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DEMUTUALIZATION OF STOCK EXCHANGES: EFFECT ON SHAREHOLDERS AND OPERATING PERFORMANCE

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Abstract

In this paper we, have discussed the process of demutualization and how it affects the structure of the board, investors and the regulators. We have taken the example of Singapore Stock Exchange (SSE) to explain the affect of demutualization on Trade Value and Revenues of SSE. We have taken the data for Trade Value and Total Fee and Commission after SSE undergone demutualization and applied regression analysis to find their relationship. We have found that there is a positive relation between them as Value Traded increases, Total Fee and Commission also increases.

Introduction

Capital markets had always been important in an economy because they foster sustainable capital formation by converting savings into investments. Time to time changes in the operations and structure of stock exchange are not only important for the proper functioning of stock exchange but for the country and its economy. Demutualization is one such transformation in the structure and operations of the stock exchanges to enhance their performance.

Demutualization, 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)* (Shamshad Akhtar).

Aggarwal (2002) refers that the decisions to demutualize are based on the recognition that the old member-owned association structure fails to provide the flexibility and the financing needed to compete in today's competitive environment.

Mendiola and O'Hara (2004) argue that the costs of organizing as a cooperative in the new competitive environment are greater than the benefits. We find that stock exchanges that demutualize and go public are in countries with a higher level of economic and political freedom facing greater competition from their peers. Demutualized exchanges go public to raise capital, and because they are subject to more trade migration. Comparing the motivation of stock exchanges to go publicly listed with "common companies", we find that larger, older and riskier stock exchanges do not go public, but the primary motive seems to be to make acquisitions.

Literature Review

(Aggarwal, R. 2002) The rising competition and advancement in technology world wide is demanding the stock exchanges around the globe to examine their business models and become more entrepreneurial. Many of them responded by demutualizing their stock exchanges. This resulted in bringing major changes in the ownership and corporate governance structure. By converting member-owned, non-profit organizations into profit-driven investor-owned corporations, demutualization will give exchanges access to capital that can be used both for investment in new technology and for participation in the ongoing consolidation of the industry. It would not only provide capital but also strengthen the corporate governance of the exchanges. Demutualization may not be providing the same answer to every country. But the three stock exchanges' stock prices performance discussed showed an encouraging outcome.

(Benos, A. 1996). The stock exchange competition is driving stock exchange demutualization. Both economic freedom and less protection of incumbent's interests are more likely to create competition causing stock exchange to demutualize. Capital controls freedom, the threat of trade migration, and the need to raise new finance lead to the decision to going public. Some exchanges demutualize in order to get into merger resulting in further tightening the competition. Other exchanges demutualize to make acquisitions and have to restructure internally before going public. Technology and deregulation also affect the nature of stock exchanges. Demutualization is also illustrative of the importance of corporate governance in industry competition.

(Aggarwal, A., 2007). Demutualization is considered as consolidation of exchanges. The historical model of a stand-alone specialized exchange that trades a single product, such as cash equities, is already transformed as the publicly-listed exchanges which seek new markets and products. Even more remarkable is the dismantling of stock exchanges as national icons as the number of cross-border mergers between exchanges starts gathering pace. The consolidation phase has been made possible by the earlier demutualization of exchanges, since it has allowed the market for corporate control to work in the exchange industry. Advancements in technology and regulatory changes are the two main factors that are attributing the push for consolidation. Better technology has resulted in economies of scale for giant trading platforms. This implies a need to enter new markets and products. This has reduced the attractiveness of Ameriacan based exchanges for potential issuers. All these factors are likely to accelerate the consolidation process facing the financial exchange industry. This process is expected to spread in the Asian countries in the near-term future.

(Chesini, G., 2007). The future structure of the world's stock markets presents very deep uncertainty and the challenges which the stock exchanges have to face. Therefore it is important for them to continue supplying solid and efficient infrastructures for the financial markets that are becoming increasingly global. Otherwise some other player can come into play to satisfy the needs of financial intermediaries and investors. The efficiency of a stock exchange is not given exclusively by itself as the value chain must also be efficient. This has a strong impact on the competitiveness of the economy. Stock exchanges have to keep changing with the rapidly changing value chain. Hence, exchanges have to, diversify their business, creating new activities, which compensate the losses that are recorded in the traditional services they offer. In terms of company profile, the Stock Exchanges must offer traditional services but trying to offer the users the best possible conditions and, at the same time, overcome the borders of their traditional operational field to increase operational efficiency.

