

**CAPITAL MARKET AND ECONOMIC GROWTH IN NIGERIA: A COMPARATIVE ANALYSIS OF PRE AND POST CENTRAL SECURITY CLEARING SYSTEM FROM 1999 to 2018.****WILLIAMS HARLEY TEGA****REDEEMER'S UNIVERSITY, EDE, OSUN STATE.****EMAIL: harleytega@yahoo.com****AYODELE THOMAS DURO****REDEEMER'S UNIVERSITY, EDE, OSUN STATE.****&****AKINYEDE OYINLOLA M.****REDEEMER'S UNIVERSITY, EDE, OSUN STATE.****Abstract**

This study seeks to evaluate the contribution of capital market to the economic growth in Nigeria using a time series data from 1999 to 2017. The main aim of the study is to investigate if total market capitalization before and after the introduction of Central Security Clearing System in the capital market affect economic growth in Nigeria. To achieve this objective, an econometric model was formulated and an Ordinary Least Square method was used in the study. The annual time series data used in the study were adjusted with the Jarque-Bera test of normality to remove spurious OLS regression result. The findings revealed that market capitalization has a positive effect on economic growth in the post Central Security Clearing System and a negative effect in the pre Central Security Clearing System and the coefficient of determination in the post Central Security Clearing System is very high when compared to the pre. The t-calculated value for Market Capitalization (MCAP) is 0.5895 in the post Central Security Clearing System and when compared with 5% statistical value ( $0.5895 > 0.05$ ), it indicates that the alternative hypothesis should be accepted and also that market capitalization in the post central clearing system affect economic growth in Nigeria.

Keywords: capital market, economic growth, regression, central security clearing system.

**Introduction**

From the year 1999 to 2017, the Nigeria capital market had gained visible strides through the Central Security Clearing System (CSCS) which have enhanced transparency and speedy settlement of transactions in the capital market and thus it positively affect economic growth in Nigeria (NSE report 2018). The Nigeria Capital Market is composed of institutions and mechanisms through which medium and long term funds are combined and made available to individuals, businesses and government. Both private placement sources and organized market like securities

exchange is included as part of the economic growth.

The Central Security Clearing System was commissioned in 1997 and commenced operations in the year 1997. In the year 2012, CSCS became a Public Liability Company (PLC) by a special resolution. Between 2012 and 2018, CSCS facilitates the delivery (transfer of securities from seller to buyer) and settlement (payment of bought shares) of securities transacted on the capital markets (Enisan & Olufisayo (2009)). The CSCS had made it possible for securities to be processed in an electronic book-entry form thereby substantially reducing the period it takes a transaction to commence

and end. This however, has been noted as a great improvement to capital market growth in Nigeria. The establishment of the Lagos Stock Exchange in the year 1960 and its commencement of operations in the year 1961, stand as a significant landmark and cornerstone for the building of the Nation's capital market development.

The Capital Market constituency is made up of individuals, institutions, issuers, operators and regulators. Paramount in the objectives for establishing and developing the market is to enhance capital formation when some resources available during the prevailing period is directed towards the filling of inventories of goods or towards creation of intermediate goods which are intended to be consumed during the prevailing period, so capital is formed by postponing or possibly abandoning consumption (Ogboi & Oladipo, 2012). Up to the year 2018 in Nigeria, the capital market operate to offer enterprises, new and wider opportunities for obtaining funds: Acting as an avenue for exchanging securities at mutually agreeable prices and in the process creating liquidity through its pricing mechanism. Acting as a means of ascertaining the prices of securities, it provides an easily accessible means of efficient trading in securities and as a means of allocating and rationing scarce funds among competing uses and users (Kolapo & Adaramola, 2012). Apart from helping the economy to increase capital formation, it provides the necessary elements in managing financial risks. Indeed, it ensures corporate continuity long after the owners and creates market discipline, improves chances for success and a proof for social responsibility. The Nigerian capital market is a veritable forum where big medium and small (quoted) companies raise medium and long term funds via financial instruments

(equity and debt) while Central Securities Clearing System (CSCS) is an instrument of the Nigeria Stock Exchange for prompt settlement of transaction (Kolapo & Adaramola, 2012).

