CHAPTER – I INTRODUCTION

1.1 Background of the Study

There is an increasing trend of securities exchanges all over the world to demutualize and convert from non-profit mutual organizations to for-profit investor owned corporations. The first exchange to demutualize was the Stockholm Stock Exchange in 1993. This was followed by several others such as the Amsterdam Exchange in 1997, Toronto, Hong Kong, and London Stock Exchanges in 2000 to name just a few.

Demutualization is the transition of a securities exchange from a mutual association of exchange members operating on a not-for-profit basis to a limited liability, for-profit company accountable to shareholders. Demutualization separates ownership (and voting rights) from the right of access to trading.

Demutualization alters the governance structure of the exchange although its operations and services may remain the same. Access to trading becomes a matter of contract with the exchange – dealers simply sign up as users or participants. Shareholders, a separate group, are entitled to the profits obtained from market operations. Shareholders provide capital to the exchange and receive profits, but they need not conduct trading on the exchange.

The demutualized exchange becomes a for-profit company, offering service to market intermediaries and listed companies. It is now organized around profit rather than as an extension of the business costs its members incurred as market intermediaries. Demutualization challenges the traditional approach to supervision of securities exchanges and raises issues regarding their role in the regulation and supervision of capital markets.

The process of demutualization takes place in stages and can ultimately take several different forms. In the first phase, the members are typically given shares in and so become legal owners of the organization. Then or in some cases even as part of phase one, the organization raises capital through a private placement, typically from outside investors as well as members. Having thus become a privately owned corporation demutualized exchanges then have two basic options: the exchange can stay private or it can list.

Several demutualized exchanges have become publicly traded companies and are listed on the exchange itself. Other exchanges that have become publicly traded companies include the Deustche Börse, Oslo, Hong Kong, and Singapore Stock Exchange.

Nepal Stock Exchange (NEPSE) has traveled its two decade long journey in the Nepalese capital market from being the seed to the fully grown tree. Now NEPSE's only trading system has been automated while the Settlement and the clearance system has to be automated and is in the final stage of the operation. Without fully automated system of clearance and broker back office system the operationalization of the stock market cannot be said to be fully automated. It is in this context, the opening up of the new stock market whether it is in the private sector and or the government sector should be viewed. Serious considerations need to be taken before reaching to the final decision in providing the operation of the Stock market.

The securities markets have not been a significant part of economic development in Nepal. The number of companies listed and the ratio of market capitalization to GNP over the last few years shows that the securities market has not been significantly used as a source of capital by companies in Nepal the market capitalization of the Nepal Stock Exchange (NEPSE) has been hovering around 40 percent of the GDP. Thus to examine whether the demutualization of the stock exchange can enhance the governance and

eventually the performance of the exchange, the present study has been conducted.

1.2 Statement of the Problem

The fundamental problem with the exchanges lies with the issue of corporate governance. There are tons of negative publicity about insider trading, related party transaction and asset stripping by listed companies in the media, which has greatly impacted investors' confidence. Moreover the existence of nontradable shares has been the greatest impediment to the development of Nepal's equity market. Traditionally, owners of non-tradable shares do not have a chance to realize the value of their shares in the market. As a result, many will abuse their executive power and participate in activities or awarding contracts that will lead to their personal monetary gains. Currently the authorities are involved in a series of shares reforms to rectify the situation. The process of share reforms will indeed bring about improvements to the existing split share structure of most listed companies. However to fully alleviate the lack of corporate governance in the exchanges, implementing the split share reform is not an adequate measure, because the exchanges will still lack the motivation to closely monitor the listed companies. Hence to test the significance of the demutualization for the good governance, the study raises the following research problems;

- a. What is the past performance of the NEPSE?
- b. What would be the main forces for demutualization?
- c. What are the possible benefits of demutualization in Nepalese context?
- d. Is demutualization of NEPSE enhances good governance?

1.3 Objectives of the Study

The main objective of the study is to evaluate the appropriateness of demutualization for good governance on NEPSE. To achieve this objective, the study also focuses on the following specific objectives;

a. To evaluate the past performance of NEPSE.

- b. To analyze the main force behind demutualization.
- c. To trace out the benefits of demutualization.
- d. To test the substantiality of demutualization in good governance.

1.4 Significance of the Study

The study is based on the prediction of benefits from demutualization of the Nepal Stock Exchange. Thus the study will be truly beneficial to the Board of Directors of the NEPSE to decide whether to demutualize. Further, the study will also be equally important to the SEBON for proposing new laws and regulations.

Besides them, the study will be substantial to the Brokers, issue managers and others as the activities of them are related to the performance of NEPSE. Further, the study will be crucial to the investors, as they are the true athlete of the stock market marathon. Finally, the study will be most important to the GON for deciding whether the promulgation of the demutualization of NEPSE assists more in economic growth.

1.5 Limitations of the Study

The study will have the following limitations;

- a. The study is concerned with the demutualization, which has not been happened in NEPSE, and thus is fictional.
- b. The evaluated benefits and the drawbacks of the demutualization may not match in future, if demutualization really occurs.
- c. The secondary data analysis is limited to five year periods, and thus may not truly represent the whole performance of NEPSE.
- d. The reliability of the primary data absolutely depends upon the responses of the respondents.
- e. Besides demutualization, the study does not cover other financial activities.

1.6 Organization of the Study

This study is organized under five different chapters. The title and brief sketch of each chapter is as follows:

Chapter-I: It contains the introduction of the study where it includes background of the study, statement of the problem, objective of the study, significance of the study, limitations and organization of the study.

Chapter-II: It incorporates theoretical framework and review of the articles, journals and past researches and other empirical studies conducted inside and outside the country.

Chapter-III: It explains the methodology used in the research to arrive at the results in the context of arriving at the objective of the study. It therefore basically deals with the nature and sources of data, research design, method of data collection and statistical tools and techniques used in analysis of data.

Chapter -IV: It deals with the analysis of primary and secondary data collected during the study by using different tools and methods and scoring empirical findings out of the study.

Chapter-V: It covers summary, conclusions and recommendations of the study followed by appendices and bibliographical references.

CHAPTER – II

REVIEW OF LITERATURE

This part of the study deals with the review of major related literature concerning the demutualization. So, this part of the study includes conceptual framework, and review of journals and articles, which would be helpful to manage and analyze the portfolio.

2.1 Conceptual Framework

2.1.1 Demutualization

"Demutualization is the process by which a customer-owned <u>mutual organization</u> (mutual) or <u>co-operative</u> changes legal form to a <u>joint stock company</u>. It is sometimes called stocking or <u>privatization</u>. As part of the demutualization process, members of a mutual usually receive a <u>"windfall" payout</u>, in the form of shares in the successor company, a cash payment, or a mixture of both. <u>Mutualization</u> is the opposite process, wherein a shareholder-owned company is converted into a mutual organization, typically through takeover by an existing mutual organization." (Pomerantz; 1996: 68)

"The mutual traditionally raises <u>capital</u> from its customer members in order to provide services to them (for example <u>building societies</u>, where members' savings enable the provision of <u>mortgages</u> to members). It redistributes some <u>profits</u> to its members. By contrast a joint stock company raises capital from its shareholders and other financial sources in order to provide services to its customers, with profits or assets distributed to equity or debt investors. In a mutual organization, therefore, the legal roles of customer and owner are united in one form ("members"), whereas in the joint stock company the roles are distinct. This allows a broader capital base if the customers cannot or will not provide sufficient financing to the organization. However, a joint stock company must also try to maximize the return for its owners instead of only

maximizing the return and customer services to its customers. This can lead to a decline in customer service to the extent that customers', management's and shareholders' interests diverge." (Cagle, Lippert & Moore; 1996: 351-352)

"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). Demutualization makes sense if it induces a change in the exchange's objective from managing the interests of a closed member-based organization with a central focus on providing services for the benefit primarily of the members/brokers and keeping costs and investments limited to financing agreed by members, into a company set up with the objective of maximizing the value of the equity shares by focusing on generating profits from servicing the demands of their customers (brokers and investors) in a competitive manner." (Elliot; 2002: 4)

"The number of exchanges that have privatized or listed has been increasing since the Stockholm Stock Exchange demutualized in 1993. In 1999, 11 stock exchanges had been privatized or listed and this number rose to 21 by early 2002, with several other exchanges either considering demutualization or already having stated their intent to do so. Of the World Federation of Stock Exchanges-formerly the International Federation of Stock Exchanges (FIBV)-member exchanges, around 52% of stock market capitalization is accounted for by demutualized exchanges. In Asia, demutualized stock exchanges including the Tokyo Stock Exchange now account for 76 % of the region's market capitalization." (Elliot; 2002: 6)

2.1.2 Types of Demutualization

There are three general methods in which an organization might demutualize, full demutualization, sponsored demutualization, and into a mutual holding

company (MHC). In any type of demutualization, insurance policies, outstanding loans, etc, are not directly affected by the organization's change of legal form.

2.1.2.1 Full Demutualization

"In a full demutualization, the mutual completely converts to a stock company, and passes on its own (newly issued) stock, cash, and/or policy credits to the members or policyholders. No attempt is made to preserve mutuality in any form." (Krishnamurti, Sequeria & Fangjian; 2002: 18)

2.1.2.2 Sponsored Demutualization

"A sponsored demutualization is similar; the mutual is fully demutualized and its policyholders or members are compensated. The difference is that the mutuality is essentially *bought* by a stock corporation. Instead of receiving stock in the formerly mutual company, stock in the new parent company is granted instead." (Krishnamurti, Sequeria & Fangjian; 2002: 19)

2.1.2.3 Mutual Holding Company

"A mutual holding company is a hybrid concept, part stock company and part mutual company. Technically, the members still own over 50% of the company as a whole. Because of this, they are generally not significantly compensated for what would otherwise be viewed as loss of property. This is also why many jurisdictions, including <u>Canada</u>, disallow the formation of MHCs. The core participants are isolated into a special segment of the company, still viewed as "mutual". The rest is a stock company. This part of the business might be publicly traded, or held as a wholly owned subsidiary until such time that the organization should choose to go public." (Krishnamurti, Sequeria & Fangjian; 2002: 20)

Mutual holding companies are not allowed in New York where attempts by mutual insurance to pass permissible legislation failed. Opponents of mutual insurance holding companies referred to the establishment of mutual holding companies in New York as "Legalized Theft."

"Some MHC demutualizations have been planned as the first of a two-stage process. The second stage would be full demutualization once the transition pains into MHC status are complete. In other cases, the MHC is the final stage. Note that some mutual companies, such as Nationwide Mutual Insurance Company and the MassMutual, own stock companies and are listed on a stock exchange. These are not MHCs, however; they are simply mutual companies which have majority control over one or more stock companies. Other mutual companies may own some of another company's stock, but as simply an asset, not something they actually control. Finally, many mutual companies, including Nationwide and MassMutual, have wholly owned subsidiaries. The subsidiaries may technically be stock companies, but the mutual owns all the stock. For example, the New York Life Insurance and Annuity Corporation (NYLIAC) is a wholly owned subsidiary of the New York Life Insurance Company (NYLIC). A person may purchase an insurance policy from either company, but only those who own participating policies from NYLIC are mutual members. Other policyholders are customers." (Krishnamurti, Sequeria & Fangiian; 2002: 22)

2.1.3 Forces for Demutualization

"All major exchanges are facing increasing competition from other exchanges and/or alternative trading systems. Moreover, the development of technology has meant that services once offered exclusively by the local exchanges are now available elsewhere, creating competition for order flow and listings. Old member-owned association structure fail to provide the flexibility and the financing needed to compete in today's competitive environment. Consensus decision-making is slow and cumbersome and frequently leads to decision grid lock as competing interests attempt to influence the strategic direction of an exchange. With the separation of ownership and trading privileges, an

exchange will achieve greater independence from its members with respect to its regulatory functions. The promise of demutualization is that shareholders of the newly demutualized exchanges will provide a new corporate governance structure that is far more effective in managing conflicts among market participants." (Garber; 1986: 31)

2.1.3.1 Technology and the rise of Electronic Communication Networks (ECNs) and Alternative Trading Systems

"Alternative Trading Systems (ATS) are privately operated computerized system that perform many of the functions of an exchange by centralizing and matching buy and sell orders and providing post-trade information. ATS provide cheaper and faster execution methods, which have caused the exchanges to alter their traditional methods – by providing extended trading hours, or alternative price discovery mechanisms. The development of electronic trading systems has eliminated the need for physical trading floors as execution takes place across ECNs. This has had profound impact on small regional exchanges which have become increasingly marginalized as the liquidity and trading has gravitated towards the largest exchanges. Furthermore, advances in technology allow for better integration of trading with clearing and settlement. The growing threat from alternative trading systems has put pressure on financial exchanges to adopt more efficient trading systems and to migrate to electronic trading. By demutualizing, the exchanges hope to get more operational freedom. Converting themselves into a publicly listed entity also enables exchanges to undertake mergers and acquisitions to meet this growing threat." (Hughes & Ehsan; 2006: 103-104)

2.1.3.2 Increasing Competition for Global Order-Flow

"With the advances in technology and the globalization of capital flows, competition between exchanges is no longer confined to national or regional boundaries but also global. In this new globally competitive environment, exchanges must be able to run as efficient business enterprises or risk being

made irrelevant. The increasing competition for global order-flow, lack of liquidity and the growing threat of marginalization of their domestic markets has compelled exchanges to consider demutualization in order to transform their business mode." (Hughes & Ehsan; 2006: 107)

2.1.3.3 Growing Conflicts of Interest between Existing Owners

"The mutual structure implied that the interests of many diverse constituents had to be taken into account when making major strategic and operating decisions. A stock exchange must be responsive to the needs of its many stakeholders, including participating organizations, listed companies and investors. However, as markets have become more sophisticated, the interests of various member groups began to diverge. This has led to tremendous strains in the governance and decision making of financial exchanges. Separating exchange membership from ownership and transforming the exchange into a for-profit investor owned organization, the managers of an exchange can focus on a single group, its owners. This simplification of governance structure allows for faster decision making which is increasingly important as the competitive landscape has been transformed by the new technology." (Taylor; 2004: 8)

Over the long run, for-profit stock exchanges run by entrepreneurs and disciplined by profit-seeking investors should produce better-financed organizations with greater ability to respond quickly to preserve the value of their franchises. The new organization would be designed to maximize the shareholder's value.

