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Comparative Assessment of Macroeconomic Indicators Growth Performance Between India and Nigeria

Makroekonomik Göstergelerin Karşılaştırmalı Değerlendirmesi Hindistan ve Nijerya Arasındaki Büyüme Performansı

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COMPARATIVE ASSESSMENT OF MACROECONOMIC INDICATORS GROWTH PERFORMANCE BETWEEN INDIA AND NIGERIA

ABSTRACT

India and Nigeria were colonized by the British empire, got their independence within a given time range, and are among the largest growing economies among developing nations; they were ranked 1st and 3rd most populous among the common wealth countries respectively and both the countries houses significant population of malnourished, poor and food insecure people. The paper comparatively assessed the macroeconomic growth performance between the two countries using time series data that spanned from 1990-2020. A compound growth rate model was fitted to the data to confirm the trend of acceleration, deceleration or stagnation during the period. The results of the study revealed the mean values of the GDP and the GNI in US dollars at constant prices for India were higher than that of Nigeria by almost 7 times, while Nigeria`s per capita GDP was higher than that of India under the reference period. With respect to the GDP and the per capita GDP growth rates, India recorded lower growth but more stable than Nigeria. Further, both the countries recorded the highest GDP contributions from the service sector (46 per cent in India and 35 per cent in Nigeria). But the growth rate shows stability in Indian Service sector in contrast to the highest instability in the agricultural sector. In Nigeria, on the other hand, the agricultural sector got the highest growth contribution to the GDP growth-though stagnant and instable, while the service sector's growth contribution to GDP growth was the lowest among other variables. It is recommended that increase budget share to agriculture through proper funding of research, credit support and extension service would help to repositioned agriculture back to its higher (of about 50 per cent) GDP contribution and compete vigorously with other economic sectors in income generation, employment opportunities and poverty reduction in both India and Nigeria.

Keywords: Macroeconomics, Assessment, Comparison, India, Nigeria.

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MAKROEKONOMIK GÖSTERGELERIN KARŞILAŞTIRMALI DEĞERLENDIRMESI HINDISTAN VE NIJERYA ARASINDAKI BÜYÜME PERFORMANSI

ÖZ:

Hindistan ve Nijerya, İngiliz imparatorluğu tarafından sömürgeleştirildi, belirli bir zaman aralığında bağımsızlıklarını kazandılar ve gelişmekte olan ülkeler arasında en büyük büyüyen ekonomiler arasında yer alıyorlar. Ortak refah ülkeleri arasında sırasıyla en kalabalık 1. ve 3. sırada yer alan her iki ülke önemli miktarda

yetersiz beslenen, yoksul ve gıda güvencesi olmayan insan nüfusuna sahiptir. Bu çalışmada, 1990-2020 arasındaki zaman serisi verilerini kullanarak iki ülke arasındaki makroekonomik büyüme performansını karşılaştırmalı olarak değerlendirilmiştir. Dönem boyunca hızlanma, yavaşlama veya durgunluk eğilimini doğrulamak için verilere bileşik büyüme oranı modeli yerleştirildi. Çalışmanın sonuçları, Hindistan için sabit fiyatlarla ABD doları cinsinden ortalama GSYİH ve GSMH değerlerinin Nijerya'dan neredeyse 7 kat daha yüksek olduğunu, Nijerya'nın kişi başına düşen GSYİH'sinin ise referans döneminde Hindistan'dan daha yüksek olduğunu ortaya koymuştur. GSYİH ve kişi başına GSYİH büyüme oranları ile ilgili olarak, Hindistan, Nijerya'dan daha düşük ancak daha istikrarlı bir büyüme kaydetti. Ayrıca, her iki ülke hizmet sektöründen en yüksek GSYİH katkısını kaydetmiştir (Hindistan'da yüzde 46 ve Nijerya'da yüzde 35). Ancak büyüme oranı, tarım sektöründeki en yüksek istikrarsızlığın aksine Hindistan hizmet sektöründe belirli bir istikrar göstermiştir. Nijerya'da ise, tarım sektörü, durgun ve istikrarsız olsa da GSYİH büyümesine en yüksek büyüme katkısını sağlarken, hizmet sektörünün GSYİH büyümesine katkısı diğer değişkenler arasında en düşük olmuştur. Araştırmada, Hindistan ve Nijerya'da fırsatlar ve yoksulluğun azaltılması, kredi desteği ve yayım hizmetlerinin uygun şekilde finanse edilmesi yoluyla tarıma ayrılan bütçe payını artırmanın, tarımın daha yüksek (yaklaşık yüzde 50'lik) GSYİH katkısına geri dönmesine yardımcı olması ve gelir yaratma, istihdam konularında diğer ekonomik sektörlerle güçlü bir şekilde rekabet etmesi tavsiye edilmektedir.

