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Inclusive Growth, Agriculture and Employment in Nigeria

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Abstract:

The Nigerian economy has been experiencing a jobless growth for over two decades. The main driver of this growth has been petroleum oil whose price started falling since 2015. The petroleum oil, which is the major driver of this growth, creates few jobs and as such, it is less inclusive. This paper, therefore, focused on agriculture as alternative to oil and as such investigates the areas where agriculture can replace petroleum oil as the major driver of growth in Nigeria. Majorly, the paper investigates the qualities of agriculture in matching economic growth with reduction in unemployment, inequality and poverty to pave way for inclusive growth within the economy. To achieve the objective above, a secondary data was analyzed using a VAR model which estimated the direct and indirect effects of agriculture on employment, inequality and poverty reduction. The findings revealed that agriculture have negative effects on employment and poverty and positive effects on inequality and gross capital formation. It is therefore, recommended that more emphasis should be placed on adaptation of imported technology to Nigerian's situation before applying such on agriculture to make it pro-poor growth.

Keywords: agriculture; inclusive growth; poverty; inequality; unemployment

JEL Classification: 01; 02; 03; 04; Q1

Introduction

The growth rate of Nigeria over the past two decades hovered around 5.3 until recently in 2015 when it declined to a record low of 2.35% in July 2015. According to statistics, the average GDP from 1960-2014 stands at \$79.89billion, with the record high being in 2014 and stands at \$568 billon and the lowest being in 1960 and stands at \$4.20billion. Since a decade now, the growth in the Nigerian economy has been a jobless one with high rate of poverty and only a few are controlling the wealth of the nation (Oloni 2013). Some of the thinking around this

concept are around the relationship between Growth, poverty reduction and inequality. International Policy Centre for Inclusive growth (IPC-IG) observes that societies based on equality tend to do better in development than countries that just place growth as their priority.

In Nigeria, unemployment, poverty and inequality have been the order of the day. According to Idowu, Akwaja and Anthony-Uko (2014), only 12 people control one-eight (1/8) of the Nigeria's wealth. Also, the 10 most capitalized companies on the Nigerian Stock Exchange (NSE) make-up over one-fifth of the country's economy with many of their shareholders drawn from the rank of the 10 richest Nigerians. On unemployment, Anaeto (2016) observed that there are about 22.45million people who are unemployed in Nigeria. This figure may be far from the truth as there are no data to back this up. It becomes pertinent to examine how the growth in the country can drive employment, poverty reduction and equity.

1. Literature review

1.1. Inclusive growth

Inclusive growth is widely used now by government, policy makers and Non-Governmental Organizations (NGOs) without clear-cut definitions for it. According to Samans, Blanke, Corrigan and Drzeniek (2015) define inclusive growth as output growth that is sustained over a long period of time and usually decades, that is broad-based across economic sectors, and has the qualities of creating productive employment opportunities for a great majority of the country's working age population, as well as reducing poverty. Inclusive growth is about both the pace and pattern of economic growth.

The concept of Inclusive Growth: it is the economic growth that results in a wider access to sustainable socio-economic opportunities for the majority of people and at the same time, protecting the vulnerable in an environment of fairness, equality and political plurality (Kanu, Salami and Numasawa 2014). Organisation for Economic Co-operation and Development (OECD) (2013) defined inclusive growth as when other indicators of well-being, which are not income, have also improved for the citizens of the country. OECD (2013) also sees growth as means not an end; as priority has to be given to the quality of growth and not the quantity of growth. According to Chang (2014), inclusive growth is about all participating in the growth process, have broader objectives than increasing GDP, which translate to increased wellbeing and benefiting all, including the most marginalised as well as reducing poverty and inequality.

Chang (2014), observed that there are deficiencies on prioritising economic growth without ensuring that the benefit from the growth are well widespread among all people of different levels of income. The inclusive growth debate tries to connect emphasis on growth, reduction in poverty and inequality. According to Roehlano (2015) inclusive growth is defined as economic expansion of an economy with poverty reduction in multiple dimension and massive creation of quality and decent employment. Growing and continued disparities can pose a threat to a high, efficient, and sustained growth. Therefore, inclusive growth is increasingly becoming a developmental agenda nationally and internationally Asian Development Bank (ADB) (2011). ADB (2011) highlighted 35 indicators of inclusive growth under which poverty, inequality, employment gender equality and good governance are.