Over the years, the capital market has grown and expanded to cater for the investment and wealth creation capacity of the government, private sector investors and the general public. It has also served as a measure of confidence and, as an effective economic parameter for measuring the temperature of the economy from time to time with a view to determining necessary adjustments. Consequently, upon its power of pricing mechanism, the capital market provides management with some ideas of the prevailing cost of capital which goes a long way in the determination of the levels and rates of investment in the economy. It has also acted as a reliable medium for broadening the ownership base from erstwhile family dominated firms (Adewuyi & Olowookere, 2011).

Before the year 2018 in retrospect, trading had been very clumsy, fraud prone and unprofessional. It was discovered that the introduction and operation of the CSCS has the capability in aborting, blocking and reduction of fraudulent transactions. The CSCS processes share certificates within 24 hours, thereafter the shares as represented, become eligible for trading on the floor of the Exchange. Thus, the CSCS processes trades and forwards same to the settlement banks for settlement. The introduction of the Central Securities Clearing and Settlement System (CSCS) has enhanced the efficiency of the stock market. Traders are now cleared and settle transactions within a short period compared to the long period prior to the introduction of the new system. With this and the planned automation of the trading system, the Stock Exchange became much

more efficient. Undeniably, the introduction of the new clearing settlement period has improved transparency and brought the stock market in line with internationally acceptable clearing and settlement standards (Yartesy & Adjasi, 2008).

Experiences seem to have shown that the capital market transactions have affect economic growth in all nations because of its transactions in attracting foreign investors in the present and past years as well as creating efficient and effective running of the capital market. In 2018, the volume of transactions in the capital market in Nigeria is estimated to be above trillions of Naira. Market capitalization and the central clearing system were identified by scholars as capital market indicators to economic growth in Nigeria. These two variables are often used by scholars to find the impact of capital market on economic growth in Nigeria. It is on the basis of these challenges that the study is being carried out to examine the contribution of capital market on economic growth pre and post central security clearing system. However, pre and post capital market modeling since the inception of the CSCS have not been in econometric modeling hence there is need for an empirical work to be done in this area. The main objective of the study is to empirically find out if market capitalization affects Nigeria economic growth between the year 1999 to 2018.

### **Literature**

Studies on the capital market have received considerable attention from contemporary finance and economics literature resulting from its role in the provision of long-term, non-debt financial capital which enables companies to avoid over-reliance on debt financing, thus improving corporate debt-to-equity ratio

and also in the mobilization of resources for national growth. According to Ndako (2010), the capital market is viewed as a complex institution imbued with inherent mechanism through which long-term funds of the major sectors of the economy comprising households, firms, and government are mobilized, harnessed and made available to various sectors of the economy. For sustainable economic growth, funds must be effectively mobilized and allocated to enable businesses and the economies harness their human, material, and management resources for optimal output. Consequentially, the capital market is an economic institution, which promotes efficiency in capital formation and allocation. The capital market contributes to economic growth through the specific services it performs either directly or indirectly. Notable among the functions of the capital market are mobilization of savings, creation of liquidity, risk diversification, improved dissemination and acquisition of information, and enhanced incentive for corporate control. Improving the efficiency and effectiveness of these functions, through prompt delivery of their services can augment the rate of economic growth (Okereke-Onyiuke, 2000, McKinnon, 1973).

