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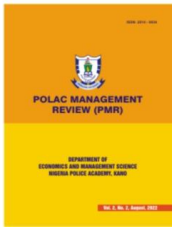

HUMAN CAPITAL DEVELOPMENT AND ECONOMIC GROWTH IN NIGERIA

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Abstract

This study examines the relationship between human capital development and economic growth in Nigeria for the period 1981-2020. It uses time series data on government expenditure on education (GEE), government expenditure on health (GEH), life expectancy rate (LER), primary school enrollment (PSE), secondary school enrollment (SSE), and tertiary school enrollment (TSE) as proxies for human capital development, and gross domestic product (GDP) as proxy for economic growth.This study concludes that human capital development has a positive and significant relationship with economic growth over the study period 198-2020 and in the long run. The results reveal that increases in human capital increases economic growth in Nigeria. In view of the above, the study therefore recommends that efforts should be made by every entity of the economy to harmonize the activities in the educational and health sectors of the economy. This will have a long run effect on the economy. Nigerian government should also increase its allocation to education in its future annual budgets in order to set standards in the education sector.

Key words: Human Capital, Development, Economic Growth, Expenditure, Nigeria

1. Introduction

Human capital refers to investment in education and health that leads to the improvement in quality of human labour such that the same quantity of labour produces more output than before. Many studies have linked modern economic growth to investment in human capital over the years. Todaro and Smith (2003) observed that modern economic growth in the advance countries of the world is linked to three important factors. These three factors include capital accumulation, population and labour force growth, and technological progress. Capital accumulation has been found to play a very important role in the modern growth process of most advanced countries. It involves the accumulation of savings for future investment. People must be able to save in order to augment future output and income.

Population and labour force growth on the other hand involves the growth of labour force of a country through education and training, provision of educational and training facilities, as well as health facilities that allows for the development of a healthy labour force. It also involves the provision of good retirement benefits and social safety nets that will support workers after their retirement from work. Besides the labour force growth, population increase also helps to develop the potential size of domestic market (Todaro and Smith, 2003)

The last important factor is technological progress. Technological progress according to scholars can be neutral, capital saving or labour saving. It's neutral when more output can be produced with the same quantity and combination of factor inputs. Simple innovations like division of labour can lead to higher output levels and more consumption for all individuals. When higher output levels are achieved with the same quantity of capital inputs, it is called capital saving technological progress and it leads to a more efficient labour intensive method. If on the other hand more output levels are achieved with the same quantity of labour inputs than before, it is called labour saving technological progress. And because most of scientific researches are conducted in the advanced countries, the mandate is to save labour not capital. These include tractors, machines and equipment, high speed trains, computers and the internet. All these make work easier and faster (Todaro & Smith, 2003). This paper consists of five sections. Section one is

the introduction, section two review of related literature, section three research methodology, section four results and discussions, while section five is conclusion and recommendations.

2. Literature Review

Several studies have been conducted to find out the relationship between human capital development and economic growth in Nigeria. Among such studies, Ogunleye *et al* (2017) used OLS method to investigate the impact of human capital development on economic growth in Nigeria using annual time series data from 1981 to 2015 and using GDP as dependent variable, while Life Expectancy Rate, Total Government Expenditure on Education, Total Government Expenditure on Health, Primary School Enrollment, Secondary School Enrollment and Tertiary School Enrollment as independent variables. Their results showed that Life Expectancy Rate, Primary School Enrollment and Secondary School Enrollment were not statistically significant and they have a negative impact on economic growth. Whereas, Total Government Expenditure on Education, Total Government Expenditure on Health and Tertiary School Enrollment were found to be statistically significant at 5% level and have positive impact on economic growth as indicated by previous studies.

Akaakohol and Ijirshar (2018) investigated the relationship between human capital development and economic growth in Nigeria for the period 1981 to 2015, using unit root test, causality test, Johansen co-integration test and error correction test. Their results showed that there was a long run relationship between government expenditure on education, government expenditure on health, gross fixed capital formation and labour force. While in the short run there is no any significant relationship. They therefore recommended that to achieve economic growth in Nigeria, government should maintain increased investment in education and health sectors of the economy. Also, more encouragement should be given to private sector to invest in education and health so as to promote and sustain the development of human capital in the country.

