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How to manage the relationship between democracy and economic development in Nigeria

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The paper analyzes empirically, in Nigeria’s case, the biunivoque relationship between democratization and economic development. The analysis is based on the construction of an Unrestricted Vector Autoregressive Model (Unrestricted VAR), in the matrix form. For a better control of the results, regarding governance’s factors, we have introduced a third variable: The political regime durability. The results show us that, for Nigeria’s case, to ensure a higher level of economic development, the political regime must be democratic and the durability of the political regime reasonable. On the other hand, only high economic development, with very low political regime durability, can ensure a solid democracy. Otherwise, there is a very sensitive relationship between democracy, development and the political regime durability.

Key words: Democracy, regime durability, development, VAR analysis, impulse functions.

INTRODUCTION

The interaction between governance and economic development offers a large perspective in the literature in the field. When talking about governance, we mainly refer to the type of governance, the quality of governance, the intensity of democratization and the political regime durability. In this context, our research tries to find the existence of the relationship between democracy and economic development, their amplitude, vectorial direction and management, for the case of Nigeria.

Democracy has a lot of definitions. In a simplistic way, according to Vanhanen (2003), democracy means free popular elections to fill positions of power. Several years after, Oliveira-Brochado and Martins (2005) consider democracy as a system of institutionalized procedures directed to a free political participation and competitiveness, the election of the main governmental leaders and the definition of limits for the political leader’s powers. Welzel (2007) defines democracy by constitutional constraints on the power of the state and by popular control over it. Considering another point of view, in a recent study, Mansfeldová and Guasti (2010), while testing the quality of democracy in Czech Republic, argue that democracy is a normative term of an ideal, which current governments either move closer to or away from.

Economic development is a complex concept, which has been much debated over the years (Alam, 2009; Alam et al., 2009; Alam, 2009b). In such context, in order to understand development, Adelman and Yeldan (2000) shows that the concept must include: (1) Self-sustaining growth; (2) Structural changes in patterns of production; (3) Technological upgrading; (4) Social, political and institutional modernization; and (5) augmentation of social human conditions. In the same way, Nafziger (2006)
considers economic development to be economic growth accompanied by changes in output distribution and economic structure.

In a modern vision, Todaro and Smith (2009) consider economic development in terms of the reduction or elimination of poverty, inequality and unemployment within the context of a growing economy. Alipour (2010) concludes that the economic development is a process in which the products of a society increase on the basis of extension, creation and self generation of modern technology.

Grabowski et al. (2007) illustrate that economic development has different determinants, such as: differences in human capital, natural resource endowments, population density, openness’ degree, market structures, government policy, technology, geography, integration and institutional differences. More so, Bogojevic et al. (2010), analysing the emerging economies, stress that the universal services have an important impact on the economic development.

Based on Guo (1998) acquisitions, democracy and economic development could have a reciprocal effect on one another. There are two statements to be brought up: on one hand, the direction “development - democracy” (development first and democracy later) and, on the other hand, the direction “democracy - development” (democracy first and development later).

THEORETICAL FUNDAMENTS

The literature in the field offers contradictory results about the intensity and signs of the relationship between democratization and economic development, for both directions of discussion.

“Development first and democracy later”

Lipset (1959) argues that the economic development ensures democratization, or more precisely “development first and democracy later.” In his analysis, the author used four indexes from the International Urban Research Centre, University of California: the index of wealth, the index of industrialization, the index of education and the index of urbanization. Almond (1991) reviews key research of some scholars and explains, statistically, the significant correlation between economic development and democratic institutions (the accentuation of economic development generates an increase of the state’s democratization).

Przeworski et al. (2000) developed their previous research and concluded that economic development does not generate democracies, but democracies are much more likely to survive in wealthy societies. In their opinion, the authors used the economic growth or the national income for development and dummy variables for democracy.

Chen (2007), after reviewing the literature in the field, explains that the states with high economic growth represent strong democracies, registering the highest level of development. In the same time, he formalized the idea that economic development grows as democratization increases, and vice-versa.