The capital market is divided into two segments namely, the primary market and secondary market. The primary market is a market where new securities are issued. According to Anyafo (2004), primary market is a segment of capital market where securities are first issued and it is sometimes refers to as the new issues market, securities sold in the primary market being launched into the market for the first time. In other words, it is a market for buying and selling of virgin securities. The Secondary Market is a market for trading existing securities. In other words, Secondary market is a re-sale

market where investors buy and sell previously issued securities which Enisan & Olufisayo (2009) in fact referred to as bend-down boutique. Secondary market including Nigeria stock exchange, the activities of brokers and dealers etc.

Osinubi & Amaghionyeodiwe (2003), provided some evidences that capital market development statistically had no significant effect on economic growth in Nigeria during the period 1980 to 2000. They interpreted the results to mean that the Nigerian Capital Market was unable to make significant contribution to rapid economic growth because of the existence of certain policies that blur the effectiveness of the vehicle or transmission mechanism through which capital market activities influence economic growth. This result confirms the position of Singh (1999) that the capital market might not perform efficiently in developing countries and that it may not be feasible for all African markets to promote capital markets given the huge costs and the poor financial system. Interestingly, the significant growth recorded in most of the exchanges in the region, from 2000 to date, have invalidated the claims made by (Osinubi & Amaghionyeodiwe, 2003).

The neoclassical growth model of Solow and Swan (1957) provide a conventional framework for analyzing economic growth as it seeks to understand the determinant of long-term economic growth rate through accumulation of factor inputs such as physical capital and labour. According to this model, the role of technological change is very crucial, even more important than the accumulation of capital. The neo-classical model of economic growth assumes an aggregate production function which exhibits constant returns to scale in labour; reproducible capital; one composite commodity is produced; output is

regarded as net output after allowance for capital depreciation; labour and capital are paid according to their marginal physical productivities; flexibility of prices and wages; full employment of the available stock of capital; diminishing returns as capital and labour increases. It implies that economies will conditionally converge to the same level of income, given that they have the same rates of savings, depreciation, labour force growth, and productivity growth. The model is given as:

$$Y = f(KL)$$

$$Y = AK^\alpha (L^{1-\alpha})$$

Where,  $K$  = Capital,  $L$  = Labour

The model shows that with variable technical coefficient, there will be tendency for capital - labour ratio to adjust itself through time in the direction of equilibrium ratio. It posits that a long run per capita growth rate depends entirely on the exogenous rate of technological progress. Increase in savings rate will lead to a temporary increase in per capital  $K/L$  and per capita output. However, both would return to a steady-state of growth at higher level of per capita output. Increase in savings rate will lead to a temporary increase in per capital  $K/L$  and per capita output. Savings has no impact on long-run per capita output growth rate but has an impact on long-run level of per capita output.

In recent times, research interests have focused on investigating whether capital markets, especially in developing countries, have achieved the development-oriented goals for which they were originally conceived. The concept of capital market liquidity, for instance, has been used to demonstrate how developments in the securities market transmit to economic growth. This liquidity argument is based on the proposition that capital markets enable firms to acquire much needed capital quickly

and, by so doing, helps in facilitating capital allocation, investment, and growth. It also assists in reducing investment risk due to the ease with which equities are traded and play crucial role in helping to determine the level of economic activities in most economies (Yartey & Adjasi, 2007). Some other major studies that investigated the link between capital market and economic growth are Levine & Zervos (1996), as well as Harris (1997) equally reached similar conclusions that indeed, some definite kind of relationship exists between capital market development and economic growth.

Patrick (2010) studied "An Empirical Analysis of the Impact of the Nigerian Capital Market on Socio-economic Development" In his analysis, he specified that the socioeconomic development (proxy by Gross Domestic Product) is significantly influenced by the capital market indices (market capitalization, new issues, value of transaction and total listing). It was found that the market capitalization and value of transaction had positive but insignificant impact on the GDP whereas the total new issues had a negative influence on GDP. However, the total listing was positively signed and also statistically significant. The findings agree with Ariyo & Adelegan (2005) and Ewah et al. (2009) who found that the capital market in Nigeria has the potentials for growth inducing but have not contributed meaningfully to the economic growth of Nigeria due to low market capitalization, small market size, few listed companies low volume of transactions, low absorptive capitalization, illiquidity.

