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Impact Of Demutualization On The Performance And Investor Confidence Of The Nairobi Securities Exchange

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Abstract: ***Despite the wave of demutualizing stock exchanges, questions linger whether this process bring about the desired effects of improved liquidity, increased listings, increased efficiency and increased investors participation and confidence especially to a nascent market like Nairobi security exchange. This paper assesses the impact of demutualization on financial and non-financial performance of Nairobi security exchange and investor confidence. A quantitative research was adopted where primary data from investors and secondary data from NSE data service department were collected and analyzed. The results shows drop in financial performance after demutualization, improved non-financial performance and slight change investor confidence. Demutualization nevertheless has improved efficiency in the market and shorten trading cycle through investing equity capital raised in self-listing to trading technologies and infrastructure.***

Keywords: Demutualization. Nairobi security exchange. Market efficiency. Investor confidence.

I. INTRODUCTION

Demutualization calls for conversion of membership rights in a bourse into shares, and in most cases, the issuance and listing of the exchange (Hughes & Zargar, 2006). The primary motivations behind demutualization of bourses are raising capital, improving the efficiency and providing better governance(Aggarwal, 2002). Whether demutualization actually improves efficiency and governance remains a contested issue by authors and practitioners. Demutualized bourses are able to raise capital needed to improve trade operations by issuing shares while governance is improved because the governing bodies of the demutualized organization are independent, more efficient and free to act faster and make better decisions to cope with changes in the competitive environment, hence performing better than mutually owned bourses.

Hazarika (2005), Treptow (2006), Krishnamurti, Sequeira, & Fangjian (2003) and Aggarwal and Dahiya (2006) all support of the idea that demutualization improves performance through inceased liquidity, lower transaction costs and market growth. Mendiola and O'Hara (2004) studied the scientific impacts of demutualization on the performance and valuation of the Deutsche and Euronext bourses and concluded that the demutualization improved the performance of bourses and increased the valuation of the bourses. However, Schmiedel (2002), who observed that mutual bourses still outperformed demutualized bourses, challenged these findings. Steil (2002) and Worthington & Higgs (2006) also disputed the findings in support of demutualization and warned that the profit driven demutualized exchanges might be less efficient and in some instances could be lax in enforcing regulations. They aver profit motive may contradict with the bourses role as a public entity providing a service. This is especially true if the demutualized exchange is still majority owned by its members. Further, a serious conflict of interest may occur when a bourse self-lists because it is still supposed to be the impartial regulator overseeing itself and other competing listed companies.

After regulatory approval from the Capital Markets Authority (CMA), Nairobi security exchange (NSE) conducted the demutualization process and concluded it in

September 2014 to become the second bourse on the continent to self-list, after the Johannesburg Stock Exchange (NSE, 2014). The demutualization process in the NSE, as in other markets, was informed by the assumption that demutualization would enhance the performance of the bourse, rendering it more competitive and drawing investors. This paper seek to investigate whether this is the case on the ground.

The purpose of the study was to investigate the impact of demutualization on performance of the NSE and investor confidence in the market. It was structured to answer the question; Has demutualization of NSE impacted positively on financial and non-financial performance of bourse and investor confidence? The paper is laid down as follows; section 2 reviews empirical literature, section 3 discusses methodology, section 4 presents the findings while the last section offer conclusion.

II. LITERATURE REVIEW

Liquidity is a key ingredient for the success of a bourse in attracting both listings and investors. Issuers would be keen to list their shares on an active and liquid bourse to ensure they get adequate subscription from the public and that their shares attract significant interest and trading activity. Investors on their part prefer liquid bourses as it shall be easy for them to buy or sell shares. An elaborate determination of liquidity would amalgamate the costs linked with trading with the inclusion of time costs and unlikelihood of getting a counterpart and finalizing the trade (Morsy & Rwegasira, 2010). Major technological advancement in the capital market have ensured access to trading is no longer restricted by geographical location. This has enabled trading to move to the more liquid and efficient exchanges as issuers and investors are in a position to operate in international markets as easily as they do in their local markets. Ramos (2006) asserts that as bourses became more competitive, the focus on liquidity increases for brokers and issuers. Small illiquid bourses find it increasingly difficult to compete against larger bourses which were absorbing their trade volumes and thus fail (small bourses) to take advantage of economies of scale (Aggrawal & Dahiya, 2006).