Okafor *et al* (2016) examined the impact of human capital investment on economic development in Nigeria using OLS method of data analysis. Their results showed that government recurrent expenditure on education, government capital expenditure on education and government capital expenditure on health have a positive impact on GDP per capita in Nigeria. Whereas government recurrent expenditure on health impacted negatively on GDP per capita.. They therefore recommended for increasing budgetary allocation to education and health sectors, as well as a comprehensive health policy with attractive welfare package be created so as to reduce the increasing human capital flight out of the health sector.

Maku *et al* (2019), investigated the relationship between human capital development and macroeconomic performance in Nigeria using ARDL approach. They use annual time series data on GDP per capita, government education and health expenditures, and secondary and tertiary school enrolment rate for the period 1986 to 2015. Using GDP per capita as a proxy for macroeconomic performance, human capital development was proxies by government expenditure on education, government expenditure on health, secondary school enrolment and tertiary school enrolments. Their results showed that human capital development has a negative and insignificant impact on macroeconomic performance in the short run, while only TER has a positive and significant impact on GDP per capita. Their study concluded that human capital development has not been an efficient determinant of the rate of growth in the macroeconomic performance in Nigeria.

Uzoh (2012), examined the relationship between human capital development and knowledge economy in Nigeria. According to him several factors inhibit human capital development in Nigeria. One of such factors is that Nigeria spent less than 1% of its GDP on education in the 1980s and 1990s when compared with Ghana's 4% of GDP and 20% of the budget. There is also the problem of low enrolment in schools. For instance enrolment level attained in Malaysia, South Korea and Singapore are 100%, while in Nigeria it is 60% in primary school, 30% in the secondary school and 40% in the tertiary sector.

2.1 Theoretical Framework

There are numbers of theories that try to explain the importance of education to an economy, which one of them is the human capital theory which was postulated by economists Theodore Schultz in 1961 and was advanced by Gary Becker in 1964. The theory states that education or training of workers are investments that will increase their productivity and level of income and at the same time raises their skills and knowledge level. Schultz (1961) recognized human capital as the important factor for national development, this theory attempts to answer the ‘’why the decision to invest on education?’’ question. (Schultz, 1961 & Becker, 1967) perceive human capital as the way in which education increase efficiency and productivity of individuals by increasing their cognitive skills, in another word, they see it as a stock of economically productive human capabilities which is established through investing in human beings, such type of investment can include; expenditure on education, on-the-job training programs, promotion of health and nutrition.

One of the most efficient measures of measuring human development over the years is the use of Human Development Index called the HDI. It was first introduced by UNDP in its 1990 World Development Report which came into being as a result of the works of AmartyaSen (1998) on development viewed as the ability to make use of what we possess not just mere ownership. The HDI measures development as the end product of three aggregates. That is, long and healthy life, knowledge and a decent standard of living. In the HDI measure, long and healthy life is captured by life expectancy at birth, knowledge is captured by expected years of schooling and mean years of schooling. While standard of living is captured by gross national income per capita.

3. Methodology

This study intends to borrow a model used by Ogunleye *et al* (2017) to find out the relationship between human capital development and economic growth in Nigeria.
The model is written as:

GDP = f(LER, TGEE, TGEH, PSE, SSE, TSE) __ (1)

We now modify the model in relation to our HDI concept explained earlier. Thus,

It can now be specified as:

GDP = $\propto_0 + \beta_1 LER + \beta_2 TGEE + \beta_3 TGEH + \beta_4 PSE + \beta_5 SSE + \beta_6 TSE +$ □_____(2)

Where:

GDP = Gross Domestic Product.

LER = Life Expectancy Rate.

TGEE = Total Government Expenditure on Education.

TGEH = Total Government Expenditure on Health.

PSE = Primary School Enrolment.

SSE = Secondary School Enrolment.

TSE = Tertiary School Enrolment.

