

INTERNATIONAL RESEARCHERS

**IS DEMUTUALIZATION OF DHAKA STOCK EXCHANGE
DESIRABLE?**

Md. Bokhtiar Hasan, A. F. M. Mainul Ahsan, Md. Afzalur Rahaman

Volume No.2 Issue No.2 June 2013

www.iresearcher.org

ISSN 227-7471

THE INTERNATIONAL RESEARCH JOURNAL "INTERNATIONAL RESEACHERS"

www.iresearcher.org

© 2013 (individual papers), the author(s)

© 2013 (selection and editorial matter)

This publication is subject to that author (s) is (are) responsible for Plagiarism, the accuracy of citations, quotations, diagrams, tables and maps.

All rights reserved. Apart from fair dealing for the purposes of study, research, criticism or review as permitted under the applicable copyright legislation, no part of this work may be reproduced by any process without written permission from the publisher. For permissions and other inquiries, please contact

editor@iresearcher.org

INTERNATIONAL RESEARCHERS is peer-reviewed, supported by rigorous processes of criterion-referenced article ranking and qualitative commentary, ensuring that only intellectual work of the greatest substance and highest significance is published.

IS DEMUTUALIZATION OF DHAKA STOCK EXCHANGE DESIRABLE?

¹Md. Bokhtiar Hasan,²A. F. M. Mainul Ahsan, ³Md. Afzalur Rahaman

¹Executive, Research, Development & Information Department Dhaka Stock Exchange Limited, 9/F, Motijheel, Dhaka

²Lecturer, Department of Economics, School of Business Independent University, Bangladesh (IUB) Dhaka

³Senior Executive, Research, Development & Information Department Dhaka Stock Exchange Limited, Dhaka,

(BANGLADESH)

¹bokhtiar@dsebd.org, ²mainul188@gmail.com, ³afzal@dsebd.org

ABSTRACT:

Demutualization is the current trend among stock exchanges all over the globe. Bangladesh has started its journey to get her exchanges demutualized in 2011. The purpose of this study is to examine the post-demutualization performance of the stock exchanges and offer some recommendations for stock exchanges in Bangladesh. In our study we examine the performance of three different stock exchanges that have already demutualized: Bursa Malaysia, Hong Kong Stock Exchange and London Stock Exchange. We found evidence that the performance of all the three demutualized exchanges have improved in terms of operational profitability and efficiencies along with governance scale. We have also identified some challenges associated with demutualization

KEY WORDS: stock exchange, mutual, demutualization, Dhaka Stock Exchange, operating performance, Challenges

1. INTRODUCTION

Demutualization of a stock exchange can be defined as a process of transformation of a exchange from mutual organization operating on a not-for-profit basis into a limited company operating for profit basis. In another words, it refers to the change in legal status of the exchange from a mutual association (Member owned organization) into a company limited by shares. In a demutualized stock exchange trading and ownership are totally separated and all decisions are taken for the best interest of the exchange and ultimately its shareholders. Hence, demutualization as the term used to describe the transition from a mutual association of exchange members operating on a not-for-profit basis to a limited liability, for-profit company, accountable to shareholders. Essentially, demutualization separates ownership (and voting rights) from the right of access to trading (Elliott, 2002).

Before 1993, basically stock exchange all over the world means mutual or member customer-owned organization which is run for raising capital from members and providing them various financial services. Traditionally, stock exchanges operated as club-like mutual organizations where traders/brokers were the owners of the exchange as well as recipients of its services until the early 1990s. Many stock exchanges operated on a not-for-profit basis; excess income was not distributed among the members as profit. The members were the owners of the exchange and also its customers. The members of the exchanges enjoy the rights of ownership, decision making and trading as well. The main problem of mutual stock exchange is that the owners of the exchange are at the same time its clients and sharing profits of the organization.

However, in the last 20 years, global stock exchanges have gone through some radical changes. Technological developments have enabled successful operation of alternative trading Systems (ATS) like electronic communication networks (ECNs) which have the potential of replacing the traditional stock exchanges. Due to this technological development and globalization, investors and issuers have greater freedom to move to market that are more competitive. To be able to compete with other exchanges' ATS in terms of efficiency and fairness, stock exchanges need access to economic capital as well as an efficient decision making structure. At the same time there have been increasing demands from regulators and the public that stock exchanges elevate their standards of governance and provide equitable representation to all stakeholders in ownership and management. However,

mutual stock exchanges were failed to ensure such standard of governance. Consequently, across the globe stock exchanges are now moving toward a new corporate, legal and business model to strengthen governance and also to face the global competition. Therefore, many exchanges especially in the developed world took initiatives to ease the problem of mutual organization.

