

Demutualization of Nigerian stock exchange and stock market growth

¹Njogo Bibiana, ²Olowo Samson, ³Obiekwe, Chinelo .J

⁴Olayiwola Oluwasegun

¹Bells University of Technology, Department of Economics, Accounting and Finance, College of Management Sciences, Ota, Ogun State, Nigeria

²Bells University of Technology, Department of Economics, Accounting and Finance, College of Management Sciences, Ota, Ogun State, Nigeria

³Department of Banking and Finance, Michael Okpara University of Agriculture, Umudike. Abia State, Nigeria.

⁴Bells University of Technology, Department of Economics, Accounting and Finance, College of Management Sciences, Ota, Ogun State, Nigeria

Corresponding author: **Njogo Bibiana**

Abstract

This study aimed to examine the demutualization of Nigerian stock exchange and stock market growth. Its main objective was comparing the capital market financial performance before and after demutualization. The research utilized a descriptive research design to examine the objective. It also sourced secondary monthly data of April 2017 to November 2019 for years before demutualization and April 2020 till November 2022 for years after demutualization from the Nigerian capital market annual reports. The variables examined were market capitalization as performance variable. Total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities. Multiple regression analysis was used to analyze the sourced data. Findings revealed that before demutualization, total market equities, total market bond, investment in subsidiary, and total listed securities negatively and significantly influence the capital market development variables of market capitalization. After demutualization, total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities were positively significant in impacting market capitalization. The implication of this finding was that demutualization positively and significantly improves the Nigerian capital market performance. Hence, its adoption is a major boost to the growth of the market. This study added value to the capital market literature by establishing the fact that demutualization would significantly influence stock market indices of market equities, market bond, investments in subsidiary, exchange rate, and total listed securities. Hence, nations looking to sustain its stock market growth can look the way of demutualization.

Keywords: 1.Nigeria Stock Market, 2.Demutualization, 3.Market Growth, 4.Nigeria Exchange Group, 5.Stakeholders

1. Introduction

The capital market is a vital market in any economy. It functions as an economic performance metric and it also drives the economy. The market creates chance of getting new funds in the primary market and also trading old funds through its secondary market, [9]. Hence, capital market efficiency equals economic efficiency.

In the past, most nations' stock exchange were managed as private corporations providing both funds and services to members, [2]. However, recent policy and structural changes as a result of globalization has

boosted competition companies and this has enhanced the capital market expansion and interaction among global investors. Globalization has also led to increased mergers and acquisitions, improvement in capital market technology, for example, modern computerized trading floor, automated clearing system, and introducing Central Depository Company that provided investors with online trading and this has made the presence of traditional capital market questionable, especially in Nigeria, that has little capital, increasing competition, and almost non-existent corporate governance strategy, investors' wealth and confidence in stock exchanges declined. Given this situation, the Council of the Nigerian capital market and the government, enacted several changes to instill confidence in investors. These amendments not only made the NSE demutualization mandatory but also streamlined the corporate governance process, [4].

According to [1], demutualization involves turning a stock exchange from a mutually-owned company to one owned by several people including the general public. Changes in the global financial markets due to globalization were the reason for demutualization. [4] opined that because of technology upgrade and increase in the competitive environment, there have been new strengths, weaknesses, opportunities, and threats and there was the need for the capital market to change ownership format. This has affected the capital market growth metrics like number of quoted firms, number equity market transactions, all-share index, and market capitalization, and also lead to better stock growth decisions

However, literature on demutualization examined only the financial and markets measurements, such as [6]; [1], but demutualization on Nigeria stock exchanges and its effect on stock market growth and the Nigeria economy are still researchable. Hence, this research thus wants to assess the financial performance of the Nigeria stock market before and after demutualization and also, to determine the impact of demutualization on Nigeria stock market growth.

This research is organised as follows; introduction, literature review, methodology, data presentation and analysis and conclusion.

2. Literature Review

2.1 Conceptual Review

2.1.1 Nigerian Stock Exchange

The Nigerian stock exchange is a major participant inside the capital market. The stock exchange provides a platform where buyers and sellers of shares, stocks, government bonds, debentures and other financial instruments can meet in the presence of the exchange participants, [5]; [12]. Therefore, it is a market where investors trade utilizing the help of stockbrokers. The stock exchange provides the needed platforms for corporations plus government to raise funds for different purposes through company shareholders. This would benefit the Nigerian economy and also the general public.