2.1.4 From Mutuality to Demutualization of Exchange

"The transformation of exchanges from mutual to demutualized structure involves two key features: (i) a change in the ownership structure, and (ii) a change in legal as well as organizational form. Both need to be accompanied by adequate safeguards to ensure appropriate governance. Depending on the

nature of ownership and legal forms adopted, the demutualized exchange - given their corporate model and facing growing competitive pressures - lends itself to focusing on evolving strategic positioning which, depending on a number of conditions, could involve greater market consolidation, vertical integration and product diversification." (Robb & Cromble; 2006: 61)

2.1.4.1 Ownership Structure

"The transformation from the mutual member-based to demutualized exchange involves issues of transferability of ownership from members to nonmembers. There are various ways that dilution of membership can be achieved. Sequentially, it involves conversion of existing member seats by monetizing these and assigning a certain value per seat. Once the valuation is done, the members can opt to convert their membership to share ownership or to sell off their interest to nonmembers. In most cases of demutualization of exchange, members have opted to retain their share ownership. A listing of equity shares in the exchange facilitates the unlocking of the members' equity and buy out of the interest of the traders, while leading to the monetization of the value of the members' seats. An entity with freely transferable shares, rather than membership rights, can form equity-swap-based strategic alliances or mergers with other exchanges, domestically or in other countries or time zones. Such alliances are stronger and offer greater credibility than pure cooperation agreements." (Singh; 2004: 42-43)

To avoid stock exchanges operating in special or limited interests, securities regulators often place restriction on ownership by one holder or a group of holders to non-controlling stakes of 5-10%. Limits on ownership stakes could affect potential take-over by other exchanges. Such takeovers could have merit in terms of efficiency and economies of scale of the market especially where more efficient participants acquire inefficient ones. Recognizing the synergies of takeovers, most demutualized exchanges have provisions in place to allow other exchanges, or technology partners, the possibility of acquiring or

swapping strategic stakes. The reluctance to relinquish control to strategic partners or owners remains however one reason why non-equity, swap-based cooperative alliances have been more prolific in the exchange industry. Indeed, several hostile take-over attempts (including OM Gruppen's moves to acquire the London Stock Exchange in 2000, and the bidding war for Sydney Futures Exchange by Australian Stock Exchange and Computershare in 1999) have failed due to the voting strength still exerted by the brokers.

2.1.4.2 Legal and Company Structure

"Most stock exchanges are registered as private limited companies with a paidup capital base, while others operate as member associations or cooperative
arrangements. At the end of 2000, FIBV statistics indicates that 90% of its
member exchanges, accounting for 60% of market capitalization, were private
limited companies. Almost 46% of these were legal company exchanges with
inside ownership. Around 25% (accounting for 21% of market capitalization)
of the exchanges had been privatized, 13% (accounting for 8% of market
capitalization) were registered as listed companies and the remaining 17% had
other types of status—with some being state-owned or semi-public entities
(such as the Shenzhen and Shanghai Stock Exchanges (SZSE and SHSE). As
evident in Asia, with the exception of SZSE and SHSE, most of the exchanges
are legal entities registered as private limited companies. So far, five exchanges
in Asia have been fully demutualized, with three of these listed on their own
exchange, and another two have announced plans to demutualize in 2003."
(Treptow; 2006: 63-64)

The legal structure for the demutualized exchange is based on considerations similar to that for any profit-making company including decisions on number of shareholders (partnership vs. corporation), voting procedures, limitation of liability (liability limited to equity invested vs. joint and several liability for all debts), accounting and reporting requirements (based on taxation laws and on partners/shareholders' access to information of the company) and distribution

of dividends (re-investment needs vs. distribution to partners, taxation). In most jurisdictions, a limited liability company has been observed to be the traditional and preferred option for profit-making ventures involving more than a close group of partners. The methods for transforming an association into a limited liability company varies between jurisdictions, but in principle, the existing members agree to transfer the assets and operations of their association to a newly formed company, in exchange for shares in that new company.

2.1.5 Benefits of Demutualization of Exchanges

"Global competition and advances in technology costs are causing stock exchanges around the world to examine their business models and become more entrepreneurial. Many exchanges have responded by demutualizing, which is bringing about major shifts in ownership and corporate governance structure. By converting member-owned, non-profit organizations into profitdriven 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. In the process of providing the exchanges with capital, demutualization is also expected to strengthen the corporate governance of the exchanges. Exchanges develop and enforce market conduct rules. These rules encourage a fair and transparent market, which in turn attracts market participation and enhances liquidity. Market conduct rules include prohibitions on market manipulation, front running of clients and insider trading as well as the accurate marking of trades to honour the allocation method used on the exchange. An exchange may also develop and enforce business and sales conduct rules, which govern the relationship between the client and the dealer. A shift from not-for-profit mutual organization to for-profit organization with ownership separated from access to trading may allow the exchange to respond more effectively to competitive pressure and to act separately from the interests of individual members thereby creating a more streamlined and market-oriented exchange."

2.1.5.1 Spurring Economic Growth

"The economic benefits of financial services sector liberalization reverberate throughout the world from widespread increased opportunities created by new entrants, innovative products and services, and capital markets with greater depth and efficiency. In the global economy, open and fair markets are essential to ensuring that markets operate efficiently so that investors can easily and quickly buy and sell shares across borders, while businesses can access capital at the lowest price. The international financial system has been a major and contributing factor in the marked increase in living standards of those countries that participate in it. The demutualization will not only bring about better corporate governance to the exchanges thereby increasing foreign investors' confidence, it will also fuel the growth of other local financial institutions, entice the public to take out their savings to invest, the exchanges can have more money to invest in high-tech infrastructure, improve service quality of investor relations and more incentive for the government to lift the capital control etc. The benefits are plentiful but most importantly it will create a more even distribution of income, thereby relieving the poverty pressure and increase the living standards." (Segal; 2002: 82-83)

a. Transfer of Technology

"Demutualization is also a means of collaborating with strategic shareholders with specialized technical know-how with the objective of importing international skills, knowledge and technical efficiencies into the domestic market. Demutualization is a means of accelerating the development of technology-related infrastructure and capabilities." (Lucy; 2004: 122)

b. Increasing Domestic Consumption

"The real issue in almost all countries is how to rebalance the economy away from heavy dependence on exports to lead growth towards self-sustaining domestic demand, including a substantial improvement in the efficiency of investment. The government of such countries also has a major part to play in influencing saving and consumption, particularly through provision of education, health care and pensions. Reducing uncertainties in these areas could substantially diminish the strong precautionary saving motive among households and give them the confidence to raise their consumption. To this end, the demutualization is an important move that provides adequate checks and balances, improvements in corporate governance that will instill confidence in the domestic capital markets and encourage domestic consumption." (Lucy; 2004: 123)

c. Increase in Foreign Direct Investments

"The foreign financial institutions have brought competition incentives for their counterparts to improve and transform business strategies and management by setting good examples in the conduct of intermediary business, patent application of certain banking products, charging fees on account services, disintegrating the customer market and introducing the concept of check and balance in building up the internal control system etc. The opening up of financial market has provided good opportunities for foreign investment, enabling investors from various countries to capitalize on rapid development. The demutualization and listing of stock exchange will result in improved corporate governance, transparency and liquidity which will increase confidence in the capital markets and boost FDI." (Lucy; 2004: 124-125)

2.1.5.2 Development of Capital Markets

"The slow development of financial markets has meant limited availability of credit, so that households generally have to save in order to purchase big-ticket items, like houses and cars, rather than being able to borrow against future income. It also has meant that there are low returns on households' financial assets and limited opportunities for portfolio diversification, since there are few alternatives to depositing savings in banks. Enterprises might be less compelled to rely on internally generated funds if they could count on a broader set of financial markets to generate capital. Increased access to credit for households,

the availability of a wider range of saving instruments that would help them to diversify risk, and higher returns on their assets also could contribute to a reduction in household savings." (Akhtar; 2002: 22)

In addition, efforts are made on the basis of strict risk control to actively push forward the bond market, steadily enhance operation quality of the futures market and set up a mechanism for market-oriented innovation of new varieties.

a. Development of a Bond Market

"It is our contention that the demutualization and listing of the stock exchange will increase the level of confidence in other financial instruments and spur the growth of the bond market. The very fact that the country's corporate bond market is so small indicates that there is ample room for further development. In addition, as the capital market develops, both the internal and external environments for corporate bond issuers will steadily improve." (Akhtar; 2002: 22)

b. Innovation in Financial Products

"Innovation in financial products has offered more choices for investors. Drawing on the international experience, commercial banks issued subordinated bonds and financial bonds. Financial transaction instruments and modes have been innovated to deepen the functions of financial market. The amount of money actually being raised domestically through the stock markets is quite small, and pales in comparison to new loans coming out of the commercial banking system every year. This is because the domestic market is not functioning properly and most of the largest issuances have recently been going to more sophisticated international markets like New York and Hong Kong. Since financial markets are inextricably linked to increased investment and economic growth, strengthening domestic capital markets will help to

alleviate the significant financing constraints that firms currently face." (Akhtar; 2002: 24-25)

2.1.5.3 Job Creation

"The act of demutualization of the stock exchanges will create demand for new types of industries. It is crucial to note that job creation is not limited to the finance or finance-related industry as the impacts of demutualization and listing can be felt in many other aspects of the economy. Small medium enterprises now have access to additional sources of funding and they will be able to embark on more ambitious expansion plans. As the populace gains confidence in the capital markets and the overall economy, they will be more willing to spend. Increased domestic consumption creates a multiplier effect where the effects will reverberate deep into the economy." (Akhtar; 2002: 26)

2.1.5.4 Improvements to the Stock Exchange

"A demutualized and listed exchange provides an opportunity to unlock the value of the exchange by providing an influx of capital that the exchange can use to improve technology, seek innovation in technology and services or acquire other markets. New technology – most notably, client online access to trading and information – has also forced a reexamination of the business model. Besides helping exchanges adapt to a fast changing marketplace, demutualization is also expected to promote the exchanges' efforts to leverage their brand values by expanding into new businesses. In sum, equipped with better financing, more flexible decision mechanisms, and heightened accountability (to shareholders), demutualized exchanges are likely to emerge as leaner, more competitive, and more transparent organizations." (Akhtar; 2002: 28)

a. Improve Regulatory Framework

"A demutualized exchange continues to perform all of its regulatory functions, even after becoming a for-profit organization. Although conflicts of interest arise in both non-profit and for-profit exchanges, concerns have been raised about whether a demutualized exchange will take enforcement actions and impose penalties on those who are major providers of revenue. In order to avoid some of the conflict-of-interest issues, a demutualized exchange can establish a separate entity to conduct regulatory functions. An exchange can also outsource its regulatory functions to a completely independent third party to avoid the perception of conflict of interest. It's important to keep in mind that, especially if exchanges have market power, both for profit and non-profit exchanges can be inadequately regulated." (Aggarwal; 2002: 108)

b. Streamlined Decision Making and Operations

"The consensus decision making process is cumbersome and ill-suited to the dynamics of a changing economy and a highly competitive capital market. Professional management is likely to be more efficient in its decision making – allowing the exchange to respond quickly to change and to remain innovative and competitive. The exchanges' operations will also have to be tailored to meet market needs and generate profits because a demutualized exchange must be accountable to its shareholders who are not members." (Aggarwal; 2002: 108)

2.1.5.5 More Open, Fair and Transparent Markets

"The capital market is a market of information where timely and accurate information is vital. As such, the demutualized exchange will exert efforts in accordance with requirements of the modern enterprise system to improve corporate governance structure, develop an effective check and-balance mechanism between power organs, decision-making bodies, regulatory authorities and corporate leadership, reinforce responsibilities of listed companies and others that have the obligation to disclose information, effectively ensure truthfulness, accuracy, completeness and timeliness of information disclosure and protect interests of investors." (Aggarwal; 2002: 110)

a. Improve Corporate Governance

"Issuers will have to improve their disclosure and corporate governance standards to meet the demands of the international investing community. Indeed, stricter disclosure of financial information in demutualized exchange is required for prospectuses, and companies must ensure they have independent directors. These rules will not only help the country access foreign capital, but they will also set the foundation for building a more robust retail and institutional investor base. For this to happen, the country will need to continue to dramatically improve the structure and transparency of its capital markets, and corporate governance throughout the ranks of management and their boards of directors. To this end, demutualization is seen as a next step in achieving this goal." (Aggarwal; 2002: 112)

2.1.6 Regulatory Oversight: Challenges and Responses for Demutualized Exchange

2.1.6.1 Regulatory Framework for Exchanges

"The securities market regulation is critical to ensure efficiency, integrity and fairness of the markets that together lend credibility to markets and safeguard investor interest and confidence. To achieve this, the regulators have to perform adequate oversight of exchanges in order to deal with: (i) the conflict of interest between owners of exchange and the business they offer, (ii) rules governing primary and secondary market trading, (iii) qualification, operative and ethical practices of market participants in particular brokers and dealers, (iv) investor protection, and (v) transparency of market transactions, etc. For ensuring confidence, the regulation for securities markets has to be effective and enforced properly. However, regulation should not stifle the economic activity (within firms and across market) or process of resource allocation and/or market and product innovation. Ideally, regulation should be harmonized internationally to avoid migration of trading to weakly regulated jurisdictions and it should nurture competition, be responsive to the new

structures and products, and offer better alternatives to firms to mobilize funding and reduce transactions costs, etc." (West; 1995: 72)

"The role and significance of the regulatory framework and its requirements remain relevant irrespective of whether there is a mutual or a demutualized exchange or whether there is a single or multiple exchanges. Under all circumstances, exchanges ought to operate on established criteria as defined in the securities law, and the regulators to retain the authority to license an exchange or to revoke it if it fails to comply with the requirements. Irrespective of the structure of the exchange, national exchanges need to keep in consideration their own reputational and financial risks associated with a weakly regulated exchange that would ultimately affect own business prospects." (West; 1995: 74-75)

In view of the market challenges, regulators ought to be responsive and supportive of the restructuring of exchanges within the national jurisdiction or formation of their alliances with overseas exchanges that are critical to improve competitiveness and innovation. In the Philippines and some other developing countries, regulators have been instrumental in encouraging a transformation of the existing exchanges given the issues with their governance structure. For instance, the Securities Law issued in 2000, mandated the PSE to demutualize itself by August 2001 and induct non-broker members to its board.