Historical Evolution of Demutualization Process

To understand the transformation of stock exchanges, we need to review the "mutually owned, not-for-profit" structure of the stock exchanges. Stock exchanges, traditionally operate as a "club of brokers" and the members of the club enjoyed the rights ownership, of decision making (one member, one vote), and trading. By restricting the access to the exchange, the members enhance the value of the exchange.

But in the recent years, the stock exchanges have undergone a number of organizational and operational changes and demutualization (the process of converting exchanges from non profit, member-owned organizations to for-profit, investor-owned corporations). Stockholm Stock Exchange was the world's first stock exchange to demutualize in 1993.[1]

The major reasons for the demutualization of stock exchanges include (i) global competition and (ii) technological advancements. (Reena Aggarwal)

The mutual association model functions well if an exchange is a provider of trading services with limited competition and the interests of members are homogeneous (Pamela S. Hughes). The competition among the stock exchanges has been extended from regional and national level to a global level due to Electronic Communication Networks (ECN) and Alternative Trading Systems (ATS). Therefore, the exchanges are no longer monopolies and have to run as efficient business enterprise. This increased competition is thus a major factor that compels exchanges to demutualize. The product of a stock exchange demutualization is, a corporation that operates in a more customer-focused manner and is able to respond more easily and quickly to changes in the business environment and meet competitive challenges. Breakthroughs in communication and data processing technology are

[1] See Table 1

also one of the main factors that induced stock exchanges to make structural and operational changes.

The process of demutualization can be divided into different steps. As part of the first phase of the demutualization process, the members are given shares and hence, they become the legal owners of the organization. After that, the organization raises capital by private placement. Having thus become a privately owned corporation demutualized exchanges then has two basic options: (1) The exchange can stay private; and (2) The exchange can list and remove all restrictions on trading. (Reena Aggarwal)[2]

In this manner, a quasi-governmental institution transforms itself into a profit-oriented, publicly traded company. Ownership and trading privileges are effectively separated. Stockbrokers are no longer owners but customers of the exchange. Directors are elected by shareholders and answerable to them[3]. (Pamela S. Hughes)

Effects of the process on exchange members, investors and regulators

With the transformability to demutualized exchange, ownership is transferred from member brokers and dealers to non members. This is done with the appointment of a professional board and management. This dilution can be done through a number of ways. Sequentially weights are assigned to individual existing member seats. The equity shares listed on the exchange facilitates the process of unlocking the members' equity. The members have then the option either to convert to share

[2] See Figure 1

[3] See the Models of Stock Exchanges in Appendix

ownership or sell them to non members. The securities regulators have put a limit on the ownership by one holder or a group of holders to non controlling stake of 5-10%. The effects on the membership differ because of the legal structure of the company. If it's a limited liability company, the existing members agree to the asset and operations transformation to the newly formed company in exchange of its shares.

The economic ownership gets separated from the trading membership, thus eliminating the control of the interest groups e.g. trading members on the decision making of the exchange. The voting rights of the broker member on the board of the exchange vary which is 50%. The directors are non trading owners who can be independent or non-independent in order to reduce the influence of the brokers on the exchange. The board members should be fully qualified as well as fully committed to meeting both shareholders' interests and conducting the business in a prudent manner.

The appointment of governmental officials remains controversial because a demutualized exchange is a private company that is operating in a competitive environment. The representatives of the securities regulators support the transition to a demutualized exchange to discourage the intimidating role of the brokers.

Broader ownership would help in avoiding large fluctuations in the value based on the trading of limited number of shares. The management should be accountable to the board which would determine management's appointment and remuneration.

The issue of compensation of the existing trading members arises since their trading rights are granted to the new members when are to acquire their trading rights. The economic value of the share would be inclusive value of the trading right. With the transformation to demutualization, the dividend policy coupled with the listing of shares and trading of shares has now replaced the previous right to trade in mutual trade.