2.1.2 Demutualization

Demutualization involves altering the legal status of a firm from a mutually-owned one to one limited by share. It involves turning a not-for-profit entity to a profit-making one, [11]. In this regard, it is the conversion of the Nigerian capital market from one limited by guarantee to a publicly traded firm owned by shareholders [4]. Put simply, in a traditional system of operating a stock market, a stockbroker must registered to be able to trade, however, for a demutualized market, the stockbroker does not have to be an exchange member before carrying out transactions.

An essential feature of a demutualized exchange is that it separates trading and ownership rights. The subject of demutualization of the Nigerian stock market is not new, as it had been a reoccurring subject as early as 2001. However, it gained significant attraction at the Extraordinary General Meeting of the NSE members on 30th of March 2017. There was a unanimous vote assenting to the Demutualization [1]. By the Demutualization of the exchange the capital market will birth a not-operating holding firm (Nigerian Exchange Group) having three operating subsidiaries: Nigerian Exchange Limited (NGX) responsible with operations of the

demutualized market, NGX Regulation Limited (NGX REGCO) responsible for regulating demutualized exchange and NGX Real Estate Limited (NGX RELCO) responsible for mortgage arms of the exchange.

2.1.3 Reasons of Demutualization

In the early 1990's countries in a bid to make their bourses more efficient and competitive have adopted and taken the model of demutualizing their capital markets. According to [3], there have been different reasons highlighted for demutualization. Whilst the reasons are non-exhaustive, the following appear to be more prevalent:

- **Revenue Generation:** Increased competition and the possibility of listing in multiple exchanges both within region and abroad inevitably leads to a reduction in membership fees, listing fees and transaction fees. This is somewhat foreseeable as the possibility of listing in multiple exchanges which gives more visibility and exposure to prospective investors is most likely to be the preferred choice of broker dealers. In view of this, it is thus inevitable that exchanges will seek to formulate means of generating revenue which has been described to be mainly by transactions and related services.
- **Technological Innovations:** The emergence of technology in capital market operations has garnered competition between exchanges by eliminating barriers and monopolies. Thus, one of the reasons some bourses embark on demutualization is as a result of technological innovations.
- **Operational Structure:** This would be inevitable as a new structure is essential to make the exchange a profitable organization. Furthermore, some exchanges have engaged in demutualization for the purpose of mergers.
- **Competition:** Bourses demutualize in a bid to meet up with ardent competition generated by the possibility of dual listing, alternative forms of trading amongst others. To avoid remaining obsolete, exchanges embrace these new competitive measures to remain a viable business, and one of the best ways of doing this by converting into a profitable entity, [3].

2.1.4 Demutualization Process of the Nigerian Stock Market

Council of the Nigeria stock exchange approved the demutualization thought at an Extraordinary General Meeting held in March 2017. Hence, the Demutualization of The Nigerian Stock Exchange Bill was signed into law on August 2018 by President Muhammadu Buhari. By December 2019, the Securities and Exchange Commission (SEC) consented to the bill and this led to a court-ordered meeting and another EGM in March 2020, where members together agreed to change the market from a non-profit one limited by guarantee to a profit-making, public limited liability firm held by shareholders, [7].

By May 2020, the Federal High Court in Lagos gave an order for the demutualization exercise to continue. This led to the final approvals from SEC and Corporate Affairs Commission ("CAC").

2.1.5 Demutualization Processes

Passage of Resolution by Members of the NSE

By March 2017, members of the capital market passed the needed resolutions empowering demutualization. The members empowered its council team to continue with the process, depending on the available laws, getting members and regulatory agencies' approval. They finally approved the participation of officers like financial advisers, legal advisers, and tax advisers vital to the process.

Demutualization of the Nigerian Stock Exchange Bill

The Companies and Allied Matters Act (CAMA) did not provide laws for the turning of a firm limited by guarantee to a public one. Hence, there was the urgency to create one. Hence, the Demutualization of the Nigerian Stock Exchange Bill ("Bill"), that consented to permit the NSE conversion to a Plc, was passed by Senate on 22 December, 2017 and by House of Representative on 1 February, 2018. By 29 August, 2018,

President Muhammadu Buhari signed off the bill to law (the "Demutualisation of the Nigerian Stock Exchange Act").