The first stock exchange to demutualize was the Stockholm stock exchange in 1993. Today, all major stock exchanges around the world such as exchanges in India, Malaysia, Hong Kong, Singapore, Japan, Germany, Australia, the USA, the UK etc are operating as demutualized exchanges. After Stockholm, many other major stock exchanges followed it, e.g. Helsinki Stock Exchange in 1995, the Copenhagen Exchange in 1996, the Amsterdam exchange & Borsa Italiana in 1997, Australian stock exchange in 1998, Toronto stock exchange, London stock exchange, Hong Kong Exchange, Deutsche Boerse in 2000, NASDAQ and Tokyo stock exchange in 2001, Bursa Malaysia in 2004, Bombay stock exchange in 2005 and New York stock exchange in 2006. However, According to the data of the World Federation of Exchanges by the end of 2008, listed exchanges represented more than 40% of the membership of the World Federation of Exchanges, with an additional 18% having gone through the process of demutualization.

Bangladesh has initiated to get its exchanges demutualized in 2011. On October 09, 2012, the cabinet endorsed the draft of “The Exchanges (Demutualization) Act, 2012”. Both the stock exchanges in Bangladesh, i.e., Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) have already made significant progress in this respect. Table 1 shows the major demutualization cases across the world.

There is always a debate whether demutualization improves the financial performance of stock exchange or not. In developed countries, many studies have been performed regarding this. In Bangladesh this is the first time we are performing such type of study. In this study, we used three stock exchanges of different sizes, small, medium and large, that have already demutualized and gone public: Bursa Malaysia, Hong Kong Stock Exchange, and London Stock Exchange and analyzed pre-and-post demutualization performance of them. The reason of taking three exchanges of different sizes is to provide better suggestion for Dhaka Stock Exchange.

Using data from the financial statements from 1999 to 2011 and by the means of descriptive statistics analysis we show that all the three demutualized exchanges have a better post listing share and operating performance than mutual exchanges. Part 2 will discuss DSE’s present status regarding demutualization. Part 3 discuss the previous studies on this issue. Part 4 will focus on Methodology and data. Part 5 will analyze the result of this research. Part 6 will conclude the study and will make some implications to the Dhaka Stock Exchange.

2. DEMUTUALIZATION OF DHAKA STOCK EXCHANGE

The Dhaka stock exchange limited first started the journey of stock exchange in Bangladesh in 1954. However, the market was very turmoil in 1990, 1996 and 2010. And, the allegation for the above mentioned market crashes has gone mostly against brokers, and regulatory bodies. As these groups of people are directly involved in the activities of stock exchange, they could have manipulated or influenced the market. In the probe reports in 2011, Khondkar Ibrahim Khaled stated that “in DSE the peoples who play in the market (players) are also acting as the role of Regulator.” Accordingly, Mr. Khaled recommended the changing of organizational structures of the stock exchanges through implementing the demutualization process to stop repeating the stock market chaos once again.

Finally, on February 02, 2011, the board of directors of DSE in its 664th meeting formed a fifteen-member “Demutualization Implementation Committee,” headed by Fayekuzzaman, managing director of Investment Corporation of Bangladesh (ICB), to demutualize DSE with a view to curb the influence of brokers. Nonetheless, DSE has already submitted “Concept Paper” and “draft of Demutualization Act” on December 29, 2011 and July 01, 2012 correspondingly to the Securities and Exchange Commission (SEC) in Bangladesh and to the Ministry of Finance. On October 09, 2012, the cabinet endorsed the draft of “The Exchanges (Demutualization) Act, 2012”. Thus, the demutualization for stock exchanges in Bangladesh is a matter of time. However, few challenges DSE might face at the time of implementing the demutualization process successfully. Later we shall discuss it more elaborately.