2.1.6.2 Conflicts of Interest Under Demutualized Exchange

"In general, the degree of conflicts at the exchange level exists whether an exchange has a mutual or a demutualized structure, though the nature of the conflicts and responses to addressing these conflicts may differ depending on the type of exchange and the range of businesses it ventures in. In the mutual exchange, the key challenge is how to balance the members (who are owners) interest with that of the public interest of investors and issuers; meanwhile the demutualized exchange has to balance its commercial objectives with those of

protecting public interest. In theory, the establishment of a privately for-profit exchange changes incentive structure and operating environment. In some sense, demutualization is perceived as a way to resolution of conflict of interest observed in mutual exchange particularly if the ownership is segregated from the membership and trading rights, and the company structure is set up to subscribe to sound corporate governance principles and to allow proper running of the day-to-day management of exchange. However, demutualization brings with it some new sources of conflict of interests. These are: First, the exchange's drive for profit is argued by some to carry the risk of increasing the scope and intensity of conflict. For instance, a company aiming to maximize profits and dividends for its shareholders is argued to have:

- (i) Less incentive to commit resources for self-enforcement or to take enforcement action against its customers or users who are a source of income.
- (ii) Temptation to commercialize services and charge fees for selling of data and trade information that traditionally has been offered free in interest of continuous disclosure that is central to market integrity. ASX came under severe criticism in its inquiry over selling of the range of all ordinaries index that tracked market movements. Standard and Poor's (S&P) has sought license to use this information. While demutualized exchange sees market information as an asset to generate return, the investors perceive it as critical for public interest.
- (iii) Resulted in some exchanges undergoing transformation to suspend trading in the liquid products listed on its market that would impact the transaction fees such trading would generate. However, proponents of demutualization argue that such exchanges have greater competitive advantage and resources to devote to regulation than the member-based exchanges given the latter are predominant emphasis on protecting the self-interest of members. Viable competitors—domestic and international exchanges—who have to manage business effectively in order to be competitive will end up upholding the reputation of the exchange and implicitly serving

public interest. In addition, the market pressures in a demutualized exchange would ensure that the company strives to be competitive by upholding principles of market integrity and transparency and by maintaining cost effectiveness and efficiency in the primary and secondary market regulation." (Belth; 1994: 125-128)

"Second, the self-listing of the public issue on its own exchange can pose issues of conflict of interest if listing standards and its oversight are compromised by the exchange concerned. Recognizing this, most of the Asian exchanges have developed specific arrangements and memoranda of understanding for regulating and oversight of self-listing. The common approach has been to lay down a credible approach and proper regulatory standards to avoid conflict of interest at exchange level in relation to its own prospective listing. Generally, the securities regulator has all the powers and functions that an exchange has in relation to listed issuers except for an exchange's power to make listing rule. The listing standards for exchanges have to be the same as for other listed companies and the listing fee for the exchange has to be determined and collected by the securities regulator. Although the stock exchanges serve as the front line regulators, they are obligated to take action as required by the securities regulators for admission, suspension or removal of listing on stock exchange, put in place procedures to deal with the conflicts of interests that may arise, and ensure complete disclosure of listing." (Cole, McNamara & Wells; 1995: 38-39)

Finally, demutualization triggered extensive debate on the merits of self-regulation. Questions have been raised on inherent conflicts of interest that self-regulatory organizations (SROs)—which in some cases could be stock exchanges—face in their dual roles as market operators and regulators. On the part of exchanges, there have been concerns regarding the direct costs to the exchange of implementing the supervisory framework and indirect costs

associated with a perceived lack of flexibility and management of authorization and approval process.

"Critics outside exchanges raise doubts regarding the ability of SROs to regulate members with which they compete and there are perceptions that SROs might abuse its regulatory authority, e.g. through rule making processes, disciplinary actions, use of in proprietary information and unfair practices visà-vis competitors it regulates. In the United States, market participants have also complained of regulatory inefficiencies that have emerged because the broker-dealers are subject to the multiple SROs that have different rules and examination standards." (Cole, McNamara & Wells; 1995: 41)

Despite inquiries on these fronts, self-regulation—though riddled with issues of perception—continues to be a preferred mode of oversight as the exchanges or its specialized subsidiaries have the advantage of: (i) proximity to market participants and understanding of supervision of complex nature of industry, products and market; (ii) developing rules and supervisory arrangements that reflect market needs, adopting flexible and effective enforcement and monitoring; (iii) keeping costs of regulation manageable given that exchanges may lose competitive edge; and (iv) having experienced, well funded, independent experts who regulate better than the regulators with little or no experience. Self policing is critical as the exchange's key business asset is its reputation for integrity and efficiency and not one that it could compromise without threatening the value of its own business.

2.1.6.3 Regulatory Oversight of Demutualized Exchange

"Experience gained thus far has shown that demutualized exchanges have developed different regulatory arrangements and controls. Most exchanges recognize that a publicly traded exchange cannot afford to risk its reputation and market integrity given its implication for business and revenue stream/profits. To address issues and challenges they face, demutualized

exchanges have evolved governance structure to lessen the emerging conflict(s) and are adopting a set of regulatory responses. The demutualized exchanges have been observed to pursue different options.

For instance, in Australia, stock market regulation is based on a co-sharing regulatory model that involves a combination of statutory oversight provided by the ASIC and by the ASX Supervisory Review Pty Limited (ASX-SR) to oversee the operations of ASX and its group.

ASIC's role and function and its oversight of ASX is defined in an MOU signed between ASIC and ASX. ASIC monitors ASX's compliance with its role and functions and is mandated to audit supervisory arrangements of market operators. ASX supervises the exchange on a day - to- day basis through contractual arrangements with market participants whereby they agree to comply with the rules for admission to and continued participation in trading activity. Besides these rules, ASX and its market participants are subject to legislative requirements of the Corporation Law, Contract Law and the Trade Practices Act that prevent the abuse of market power." (Taylor; 2004-15)

Regulatory working relationship between the Hong Kong and Singapore demutualized exchanges and respective securities regulators are defined to be cooperative. In these cases, the securities regulator closely oversees the prudential and conducts regulation of market participants. Under the regulations, the securities regulators obligates companies to report continuous disclosure and monitors compliance with liquid capital requirements and conducts surveillance on selective basis to ensure that exchange users have in place proper systems of management and control.

Depending on regulatory response of demutualized exchange, the regulators need to position themselves to deal with the new structure of exchange and must keep up with the new market structure and market technology. Generally,

regulators need to ensure that stock exchanges operating as limited liability companies in a particular jurisdiction are regulated at par (in terms of conformity of laws and regulations) with the limited liability company operating in other jurisdictions and should not provide privileges to one exchange that its potential competitors may not enjoy. Enforcement cases will become more complicated as market manipulation and other misconduct are now also conducted on the Internet, making it more difficult to be detected.

2.2 Review of Related Studies

Serifsoy (2007), in his article, "The Impact of Demutualization and Outsider Ownership on Stock Exchange Performance - Empirical Evidence", has analyzed the efficiency and productivity of the stock exchange industry for the years 2001 to 2006. The chief aim of this study was to provide an empirical contribution to the growing literature on exchange demutualization since some of the points made by other authors rely mostly on anecdotal evidence. The study does not support the view that an outsider dominated exchange is a precondition for dealing adequately with increased levels of competition in this industry. Therefore, the case for an IPO, a measure that involves considerable one-off and additional running costs cannot be advocated from a technical efficiency perspective. However, a demutualization process that retains the exchange's customers as its main owners but realigns the ownership structure, for example more in congruence with the customer's respective volume of conducted business, seems promising from a technical efficiency point of view. Assuming that productivity growth will also improve when the restructuring process is completed, this would make this decision even more sensible. Another point that is commonly advanced in the literature is challenged by this paper: The assumption that a demutualization process is necessary to install modern trading systems cannot be empirically confirmed. In the contrary, the mutual exchanges in sample have a persistently higher portion of electronic trading than the demutualized and listed exchanges of our sample. Thus, it

seems that mutual exchanges are well aware of the necessity to adapt to new trading technologies without changing their governance structure substantially.

The study concludes that the rationale behind an IPO seems not primarily driven by efficiency enhancing motives. An IPO is more likely to be used as a solution vehicle for the diverging interests between (few) large international financial intermediaries and (many) small local brokers. The exchange's old owners possibly viewed a public listing as a catalyst to both maximizing the value of their venue and creating an exit option for those members that were unwilling to bear the costs of a operations restructuring. The fact that most of these IPOs occurred during the bull market until 2001, where relatively high sales prices were feasible, further strengthens this argument. Therefore, in anticipation of a substantial appreciation of the value of their voting rights, many small broker gave up their reluctance to demutualize and their hitherto relatively large share of the control structure in favor of cashing out these rights on the securities market.

Carowa, Cox & Roden (2008), in their article, "Demutualization: Determinants and Consequences of the Mutual Holding Company Choice", have provided comprehensive analysis of the determinants and consequences of the MHC structure as an alternative to full demutualization. According to them, the MHC structure provides a flexible alternative to full demutualization, allowing the thrift to maintain its mutual structure while accessing capital markets. Thrift insiders are able to retain protection from takeovers while outside minority shareholders are subjected to the agency costs of an insulated management.

The results indicate that the MHC choice can be used to control for over- and under-investment costs. Thrifts with less profitable investment opportunities and more capital are more likely to choose the MHC structure while thrifts with more profitable investment opportunities and less capital are more likely to

choose a full demutualization. Firms that match their capital needs with their choice of full or partial (MHC) demutualization have higher offer-period returns. Returns are also higher during more favorable regulatory periods.

MHCs grow slower, maintain higher levels of capital, maintain lower loans-toassets ratios, are less likely to return to their pre-IPO capital levels, and do not experience significantly higher performance. These findings suggest that firms with fewer investment opportunities relative to their potential level of capital are more likely to choose the MHC form. After formation, MHC insiders continued to be sheltered from the corporate control market, reducing the likelihood of being acquired. Nearly 39 percent of full demutualization was acquired compared to only 9 percent of firms that chose the MHC structure. Of the 8 MHCs that were acquired, only one did not first complete a second-stage conversion. The stock price reaction to the announcement that a MHC intends to fully convert to a stock company demonstrates the preference of minority shareholders to remove the MHC structure. Although the MHC structure seems to offer reduced risk of over-investment at the time of the IPO, after the IPO minority shareholders subsequently demonstrate they value enhanced growth opportunities and benefits of corporate control by responding positively when the MHC structure is dissolved.

Carson, Forster & McNamara (2009), in their article, "Changes in Theory and Evidence Life *Ownership* Structure: from Insurer Demutualization", have examined important issues related to demutualization, foremost among these being the off-cited need for access to capital. Based on an empirical analysis of financial statement variables, univariate results indicate that demutualizing insurers are no less capitalized than mutual insurers that do not demutualize, providing evidence against the access to capital motivation for demutualization. Moreover, an empirical examination of several organizational structure hypotheses indicates that the level of free cash flow is significantly related to the likelihood of demutualization, and demutualization may be motivated by attempts to control associated agency costs or to expropriate free cash flow. With the level of assets of mutual life insurers in the U.S. exceeding \$800 billion, the potential for wealth expropriation in the demutualization process appears to be immense.

As discussed throughout this paper, the issues surrounding demutualization are important to policyholders, managers, state taxpayers, and regulators. Policyholders are the owners of mutual life insurance companies even though they generally do not take full advantage of their rights. To the extent that policyholders are not fairly compensated for their ownership interests, changes in ownership form are antithetical to the rights of policy owners. Regulators are charged with safeguarding policy owner rights. In that capacity, the findings of this study suggest that regulators should actively examine all important factors related to the change in ownership of any mutual insurer.

Morsy & Rwegasira (2009), in their article, "Does Demutualization Matter to the Financial Performance of Stock Exchanges? An Investigation of Demutualized Member Stock Exchanges of the World Federation of Exchanges", have stated that financial performance of stock exchanges that have undergone the demutualization program is measured in terms of eleven measures; current ratio, fixed asset turnover, total asset turnover, debt ratio, debt equity ratio, earnings before interest and taxes (EBIT), basic earning power ratio, profit margin, return on assets, return on equity and return on capital employed. Results are mixed and exhibit different change in performance for the samples of demutualized stock exchanges.