The Act specified that after the conversion, the income, assets, properties and liabilities of the NSE shall continue to be managed by the NSE now as a Plc. Also, it exempted the NSE from tax liabilities from the conversion but the NSE would be apt to pay tax on profits as a plc.

SEC approval

SEC gave its permission for the demutualization procedures on 23rd December, 2019.

Court-Ordered Meeting of the NSE

This was held on 3 March, 2020 and members consented to:

- Re-registering the NSE as 'Nigerian Exchange Group Plc by "CAC",
- Transferring of NSE license and assets to Nigerian Exchange Limited,
- Establishing a new subsidiary firm called 'NGX Regulation Limited' to regulate the NSE post-demutualization,
- The authorized share capital of new firm would be N1,250,000,000 rationed into 2,500,000,000 ordinary shares of 50 kobo each,
- Allotting 1,964,115,918 ordinary shares ("Issued Shares") to both dealing and ordinary members utilizing the ratio of 78 to 22 respectively,
- Providing a 'Claims Review Shares' of 40,083,999 ordinary shares. This was 2% of the Issued Shares of the new company and would be allotted to members entitled to shares in the demutualised exchange and,
- Transferring assets of NSE Consult Limited, NSE Nominees Limited plus Coral Properties Limited: old subsidiaries of the NSE: to the Nigerian Exchange Group Plc.

Another extraordinary general meeting was arranged and a Board of Director of the reformed exchange was nominated. OtunbaAbimbolaOgunbanjowas appointed as Chairman and Non-Executive Director while Mr. Oscar N. Onyemawas appointed as the Chief Executive Officer.

Next Procedures

NSE demutualization would boost the exchange's efficiency and competitiveness. The Nigerian Exchange Group Plc would be able to raise finance easily. The demutualization would cause improved investor's participation in the exchange governance process plus the exchange would be of highest corporate governance standard expected of a public firm. The Nigerian Exchange Group Plc would provide profit-tax revenue to the government.

2.1.6 Benefit of Demutualization

There is no doubt that the demutualization of the Nigerian bourse has the propensity to yield fruitful outcomes as it has been described by relevant stakeholders to be a well thought through and carefully implemented process. According to [8], some of the potential benefits of demutualization have been listed to include but not limited to:

- Flexible and improved government structure of the bourse which will foster positive changes in the ever-evolving commercial environment. This is can be made possible due to the separation of ownership rights from trading rights.
- Enhancement of the ability to raise capital. A demutualized bourse would attract investors instead of reliance on donor funding or mutual members.
- It has the propensity to lead to an improved trading platform especially in the bid to be competitive as well as adopt financial innovation, increased financial instruments that are vital for exchange growth.

Table 2.1: Nigeria Stock Exchange VS Nigeria Exchange Group Post Demutualization

NSE today (Pre)	NGX post demutualization (Post)
A mutual firm limited by guarantee, whose shares cannot be quoted nor traded	Enable the implementation of a fair and just transaction process which involved all interested parties in a fair equitable manner
Have no capacity to raise capital	Facilitate fair representation and actualization of the investment needs and interest of the local, foreign, private, public, individual and institutional investors alike
Not competing with global best practice	The NGX structural operation changed from mutual firm limited by guarantee to one limited by shares
	The NGX ownership changed from members to shareholders
	Members were given shares for their membership; (Decouple shares ownership from trading rights for dealing members only)
	Actualize the introduction of new products on the exchange such as options, security, loan, assets-backed security etc.
	Creation of a deeper and more liquid financial market that facilitated the funding of the long-term national development infrastructure project

Source:[8].