$\varepsilon = Error\ term.$

3.1 Method of Data Analysis

Unit Root Test

Unit root test both Adjusted Dickey Fuller (ADF) and Phillips Peron (PP) will be conducted on the annual time series data in order to ascertain the Stationarity of the variables. This will allow us to determine whether there is a long run relationship among the variables of interest in the research or not.

Johansen Cointegration

Co-integration is a technique used to determine the existence of a long-run equilibrium relationship in time series. This study used the Johansen co-integration test because it is based on a multivariate Vector Autoregression (VAR). VAR is a stochastic process model used to capture the inter-dependencies among multiple time series, i.e VAR-based approach allow for all variables to be endogenous in the system and there are no exogenous variables. The VAR based model can be written as:

$LGDP = \beta_0 + \beta_1 LGEE_t + \beta_2 LGEH_t + \beta_3 LER_t + \beta_4 PSE_t + \beta_5 SSE + \beta_6 TSE + U_T$(3)

The Johansen cointegration test is based on the trace test and the Maximum Eigenvalue test upon the hypothesis:

H_0: there is cointegration among variables

Hi: there is no cointegration among variables

The trace test is a joint test on several eigenvalues at the same time. The test statistics is given as

$$\lambda_{trace(r)} = -T\sum_{i=r+1}^{g} In(1-\lambda i) \quad \ldots\ldots\ldots\ldots\ldots (4)$$

where r is the number of cointegrating equations. The maximum eigenvalue test conducts separate test on each eigenvalue. The test statistics is given as:

$$\lambda_{max(r,r+1)} = -TIn(1-\lambda_{r+1}) \quad \ldots\ldots\ldots\ldots\ldots (5)$$

Where r is the number of cointegrating equation

Decision: If LR trace (r) > critical value; the null H_o is rejected, and if LR trace (r) < critical value, no reject

Also in Maximum Eigenvalue

If LR max (r) > critical value; the null H_o is rejected, and if LR max (r) < critical value, no reject

4. Results And Discussions

Data on Nigeria's GDP, Total Government Expenditure on Education and Total Government Expenditure on Health was obtained from Central Bank of Nigeria Data Base. While data on Life Expectancy Rate, Primary School Enrolment, Secondary School Enrolment and Tertiary School Enrolment was obtained from World Development Indicators of the World Bank, which ranges from 1981 to 2020. The raw data on the above variable is presented in appendix 1 at the end of this paper.

Table 1: Summary of Statistics of the Variables

	GDP	GEE	GEH	LER	PSE	SSE	TSE
Mean	34087.79	664.8728	231.5654	48.44625	91.89726	33.21956	8.101347
Median	7648.622	233.0619	111.0342	46.38850	91.81845	29.08569	7.252516
Maximum	154252.3	2969.316	951.3426	55.04200	113.0788	56.20540	15.59630
Minimum	139.3105	3.398465	1.619069	45.63700	57.38922	17.10584	2.326810
Std. Dev.	45875.59	934.8038	293.5291	3.171799	10.80380	9.748037	3.965083
Skewness	1.265728	1.355680	1.188466	0.836464	0.538012	0.794023	0.223059
Kurtosis	3.351861	3.374549	3.066884	2.144365	4.710629	2.684287	1.747503
Jarque-Bera	10.88680	12.48627	9.423803	5.884670	6.806802	4.369276	2.946283
Probability	0.004325	0.001944	0.008988	0.052742	0.033260	0.112518	0.229204
Sum	1363512.	26594.91	9262.618	1937.850	3675.891	1328.782	324.0539
Sum Sq. Dev.	8.21E+10	34080466	3360214.	392.3519	4552.165	3705.945	613.1535
Observations	40	40	40	40	40	40	40

Source: Researcher's Computation Using E-views 9.