The review of the literature reveals the existence of many gaps of knowledge in

respect of capital market and economic growth in Nigeria. As per the review of the literature most of the empirical studies that have been conducted with the aim of identifying the effect of capital market on economic growth such as the work of Emeh & Chigbu (2014). Moreover, the literature review also reveals the existence of controversial conclusions that results from different studies made so far. Furthermore, so far as the review of the literature discloses, very scanty work has been done with the objective of identifying the effect of pre and post capital market central security clearing system. The findings of prior empirical studies have provided varying evidence related to capital market effect on economic growth in Nigeria. However, from the empirical literatures above, some studies has proved capital market to be relevant to economic growth while some discredited it. Emeh & Chigbu (2014) opined that the more studies on capital market on economic growth the harder the conclusion.

### Methodology

Multiple regression methodology known as the ordinary least square OLS which may be distilled from the literature. A unique way of conceptualizing capital market and economic growth in Nigeria, pre and post central security clearing system is to analyze variables that are likely to affect capital market and economic growth. To justify this methodology, similar study such as the work of Emeh & Chigbu (2014) used a multiple regression technique to find a linear relationship between the market capitalization and economic growth.

GDP =f (MCAP, TNI, TNS) .....

Rewriting the Model in Linear form

$$LOGGDP_t = \beta_0 + \beta_1 LOGMCAP_t + \beta_2 LOGTNI_t + \beta_3 LOGTNS_t + \mu_t \dots\dots\dots ii$$

Rewriting the Model in Log Linear form

$$LOGGDP_t = \beta_0 + \beta_1 LOGMCAP_t + \beta_2 LOGTNI_t + \beta_3 LOGTNS_t + \mu_t \dots\dots\dots iii$$

Where:

GDP = Gross Domestic Product

MCAP= Market Capitalization

TNI = Total New Issue

TNS = Total Value Of Transaction

$\beta_0$  = Slope of the regression

$\beta_{1,2,3}$  = Coefficient of the variables

U = Error term

**A-priori/ Expectation/Economic Criterion**

This involves theoretical expectation drawn from economic principles and theories of growth. These will be used to determine the a-priori signs and magnitudes of the parameters. As regards the signs of the parameters, the following are expected.

$$LOGGDP_t = \beta_0 + \beta_1 LOGMCAP_t + \beta_2 LOGTNI_t + \beta_3 LOGTNS_t + \mu_t$$

$$f^i(GDP) > 0$$

It is expected that gross domestic product should be positive i.e>1

$$f^i(MCAP) > 0$$

It is expected that market capitalization will have positive impact on economic growth.

$$f^i(TNI) > 0$$

It is expected that total new issues in the capital market will have good impact on economic growth

$$f^i(TNS) > 0$$

It is expected that total values of transactions in the capital market will positively affect economic growth in Nigeria.

$$\text{Market Capitalization Ratio} = \frac{\text{Market Capitalization}}{\text{Real Gross Domestic Product}}$$

$$\text{Total New Issues Ratio} = \frac{\text{Total New Issues}}{\text{Real Gross Domestic Product}}$$

$$\text{Ratio of Transaction at the Nigerian Stock Exchange} = \frac{\text{Transaction at the Stock Exchange}}{\text{Real Gross Domestic Product}}$$

**Analysis of the Pre Central Security Clearing System 1999 - 2007**

$$LOGGDP_t = \beta_0 + \beta_1 LOGMCAP_t + \beta_2 LOGTNI_t + \beta_3 LOGTNS_t + \mu_t$$