Anahtar Kelimeler: Makroekonomi, Değerlendirme, Karşılaştırma, Hindistan, Nijerya.

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1. INTRODUCTION

Economic development encompasses factors such as increases in the real GDP and per capita income, as well as decreases in unemployment, poverty rates, gains in literacy and life expectancy (Todaro and Smith, 2012; Chambers, 2016). India and Nigeria have warm, amicable, and long-standing bilateral ties. In November 1958, two years before Nigeria gained independence on October 1, 1960; India opened its Diplomatic House in Lagos. Nigeria's largest trading partner is currently India, and Nigeria is India's top trading partner in Africa. In recent years, India has become the major customer of Nigerian crude oil (Femi, 2021). In Nigeria, Indians or people of Indian origin own and/or operate over 135 businesses (HCI, 2022).

Nigeria and India are two Afro-Asian regional powers with strong economic potential. As a result, they play pivotal roles in the international political landscape. These two countries have built interesting economic, political, and diplomatic connections over several decades (Ghazali, et al, 2019). Nigeria has a large, arable

land area, giving it a competitive edge in agriculture and it is an oil-rich country (Umezulike, 2016). Nigeria and India are Afro-Asian regional giants with economic potential.

Both India and Nigeria were colonized by the British Empire, gained independence within a short period of time, and are among the fastest-growing economies in the developing world with English as their official language (Investopedia, 2014). With populations of 1,257 and 177 million people respectively, India and Nigeria were placed first and third among the common wealth countries (Isah, 2016). About 1,000,000 Indians live in Nigeria and work in the commercial and manufacturing sectors; the two nations have had a long and excellent bilateral connection (HCI, 2022).

Nigeria's major trading partner is India, and India's top trading partner in Africa is Nigeria. In the fiscal year 2019-20, total bilateral trade between India and Nigeria reached US$ 13.82 billion, down from US$ 13.89 billion in the previous fiscal year. In the fiscal year 2019-20, Indian exports to Nigeria totaled US$ 3.61 billion, up from US$ 3.0 billion (20 percent) in the previous fiscal year. India's imports totaled US$10.21 billion from 2020 to 2019, compared to US$10.88 billion in 2018-19 (HCI, 2022).

Despite multiple policies, programs, and large investments in agriculture by many developing countries, food insecurity remains a major concern (OECD, 2013). With the economic progress and self-sufficiency in food grain production, significant levels of poverty, food insecurity, and malnutrition persist in India, according to the World Food Program (2016). India is home to a quarter of the world's undernourished people, with 32.7 percent of the population living on less than US$ 1.25 per day (Food and Agriculture Organization of the United Nations, 2019). Nigeria, on the other hand, is Africa's largest oil exporter and has the continent's largest natural gas reserves (SRWE, 2019).

Despite recent global financial downturns, Nigeria's oil wealth has enabled it to sustain relatively stable economic growth. Nigeria is the world's greatest producer of cassava, yam, and cowpea, yet it is a food-deficit country that relies heavily on grain, livestock, and fish imports (IFAD 2012), thus creating a vicious circle around the country's massive population (FAO, 2018; Sadiq*et al.*, 2020). In spite of its abundant natural resources and steady economic progress, Nigeria's poverty is prevalent, and in some areas, it has even increased since the late 1990s (World Bank, 2019).

