GLOBALISATION AND DOMESTIC SAVINGS GROWTH IN NIGERIA

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Abstract
What has become of Nigeria’s savings growth in the light of globalization? This paper seeks answers to this important question as Nigeria enters a new path of cash crunch consequent upon the dwindling fortunes of crude oil. Using data from the Central Bank of Nigeria and World Development Indicators database, and a single equation, reduced form and constant elasticity specification, and providing for both trade and financial globalization for the period 1983 to 2013, it was found that globalization significantly impacts savings growth in Nigeria. This takes place in a crowding-out manner in the short run, while in the long term, this outcome could be positive, depending critically on exchange rate policy and trade liberalization. Tighter capital controls, less volatility of the Naira and greater attention to non-oil exports were recommended

Key Words: Globalization, Domestic savings growth, Nigeria.
JEL Code: F41, F60, F62.

INTRODUCTION
While foreign contacts open-up the domestic economy to external influences, they also provide external room for expansion of domestic influences. The balance of the ensuing exchange, often influenced by the intensity of contact, relative strength of economic fundamentals as well as policy stance and political will, can have a profound effect on the welfare of the domestic economy. As a result, theorists have not neglected to express views on the possible outcome of globalization. These provide reasonably clear indications of expectations, especially with regard to financial globalization and saving, which is an important economic fundamental.

The gap hypotheses (two-gap and also three-gap) indicate clearly enough what direction capital should flow in the event of open doors, and the role of domestic saving there-in. This is of particular relevance to developing countries. Some of them, on account of poverty, are unable to save enough to meet their investment needs. They are, at the same time, often unable to obtain sufficient foreign exchange to fund their import needs, needs reflecting the dual feature of their poor economies: food, clothing and medicine on the one hand, and luxury items such as SUVs on the other hand. These gaps work together to deepen their shortage of capital. Such gaps can, however, readily be bridged by foreign capital. This is so because the paucity of capital in poor nations, which confers on their economies in relation to the rest of the world, leads to a relatively
higher marginal product of capital, a natural spur results for inflow of foreign savings, which can happen only if there are no capital controls, or at least partially open doors.

In the event of such capital inflow, several possible scenarios have been envisioned, pertaining mostly to what investment options are open and whether domestic investment is thus supplemented, complemented or crowded out. The reaction of domestic savings in the event of any of these outcomes is of critical importance in the welfare of the domestic economy, especially its growth in the long-term and even in the medium term. Savings could escape abroad with doors now open. Such escape could be spurred by a variety of factors not necessarily the search for yield differentials. Savings could be frustrated and thus dwindled or else encouraged. Its status, when and if a reverse flow of foreign capital occurs, as it often does, or when through contagion crises shake up the system, can matter a lot for eventual recovery. It is also important for future growth when an economy approaches a downturn, such as Nigeria now faces with a technology-driven crude oil glut which promises to endure. Whichever, savings behaviour is a plank in national economic management that cannot be ignored because self-financing ratio determined by domestic saving does matter for growth performance of especially poor nations (Ganioglu and Yaltcin, 2015). Savings behaviour should thus be empirically determined in order to configure a right the nation’s policy stance in that respect. This paper contributes to that need by investigating what has become of Nigeria’s domestic savings growth in the light of globalization. We are not aware of any previous effort to do so as most of the concern had been with investment. The rest of the paper is organized as follows: section two briefly reviews extant literature. Section three outlines methodology. Results are discussed and the paper concluded in section four.

2. EXTANT LITERATURE: A BRIEF REVIEW

In his famous piece, Lucas (1990) called attention to the seeming non-fulfilment of neo-classical postulation on capital flows, which predicted the flow of capital from the capital-rich of the world to the capital-poor. According to him, notwithstanding their much vaunted higher marginal product of capital, very little of it went to developing countries. His explanation for this phenomenon cited risk-return considerations, missing factors of production, etc. It can be inferred from this that, from a pragmatic perspective, developing countries should expect to be able to deploy for their development mainly such saving as they are able to generate themselves, which raises the premium on the right savings policy in those capital scarce economies. Earlier, Feldstein and Horioka (1980), using a group of selected OECD countries, established that international differences in domestic savings rates, resulted in comparable corresponding differences in domestic investment rates. This led to the conclusion that increases in domestic saving remained within national borders but did not seem to flow out in quest of higher yield, given perfect capital mobility (the so-called ‘ethnicity’ of capital). Hence, portfolio preferences shaped by a variety of factors, in particular, risk aversion, informational asymmetries and institutional rigidities often moderate outcomes, leading to domestic retention of increases in domestic saving. Feldstein’s (1982) later work reinforced their earlier finding, with estimates showing that in the post-OPEC period (1974-1979) each extra dollar of domestic saving in a sample of 17 OECD countries increased domestic investment by approximately 85 cents. That this outcome is not peculiar to advanced economies has since been established by several studies. For example, Nasiru and M.Usman (2013) who studied Nigeria found support for the Feldstein-Horika hypothesis. So did Adebola and Dahalan (2012) for Tunisia and Mishra et al (2010) for India. However, a large pool of both short and long-term capital does flow around in the world economy. This may not be the increases to domestic saving per se but perhaps something separate as already
suggested by Feldstein and Horika (1980) and echoed by Obstfeld (2012). Also such flows seem to follow their own dynamics consistent with characteristics peculiar to them, prominent among which are their tenure, hence whether they could crystallize as bonds or equity; and in addition, whether they are sovereign or privately owned; whether they seek yield-differential or safe haven, etc. This then is the capital expected to flow across borders as financial globalization gains momentum, whose volume has already surpassed trade volume. It is the source of the effect expected from financial globalization on economic, especially financial fundamentals such as savings growth, in the domestic economy. Most studies have focused on the investment-saving nexus, else on domestic investment in the wake of globalization or general determinants of domestic savings. Inevitably, savings behaviour has had to come into purview but only as far as the main thrust of the search was concerned. In some cases specific attention was paid to external effects on savings behaviour. Here are some examples:

Hossain (2014) examined the role of foreign capital inflows and workers’ remittance in the domestic savings in developing countries, paying attention to likely differential effects of foreign direct investments, portfolio investments, foreign aid and workers’ remittance inflows while controlling for other relevant variables. Using Pesaran’s (2006) Common Correlated Effect Mean Group Estimator technique, he found that only remittance crowds-out savings while foreign aid, FDI and portfolio flows were found to be statistically insignificant in their effect on savings. This later finding contrast with conventional homogenous panel estimates which suggests that foreign aid and remittance flow has a significant negative impact on domestic savings.

Adegbite and Adetiloye (2013) studied the impact of financial globalization on domestic investment in developing countries, focusing on Nigeria. Using an index of capital account openness and average exchange rates as measures of financial globalization, they found that financial globalization impacts domestic investment negatively by leading to greater outflow of capital. Their call for autonomous investment implied improving increases in domestic saving, in the absence of pronounced capital flight.

Trade openness was found by Ahmad and Mahmood (2013) to be positively associated with national savings in Pakistan. They attributed this to increases in income and welfare of the society which openness conferred through the market economy. Although the country experienced a significant increase in international capital inflow within the period (1974-2010), which was facilitated by the floating exchange rate, they nevertheless found that exchange rate had a negative impact on national savings.

Important as the savings–investment nexus is, as well as the general determinants of savings, the severe impact of globalization on several economic fundamentals and the on-going search for remedies when crises strike, as always, recommend especially a closer look at what has become of savings growth in the face of such huge capital flows all around the world and the interconnectedness it has hoisted on all.

3. RESEARCH METHOD

We regress domestic savings on chosen proxies of globalization over the period 1983 to 2013. From the perspective of savings, the proxies should encompass trade and financial aspects, all of which impact both income and wealth, affecting the ability and need to save. Accordingly, we adopt, as is in widespread use in the literature, trade openness as proxy for trade globalization, measured as the sum of import and export as a ratio of GDP; for financial globalization we adopt a measure of capital account openness (and chose Chin & Ito’s index of current account openness, KAOP) and real exchange rate. For controls we select some of the established savings influencers.
or determinants such as Bank credit to private sector, Income per capita, Real interest rate and Inflation rate. Our expectations from these regressors, a priori, are as follows: Openness should improve access to foreign savings and aid capital inflow, and along with credit to private sector, should ease liquidity constraint and moderate, if not reduce domestic savings. Improving income per head and higher return via real interest rate should boost domestic savings while higher and sustained inflation should deliver the opposite effect, ceteris paribus. We begin by conducting diagnostic tests on the model and data, mindful of the time series properties of the data. We specifically conduct the following, among others: multicollinearity, stationarity and tests of overall significance. We focus on long term relationships but also examine the short run dynamics, using, in this connection, the error correction mechanism. We adopt the double-log specification and estimate the following model:  

\[ ds = \beta_0 + \beta_1 cps + \beta_2 gdppc + \beta_3 topn + \beta_4 rer + \beta_5 riinf + \beta_6 kaop + \epsilon \]  

Where the \( \beta \)'s are the parameters of interest and \( \epsilon \) is the stochastic error term. Others are as follows: \( ds = \) domestic savings; \( cps = \) credit to private sector; \( gdppc = \) income per capita; \( topn = \) trade openness; \( rer = \) real exchange rate; \( riinf = \) a composite of inflation rate and real interest rate as explained below; \( kaop = \) index of current account openness. 

Data were sourced from WDI, CBN Statistical bulletin and Chin & Ito (Appendix 1). In this connection we rate the CBN data on savings over and above that of WDI. The later is the more theoretically better representation of domestic savings but is more of an imputation (income less expenditure) in an atmosphere of not too high a culture of documentation. As a result it can only be as good as the model upon which it is based. CBN data, being monetized and banked savings is an obvious understatement of the reality. 