The theory that demutualization increases liquidity is supported by Treptow (2006) who examined 156 securities listed on two markets simultaneously, demutualized and a mutualized New York Stock Exchange, over a period of ten years. The research found that the securities performed better in demutualized bourses, having higher turnovers and liquidity. Besides, demutualized market had reduced trading costs and improved the trading volumes. Krishnamurti et.al (2003) assessed the effect of organizational structures on stock exchanges by contrasting two similar exchanges in India, the Bombay stock exchange and the national stock exchange. The two have diverse structures of ownership. The outcomes of his study showed that the demutualized national exchange had a superior trading cost efficiency compared to the mutual Bombay Stock Exchange despite both sharing the same trading systems and operating hours. This finding on efficiency is supported by Serisfoy (2008) who examined the impact of demutualization by studying the efficiency of 28 bourses with different ownership structures. The researcher first analyzed the individual variances between mutual customer-owned bourses and demutualized publicly listed bourses. The research found that demutualized bourses exhibited higher technical efficiency than mutuals. However, this author found that demutualized bourses exhibited poorer growth than mutual bourses.

The shift from not-for-profit mutual organization to for-profit organization with ownership alienated from trading access enables the exchange to work effectively to pressure from the environment and differently from individual members demands; thus, developing a highly cost-effective, direct and market-focused exchange. While this is beneficial for investors and issuers, Ramos (2006) points out that mutually owned exchanges protect the issuers and investors from the monopoly power of a for-profit bourse which might charge more for their services to raise revenues, hence becoming less cost effective to issuers and investors.

Market capitalization ratio is regularly utilized as metric of share market magnitude. The ratio can be equated to the value of listed stocks divided by the GDP. Based on economic significance, the presumption concerning market capitalization states that the market size is directly associated with the capacity to mobilize capital and diversify threats (Demirguc & Ross, 1995). Market capitalization is essential for bourses because they earn their revenues primarily from listing and trading fees. Therefore, higher market capitalizations and increased listings result in enhanced revenues for the bourses. Demutualized bourses are assumed to have higher market capitalizations as they are capable of attracting more issuers and larger issuers to list (Ahmed, Butt, and Rehman 2011). A research by Nyangara and Mavziona (2014) assessed the effect of ownership structure on bourse performance by making use of data from 50 stock bourses for over two decades (1990-2011). The authors used the Least Squares Dummy Variable (LSDV) regression model to assess the aspect and essence of the correlation between stock exchange ownership structure and performance. They found that exchanges performed better based on turnovers, market capitalization, and listings when they were demutualized.

The enhanced performance attributed to demutualized bourses is brought about by the paradigm shift of the bourses, changing their raison d'être from serving their brokers to serving the market. Lee (2002) argues that demutualization offers the bourses a lot more flexibility to pursue commercial interests by shifting the focus of the exchange from the needs of its members to the needs of the market participants so as to increase revenue streams and maximize shareholder revenues. This revenue would stem from new product offerings, new listings, new technology offering new services and other value creation measures.

Changing member-owned, not-for-profit entities to profit-oriented investor-owned companies, demutualization offers exchanges availability to equity that can be utilized both for investment in the trading technology and infrastructure or for taking part in the proceeding integration of the industry. Improvement in trading technologies enhances efficiency of the exchange and fluidity of market operations. Conversely, mutual entities are unable to tap into the capital markets for capital and they may also find it difficult to penetrate the credit markets on the similar conditions as comparable listed firms. Member owned bourses may find it hard to compete given that the desire and capability of the members to finance growth and technological up-grade could be rather limited. Thus, Demutualization provides an opportunity for bourses to raise capital, unlock value, and upon listing, the shareholders of the exchange can realize this value. Bourse shareholders enjoy a capital appreciation of their holdings and a simple exit mechanism upon listing (IOSCO, 2005). Though compulsive, the above argument has its detractors. Raising capital, it is argued, is more likely a secondary aim, as many exchanges have no need for fresh capital (Kim & Weisbach, 2005).