2.2 Theoretical framework

2.2.1 Transaction Costs Theory

It was established by Ronald Coase in 1937 to explain a company's presence. Based on the theory, a company simply exists for transaction cost reduction. The transaction costs increase the volume of dealings and boosts the economy. The theory found a company to comprise many contracts that minimizes transaction costs. Also, increasing competition from introduction of technology has reduced transaction costs of trading on capital markets by investors. It has allowed flexible pricing and lowered issues of market manipulation that existed in a mutually owned market. The modern technology and globalization forces have also boosted cross-listing of investors' shares. Hence, responding to the issues of technology and globalization, major stock market have therefore decided to demutualize. This is due to the fact that mutual structures here were expensive plus less appealing to stock market investors and other participants [2].

3. Methodology

3.1 Research design

This research utilized the descriptive research design. It helped in determining how demutualization has impacted on performance of NGX. Hence, the problem in the study was best achieved through a descriptive design. A descriptive design helped the researcher to apply an event study methodology so as to attain objectives. This study adopted and modified the model of [10] to fit the objective of the investigation.

3.2 Population

It comprised the trading activities done on the Nigeria stock exchange as a demutualized company. This was therefore a case study with specific reference to NGX.

3.3 Sample

The Nigeria stock was used for this study and it was in April 2017 till November 2019 years before demutualization of the Nigerian stock exchange and April 2020 till November 2022 years after the demutualization.

3.4 Data collection

The study collected monthly secondary data on stock market growth and demutualization. Hence, data was gathered three years before and three year after demutualization from financial statement of the Nigeria stock exchange. .

3.5 Data Analysis Techniques

The data type was secondary time series data. The sourced data was estimated utilizing the multiple regression technique.

3.6 Model Specification

The model to be used for the research was adapted and modified from the study of [10] and the implicit model form was:

$$MCAP = f(\text{Demutualization}) \dots\dots\dots(1)$$

With MCAP = market capitalization

Demutualization was broken down into total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities. Hence, the new implicit model form was:

$$Mcap = (\text{total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities}) \dots\dots\dots(2)$$

Equation (2) was rewritten in short form as:

$$MCAP = f(\text{EQTY, BOND, SUBY, EXCR, SECU}) \dots\dots\dots(3)$$

Where:

- EQTY = Total market equities
- BOND = Total market bond
- SUBY = Investment in subsidiary
- EXCR = Exchange rate
- SECU = Total listed securities

The explicit model form was:

$$MCAP = \alpha_0 + \alpha_1EQTY + \alpha_2BOND + \alpha_3SUBY + \alpha_4EXCR + \alpha_5SECU + \mu t \dots\dots\dots(4)$$

Variables not in rate form were logged to establish a linear model. The new model was:

$$LMCAP = \alpha_0 + \alpha_1LEQTY + \alpha_2LBOND + \alpha_3LSUBY + \alpha_4LEXCR + \alpha_5LSECU + \mu t \dots\dots\dots(5)$$

4. Data Presentation and Analysis

4.1 Descriptive Statistics

The descriptive statistics was done for both periods before demutualization and periods after demutualization. The variables examined for both periods were log of market capitalization (LMCAP), log of total market equities (LEQTY), log of total market bond (LBOND), log of investment in subsidiary (LSUBY), exchange rate (EXCR), and log of total listed securities (LSECU).

4.2 Descriptive Statistics for Pre-Demutualization Period (April 2017 to November 2019)

The mean was estimated by summing up data figures for a year and dividing by number values of that year. The median was middle number when a data set is arranged in ascending or descending order. From table 4.1

EXCR had the highest mean and median figures of 25.83674 plus 24.03821 respectively while LSUBY had the least mean and median values of 20.12230 plus 12.00000 respectively.

The maximum showed the variable that has the most figure and minimum showed the one with the least figure. EXCR also had highest maximum value of 252.0000 while LSUBY had the lowest minimum value of 0.100000. Standard deviation estimated the variations in data figures. Standard deviation is given as the addition of squared deviations from mean. From table 4.1 LSUBY had the highest figure of 36.89055. Kurtosis shows the flatness or peakness of the data spread. A variable is said to be peaked to normal when its kurtosis equals 3 or exceeds 3, and this is good for the distribution. From the table 4.1, the kurtosis of all the variables were 3 and above respectively to prove that all the variables were peaked to the normal.

