MODELING THE POTENTIAL ECONOMIC EFFECTS OF TAX POLICY REFORM IN NIGERIA: SIMULATION ANALYSIS USING THE CGE MODEL.

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MOTIVATION

- In January 2010 the Federal Executive Council ratified and approved the National Draft Tax Policy for the country. an attempt to transform and diversify the existing revenue base of the govt.

- The approved tax policy provides a set of guidelines, rules and modus operandi that would regulate Nigeria's tax system and provide a basis for tax legislation and administration in the country.

- Specifically: enable economic growth and development; provide the government with stable resources that it shall invest in well-judged expenditures; provide economic stabilisation; to pursue fairness and distributive equity; and to correct market failures or imperfections.

- To actualize the laudable objectives, a shift of focus in the tax system from direct taxation to indirect taxation through gradually increasing value-added tax so as to achieve stable non-oil revenue flows and thus high compliance in the tax system.

MOTIVATION

- Companies income tax will drop to 20% from 30%; while the personal income tax will drop from 25% to 17.5% of the top rate. this is accompanied by an increase in the rate of value added tax (vat) from 5% to 15%. Obviously, the impact of the new tax system especially the significant increase in the value added tax has economy-wide effects since it will affect aggregate consumption.

- However, there appears not to be a general consensus on the impact of taxes on the economy and thus Bird and Zolt (2005) warns that it is important not to exaggerate it as most research has shown the impact to be relatively modest.

- They maintain that how a given tax policy influences the economy will depend on the context—for example, on the size of the country's informal sector, its legal and regulatory environment, the effectiveness of its tax administration, and the level of corruption.

THE QUESTIONS!!!

1) What would be the macroeconomic impact (government revenue, growth and aggregate employment) of the increase in value-added tax from 5 – 15%. **2)** What would be the sectoral impact of the tax reform. which sectors will benefit in the short-run.

Methodology and data sources

- The methodology adapted for the analysis is the Orani-g cge model with the Nigeria social accounting matrix (SAM) data of 1999 chosen to calibrate the model.

- The choice of the CGE model is that it is more appropriate than other methods in providing answers to the policy issue at stake. again, Orani-g model has large scale disaggregated features of the Nigerian economy based on Nigeria SAM of 1999 which could be found in the GTAP data base

RESULTS

- Baseline scenario - simulation result of 5% tax (vat) on household usage under short run closure: macroeconomic effects : the simulation result shows that a 5% vat on households produces a -0.007 percent reduction in total employment. this is even the situation as the level of unemployment has been on the increase.

- The nominal GDP was positive at 0.030% but there was a reduction in the real GDP of -0.001%. However, aggregate revenue from indirect taxes on household stood at 12.070. Aggregate revenue from all indirect taxes stood at 11.950

- Sectoral performance of 5% tax (vat) on household usage under short run closure: the simulation result of the 5% vat shows that 15 industries gained in their real sales of domestic and imported commodities while others did not.

- Simulation result of 15% tax (vat) on household usage under short run closure: macroeconomic effects: the simulation result shows that a 15% increase in vat on households' usage produces a -0.015 percent reduction in total employment.

- Nominal GDP stood at 0.061% . this is expected as higher spending by consumers to beat the full phasing-in of the tax reform will boost aggregate demand which will help boost increased production and economic activities and thus stimulate the economy.

RESULTS

- This shows that the 15% increase in vat does actually stimulate the economy (will cause the nominal gdp to rise) in the short run. However, it will produce a reduction in real GDP of -0.002%. Aggregate revenue from indirect taxes on household is 24.146% . Aggregate revenue from all indirect taxes 23.905%.

➢ **Simulation result of 15% tax (vat) on household usage under short run closure: sectoral performance:** The simulation result of the 15% vat shows that 16 industries gained in their real sales of domestic and imported commodities while others did not. this is unlike the 5% simulation where only 14 industries benefited

- From the result, all the industries that gained in sales under 5% vat also improved in their sales under the 15% vat increase. strikingly, otp which include other transport: road, rail; pipelines, auxiliary transport activities and travel agencies are among the gainers with 15% vat increase.

➢ **Policy Implication**

- The implication of the result is that the tax incentive structure must be looked into properly and should be such that will boost production in all the industries as to improve the real GDP and boost the level of employment.