Robinson (2006), analyzing the economic effects of development (measured with Log per Capita GDP) on democracy (Polity Composite Index of Madiisson), illustrates that the econometrics’ applications show no evidence that the economic development has a causal effect on democracy.

Uysal et al. (2010), using the co-integration analysis for the period 1955 to 2006, have identified the relationship between economic growth and democracy, in Turkey’s case. Their empirical results suggest that there is, in the long run, equilibrium between economic growth and democracy.

Therefore, the research on the causal relationship between “economic development and democracy” is not conclusive; some of them claim the same direction and others the opposite as asserted by Alam et al. (2010) and Alam and Haque (2010).

“Democracy first and development later”

Sirowy and Inkeles (1990) believe that democracy facilitates economic development and not vice versa. More precisely, they said “democracy first and development later”. The same results were obtained by Burkhart and Lewis-Beck (1994). Przeworski et al. (2000) consider that, generally, political instability decreases a state’s economic development (in particular in autocracies).

Siegle et al. (2004) argue that democracy brings political checks and balances, responsiveness to citizen priorities, openness, and self-correcting mechanisms - all of them contributing to a steady growth and to superior living conditions.

Oliveira-Brochado and Martins (2005) reveal a positive but not perfect relationship between democracy and economic and human development, thus presenting new insights for the understanding of the heterogeneity of behaviors relatively to political indicators.

Also, Campos (1994) and Menocal (2007) claim that democracy determines economic development (measured by per capita income level) and Bhagwati (2002) thinks that democracy is better for development only when it is accompanied by an expansion of markets and
Generally, the literature in the field shows that the analysis’ instruments refer to descriptive methods, simple and multiple OLS regressions, pooled OLS models, dynamic probit models or, in a modern new trend, panel VAR models or fuzzy alternative. Bardhan (1999) is reticent regarding the investigation’s methodology and the quality of the existing data sets. He recommends the traditional analysis, using measures such as per capita income or the human development index, but combats the “cross-country regressions.” We can see that there is not a unanimous point of view regarding the intensity and signs between democracy and economic development, for both directions. According to the mentioned premise, all the theoretical presented elements allow us to formulate two theoretical working assumptions. The hypotheses are:

H1: “Development first and democracy later”: The level of development is growing as the intensity of democratization is increasing.

H2: “Democracy first and development later”: The intensity of democratization is growing as the development is increasing.

METHODS

Starting with the theoretical arguments shown, this paper analyzes empirically, for Nigeria’s case, the “biunivoque” relationship between “democratization and economic development”.

Democracy (DI) is represented by the intensity of the democratization’s variable. The used data represents combined polity score, as according to Marshall et al. (2009). The combined polity score measures the level of democratization and illustrates the ranking of democracy’s level, from +10 (strongly democratic) to -10 (strongly autocratic).

Economic development (GDPP) suggests the level of economic development as GDP per capita (1990 International Geary-Khamis dollars). The series is taken from Madison (2008). In this case, we know that our choice may be “debatable”. This measure is used as a component of the human development index (HDI), because the data sets of HDI are too short for our autoregressive analysis’s objective (first observation for 1990).

For a better control of the results, regarding governance’s factors, we have introduced a third variable: The political regime durability.

The political regime durability (T) represents the number of years since the most recent regime changed or the end of a transition period defined by the lack of stable political institutions. This variable represents the Regime Durability Score, as according to Marshall et al. (2009).

The data set covers the period 1960 to 2008, with democratic and autocratic regimes (49 observations). Based on two theoretical working assumptions (H1 and H2), for the analysis of the “trinome DI, GDPP and T”, we have used an unrestricted vector autoregression model (VAR). The reason for this choice is argued by the fact that such a model is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on the system of variables. Moreover, according to Gujarati (2004), in vector autoregression models, some variables are treated as endogenous and some as exogenous or predetermined (exogenous plus lagged endogenous).

