

Nigeria's Economic Recovery & Growth Plan: Risk Optimization for Maximization of Plan Objectives

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Nigerian economy entered into recession by 2016 with all macroeconomic indices turning negative. This necessitated the launching of Economic Recovery and Growth Plan (ERGP). The medium term development plan (2017 – 2020) is designed to stimulate the docile macroeconomic variables for sustained growth and development. The plan has three specific objectives designed to achieve the stated goal. There however exist some upside and downside risks which seems to receive little attention from the document. Foundation on the framework of economic optimization, the study employs qualitative optimization research design to minimize six downside risks and maximized their corresponding upside components. Among the downside risks is the potential of militancy to disrupt economic activities like food production in Central Nigeria and oil production in the Niger Delta. The upsides risks include improvement in the international price of oil and a more peaceful disposition of the restive tribes in Nigeria. The study recommends that the legislature should legalize the ERGP and form an ERGP Monitoring and Evaluation Committee. The legalization will hold any public officer that neglects its implementation culpable while the evaluation committee monitors economic policies by creating a public – private sector monitoring and evaluating unit. It is also recommended that the executive arm of the government should form an ERGP Implementation Directorate under the Presidency. This directorate should be a core civil service organ that ensures risks like electioneering campaigns identified are optimized and the targets and objectives of ERGP implemented.

Keywords:

ERGP, Economic recession, Risk optimization.

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Background to the Study

The Nigerian Federal Government launched an economic plan tagged the Economic Recovery and Growth Plan (ERGP) in 2017. The ERGP is a medium term economic framework meant to stimulate the recessive Nigerian economy back to sustainable, accelerated development and restore economic growth in the medium term (2017 - 2020). The plan is expected to place Nigeria on the path of sustainable development. Despite the robust provisions of the Plan, the experiences of similar previous plans in Nigeria which were frustrated for ignoring inherent risks creates doubts as to the prospects of a successful implementation of the ERGP. One of such risks is the inability of the past plans to elucidate on the potential downside risk that could eventually jeopardize the achievement of their targets and objectives. In fact, in the 140 - page - ERGP document, the downside and upside risks are contained in just 23 lines occupying less than half a page; they are not identified, enumerated nor emphasized yet its only such prioritization that could present clearly what risk to optimized to avoid a debacle or guarantee a success of the ERGP (FGN, 2017).

For ERGP to succeed, the risk must be properly analyzed. In this light, this paper seeks to highlight the downside and upside risk capable of jeopardizing the plan objectives. Suggestions would be advanced for policy actions that would ensure the downside risk are minimized and the upside risk are maximized for attainment of the plan objectives.

In pursuit of the above, this paper is divided into 5 sections. After the introduction, sections 2 provide clarification to key concepts; present the objectives and targets of the ERGP and a review of literature on the risks to ERGP. The theoretical framework of the paper is also presented in this section. Section 3 deals with the methodology of the research. Section 4 attempts a qualitative optimization of the downside and upside risks while section 5 concludes and presents suggestions for policy implementation.

Conceptual Clarification

The basic concepts central to appreciation of this study are Economic Recovery Growth Plan (ERGP), economic recession and risk optimization.

Economic Recovery and Growth Plan (ERGP)

The ERGP is a medium term economic plan designed to bring the country back to the path of sustainable growth. It is expected to guide government activities from 2017 through 2020. This medium term development plan was launched in 2016 after identification of negative socio-economic indices in virtually all areas of the Nigerian economy. The plan is expected to pull out the economy from the recession and place her on sustainable growth path by 2020. The plan has 3 objectives and a set of specific targets in prioritized sectors like agriculture to be achieved within the timeframe.