Table 1 presents the result of descriptive statistics of the variables employed in the model. It was observed that the mean value of the GDP is 34087.79 which is the highest among the variables while TSE has the lowest mean value of 8.101347. The result also shows that all the variables in the series have positive median values, which shows that the series is evenly distributed. GDP has the highest maximum value of 154252.3, while GEH has the lowest minimum value of1.619069. GDP has the highest standard deviation of 45875.59, while LER has the lowest standard deviation of 3.171799. This shows that the amount of variation or dispersion of the set of values. A low standard of deviation indicates that the values tend to be close to the mean of the set while a high standard deviation indicates that the values are spread out over a wider range. The skewness of all the variables are positive which indicate that the tail of the distri1bution is longer on the right side and the mean is higher than the median and mode. The kurtosis of three variables (LER, SSE and TSE) are lower than 3, hence the distribution of

the series is platykurtic. The Jarque-Bera probability of the series shows that three variables (GDP, GEH and GEE) are normally distributed based on the null hypothesis at 5% significance level.

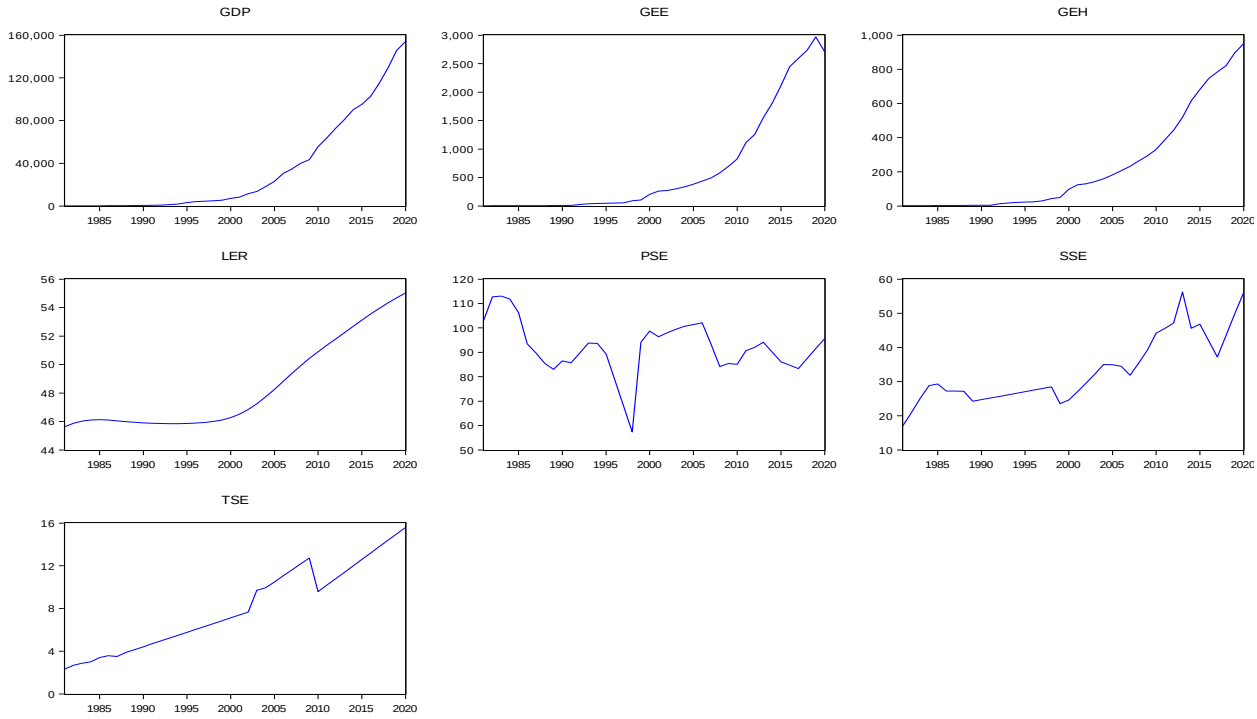

Figure 1: Graphical Presentation of the Variables

Figures 1 above shows the plot of all the variables used in the study. The Figure displays the either upward or downward movement trend for selected variables over the study period.