In this case, the three considered variables - DI, GDPP and T - are treated as endogen variables. Assuming that each of the three equations contains k lag values, for the t period, the VAR model can be written:

\[
\begin{align*}
DI_t &= \alpha_1 + \sum_{j=1}^{k} \beta_j DI_{t-j} + \sum_{j=1}^{k} \gamma_j GDPP_{t-j} + \sum_{j=1}^{k} \delta_j T_{t-j} + u_{1t} \\
GDPP_t &= \alpha_2 + \sum_{j=1}^{k} \epsilon_j DI_{t-j} + \sum_{j=1}^{k} \phi_j GDPP_{t-j} + \sum_{j=1}^{k} \theta_j T_{t-j} + u_{2t} \\
T_t &= \alpha_3 + \sum_{j=1}^{k} \eta_j DI_{t-j} + \sum_{j=1}^{k} \iota_j GDPP_{t-j} + \sum_{j=1}^{k} \kappa_j T_{t-j} + u_{3t}
\end{align*}
\]

or, equivalently, in matrix form:

\[
\begin{bmatrix}
DI_t \\
GDPP_t \\
T_t
\end{bmatrix}
= 
\begin{bmatrix}
\alpha_1 \\
\alpha_2 \\
\alpha_3
\end{bmatrix}
+ 
\begin{bmatrix}
\beta_1 X_{t-1} \\
\epsilon_1 \phi_1 \phi_1 \\
\gamma_1 \iota_1
\end{bmatrix}
\begin{bmatrix}
DI_{t-1} \\
GDPP_{t-1} \\
T_{t-1}
\end{bmatrix}
+ 
\begin{bmatrix}
\beta_k X_k \delta_k \\
\epsilon_k \phi_k \phi_k \\
\gamma_k \iota_k
\end{bmatrix}
\begin{bmatrix}
DI_{t-k} \\
GDPP_{t-k} \\
T_{t-k}
\end{bmatrix}
+ 
\begin{bmatrix}
u_{1t} \\
u_{2t} \\
u_{3t}
\end{bmatrix}
\]

where \( \alpha_1, \alpha_2, \alpha_3 \) are the intercept terms; \( \beta, \gamma, \delta, \epsilon, \phi, \varphi, \gamma, \iota, \) are the coefficients of the endogen variables, and the \( u \) are the stochastic error terms.

The principal steps of econometric analysis are: (a) Unit root tests of variables; (b) Joint lag selection, Lag Exclusion Wald Tests and VAR.; (c) Stability test and (d) Residuals’ tests.

(a). Unit root tests of variables are based on Kwiatkowski-Phillips-Schmidt-Shin and Ng-Perron tests. The results, shown in Table 1, suggest that DI is I(0), GDPP is I(1) at limit (for 10% level) and T is I(0). According to Vogelvang (2005), we have chosen the assumption “constant term”, because an additional trend term is generally superfluous.

The VAR construction’s problem in our case is that two of the series are stationary and another is non-stationary. In this context, the series GDPP, which is I(1), has been transformed and becomes \( DGDPt \):

\[
DGDP_t = GDPP_t - GDPP_{t-1}
\]

Gujarati (1995) states that transformations of the data will not be easy if the model contains a mix of I(0) and I(1). In this case, it is important to recognize the effect of the unit roots on the distribution of estimators.
Table 1. KPSS and NP “unit root” tests of variables - level and 1st difference.

<table>
<thead>
<tr>
<th>Explication</th>
<th>KPSS</th>
<th>Ng-Perron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LM-stat</td>
<td>LM-stat</td>
</tr>
<tr>
<td></td>
<td>Level</td>
<td>1st diff.</td>
</tr>
<tr>
<td>Unit root</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interception</td>
<td>0.109809*</td>
<td>0.5***</td>
</tr>
<tr>
<td>GDP</td>
<td>0.399897**</td>
<td>0.097851*</td>
</tr>
<tr>
<td>T</td>
<td>0.256909*</td>
<td>0.056282*</td>
</tr>
<tr>
<td>Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend and Intercep</td>
<td>0.102574*</td>
<td>0.5000</td>
</tr>
<tr>
<td>GDP</td>
<td>0.096972*</td>
<td>0.095236*</td>
</tr>
<tr>
<td>T</td>
<td>0.053248*</td>
<td>0.056364*</td>
</tr>
</tbody>
</table>

***, ** and * denotes significance at p < 1, 5 and 10%.

Table 2. VAR lag order selection criteria.