1.1.1. Inclusive growth in agriculture

Agriculture is critical for sustainable development and poverty reduction as its growth can be a powerful means for inclusive growth. Inclusive growth in agriculture is that, which is accompanied by gain manifested through more employment and income benefitting the agricultural sector which have been by-passed recently by higher rate of economic growth (Kanu, Salami and Numasawa 2014). Inclusive growth focuses on improvement in agricultural productivity and standard of living of the poor than does the conventional economic growth.

1.2. Income inequality

Income inequality is described as the variation, disparity, dissimilarity, inequity, unfairness or disproportion in income, accruing to various citizens in the nation (Omojuwa 2011). It has the effect of gradually building up conscious hatred and deep rooted envy against the upper class that are often perceived to be exploiting the lower class. Income inequality matters when it comes to making progress on poverty reduction. It therefore becomes

paramount that re-distribution programme be evolved to address the widening gap. In literature, it has been that equitable distribution of income deals should be targeted through monetary, fiscal and Income policy programmes. Income policy programme relates to the regulation of rewards that go to the factors of production such as labour in terms of wages; and regulation of product prices governed by government legislating minimum and maximum price (Johnson 2004).

1.3. The Nigerian economy: 1960-2015

Nigeria became independent in 1960. Prior to this time, the country depended on agriculture with its main products as Cocoa from the South West, Groundnut and cotton from the Northern part and Palm-produce from the South East of the country. Oil replaced agriculture in the '70s as both the main export as well as the major contributor to the Gross Domestic Product (GDP) of the country. Oil boom of 1970s helps the country to recover from the effects of the civil war of 1966-1969. Also, it leads to the influx of youths, who had hitherto been engaged in agriculture in the rural areas, to the urban areas to seek for white collar jobs. The proceeds from oil during this time of boom help the government to embark on rapid industrialization which gave job to these youths (Effoduh, nd). Thus, the youths were able to be absorbed as at this time; however, many more that started to follow their footstep were stranded as the World price of petroleum dropped sharply in 1975 as a result of the slowdown of World demand. Increase in the price of petroleum in the years 2007-2008 led to increase in growth within the economy which did not translate to employment (Oloni 2014). The oil sector, which is the major driver of growth in Nigeria, creates little jobs that are mainly urban. Unlike agriculture, the sector is less inclusive and has a history of aggravating and fuelling social conflict like those in the Niger Delta in the country (Kanu, Salami and Numasawa 2014). It should be recalled that since 2015, the price of petroleum oil has been going down; exposing the country to external shock whereby growth in the economy has sharply declined Recently this is compounded by supply shocks (due to breaking of pipelines by militants in Niger Delta region of the country). The adverse effects caused by these shocks include: increase the price of domestic goods; rate of unemployment; poverty and non-payment of salaries as well as decrease in real income among others.

Statistics has shown that, for one and halve decade consecutively (the period between years 2000 and 2013), the Nigerian economy was growing with the average growth rate at about 7.86%, reaching an all-time high of 33.7% in 2004 and a record low of 3.4% in 2005. Between 2013 and 2016, the average growth rate reduced to 0.77%; it reaches 9.19 % in the 3rd quarter of 2015 and a record low of -13.70% in the first quarter of 2016.

Despite the country's progress experience, the existing challenges remain as; there are a large number of poor people (Oloni, Alao, Omotosho and Obasaju 2015), increasing unemployment (Oloni 2013) especially of youth from schools and the problem of monocultural economy (where the country depends mainly on petroleum oil). Studies on inclusive growth in Nigeria is still growing, most of the studies focused on output, poverty, growth in agriculture and manufacturing sector, employment and macroeconomic performance (few among others are Oloni 2011, Campbell and Asaleye 2016). Though, some studies in Nigeria examine financial inclusion and, inclusive growth with less emphasis on the indicators of inclusive growth. For instance, Onaolapo (2015) examines the effects of financial inclusion on the economic growth of Nigeria using the Ordinary Least Square (OLS). Goshit (2015) examines inclusive growth in Nigeria and its relation to monetary policy while Uduakobong (2015) assesses the effect of poverty in Nigeria using descriptive statistics, he concluded that Nigerian government should promote a broad-based growth that generates productive employment, redistributes income, enhances equity and involves the active participation of the poor in order to reduce poverty.