The ERGP incorporates a systematic implementation of a 4 year budget between 2017 to 2020. The 2017 budget would be the ERGP base year budget and the 2018 would be just an extension of the 2017. In this systematic pattern, the *rolling plan -like* re-calibration of adjustments in terms of real value providing only for inflation would ensue up to 2020. Commenting in this regard, Kyarem & Ogwuche (2017:2) observed that:

The ERGP is an overarching plan, hence to produce subsequent budgets like 2019 would not be difficult in the presence of the existing framework. This is good for both private and public sector planning as the existing framework would enable business entities and the private sector to evaluate the economic prospects, plan and make decisions.

Economic Recession

Keynes (1936) defined recession as the period an economy is characterized by low economic activities emanating from high level of unemployment, high level of inflation, low level of output hence low level of income over a relatively long period of time. Economic recession according to Neo-classical economists is a stage of business cycle associated with every economy in which the economy operates below equilibrium level as a result of low or downturn in economic activities over a period of time.

Central Bank of Nigeria (CBN), [2017a] defines recession as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in a real gross domestic product (GDP), real income, employment, industrial production and wholesale-retail sales.” The problem with this definition is that it specifies no time frame for identification of a recession.

The National Bureau of Statistics (NBS) [2017] perceives recession as negative real GDP growth rate for two consecutive quarters of a financial year, say first and second quarters. This second definition compromises the idea of an existing underground phenomenon that manifest at a time -two consecutive quarters of a year.

In this paper, we identify a recession exist in a country when most of the macroeconomic indicators like inflation, GDP growth rate, output and other socio-economic indicators turned negative over at least six continuous months. In Nigeria, by 2016 the price of oil which is the chief foreign income source of Nigeria slumped from an average of 83.4 \$pb between 2011 – 2015 to 44 \$pb in 2016, the production per day slumped from 1.86 mbpd in 2015 to 1.47 in 2016. While this drought of foreign earning persisted, the budget balance (% of GDP) moved from -1.2 in 2015 to -3.0 in 2016. The Nigerian stock market return (%) slide from 6.57 in 2015 to -6.17 in 2016 and average corporate profitability growth (%) went drastically down from 19.74 in 2015 to -17.4 in 2016. This scenario was worsened by an inflation that galloped from 10.69 in 2015 to 18.55 in 2016 and has since refused to come to single digit. [CBN (2017a), Nwaoba (2017), Think Tank (2017)]. Indeed, Nigeria was in a recession which necessitated the ERGP.

Risk Optimization

Technically, a risk is a variable that could frustrate or enhance the efforts to create utility. In policy formulation, a risk is a potential that may either impact a policy objective or target negatively to assume unexpected structures, or positively towards expected goal. Risks are classified into downside risk and upside risk. While downside risk deals with the potential of a variable to cause deviation of policy from expected objectives, upside risk is the capacity of a

variable to enhance actualization of policy objectives. Summarily, downside risk explains a worst case scenario while upside risk explain a best case scenario (Prague, 2005). A risk is optimized when an act, process, or methodology is adopted to ensure a policy or system is fully functional or effective. It is maximizing the desired factors and minimizing the undesired ones. It entails finding an alternative with the most cost effective or highest achievable performance under the given constraints (<http://www.investopedia.com>). In application to ERGP, optimization of upside risk entails identification of friendly variables and harnessing their potentials to ensure the achievement of the set objectives. On the other hand, downside risks entail identification of inimical variables and harness the possible ways of curtail their potentials to frustrate the achievement of the ERGP objectives.

Objectives and Targets of the ERGP

The three-fold objectives of the ERGP are first restoration of economic growth, macroeconomic stability and provoke economic diversification. Secondly, ERGP aims at provision of safety nets and efficient social contract thus investing in the Nigerian people and finally, the ERGP aims to significantly increase investment in infrastructure. The first objective is designed to be achieved via a strong drive of fiscal and monetary stimulus focus on key sectors like agriculture, energy and Micro, Small and Medium Enterprises. These are expected to enable economic growth and improve the balance of trade. The second objective of investing in the Nigerian people is mainly focused on provision of support for the economically disadvantaged through creation of jobs and improve access to quality healthcare and education. The last objective is to significantly increase investment in infrastructure through Public Private Partnership arrangements. There would also be a simplified and improved legal and regulatory framework for doing business in Nigeria.