The regulators are there to guarantee efficiency, transperancy and credibility of the markets and protect investor's interest and confidence. Their role remains the same before and after undergoing demutualization. For this, they have to deal with the conflict of interest between the exchange owners and the business they offer, rules governing primary and secondary markets, operative and ethical practices of market participants in particular dealers and brokers and the like. The regulation is harmonized in such a manner to avoid migration of trading to weakly regulated jurisdictions, to nurture competition, be responsive to the new structures and products, offer better alternatives to firms to mobilize funding and reduce transactions cost and the like.

The Performance of Public Stock Exchanges

A number of European companies have undergone the process of demutualization. The US stock exchanges also followed the trend of demutualization. The stock exchanges in Asia are also adapting to these structural changes. We will examine the performance of Singapore Stock Exchange after it went the process of demutualization as it was the first stock exchange in the Asia Pacific region that demutualized.

Singapore Stock Exchange

The Singapore Stock Exchange (SGX) was formed in 1999 by the merger of Stock Exchange of Singapore (SES) and Singapore International Monetary Exchange

Limited (SIMEX) (financial futures exchange). The demutualization was to enhance competitive positioning and respond to the global trend (Alan Shaw). Before the merger, SES was administered by the Monetary Authority of Singapore (MAS) and SIMEX was owned by its members. The SGX was created to own the exchanges and their related clearing houses. The former owners of the exchanges were given share and seats in the exchange[4]. SGX went public in 2000 with 1,000,000,000 ordinary shares outstanding.

Impact of Demutualization

Demutualization has a dramatic impact on the SGX. It is likely to result (sooner or later) in changes in corporate mindset to emphasize shareholder value and customer focus, and for operating discipline (Alan Shaw).[5] The sources of revenues for the SGX also changes after demutualization. Prior to demutualization, the exchange was dependent on the access fees and lower trading costs as its source for revenues. The exchange also relied on the debt finance from its member. But after the SGX undergone the process of demutualization, the whole revenue stream of the exchange has been changed. Now the major sources of revenues for SGX are[6] (i) sales of market data; (ii) trading in options and warrants; (iii) equity trading, clearance and settlement and (iv) listing fees (both initial and subsequent listing fees) (Reena Aggarwal).

[4] See Figure 2

[5] See Table 2

[6] See Figure 3

Methodology

We have used the regression model to explain the relationship between the demutualization and the revenues of Singapore Stock Exchange.

X Variable and Y Variable

We have taken “Value Traded” as independent variable. “x” and the “Total Fee and Commission” as the dependent variable “y”. Both variables are the monetary values.

Assumptions

We have assumed that after demutualization, the trading value of the SGX would increase and as a result the fees and commission (revenues) also increase.

Findings

The regression equation for our findings is

$$\mathbf{Y = 0.8281+0.0034x}$$

This equation[7] shows that dependent variable “Total Fee and Commission” is positively related to the independent variable “Value Traded” i.e. if “Value Traded (x)” increases “Total Fee and Commission (y)” also increases and vice versa. The equation also shows that if the Total Fee and Commission (Revenues) have to increase by 1% then trade value must me increased by 0.0034%.

[7] See appendix for findings

Future Research

In our paper we discussed the process of demutualization of stock exchanges and how it impacts the performance of the stock exchanges. Our research will help the analysts and students to study the process of demutualization in Pakistani Stock Exchanges. It would also help them to further research into the methods that can enhance the performance of the stock exchanges thus increasing the benefit to the investors and the shareholders. Further research can be carried out to come with some other structural changes in the demutualized exchanges that can enhance their performance.

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APPENDIX

Table 1

Demutualized Exchanges	Year
Stockholm Stock Exchange	1993
Helsinki Stock Exchange	1995
Copenhagen Stock Exchange	1996
Amsterdam Stock Exchange	1997
Borsa Italiana	1997
Australian Stock Exchange	1998
Iceland Stock Exchange	1992
Simex	1999
Athens Stock Exchange	1999
Stock Exchange of Singapore	2000
Hong Kong Stock Exchange	2000
Toronto Stock Exchange	2000
London Stock Exchange	2000
Euronext	2000
The Nasdaq Stock Market	2000
Chicago Mercantile Exchange	2002