**Table 1**

Dependent Variable: LOGGDP

Method: Least Squares

Date: 11/05/18 Time: 05:56

Sample: 1999 2007

Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.77811	1.177574	2.503194	0.0005
LOGMCAP	-0.788073	0.138095	-4.250012	0.0000
LOGTNI	26.75620	0.141272	1.100013	0.0596
LOGTNS	-8.734976	0.100803	-1.070013	0.7992
R-squared	88.79675	Mean dependent var	13.36469	
Adjusted R-squared	87.34391	S.D. dependent var	0.499831	
S.E. of regression	0.253197	Akaike info criterion	0.283836	
Sum squared resid	0.897525	Schwarz criterion	0.481696	
Log likelihood	1.445478	Hannan-Quinn criter.	0.311118	
F-statistic	1.950021	Durbin-Watson stat	1.336611	
Prob(F-statistic)	0.000053			

Source: Eviews7, 2018

### Discussions of Findings.

Table 1 shows the probability of each of the variables used in the model. The probability value shows if the variables are statistically significant or not. It is noted in statistics that a probability value of 0.0000 are statistically significant. The market capitalization (MCAP) shows a probability of 0.0000 indicating that there is a statistical significant probability relationship between the dependent variable GDP and the independent variable MCAP.

From the regression result in table 1, the GDP represent the dependent variable and the independence variables are MCAP, TNI and TNS.

Market Capitalization (MCAP) from the regression result shows a negative relationship with Gross Domestic Product (GDP) of -0.788895. This means that one percent increase in MCAP will lead to a fall in GDP. Ewan et al. (2009) on their study titled 'capital market efficiency and economic

growth in Nigeria' stated that market capitalization is a strong indicator of economic growth. Their study shows that the impact of MCAP on GDP is dependent on the degree of capital market efficiency. To generalize this relationship, this study therefore shows empirically that the relationship between MCAP and GDP is negative. This negative impact may emerge as a result of the observations used in this study. This result negates the findings of Ewan et al. (2009). Total New Issues (TNI) shows positive relationship with GDP of 26.75235. This means that one percent increase in TNI will lead to a corresponding increase in GDP. We can deduced that GDP represent economic growth. In this context where there is a positive relationship between TNI and GDP, there is certainty that as new issues increases in the capital market, there will a positive impact on economic growth.

The model result shows a relationship between TNI and GDP is 26.75235. This indicates a positive relationship. From economic criterion, it is expected that TNI should be positive and thus bring about a positive effect on GDP. Therefore, the result of TNI corroborate with the apriori expectation. In this study, Total New Issues Ratios (TNR) is computed by dividing total new issues by gross domestic product. Total Value of Transaction (TNS). The regression result shows the relationship between TNS and GDP is a negative relationship of 8.734974. This means that one percent increase in TNS will lead to a corresponding fall in GDP. Therefore, it would not be an overstatement to generalize from this empirical analysis that TNS affect GDP. Hussainey et al. (2011), stated that high transaction in the capital market affects economic growth. In the result, the coefficient of determination is very high. It shows that about 88.79 percent of the total variations in GDP are explained by all the independent variables in the model. The adjusted R<sup>2</sup> also indicates that about 87 percent of the total variations in GDP are explained by the functional relationship model. This however, indicates that the

dependent variable and the independent variables are good fit. The F-statistic is significant at 5 percent critical level. It indicates that the joint variations of the model are significant. The F-statistics calculated in the model shows that 1.95002. The F-statistics tabulated is noted to be 1.96. From this statistical analysis, it is noted that the model should be accepted because it is statistically significant to the study.

#### **Test of Hypothesis Using T-Test Derived from the Model Result.**

Capital market capitalization does not significantly affect economic growth in Nigeria.

The variable to be tested here is MCAP and GDP. The reason for the test is to validate the research objective. The P-value or Sig value is compared with that of 5% confidence interval. Since the Sig value above is -4.250012 which is compared to 0.05 i.e . -4.250012<0.05 we reject the alternative hypothesis and accept the null hypothesis that market capitalization does not significantly affect gross domestic product in Nigeria. Therefore, one of the findings of this study is that MCAP does not affect GDP.