More interestingly, it is the study of Oboh and Adeleke (2016) which assessed inclusive growth and agricultural growth in Nigeria. However, they did not include many of the important indicators of inclusiveness like inequality, poverty index and employment, which are the bane of Nigerian challenges in respect to inclusive growth. The alarming rate of unemployment, poverty and uneven distribution of income over the years has remained some of the major concerns of policy analysts and Nigerian government. In order to promote pro-poor growth, this paper accesses the relationship between inclusive growth and Nigerian economy using selected indicators to measure inclusive growth.

2. Methodology

2.1. Model specification

In our equation, we are interested in agriculture as a tool of inclusive growth in Nigeria. Thus, the model specified followed that of Hassan, Zaman and Gul (2015) whose second model is specified as below:

$$GDP_t = f(C0_t, Gini_t, Poverty_t)$$

(1)

The growth variable is represented by Agriculture, since we are interested in agriculture as a tool of inclusive growth, we remove Co₂ since it is not our variable of interest, and employment is added. Thus, our own equation is specified as:

$$Agg_{t} = \alpha_{0} + \alpha_{1}e_{t} + \alpha_{2}GCF_{t} + \alpha_{3}POV_{t} + \alpha_{4}Giniindex_{t} + \varepsilon_{t}$$
⁽²⁾

where: Agg_t is agricultural value added e_t = employment; GCF is gross capital formation; Pov_t is poverty; Giniindex for inequality; ε_t is error term.

2.2. Method of estimation

This paper used the VAR model technique of analysis that has an advantage over others in macroeconomics. According to Sims (1982), the VAR model makes the natural starting point for empirical analyses because it incorporates non-uniqueness, non-fundamentalness and non – orthogonality of the innovation as it is stated in Wold theorem.

The preliminary stage involves testing for the series for stationarity and consequently co-integration. The paper uses the restricted VAR model also known as the VECM (this is because the variables are not stationary at level and the presence of co-integrating vectors). The Johansen and Jesulius (1990) dynamic approach is involved, where the derived maximum likelihood procedure for testing for co-integration in a finite Gaussian autoregressive (VEC) is used for estimation. The system is given as:

$$X_{t} = \sum_{i=1}^{N} \Pi X_{t} + \Phi D_{t} + \varepsilon_{t}$$
(3)

$$\varepsilon_t \sim in(0,\Omega)$$
 and $t = 1 - - -T$

where: X_t in our equation is agriculture, poverty, employment and Gross capital formation and Inequality; π is a K x

K matrix of coefficient in ith lag of X_t; N is the maximal lag length; θ is a K x d of the coefficient on D_t; D_t is a vector of trend and a constant while; ε_t is a vector of K unobserved sequentially independent, joint errors with mean zero and constant covariance; Ω and T is the number of observations in the model.

Throughout, X is restricted to be at most, integrated of order one. The time series properties are tested using the augmented Dickey Fuller (ADF) and Phillips Perron (PP) to determine the underlying properties of the process that generate the result (Charemza and Deadman 1997). Also, the direction of causality is investigated both in the short-run and long-run using the Gauss-Newton/Marquardt steps and the Wald test respectively. Also, the normality test is performed. Other test is conducted to show the validity of the model, this included: Breusch-Goffery serial correlation LM test and Heteroskedasticity ARCH test.

3. Results

This section presents the result of the analysis done in the paper. The section is divided into five sub-sections namely: unit root test result, co-integration test result, Variance decomposition and finally short run and long run analysis.

3.1. Unit root result

Variables	ADF Test Statistics	Order of Integration	PP Test Statistics	Order of Integration
AGG	-6.143678	l(1)	-7.718974	I(1)
E	-6.789276	l(1)	-5.252315	I(1)
GCF	-5.201143	l(1)	-3.723006	I(0)
POV	-5.567764	l(1)	-5.567764	I(1)
GINIIDEX	-5.477226	l(1)	-5.477226	I(1)

Table 1. Unit Root Test

Source: Authors' computation from Eviews

Table 1 presents the unit root for both Augmented Dickey Fuller and Phillips Perron Test, all variables AGG (Agricultural Value added), EMP (Employment), GCF (Gross Capital Formation), POV (poverty Index) are not stationary using Augmented Dickey fuller test. Using the Philips-Perron test statistics of critical value of -2.533565 GCF is stationary at both 5% and 10% significant level. With the exception of this, all the variables are integrated of order I(1). So the first difference is used for all series in the table and all are significant at 10% level.



