



DEMUTUALIZATION OF STOCK EXCHANGES AND STOCK MARKET GROWTH: BROADER ECONOMIC INVESTIGATION OF DEMUTUALIZED EXCHANGES

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ABSTRACT

Stock exchanges are traditionally considered as “Brokers club” which inconsequence tarnishes the image of these markets in mind of the people. The advancement of the technology and media explosion have broader the wisdom of business in the field of the stock market. The demutualization is process where any shareholders become the member of company and receiving a mark able response in some countries of the world. The purpose of the study was to investigate whether demutualization lead to better stock market performance of the stock exchanges in all level of economies or for specific? Sample of the study was comprised of thirteen stock exchanges. The data of the study was collected from WFE website for each five years before and after the demutualization. Wilcoxon sign rank was used to evaluate the empirical data regarding the stock market growth of the stock exchanges after the demutualization. Wilcoxon sign rank test showed that stock exchanges are performing better in all level of economies after the demutualization in many dimension except in no of transactions in low level economies. The recommendations of the study are quite helpful for formulating policy of demutualization in Pakistan. The scope of the study can be extended to the other countries of the region and especially the developed countries where demutualization is being exercised.

JEL Classification

G30, O50, F62,G18

1. INTRODUCTION

Stock exchange is an important institution of the economy. It plays dual role; on one hand it acts as a barometer of the economy and on the other hand it derives the economy. Therefore efficiency of stock exchange in broad term is the efficiency of the economy. The operative efficiency of the stock exchange depends on the regulatory, supervisory and organizational setup of the stock exchange (Serifsoy & Tyrell, 2005).

The internal structure of stock exchange consists of cooperative structure of governance of its members and members are also its customer who enjoy the rights of ownership and make decision democratically, on the condition of one member one vote base, to facilitate the members of stock exchange only (status quo) and ignore the interest of public and economy of the country. This is the major weakness of the mutually owned stock exchange. It creates conflict of interest between members and public of the country. Similarly before the demutualization stock exchanges were owned and controlled by the broker and these were seem to be property of broker and club of the broker (Akhtar, 2002).

The strategies, working constitution, means of trading and models of business have been changed due to globalizations and network economy. Introduction of alternative trading system (ATS) like in Pakistan Central depository Company, integration of the firm, portfolio flows and cross boarder listing (Doidge, 2004) created the position of mutual stock exchanges as market facilitator and market regulator questionable (Akhtar, 2002). It was compulsory for the stock exchanges for survival in global competitive market and dynamic business atmosphere to change their status from mutual or club of broker to democratic corporate governance structure. Demutualization is process which lead to change in the governance structure of stock exchange from mutual (one vote per member) to demutualized firm where One vote per share (Akhtar, 2002) and from not for profit organization to profit motive organization. At the start of 1990s, around the world mostly stock exchanges shifted their business from not for profit organization to profit organization, to retain their customers and achieve maximum fund through initial public offering for acquisition of advance technology which lead to gain optimal level of profit for long run survival in Market (Tahir & Sial, 2013). It was investigated in previous researches about the demutualization and its impact on financial performance through different dimensions in different region and different economy like developing and emerging economy (Tahir & Sial, 2013) and developed economies (Isaac & Erin, 2010), but demutualization and its impact on stock market growth (public interest) in different economies are still open for further verification. Current study focal point is to investigate whether demutualization is fruitful for all economies in term of stock market performance or it is specific for some economies.

2. LITERATURE SURVEY

The demutualize stock exchanges are those stock exchanges which convert their status from mutual, guarantee limited or member owned organization to share holder owned or public limited company. Akhtar (2002) defined the demutualized stock exchanges as "Demutualization, in the strictest sense, refers to the change in legal status of the

exchange from a mutual association with one vote per member (and possibly consensus-based decision making), into a company limited by shares, with one vote per share (with majority-based decision making)". It shows that demutualized stock exchanges are those stock exchanges which are owned by share holders, having the status of Public limited, one vote per share and having the share capital. According to Aggarwal (2002) corporate governance is the biggest advantages of demutualization.