For these objectives to be achieved there are areas of primary attention. This is inevitable because not all the segments of the economy can be revitalized within the timeline set by the Plan. The ERGP therefore identify macroeconomic stability, agriculture and food security, power and petroleum product sufficiency, improving transportation infrastructure and driving industrialization particularly in relation to MSMEs as its priority execution areas.

Specifically, the targets set enroute the objectives can be summarized into eight key items as follows:

- i) To take actions that will enable GDP expand by 2.19% in 2017, averaging 4.62% annually before hitting 7% by 2020
- ii) Oil production to be ramped up to 2.5mbpd, Nigeria to be net exporter of refined Oil. FGN asset sale –reduced stake in oil and non-oil assets.
- iii) Overall increase in tax to GDP ratio to 15%. Improved tax policy and implementation to raise revenue to N350b annually.
- iv) CBN to achieve sustainable market determined exchange rate.
- v) Inflation forecast of 15.74% in 2017 and 12.42% in 2018, single digit by 2020.
- vi) Reduction in unemployment from 13.9% (Q3 2016) to 11.23% by 2020.
- vii) Review restrictions in the forex market.

- viii) Investment in agriculture to drive self sufficiency in tomato paste (2017), rice (2018) and wheat (2020)

Theoretical Framework

This study is structured around the economic principle of optimization. Generally, optimizations involve finding an alternative with the most cost effective or highest achievable performance under some given constraints. Specifically, it involves a bifocal objective of maximizing desired factors and minimizing the undesired ones (BusinessDictionary.com). In policy formulation, this implies maximizing upside risks and minimizing the downside risks.

The economic optimization technique uses either the substitution or the Lagrangian method to arriving at equilibrium of a household, business firm or a nation. In practical cases, the substitution method is usually inefficient for definite solutions because the constraint equation is usually very complex and therefore cannot be easily solved for each of the decision variable. On the other hand, the Lagrangian technique incorporates the original objective and constraint equations into a single Lagrangian objective function to be optimized. This, of course reduces real life scenario to an oversimplified idealized unconstrained scenario, for the purpose of obtaining abstract mathematical values, which is fallacious in real life (Amrit, Rawlings & Angeli, 2011).

Formal economic modelling and the application of mathematical optimization commenced during 1870s by Economists like Walras and Cournot who used differential calculus to represent and explain economic behaviour of maximization and minimization. Since then and till now, the quantification of upside risks and downside risks of socio-economic and political structure has attracted heavy criticisms from even noted economists. Gerard (2008) asserts that Keynes, Heilbroner and Hayek argued that psychic variables of the kind adopted in most optimization cases should not be reduced to concrete mathematics. Others like Mansfield (2008) argues further that utility is psychic, thus mathematical quantification should not be employed to measure the concept.

Following these criticisms and in the light of the limitations of the substitution and Lagrangian methods of optimization, contemporary scholars like Faber (2013) have resorted to non quantitative or qualitative optimization which entails a political economy approach to analyzing risks in a project. In this case inductive and deductive reasoning are employed to systematically evaluate the dynamics of the downside or upside risk in the light of peculiar non mathematical social, political, psychological or economic constraints. It is this facade of optimization that is considered most appropriate and hence makes optimization fits as a framework to this study.

Economic Recession and ERGP Risks

With a full year GDP contraction of 1.5 %, Nigerian economy entered into 2017 overwhelmed by a 18.7% galloping inflation and a Foreign Direct Investment (FDI) on a steady decline reaching an all-time low of US\$1.6 Billion in 2017 as against a peak at US\$8.8 Billion in 2011 (Adegbulu, 2017). The ERGP is expected to stabilize the economy and lead to a steady growth

of 2.19% in 2017; and with a progressive growth year on year, the growth should peak at 7% by the end of the plan period in 2020. The problem however shall be how the Plan and her implementers handle the potential risks and constraints.