Comparing the pre versus post-demutualization performance, the results show significant increases – at ten and five percent levels - in most of the profitability ratios (profit margin, earnings before interest and taxes (EBIT), basic earning power ratio and return on assets). Changes in other financial performance measures related to liquidity, asset management and debt ratios

are not significant; although in general it goes with the same direction as predicted by the research hypothesis.

In general, the results from analyzing the financial ratios are mixed. Only 36 percent of the financial ratios have changed as predicted by the research hypothesis. Thus, the study fails to reject the null hypothesis that states that demutualization has not led to better financial performance. This paper has gone a step further to analyze the financial performance of demutualized stock exchanges; it might be fruitful to re-investigate the financial performance of demutualized stock exchanges when we have a longer pre and post-demutualization periods. There is a big possibility then to conclude with more decisive and significant results.

Worthington & Higgs (2010), in their article, "Market Risk in Demutualised Self-Listed Stock Exchanges: An International Analysis of Selected Time-Varying Betas", uses a bivariate MA-GARCH to estimate the time-varying betas for four demutualised and self-listed stock exchanges: the Australian Stock Exchange, the Deutsche Börse, the London Stock Exchange and the Singapore Stock Exchange. Unit roots tests show that despite significant variability in each exchange's beta over time, they are covariance stationary and mean reverting. This has obvious and well-known for implications the capital asset pricing model, efficient markets hypothesis, event studies, and more importantly, the forecasting of exchange returns.

However, the primary focus of this analysis is instead on whether significant changes in market risk have arisen in securities exchanges through the process of demutualization and self-listing. While none of the exchanges has been listed for more than seven years, there is still ample evidence that the betas for these exchanges are stationary and have neither trended up nor down since listing. This suggests that despite ample evidence of operational and financial change since demutualization, and concerns that risky business decisions could

impact upon the ability of exchanges to perform their traditional monitoring and supervisory role, there has been no significant change in financial risk.

Karmel (2010), in her article, "Turning Seats into Shares: Implications of Demutualization for the Regulation of Stock and Futures Exchanges", have stated that it is hard to predict the future structure of the securities markets and the future governance and regulation of stock exchanges. Issues about exchange governance probably do not have to be fully resolved prior to demutualization because one of the objectives of demutualization is to streamline governance and base it upon stock ownership rather than constituency representation of member firms. However, issues concerning the balance between government regulation and self-regulation and the regulatory implications of demutualization are more urgent because the SEC is unlikely to allow the exchanges to demutualize unless it is satisfied with the securities industry's new self-regulatory structure.

Demutualization of exchanges will shift the power structures within exchanges, but public offerings of exchanges will change them much more. By raising new capital, exchanges will be able to implement new business strategies. But the freedom of public ownership will add burdens to exchange operations. New disclosure and reporting duties will affect cultures of confidentiality and even (from the public's viewpoint) mystery. To the extent that broker-dealer regulation is subsidized by listed companies, these issuers may object to this use of listing fees. Exchange executives will have to learn to deal with security analysts and plaintiff securities lawyers. Stock market corrections may adversely affect the stock of exchanges disproportionately to general indices.

2.3 Review of Thesis

Kharel (2005), in her thesis, "Current Problems and Prospects of Securities Market in Nepal", has the major objectives to detect out the existing problems

in Securities market in Nepal and also the prospects of Securities Market in future.

The main findings of the study were:

- a. The development of stock market primarily depends on program and their implementation.
- b. In Nepal, the overall policy environment has not been conductive to the development of stock market. Therefore, it is difficult to develop more efficient secondary market, trading system for both equity and debt security.
- c. Lack of investor's confidence in stock market since many listed companies resulted not trading on regular basis or hold AGM.
- d. Restriction on foreign portfolio investment hindered market development.
- e. NEPSE does not have appropriate policies, memberships and fee structure to attract member outside the Kathmandu.
- f. In Nepal, banks dominate primary market in government debt instruments, OTC trading is not permitted; therefore, secondary market is totally inactive.
- g. Lack of necessary provisions in the laws and regulation for the privatization and automatics of stock exchange as well as for the establishment of central depository of securities (CDS).

Baniya (2006), in his thesis, "Determinants of Share Price in Nepalese Financial Market", has the main objectives:

- a. To examine and evaluate the relationship of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- b. To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- c. To identify whether stocks of the sampled companies equilibrium priced or not.

d. To present some recommendations bases on the findings of the study.

The major findings of the study were:

- a. HBL's MPS is negatively correlated with major financial indicators. But it has positive relationship with DPS and DPR respectively.
- b. NBL's MPS has positive relationship with EPS and ROE, whereas it has negative relation with other financial variables.
- c. NBBL's MPS is positively correlated with EPS, NWPS and DPS which are statistically significant at 1% and 5% levels of significance. Further, MPS is positively correlated with DPR and ROE.
- d. NIBL's MPS is reversely correlated with major financial variables. However, MPS and DPS is statistically significant at 1% level of significance.
- e. SCNBL's MPS is negatively correlated with major financial indicators. But it has higher positive relationship with ROE.
- f. AFCL's MPS has positive correlation with main financial variables except ROE, with which it has negative relationship. But no such relationship is statistically significant.

Rijal (2008), in his thesis, "Role of Financial Indicators in Determining Share Price in Nepalese Financial Market", has the main objectives:

- a. To examine and evaluate the relationship of MPS with various financial indicators like NWPS, EPS, DPS, ROE, etc.
- b. To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- c. To find out whether stocks of the sampled companies are equilibrium priced of not.
- d. To identify qualitative factors affecting the stock price.

The major findings of the study were:

- a. NABIL's MPS is positively correlated with all financial indicators but these values are not statistically significant at either 5% or 10% level of significance.
- b. NIBL's MPS has negative correlation with all financial indicators.
- c. For all other banks, the correlation coefficients of MPS with other financial indicators are both positive and negative. These values are statistically significant at either 5% or 10% level of significance.
- d. Relationship with all financial indicators of MPS for NFCL is positively correlated and the relationship is statistically significant at 5% level of confidence with EPS and at 10% level of confidence with NWPS and DPS.
- e. For other Finance Companies, the correlation coefficient of MPS with other financial indicators, are both positively and negatively correlated and the relationship is statistically significant for KFL and UFCML and for others it is insignificant.

Shrestha (2009), in his thesis, "Share Price Behaviour of Commercial Banks listed in NEPSE", has the main objectives:

- a. To analyze the stock price movement of the NEPSE market.
- b. To test the random walk or weak efficient market hypothesis.
- c. To test whether the successive price changes are independent or dependent with the price of historical change.

The major findings of the study were:

a. The total numbers of actual and expected runs are statistically significant for most of the equity shares, which implies that their price changes are significantly different from random series. Result of run test also supports the result of autocorrelation. Therefore, today's price change is dependent on the information of yesterday's price.

- b. The mean absolute values of the autocorrelation coefficients are lower when the lag days are increases. This means the information of past price changes have little role to predict the future price changes for longer days.
- c. Half of the sample companies' share have greater than average value of K (18.87%) difference between actual and expected number of runs, which indicates significant difference between the actual and expected number of runs.
- d. Because the persistence hypothesis has been supported by the result of autocorrelation and run test, professional investors either individual or institutional can beat the market. Therefore, to make greater profit than "naïve buy and hold strategy", acute fundamental or other analysis are required which accurately predict the appearance of the new information in the market that affects the price of shares.
- e. There exists a low order serial dependence, which helps in certain extent to increase investor's expected profit.

Ojha (2010), in his thesis, "Stock Price Movement in Nepalese Securities Market", has the main objectives:

- a. To study and analyze the stock price and volume.
- b. To study and analyze the rate of newly listed companies and maintenance of already listed companies in NEPSE.
- c. To study and analyze the investors views regarding the decision on stock investment.
- d. To suggest the findings of the study to the interested parties related to stock investment.
- e. To study & examine the signalling factors impact on stock price with the help of NEPSE index.

The major findings of the study are:

- a. Studying the annual trend analysis of Nepalese stock price market, it was found that stock price trend is decreasing from many years as smoothly but from one year price of stock is decreasing as rapidly.
- b. On analyzing the price trend of three years NEPSE index in different months (36 months) with the help of monthly trend showed that the price trend of different months of the year 2005 was in increasing trend 2008 in decreasing trend while that of 2009 was sometimes in increasing and sometimes in decreasing trend. So from this trend analysis we can say there is no relationship of price trend between three successive years.
- c. Studying the sector wise monthly trend analysis for one year, it was found that unsystematic activities of the Nepalese stock price market. No exports can certainly forecast about the stock price.
- d. Volume of stock traded in stock exchange during the study period was found in increasing trend but in last year it was in decreasing trend.

2.4 Research Gap

All of the above studies are concerned either with the movement of the market price of the securities, or with the problems and prospects of the securities market of the country. The studies, however, does not provide the solution for tackling the problems and malpractices of the securities that can unexpectedly increase the market price. Further the study does not suggest any solution for the good governance and less conflict in the stock exchange of the country. To embrace such gap, the present study has been conducted, presenting demutualization as the solution for the good governance and less conflict in the stock exchange and analyzing other benefits that is associated with demutualization, and also analyzing the past performance of the securities market.

CHAPTER –III

RESEARCH METHODOLOGY

3.1 Research Design

Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. It is arrangement for collection and analysis of data. To achieve the objective of this study, descriptive and analytical research design has been used. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to analyze the appropriateness of demutualization for good governance of stock exchange.

3.2 Population and Sample

Currently there are one stock exchange operating under the ownership of NRB, NIDC and GON. For the study, the same stock exchange, Nepal Stock Exchange, has been chosen for examination, and data has been analyzed on the basis of the past performance of stock exchange, and hypothesis has been done to analyze the impact of demutualization on the operation of stock exchange.

3.3 Nature and Sources of Data

The study is based on both secondary data and primary data. For primary data, the responses obtained through the questionnaire from the personnel of brokerage firms, investors and students are the main source. Whereas, the annual reports of the NEPSE is the major source for secondary data. Besides these, the annual report of SEBON also serves equally as the major source for secondary data. Further, the basic conceptual information was collected through related working papers.

3.4 Periods covered

The study covers only five fiscal years period, i.e. from the fiscal year 2005/06

to 2009/10. This secondary data analysis serves the first objective of the study, i.e. analyzing the past performance of NEPSE.

3.5 Data collection Procedure

The required information is collected by conducting visits to NEPSE and SEBON, consulting library, surfing the internet and related text books. The annual reports of NEPSE and SEBON for the study period are obtained from the official websites of each organization. Existing literature on the subject matter is collected from various research papers obtained via internet. Likewise the review of working papers conducted by various international scholars on the related matters is done through internet surfing to various websites. For the primary data collection, a questionnaire containing 8 questions have been prepared and distributed to the personnel of the brokerage firms, investors and students, asking them to fill up the questionnaire and return it.

3.6 Data Analysis Tools

The collected data have no meaning if such data are not analyzed. To analyze the data in this research, the researcher has used some statistical and financial tools which are explained here.

3.6.1 Financial Tools

The financial tools used in this study are as follows;

A) NEPSE Index

The index is taken as a measuring tool whether the performance of stock market is good or not. This clearly focuses on the price of stocks that is increasing or decreasing in the market. Because the prices of stocks go up and down in a particular period compared to the previous period as disclosed by index. The highest index suggests the increase in market price of the stocks and implies the better performance of companies and vice-versa. Thus, the NEPSE index shows the behavior of stock prices in the capital market.

B) Company Trading Ratio

The company trading ratio is the ratio of the number of traded companies to the total number of listed companies. It is not necessary that the shares of all the companies listed in the stock exchange are traded, so the listed companies whose shares are traded in the stock exchange are called traded companies. The company trading ratio measures the liquidity of a stock exchange i.e. higher the company trading ratio higher the liquidity and vice-versa. The company traded ratio can be calculated as;

Company Trading Ratio =
$$\frac{\text{Number of Company Traded}}{\text{Number of Listed Company}} \times 100$$

C) Turnover to Market Capitalization Ratio

It is the ratio of turnover to the market capitalization. Though, it is not direct measure of theoretical defilation of liquidity, high turnover is often used as indicator of low transaction cost. The turnover ratio complements market capitalization ratio. A large but inactive market can have a large market capitalization ratio but a small turnover ratio. While the value traded ratio captures trading relative to the size of stock market. A small liquid market can have a high turnover ratio but a small value traded ratio.

Stock Turnover to Market Capitalization Ratio =
$$\frac{\text{Stock Turnover}}{\text{Market Capitalization}} \times 100$$

3.6.2 Statistical Tools

A) Arithmetic Mean

Arithmetic Mean of a given set of observations is the sum of the observation divided by the number of observations. In such as case all the items are equally important. Simple Arithmetic Mean is used in this study as per necessary for analysis

We have,

Mean
$$(\overline{X}) = \frac{\sum x}{n}$$

SSSSSS

Where $\sum x = \text{sum of all values of the observations}$

n = Number of observation

x = Value of variables

B) Standard Deviation

The standard deviation usually denoted by the letter σ . Karl Pearson suggested it as a widely used measure of dispersion and defined as the given observations from their arithmetic mean of a set of value. It is also known as root mean square deviation. Standard deviation, in this study has been used to measure the degree of fluctuation of interest rate and that of other variables as per the necessity of the analysis.

We have,

Standard Deviation =
$$\sqrt{\frac{\sum (x - \overline{x})}{n}}$$

C) Coefficient of Variation (C.V.)