#### **Post Central Security Clearing System 2008 - 2017**

$$LOGGDP_t = \beta_0 + \beta_1 LOGMCAP_t + \beta_2 LOGTNI_t + \beta_3 LOGTNS_t + \mu_t$$

**Table 2**

Dependent Variable: LOGGDP

Method: Least Squares

Date: 11/06/18 Time: 11:58

Sample (adjusted): 2008 2017

Included observations: 10 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.321978	3.455275	-0.093184	0.9302



LOGMCAP	0.105356	0.178709	0.589540	0.5872
LOGTNI	2.724220	0.463741	5.874444	0.0042
LOGTNS	-0.872432	0.102756	-8.490352	0.0011
R-squared	0.954899	Mean dependent var	13.83303	
Adjusted R-squared	0.921073	S.D. dependent var	0.195926	
S.E. of regression	0.055043	Akaike info criterion	-2.654535	
Sum squared resid	0.012119	Schwarz criterion	-2.614815	
Log likelihood	14.61814	Hannan-Quinn criter.	-2.922436	
F-statistic	28.22984	Durbin-Watson stat	3.220020	
Prob(F-statistic)	0.003756			

Source : Eviews7, 2018

### Discussions of Findings

Table 2 shows the relationship between gross domestic variable (GDP) and all variables stated in the model. The GDP represent the dependent variable and the independence variables are MCAP, TNI and TNS in the post central security clearing system.

Market Capitalization (MCAP) from the regression result shows a positive relationship with Gross Domestic Product (GDP) of 0.105356 compared to the negative relationship show in the pre central security clearing system. This means that one percent increase in MCAP will lead to an increase in GDP. This study shows that the impact of MCAP on GDP is highly positive, indicating that the higher the positive coefficient of MCAP the better the impact on GDP. Total New Issues (TNI) shows positive relationship with GDP of 2.724220. This means that one percent increase in TNI will lead to a corresponding increase in GDP. We can deduce that in both the pre and post central security clearing system, TNI has positive impact on GDP. Total Value of Transaction (TNS). The regression result shows the relationship between TNS and GDP to be 0.872432. This means that one percent increase in TNS will lead to a corresponding fall in GDP. The

negative impact of TNS still holds in the pre central security clearing system. In the result, the coefficient of determination is very high. It shows that 95.49 percent of the total variations in GDP are explained by all the independent variables in the model of the Central Security Clearing System. The adjusted  $R^2$  also indicates that 92.11 percent of the total variations in GDP are explained by the functional relationship model. This however, indicates that the model is better in the post central security clearing system than in the pre central security clearing system. The F-statistic is significant at 5 percent critical level. It indicates that the joint variations of the model are significant. The F-statistics calculated in the model show 28.22984. The F-statistics tabulated is noted to be 1.96. From this statistical analysis, it is noted that the model should be accepted because it is statistically significant to the study. The Durbin Watson statistics indicate the presence of serial correlation in the data.

Capital market capitalization does not significantly affect economic growth in Nigeria

The P-value or Sig value is compared with 5% confidence interval. Since the Sig value above is 0.589540 which is compared to 0.05 i.e.  $-0.589540 > 0.05$ , we reject the null

hypothesis and accept the alternative that market capitalization significantly affect gross domestic product in Nigeria.

Therefore, one of the findings of this study is that MCAP affect GDP in the post central security clearing period.

Table 3: Abstract of Table 1 and Table 2. (Pre and Post CSCS)

Variables	Pre (1999-2007)	Post (2008 -2017)
MCAP	-0.788073	0.105356
TNI	26.75620	2.724220
TNS	-8.7349	-0.872432
R <sup>2</sup>	88.79675	95.4899
R <sup>2</sup> <sub>ADJ</sub>	87.34	92.10
F-Statistics	1.95	28.23
DW	1.33	3.22
Hypothesis	Accept Null	Reject Null
Hypothesis II	Reject Null	Reject Null
Hypothesis III	Accept Null	Accept Null

Source: Extracted by researcher's (2018).