The fact that the two countries have long established and executed a number of policies and programs aimed at providing appropriate and sufficient food for their combined populations, a large portion of their populations remains food insecure

(Isah, 2016). Thus, it is against this background that this paper intends to comparatively assess the macroeconomic growth performance between India and Nigeria.

2. MATERIAL AND METHODS

Time series data that spanned for a period of 30 years (1990-2020) and covers Gross Domestic Product (GDP), Gross National Income (GNI) and Per Capita Income for both countries were used for the study. The data sources for India and Nigeria were Directorate of Economics and Statistics (DES), Ministry of Agriculture, National Sample Survey Organization (NSSO) Government of India; and, journals, technical documents, government gazettes, CBN annual reports and bullions, and published materials from the National Bureau of Statistics, the National Planning Commission (NPC) and Central Bank of Nigeria, respectively. The collected data were analyzed using both descriptive and inferential statistics.

Analytical Tools

The descriptive statistics concentrate on averages, percentages and ratios for assessment and comparisons. The coefficient of variability (CV) which measure instability is a normalized measure of dispersion and is the ratio of standard deviation (σ) to the mean (μ):

Algebraically, $CV = \sigma/u$ ..... (1)

The growth rates were calculated by fitting an exponential function in time to the data as follows:

$Y = \beta_{0,} \beta i^{t}$ ..... (2)

Linearizing the equation, it becomes:

$\text{Log } Y = \beta_{0+} \beta_{it}$ ..... (3)

Where,

Y = macro-economic indicators;

t = time trend variable; and,

β_0 and $\beta_{i's}$ are regression parameters to be estimated.

The compound growth rate (r) is given by the formula:

$r = (e^{\beta i} - 1) \times 10$ ..... (4)

Where,

e = Euler's constant;

Euler's constant = 2.71828

The time it would take to double the rate of growth was estimated as follows:

$Dt = 69/r$ ...…….. (5)

Where,

Dt = Doubling time; and

r = compound rate of growth.

Following Marchenko (2009), a quadratic equation in time variable was fitted to the data to confirm the existence of acceleration, deceleration or stagnation during the same period and it was given as follows:

$\text{Log } Y = \beta_0 + \beta_{it} + ct^2$……..……. (6)

Where c is the regression coefficient used to depict acceleration, deceleration or stagnation. In the equation 5 above, the linear and quadratic time terms give the circular path in the dependent variable (Y). The quadratic time term (t2) allows for the possibility of acceleration, deceleration or stagnation during the period. Significant positive values of the coefficient of t2 indicate acceleration in growth; significant negative values of t2 indicate deceleration in growth; while non-significance of the coefficients indicates stagnation in the growth process.

3. RESULTS AND DISCUSSION

3.1 Summary of Macroeconomic Indicators Between India and Nigeria

Agriculture and economic development go hand in hand with one another, both aimed at producing more 'life sustaining' necessities such as employment, food, shelter and raising standard of living. Variables such as GDP, NI, GNI and Per Capita Income explain the rate at which economic growth is moving over a given period of time.The mean values of the macroeconomic variables in million US dollars at current prices during the period from 1990 to 2014 for India are presented in Table 1.

The mean values of GDP and GNI in million US dollars for India during the study period were 722,730.7 and 721,345.7 USD, while the per capita GDP stood at 656.38, US dollars. The corresponding figures for Nigeria were 109,525.6,

101,246.3 and 751.3. It could be seen that the mean value of GDP per capita in Nigeria was slightly higher than the value obtained in India at 1% level of significance. In the case of GDP and GNI both the values obtained from India are much higher than those obtained from Nigeria. Therefore, both GDP and GNI between India and Nigeria are not in any way statistically the same, as could be inferred from the t-test analysis.

The mean values of the macroeconomic variables were estimated in million dollars, and GDP of India was found to be slightly higher than the mean value of GNI during the period of 1990-2020 (Table 1). This difference between GDP and GNI is statistically significant. Similarly, in Nigeria, the mean GDP value stands higher than that of GNI during the period of 1990 to 2020. GDP is used to indicate the strength of a country's local income. On the other hand, GNI shows the economic strength of the citizens of a country.