The relative measure of dispersion based on standard deviation is called coefficient of standard deviation and 100 time coefficient of standard deviation is called coefficient of variation. It is denote by C.V. Thus,

$$C.V. = \frac{\dagger}{x} x 100\%$$

Where σ = Standard Deviation

 \overline{X} = Mean Value of Variables

D) Chi-Square Test

A chi-square test (also chi squared test or ² test) is any <u>statistical hypothesis</u> test in which the <u>sampling distribution</u> of the test statistic is a <u>chi-square distribution</u> when the <u>null hypothesis</u> is true, or any in which this is asymptotically true, meaning that the sampling distribution (if the null hypothesis is true) can be made to approximate a chi-square distribution as closely as desired by making the sample size large enough.

CHAPTER - IV DATA PRESENTATION AND ANALYSIS

4.1 Secondary Data Analysis

This section provides interpretation and analysis of secondary data. Thus this section is exclusively devoted for the analysis of past performance of Nepal Stock Exchange. More concisely, this section of the study attempts to achieve the first objective of the study, set in the first chapter.

4.1.1 NEPSE Index

Market indexes are used to determine the relationship between historical price movements and economic variables and to determine the systematic risk for individual securities and portfolios. The index is taken as a measuring tool whether the performance of stock market is good or not. Thus the NEPSE index shows the behavior of stock prices in the capital market.

Table: 4.1
NEPSE Index

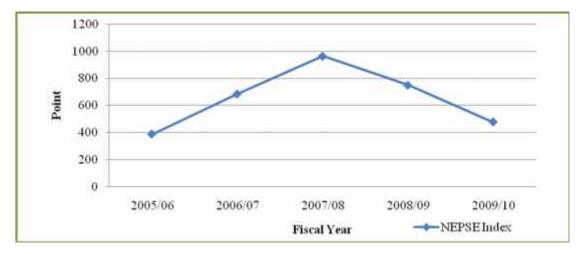
Fiscal Year	NEPSE Index (In Million)	Percentage Change
2005/06	386.83	34.94
2006/07	683.95	76.81
2007/08	963.36	40.85
2008/09	749.10	-22.24
2009/10	477.73	-36.23

(Source: Annual Reports, NEPSE)

Due to the increment in the share prices of banks, financial institutions, hydropower companies and development banks, the NEPSE index increased for the first three fiscal years. The restoration of peace, an improvement in listed companies' financial performance and, most importantly, the central bank's direction, dated 26 March 2007, to double paid-

up capital for banks and financial institutions contributed to a remarkable increment in share prices and subsequently the stock market indices up to the fiscal year 2007/08. However, the consequence of the recession has shown effect on the NEPSE index as well, and thus the index started to decrease from the fiscal year 2008/09. The stock market opened with the NEPSE index of 386.83 points at the beginning of the FY 2005/06 and ended with 477.73 points in the FY 2009/10. The NEPSE index is highest, 963.36 points, in the fiscal year 2007/08 and increased highest (76.81%) in the fiscal year 2006/07 compared to the index of previous year. As per the annual report of NEPSE in the fiscal year 2009/10, the NEPSE index has reached the highest, 739.02 points, on 20th July 2009 and the lowest, 405.45 points, on 28th April 2010. Also, the sub-index of listed hydropower is greatest in the fiscal year 2009/10. The sub-index of hydropower is 881.00 points, commercial banks is 456.93, manufacturing and processing is 427.89 points, hotel is 400.26 points, trading is 282.08 points, insurance is 548.52 points, finance is 397.38 points, development bank is 478.53 points and other is 540.48 points at the end of the fiscal year 2009/10. The instability in the political situation of the nation has also caused the decrement in the NEPSE index.

Figure: 4.1 NEPSE Index



4.1.2 Annual Turnover

The annual turnover analysis indicates the number of shares transacted in amount in the NEPSE. The annual turnover of NEPSE in the five year period is presented in the following Table 4.2.

Table: 4.2
Annual Turnover

Fiscal Year	Turnover (Rs. in Million)	Percentage Change
2005/06	3451.43	-23.43
2006/07	8360.07	142.22
2007/08	22820.76	172.97
2008/09	21681.14	-4.99
2009/10	11851.11	-45.34
Average	13632.91	
S.D.	7534.33	
C.V. %	55.27	

(Source: Annual Reports, NEPSE)

The table 4.2 shows that the annual turnover of NEPSE from the shares traded followed increasing trend up to the fiscal year 2007/08 and then followed decreasing trend in the fiscal year 2009/10. The annual turnover of NEPSE shares traded was Rs. 3451.43 in the base year 2005/06 and reached to Rs. 22820.76 millions in the fiscal year 2007/08 and finally decreased to Rs. 11851.11 millions in the fiscal year 2009/10. Such decrement in the NEPSE index indicates the increasing risk in the investment of investors. Moreover, the percentage change indicates that the pace of annual turnover growth did not follow the same growth during the entire period. The percentage change of annual turnover has ranged from -45.34% in the fiscal year 2009/10 to 172.97% in the fiscal year 2007/08.

In average, NEPSE made a turnover of Rs. 8256.84 millions in these five year periods. The standard deviation and coefficient of variation of annual turnover are 7571.39 and 91.70 % respectively. The coefficient of variation indicates that the annual turnover is highly inconsistent.

25000 20000 15000 10000 5000 2005/06 2006/07 2007/08 2008/09 2009/10 Fiscal Year Turnover

Figure: 4.2
Annual Turnover of NEPSE

4.1.3 Sector wise No. of Securities Traded

The sector wise number of securities traded clarifies the number of shares traded on the basis of sector and thus enlightens on the contribution of each sector on the total number of securities traded.

Table: 4.3

	2005/06	2006/07	2007/08	2008/09	2009/10	No.	%
Commercial Banks	5534.72	9090.95	11241.41	13301.43	9680.62	9769.83	42.20
Finance	1957.49	2343.46	3094.26	3552.01	3265.92	2842.63	12.28
Hotel	392.65	81.70	158.07	95.89	50.28	155.72	0.67
Manufacturing &							
Processing	59.80	82.92	1655.08	95.12	360.68	450.72	1.95
Other	0.47	14.24	7.70	630.82	423.13	215.27	0.93
Hydro Power	473.61	4460.27	7251.21	3612.12	4776.70	4114.78	17.77
Trading	15.22	11.47	14.97	14.65	12.01	13.66	0.06
Insurance	574.93	627.61	433.26	418.49	629.90	536.84	2.32
Development							
Banking	386.44	1360.53	2534.88	3631.81	3535.07	2289.75	9.89
Mutual Fund	2826.60	74.10	319.10	758.50	187.50	833.16	3.60
Preferred Stock	-	-	101.42	74.43	29.46	41.06	0.18
Promoter Share	-	-	1788.41	4361.90	3171.55	1864.37	8.05

Total	12221.93	18147.25	28599.77	30547.16	26231.35	23149.49	100
Government Bond	-	-	-	-	50.00	10.00	0.04
Corporate Bond	-	-	-	-	58.53	11.71	0.05

Sector wise No. of Securities Traded

(Source: Annual Reports, NEPSE)

The table shows the number of securities traded in NEPSE on sector-wise. The table shows that the trading of NEPSE is dominated by the Commercial Banks. The average number of securities traded during the five year period is 23149.49 thousands, out of which, 9769.83 thousand shares of commercial banks, 4114.48 thousand shares of hydropower, 450.72 thousand shares of manufacturing and processing companies, 2842.63 thousand shares of finance companies, 833.16 thousand shares of Mutual fund, 2289.75 thousand shares of development banks, 536.84 thousand shares of Insurance, 1864.37 thousand shares of promoter, 155.72 thousand shares of Hotel, 41.06 thousand shares of preferred stock, 13.66 thousand shares of Trading companies and 215.27 thousand shares of other are transacted.

In average, commercial banks occupied 42.20% of the total number of shares traded in NEPSE. This clearly indicates that the investors are highly fascinated in commercial banking sector than other sector, with the hope of gaining high income.

4.1.4 Sector wise Turnover Collection

The contribution of each sector on the total turnover of the NEPSE can be clarified with the aid of sector wise turnover collection. The Sector wise turnover collection in the five year period is presented in the following Table 4.4.

Table: 4.4
Sector wise Turnover Collection

Sector		Fisc	al Year	'Rs. in M	lillion'	Avera	ige
	2005/06	2006/07	2007/08	2008/09	2009/10	Turnover	%
Commercial Banks	2696.27	5855.77	13822.14	12406.45	7196.24	8395.37	61.58
Finance	305.84	642.64	2307.53	2615.40	1263.94	1427.07	10.47
Hotel	19.76	7.07	27.67	18.69	10.15	16.67	0.12
Manufacturing &							
Processing	17.19	24.12	343.44	26.08	37.74	89.71	0.66
Other	0.02	0.54	0.29	494.39	217.83	142.61	1.05
Hydro Power	152.01	1258.01	3199.94	890.30	752.45	1250.54	9.17
Trading	15.80	10.42	33.65	33.49	35.43	25.76	0.19
Insurance	129.90	204.97	264.86	212.80	183.47	199.20	1.46
Development							
Banking	82.76	355.73	1981.05	2740.36	1323.53	1296.69	9.51
Mutual Fund	31.88	0.80	6.09	22.40	5.21	13.28	0.10
Preferred Stock	-	-	81.15	74.05	26.39	36.32	0.27
Promoter Share	-	-	752.95	2146.73	735.00	726.94	5.33
Corporate Bond	-	-	-	-	58.53	11.71	0.09
Government Bond	-	-	-	-	5.20	1.04	0.01
Total Turnover	3451.43	8360.07	22820.76	21681.14	11851.11	13632.90	100

(Source: Annual Reports, NEPSE)

The above table shows the turnover that NEPSE made in five fiscal year period. The table shows that NEPSE started to trade the corporate bond and government bond from the fiscal year 2009/10, however in that year the turnover of most of the listed companies has decreased. In average, NEPSE collected Rs. 13632.90 million from the transactions of shares in the period taken for research. Likewise, the annual turnover of NEPSE is highly dominated with the share transaction of commercial banks, since commercial banks covered 61.58% of the total turnover of NEPSE. After commercial banks, finance companies occupied 10.47%, Development Bank occupied 9.51% and hydropower occupied 9.17% of the total turnover of NEPSE. Moreover, the contribution of other sector in turnover of NEPSE are less than 6%. So, the contribution of financial institutions, mainly commercial banks, and hydropower in turnover of NEPSE cannot be ignored.

4.1.5 Number of Securities Traded

The total number of securities traded indicates the trend of securities trade during the period taken for research. Also, the percentage change in number of securities traded is presented in the following Table 4.5.

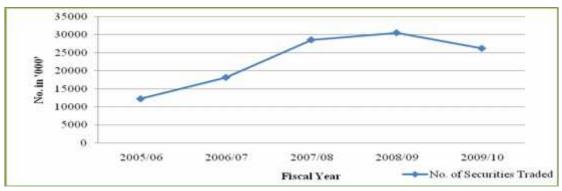
Table: 4.5
Number of Securities Traded

Fiscal Year	No. of Securities Traded	Percentage Change
2005/06	12221.93	-33.70
2006/07	18147.25	48.48
2007/08	28599.77	57.60
2008/09	30547.16	6.81
2009/10	26231.35	-14.13
Average	23149.49	

(Source: Annual Reports, NEPSE)

The above table shows that the number of securities transaction increased in greater extent in the fiscal year 2006/07 and 2007/08 compared to the number of securities transaction in the previous year. However, in the fiscal year 2009/10, the number of securities transaction decreased by 14.13%. The number of securities transaction ranged from 12221.93 thousands in the fiscal year 2005/06 to 30547.16 thousands in the fiscal year 2008/09. However, the fiscal year 2009/10 can be regarded as rather depressing year for the NEPSE, since the securities transactions and also the turnover has decreased in this fiscal year.

Figure: 4.3
Number of Shares Traded



4.1.6 Number of Company Traded

This clarifies the total number of company traded out of the total listed companies in NEPSE. The number of company traded also clarifies the increasing/decreasing trend of the companies traded in the NEPSE during the fiscal year compared to the previous year. The total number of company traded during the period taken for research and the percentage change is presented in the Table 4.6.

Table: 4.6
Number of Company Traded

Fiscal Year	No. of Company Traded	Percentage Change
2005/06	110	7.84
2006/07	116	5.45
2007/08	136	17.24
2008/09	137	0.74
2009/10	160	16.79
Average	132	

(Source: Annual Reports, NEPSE)

The above table shows that the number of company traded in each fiscal year has increased. In fiscal year, 2005/06 only 110 companies were traded, similarly in fiscal year 2006/07, 2007/08, 2008/09 and 2009/10, 116, 136, 137 and 160 companies were traded respectively. In average, 132 companies were traded during the period taken for research. This indicates that the investors have shown interest in different sector and in different companies for investment in share.

180 160 140 120 100 80 60 40 20 0 2005/06 2006/07 2007/08 2008/09 2009/10 →No. of Company Traded Fiscal Year

Figure: 4.4
Number of Company traded

4.1.7 Market Days

To increase the turnover of the NEPSE and the stock growth, the number of operating days in NEPSE is crucial. The total market days operated in the NEPSE is presented in the Table 4.7.

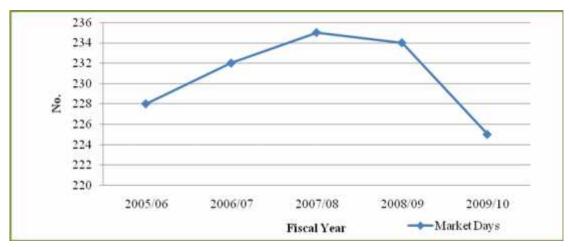
Table: 4.7
Market Days

Fiscal Year	Market Days	Percentage Change
2005/06	228	-3.39
2006/07	232	1.75
2007/08	235	1.29
2008/09	234	-0.43
2009/10	225	-3.85
Average	231	

(Source: Annual Reports, NEPSE)

The above table shows that the market days of the NEPSE office varied during the period and followed fluctuating trend. Within these five year period NEPSE transacted maximum 235 days in the fiscal year 2007/08 and minimum 225 days in the fiscal year 2009/10. In the recent two fiscal years, the number of market days has started to decrease. Since, the hurdles in the market days adversely affect the turnover of NEPSE, the number of holidays and other factors like conflict and other should be minimized by the government for the smooth operation of NEPSE and eventually increase the turnover.