3. LITERATURE REVIEW

Some studies argued in favor of demutualization while others suggested against it. Those who supporter demutualization argue that it can help the stock exchange to modernize its technology, achieve good governance, avoid concentration of ownership power in a particular group of stock exchange participants and, ensure financial decision-making - by ensuring that resources are allocated to business initiatives and ventures that enhance shareholders’ value. On the other side, antagonists to demutualization argue that the above mentioned anticipated

benefits of demutualization may in reality not be achieved. Rather, with certain conditions, those may be obtainable under a mutual or cooperative structure (Hansman, 1988; Hart & Moore, 1996). Thus, any cost-saving that caused by demutualization could be low in comparison to the benefits that can be obtained from the presence of brokers, with ownership interests in the exchange. In many developing countries, the creation of any financial institution is awfully hard, and the creation of investors is often harder than the creation of the brokers (Lee, 2002). Demutualization may also allow for new risky businesses that usually do not take place when the stock exchange is under a mutual structure (Worthington & Higgs, 2006).

Nonetheless, now we shall try to find out those authors who have suggested for demutualization. According to Scullion (2001), demutualization is not merely converting into for profit organization owned by its members. An exchange is genuinely demutualized when it maximizes its potential of market capitalization to the fullest and alongside it also increases its shareholders value.

Cospormac and Altaf (2009) used simple descriptive statistics to analyze the data and found that demutualized stock exchanges hold a stronger operating performance and a better performance in term of shareholder's return than mutual exchanges.

Mendiola and O'Hara (2003) investigated the effects of the change of governance in stock exchanges on performance and evaluation. They found that exchange performance tends to improve after the change of governance.

Domowitz and Steil (1999) list several benefits of demutualization as compared to mutualized stock exchanges. They believe that demutualized stock exchanges should provide a better quality market than mutualized stock exchanges.

In order to compete efficiently, stock exchanges must operate for-profit. The new recent technological changes have made the members' ownership structure less attractive. Thus, Hansmann (1988) pointed out that Exchanges must raise capital to compete efficiently and investor ownership is the obvious solution to solve.

Demutualization can permit the stock exchange to modernize its technology, create a flexible management structure that is more responsive to market conditions and, get an initial infusion of capital and allow for easier access to capital. It also enhances financial decision making by allocating resources to business initiatives and ventures that increase the shareholders' value (Lee, 2002). Thus, demutualized stock exchanges are in general expected to bring better performance of exchanges.

Sarah, Babar and Kashif (2011) stated that demutualization is an intricate process, which can result in increased efficiency, capitalization, governance, if done effectively.

Morsy and Rwegasira (2010) analyzed and evaluated the financial performance of demutualized stock exchanges between 1996 and 2004. They examined whether or not financial performance improved after implementing the demutualization program. Financial performance of stock exchanges that have undergone the demutualization program is measured in terms of eleven measures. Results were mixed and exhibited different change in performance for the samples of demutualized stock exchanges. But, in their examination, most of the profitability ratios showed significant increases.

Aggarwal (2002) took three demutualized stock exchanges: Deutsche Börse, the London Stock Exchange, and the Australia Stock Exchange, as sample to examine their performance. She found that in the form of the stock-price performance of the three exchanges that have been operating as publicly traded companies for at least one year—is encouraging.

Otchere and Oldford (2011) tried to examine whether corporatization of the exchange is necessary to improve the performance of the exchange. They found that both demutualized but member-owned exchanges and publicly traded exchanges exhibit higher levels of profitability and operating efficiency than mutually-owned exchanges.

5. METHODOLOGY AND DATA

To evaluate the performance of demutualized stock exchanges, mainly two analyses have been performed: (1) descriptive statistics analysis of the stock price performance of the three sample demutualized stock exchanges and (2) ratios analysis. For assessing the stock price performance of the exchanges, we have used cumulative stock return to see the difference with the comparable index (or benchmark) of the respective stock exchanges. Financial ratios, e.g., return on profit margin, return on equity (ROE), return on assets (ROA), debt to total assets ratio and current ratio are also used to study the operating performance of the sample exchanges.

Daily stock prices are gathered from www.finance.yahoo.com. However, financial statements from the official website of the sample stock exchanges, i.e., www.londonstockexchange.com, www.hkex.com.hk and www.bursamalaysia.com.