<table>
<thead>
<tr>
<th>Lag</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-548.2603</td>
<td>NA</td>
<td>27409712</td>
<td>25.64001</td>
<td>25.76289</td>
<td>25.68533</td>
</tr>
<tr>
<td>1</td>
<td>-484.4692</td>
<td>115.7110*</td>
<td>2146996.*</td>
<td>23.09159*</td>
<td>23.58309*</td>
<td>23.27284*</td>
</tr>
<tr>
<td>2</td>
<td>-477.3137</td>
<td>11.98138</td>
<td>2356100.</td>
<td>23.17738</td>
<td>24.03750</td>
<td>23.49457</td>
</tr>
<tr>
<td>3</td>
<td>-468.8109</td>
<td>13.05080</td>
<td>2453104.</td>
<td>23.20051</td>
<td>24.42925</td>
<td>23.65363</td>
</tr>
<tr>
<td>4</td>
<td>-468.3708</td>
<td>5.267607</td>
<td>2989808.</td>
<td>23.60034</td>
<td>25.56633</td>
<td>24.32534</td>
</tr>
</tbody>
</table>

* indicates lag order selected by the criterion; LR: Sequential modified LR test statistic (each test at 5% level); FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion.

Table 3. Lag exclusion Wald test

<table>
<thead>
<tr>
<th>Chi-squared test statistics for lag exclusion (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI</td>
</tr>
<tr>
<td>Lag 1</td>
</tr>
<tr>
<td>Lag 2</td>
</tr>
<tr>
<td>Lag 3</td>
</tr>
<tr>
<td>Lag 4</td>
</tr>
<tr>
<td>Lag 5</td>
</tr>
</tbody>
</table>

df | 3 | 3 | 3 | 9

***, ** and * denotes significance at p < 1, 5 and 10%.

(b) Joint lag selection lag, Exclusion Wald Tests and VAR, illustrate the joint lags selection criteria, Wald Chi-squared Test and, finally, the VAR construction.

For the selection of the joint lags we consider the VAR lag order selection criteria (Table 2). In the case of VAR “DI, DGDPP and T”, all the criteria (LR, FPE, AIC, SC and HQ) recommend a joint lags 1.

Based on the data included in Table 3, we cannot reject the joint Hypothesis that the coefficient of the lags 2, 4 and 5 are all equal to zero. So, we have kept for our work the lag 1.

In such conditions, for 1 joint lag, the “unrestricted vector autoregression DI, DGDPP and T” may be written (Table 4):

\[
DI_t = \alpha_1 + \sum_{j=1}^{2} \beta_j Dl_{t-j} + \sum_{j=1}^{2} \chi_j DGDPP_{t-j} \sum_{j=1}^{2} \delta_j T_{t-j} + u_{1t} \quad (6)
\]

\[
GDPP_t = \alpha_2 + \sum_{j=1}^{2} \epsilon_1 Dl_{t-j} + \sum_{j=1}^{2} \phi_j DGDPP_{t-j} \sum_{j=1}^{2} \psi_j T_{t-j} + u_{2t} \quad (7)
\]
Table 4. "Unrestricted vector autoregression DI, DGDPP and T" estimates.