It can be define as a set of processes, customs, practices, policies and laws which has direct effects on the ways of an organization's working. Literature supports this argument that demutualization does help an exchange to improve its corporate governance (Williamson, 1999; Steill, 2002). Demutualization brings sustainability to stock exchanges by reforming their governance (LSE, 2007) as the ownership rights have been separated from trading rights. It also increase the role of non- member stakeholders in the affairs of the exchange. Duties of Management and Board have been clearly define. Management is supposed to be in the hands of professional people selected by the directors to looks after the day to day management of the exchange. Board of Directors (BODs) is also separated from Management and do not interfere in their working. This would result in lucidity, effectiveness and sovereignty (IOSCO Emerging Markets Committee, 2004). Demutualization in its many forms has become a pervasive authenticity, one with growing demand in emerging market countries (Elliott, 2002). It refers to the amendment in legal standing of the exchange from a mutual association with one vote per member, where decision making is consensus based, into a company limited by shares, with one vote per share with majority-based decision making (Akhtar, 2002). It is a step towards initial public offering (IPO) of the company. Demutualization is the process of corporatization of a stock exchange, where an exchange previously a company limited by guarantee converts into a public limited company which issues shares to general public in order to raise capital. Demutualization is not a new term for stock markets, as in 1993 world's first exchange, Stockholm Stock Exchange went through the process of demutualization very successfully. Many researchers examine the reasons or factors behind demutualization and they are agreed on two main factors: globalization and information technology (IT) (Williamson, 1999; Akhtar, 2002; Serifsoy, 2005). Another advantage of demutualization is it provides the ways to increase economic resources. After demutualization stock exchanges can raise capital from many sources as normal for profit organization. Most significant resource of income would be new share holders, institutions and individuals. Research has shown that demutualization increases the capital and income of an exchange as compared to a mutual exchange. A demutualized exchange can have funds from conventional lenders such as banks. Whereas mutual stock exchanges have to rely on their guarantor for finances. To borrow from a bank, stock exchanges have to improve their fiscal policies in order to augment the trustworthiness of the exchange which intern enhances the corporate governance. In addition to the advantages discussed above, access to human capital is also an important outcome of demutualization. High-quality governance structure and access to economic capital help exchanges to magnetize better competent human resource (Faina and Lopez, 2006). There are also some corns of demutualization apart from many benefits. Demutualized exchanges may face Conflict of interest e.g., separation of ownership and management may result in such conflict. Management takes decisions which are not in conflict with their position in the organization. Further, after

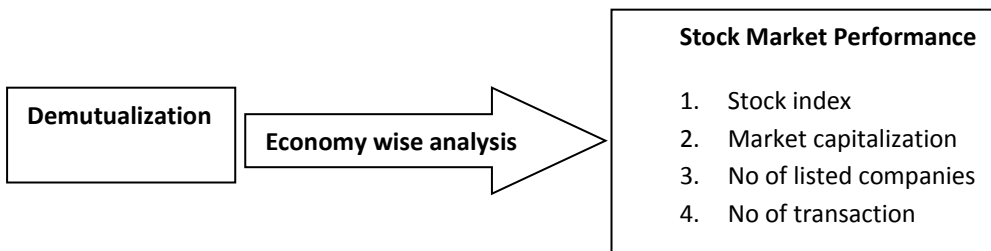
demutualization these exchanges went on to form coalitions with other exchanges around the Globe to give better services to their shareholders. Demutualization helped them in providing a platform and their better and timely initiative assisted them to grow in the global market. Like SGX went on to form an alliance with Japan, NASDAQ and Australia. These alliances helped them to run successfully, globally (Akhtar, 2002).