6. THE PERFORMANCE OF DEMUTUALIZED STOCK EXCHANGES

In this section we mainly executed the data analysis to see the performance of demutualized stock exchange. In our study we took three stock exchanges- London Stock Exchange, Hong Kong Stock Exchange and Bursa Malaysia that have already demutualized successfully as a representative of the demutualized stock exchanges. This section has two parts: one is stock price performance using the post listing daily share prices of the exchange, another is operating performance by having financial ratios analysis.

6.1 Stock Price Performance

Figure1 shows the cumulative return performance of the three stock exchanges, i.e., London Stock Exchange (LSE), Hong Kong Stock Exchange (HSE) and Bursa Malaysia, from their first day of listing to December 19, 2012. For LSE the first trading day is July 20, 2001, for HSE it is June 27, 2000 and for Bursa Malaysia it is March 18, 2005. The Table 2 shows the details of the first day return and cumulative return for the post listing period. This cumulative return is compared with respective stock exchange's main Index as the benchmark index to understand the stock price performance.

The first day return is calculated by the percent difference between the offer price and the first day closing price of the stock. Except London Stock Exchange, both the Hong Kong Stock Exchange and Bursa Malaysia have positive return on the first day which is 17.90% & 23.33% respectively. Many studies showed that significantly high return on the first day is caused by either IPO under-pricing or speculation. However, the negative return on the first day can be explained by either over pricing or investors are experiencing first time of such an IPO. Investors are facing mainly two new things, one is demutualization and another is its listing. They have no idea about what will happen after demutualization, i.e., the performance of the exchange will get stronger or not. However, the performance of a stock can't be explained by only the first day return, rather it would be fair to get the performance for long run. The fourth column of Table 2 compares the long run performance of the publicly listed stock with the relevant stock market's benchmark index. Here, we calculate the buy and hold returns of an investor who buys the newly listed stock on the first day and hold it versus the same return from market benchmark index.

Except Bursa Malaysia, both the London and Hong Kong Stock Exchange have a very high excess return compare to benchmark index return. Figure 1 also shows that the daily cumulative returns of all the three exchanges are very strong from listing to until 2007 and all have reached at the top in 2007. London Stock Exchange reached its maximum at 442.19% on December 31, 2007, Hong Kong Stock Exchange at 3156.44% on November 02, 2007 and Bursa Malaysia at 348.65% on October 30, 2007. In fact, all have performed outstandingly. However, in early 2008, the cumulative returns of the exchanges started getting down as the world economy's crisis mounted. Notwithstanding this, at December 19, 2012 all stock exchanges still show a significant cumulative return: London Stock Exchange is 203.10% and Hong Kong Stock Exchange 1512.27% and Bursa Malaysia 69.19%. Accordingly, the post listing performance of all the sample exchanges got stronger based on the stock price performance analysis.

6.2 Operating Performance

Some widely used financial ratios, e.g., return on profit margin, return on equity (ROE), return on assets (ROA), debt-assets ratio and current ratio, have been used to get better understanding about the operating performance of publicly listed exchanges. We have calculated these ratios for all the three sample exchanges from the year 1999 to 2011 which are shown in table 3 to 8.

In table 3, the profit margin for LSE, HSE and Bursa Malaysia at the end of the year 2011 was 22.46%, 69.23% and 38.33% respectively which is almost two times more than pre-demutualization. Table 3 shows that after demutualization all exchanges maintained an increasing trend except LSE in 2009 when it experienced negative

profit margin due to global financial crisis and economic conditions have deteriorated significantly since the merger (with Borsa Italiana), leading to greater uncertainty about the future.

After demutualization the ROE for all the three exchanges have increased notably which is shown in table 4. The ROE for LSE, HSE and Bursa Malaysia was 13.33%, 55.61% and 16.71% respectively in 2011 while pre-demutualization ROE of Bursa Malaysia was 2.37% in 2004, HSE 12.65% in 1999 and LSE 6.5% in 1999. In table 5, the ROA for HSE and Bursa Malaysia is 9.43% and 8.73% which is impressive when compared to pre-demutualization. However, ROA of LSE has decreased to 0.13% in 2011 compared to 4.15% in 1999 due the effect of world-wide financial crisis during 2007 to 2009.

