. As shown in the result, the t-value (2.2) is also statistically significant at 5%. We therefore reject the null hypothesis, accept the alternative and conclude that there is a significant relationship between INFR and RWR.

As pointed out in the previous hypotheses, inflation rate also affects the real wage rates. Here, the author used the variable as a check variable. An income policy poorly thought out and or implemented always results to catastrophic economic consequences such as high inflation rates. These ugly economic situations usually results to eroded wage rates of the workers.

Conclusions and Recommendations

Conclusions

Income policies as used by the government have been able to shift the economy positively and negatively. Governments of China, India, Brazil and Nigeria have successfully implemented such policies bothering on their income in other to achieve huge economic goals over time. From the analysis, a positive income policy will achieve a positive result and vice versa. However, income policies must have a human face considering the fact that the end result is usually borne by the consumers/workers whose salaries do not change as the changes in income policies affect their wages.

Recommendations

The following recommendations are offered:

(i) The government and the financial authorities should ensure that changes in the personal income tax have a favourable effect on the real wage rates of the workers and final consumers. As revealed in the analysis, an increase in PITR has a negative effect on the real wage rates and this effect indirectly reduces welfare of the workers. Therefore, even if there will be any reason for the increase in the personal income tax, there should be an accompanying policy to cushion the effects of this increment on the workers.

(ii) Although, the government generates a lot of revenue from company income tax, they also ensure there is a cushioning effect when such policies are made because it has direct and negative implications on the real wage rates. Such implications can also affect the demand structure of the economy and subsequently result to lower income generated by the government.

(iii) More so, the VAT structure, which has an indirect but significant effect on the real wage rates must not be changed so frequently for the sole benefit of the government, even though, it is a major income generator. As with the other variables considered in this study, it could decrease the demand structure due to increase in the prices of goods and services offered by the companies who pay the VAT.

(iv) Finally, it is clear that the inflation rate erodes the disposable income of workers and as a result, decreases their real wage rates. The financial authorities must, as a matter of urgency, encourage policies that reduce inflation to a single digit and ensure it stays that way for a long time.

Recommendations for Policy

The following recommendations are made based on the findings.

i) The Nigerians government should introduce targeted tax rates and reductions for low incomes earners such as grass root entrepreneur who are struggling to survive.

ii) States government board of internal revenue service should introduce and encourage payroll tax subsidies for low wage workers, mostly, those in urban areas.

iii) Local, state and federal government should consider a modest tax structure of public spending, reduce internal and external borrowing in particular, and reduce the cost of social benefits in general that are compatible with level of taxation.

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