Demutualization do not only provide the effective governance structure to the stock exchanges it also provide the opportunity to the exchanges to raise the funds from general public through initial public offering and also initiate interest of the investors in the stock exchanges trading and activities which improve the performance of the stock exchanges in the term of financial performance and also market performance (Akhtar, 2002). This term was to begin with used for the conversion process of insurance companies only but later evolves into a more broad term. Demutualization has been happening at a faster rate in many industries since the 1980s (Chaddad, 2003). Financial exchanges, insurance companies, savings and loan associations and agricultural cooperatives have converted to publicly listed companies. Financial Exchanges have diverse ownership structure, state owned, limited by a guarantee (Dinoia, 1999). In other words, the major customers of the services provided by the exchange-financial intermediaries, issuers of listed companies, brokers, dealers and 450 Afr. J. Bus. Manage. It is observed that market capitalization, number of listed companies and governance structure perk up when the stock exchanges become for profit organizations (Karmel, 2000). The research also supports listed companies, corporate governance and market capitalization increased when a mutual exchange move towards becoming demutualized one. Many stock exchanges around the world have gone successfully through this process after the first stock exchange demutualized in 1993 (Serifsoy, 2005).

3.DATA AND METHODOLOGY

Demutualization is basically changed three aspects of stock exchanges such as change in ownership, objective and corporate governance structure of stock exchanges. Akhtar (2002) defined the demutualized stock exchanges as “Demutualization, in the strictest sense, refers to the change in legal status of the exchange from a mutual association with one vote per member (and possibly consensus-based decision making), into a company limited by shares, with one vote per share (with majority-based decision making)”.

Figure1: Theoretical framework of the study



According to (Andrew M., 2002) the equity capital is capital which is raised by the issuance of equity share to shareholders who are the owner of the company through initial public offering is called the equity capital or common stock. The capital market starts with the first step of listing of the company on the plate forum which is provided by the stock exchanges for the raising of the equity capital from general public. According to (Naacke, 2005) the performance of the stock market is measured through the followings determinants.

1. Number of the listed Companies
2. Number of the transaction in the equity market
3. Stock index
4. Market capitalization

Number of the listed companies in the markets indicates that size of the market. It also shows the interest and confidence of the investors on the market supervisors. It also indicates that investors are interested in the trading in the market. Listing of the company in the stock exchanges is also indicating the health and soundness of the market.

Broad indexes are, in general, market capitalization-weighted, including a large sample of listed domestic companies, as the all-share or composite indexes. They are generally recalculated to adjust to capital operations and to modifications in the company composition of the index. The index can be market capitalization-weighted or free float based. (Business Dictionary.com, 2010).

Number of the transactions in equity share explains that how much amount of the transactions is made in the capital market. It shows the market worth in the specific region. Number of the transactions shows that trading of the share in the market. It also shows the circulation of the share around the seller and buyers.

Market capitalization is term which shows the strength and magnitude of the stock market. The market capitalization shows that how much the stock exchange is large and strong (Andrew M., 2002). The market capitalization is calculated by the total number of issued shares of domestic companies, including their several classes, multiplied by their respective prices at a given time.

This study is non-contrived (non-experimental), comparative (Before and after demutualization analysis), cross-sectional (different sections like economy wise analysis) and one-industry (Demutualized stock exchanges) research design. The variable of the study is demutualization of the stock exchanges (Independent variable) and stock market indicators growth is taken as dependent variable of the study.

The population of the study is the total 60 stock exchanges all around the world which are the members of the World Federation of Exchanges (WFE) and only 23 stock exchanges are demutualized and public listed companies (Naacke, 2005). Stratified Proportionate Sample Technique was used for the selection of the stock exchanges. The Proportion is 23 % (3 stock exchanges) sample is from low level economies, 67 % (10 stock exchanges)

sample is from high level economies. Total sample of study is only 13 (56 % of the population) stock exchanges out of 23 demutualized stock exchanges as shown in Table1.