Table 2

Corporate Structure of a Mutual and a Demutualized Exchange

AREA	MUTUAL EXCHANGE	DEMUTUALIZED EXCHANGE
Ownership	Members who trade on the exchange.	Public shareholders. These may include members, but trading rights and ownership are separated.
Aims of the Exchange	Usually, to maintain: • an efficient, low-cost, trading environment; • "risk-minimized" settlement; and • quality regulatory framework.	Usually to: • maximize gains from shares; • grow earnings and dividends; • improve product range and distribution; and • protect brand quality (including by having a quality regulatory framework).
Composition of board and decision-making	• The board usually comprises mostly or solely member representatives.[3] • Decisions are usually made on one member, one vote basis. • Decision making power is vested with the board.	• The board is usually more diversified. • Decisions are usually made on a one share, one vote basis. • Decision making power is vested with the board, but it is likely to be more "strategic" leaving management to operate the business.
Acquisitions and alliances	• Not usually a priority.	• Likely to be a priority, given a desire to maximize growth.
Capital management	• Not usually a priority. Mutual exchanges may maintain high levels of capital backing on the basis of "better safe than sorry" and to meet statutory requirements.	• A key priority as management attempts to maximize shareholder value. It may be undesirable for the exchange to maintain high cash/liquid reserves as it can weigh down the company's return on assets.