Figure: 4.5 Market Days



4.1.8 Average Daily Turnover

This indicates the turnover collected by NEPSE per day and is the useful indicator to measure the efficiency of NEPSE in turnover collection. The average turnover also delineates the average number of securities traded per day. The average daily turnover of NEPSE is presented in the Table 4.8.

Table: 4.8
Average Daily Turnover

Fiscal Year	Average No. of Securities	Daily Turnover
2005/06	53.60	15.14
2006/07	78.22	36.03
2007/08	121.70	97.11

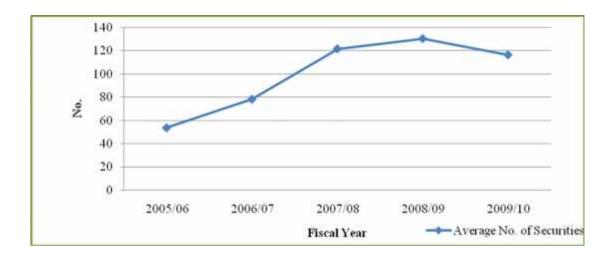
2008/09	130.54	92.65
2009/10	116.58	52.67
Average	100.13	58.72
S.D.	29.35	31.86
C.V. %	29.31	54.26

(Source: Annual Reports, NEPSE)

The above table shows that the average number of securities per day of NEPSE ranged from 53.60 thousands in the fiscal year 2005/06 to 130.54 in the fiscal year 2008/09. The same table shows that the average daily securities transacted decreased in the fiscal year 2009/10, when it is 116.58 thousands. Moreover, NEPSE transacted 100.13 thousands securities per day within these five year periods in average. The coefficient of variation (29.31%) indicates inconsistency in the average number of daily shares transacted.

Similarly, the daily turnover collected from shares transaction followed increasing trend up to the fiscal year 2007/08. The daily turnover increased from Rs. 15.14 million in the fiscal year 2005/06 to Rs. 97.11 million in the fiscal year 2007/08, and by the end of the fiscal year 2009/10, it is Rs. 52.67 millions. In average, the average daily turnover has been measured to be Rs. 58.72 millions, and the coefficient of variation indicates 54.26% inconsistency in the daily turnover over these five year periods. The above table shows that the average number of securities per day and daily turnover of NEPSE from share transactions have started to decrease in the recent periods.

Figure: 4.6
Average Daily Turnover



4.1.9 Traded Companies to Listed Companies

This ratio depicts the percentage of number of companies traded out of the companies listed in each year. This ratio also delineates how many company remained active and inactive during the period. The traded companies to listed companies is presented in the Table 4.9.

Table: 4.9
Traded Companies to Listed Companies

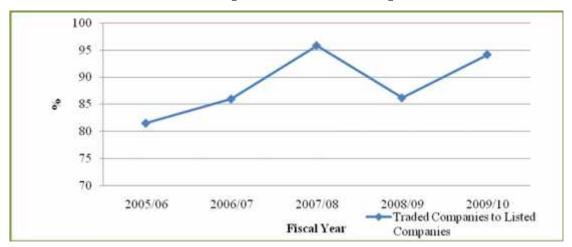
Fiscal Year	Companies Traded	Companies Listed	Ratio %
2005/06	110	135	81.48
2006/07	116	135	85.93
2007/08	136	142	95.77
2008/09	137	159	86.16
2009/10	160	170	94.12
Average			88.69

(Source: Annual Reports, NEPSE)

The table shows that the traded companies to listed companies in the five year period. The table depicts that the number of traded companies to listed companies has increased in most of the observed periods. However, the ratio decreased to 86.16% in the fiscal year 2008/09. The ratio is least, 81.48% in the fiscal year 2005/06 and highest, 95.77% in the fiscal year 2007/08 and by the end of the fiscal year 2009/10, the ratio is 94.12%. The ratio shows that the fiscal year 2007/08 remained the most satisfactory as maximum percentage of

listed companies have been traded. In average, only 88.69% of the listed companies in NEPSE have been traded within the five year period taken for research. NEPSE should set out new policy and techniques to effectively jerk out the untraded companies in transactions and thus increase the turnover.

Figure: 4.7
Traded Companies to Listed Companies



4.1.10 Turnover to Market Capitalization

This ratio indicates the efficiency of NEPSE in effectively utilizing the market capital in converting to turnover. The total turnover to market capitalization in the five year period is presented in the Table 4.10.

Table: 4.10
Turnover to Market Capitalization

Fiscal Year Turnover Market Capitalization Rati	in %
---	------

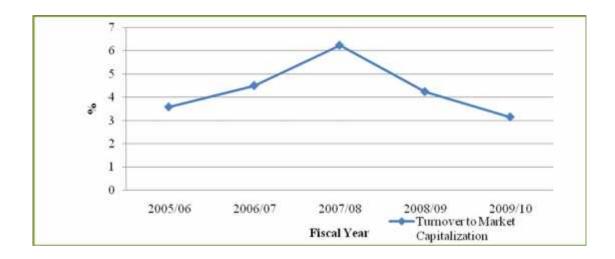
2005/06	3451.43	96763.74	3.57
2006/07	8360.07	186301.28	4.49
2007/08	22820.76	366247.56	6.23
2008/09	21681.14	512939.07	4.23
2009/10	11851.11	376871.37	3.14
Mean			5.38
S.D.			2.42
C.V.			45.02

(Source: Annual Reports, NEPSE)

The above table shows that the market capitalization of the listed companies has followed increasing trend up to the fiscal year 2008/09. The market capitalization ranged from Rs. 96763.74 millions in the fiscal year 2005/06 to Rs. 512939.07 millions in the fiscal year 2008/09. Similarly, the turnover to market capitalization of the listed companies ranged from 3.14% in the fiscal year 2009/10 to 6.23% in the fiscal year 2007/08. The turnover to market capitalization started has gradually decreased from the fiscal year 2008/09, and by the end of the fiscal year 2009/10, it is the lowest, i.e. 3.14%. Nonethless, NEPSE utilized 5.38% of the market capitalization in average in generating turnover. The standard deviation and coefficient of variation of turnover to market capitalization are 2.42 and 45.02% respectively. The coefficient of variation indicated that turnover to market capitalization of NEPSE fluctuated by 45.02% during the observed periods.

Figure: 4.8

Turnover to Market Capitalization



4.1.11 Turnover to Paid up Capital

This ratio measures the NEPSE's efficiency in optimally utilizing the paid up capital in generating sales. The turnover to paid up capital in the five fiscal year period is presented in the Table 4.11.

Table: 4.11
Turnover to Paid up Capital

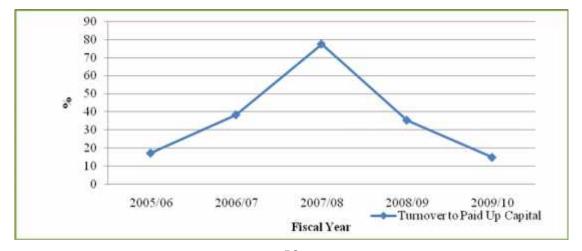
Fiscal Year	Turnover	Paid up Capital	Ratio in %
2005/06	3451.43	19958	17.29
2006/07	8360.07	21746	38.44
2007/08	22820.76	29465	77.45
2008/09	21681.14	61140	35.46
2009/10	11851.11	79356	14.93
Mean			36.72
S.D.			22.43

C.V. %	61.09

(Source: Annual Reports, NEPSE)

The above table shows that the total paid up capital of companies listed in NEPSE is in increasing order. The paid up capital increased from Rs. 19958 millions in the fiscal year 2005/06 to Rs. 79356 millions in the fiscal year 2009/10. The table shows that the turnover to paid up capital of NEPSE ranged from 14.93% in the fiscal year 2009/10 to 77.45% in the fiscal year 2007/08. The ratio is also in fluctuating trend in the entire period. The ratio increased in the fiscal year 2006/07 to 38.44%, then increased to 77.45% in the fiscal year 2007/08 and then followed decreasing trend and eventually reached to 14.93%. In average, 36.72% of the total up capital has been converted to sales. The coefficient of variation (61.09%) depicts high inconsistency in turnover to paid up capital. NEPSE should increase its market days to increase the turnover and finally optimally utilize its paid up capital in generating higher turnover.

Figure: 4.9
Turnover to Paid up Capital



4.1.12 Number of Transactions

To determine how many times the each share is transacted annually, the number of transactions is essential. Greater the number of transactions higher will be the turnover. Hence, the number of transactions in each fiscal year and the percentage change is presented in the Table 4.12.

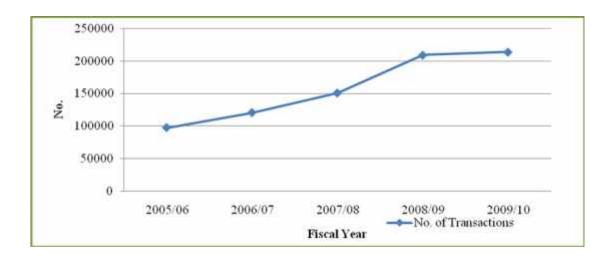
Table: 4.12
Number of Transactions

Fiscal Year	No. of Transactions	Percentage Change
2005/06	97374	-8.35
2006/07	120510	23.76
2007/08	150800	25.13
2008/09	209091	38.65
2009/10	213733	2.22
Average	158302	

(Source: Annual Reports, NEPSE)

The above table depicts that the number of transactions made during the five year period followed increasing trend. The number of transaction ranged from 97,374 thousand in the fiscal year 2005/06 to 213,733 thousand in the fiscal year 2009/10. The number of shares transaction increased highest (38.65%) in the fiscal year 2008/09 and lowest (-8.35%) in the fiscal year 2005/06 compared to the number of shares transactions of previous year. The average number of shares traded (23149.49) and the average number of shares transactions (158302) showed that the same share is transacted for 6.84 times in average.

Figure: 4.10
Number of Transactions



4.1.13 Classification of Listed Companies

NEPSE has classified 94 companies under the 'A' category on in the fiscal year 2009/10. Companies earning profit consecutively for three years with at least 1000 shareholders and the paid-up capital of Rs. 20 million are listed under category 'A'.

Table: 4.13

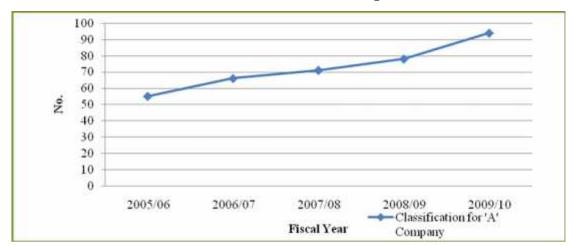
Number of 'A' Classified Companies

Fiscal Year	Classification for 'A'	Percentage Change
2005/06	55	14.58
2006/07	66	20.00
2007/08	71	7.58
2008/09	78	9.86
2009/10	94	20.51

(Source: Annual Reports, NEPSE)

The table shows an increase in the number of companies classified under 'A' category. There were 55 companies classified as category 'A' in the FY 2005/06. This number reached 71 in the FY 2009/10: 15 commercial banks, 20 development banks, 11 insurance companies, 43 finance companies and 2 the hydropower group, and 3 others. Companies classified under the 'A' category occupied 49.99 percent of the total paid-up capital, 47.87 percent of the total listed shares and 80.63 percent of market capitalization.

Figure: 4.11



Number of 'A' Classified Companies

4.2 Primary Data Analysis

This section of the study attempts to fulfill the second to fourth objectives of the study set on the first chapter of the study. To achieve such objectives, a set of questionnaire, containing eight questions, related to the demutualization has been prepared and distributed to the 10 personnel of brokerage firms, 15 investors and 15 students. However, 3 personnel of brokerage firms, 4 investors and 1 student did not respond. So, the questionnaire is conducted among 7 brokers, 11 investors and 14 students, and in total 32 respondents.

4.2.1 Demutualization of the Stock Exchange

To examine whether the Nepal Stock Exchange should be demutualized for the good governance of the stock exchange and for enhancing the financial performance and for reducing the conflicts and other obstacles hindering the smooth operation of the exchange, the respondents are asked on this issue, and the responses, thus, obtained are tabulated and interpreted in the below section.

Table: 4.14

Demutualization of the Stock Exchange

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Yes	3	43	5	46	8	57	16	50
No	4	57	3	27	4	29	11	34

Don't Know	0	0	3	27	2	14	5	16
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

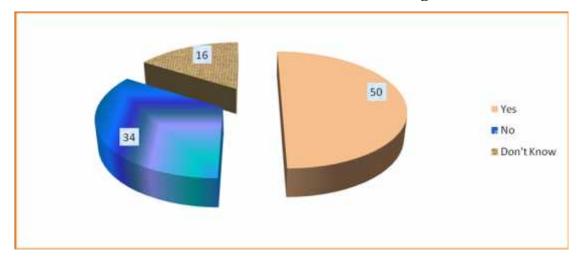
The table manifests that about half of the total respondents are in the opinion that the Nepal Stock Exchange should go demutualization, i.e. to change its shareholding pattern from limited shareholders to the public shareholders and change the legal status. This fact has also substantiated by the trading report of 2007/08 that has promulgated the conversion of NEPSE to profit-seeking organization, which may be the harbinger for the demutualization. The 16 out of 32 respondents are in the opinion that the demutualization of stock exchange is necessary for the good governance that can tackle the malpractices, problem and other obstacles for the smooth running of the business. Further it is necessary for the buttressing the capital market and others. However, 34% of the total respondents have shown no interest for the demutualization of the stock exchange, and according to them such demutualization would not be helpful for the good governance of the organization. Though demutualization has some benefits the current status of the stock exchange is suffice for the smooth operation of the business, it the regulations have been stringently implemented. In contrast to these groups, 16% of the responses is bewildered on whether the NEPSE should go demutualization and thus stated that they have no idea on this issue.