Table 2: Correlation matrix:

	LGDP	LGEE	LGEH	LGLER	PSE	SSE	TSE
LGDP	1						
LGEE	0.426339281	1					
LGEH	0.377666062	0.9717308	1				
LGLER	-0.570706295	-0.652324128	-0.50266295	1			
PSE	-0.007604835261	0.014645406	0.016367129	0.107635645	1		
SSE	0.0682004002254	-0.066999443	-0.054636515	0.380777201	0.653736108	1	
TSE	-0.383939826 7	-0.122528109	-0.049341694	0.200014998	0.204848979	-0.260531677	1

Source: Researcher's Computation Using E-views 9

4.1 Unit Root Test Results

The results of the Augmented Dickey-Fuller (ADF) unit root tests are presented in Table 2. The result shows that all the variables are non-stationary at level, therefore, we cannot reject the null hypothesis at a 5% confidence level. However, the results show that all of the variables *LGDP*, *LGEE, LGEH*, *LER,PSE, SSE*and *TSE* are stationary at the first difference at a 5% confidence level. This justifies the use of Johansen cointegration techniques since all the variables are integrated to the same order.

Table 3: Stationarity Test Results

	ADF t statistics		PP t statistics		
Variables	**Levels**	**1st Difference**	**Levels**	**1st Difference**	**Decision**
LGDP	0.178995	-3.549490**	-0.656409	-3.468686*	I(1)
LGEE	-1.003172	-2.643388*	-1.271814	-4.709647**	I(1)
LGEH	-0.703068	-2.740972*	-0.960581	-4.632059*	I(1)
LGLER	-3.002129	-3.244496***	-0.780957	-2.221906**	I(1)
PSE	-3.340773	-5.388559*	-2.398835	-5.936524*	I(1)
SSE	-2.016331	-5.557190*	-2.186244	-5.546034*	I(1)
TSE	-2.488398	-6.424303*	-2.488398	-6.445867*	I(1)

Source: Researcher's Computation Using E-views. **Note:** The table reports the ADF and PP tests t- statistics. *, **, *** indicates significant at 1%, 5% and 10% levels respectively.

4.2 Lag Selection Criteria

In VECM the best lag length should be set to ensure that the residuals are Gaussian (serially uncorrelated, homoskedastic and normally distributed). Hence, Table 3 reports the result of the VAR Lag Order Selection Criteria.

Table4: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1165.528	NA	7.91e+18	63.37991	63.68468	63.48736
1	-803.8060	567.0243	3.78e+11	46.47600	48.91415	47.33556
2	-670.2872	158.7791	5.28e+09	41.90742	46.47894	43.51909
3	-529.3239	114.2946*	91639533*	36.93643*	43.64133*	39.30022*

Source: Researcher's Computation Using E-views 9. Note:* 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.

The result indicated that the five selection criterion (LR, EPE, AIC, SC, HQ) selected 3 as the optimum lag length. Note that the lower the lag the better the results. Hence, the optimal lag length for the VAR was 3.

4.3 Johansen Co-integration Test

This test is carried out to determine the existence of long term relationship and co-movement between variables. Its decision rule is to reject the hypothesis about the number of cointegrating equations found if p-values are less than 5% (0.05) and accept if otherwise. The trace and maximum eigenvalue test statistics are used to test cointegration in data series.

Table 5: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.906177	222.1496	125.6154	0.0000
At most 1 *	0.719998	132.2283	95.75366	0.0000
At most 2 *	0.581029	83.85589	69.81889	0.0025
At most 3 *	0.529729	50.79767	47.85613	0.0258
At most 4	0.291448	22.12875	29.79707	0.2914
At most 5	0.210302	9.036555	15.49471	0.3620
At most 6	0.001698	0.064563	3.841466	0.7994

Source: Researcher's computation using E-views 9, Trace test indicates 4 cointegrating eqn(s) at the 0.05 level,
* denotes rejection of the hypothesis at the 0.05 level,
**MacKinnon-Haug-Michelis (1999) p-values

In table 4 above, the trace test indicates that there are four cointegrating equations at 5% level of significance. This means that there is a long run relationship between the variables.The p-value of none (null hypothesis) is less than alpha, 0.0000< 0.05. Therefore we reject the null hypothesis of no cointegration between GDP, LGEE, LGEH, LGLER, PSE, SSE and TSE at 5% significance level. There is significant long run relationship between GDP and the independent variables