Investors and issuers also stand to gain when bourses are demutualized. The enhanced operational performance of the bourses attracts issuers to list on demutualized bourses and investors to invest in demutualized bourses. In their research, Lai, McNamara and Tong (2009) examined the wealth impact of demutualization on the IPO of firms by studying the underpricing and stock performance post demutualization. They found that the demutualized issuers possess greater wealth. Based on this study, higher demutualized underestimation has been realized due to the rising demand for players in the market. Aggarwal and Dahiya (2005) studied the impact of demutualization upon stock exchange performance in terms of the returns enjoyed by shareholders in demutualized bourses vis a vis that of mutual bourses. The research found that demutualized bourses had improved performances with respect to shareholder returns and operating performance. Morsy & Rwegasira (2010) examined the effects of demutualization on market efficiency. Their research examined the number of firms listed, overall transactions, domestic market capitalization, increased capital in the domestic market, worth of the listed bonds, aggregate value of the share trading, capital sourced by Initial Public Offerings, turnover speed of domestic stocks, market cap of new ventures listed, the count of bond issuers and bonds listed, mean value of transactions, capital accumulated by the bonds and bonds trading value. The research found that demutualization only improved performance in less than half of those measures, namely, the number of listed firms, overall transactions, capitalization of the local market, aggregate value of stock trading, new capital accelerated by IPOs, and rate of turnover. These results showed that the impact of demutualization on market performance may not be as strong, especially with regards to bond markets.

Some researches have been done on effect of demutualization on performance of listed companies. Hassan et al. (2013) study analyzed three stock exchanges- London Stock Exchange, Hong Kong Stock Exchange and Bursa Malaysia that had demutualized and used stock price performance and operating performance as indicators to measure the performance. He used financial ratios (Return on Profit Margin, Return on Equity (ROE), and Return on Assets (ROA), debt assets ratio and current ratio) as measure of operating performance and found evidence that profitability was enhanced in the three demutualized exchanges. Ali (2012) also found a positive correlation between demutualization and improved financial performance in the National Stock Exchange in India. Islam and Hossain (2015) study also used ROE, ROA among other performance measures to study financial performance of the London Stock Exchange and the Hong Kong Stock Exchange before and after demutualization. This research found that demutualization had improved the financial performance of the bourses.

The corporate strategies of mutual and demutualized bourses are patently distinct due to their different objectives. The fast changing environment in which bourses operate requires a strategy that engenders flexibility and adaptability with changes in their environment. This puts demutualized exchanges at an advantage due to their less rigid structure. Martin (1997) has similar findings as he suggests the examination of internal and external corporate strategy in the study of company performance. The internationalization and deregulation of bourses significantly opened up competition in the industry, leaving mutual bourses at a disadvantage as compared to their demutualized counterparts. This sparked changes from mutual to demutualized structures as bourses sought to become more responsive and adaptable in order to survive and compete in their fast paced and fluid industry (Fitzgerald et al., 1991).

According to Hart and Moore (1996) the fact that the members of a bourse would be more homogenous in nature was another reason for mutual ownership. Members were all stockbrokers, so decision making would not be a long arduous process as the members were likely to have had similar interests and were often competitors. Also, the fact that members had equal governing rights ensured that members were protected against any unfair actions in the market. Flexibility and responsiveness are forfeited in mutual bourses because of the need to have consensus in their decision making, which might be difficult to attain due to the vested interests the brokers have in the operations of the bourse. In this respect, demutualized bourses are seen to be much more adaptable and they are able to make faster decisions as the decisions made by the board are representative of shareholders who are not necessarily members as it is for the mutual bourses (Aggarwal, 2002). Demutualization gives bourses the flexibility to carry out consolidation and restructuring (IOSCO, 2005). Serifsoy and Tyrell (2006) argue that the need for exchanges to be more responsive and adaptive in order to survive in the changing environment. Demutualization would therefore be necessary to facilitate better governance.