Table 1: Summary Statistics

	LEQTY	LBOND	LSUBY	EXCR	LSECU	LMCAP
Mean	23.80987	21.97342	20.12230	25.83674	22.79221	22.79221
Median	20.161391	21.90879	12.00000	24.03821	22.49398	22.49398
Maximum	85.89431	24.77580	28.68632	252.0000	25.46599	25.46599
Minimum	0.020967	18.93561	0.100000	17.24760	19.95212	19.95212
Std. Dev.	12.87345	1.452239	36.89055	2.890816	1.530479	1.530479
Skewness	1.252509	-0.097261	1.061452	-0.337429	-0.009915	-0.009915
Kurtosis	31.38230	2.474818	25.00822	2.539149	2.461882	2.561882
Jarque-Bera	2327.939	1.089591	1398.789	1.957052	1.786370	1.786370
Probability	0.000000	0.039960	0.000000	0.035865	0.040350	0.010240
Sum	232.4024	1340.378	1471.460	1454.041	1390.325	1390.325
Sum Sq. Dev.	9943.550	126.5400	81654.76	501.4089	140.5419	140.5419
Observations	61	61	61	61	61	61

Source: Author’s Computation utilizing E-views 9

4.3 Descriptive Statistics for Post-Demutualization Period (April 2020 to November 2022)

From table 1, LMCAP had the highest mean and median figures of 18.29370 and 18.38282 respectively while LBOND had the lowest mean and median values of 0.116463 and 0.121250 respectively. The maximum showed the variable with the highest value and minimum showed the variable with the lowest value. LMCAP also had the highest maximum value of 20.30164 while LSUBY had the lowest minimum value of 0.009800. Standard deviation is a measure of the variations in a set of values. Standard deviation is given as the addition of squared deviations from the mean. From table 4.2, LSECU had the highest figure of 1.030905. Kurtosis shows the flatness or peakness of the spreads of the series. The variable is said to be peaked to the normal if the kurtosis is 3 or exceeds 3, and this is good for the distribution. From the table 4.2, the kurtosis of all the variables were 3 and above respectively to prove that all the variables were peaked to the normal.

Table 2: Summary Statistics

	LEQTY	LBOND	LSUBY	EXCR	LSECU	LMCAP
Mean	16.80284	0.116463	0.361160	18.21952	16.95493	18.29370
Median	16.92717	0.121250	0.223600	18.38110	17.18731	18.38282
Maximum	17.63724	0.264900	1.872800	19.41179	18.35178	20.30164
Minimum	15.51223	0.016900	0.009800	17.04155	15.13805	16.87788
Std. Dev.	0.664655	0.065899	0.412645	0.713034	1.030905	0.720323

Skewness	-0.407389	0.513500	1.276202	-0.209492	-0.450708	0.345763
Kurtosis	2.859188	2.536658	7.915943	2.673666	2.875279	3.339627
Jarque-Bera	2.456646	1.586769	56.11359	2.418387	2.596937	0.741945
Probability	0.092783	0.052311	0.000000	0.098438	0.072950	0.090063
Sum	504.0851	3.493900	10.83480	546.5857	508.6478	548.8109
Sum Sq. Dev.	12.81124	0.125936	4.938009	14.74409	30.82020	15.04707
Observations	30	30	30	30	30	30

Source: Author’s Computation utilizing E-views 9

4.4 Unit Root Test

The study used the panel unit root test to examine the stationarity of the data. The null and alternate hypothesis for the panel unit root test is:

H₀: There is the presence of a unit root.

H₁: There is no unit root.

The probability values of the Augmented Dickey-Fuller statistics must be less than 0.10 or significant at 10 per cent level of significance to accept the null hypothesis of the presence of a unit root and the data is stationary.

Examining the unit root result in table 4.3, all the variables were stationary at levels and therefore integrated to the order of 0. Thus, we accept the null hypothesis and this made the use of regression analysis possible.