Table 6: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.906177	89.92123	46.23142	0.0000
At most 1 *	0.719998	48.37245	40.07757	0.0047
At most 2	0.581029	33.05822	33.87687	0.0624
At most 3 *	0.529729	28.66892	27.58434	0.0362
At most 4	0.291448	13.09220	21.13162	0.4438
At most 5	0.210302	8.971992	14.26460	0.2885
At most 6	0.001698	0.064563	3.841466	0.7994

Source: Researcher's computation using E-views 9
Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Here also, in table 5 above, the maximum eigenvalue test indicates that there are two cointegrating equations at the 5% level of significance. This means that long run relationship exist between the variables. The p-value of none (null hypothesis) is less than alpha, 0.0000< 0.05. Therefore we reject the null hypothesis of no cointegration between LGDP, LGEE, LGEH, LGLER, PSE, SSE and TSE at 5% significance level. There is significant long run relationship between GDP and the independent variables.

Table 7: Normalized Vector Error Correction (VECM) Coefficients

Variables	Vector Coefficients (β)	Error Correction Adjustment Coefficient (α)
LGDP(-1)	1.000000	0.330839 (0.26818) [1.23364]
LGEE(-1)	3.292848	

	(0.86819)	
	[3.79279]	
LGEH(-1)	-4.358369	
	(0.90591)	
	[-4.81101]	
LGLER(-1)	-2.182914	
	(4.64103)	
	[-0.47035]	
PSE(-1)	0.026584*	
	(0.00232)	
	[11.4365]	
SSE(-1)	-0.055260*	
	(0.00551)	
	[-10.0255]	
TSE(-1)	-0.023550**	
	(0.04532)	
	[-0.51962]	
C	0.827708	

Source: Computed Using E-Views 9

( ) and [ ] report values of standard errors and t-ratios respectively.

* indicates significance at 5% levels. **indicates significance at 1% & 5% levels.

Table 7above presents the results of long-run co-integrating vector coefficients of the model, where log of gross domestic product (LGDP) is used as the dependent variable, while log of government expenditure on education (LGEE), log of government expenditure on health (LGEH), log of life expectancy rate (LGLER), primary school enrolment (PSE), secondary school enrolment (SSE) and tertiary school enrolment (TSE) are used as independent variables. An in increase in government expenditure on education by 1% will lead to an increase in GDP growth by 3.3%. This coincides with the results obtained by Otu and Adenugu (2006) andOluwatoyin (2013) whose study found a similar positive relationship between government expenditure on education and economic growth in Nigeria.Increase in government expenditure on health by 1% will lead to an increase in the rate of GDP growth by 4.4%. An increase in life expectancy by 1% will promote economic growth by 2.2%. An increase in primary school enrolment on the other hand has a negative effect on economic growth of 0.03%. On the other hand, increases in secondary school and tertiary school enrolments will have a positive effect on economic growth of 0.06% and 0.03% respectively.

5. Conclusion and Recommendations

The study analyzed the impact of human capital development on economic growth in Nigeria for the period 1981 to the year 2020. Seven variables were introduced for the analysis, which include gross domestic product, government expenditure on education, government expenditure on health, life expectancy rate, primary school enrolment, secondary school; enrolment and tertiary school enrolment. In order to achieve proper analysis of the data, e-views 9 statistical package was used on the on the time series data collected for the study. Using different statistical methods, we were able to determine the impact of human capital development on economic growth in Nigeria.

This study concludes that human capital development has a positive and significant relationship with economic growth over the study period 1981 to 2020 and in the long run. The results reveal that increases in human capital increases economic growth in Nigeria.

In view of the above, the study therefore recommends that efforts should be made by every entity of the economy to harmonize the activities in the educational and health sectors of the economy. This will have a long run effect on the economy. Nigerian government should also increase its allocation to education in its future annual budgets in order to set standards in the education sector.The UNICEF requires governments in the Less Developed Countries to allocate not less than 26% of

their annual budgets to education. Most of the so called Asian tigers have been allocating 46% of their budgets to education. Higher educational funding will mean better educational facilities and infrastructures, higher paid teachers/lecturers, improved working conditions and better educational delivery.