Another important aspect is that all the exchanges, i.e., London stock exchange, Hong Kong stock exchange and Bursa Malaysia, have current ratio more than or equal to one (01). Table 8 shows the details of the current ratio for exchanges. In 2011 the current liquidity ratio was 1.00 for LSE, 1.17 for HSE and 1.66 for Bursa Malaysia which indicates that the exchanges are in better position in terms of liquidity. Except Bursa Malaysia, all the exchanges are highly leveraged as their debt to total assets ratio is more than 0.5. Table 7 shows, for the year 2011 the debt to total assets ratio for LSE, HSE and Bursa Malaysia is 0.99, 0.83 and 0.48 respectively. Theoretically, exchanges get comfort for the debt to total assets ratio as it is less than one (01). Thus most of the estimators for evaluating the performance of demutualized exchanges indicate significant improvement after demutualization of all the three sample exchanges.

Now, let's take look on another important effect of demutualization on the number of companies listed on the exchange and the market capitalization. According to World Federation of Exchanges, there is a positive relationship between demutualization and the number of companies listed on the exchange and the market capitalization. After changing organizational structure the number of listed companies increased for LSE by almost 58.05% since 2000 (year of demutualization), for HSE by 111.30% since 2000 (year of demutualization) and for Bursa Malaysia by only 4.21% since 2004 (year of demutualization). From 2004 to 2011 about 299 new companies got listed on Bursa Malaysia while 258 existing companies got de-listed from it. That's why, the total number of listed companies in Bursa Malaysia didn't look better. For the same time period the domestic market capitalization increased 14.40%, 270.72% and 145.77% for LSE, HSE and Bursa Malaysia respectively.

7. CONCLUSION

In this paper we have mainly examined the pre and post-demutualization performance of the three stock exchanges - London Stock Exchange, Hong Kong Stock Exchange and Bursa Malaysia. We found that the stock price performance and the operating performance of all the three exchanges are very impressive. Although the performance of London stock exchange has gone down in 2009 and 2010 due to world economic meltdown, the overall post-demutualization performance of all three exchanges has been much better comparing to pre-demutualization performance. Accordingly, Dhaka Stock Exchange could be encouraged for its demutualization.

Nevertheless, Stock exchange demutualization is a challenging issue, both from regulatory and business perspectives in a developing country like Bangladesh. Members' participation in the process is vital, as is the cooperation of the regulatory authorities. After passing the Demutualization Act by the parliament in Bangladesh, the actual process of demutualization will be started by the exchange. At that time DSE may face some sort of challenges and threats. In the following we have stretched out some challenges, threats and made some suggestions to DSE:

➤ **Managing Conflicts of Interest:**

Managing conflicts of interests is a main challenge for exchanges. However, it can be attained through having an efficient corporate governance system, rigorous regulatory oversight, enhanced transparency; and the separation of the commercial activities of the stock exchange from regulatory functions. Hong Kong Stock exchanges and Clearing Limited (HKEx) gives one example of applying these principles in order to recognize, minimize and manage conflicts of interests. John W. Carson (2003) stated that HKEx felt major conflicts did not exist but it was prudent to implement safeguards to mitigate and manage any that might arise. The main focus was on Listings because it is a major source of revenue and HKEx has a major role in regulating listed companies. Also, its trading regulation is limited. He also mentioned the following safeguards:

1. The Exchange and its directors have a legal duty to act in the public interest, and to place the public interest first in the event of any conflict between it and the exchange's business interests;
2. The maximum shareholding is 5% unless exempted by SFC (Securities and Futures Commission)

3. The Board of HKEx has public interest directors (appointed by Government);
4. The Exchange maintains strict separation of its Regulation and Risk Management Dept. from business units;
5. HKEx's self-listing process was administered by SFC;

Dhaka Stock Exchange can also follow the above safeguards to manage the potential conflicts of interest after demutualization.