<table>
<thead>
<tr>
<th>Variable</th>
<th>DI</th>
<th>DGDPP</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI(-1)</td>
<td>0.065145 (0.13045) [0.49938]</td>
<td>-0.468311 (0.55948) [-0.83705]</td>
<td>0.005450 (0.02107) [0.25862]</td>
</tr>
<tr>
<td>DGDPP(-1)</td>
<td>0.024415 (0.03476) [0.70239]</td>
<td>0.356202 (0.14908) [2.38938]</td>
<td>0.006254 (0.00562) [1.11378]</td>
</tr>
<tr>
<td>T(-1)</td>
<td>-2.756381(0.65822) [-4.18762]</td>
<td>-0.528016 (2.82300) [-0.18704]</td>
<td>0.702569 (0.10634) [6.60698]</td>
</tr>
<tr>
<td>C</td>
<td>7.101435 (3.82026) [1.85889]</td>
<td>9.959111 (16.3845) [0.60784]</td>
<td>1.434200 (0.61717) [2.32382]</td>
</tr>
<tr>
<td>R²</td>
<td>0.290663</td>
<td>0.12270</td>
<td>0.544726</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.241174</td>
<td>0.061033</td>
<td>0.512962</td>
</tr>
<tr>
<td>Sum sq. resid</td>
<td>11357.88</td>
<td>208917.6</td>
<td>296.432</td>
</tr>
<tr>
<td>S.E. equation</td>
<td>16.25229</td>
<td>69.70329</td>
<td>2.625599</td>
</tr>
<tr>
<td>F-statistic</td>
<td>5.873315</td>
<td>1.996676</td>
<td>17.14951</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-195.6468</td>
<td>-264.0795</td>
<td>-109.9694</td>
</tr>
<tr>
<td>Akaike AIC</td>
<td>8.495609</td>
<td>11.40764</td>
<td>4.849760</td>
</tr>
<tr>
<td>Schwarz SC</td>
<td>8.653069</td>
<td>11.56510</td>
<td>5.007220</td>
</tr>
<tr>
<td>Mean dependent</td>
<td>-5.148936</td>
<td>14.89362</td>
<td>4.617021</td>
</tr>
<tr>
<td>S.D. dependent</td>
<td>18.65706</td>
<td>71.93301</td>
<td>3.762245</td>
</tr>
</tbody>
</table>

Standard errors in ( ) and t-statistics in [ ].

Table 5. VAR stability condition check test.

<table>
<thead>
<tr>
<th>Root</th>
<th>Modulus</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.705312</td>
<td>0.705312</td>
</tr>
<tr>
<td>0.209302 - 0.099677i</td>
<td>0.231825</td>
</tr>
<tr>
<td>0.209302 + 0.099677i</td>
<td>0.231825</td>
</tr>
</tbody>
</table>

VAR satisfies the stability condition. No root lies outside the unit circle.

\[ T_t = a_3 + \sum_{j=1}^{2} \gamma_j DI_{t-j} + \sum_{j=1}^{2} \eta_j DGDPP_{t-j} + \sum_{j=1}^{2} \eta_j T_{t-j} + \epsilon_{st}(8) \]

(c). The VAR stability condition check test shows that the VAR satisfies the stability condition (Table 5).

d. Residuals tests are focused to VAR Residual portmanteau tests for autocorrelations, Residual serial correlation LM tests, Unit root tests of VAR residuals and White test for residual heteroskedasticity.

The results of first two tests are illustrated in Tables 6 and 7. Both tests show that the null hypothesis of no serial autocorrelation in residuals cannot be rejected (Portmanteau Tests excepted, for inferior legs). Moreover, in an independent mode, the "unit root tests" of residuals suggest the same conclusions (Table 8).

Even if the heteroskedasticity is more relevant for the analysis of cross-section data than time-series data (Vogelvang, 2005), the White test has been involved. The results are illustrated in Table 9 and shows that the variance of the disturbance term is constant (the null cannot be rejected).

In conclusion, the "Unrestricted Vector Autoregression DI, DGDPP and T" model may be considered representative and stable to describe, for the case of Nigeria, the autoregressive connection between DI, DGDPP and T and vice-versa.

RESULTS

Unlike other research, based on our approach, we can identify a series of impulse response functions. An impulse response function traces the effect of a one-time shock to one of the innovations on current and future
**Table 6. VAR residual portmanteau tests for autocorrelations.**

<table>
<thead>
<tr>
<th>Lag</th>
<th>Q-stat</th>
<th>Prob.</th>
<th>Adj Q-stat</th>
<th>Prob.</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9.685706</td>
<td>NA*</td>
<td>9.896264</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>2</td>
<td>21.69179</td>
<td>0.0099</td>
<td>22.43595</td>
<td>0.0076</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>33.36550</td>
<td>0.0151</td>
<td>34.90560</td>
<td>0.0097</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>36.91651</td>
<td>0.0966</td>
<td>38.78693</td>
<td>0.0662</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>45.48289</td>
<td>0.1337</td>
<td>48.37312</td>
<td>0.0815</td>
<td>36</td>
</tr>
</tbody>
</table>

*The test is valid only for lags larger than the VAR lag order; df represents degrees of freedom for (approximate) chi-square distribution.