From the aforesaid analysis, comparatively, the India GDP was statistically six times higher than that of Nigeria; GNI was more than seven times to that of Nigeria and conversely, in the case of per capita GDP, the mean value of Nigeria was statistically higher to that of India. Therefore, both GDP and GNI between India and Nigeria are not in any way the same. According to INDIASTAT reports of 2019, India ranked 5th while Nigeria ranked 27th in terms of GDP value. It is estimated that India's GDP would reach $10 trillion in the year 2028. The GDP is one of the primary indicators used to gauge the health of a country's economy. It represents the total dollar value of all goods and services produced over a specific time period, usually a year.

Table 1. Summary statistics of the macroeconomic indicators

Variables	India			Nigeria		
	Mean	Min.	Max.	Mean	Min.	Max.
GDP	722730	274842	1880097	109525	15789	459616
GNI	721345	270732	1864064	101246	13442	437310
GDP per capita	656	308	1539	751	153	2722

Note: GDP and GNI in million US dollars, GDP per capita in US dollar

3.2 Growth Rate of MacroeconomicIndicators Between India And Nigeria

In Table 2, the results of compound growth rates for GDP, GNI and GDP per capita were reported as 8.82, 8.49 and 6.96 from 1990 to 2020 respectively, with the GDP having slightly the highest growth rate. The highest instability index of the growth was recorded as 34.82 per cent, 31.44 per cent and 26.38 per cent for

the GDP per capita, GNI and GDP, respectively. This shows that the growth in the GDP was more stable having the lowest instability index when compared to GNI and GDP per capita. The results for the nature of growth indicated acceleration for the GDP, GNI and GDP per capita meaning that all the three indicators had a significant positive growth during the study period. The years required to double the values of these variables were reported as 9.9, 8.1 and 7.8 years for GDP per capita, GNI and GDP respectively. Therefore, under present scenario in the next 7.8 years to come the value of Indian GDP would be doubled, 8.1 years was required for GNI to be doubled and 9.9 years to achieve doubling in the case of GDP per capita in India, other things being equal.

The analysis for Nigeria reported growth rates to the tune of 8.82, 10.92 and 11.03 for the GDP per capita, GNI and GDP, respectively. This follows a similar trend with the result obtained from India where GDP had the highest compound growth rate followed by GNI and then GDP per capita within the period of the study. There was highest instability (64.84 per cent) recorded for GDP per capita, followed by 64.12 per cent of the GNI and 61.03 per cent in the GDP. This trend was similar to that obtained from India where GDP per capita and GNI recorded the highest instability. However, instability index of these variables was lower in India compared to Nigeria.

The nature of growth as depicted in Table 2 indicated that all the three variables witnessed an accelerative and positive growth. As such, both India and Nigeria are reported to have similar accelerative growth pattern in respect of these variables over the period of study. Furthermore, the time period to achieve doubling of these variables in Nigeria was estimated as 6.25, 6.31 and 7.8 years for GDP, GNI and GDP per capita, respectively. Similar scenario prevails in India too.However, in Table 2 the instability index was lower in India compared to Nigeria across all the variables and this indicates steadiness and lesser volatility or fluctuation of these variables in India than in Nigeria. On the contrary, the compound growth rate in Nigeria was higher than that of India across all the three variables during the period of study indicating that Nigeria has witnessed a higher growth in terms of GDP, GNI and GDP per capita than India in this period. Going by the results, Nigeria reveals a potential of doubling the values of these macro variables before India, other things being equal.

The results of the analysis on compound growth rates and nature of growth of India's macro variables during 1990-2020 (Table 2) indicate that India's GDP was increasing significantly at a percentage close to a double-digit figure, with an accelerative pace of growth; but however, the growth was instable during the study period. Similarly, GDP of Nigeria has increased significantly at a double-digit percentage growth rate, with accelerative pace of growth, and instability of the growth was more than two times higher to that of India during this period. Therefore,

GDP growth rate in Nigeria was higher than in India, while at the same time, India's GDP growth was more stable compared to Nigeria, and both the GDP growth rates of India and Nigeria were accelerative in nature. According to the Nigerian National Bureau of Statistics (NBS), after Nigeria rebased its GDP in 2014, Nigeria's GDP was hovering around US$560 billion.