➤ **Avoiding Hostile Take-over:**

The exchange can become a potential hostile take-over target when it goes for public (self-listing). Defending the take-over bid involves significant costs. Although this hostile take-over can be managed through ownership limits. However, from the official website and annual reports of LSE we found that after demutualization and self-listing the London Stock Exchange experienced several hostile take-over bids. The first takeover attempted by OM Gruppen in 2000 and then by Deutsche Bourse in 2004, Macquarie Bank in 2005, and last by NASDAQ in 2006 and 2007. Fortunately all these hostile take-over bids got failed. Applying special or higher restrictions to ownership can be thought as a protective device to prevent hostile takeovers by other exchanges or giant financial groups. Most exchanges have at least a 5% ownership restriction bylaw (Aggarwal, 2006). Accordingly, Dhaka Stock Exchange can also impose ownership restriction on shareholding by single entity to avoid any potential hostile take-over.

Nonetheless, Demutualization can take many shapes and forms and the experience varies considerably across the globe. There being no defined formula for success, considerable uncertainty must be taken into account. It should be borne in mind that "Demutualization is therefore, not an end in itself but a means to an end" (Ekineh, 2011). However, we hope that Dhaka stock exchange will obviously consider the above mentioned challenges and suggestions when they actually start the demutualization process just after passing the Demutualization Act. In essence, a proper understanding of all the issues, openness to new approaches and a high level of co-operation among the stakeholders is fundamental to any successful demutualization.

REFERENCES:

- Aggarwal, R. (2006). Demutualization and Public Offering of Financial Exchange, *Journal of Applied Corporate Finance*, 18(3), 96-106.
- Aggarwal, R. (2002). Demutualization and Corporate Governance of Stock Exchanges, *Journal of Applied Corporate Finance*, 18(1), 106-113.
- Altaf, S. (2009). Demutualization of stock exchanges: A case study: London Stock Exchange and Hong Kong Stock Exchange. Retrieved from University of Skövde website
<http://urn.kb.se/resolve?urn=urn:nbn:se:his:diva-3129>
- Arwa M., Kami R. (2010). Does Demutualization Matter to the Financial Performance of Stock Exchanges? An Investigation of Demutualized Member Stock Exchanges of the World Federation of Exchanges, *International Research Journal of Finance and Economics*, 40(2000), 155-167.
- Onyema, E. (2011). The roles expectations of regulations in demutualization process. Retrieved From
http://www.cisnigeria.com/cisdocs/Papers_Presented/Workshop%20on%20demutualization/Roles%20and%20Expectations%20of%20Regulators%20in%20Demutualization%20Process.pdf
- Daisy Ekineh (2011). The roles and expectations of Regulators in Demutualization Process. At the workshop on Demutualization: The way forward. Retrieved From
http://www.cisnigeria.com/cisdocs/Papers_Presented/Workshop%20on%20demutualization/Roles%20and%20Expectations%20of%20Regulators%20in%20Demutualization%20Process.pdf
- Domowitz, I., Steil, B., (1999). Automation, trading costs, and the structure of the securities trading industry. *Brookings-Wharton Papers on Financial Services*, 33-81.
- Elliott, J. (2002). Demutualization of Securities exchanges: A regulatory perspective. (IMF Working Paper No. WP/02/119). Retrieved from IMF Website <http://www.imf.org/external/pubs/cat/longres.cfm?sk=15889.0>
- Oldford, E., & Otchere, I. (2011). Can commercialization improve the performance of stock exchanges even without corporatization? *The Financial Review*, 46(1), 67-87.
- Hansmann, H. (1994). *The ownership of enterprise*. New Haven, Connecticut: Yale University Press.
- Hart, O., & Moore, J. (1996). The governance of exchanges: members' cooperatives versus outside ownership. *Oxford Review Economic Policy*, 12(4), 53-69.
- John W. Carson. (2003). Conflicts of interest in self-regulation: Can demutualized exchanges successfully manage them? (World Bank Policy Research Working Paper 3183). Retrieved from World Bank website
http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/11/05/000160016_20041105142008/Rendered/PDF/wps3183.pdf
- Lee, R. (2002). The future of securities exchanges. *Brookings-Wharton Papers on Financial Services*, 1-33.
- Mendiola, A. & O'Hara, M. (2003). Taking stock in stock markets: the changing governance of exchanges. Retrieved from
<http://solvay.ulb.ac.be/cours/chapelle/200405/corp-govSE-OHara.pdf>
- Pirrong C (2000). Technological change, for profit exchanges, and self-regulation in financial markets. Working Paper, Washington University.
- Ahmed, S., Butt, B. Z., & Rehman, K. (2011). Demutualization of stock exchanges in Pakistan: Challenges and benefits. *African Journal of Business Management*, 5(2), 448-454.
- Schmiedel, H. (2001). Technological development and concentration of stock exchanges in Europe (Bank of Finland discussion paper No. 21). Retrieved from
<http://www.suomenpankki.fi/en/julkaisut/tutkimukset/keskustelualoitteet/Documents/0121.pdf>