In section 8.1 (page 112) of the ERGP document, the downside risks associated with the Plan are highlighted. Kyarem & Ogwuche (2017) lamented that this is handle lightly in just less than half a page of the document, yet these are risks that could frustrate the whole plan. Cordros Research (2017) concur and acknowledged that the unserious treatment of the risks could translate to failure of the plan as the downside *risks frustrates* the achievement of the targets envisaged in the medium-term Plan. There is serious need therefore for an appendix that expatiates on the risks if the eminent aura of doom surrounding the plan must be erased.

Uwaleke (2018) lamented the delay in passing the 2018 Budget which was submitted by the President to the Legislature in November 2017 and is yet to be passed for implementation. He opined that this delay could undermine the effective implementation of the ERGP. Of course, implementation of projects critical to economic diversification which is key to anticipated GDP growth of 3.5%t are almost unrealistic now. With hope of this growth rate getting dimmed by the delay, planned investments in agriculture and infrastructure, and job creation could be hampered. Uwaleke (2018:2) expressed fears that “If the delay drags on for too long, it can heighten uncertainty in the market. It has the potential to scare away foreign investors whose presence is being felt now due to the current investor's confidence in the country's economy following recovery in crude oil price”

Mbonu (2017) identify project and operational risks. The project risk is a macro-structured constraint that is capable of hindering the plan from being delivered on time and within budget. On the other hand, the operational constraint is concern with implementation the plan. The plan is so integrated, cutting across several sectors and MDAs and the risk of non-performance resulting from systemic inadequacies or failed internal processes. It is however important to note that operational and project risks always exist on all projects, what is important is to identify them and ensure their potential for limiting project success or operational efficiency is curtailed. They should not be separately treated as they are often so inter connected that they have feedback effect and feed into the overall project risk.

Preston Consults (2018) conclusively asserts that the ERGP is coming relatively too late in the life of the government (already at its mid-point) which started in 2015 to end in 2020. With the 2019 elections around the corner, it is likely that focus may shift away from delivering on the Plan to election campaign efforts. Kyarem & Ogwuche (2017) and Rewane (2017) all agree on the downside risks of political incorrectness of the plan. They are all certain that as from 2019, the electioneering process in Nigeria would commenced and this could derail the implementation of ERGP as all attention would be on efforts to win election.

There are other risks associated with the Plan that may take dangerous dimensions that must be noted and alternatives provided in case urgent actions may be required. This class of risks include the uncertainty in the ever volatile global economic environment which could

jeopardize Nigeria's ability to achieve its high growth projections. Also the growth projections of 7% by 2020 is seen by experts like Patillo (the Assistant Director of Fiscal Affairs Department) as overambitious, especially in the light of the IMF's projection of just over 3% growth rate for Nigeria within the same period (Chijioke, 2017). Many others like Adegbulu (2017) acknowledge the risk of structural weaknesses (dependency on oil for revenues) and governance challenges in the midst of a culture of corruption and thievery of public money.

The challenges are daunting yet the prospects are robust especially with this study that identify not only the downside risks as almost all the authors have done but also exposed the upside risk associated with six fundamental risks capable of frustrating the ERGP.

Methodology of the Research

The method adopted for this study is a modified classical optimization techniques. While the classical optimization technique seeks quantitatively to find the optimum solution or unconstrained maxima or minima of differentiable functions, the modified variant adopts qualitative optimization as used by Faber (2013). Hume, Javelainen, Parson & Dohnal (2007) interprets qualitative classical optimization as *qualitative algebra that degrades conventional objective functions and constraints*. Their analyses were specifically for static and complex engineering systems, and so we ignore the qualitative algebra and adopt pure qualitative (and political economy) optimization since the socio-economic and political risks relevant to the ERGP are all humane and dynamic.