Table 3: Unit Root Test for both Pre and Post Demutualization Periods

Variable	ADF test Statistics for Pre Demutualization era	Probability Value	ADF test Statistics for Post Demutualization era	Probability Figure	Stationarity	Element	Remark
LMCAP	-2.48262	0.0342	6.98319	0.0000	Levels	Trend and Intercept	I(0)
LEQTY	-2.83753	0.0331	8.94291	0.0000	Levels	Trend and Intercept	I(0)
LBOND	-3.58518	0.0002	11.9320	0.0000	Levels	Trend and Intercept	I(0)
LSUBY	-5.79961	0.0000	21.8338	0.0000	Levels	Intercept	I(0)
EXCR	4.35902	0.0000	2.95353	0.0239	Levels	Trend and Intercept	I(0)
LSECU	-2.12882	0.0166	6.47307	0.0000	Levels	Intercept	I(0)

Source: Author’s Computation utilizing E-views 9

4.5 Multiple Regression Result Pre-Demutualization (April 2017 to November 2019)

This technique was used to check if there was a significant impact between the dependent variable (log of market capitalization) and all the independent variables which are total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities.

From table 3, plus checking the coefficient sign, it was evident there existed a positive relation between stock market performance (MCAP) and only exchange rate (EXCR). However, based on the same sign language

under the coefficient series, majority of the demutualization variables of total market equities (EQTY), total market bond (BOND), investment in subsidiary (SUBY), and total listed securities (SECU) had negative relationship with MCAP. The relation nature was majorly negative from the coefficient signs. It implied an increase in any of the independent variables with the positive sign would cause an increment in the dependent variable and vice versa. Summarily, before demutualization, majority of the stock market indices had a negative relationship on stock market growth (market capitalization).

Beyond the nature of the relationship, the regression output also displayed the significance of the independent variable and was utilized to test the hypotheses. Based on the rule of thumb and the significant level of 0.05, the probability value of all the independent variables which are demutualization variables were all significant with probability values of 0.0425, 0.0373, 0.0000, 0.0000, and 0.0000 respectively.

The coefficient of determination (R-squared) of the model under consideration which measures the goodness of fit of the model had a value of 0.79. This indicated that all the independent variables explain about 79% of the variations in the dependent variable (MCAP). After adjusting for degree of freedom, the adjusted R-squared was 0.71 (71%).

Finally, the durbin-watson test was used to show the presence or absence of autocorrelation in the model. Autocorrelation means that all or some of the independent variables are related this makes the regression result spurious. The value of the durbin-watson variable must be estimated at 2 to ensure that there is no autocorrelation in the model. The durbin-watson value of 1.73 is approximately 2 to show that there was no autocorrelation in the model.

Table 4: Pre Demutualization Regression Output (April 2017 to November 2019)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.35871	2.358677	5.663646	0.0000
LEQTY	-0.029117	0.024630	-1.182169	0.0425
LBOND	-0.250439	0.111374	-2.248623	0.0373
LSUBY	-0.871387	0.014736	-59.13392	0.0000
EXCR	0.020091	0.001022	19.64929	0.0000
LSECU	-0.028399	0.000913	-31.11036	0.0000
R ² = 0.79	Adjusted R ² = 0.71	Durbin-Watson Test = 1.73		

Source: Author's Computation utilizing E-views 9

4.6 Multiple Regression Result Post-Demutualization (April 2020 to November 2022)

Table 4 displayed the significance of independent variables and was utilized to test the hypotheses. The coefficient sign revealed that demutualization variables had positive relationship with LMCAP. This showed the importance of stock market demutualization as all the variables had positive relationship with market capitalization. Based on the rule of thumb and the significant level of 5 per cent, the probability value of all the independent demutualization variables were significant in impacting the dependent variable LMCAP with probability value of 0.0000, 0.0000, 0.0000, 0.0000, and 0.0000 respectively. No variable was insignificant.

The coefficient of determination (R-squared) of the model under consideration which measures the goodness of fit of the model had a value of 0.76. This indicated that all the independent variables explain about 76% of the variations in the dependent variable (LMCAP). After adjusting for degree of freedom, the adjusted R-squared was 0.68 (68%).

Finally, the durbin-watson test was 1.98 proving the absence of autocorrelation.

Table 5: Post Demutualization Regression Output(April 2020 to November 2022)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.92181	0.160939	86.50381	0.0000
LEQTY	0.032021	0.001225	26.13454	0.0000
LBOND	0.025096	0.001483	16.92479	0.0000
LSUBY	0.386488	0.006024	64.15610	0.0000
EXCR	0.002045	2.35E-05	86.92252	0.0000
LSECU	0.002778	7.67E-05	36.23147	0.0000
R ² = 0.76	Adjusted R ² = 0.68	Durbin-Watson Test = 1.98		

Source: Researcher’s compilation using E-views 9

4.7 Discussion of Results

The study did a pre and post effect of demutualization on stock market growth. Monthly data was gathered from April 2017 to November 2019 for pre demutualization era and April 2020 to November 2022 for demutualization and post demutualization periods.