- Scullion M (2001). The Compaq handbook of world stock, derivative and commodity exchanges chap, demutualisation: The challenges facing global exchanges, *Mondo Visione*, (pp. 25-32).
- Serifsoy, B. (2006). Essays on stock exchange efficiency, Business Models and Governance. Retrieved from <http://www.wiwi.uni-frankfurt.de/schwerpunkte/finance/wp/1360.pdf>
- Akhtar, S. (2002). Demutualization of Stock Exchanges: Problems, Solutions and Case Studies. Manila, Philippines: *Asian Development Bank (ADB)*.
- Islam, S., & Islam, R. (2011). Demutualization: Pros and Cons for Dhaka Stock Exchange (DSE), *European Journal of Business and Management*, 3(12), 24-33.
- Worthington, A. & Higgs, H. (2006). Market risk in demutualized self-listed stock exchange: An international analysis of selected time-varying betas. *Global Economic Review*, 35(3), 239-257.
- Share Market Inquiry Report, (2011). The committee is headed by Khondkar Ibrahim Khaled. Retrieved from <http://www.mof.gov.bd/en/budget/share/report.pdf>
- World Federation of Exchanges (WFE), Annual Report and Statistics 1999 to 2011.

Table 1: Significant International Cases

Name of the Exchanges	Year of Demutualization	Year of Listing
Stockholm Stock Exchange	1993	1998
Borsa Italiana	1997	-----
Australian Stock Exchange	1998	1998
Singapore Stock Exchange	1999	2000
Hong Kong Stock Exchange	2000	2000
London Stock Exchange	2000	2001
Deutsche Börse	2000	2001
Euronext	2000	2001
Toronto Stock Exchange	2000	2002
The NASDAQ Stock Market	2001	2002
The Philippine Stock Exchange	2001	2003
Osaka Stock Exchange	2001	2004
Tokyo Stock Exchange	2001	2006
New Zealand Stock Exchange	2003	2003
Bursa Malaysia	2004	2005
Bombay Stock Exchange	2005	-----
New York Stock Exchange	2006	2006
BOVESPA (Brazil)	2007	2007

Table 2: Cumulative Return Analysis

Name of Exchanges	IPO/Listing Date	First Day Return (%) [Offer to Close]	Cumulative Returns (%) [Since IPO/Listing to Dec. 19, 2012]		
			Exchange	Comparable Index	Difference
London Stock Exchange	20-Jul-2001	(5.20)	203.01	10.66	192.35
Hong Kong Stock Exchange	27-Jun-2000	17.90	1,512.27	40.03	1,472.24
Bursa Malaysia	18-Mar-2005	23.33	69.19	86.31	(17.12)