Figure 1. Graph of the series after first differencing

Figure 1 reveals the graph after first differencing. Regression results from the VECM models of the Granger causality tests using non-stationary variables will be spurious (Granger and Newbold (1974). So to avoid this, the regression with the stationary variables after differencing is used.

3.2. Johansen Cointegration result

Table 2 and Table 3 present Johansen Cointegration for Trace Unrestricted Cointegration Rank test and Maximum Eigenvalue Unrestricted Cointegration Test, respectively.

Hypothesized no. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None*	0.747784	106.9081	69.81889	0.0000
At most 1*	0.611955	65.58402	47.85613	0.0005
At most 2*	0.529361	37.18500	29.79707	0.0059
At most 3	0.258745	14.56506	15.49471	0.0684
At most 4*	0.170079	5.592743	3.841466	0.0180

	Table 2. Unrestricted	Cointegration Rank Test ((Trace)
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Note: Trace test indicates 3 cointegrating equation(s) at the 0.05 level; *denotes rejection of the hypothesis is at the 0.05 level; **Mackinnon-Haug-Michelis (1999) p-values

Source: Authors' computation from Eviews

Source: Authors' computation from Eviews

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None*	0.747784	41.32410	33.87687	0.0054
At most 1*	0.611955	28.39902	27.58434	0.0393
At most 2*	0.529361	22.60995	21.13162	0.0308
At most 3	0.258745	8.982312	14.26460	0.2876
At most 4*	0.170079	5.592743	3.841466	0.0180

Table 3. Unrestricted	Cointegration	Rank Test	Maximum	Eigenvalue)
			1	

Note: Trace test indicates 3 cointegrating equation(s) at the 0.05 level; *denotes rejection of the hypothesis is at the 0.05 level; **Mackinnon-Haug-Michelis (1999) p-values

Source: Authors' computation from Eviews

The trace unrestricted cointegration rank and the maximum eigenvalue unrestricted cointegration Rank Test indicates three cointegrating equation, it can be concluded that there is an existence of potential long-run relationship among the variables. Based on this result, the restricted VAR also known as Vector Error Correction Model (VECM) will be adopted for the analysis. The VECM helps to adjust both short-run changes in variables and deviations from the equilibrium.

Table 4. Normalized Cointegrating Coefficients

Normalized cointegrating coefficients (standard error in parentheses)							
AGG POV GCF E GINIINDEX							
1.000000 -2.614868 0.898996 -0.937924 2.95472							
(0.51735) (0.21206) (0.29446) (0.56934)							

Source: Author's computation from Eviews

Table 4. presents the normalized cointegrating coefficients, from the result using AGG as the normalized variable, it has negative relationship with POV and E; positive relationship with GCF and GINIINDEX.

3.3. Variance deposition result

Variance Decomposition of AGG								
Period	S.E	AGG	POV	E	GCF	GINIINDEX		
1	5.523240	100.0000	0.000000	0.000000	0.000000	0.000000		
2	6.480122	72.64856	20.67441	6.083384	0.539620	0.054028		
3	7.643960	58.66733	26.97542	8.377606	4.386737	1.592900		
4	8.034876	53.37551	27.61752	8.242167	6.191521	4.573274		
5	8.178346	52.95668	28.32634	8.242693	6.037358	4.436928		
6	8.637097	48.23761	33.75070	7.699156	6.322169	3.990365		
7	8.990419	44.58981	36.17587	7.191208	7.273943	4.769172		
8	9.218763	42.40916	37.46859	6.898491	7.641740	5.582012		
9	9.422701	40.84095	39.32692	6.604923	7.745853	5.481350		
10	9.664434	39.17185	41.60834	6.294451	7.697535	5.227823		

