Overview
Natural gas is undoubtedly the cleanest energy source among the three fossil fuels – coal, oil and gas. Its contribution to the energy consumption volumes in Nigeria has been increasing in recent years following key gas monetization policies introduced by the Nigerian government. Despite reserves abundance, the policy objectives of gas utilization are largely unfulfilled. Gas rents contribution to Nigerian GDP is still very low and 11 percent of production is flared. A new national gas policy emerged 2017 and envisaged increased supply and consumption of gas as requirement for growth of critical sectors of the economy. Achieving the above aim requires sufficient knowledge of the impacts that increasing gas supply would have on the macro economy and the various sectors of the economy.

Methodology
Employing the comparative static CGE model, this study carries out an evaluation of the gas monetization policy of Nigeria with emphasis on the gas supply increases in the economy using 2010 Nigerian Social Accounting Matrix (SAM) to analyse the economy-wide impacts. Considering gas increases from flaring down monetization and additional production scenario, 80 percent reduction in gas flare rate and 15 percent increase in aggregate gas supply were simulated.

Results
Results show that gas volume increases have both positive and negative impacts on the economy. GDP, real investments, total investments, government revenues and savings experienced increases while sectors as agriculture and transport where negatively impacted. The drop in average consumer prices encouraged more government and household consumptions as well as increase in sectoral exports. The results of the study equally reveal growth of the gas sector in terms of output, its consumption and positive labor migration which was a panacea to decreased activity recorded in the output and consumption of oil and refined products sectors. This finding is consistent with a priori expectations that increased utilization of gas could boost sustainable access to energy that will ultimately reduce the carbon footprints associated with energy use in Nigeria. The study established direct linkage of increased gas supply and consumption with economic growth. Embarking on key investment interventions to facilitate gas critical infrastructures by the government is recommended. This would boost distributive capacity as well as improve key sectors growth.

Conclusions
The Nigerian economy is known to be strongly reliant on the oil and gas sector with significant share of government revenue derived from taxes paid due to oil and gas activity. The study revealed this assertion going by the proportionate increase in government revenue by 3.1 percent and GDP growth by 1 percent. The findings of the study show that flare out of gas as well as increase in gas stock have positive impact on economic growth with macroeconomic indicators showing positive outcomes with welfare gains in some key sectors. The government should then exercise caution to ensure protection of the local economy to guarantee proportionate health of the sectors that suffers such as agriculture, transport and electricity.

References