Table 1: Sample of the Study

Name of the Stock exchange	Status	Year	Economy
Bursa Malaysia	Public listed company	2004	Low-middle income economies
Deutsche Börse	Public listed company	2000	High income economies
Hong Kong Exchanges and Clearing	Public listed company	2000	High income economies
Johannesburg Stock Exchange	Public listed company	2005	High income economies
London Stock Exchange Group	Public listed company	2000	High income economies
NASDAQ OMX Group	Public listed company	2008	High income economies
NYSE Euro next	Public listed company	2007	High income economies
Athens Stock Exchange	Public listed company	1999	High income economies
Australian Securities Exchange	Public listed company	1998	High income economies
BM&FBOVESPA S.A.	Public listed company	2007	Low-middle income economies
BME Spanish Exchanges	Public listed company	2001	High income economies
Philippines Stock Exchange	Public listed company	2001	Low-middle income economies
Singapore Stock Exchange	Public listed company	1999	High income economies

Note: Note: Year indicates the year in which the stock exchanges converted their status from mutual to demutualized stock exchanges

The reliability of data in secondary data shows that data is reliable and collected from reliable and relevant sources. Reliability of the secondary data is checked through its source from which the data is collected (Sekaran, 2003, p. 206). The current study data is collected from the website of World Federation of the Exchanges (WFE). The study used Wilcoxon sign Rank Test to find out performance of the stock exchanges after demutualization in term of percentage (Joseph F, Willam C, Barry j, & Rolph E, 2012)through ranking positive and negative performance after the demutualization.

4. EMPIRICAL FINDINGS

The result of the Wilcoxon sign rank test in Table-2 about the stock market index in economy wise (Low-middle income economies) shows that out of total 15 Pairs of observations (3 demutualized stock exchanges * Five years data of these stock exchanges), only 5 (33 %) pair of observations are at negative ranks and 10 (67 %) pair of observations are at positive ranks and these negative ranks (after the demutualization value of stock index is greater than before the demutualization of the stock exchanges) is significant at 99 % confidence level. It proves that demutualization is fruitful for the stock market index of the demutualized stock exchanges.

Similarly the result of the market capitalization shows only 4 (27 %) pair of observations are at negative ranks and 11 (73 %) pair of observations are at positive ranks and these negative ranks is significant at 99 % confidence level. The result of the market capitalization shows that demutualization of stock exchanges lead to better performance in the market capitalization of the demutualized stock exchanges. Similarly result of the wilcoxon sign rank test about the number of the listed companies indicates that only 1 (7 %) pair of observations are at negative ranks and 14 (93%) pair of observations are at positive ranks and it is insignificant at 95 % confidence level. It shows that demutualization of the stock exchanges don't increase the number of listed companies in the market, in

other words the demutualization of the stock exchanges attract the companies to list on it plate forum in low level economy region.

Number of transactions in equity share shows that only 6 (40 %) pair of observations is at negative ranks and 9 (60 %) pair of observations are at positive ranks and it is insignificant at 99 % confidence level.

Table2: Summary of Stock Market Performance After and Before in Low-Middle Level Economies

Indicators	Ranks Category	Mean		Sum of		Z value	Sig.
		N	Rank	Ranks	Rank in %		
Stock Market Index	Negative Ranks	5	5.8	29	33	-1.761	0.078
	Positive Ranks	10	9.1	91	67		
Market capitalization	Negative Ranks	4	4	16	27	-2.499	0.012
	Positive Ranks	11	9.45	104	73		
Number of listed companies	Negative Ranks	1	1	1	7	-3.351	0.001
	Positive Ranks	14	8.5	119	93		
Number of transactions in equity share	Negative Ranks	6	11.5	69	40	-0.511	0.609
	Positive Ranks	9	5.67	51	60		

Positive Ranks: Value of Variable after demutualization of stock exchanges is less than the value of variables before demutualization of stock exchanges.

Negative Ranks: Value of Variable after demutualization of stock exchanges is greater than the value of variables before demutualization of stock exchanges.