Table 5. Variance Decomposition of AGG

Source: Author's computation from Eviews

Table 5 shows the variance decomposition of AGG; from the table it can be depict that in period one, the variable AGG variation explained about 100% variation in the forecast error shock of its self. In period two, the variable POV variation explained about 20.7% variation in the forecast error shock of AGG. In period three, the variable E variation explained about 8.4% variation in the forecast error shock of AGG. In period four, the variable GCF variation explained about 6.2% variation in the forecast error shock of AGG. In period four, the variable GINIINDEX variation is explained about 4.4% variation of the shock of the forecast error. In period six, the variable POV variation is explained about 33.8% variation of the shock of the forecast error. In period seven, about 44.6 percent variation in AGG was explained in the variation of its own error shock. In period eight, the variable POV

variation is explained about 37.5% variation in the forecast error shock. In period nine, about 7.4% in variation of the forecast error shock is explained by the variable GCF. In period ten, about 41.6% variation is explained in the variable POV in the forecast error shock. It can be concluding that the forecast error shock from AGG affects other variation with POV with the more percentage than the others in the long run (see appendix for Variance Decomposition of other Variables).

3.4. Short run and long run causality analysis

Long Run Joint Causality								
Coefficient		Value	Standard Error t-Statistics		F	Probability Value		
C(1)	C(1) -1.458754 0.435751 -3.347674		-3.347674		0.0036			
	Short Run Joint Causality (Wald Test)							
C(2): C(12)		F-statistics Value	Chi-	Square Val	ue	df	F	Probability Value
		4.2160	84	42.	16084	10		0.0000
R-squared	0.74965	3 Adjusted R-squ	uared 0.596	663 Di	urbin-Wa	itson 2.	051098	
F-statistics	4.900015	5 Prob. (F-statist	tic) 0.001	499				

Source: Author's Computation from Eviews

Table 6 presents the result of the system equation using AGG as dependent variable. The long run coefficient is C (1) is negative and significant at 5 per significant level which indicates long run causality with the independent variables. The short run causality was done using Wald Test. Wald test Chi-square p-value is less than 0.05, which is significant at level of 5%. Therefore, it can conclude that there is short run causality from the independent variables to the dependent variable.

3.5. Normality test



Figure 2. Normality Test Result

3.6. Serial Correlation Test Result

Table 7. Serial Correlation Test Result

Breusch-Godfrey Serial Correlation LM Test:					
F-statistic 0.226626 Prob. F(2,25) 0.7997					
Obs* R-squared	0.826435	Prob. Chi-Square (2)	0.6615		

Source: Authors Computation

3.7. Heteroskedasticity Test Rest

Table 8. Heteroskedasticity Test Result

Heteroskedasticity Test: ARCH					
F-statistic	2.449245	Prob. F(2,25)	0.1068		
Obs* R-squared	4.587447	Prob. Chi-Square (2)	0.1009		

Source: Author's Computation from Eviews

3.8. Stability test



Source: Authors Computation

3.9. Validity of the model (tests applied on the residuals)

Figure 2, Table 7, and Table 8 show the test applied on the residuals. To test the validity of the model, the residuals' series must be normally distributed, with no serial correlation and homoscedastic. In order to test serial correlation, this paper applied Breuch-Godfrey Serial Correlation LM Tests.

The result proves the absence of serial correlation with p-value of 0.6615. The normality test was done using the histogram and statistics, from the result the series are jointly normal distributed with p-value of Jarque Berra of 0.432910 which is more than 5% relevance interval. Test of Heteroskedasticity was done using the ARCH Test; the test result proved that the series are homoscedastic with p-value of 0.1009, all at 5% significance level. A model which passes all the tests applied on the residuals and show stability as reveals in Figure 3 could be used in analyses and forecasting. Table 4 presents the normalized co-integrating coefficients, from the table it is depicted that there is negative relationship between the dependent variable AGG and independent variables, POV and E with coefficient value of 2.614868 and 0.937924 respectively. This indicates that the variables have negative relationship in the long-run with AGG. Both the variables GCF and GINIINDEX with coefficient value of 0.898496 and 2.954727 respectively have positive relationship with the dependent variable, this indicates positive long-run relationship.

Conclusion and recommendation

In conclusion, agriculture can be found to be very important in Nigerian economy. It impacts positively and significantly on poverty and capital formation as well as inequality.

The economic implication, as it appears, will promote pro-poor growth. However, the positive relationship with inequality may affect the benefit to the poor on the overall level. This is a pointer to the fact that innovation in agriculture will bring about the replacement of man with machine as well as widening the gap between the rich and the poor except if conscious effort is made by the government to engage labor intensive technology. Imported technology should first be adapted to the Nigerian situation where we have very high labor market. This will reduce the gap between the rich and the poor as the poor will benefit more when it is labor intensive technology.