Likewise, GDP per capita (6.96%) growth of India within the study period was found to be lower than that of Nigeria (8.82%) and at the same time the instability nature of Nigerian GDP per capita was almost two times compared to the instability nature of GDP per capita growth of India. This indicates that, in terms of GDP and GDP per capita, the results reveal that Nigeria enjoys higher increasing growth rates, but characterized by highly instable growth compared to India. Nigeria in recent times rebased its GDP and was positioned as the largest economy in Africa, the position occupied by South Africa for a very long time and now targeting GDP of about $900 billion by 2020 to enable it realize its vision of being among the world's top 20 economies.

Table 2. Growth rates of the macroeconomic indicators

Variables	**India**			**Nigeria**		
	GDP	Per Capita GDP	GNI	GDP	Per Capita GDP	GNI
CV	71.97	60.32	70.96	115.50	98.63	119.05
Instability Index	26.38	34.82	31.44	61.03	64.84	64.12
CGR	8.82	6.96	8.49	11.03	8.82	10.92
Doubling	7.80	9.90	8.10	6.25	7.80	6.31
Nature	Acc.	Acc.	Acc.	Acc.	Acc.	Acc.

Note:CGR – Compound growth rate, Acc. – Acceleration.

3.3 Sectoral contributions to GDP in India and Nigeria

Table 3 reveals that, during the period of 1990 to 2020, the sectoral contribution to India's GDP in million US dollars at current prices was highest for the service sector (349,976.1), followed by industry (181,029), agriculture (137,740.4) and manufacturing (101,647.1), accounting for 46 per cent, 23 per cent, 17 per cent and 13 per cent mean value contributions to GDP, respectively. While in Nigeria, the absolute contributions from different sectors were 63,560 from services, 39,531 from industry, 31,020 from agriculture and 5,257 from manufacturing sector, accounting for about 35 per cent from services, 32 per cent from industry, 27 per cent from agriculture and 5 per cent from manufacturing sector.

The contribution of different economic sectors to GDP was believed to explain the level and phase which the overall economy will be progressing at. The service sector contributed the highest (46%) to India's GDP during 1990-2020 (Table 3). Similarly, according to the report of The Hindu (2015), India has the second fastest growing service sector with its compound annual growth rate at nine per cent.

Further, the study reveals that the service sector (46%) contributions to GDP in India stand much higher to that of the industry (23%), agriculture (17%) and manufacturing (13%). However, it was reported by the Statistics Time 2015 that at previous methodology, the compositions of the agriculture & allied, industry, and the service sectors were 51.81, 14.16, and 33.25 per cent, respectively at current prices in 1950-51. The share of the agriculture & allied sector has declined to 18.20 per cent in 2013-14. The share of the service sector has improved to 57.03 per cent, and the share of the industry sector has also increased to 24.77 per cent. It means that, the service and the industrial sectors were emerging stronger and occupying higher contributions to the GDP while agriculture leans out slowly as it was reported recently to have contributed around 13 per cent to GDP during 2014-15 in India.

Similarly, in the case of Nigeria, the analysis of the average contributions of major economic sectors in million US dollars during 1990 to 2020 reveals that, similar to India, the Nigerian service sector's contribution (35%) was the highest among other sectors. The second largest contributor to GDP was the industrial sector (35%), followed by agriculture (27%) and manufacturing (5%). This indicates that agriculture's share in GDP has also been gradually declining in Nigeria although still ahead of India in percentage contributions. This may be further supported by the findings of Ekpo and Umoh (2012), where they revealed that the contribution of agriculture to GDP, which was 63 per cent in 1960, declined to 34 per cent in 1988, not because the industrial sector increased its share but due to neglect of the agriculture sector. It was therefore not surprising that in the year 1975, the economy had become a net importer of basic food items. The apparent increase in growth of Industry and manufacturing sectors from 1978 to 1988 was due to activities in the mining sub-sector, especially petroleum. The factors responsible for the decline include the mono-economy of oil, poor budgetary allocation, flexible importation policy, inadequate support to farmers and insecurity.