Figure 1: Post listing Stock Price Performance of the Exchanges



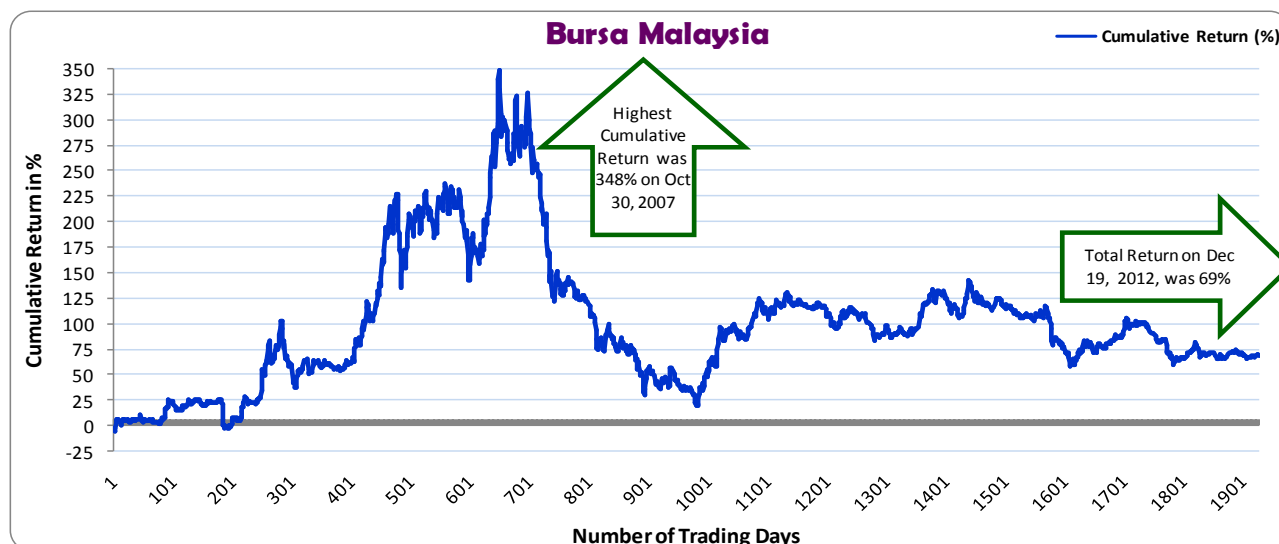


Table: 3

Profit Margin (%)													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	9.60	18.27	7.81	23.14	22.21	25.44	23.95	23.76	31.35	30.80	(50.34)	14.39	22.46
Hong Kong Stock Exchange	28.69	37.78	37.04	32.55	34.25	44.15	49.72	60.73	73.53	79.13	73.34	71.00	69.23
Bursa Malaysia	58.91	31.95	13.17	5.51	29.71	16.06	42.13	41.24	54.30	34.54	59.67	34.13	38.33

Table: 4

Return on Equity (ROE) (%)													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	6.50	13.10	6.28	17.74	16.38	17.42	26.32	24.48	(31.32)	13.33	(32.09)	8.77	13.33
Hong Kong Stock Exchange	12.65	17.91	14.14	10.72	12.35	26.21	30.67	47.90	73.64	70.32	58.60	58.05	55.61
Bursa Malaysia	15.80	10.41	1.79	0.98	4.16	2.37	8.99	13.36	30.84	14.26	20.93	13.09	16.71

Table: 5

Return on Asset (ROA)													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	4.15	8.70	4.60	13.40	12.10	12.93	17.26	17.09	41.03	0.86	(0.90)	0.10	0.13
Hong Kong Stock Exchange	3.60	6.17	5.39	4.19	3.49	4.93	5.83	6.22	7.01	8.16	10.38	10.52	9.43
Bursa Malaysia	13.47	8.83	1.49	0.82	3.43	1.99	6.79	7.68	16.63	6.04	9.94	6.62	8.73

Table: 6

Earning Per Share (EPS)													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	4.95	11.31	15.20	18.30	20.90	21.30	23.50	27.40	49.40	71.90	(126.10)	33.50	55.90
Hong Kong Stock Exchange	0.50	0.84	0.71	0.56	0.66	1.00	1.26	2.34	5.72	4.75	4.36	4.67	4.72
Bursa Malaysia						7.00	16.40	20.00	43.70	19.00	33.60	21.30	27.50

Table: 7

Debt / Total Assets Ratio													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	0.36	0.34	0.27	0.24	0.26	0.26	0.34	0.30	2.31	0.94	0.97	0.99	0.99
Hong Kong Stock Exchange	0.72	0.66	0.62	0.61	0.72	0.81	0.81	0.87	0.90	0.88	0.82	0.82	0.83
Bursa Malaysia	0.15	0.15	0.17	0.16	0.17	0.16	0.24	0.42	0.46	0.58	0.53	0.49	0.48

Table: 8

Current Liquidity (Current Ratio)													
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
London Stock Exchange	3.90	4.20	3.33	3.78	4.30	3.66	2.69	3.51	0.41	0.98	1.00	1.00	1.00
Hong Kong Stock Exchange	1.26	1.38	1.51	1.53	1.34	1.19	1.19	1.13	1.10	1.13	1.15	1.16	1.17
Bursa Malaysia	9.30	8.45	5.53	5.24	4.78	4.94	2.99	1.69	1.50	1.34	1.42	1.56	1.66