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Appendix

Variance Decomposition of POV							
Period	S.E	AGG	POV	Ш	GCF	GINIINDEX	
1	1.469123	2.130070	97.86993	0.000000	0.000000	0.000000	
2	4.039897	24.30615	13.81134	1.202446	23.59302	37.08704	
3	4.142330	26.55404	14.39664	1.143802	22.46424	35.44129	
4	4.240766	25.95540	14.26841	1.101874	22.97316	35.70115	
5	4.405533	24.75147	15.89427	1.244784	22.65904	35.45043	
6	4.898822	27.17710	13.93333	1.415375	22.15663	35.31757	
7	5.043151	27.99101	14.26347	1.351857	21.80463	34.58903	
8	5.177727	27.58921	14.20706	1.411389	21.97650	34.81584	
9	5.339107	27.46465	14.44834	1.448287	21.80837	34.83035	
10	5.584940	27.95864	14.19128	1.408477	21.76586	34.67574	

Table 9. Variance Decomposition of POV

Source: Author's computation from Eviews

Table 10. Variance Decomposition of E

Variance Decomposition of E							
Period	S.E	AGG	POV	E	GCF	GINIINDEX	
1	3.352511	0.067115	6.684195	93.24869	0.000000	0.000000	
2	3.712733	6.643345	12.35607	76.24714	3.761910	0.970536	
3	4.957305	3.742654	8.385413	77.80858	4.717626	5.345731	
4	5.260140	3.554758	12.86294	74.62611	4.201100	4.755092	
5	5.612710	5.242754	12.18736	72.58763	5.277034	4.705218	
6	6.063349	4.586232	13.48644	72.97041	4.647581	4.309338	
7	6.361127	4.283801	13.58759	72.32620	4.983012	4.819397	
8	6.698608	3.895136	13.99545	72.25162	5.030221	4.827574	
9	6.949753	3.948140	14.53697	72.15161	4.813407	4.549873	
10	7.267390	3.834039	14.64017	71.89397	4.900498	4.731322	

Source: Author's computation from Eviews

Table 11. Variance Decomposition of GCF

Variance Decomposition of GCF							
Period	S.E	AGG	POV	E	GCF	GINIINDEX	
1	2.142752	29.59371	0.031121	7.074876	63.30029	0.00000	
2	3.123945	44.98640	5.215530	3.330824	46.07267	0.394569	
3	3.922520	35.49787	8.890158	8.599185	37.95756	9.055231	
4	4.260565	33.48097	9.920234	7.292088	40.45868	8.848028	
5	4.663989	38.39050	9.055118	6.514698	38.08811	7.951570	
6	5.133879	40.39371	9.472701	5.939043	36.46492	7.729630	
7	5.549212	37.26052	9.797557	6.010607	37.33380	9.597513	
8	5.772491	37.33217	10.05702	5.568259	38.12971	8.912846	
9	6.092402	39.99222	9.984574	4.999918	37.01332	8.009962	
10	6.44840	39.74643	10.14965	4.988688	36.76874	8.3464884	

Source: Author's computation from Eviews

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Variance Decomposition of GINIINDEX							
Period	S.E	AGG	POV	E	GCF	GINIINDEX	
1	3.585562	33.09383	1.015833	4.493258	23.70257	37.69450	
2	3.807090	37.16332	3.788291	4.019073	21.58253	33.44679	
3	3.914685	35.41344	6.292488	4.025481	21.23799	33.03060	
4	3.994381	35.53438	6.721530	4.482113	20.65324	32.60874	
5	4.405779	37.86179	6.274532	4.154276	19.61740	32.09200	
6	4.565746	39.20849	7.023968	3.957005	18.69816	31.11238	
7	4.680968	38.96363	8.149021	4.030774	18.19397	30.66260	
8	4.793440	39.14152	8.520299	4.091168	17.81032	30.43669	
9	4.997042	39.82742	8.572305	4.056719	17.37106	30.17249	
10	5.140098	40.45877	8.964734	3.974144	16.89090	29.71145	

Table 12. Variance Decomposition of GINIINDEX

Source: Author's computation from Eviews

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