Analyzing individually to each category, it has been revealed that the majority of the investors and the students are in the favor of demutualization whereas the majority of the brokers are in the favor of mutual organization. More concisely, 46% of the investors and 57% of the surveyed students have stated that the stock exchange sought demutualization for the enhancement of the operation, while only 43% of the brokers have supported this view. Similarly, 57% of the brokers, 27% of the investors and 29% of the students have opined that NEPSE should not go for demutualization, since the current rules and regulations are adequate for the smooth operation. Finally, 27% of the investors

and 14% of the students have expressed that they have no idea on this issue. Consequently, on the basis of the majority of the respondents, the study has assumed that for the enhancement of the performance and the good governance of the securities transactions, the demutualization is crucial.

Figure: 4.12

Demutualization of the Stock Exchange



4.2.2 Forces for Demutualization

Various forces are requisite for the demutualization of the stock exchange. To investigate what force would be the main cause for the demutualization of the Nepal Stock Exchange, the respondents are asked on this issue.

Table: 4.15
Forces of Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Advancement in	3	43	4	36	6	43	13	41
Technology								

Increasing Competition	4	57	5	46	6	43	15	47
for Global order								
Conflicts of Interest	0	0	2	18	2	14	4	12
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

Although the NEPSE has not permitted the foreign investors to make transaction and the securities market of the country is not immediately affected by the international market, the securities market could not remain far from the recent recession of the world, as a result the NEPSE index is in its nadir. Though the consequence of the international market is indirect, the crisis in the international market or the competition in the international market has some sort of effect in the NEPSE as well. This fact has also been substantiated by the majority of the respondents. Among the surveyed respondents, 47% of the respondents, including 57% of the brokers, 46% of the investors and 43% of the students, have opined that the increased competition of the international market has deteriorated the performance of the NEPSE by diverting most of the investors toward the international securities market, and hence increasing competition for global order-flow could be the main force for the demutualization of the stock exchange of Nepal.

Similarly, 41% of the total respondent, including 43% of the brokers, 46% of the investors and 43% of the student, have stated that the advancement in the technology may obsolete the performance of the mutual exchange like NEPSE and thus force such exchange to go demutualization. According to them, the advancement in technology, like Alternative Trading Systems (ATS) are privately operated computerized system that perform many of the functions of an exchange by centralizing and matching buy and sell orders and providing post-trade information. The development of electronic trading systems has eliminated the need for physical trading floors as execution takes place across ECNs. The growing threat from alternative trading systems has put pressure on financial exchanges to adopt more efficient trading systems and to migrate to

electronic trading. By demutualizing, the exchanges hope to get more operational freedom.

Finally, 12% of the total respondents, comprised of 18% of the investors and 14% of the students, have stated that the conflicts of interest among the members of the mutualized exchange, which includes the Government of Nepal, Nepal Rastra Bank, Nepal Industrial and Development Corporation, brokers and market makers, is the main force for the stock exchange to go for demutualization. Eventually, on the basis of the majority of the respondents, it can be assumed that the increasing competition in the international market could be the major force for NEPSE to go for demutualization.

Advancement in Technology

Increasing Competition for Global order

Conflicts of Interest

Figure: 4.13
Forces of Demutualization

4.2.3 Benefit of Demutualization

It has been assumed that the demutualization of the stock exchange enhances the performance of the exchange, and aids to build up the capital market of the country. Various benefits can be observed along with the demutualization. To examine which benefit will be mostly experience by the NEPSE, if it has been demutualized, the respondents are asked on this matter.

Table: 4.16
Benefit of Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Good Governance	5	72	6	55	5	36	16	50
Tap Capital Market	1	14	3	27	3	22	7	22
Transparency	1	14	1	9	2	14	4	13
Strengthening Professionalism	0	0	0	0	2	14	2	6
Enhance Management Flexibility	0	0	1	9	2	14	3	9
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

Majority of each category of the respondents, and consequently the majority of the total respondents have opined that the demutualization of NEPSE leads to good governance, if deployed. About, 72% of the brokers, 55% of the investors, 36% of the students, and 50% of the total respondents have opined this view. According to them, stock exchange owned by members tends to work towards the interest of members alone, which could on occasion be detrimental to rights of other stakeholders. Division of ownership between members and outsiders can lead to a balanced approach, remove conflicts of interest, create greater management accountability, and take into consideration the interest of other players. However, 14% of the brokers, 27% of the investors, 22% of the students, and in total 22% of the surveyed respondents have opined that the major benefit of the demutualization is the increasing capability of the stock exchange to tap the capital market. According to their views, to cope with competition, stock exchanges require funds. While member-owned stock exchanges have limitations in raising funds, publicly owned stock exchanges can tap capital markets.

Other dissection of the total respondents, i.e. 14% of the brokers, 9% of the investors, 14% of the students, and 13% of the total respondents, have stated as

a result of the role played by shareholders, strengthening of the management and the organization, there is greater transparency in dealings, accountability and market discipline. Further, 14% of the investors, representing 6% of the total respondents, have opined that demutualization aids to strengthen the professionalism of the stock exchange. Publicly owned stock exchanges can be more professional when compared to member-owned organizations. Similarly, 9% of the investors and 14% of the students, representing 9% of the total respondents have admitted that the demutualization of the stock exchange would enhance management flexibility. According to them, a publicly held company is better equipped to respond to changes when compared to a closely held mutually owned organization. Further, a company can spin-off its subsidiaries, get into mergers and acquisitions, raise funds, etc. Eventually on the basis of the majority of each category, and the majority of the total respondents, it can be inferred that the facilitation for the good governance of the stock exchange is the major benefit that can be reaped, if NEPSE is demutualized.

Good Governance
Tap Capital Market
Transparency
Strengthening Professionalism
Enhance Management Flexibility

Figure: 4.14
Benefit of Demutualization

4.2.4 Type of Demutualization

The question may arise what type of demutualization may be adopted if NEPSE has been demutualized, since it can be fully demutualized, sponsored demutualized or remain as mutual holding company. To solve this query, the respondents are asked on this issue.

Table: 4.17

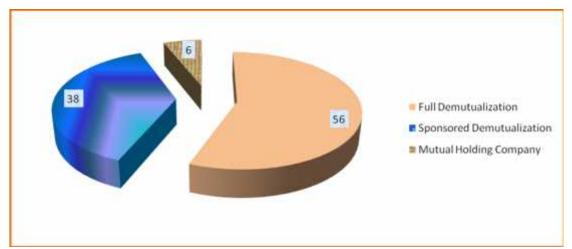
Type of Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Full Demutualization	3	43	6	55	9	64	18	56
Sponsored	4	57	4	36	4	29	12	38
Demutualization								
Mutual Holding	0	0	1	9	1	7	2	6
Company								
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

It has been observed that the majority of the investors and the majority of the students are in the opinion that if NEPSE is demutualized then it should adopt full demutualization. More concisely, 55% of the investors, 64% of the students, 43% of the brokers, and 56% of the total respondents have opined that NEPSE should adopt full demutualization, under which the mutual exchange completely converts to stock company, and passes its own stock to the members or the policyholders, and no form of mutuality is preserved. However, the majority of the brokers have favored the sponsored demutualization, under which the members or the policyholders are compensated and the mutual is fully demutualized. More specifically, 57% of the brokers, 36% of the investors and 29% of the students, and 38% of the total respondents have stated that NEPSE should go for sponsored demutualization. Whereas, 9% of the investors, 7% of the students, and 6% of the total respondents have stated that the stock exchange should go for mutual holding company, which is a hybrid of demutualization and mutual organization, and the members still hold the stock and for such holding non compensation are been made. Paraphrasing the analysis, it can be assumed that the full demutualization would be the most preferable type of demutualization, if the stock exchange of the country is demutualized.

Figure: 4.15



Type of Demutualization

4.2.5 Status of Exchange after Demutualization

Stock exchange can either remain as public exchange or private exchange after the demutualization of the exchange. To know the status of the exchange, if NEPSE is demutualized, the respondents are asked on this matter, and the responses obtained from them are presented in the table.

Table: 418
Status of Exchange after Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Public	7	100	4	36	6	43	17	53
Private	0	0	5	46	7	50	12	38
Don't Know	0	0	2	18	1	7	3	9
Total	7	100	11	100	14	100	32	100

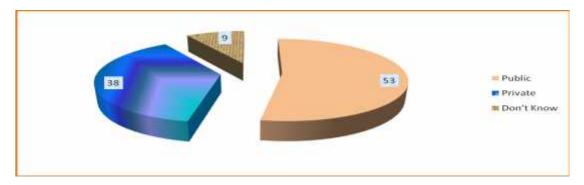
(Source: Opinion Survey, 2011)

According to the majority of the respondents, 53%, comprising of 100% of the brokers, 36% of the investors and 43% of the students, the NEPSE should operate as public exchange after it has been demutualized, though there is the possibility that some demutualized exchange has operated as private exchange. To illustrate, the New York Stock Exchange can be taken. The New York Stock Exchange converted to a publicly trade company in 2006 under ticker NYY, in essence listing itself on its own exchange. NYSE later merged with

Euronext to become one of the largest stock exchange groups in the world. Moreover, many European exchanges are also publicly traded or form part of a larger stock exchange group. In contrast, 38% of the total respondents have opined that NEPSE should operate as private exchange, if it decides to go demutualization. For instance, in 1986, the London Stock Exchange converted to a private, for-profit, limited company with private shareholders. The exchange acts like a business and is subject to the same regulations. Other private exchanges include CHX Holdings, the parent of the Chicago Exchange, which converted in 2005.

However, 9% of the total respondents, including 18% of the investors and 7% of the student, have stated that they have no idea on this issue. Clearly, the majority of the brokers, 100%, took stance that NEPSE should act as public exchange, while the majority of the investors, 46%, and the majority of the students, 50%, are rather obstinate for the private exchange after the demutualization of NEPSE. Nonetheless, on the basis of the total majority, it can be assumed that the NEPSE would have good governance on its operation, if it acts as public exchange when it has been demutualized.

Figure: 4.16
Status of Exchange after Demutualization



4.2.6 Better Financial Performance and Demutualization

In most of the stock exchanges of the world, the better financial performance of the exchange has been observed after demutualization. As a result, in the context of the country, it has been assumed that the demutualization facilitates the better financial performance of NEPSE, if it has been demutualized.

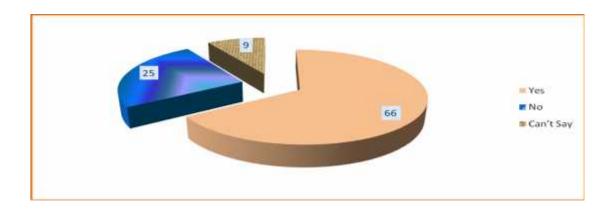
Table: 4.19
Better Financial Performance and Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Yes	5	71	7	64	9	64	21	66
No	2	29	4	36	2	14	8	25
Can't Say	0	0	0	0	3	22	3	9
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

The table shows that most of the respondents, 66%, including 71% of the brokers, 64% of the investors and 64% of the students, have admitted that there will be enhancement in the financial performance, if NEPSE goes demutualization. Thus, demutualization will have positive impact on the financial performance of the stock exchange. However, one-fourth of the total respondents, including 29% of the brokers, 36% of the investors and 14% of the students, have stated that there will be no improvement in the financial performance of the stock exchange, even if it goes demutualization. The dissection of this view is rather depressed on the enhancement in the financial performance. Finally, 9% of the total respondent, 22% of the students have opined that they can't precisely say on the amelioration of the financial performance, if the stock exchange of Nepal goes demutualization. Certainly, on the basis of the total majority of each category, and in total, it can be assumed that demutualization has positive relationship with the financial performance of the stock exchange, and thus serves as facilitator for the improvement. In addition, to test the significance of the relationship between the demutualization and the improvement of the financial performance of the stock exchange, the chi-square analysis has been done in the following section.

Figure: 4.17
Better Financial Performance and Demutualization



Chi-Square Test for the Relationship between Better Financial Performance and Demutualization

To determine the significance of responses regarding the relationship between the financial performance and the demutualization of stock exchange, Chisquare method has been conducted.

Table: 4.20
Chi-square Test for the Relationship between Better Financial
Performance and Demutualization

0	$\mathbf{E} = \mathbf{R}\mathbf{T} \mathbf{x} \mathbf{C}\mathbf{T}$	O – E	$(\mathbf{O} - \mathbf{E})^2$	$(\mathbf{O} - \mathbf{E})^2$
	N			E
5	4.59	0.41	0.17	0.04
7	7.22	-0.22	0.05	0.01
9	9.19	-0.19	0.04	0.00
2	1.75	0.25	0.06	0.04
4	2.75	1.25	1.56	0.57
2	3.50	-1.50	2.25	0.64
0	0.66	-0.66	0.43	0.66
0	1.03	-1.03	1.06	1.03
3	1.31	1.69	2.85	2.17
			$(\mathbf{O} - \mathbf{E})^2$	= 5.15
			E	

Where,

O = Observed value

E = Expected value

RT = Row Total

CT = Column Total

Here, Degree of Frequency, d.f. = (r-1)(c-1) = (3-1)(3-1) = 4

The tabulated value of ² at 5% level of significance for 4 d.f. is 9.49. Since the calculated value of ² (5.15) is less than the tabulated value of ² (9.49), it can be said that the opinions of all responding groups are similar and there is no significant difference in the opinions with respect to the relationship between amelioration of financial performance and demutualization. Hence, it would be worthwhile if the concerned bodies decide to demutualize the NEPSE, as it has already been promulgated to be profit-oriented organization, for enhancing the financial performance and to buttress the capital market of the country.