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Appendix 1: Data on Gross Domestic Product (GDP), Government Expenditure on Education (GEE), Government Expenditure on Health (GEH), Life Expectancy Rate (LER), Primary School Enrolment (PSE), Secondary School Enrolment (SSE) and Tertiary School Enrolment (TSE) from 1981 to 2020.

YEAR	GDP	GEE	GEH	LER	PSE	SSE	TSE
1981	139.31	3.40	1.62	45.637	103.0689	17.10584	2.32681
1982	149.05	4.31	2.05	45.867	112.761	21.02671	2.68103

1983	158.75	4.53	2.16	46.023	113.0788	25.17775	2.87149
1984	165.85	4.76	2.27	46.106	111.8358	28.84042	3.01674
1985	187.83	5.00	2.38	46.127	106.283	29.33096	3.41472
1986	198.12	5.25	2.50	46.101	93.49089	27.22324	3.57325
1987	244.68	5.49	2.61	46.048	89.7366	27.20931	3.50603
1988	315.62	6.73	3.21	45.99	85.38942	27.19538	3.88089
1989	414.86	7.49	3.57	45.939	83.04525	24.25362	4.15062
1990	494.64	8.29	3.95	45.9	86.49156	24.72132	4.42035
1991	590.06	9.89	4.71	45.875	85.64646	25.18902	4.69008
1992	906.03	25.48	12.14	45.857	89.70445	25.65672	4.95981
1993	1,257.17	37.09	17.67	45.845	93.81847	26.12442	5.22954
1994	1,768.79	42.97	20.47	45.843	93.60667	26.59212	5.49927
1995	3,100.24	49.65	23.65	45.854	89.30061	27.05981	5.769001
1996	4,086.07	51.13	24.36	45.88	78.66348	27.52751	6.038731
1997	4,418.71	55.38	30.36	45.923	68.02635	27.99521	6.308461
1998	4,805.16	90.78	43.25	45.994	57.38922	28.46291	6.578191
1999	5,482.35	104.15	49.62	46.103	94.1129	23.5518	6.847921
2000	7,062.75	205.95	98.12	46.267	98.6895	24.60941	7.117651
2001	8,234.49	260.17	123.95	46.51	96.37557	27.03358	7.387381
2002	11,501.45	273.22	130.09	46.835	98.00531	29.61322	7.657111
2003	13,556.97	300.57	142.86	47.242	99.46706	32.19286	9.71426
2004	18,124.06	336.66	159.67	47.72	100.677	34.99748	9.93078
2005	23,121.88	383.82	181.61	48.252	101.3651	34.95775	10.49106
2006	30,375.18	437.57	206.59	48.812	102.1081	34.45698	11.05134
2007	34,675.94	491.61	231.72	49.373	93.31004	31.8677	11.61162
2008	39,954.21	580.59	264.21	49.913	84.13864	35.38618	12.1719
2009	43,461.46	694.10	294.09	50.422	85.38784	39.2328	12.73218
2010	55,469.35	826.67	330.96	50.896	85.11785	44.21823	9.572
2011	63,713.36	1,110.72	387.19	51.346	90.67124	45.55653	10.17443
2012	72,599.63	1,252.72	442.94	51.786	92.09114	47.18077	10.77686
2013	81,009.96	1,549.93	518.74	52.228	94.11853	56.2054	11.37929
2014	90,136.98	1,804.40	615.03	52.672	90.10355	45.62404	11.98172
2015	95,177.74	2,116.35	682.70	53.112	86.08858	46.782	12.58415
2016	102,575.42	2,445.95	745.58	53.541	84.72564	42.00254	13.18658
2017	114,899.25	2,590.86	784.80	53.95	83.3627	37.22308	13.78901
2018	129,086.91	2,734.53	821.69	54.332	87.45423	43.51114	14.39144
2019	145,639.14	2,969.32	896.19	54.687	91.54576	49.7992	14.99387
2020	154,252.32	2,707.44	951.34	55.042	95.63729	56.08726	15.5963

Source: Central Bank of Nigeria and World Development Indicators of the World Bank