Investors need the implementation of rigorous corporate governance rules to make sure that there is improved business performance. That includes the Board of Directors and important committees, the reporting and financial filing pre-requisites for the exchange – incorporating yearly reporting or self-assessments rendered to the regulator and extra disclosure to shareholders concerning the regulatory events. There are studies in the literature that associate corporate governance to the entity's value or its operation. The public interest and duties of the exchange develop unique corporate governance needs. Due to the nature and composition of their boards and committees, demutualized bourses have better corporate governance than their mutual counterpart (Morsy & Rwegasira, 2010). Bourses must work to embrace an effective corporate governance rules and regulations of the institution. The fundamental rules of corporate governance are set up by the exchange. The revelation of these rules requires a neutral corporate governance function that assures compliance and a non-biased and well constituted board of directors, which by nature demutualized bourses are much more likely to have than mutual bourses (Strenger, 2004). In this vein, mutual bourses have real challenges when it comes to good corporate governance. Primarily because they are owned by members and run for their benefit, decision making is a cumbersome affair as the interests of a member may be odds with the interests of the bourse, the investing public and sometimes even the other members. The result is lethargic and laborious decision making process. This is detrimental to the performance of a bourse. A sharp board with lesser committees and a skilled approach to management of the organization rather than looking after members' interests may result in streamlining of the decision-making process. This is easily achieved in a situation where the bourse is demutualized as the board is constituted by the representatives of the shareholders, and not the members. Shareholders rely on the directors for proper governance of the firm. Thus, the institution is supposed to adhere to effective policies and procedures in selecting the board of directors and making sure they abide by the international policies. Investors and shareholders anticipate their organization to give them sufficient access to data, financial results and full reports of annual shareholders. They also need utmost disclosure of inter-institutional and associated party transactions (Peralta, 2006).

Demutualized exchanges stand the risk of failing or going out of business if either the issuers prefer other avenues to raise capital or investors find that their holdings are illiquid. This risk pushes bourses to be more aggressive in their pursuit of profit and maximization of shareholder value, introducing a danger of bourses overlooking their regulatory and supervision functions. In cognizance of this, many bourse supervisory bodies have allowed bourses to operate as Self-Regulatory Organizations (SROs) charged with setting trading rules, carrying out surveillance and enforcing the rules, preventing abuses of the market and establishing and enforcing membership rules. The SRO function of exchanges operates as a quasi-independent arm, allowing it the objectivity to supervise itself. This is important in solving the conflict of interest inherent in both demutualized and mutual bourses (Aggrawal, 2002).

The ability of bourses, mutual and demutualized, to develop and enforce regulatory standards has remained a contentious issue. As securities exchanges globally demutualize and change from not-for-profit mutual firms to for-profit, investor owned companies, the issue surrounding their regulatory functions persists. Several exchanges are now being publicly traded firms and are listed on the exchange, creating a further layer of complexity to the issue. Mutualized exchanges are automatically subject to a misunderstanding since the decisions of the exchange could affect the trading interests of members, individually or collectively. So their ability to protect investor interest and enforce rules is viewed with suspicion. Worse still, cases of trading members bestowed with regulation trying to derive benefits from their position are not uncommon. Institutional and foreign investors are wary of trading in markets where enforcement is perceived to be lax. A demutualized exchange with the management free to decide on operational issues is perceived to be a lot more effective and fair in enforcement as they are in a better position to fulfil their regulatory responsibilities (Morsy & Rwegasira, 2010).

Investor confidence is a subject that is important in the stock market or securities exchange markets. Public confidence in the securities market relies on the capacity to give securities and not withholding crucial information from public security holders (Dante, 2004). Demutualization may facilitate the changes necessary to improve standards of self-regulation and increase investor confidence. According to Abukari (2015), demutualization signals to market participants that the exchange is a transparent organization. This signal of transparency bolsters the confidence of issuers and investors in demutualized stock exchanges. Abdel-Hafez (2015) confirmed that the transparency of demutualized exchanges also increases the confidence of domestic and international investors.

Rasul (2013) study on the challenges facing the Dhaka stock exchange could be attributed to the absence of demutualization. Resul attributed the lack of transparency and capacity in the Dhaka stock exchange as contributing to the loss of investor confidence. According to Bitok, Kiplanagat, Tenai and Rono (2010), investor confidence is the perception that the market is stable and operating in the manner that is expected. Access to relevant and timely information is critical in molding investor attitudes as information enables them to deal with changes in the markets.