### Summary and Conclusion.

This study was an attempt to examine the impact of market capitalization on economic growth in Nigeria, utilizing capital market variables such as market capitalization and other variables proxy for capital market variable that are likely to affect economic growth in Nigeria from the period of 1999 to 2017. From table 1.5, we can conclude that capital market can promote economic growth if the central security clearing system is efficiently working. However, due to several problems identified to have prevented the central security system in running before 1999 in the capital markets development and impact on economic growth in Nigeria, its impact would have been clearly seen in 2018. From the result obtained and shown in Table 1.5, market capitalization positively affect economic growth after the introduction of the central clearing system in Nigeria making a great impact in 2018 market capitalization in the Nigeria stock market. It is also important that government should implement policies that will make the central security system more independent and

efficient so as to make the capital market have a positive impact on economic growth in Nigeria.

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## Appendix

YEAR	RGDP	MCAP	TNI	TNS
1999	3,312,240,000,000	2,939,580,000	142224.05	45.0761
2000	4,717,330,000,000	2,645,413,000	107844.16	85.5253
2001	4,909,530,000,000	2,641,723,000	127733.13	161.582
2002	7,128,200,000,000	2,373,940,000	158355.14	13.7134
2003	8,742,650,000,000	13,815,941,000	38740.78	252.140
2004	11,673,600,000,000	15,865,940,000	446438.05	428.140
2005	14,735,300,000,000	22,244,000,000	1300051.93	467.910
2006	18,709,800,000,000	32,830,510,000	2769258.3	789.250
2007	20,940,900,000,000	84,894,570,000	3783990.28	16.9653
2008	24,665,200,000,000	48,062,280,000	3852485.37	2.48800
2009	25,236,100,000,000	32,223,400,000	389497.34	956.436
2010	55,469,400,000,000	50,546,400,000	257046.46	97.0520
2011	63,713,400,000,000	39,028,390,000	268314.4	130.880
2012	72,599,600,000,000	56,205,200,000	284737.33	109.880
2013	81,010,000,000,000	80,609,900,000	291432.15	126.329
2014	90,137,000,000,000	62,766,310,000	324167.67	135.667
2015	95,177,700,000,000	49,973,880,000	333146.56	152.232
2016	102,575,000,000,000	29,792,430,000	387223.91	187.899
2017	103,612,000,000,000	29,812,782,000	383456.41	188.012

Source : stock exchange 2018.

YEAR	LOGRGDP	LOGMCAP	LOGTNI	LOGTNS
1999	12.52012	9.468285	5.152973	1.653946
2000	12.67370	9.422493	5.032797	1.932095
2001	12.69104	9.421887	5.106304	2.208393
2002	12.85298	9.375470	5.199632	1.137145
2003	12.94164	10.14038	4.588168	2.401642
2004	13.06720	10.20047	5.649761	2.631586
2005	13.16836	10.34721	6.113961	2.670162
2006	13.27207	10.51628	6.442363	2.897215
2007	13.32100	10.92888	6.577950	1.229562

2008	13.39208	10.68180	6.585741	0.395850
2009	13.40202	10.50817	5.590504	2.980656
2010	13.74405	10.70369	5.410012	1.987004
2011	13.80423	10.59138	5.428644	2.116873
2012	13.86093	10.74978	5.454444	2.040919
2013	13.90854	10.90639	5.464537	2.101503
2014	13.95490	10.79773	5.510770	2.132474
2015	13.97854	10.69874	5.522635	2.182506
2016	14.01104	10.47411	5.587962	2.273924
2017	14.30182	10.56218	5.567192	2.378123