Catalogue of Upside and Downside Risks

This study identifies and analyze six risks. Since most upside risks have their corresponding downside risks, we present each of the six upside risk and its related downside risk as follows:

1. The ERGP is evidence that the government of Nigeria has a clear vision for the next four years. ERGP outlines a roadmap to shock the economy towards growth. With its clear objectives and targets, the plan meets the requirements of the World Bank for acquisition of the much needed foreign aids/loan for growth and development. The downside risk herein is that detail on action plan is very scanty. For instance, the plan does not elaborate on foreign exchange policy that would be implemented to ensure flexible foreign exchange rate regime to support the anticipated growth from ERGP.
2. The ERGP spells out growth indices commencing from the negative recessive RGDP in 2016 to improve gradually and peak at 7% by 2020. The upside risk herein is that following the agricultural boom experience recently, commodity prices will continue to improve in the coming years. This should help propel earnings and in turn provide funds for investment and guarantee the policy of diversification from oil to agricultural sector. The downside risk herein is that much of the expected revenue for policy implementation centred on the oil sector which is the main foreign earner for Nigeria. The oil prices could crash if glut is upheld. Also the Niger Delta militants could frustrate consistent and steady oil production due to fragile relationship with the federal government. In addition, there is high potential for the inexplicit foreign exchange policy to derail the growth projections

3. The upside risk of a single digit inflation could be actualized especially with the accelerated activity in the agricultural sector which has resulted to increased cereal output. The downside risk herein is that Nigeria is an import oriented country and still prefer foreign capital and manufactured consumer goods, hence inflation could be imported. Also domestic slump in oil market is eminent and capable of sustaining double digit inflation.
4. The whole ERGP is based on estimated revenue from the production of oil which is expected to ramp up to 2.5mbpd by 2020. This possibility is feasible in the light of the sustained peace between the federal government and Niger Delta constituents that has prevails recently. There is however the downside risk of the inability of the government to keep and sustained the peace with the Niger Delta constituents. There is also the possibility of ideological shifts in the militant camp towards more violence in the region. The risk of OPEC exemptions being lifted in a bid to resolve oil glut is also eminent.
5. Reduced unemployment as anticipated by ERGP could be achieved due to increased economic activity by the re-engineering anticipated from ERGP which will provide more job opportunities. The downside risk associated to this are delayed policy implementations and the prevailing high MPS from high interest rates could starve economy of spending. Also the existing high inflation may produce increase unemployment
6. The 2019 electoral campaigns have already commenced in Nigeria. If the present government remains in power, ERGP is likely to be followed to the letter. This would also boost public confidence in ruling party which is necessary for economic revival and the success of ERGP. On the other hand, there is the downside risk of the likelihood of the electoral campaigns diverting the policy makers' attention from the objectives of ERGP towards winning elections. Stakeholders might be gunning for positions which do not entail implementation of ERGP

Conclusion and Suggestions

The euphoria that welcome the arrival of a well designed programme like ERGP would obviously be translated into despair if the upside and downside risk are not carefully identified and optimized. The structural changes advocated as solution to the quagmire of Nigerian recession and underdevelopment all hanged on whether the relevant risks are optimized. This study feels that until institutions that superintend over economic packages are created and strengthened, programmes like ERGP will continue to be a mirage in Nigeria.

Though the study has attempted an optimization exercise, in order to ensure the success of the ERGP, the National Parliament of Nigeria should legalize the ERGP and pass a Fiscal Responsibility and Economic Revitalization Bill. This bill should establish one ERGP institutions resident in the legislative wing and another in the executive wing of the government of Nigeria.

By legalizing the ERGP, any public officer that neglects its implementation should be culpable. While the legalization holds, the ERGP Evaluation Committee resident in the legislative arm of the government should exist and monitor and evaluate implementation of the Plan. On the other hand, the executive arm of the government should form an ERGP Implementation Directorate under the Presidency. This directorate should be a core civil service organ that ensures the implementation of ERGP despite risk like electioneering campaigns.

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