FIGURE 1 ■ THE PROCESS OF EXCHANGE DEMUTUALIZATION

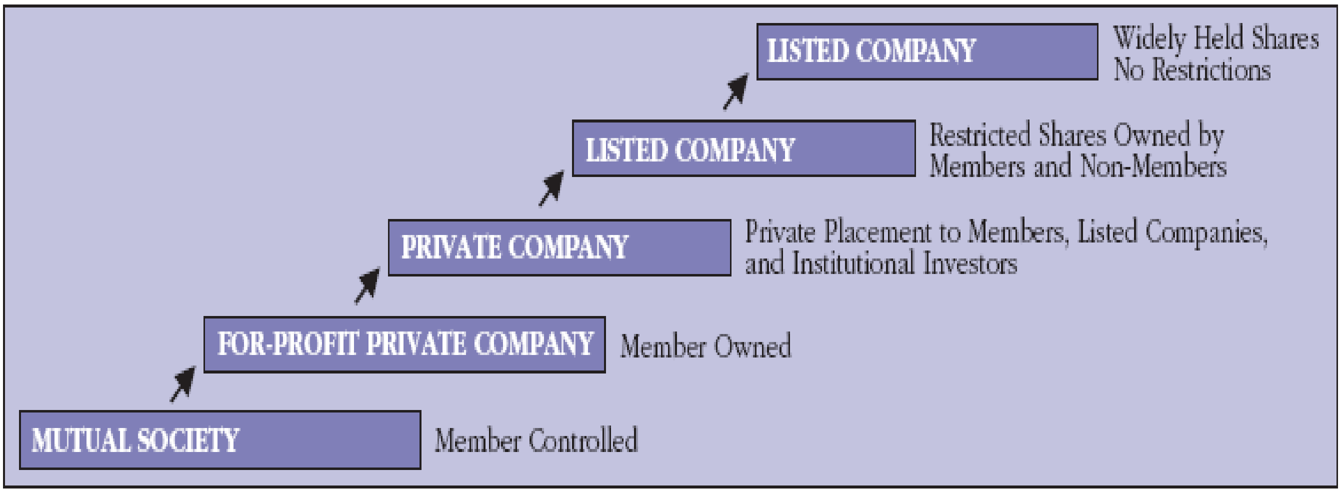


Figure 2

SGX Structure after Demutualization

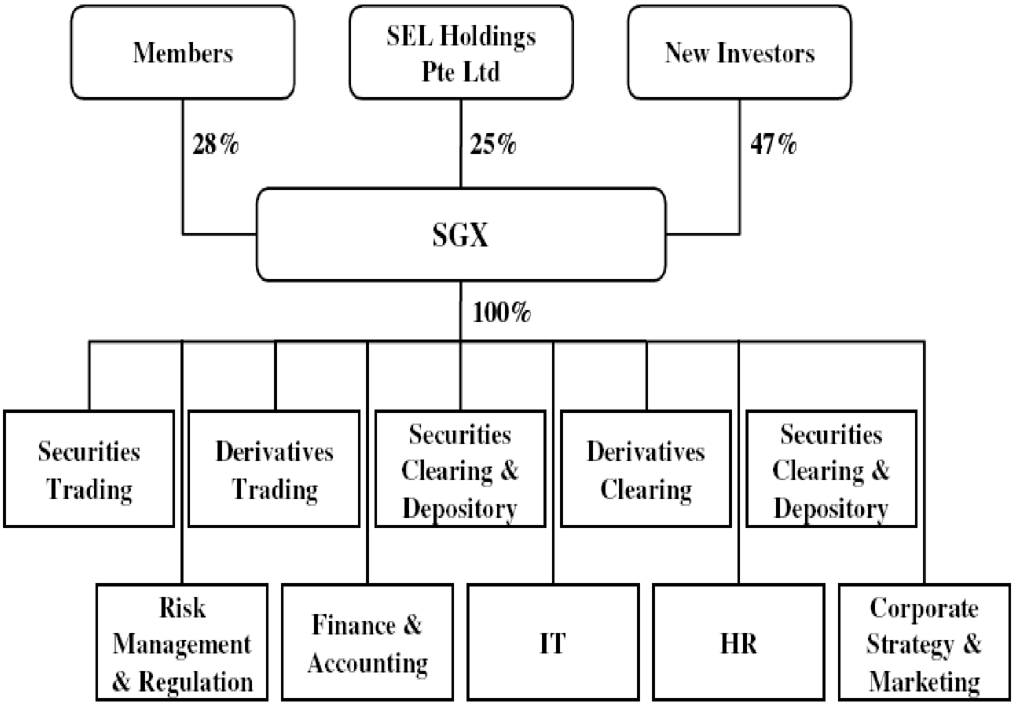
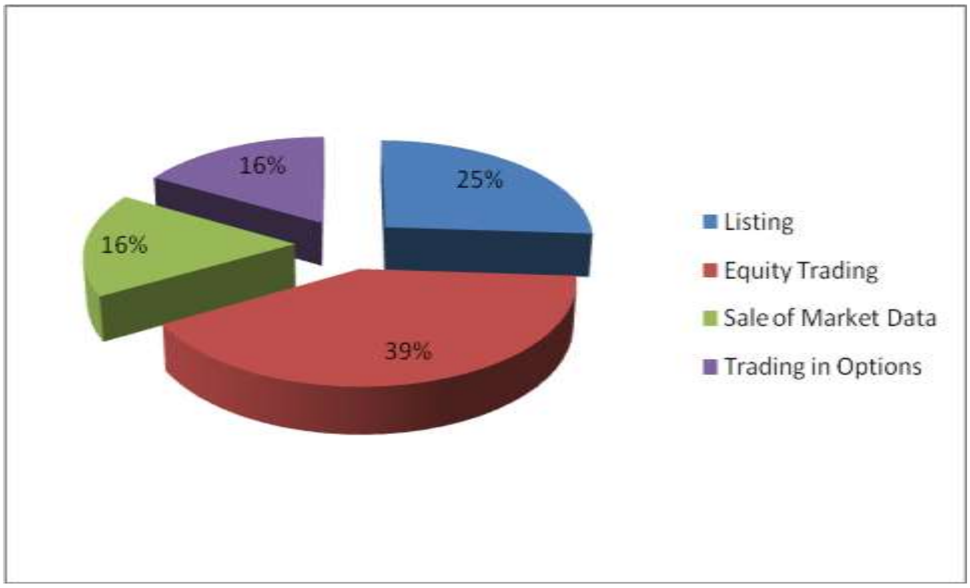


Figure 3



Sources of Revenue of SGX

THE MODELS OF STOCK EXCHANGES

STOCKHOLM STOCK EXCHANGE (SSE)