4. RESULTS AND CONCLUSION

A very high correlation (\(-0.94\)) emerged between two proposed control variables – real interest rate and inflation rate. A linear combination (RIINF) was consequently devised as a remedial measure. All variables including RIINF were found to be stationary at first difference except real exchange rate which was stationary at level (Appendix 2). The overall significance of the regression was established using F test, the probability of F-statistic being 0.0000. Test of long run relationship using Johansen procedure revealed 3 co-integrating equations. The long run estimates using the same procedure are presented in Table 1, while the parsimonious ECM results are in Table 2. 

From the long run result (Table 1) openness to trade representing trade globalization has no significant effect on domestic savings. However financial globalization does have, as revealed by the two proxies – real exchange rate and capital account openness both of which are significant. From this result we learn that increased capital account openness coupled with a stronger currency will tend to crowd out savings in Nigeria. Adegbite and Adetiloye (2013) saw this outcome as impacting domestic investment through capital outflow. The CBN appears to have recognized this in its reaction of 2014, when in tightening its monetary policy stance and subsequent capital controls, allowed the currency more lee-way to rally, and thus stave off a rapid depletion of reserves. 

Although trade openness is, in the long term, not significant for domestic saving, it appears to be so in the short to medium term, which period is especially important in economic life in Nigeria whose open economy often finds itself at the mercy of external developments and as such prone to sudden changes. A plausible explanation for this outcome may be the effect of trade credit. Merchandise trade in an era of convergent export oriented growth model of most world economies, and especially the emerging ones, often allow for greater trade credit which obviate the need for
savings on the part of the importer. This is distinct from bank credit to private sector whose effect is confirmed always to be significant on domestic savings.

In the light of the above findings it can be concluded that globalization has, as expected, impacted significantly on savings growth in Nigeria. The direction of effect is negative in the short term but depends critically on trade openness and exchange rate in the long term. Policy reaction to this situation needs to take cognizance of two points. One is that the precautionary motive for savings remains high in Nigeria. Indicators include absent safety nets and the unfortunate reality that each economic agent (individual, firm and government) literally has to provide the infrastructural platform on which to operate (if nothing else, electricity). As a result, savings must not be allowed to flag off. Whatever impedes savings growth in the economy ought to be addressed through policy action. Secondly, in the global market place, the Nigerian economy is only a small economy whose attraction lies in the wealth arising from its natural resource (for now, oil). Once the fate of oil experiences a reversal in the market place then the party ends abruptly and the country can leave the woods mainly from deploying its own resources, an important one of which is whether it can count on domestic savings.

It is therefore recommended that capital controls need to be firmly in place. In this connection it is noteworthy that even with its might and size the Chinese economy still has in place stringent capital controls. Further opening up of the capital account should be explicitly tied to adequacy and efficacy of control mechanism. This is a primary lesson learnt from the most recent global financial crises as Lane (2012) points out. In addition, a stronger Naira is not particularly helpful for savings growth in the long term. Less volatility of the currency should be the goal. Greater effort to encourage non-oil, especially light manufactures export, so as to have more goods passing through our largely open trade doors (doors which we can hardly unilaterally close without harming ourselves on account of our numerous trade treaties), would also help savings growth.

REFERENCES


### APPENDIX

#### Table 1: LONG RUN ESTIMATION RESULTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std error</th>
<th>t stat</th>
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<tr>
<td>LNCPS</td>
<td>1.477575</td>
<td>0.17170</td>
<td>8.6056*</td>
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<tr>
<td>LNGDPPC</td>
<td>0.660664</td>
<td>0.62413</td>
<td>1.05853</td>
</tr>
<tr>
<td>LNTOPN</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>0.29213</td>
<td>1.27451</td>
<td></td>
</tr>
<tr>
<td>LNRER</td>
<td>0.297220</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.14373</td>
<td>2.0679*</td>
<td></td>
</tr>
<tr>
<td>LNRIINF</td>
<td>-71.61318</td>
<td>31.3531</td>
<td>-2.28408*</td>
</tr>
<tr>
<td>KAOP</td>
<td>-0.164159</td>
<td>0.06459</td>
<td>-2.54155*</td>
</tr>
<tr>
<td>C</td>
<td>536.0924</td>
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</tr>
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</table>

*Signifies significance at 5% level

#### TABLE 2: PARSIMONIOUS ECM ESTIMATES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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<tr>
<td>DLNCP</td>
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<td>0.084507</td>
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<td>0.0000</td>
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<td>DNLNGDPPC(-2)</td>
<td>1.363129</td>
<td>0.553856</td>
<td>2.461161</td>
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<td>DLNTOPN</td>
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<tr>
<td>DLNRER</td>
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<td>0.084746</td>
<td>-1.687242</td>
<td>0.1079</td>
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<tr>
<td>DLNRER(-2)</td>
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<td>0.065780</td>
<td>-0.877100</td>
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</tr>
<tr>
<td>DLNRIFN</td>
<td>4.235033</td>
<td>4.227278</td>
<td>1.001834</td>
<td>0.3290</td>
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<td>DKAOP(-1)</td>
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<td>0.071343</td>
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<td>ECM(-1)</td>
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<td>0.193768</td>
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