In summary, the service sector was contributing the highest to the GDP in both countries; the agriculture's contribution to GDP was declining and more than 50 per cent of their populations depended on agriculture as a means of sustenance. This may be further corroborated to the reduction in capital investment to the agricultural sector in the form of subsidies and other farm support which drives away significant percentage, especially of small and landless farmers from agriculture to other promising economic sectors. Unless government takes adept measures, agriculture's share to GDP would continue to decline, meaning declining perfor-

mance that translate to lesser profitability thereby undermining farmers effort and enthusiasm to remain in the sector.

Table 3. Sectors contribution to GDP in Million USD at current price from 1990-2020

Variables	India			Nigeria		
	Mean	Min.	Max.	Mean	Min.	Max.
Agriculture	137740 (17)	73541	312823	31020 (27)	5117	101515
Manufacture	101647 (13)	38053	257959	5257 (5)	860	30257
Industry	181029 (23)	63560	476688	36761 (32)	5655	121321
Services	349976 (46)	113127	971065	39531 (35)	3534	231131

Note: Figures in parenthesis indicate percentages of mean values

3.4 Growth Patterns of Sectoral Contributions to GDP İn India and Nigeria

The results presented in Table 4 describes the compound growth rate, instability index, doubling period and nature of growth in contributions for different sectors to GDP in million US dollars at current prices during the study period in India and Nigeria. The compound growth rates of 6.1, 8.6, 9.3 and 10.0 per cent were recorded for agriculture, manufacturing, industry and services, respectively. Further, the instability index was 35.8, 27.9, 26.9, and 22.85 per cent for agriculture, manufacturing, industry and service sector's contributions to GDP within the study period, respectively. More so, time required to achieve doubling of these sectors' contributions were 11.2, 7.6, 7.4, and 6.8 years for agriculture, manufacturing, industry and services sectors, respectively. In addition, the nature of the growth rate was observed to be accelerative in all the four sectors during the study period.

Thus, it could be observed that the highest and lowest growth rates were recorded in the service and agriculture sectors. In terms of instability, the highest index was recorded for agriculture and lowest in the service sector. The shortest time duration to achieve doubling in the GDP contribution was observed in the service sector while the highest duration to achieve doubling was observed in the agricultural sector. In respect of manufacturing and industry, time duration to achieve doubling in the GDP contribution was observed to be almost similar.

On the other hand, in Nigeria, the compound growth rates were to the tune of 10.0, 9.9, 9.3 and 0.48 per cent for agriculture, manufacturing, industry and service sectors, respectively. The corresponding instability indices were 64.0, 67.3, 66.7 and 60.0 per cent for agriculture, manufacturing, industryand service sectors, respectively. Further, the time required for Nigeria to achieve doubling of the present

levels of contributions to GDP by these sectors was to the tune of 6.8, 6.95, 7.3, and 143.7 years, respectively. Furthermore, the nature of the growth in all the sectors was estimated to be acceleration.

From the results above, it has been clearly indicated that the highest compound growth rate was observed in the agricultural sector and the lowest in the service sector of Nigeria during the study period as against what was observed in India. By and large, highest instability was witnessed in the manufacturing sector which is contrary to India with highest instability in the agricultural sector. The highest period to achieve doubling in Nigeria was observed in the service sector and this also contradicts the situation of India which had its highest period of doubling in the agriculture sector.

The analysis of growth rates of different sectors' contributions to GDP over the study period in India reveals that the service sector enjoys the highest growth during the period than all other sectors, whereas agriculture recorded the lowest growth percentage. At the same time, instability was higher in the agriculture sector and lowest in the service sector and the growth nature was observed to be accelerative in nature. This however, confirms numerous literature reports that India's service sector is one of the fastest growing in the world with annual growth of 9 per cent. The growth of the service can be linked to the economic development of Indian society and the socio-cultural changes that have accompanied it. At the same time, this trend spells doom to agriculture as its share keeps declining and as well characterized with high instability.