Rahim and Ahmad (2016) see investors' confidence as the anticipation of expected share market stability. Information is essential for investors who would like to prepare for any shocks or volatility in the stock market. Transparency and adequate information are key for investors seeking to bolster their positions in the markets in anticipation of any changes in the market. In Kenya, Kajuju (2010) conducted a study on the perceived benefits and challenges of demutualization of the Nairobi Stock Exchange. The study found that demutualization would bring benefits to the NSE such as improved corporate governance, restoration of investor confidence brought about by increased transparency and unlocking the potential of the capital markets and the economy at large. Study participants further cited that demutualization would lead to greater investor participation.

A survey conducted by BTA Consulting to determine the objectives behind exchange demutualization cited attracting new investors to meet the capital requirements for modifying a trading system as significant objective of demutualization (Hammad et al., 2015). Ali (2012) conducted a study on effect of demutualization on the financial performance of the financial and investment firms quoted at the NSE. The study concluded that enhanced performance of the National Stock Exchange in India due to demutualization will mean enhanced confidence amongst the investors. In Pakistan, Ahmed et al. (2011) found that demutualization can as well aid an exchange to draw more listings. Reliable and efficient system of a demutualized exchange can enhance the confidence of other firms. In India, Bhoopal and Prabakaran (2015) also showed how operational improvements in stock exchange had resulted to investor confidence.

III. METHODOLOGY

The study used descpritive research design. Cooper and Schindler (2008) present a descriptive research as an approach associated with answering questions of what, where and how of a phenomenon. The phenomena in this study is demutualization, whose impact on performance of the exchange and investor confidence is being sought. Primary data was collected from individual investors in the market who regularly traded pre and post demutualization of NSE through use of questionnaire while secondary data was obtained from NSE data services department. Descriptive and inferential tools were used to analyse data using approaches adopted by Karmel (2000) and Ahmed, Butt, and Rehman (2011

IV. FINDINGS

Analysis of equity turnover in the market pre and post demutualization shows a steady rise in turnovers peaking in the demutualization year, 2014, at KShs. 215.73 Billion. After this, the turnovers show a sustained slump through to 2016.

	Full Year 2011-2016 (KES Millions)					
	2011 FY	2012 FY	2013 FY	2014 FY	2015 FY	2016 FY
Equity Turnovers	77,999.16	86,795.16	155,751.24	215,726.94	209,381.86	147,178.30

Table 1: Equity Turnovers Before and After Demutualization

Karmel (2000) and Ahmed, Butt, and Rehman (2011) used listings, market capitalization and revenues as indicators of financial performance of bourses pre and post demutualization in their research. This research employed the same variables and reported following findings in table 2. The table shows revenues rose steadily from 2011 to 2014, peaking at KShs. 821 Million in 2014, after which the revenues dip to KShs. 717 Million in 2016 shows a steady upward trend in the number of listings from 2011 till 2014 reaching a high of 65. Listings then see a dip to 63 due to de-listings, then a recovery back to 65 listings in 2016. Profitability as proxied by ROA and ROE of the bourse also dropped post demutualization as shown in table 3.

	Full Year 2011-2016 (KES Millions)					
	2011 FY	2012 FY	2013 FY	2014 FY	2015 FY	2016 FY
Listings	60	60	61	65	63	65
Revenues	338.97	384.33	622.71	821.90	808.26	717.79
Market Cap.	868,241.59	1,272,002	1,920,718	2,316,320	2,053,520	1,961,917

Table 2: Listings, Revenues, Market Capitalization in NSE

	Full Year 2011-2016 (KES Millions)					
	2011 FY	2012 FY	2013 FY	2014 FY	2015 FY	2016 FY
ROA	18%	10%	36%	19%	16%	9%
ROE	20%	17%	23%	21%	17%	10%

Table 3: ROA and ROE of NSE Before and After Demutualization

Correlation analysis on the performance of equity turnover, listings, revenues and market capitalization before and after demutualization shows a positive association between listings (r= 0.937) and the dummy variable (before and after demutualization) and this was significant (p value = 0.006). Revenues were also found to have a positive association with demutualization (r= 0.872; p value = 0.023). Market Capitalization and Turnovers also showed positive correlations with demutualization, however, these were not significant.