For pre demutualization regression output on table 4.4, there existed a negative and significant relationship between major stock market variables of total market equities, total market bond, investment in subsidiary, and total listed securities. Only exchange rate was positively significant. The result means that before demutualization, major stock market indices were moving against stock market growth. There was an inverse relationship between both variables. However, after demutualization, the multiple regression output on table 4.5 revealed a positive and significant relation between all capital market demutualization exponents and its growth. This showed the importance of demutualization to the capital market and how it can help improve the market. Hence, the Nigerian government were right to approve the demutualization act and policy.

5. Conclusion

The study established a linkage between demutualization and capital market development. Several investors know about the workings and regulations of the capital market but fewer studies have been done on capital market demutualization, this was one gap the study highlighted. Demutualization variables of total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities were used as independent variables. The findings revealed that prior to demutualization, total market equities, total market bond, investment in subsidiary, and total listed securities negatively and significantly influence the capital market development variable of market capitalization. Also, after demutualization, total market equities, total market bond, investment in subsidiary, exchange rate, and total listed securities all positively and significantly impact market capitalization. Hence, the research concluded that the importance of demutualization to a boosted Nigerian capital market cannot be overstressed. This was because demutualization would push the competitiveness of the stock market in relation to those in other countries. It would also allow low to middle income earners to become active participants in the capital market, and this would boost its profitability and performance. Hence, demutualization scheme is an avenue for small savers to own investments in the stock exchange and its development is vital to increase the flow of investment funds in the stock market. This would ultimately boost profitability and performance of the capital market.

5.1 Recommendations

- Conferences should be arranged by the regulatory authorities of the Nigerian capital market to the general public on the importance and benefits of demutualization of the capital market.
- Nigerian mutual fund managers should be more proactive while selecting investments and stocks which can generate positive returns for their customers and also achieve a high net equity value for themselves. This would improve the equity of the capital market.

- Based on the significance of demutualization to the stock market, the SEC should reduce entry start-up costs and fees into the capital market to the barest minimum. This would increase both the number of participants in the market and also the number of financial instruments traded, and hence boost profitability of the market.
- Efficient demutualized market supervision must be done by SEC as it would boost the confidence of participants in the fund schemes in Nigeria. This would boost market performance.
- The regulatory agencies should ensure stability in macroeconomic variables especially exchange rates as the variable, alongside demutualization, have a significant impact on capital market development.
- There should be an improvement of financial strength of exchange and post demutualization, this will result in the exchange being better positioned to innovate, embrace stock market changes and meet customers demand, this will also increase value of the exchange and provide it with vital capital and resources required to compete in the global stock and capital market.
- Investment in bond instruments and investment in subsidiary should be encouraged so as to boost market performance.