**Table 7. VAR residual serial correlation LM tests.**

<table>
<thead>
<tr>
<th>Lag</th>
<th>LM-stat</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.44989</td>
<td>0.1891</td>
</tr>
<tr>
<td>2</td>
<td>12.82688</td>
<td>0.1706</td>
</tr>
<tr>
<td>3</td>
<td>14.16707</td>
<td>0.1165</td>
</tr>
<tr>
<td>4</td>
<td>3.906369</td>
<td>0.9175</td>
</tr>
<tr>
<td>5</td>
<td>9.171005</td>
<td>0.4216</td>
</tr>
</tbody>
</table>

Probabilities from chi-square with 9 df.

**Table 8. The unit root tests of Var residuals.**

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
<th>Cross-section</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null: Unit root (assumes common unit root process)</td>
<td>Levin, Lin and Chu t*</td>
<td>-7.76432</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Breitung t-stat</td>
<td>-8.27424</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td>Null: Unit root (assumes individual unit root process)</td>
<td>Im, Pesaran and Shin W-stat</td>
<td>-7.37003</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADF - Fisher chi-square</td>
<td>59.0108</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PP - Fisher chi-square</td>
<td>77.0657</td>
<td>0.0000</td>
<td>3</td>
</tr>
<tr>
<td>Null: No unit root (assumes common unit root process)</td>
<td>Hadri Z-stat</td>
<td>-0.65432</td>
<td>0.7435</td>
<td>3</td>
</tr>
</tbody>
</table>


**Table 9. VAR residual heteroskedasticity tests with cross product.**

<table>
<thead>
<tr>
<th>Joint test</th>
<th>Chi-sq</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>257.8287</td>
<td>228</td>
<td>0.0852</td>
</tr>
</tbody>
</table>
Figure 1. Accumulated response of DI to DGDPP.

Figure 2. Accumulated response of T to DGDPP.

Figure 3. Accumulated response of GDPP to DI.
values of the endogenous variables DI, DGDPP and T. In this case, the accumulated responses of DI, DGDPP and T to generalized one S.D. Innovations $\pm$ 2 S.E., for 10 years, are illustrated in the Figures 1 to 5.

In this context, for the case of Nigeria, some principal conclusions results are:

1. The statement “development first and democracy later”
   a. A positive impulse in DGDPP determines an increase of DI’s level in the first 4 years and an abrupt negative level on long term; b. A positive impulse in DGDPP determines a slow increase of T’s level in the first 5 years and a flat positive level on long term.

2. The statement, democracy first and development later
   a. A positive impulse in DI’s level generates a small reaction of DGDPP in all the years, with a flat trend; b. A positive impulse in T’s level generates a very small flat positive effect of DGDPP in all the years. c. Moreover, a positive impulse in T determines an abrupt decrease of DI’s level in all the years.

Conclusions

Based on the previous remarks, the obtained results partially confirmed our two hypotheses.

We can observe that, in Nigeria, a high level of GDPP can ensure a high level of democratization only on short and medium term (4 years - one political mandate). On
long term, there is possibility that the high level of GDPP would not assure a higher level of democratization.

This means that, in a very short period, the voters seek to maximize the social welfare and tend to be more participative and competitive in the public choice area. Over a very long period of time, the voters, with a high comfortable level of social welfare, tend to be more lethargic from the "political" point of view. In this case, the elector's political responsibility is "attenuated" by the high social welfare.

In conclusion, in Nigeria's case, to ensure a higher level of economic development, the political regime must be democratic and the durability of the political regime reasonable. In another way, only a high economic development, with very low political regime durability, can ensure a solid democracy. Otherwise, there is a very sensitive relationship between democracy, development and the political regime durability.

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