Demutualization Status	Demutualization Process	Reasons for Demutualization
• is now public, listed on its own exchange • used to be operated as a not-for-profit mutual organization, with no right to build up capital, as fees charged to members could not exceed costs; members could trade seats, but seats could not be purchased and sold; SSE was regulated by the City Chamber of Commerce and it operated as a legal monopoly	• 3 step transformation in exchange: (1) modernization of trading (2) privatization of exchange (3) internationalization of the market • 1992 legislation abolished monopoly of SSE and provided the Financial Supervisory Authority with the power to authorize an exchange • shares were sold to listed issuers and exchange members, and were only freely tradable after one year, after which time, no restrictions on ownership	• in the '80s trading on the exchange was low and primary market for key Swedish issuers moved to London due to a 1% turnover tax • in late '80s and '90s, political climate changed—more market oriented, aftermath of '87 crash and financial crisis in the Swedish banking system • turnover tax and currency controls repealed • because of 1992 legislation, the exchange felt that in order to compete internationally it needed "economic incentives and a business attitude"

Post-Demutualization	Corporate Governance	Regulatory Framework
• SSE's first act as private company was to allow remote membership and direct execution of orders from other cities • OM Gruppen AB (OM), which began in 1985 as a clearance house and options exchange of Swedish stocks and became authorized and licensed as an exchange following the 1992 legislation, and which was an initial subscriber to shares in SSE because of its status as a listed company, increased its ownership in SSE to 20% and proposed a merger with SSE in 1998 • this controversial proposal succeeded because the Ministry of Finance believed a merger of cash and derivatives market was beneficial • in order to satisfy opponents, the government became a shareholder of both OM and SSE • also, new legislation passed giving Financial Supervisory Authority more power • at completion of merger, government owned 6.3% of combined entity and announced its intention of becoming a 10% shareholder in order to block measures • in 1995 a clearing link was created between OM and the Finnish derivatives exchange; in 1997 these derivatives were united by the world's first electronic trading link between independent exchanges • in 1999, Sweden and Denmark launched the first cross-border joint equities trading system, designed to raise liquidity in Baltic markets	• 9 board members elected by shareholders	• Financial Supervisory Authority has power to vet owners (10% stockowners) and managers of exchanges, and has direct supervision of public disclosure by OM and SSE • independent disciplinary committees were created for companies with qualified holdings in an exchange, with a right to initiate disciplinary proceedings in such cases given to the FSA

AUSTRALIAN STOCK EXCHANGE (ASX)

Demutualization Status	Demutualization Process	Reasons for Demutualization
• is now public, listed on its own exchange • exchange formed in '87 through amalgamation of six independent stock exchanges • exchange was not a legally mutual society—it was company limited by guarantee with no shares, and was prohibited from paying profits; surplus had to be applied towards promoting objects of the exchange	• legislation allowed for demutualization in 1998: expanded the regulatory and public interest responsibilities of exchanges as SROs, as well as the exchange's accountability to the ASIC; separated stockbrokers' right to trade on an exchange from shareholder rights; imposed 5% limit on shareholdings in the exchange; allowed an exchange to self-list and provided for supervision of this arrangement by ASIC	• deregulation, open competition and technological advances

Post-Demutualization	Corporate Governance	Regulatory Framework
• when ASX, Ltd. parent of the exchange proposed to take over the Sydney Futures Exchange, it found itself in a bidding war; • also the Australian Competition and Consumer Commission (ACCC) considered ASX's merger plan to be anti-competitive • "key issue before the ACCC was whether a securities exchange should be protected and fostered as a national capital markets champion or just another entity competing in the marketplace like the companies that use it to raise capital"	• 9 member board of directors	• ASX develops and implements business and listing rules and supervises trading activity, markets participants such as stockbrokers and broker firms, including surveillance, investigation, discipline of stockbrokers and broker firms, and notification of Australian Securities & Investments Commission (ASIC) of certain supervisory matters • ASIC supervises ASX's listing and undertakes the day-to-day supervision of its compliance with the listing rules to ensure ASX subject to independent scrutiny • MOUs between ASX and ASIC: (1) Markets MOU covering the referral to ASIC of matters detected by ASX in its supervision; (2) Membership matters MOU covering ASX's responsibility for supervision of brokers and broking firms; (3) Companies matters MOU covering ASX's supervision of listed entities; (4) Transfer of information MOU relating to arrangements for ASX to provide documents released to the market by listed entities; (5) Self-listing MOU detailing arrangements for ASX to be listed on its own market and supervised as a listed entity by ASIC