The result of the Wilcoxon sign rank test in Table-3 about the stock market index in economy wise (High income economies) shows that out of total 50 Pairs of observations (10 demutualized stock exchanges * Five years data of these stock exchanges), only 15 (30 %) pair of observations are at negative ranks and 30 (70 %) pair of observations are at positive ranks and these negative ranks (after the demutualization value of stock index is greater than before the demutualization of the stock exchanges) is significant at 99 % confidence level. It proves that demutualization is fruitful for the stock market index of the demutualized stock exchanges in high level economy. Similarly the result of the market shows that only 11 (22 %) pair of observations are at negative ranks and 39 (78%) pair of observations are at positive ranks and these negative ranks is significant at 99 % confidence level. Number of the listed companies results shows that only 13 (26 %) pair of observations are at negative ranks and 37 (74 %) pair of observations are at positive ranks which is significant at 95 % confidence level. Similarly number of transactions in equity share that only 6 (12 %) pair of observations is at negative ranks and 44 (88 %) pair of observations are at positive ranks which is significant at 99 % confidence level.

Table3: Summary of Stock Market Performance After and Before in High-Level Economies

Indicators	Ranks Category	Mean		Sum of Ranks	Rank in %	Z value	Sig.
		N	Rank				
Stock Market Index	Negative Ranks	15	22.07	331	30		
	Positive Ranks	35	26.97	944	70	-2.959	0.003
Market capitalization	Negative Ranks	11	27.27	300	22		
	Positive Ranks	39	25	975	78	-3.258	0.001
Number of listed companies	Negative Ranks	13	27.69	360	26		
	Positive Ranks	37	24.73	915	74	-2.679	0.007
Number of transactions in equity share	Negative Ranks	6	27.33	164	12		
	Positive Ranks	44	25.25	1111	88	-4.571	0

Positive Ranks: Value of Variable after demutualization of stock exchanges is less than the value of variables before demutualization of stock exchanges.

Negative Ranks: Value of Variable after demutualization of stock exchanges is greater than the value of variables before demutualization of stock exchanges.

5. CONCLUSION

The study has examined the effects of demutualization on the stock market growth of the stock exchanges for the period of five years before and four years after demutualization. Stock market growth is measured through the number of transactions in equity shares, number of listed companies, stock indexes and market capitalization. Wilcoxon signed ranks test were applied to examine the significant change in stock market growth of stock exchanges after demutualization. The results of Wilcoxon signed ranks test indicates that there is a significant difference in dimensions of stock market growth like the number of transactions in equity shares, number of listed companies, stock indexes and market capitalization after the demutualization in both economic level except no of transactions in low level economy after demutualization. The results of the current study are also supported by some previous researches such as (Aggarwal & Dahiya, 2002; Morsy & Rwegasira, 2010 and Tahir & Sial, 2013). It is concluded that demutualization is productive for stock exchanges in overall stock in stock market growth of the stock exchanges. It shows that democratic governance structure is more progressive than the mutual governance structure for the stock exchanges. The research findings imply that demutualization is concept which leads the stock exchanges from autocratic culture toward the democratic culture. When culture of stock exchange base on the autocratic governance structure where the board of the directors consists of only minimum 3 directors. The decision made by the board base on the mutual consensus which leads toward the interest of brokers. In consequences listed companies discourage from decision making authority (Tahir & Sial, 2013). In this type of scenario market forces disturb badly and inside trader make the abnormal profit and derail the ethics of the market and code of governance. When the stock exchanges go for initial public offering and convert for profit organization, governance structure totally change.

After that board of the directors comprised of minimum 7 directors and decision of the market and regulation about the control on the market are made through special resolution. If the decisions of the board will based on the majority voting and consensus of the all stakeholders about the all stakeholders as well as shareholders than the stock exchanges will provide the suitable and good governance atmosphere in which no one will not involve in window dressing for the competing of its competitors, inside trading for the abnormal and illegal way of gaining profit and also market abusing for the artificial desired ups and downs in the market (Serifsoy & Tyrell, 2005). In the consequence of the good governance and keeping in view to all stakeholders as well shareholder the decisions of the stock exchanges will lead to stock market toward the growth and stable for the normal working and profit gaining.

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