		Equity turnover	Listings	Revenues	Market Cap.	Dummy
Equity Turnover	Pearson Correlation	1				
	R^2					
	Sig. (2-tailed)					
Listings	Pearson Correlation	.754	1			
	R^2	.568				
	Sig. (2-tailed)	.083				
Revenues	Pearson Correlation	.967	.867	1		
	R^2	.935	0.752			
	Sig. (2-tailed)	.001	.025			
Market Cap.	Pearson Correlation	.936	.818	.964	1	
	R^2	.876	.669	.931		
	Sig. (2-tailed)	.006	.004	.002		
Dummy	Pearson Correlation	.785	.937	.872	.759	1
	R^2	.617	.878	.759	.576	
	Sig. (2-tailed)	.064	.006	.023	.080	

Correlation is significant at the 0.05 level (2-tailed).

Table 4: Correlations for Listings, Revenues and Market Capitalization in NSE before and after demutualization

Correlation analysis between ROA and ROE revealed demutualization has not had any significant effect on the ROE and the ROA at the Nairobi Stock Exchange. A negative and insignificant correlation between ROA (r= -0.375 and p value = 0.464) and the dummy variable (before and after demutualization) and ROE (r= -0.480 and p value =0.335) and the dummy variable (before and after demutualization) were found in both cases.

		ROE	ROA	Dummy
ROE	Pearson Correlation	1		
	R^2			
	Sig. (2-tailed)			
ROA	Pearson Correlation	.788	1	
	R^2	.621		
	Sig. (2-tailed)	.063		
Dummy	Pearson Correlation	-.480	-.375	1
	R^2	.231	.141	
	Sig. (2-tailed)	.335	.464	

Correlation is significant at the 0.05 level (2-tailed).

Table 5: Correlations of ROA and ROE

On the impact demutualization had on non-financial performance of the NSE, investors responded their participations and involvement in the bourse is still low despite demutualization. Findings on increased access to the market after demutualization are inconclusive though there was notable increase and expansion of trading technologies and infrastructure in the market. Management structure improved and trading cycle shorted with demutualization. Investor confidence improved though access to information relating to listed companies did not improve significantly. These findings are summarized in table 6 below

	Strongly Disagreed	Disagreed	Neutral	Agree	Strongly Agree
Demutualization Increases Involvement of Non-member Stakeholders in the NSE Affairs	32%	15%	18%	22%	13%
Demutualization Improves Access to Market Data at the NSE	23%	21%	10%	12%	34%
Demutualization Improved NSE Trading Technologies	8%	10%	13%	25%	44%
Demutualization Improved the Management Structure of the NSE	19%	22%	12%	24%	23%
Demutualization Shortened Trading Cycles at the NSE	24%	29%	33%	8%	6%
Demutualization Enhanced Innovation Processes at the NSE	7%	6%	20%	30%	37%
Demutualization Enhanced NSE's Regulatory Abilities	26%	19%	20%	15%	20%
Demutualization Improved Listing and Admission Process at NSE	30%	21%	21%	16%	12%
Demutualization Eased Entry of New Member Firms Entry in NSE	27%	21%	18%	15%	19%
Demutualization Increased NSE Responsiveness to Stakeholders	25%	25%	19%	10%	21%
Demutualization Increased market Liquidity at the NSE	15%	9%	18%	27%	31%
Demutualization Increased Investor Activity	11%	11%	25%	17%	36%
Demutualization Improved Investor Access to Listed Companies' Information	22%	20%	39%	11%	8%
Demutualization Improved Investor Confidence in the NSE	14%	13%	18%	22%	33%

Table 6: impact of demutualization

V. CONCLUSION

In summary, demutualization of NSE has had mixed impact in the market. Dropping of ROE and ROA reveal a negative financial impact. Investors have not had a significant participation in running the exchange possibly because the brokers still hold the controlling stake in the market. However, they have a better trading technologies and shorter trading cycle though there is still room for improvement to make exchange more efficient for investors. NSE remains relatively unresponsive to stakeholders (other than brokers) in the market and access to listed companies information remains a challenge.

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