Reference

1. Abukari, K., Otchere, I., 2020. Has stock exchange demutualization improved market quality?: International evidence. *Review of Quantitative Finance and Accounting*, 55(3), pp. 901-934.
2. Choi, D., Chung, C. Y., Kim, Y. E., Kim, Y. J., Choi, P. M. S., 2020. Sustainable corporate ownership structures and earnings management in the Vietnamese stock market. *Sustainability*, 12(15), 60 - 89
3. El Azza, M. H., 2020. Evaluation of the impact of the demutualization process on stock exchange value, Doctoral dissertation, Cardiff Metropolitan University
4. Harit, P., 2021. From mutual association to demutualisation: A paradigm shift in the ownership and governance of stock exchanges in India. *Asian Journal of Economics and Finance*, 3(2), 289 - 303
5. Ibrahim, U. A., Isiaka, A., 2020. Effect of financial leverage on firm value: Evidence from selected firms quoted on the Nigerian stock exchange. *European Journal of Business and Management*, 12(3), 124 - 135
6. Jain, C., Jain, P. K., Taylor, D. A., 2021. Causes and effects of worldwide demutualization of financial exchanges. *SSRN Journal*, 10(4), 15 - 23
7. Lawrence, S. C., Nzeroogu, D. C., Asiegbu, T., 2021. The journey to 'internationalization' and 'demutualization': The Nigerian stock exchange and the acting of a script from 1985 to 2021. *Uzu Journal*, 8(2), 1 - 9
8. Mbugua, M. N., Waweru, K. M., 2020. Demutualization, member transactions and financial performance of cooperatives in Kenya. *Journal of Management and Finance*, 10(3), 20 - 27
9. Mexmonov, S., 2020. Stages of development of the stock market of Uzbekistan. *Архив научных исследований*, 33(1), 1 - 10
10. Osakwe, C., Anachedo, C. K., Jeff-Anyeneh, E. S., Nwisiyeni, K. J., 2022. Effects of demutualization on stock market performance and economic growth, *International Journal of Advances in Engineering and Management*, 4(10), 108 - 116
11. Rastuti, T. (2022). Principles of appropriateness in the Indonesian insurance legal system: Study on demutualization in the globalization flow. *International Journal of Environmental, Sustainability, and Social Science*, 3(1), 179 - 188
12. Ucheaga, E.G., Omarkhanlen, A.E., Olokoyo, F.O., Isibor, A.A., Ighodalo, B.E., 2020. The role of stock prices cycles in forecasting inflation in Nigeria. *Journal of Management Information and Decision Science*, 23(5), 577 - 589
13. Zulfigar, S. T., 2014. Demutualization of stock exchanges and stock market growth: Broader economic investigation of demutualized Exchanges. *Journal of Economics Finance and Accounting*, 1(4), 1 - 9

Appendix

1. Multiple regression result for pre-demutualization era (April 2017 to November 2019)

Dependent Variable: LMCAP				
Method: Least Squares				
Date: 12/24/22 Time: 15:42				
Sample (adjusted): 2017M04 2019M11				
Included observations: 24 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.35871	2.358677	5.663646	0.0000
LEQTY	-0.029117	0.024630	-1.182169	0.0425
LBOND	-0.250439	0.111374	-2.248623	0.0373
LSUBY	-0.871387	0.014736	-59.13392	0.0000
EXCR	0.020091	0.001022	19.64929	0.0000
LSECU	-0.028399	0.000913	-31.11036	0.0000
R-squared	0.799999	Mean dependent var		24.22516
Adjusted R-squared	0.719999	S.D. dependent var		0.045401
S.E. of regression	5.18E-05	Akaike info criterion		16.68640
Sum squared resid	4.83E-08	Schwarz criterion		16.39189
Log likelihood	206.2368	Hannan-Quinn criter.		16.60827
F-statistic	3534931.	Durbin-Watson stat		1.739603
Prob(F-statistic)	0.000000			

2. Multiple regression result for post-demutualization era (April 2020 to November 2022)

Dependent Variable: LMCAP				
Method: Least Squares				
Date: 12/24/22 Time: 15:54				
Sample (adjusted): 2020M04 2022M11				
Included observations: 24 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.92181	0.160939	86.50381	0.0000
LEQTY	0.032021	0.001225	26.13454	0.0000
LBOND	0.025096	0.001483	16.92479	0.0000
LSUBY	0.386488	0.006024	64.15610	0.0000
EXCR	0.002045	2.35E-05	86.92252	0.0000
LSECU	0.002778	7.67E-05	36.23147	0.0000
R-squared	0.763955	Mean dependent var		23.97194
Adjusted R-squared	0.682971	S.D. dependent var		0.042147
S.E. of regression	1.80E-05	Akaike info criterion		18.79525
Sum squared resid	5.86E-09	Schwarz criterion		18.50073
Log likelihood	231.5430	Hannan-Quinn criter.		18.71711
F-statistic	25098371	Durbin-Watson stat		1.985312
Prob(F-statistic)	0.000000			

Corresponding Email: bonjogo@bellsuniversity.edu.ng, bibiananjogo@yahoo.com,
soolowo@bellsuniversity.edu.ng, olowosamson1@gmail.com, c.obiekwe@yahoo.com,
oluwasegun.olayiwola@yahoo.com