In Nigeria, a contrary scenario with India, agriculture has the highest growth rate of GDP contributions and service recorded the lowest growth percentage. The nature of the growth contribution was accelerative and highly instable during this period. Agriculture, despite its sharp decline, still remains the highest in terms of growth rate compared to other sectors. This agrees with the submission of Majoba (2015) that the agricultural sector contributed 35 per cent to GDP prior to rebasing, but is now only estimated to account for 22 per cent of GDP. Meanwhile, the service sector's contribution increased from 29 per cent of GDP to 52 per cent of GDP, the manufacturing sector was now estimated to contribute 6.8 per cent to GDP, compared to just 1.9 per cent previously, while the oil and gas sector's contribution has been revised down to 14.4 per cent from 32.4 per cent before rebasing. Therefore, it can be inferred that the two countries differ in terms of growth of sectoral GDP contributions during 1990 to 2020; India records highest and lowest growth in service and agriculture sectors, respectively, while on the contrary, Nigeria records its highest and lowest growth in agriculture and service, respectively.

Table 4. Compound growth rates, instability, doubling time and nature of growth of different sector`s contribution from 1990 - 2020

Variables	India					Nigeria				
	CV	Inst.	CGR	Double	Nature	CV	Inst.	CGR	Double	Nature
Agriculture	54.6	35.8	6.1	11.2	Acc.	95.5	64.0	10.0	6.8	Acc.
Manufacture	69.9	27.9	8.6	7.6	Acc.	156.8	67.3	9.9	6.9	Acc.
Industry	74.9	26.9	9.3	7.4	Acc.	94.0	66.7	9.3	7.3	Acc.
Services	79.2	22.8	10.0	6.8	Acc.	162.4	60.0	0.4	143.7	Acc.

Note: CV denote Coefficient of variation (%), Inst., Instability, CGR Compound growth rate (%), Acc. denote acceleration

4. CONCLUSION

The mean value of the GDP and GNI during the period 1990-2020 in US dollars at constant prices for India was higher than those in Nigeria by about 7 times. Nigeria`s per capita GDP was higher than that of India. With respect to the GDP and per capita GDP growth rates, India recorded lower growth but more stable than Nigeria.During the study period, both the countries recorded highest GDP contributions from service sector (46 per cent in India and 35 per cent in Nigeria). But the growth rate shows stability in Indian service sector in contrast to the highest instability in the agricultural sector. In Nigeria, on the other hand, the agricultural sector got the highest growth contribution to the GDP growth – though stagnant and instable, while the service sector's growth contribution to the GDP growth was the lowest among all others.

1. Though growth of the GDP has been impressive, more than 8 per cent, the mean per capita GDP was very low due to high population which calls for the government effort to revisit population control measures in order to reduce population growth rate to less than one per cent and at the same time, working to improve the living condition, income and employment in order to reduce the fierce competition on food and other basic necessities in both India and Nigeria.

2. Evidently, the agriculture`s contribution to the GDP declines at an alarming rate in both countries; where about 50 per cent or more (Nigeria) of their populations depends on agriculture as primary provider of food, income and employment as such requires a drastic and desperate measures to revamp and revitalize the sector from further crumbling. Increase budget share to agriculture, proffer funding of research, credit support and extension service would help to repositioned agriculture back to its higher (of about 50 per cent) GDP contribution and compete vigorously with other economic sectors in income generation, employment opportunities and poverty reduction in both India and Nigeria.

Conflict of Interest

The authors declare that there is no conflict of interest.

Ethics

This study does not require ethics committee approval.

Author Contribution Rates

Design of Study: ISA (40 %), SMS (30 %), MG (30 %)

Data Acquisition: ISA (40 %), SMS (30 %), MG (30 %)

Data Analysis: ISA (40 %), SMS (40 %), MG (20 %)

Writing up: ISA (50 %), SMS (25 %), MG (25 %)

Submission and Revision: ISA (40 %), SMS (30 %), MG (30 %)

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