4.2.7 Increment in Basic Earning Power and Demutualization

It has been assumed that the demutualization of the stock exchange increases the basic earning power of the exchange. To test this hypothesis the respondents are asked on this issue, and the significance of the responses is tested through chi-square.

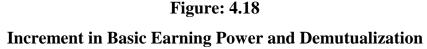
Table: 4.21
Increment in Basic Earning Power and Demutualization

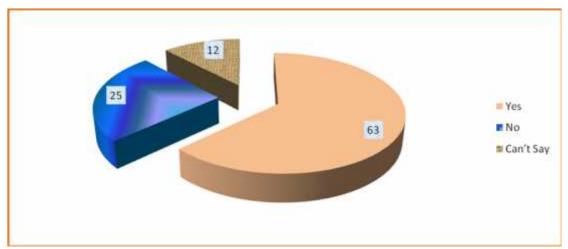
Response	Bro	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%	
Yes	4	57	6	55	10	72	20	63	
No	2	29	4	36	2	14	8	25	
Can't Say	1	14	1	9	2	14	4	12	
Total	7	100	11	100	14	100	32	100	

(Source: Opinion Survey, 2011)

The table reveals that the majority of the respondents, 63%, are in the view that the earning power of NEPSE will be increased, if the exchange goes demutualization. According to them, including 57% of the brokers, 55% of the investors and 72% of the students, the membership fees will be lower than the exchange charge fees after demutualization. When an exchange demutualizes, the exchange no longer makes money by selling memberships on the exchange.

Instead the exchange charge fees to meet its operating costs. The fees included; transaction fees for each order, fees paid by corporations to have their securities listed and fees from the sale of historical trading and market information. 25% of the total respondents, including 29% of the brokers, 36% of the investors and 14% of the students, however, opined that the basic earning power of the demutualized stock exchange will not be higher than that of mutual exchange, also in some cases, the earning power in demutualized exchange may also be lower than that of mutual exchange. Thus, according to them, the demutualization does not ensure the increment in the basic earnings of the exchange, and thus demutualization has not positive relationship with the earnings. Eventually, 12% of the total respondents, including 14% of the brokers, 9% of the investors and 14% of the students, have stated that they have no idea on this issue. Thus, considering the total majority of the respondent, it can be inferred that certainly the basic earning power of the demutualized exchange will be higher than before the demutualization. To test the significance of the positive impact of demutualization on the basic earnings, the chi-square test has been conducted in the following section.





Chi-Square Test for the Relationship between Increment in Basic Earning Power and Demutualization

It has been assumed that the demutualization facilitates the NEPSE to make increment in basic earning power by charging fees for each order and other, rather than by charging fees for the membership. Also, the majority of the respondents have supported this relationship and thus, to test the significance of the responses, chi-square method has been adopted.

Table: 4.22
Chi-square Test for the Relationship between Increment in Basic Earning
Power and Demutualization

0	$\mathbf{E} = \mathbf{RT} \times \mathbf{CT}$	O – E	$(\mathbf{O} - \mathbf{E})^2$	$(\mathbf{O} - \mathbf{E})^2$
	N			\mathbf{E}
4	4.38	-0.38	0.14	0.03
6	6.88	-0.88	0.77	0.11
10	8.75	1.25	1.56	0.18
2	1.75	0.25	0.06	0.04
4	2.75	1.25	1.56	0.57
2	3.50	-1.50	2.25	0.64
1	0.88	0.13	0.02	0.02
1	1.38	-0.38	0.14	0.10
2	1.75	0.25	0.06	0.04
			$(\mathbf{O} - \mathbf{E})^2$	= 1.72
			${f E}$	

The tabulated value of ² at 5% level of significance for 4 d.f. is 9.49. Since the calculated value of ² (1.653) is less than the tabulated value of ² (9.49), it can be said that the opinions of all responding groups are similar and there is no significant difference in the opinions with respect to the relationship between demutualization and the increment in the basic earnings power of the NEPSE after demutualization. Thus, to make the securities exchange of the country financially strong, the demutualization of the exchange is crucial.

4.2.8 Good Governance and Less Conflict, and Demutualization

In most of the world's demutualized stock exchange, it has been observed that that the governance and conflict have been improvised in demutualized exchange. To test whether the governance of the exchange will be enhanced, if NEPSE goes demutualization, the respondents are asked on this matter.

Table: 4.23
Good Governance and Less Conflict, and Demutualization

Response	Broker		Investor		Student		Total	
	No.	%	No.	%	No.	%	No.	%
Yes	5	71	8	73	8	57	21	66
No	2	29	2	18	4	29	8	25
Can't Say	0	0	1	9	2	14	3	9
Total	7	100	11	100	14	100	32	100

(Source: Opinion Survey, 2011)

The table shows that the majority of the respondents, 66%, comprising of 71% of the brokers, 73% of the investors, and 57% of the students are in the expectation that the demutualized stock exchange has good governance and less conflict among the stakeholders than in mutual exchange, thus they admitted that the NEPSE should also be demutualized for the smooth and sound operation of the securities business. However, 25% of the respondents, including 29% of the brokers, 18% of the investors and 29% of the students, have opined that there will be no effect of the demutualization on ameliorating the governance and abating the conflict of the stock exchange. In other word, the conflict among the stakeholders, including the participated organizations, listed companies and investors, would persistently extant even after the demutualization of the exchange. Finally, 9% of the total respondents, consisting of 9% of the investors and 14% of the students, have stated that they have no ideas on this matter. Eventually, on the basis of the majority of the respondents, the study has inferred that the demutualization perhaps have greater role for ameliorating the governance and deteriorating the conflicts among the stakeholders. To test the significance of the response, the chi-square test has been adopted.

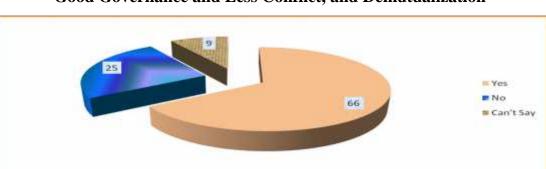


Figure: 4.19
Good Governance and Less Conflict, and Demutualization

Chi-square Test for the Relationship between Good Governance and Less Conflict, and Demutualization

On the basis of the majority of the responses, in the above section, it has been assumed that the demutualization of the stock exchange certainly facilitates the good governance for the operation of the exchange and lessens the conflict among the various stakeholders. However, to test the significance of such assumption the chi-square test has been done.

Table: 4.24
Chi-square Test for the Relationship between Good Governance and Less
Conflict, and Demutualization

0	$\mathbf{E} = \mathbf{R}\mathbf{T} \mathbf{x} \mathbf{C}\mathbf{T}$	O – E	$(\mathbf{O} - \mathbf{E})^2$	$(\mathbf{O} - \mathbf{E})^2$
	<u> </u>			E
5	4.59	0.41	0.17	0.04
8	7.22	0.78	0.61	0.08
8	9.19	-1.19	1.41	0.15
2	1.75	0.25	0.06	0.04
2	2.75	-0.75	0.56	0.20
4	3.50	0.50	0.25	0.07
0	0.66	-0.66	0.43	0.66
1	1.03	-0.03	0.00	0.00
2	1.31	0.69	0.47	0.36
			$(\mathbf{O} - \mathbf{E})^2$	= 1.60
			E	•

As it has been observed that the calculated value of 2 (1.600 is lower than the tabulated value of 2 (9.49) at 5% level of significance for 4 d.f., it can be

inferred that the relationship between good governance and less conflict, and demutualization is statistically significant, as stated by the majority of the respondents. Thus, to smoothly run the exchange with minimum level of conflict among the shareholders, the demutualization is crucial for NEPSE, no matter whether it will be operated as private exchange or public exchange.

4.3 Major Findings

On the basis of both the primary and secondary data analysis, the following major findings have been reached.

Findings from Secondary Data

- The NEPSE index followed decreasing trend in the recent two fiscal years. The NEPSE index is 963.36 points in highest in the fiscal year 2007/08 and 477.73 points in lowest in the fiscal year 2009/10.
- The annual turnover of NEPSE started to decrease from the recent two fiscal years. The annual turnover has been measured to be Rs. 22820.76 in the fiscal year 2007/08 and in the fiscal year 2009/10, it is Rs. 11851.11 millions only.
- Commercial bank covers the major portion of NEPSE turnover both in the no. of shares traded and the amount generated from the sales. Similarly, 23149.49 thousands shares were traded in average during the five year period.
- The number of company traded and listed companies are increasing in every year. However, the market days of NEPSE started to decrease from the recent two fiscal years. Also, NEPSE made an average daily turnover of Rs. 58.72 millions in the five year period.
- In average, 88.69% of the listed companies were traded in the five year period. Likewise, NEPSE converted 5.38% of total market capitalization into turnover and 36.72% of total paid up capital in turnover in average. Similarly the number of transactions has increased in each fiscal year,

and by the end of the fiscal year 2009/10, the number of transactions is 213733.

Findings from Primary Data

- Half of the respondents are in the opinion that NEPSE should be demutualized for better governance and less conflict. Similarly 47% of the total respondents have opined that the increasing competition for global order-flow would be the main force that will cause NEPSE to be demutualized.
- The good governance of the exchange would be the main benefit from demutualization. About 50% of the respondents have supported this view. And 56% of the total respondents have stated that if NEPSE is demutualized, then it should adopt full demutualization.
- Although a demutualized exchange can operate as public exchange or private exchange, 53% of the total respondents have said that NEPSE should operate as public exchange, if it is demutualized.
- 66% of the respondents agreed that demutualization leads to better financial position of the exchange. The relationship is also statistically significant. Similarly, 63% of the respondents have said that there is positive relationship between the increment in basic earnings power and the demutualization of the exchange. Also, 66% of the respondents have said that demutualization yields good governance of the exchange and minimizes the conflicts, if any. The relationship is also statistically significant.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Several stock exchanges have been overhauling their corporate governance structure as a result of a more demanding competitive environment. A combination of factors led to the increased pressure on the exchanges' businesses. Particularly in Europe the deregulation of the financial markets by initiatives such as the Single European Market, but also by the Big Bang reforms in UK, opened the path for increased competition from foreign institutions. But other country's exchanges were also affected. The changing investment behavior of their customers, which became less home-biased and sought to diversify their capital globally, resulted in increased competition for order flow amongst exchanges. Yet, the greatest impact on stock exchange competition can be contributed to the developments in information technology and the reduction in communication costs, which resulted in the emergence of new ways to trade securities. Remote membership, electronic order book trading, electronic communication networks, and the internalization of order flow by intermediaries became all viable threats to the traditional floor trading. The stock exchange in Stockholm was the first to react on this changing environment by re-structuring its corporate governance in the early 1990s. As most other exchanges, it was organized as a mutual, which usually comprises a one-member one-vote control structure and a not-for-profit orientation of their venue. In the process of this demutualization, they changed their institutional setting towards a profit-oriented one-share, one-vote structure as we find it in a regular capitalist firm. Several other exchanges followed the suit.

However, one can observe that some exchanges merely restructured their voting system and altered the objective function towards profit-orientation, but mostly retained their old shareholders. Hence, this type of reorganization did

not involve a change in the type of owners, although sometimes an internal reallocation of share and thus vote distribution occurred in order to more closely align the customers' voting power with their respective volume of business. As a consequence, these exchanges basically remained dominated by their customers. Other exchanges have decided to go one step further. They sold a substantial portion of their shares to outsiders via a public listing. Thus, their governance has become more or less dominated by outside or non-customer owners who foremost have a financial interest in the exchange.

A demutualized and listed exchange provides an opportunity to unlock the value of the exchange by providing an influx of capital that the exchange can use to improve technology, seek innovation in technology and services or acquire other markets. New technology – most notably, client online access to trading and information – has also forced a re-examination of the business model. Besides helping exchanges adapt to a fast changing marketplace, demutualization is also expected to promote the exchanges' efforts to leverage their brand values by expanding into new businesses. In sum, equipped with better financing, more flexible decision mechanisms, and heightened accountability, demutualized exchanges are likely to emerge as leaner, more competitive, and more transparent organizations. Thus, to examine whether the demutualization of NEPSE can also bring good governance of the exchange, the present study has been conducted. The study has been divided into two sections; the first section analyzes the past performance of NEPSE, and second section conduct questionnaire to measure the appropriateness demutualization.

5.2 Conclusion

The fundamental problem with the Nepal stock exchanges lies with the issue of corporate governance. Moreover the existence of non-tradable shares has been the greatest impediment to the development of Nepal's equity market. Moreover, it is the contention that more can and needs to be done to reform the

Nepalese capital markets. Demutualizing and listing in its own stock exchange is a crucial step in bringing about better corporate governance to the Nepalese exchange. The NEPSE is a well-established and highly regarded institution that has a strong regulatory framework and legal system, and an adherence to international accounting standards. Through this act, there is further pressure on the Nepalese stock exchange to ensure accountability and transparency in its markets. Moreover, there will be a higher level of scrutiny on the listed companies and companies that are looking to launch their IPOs.

The successful act of demutualization and listing will result in many benefits to the Nepalese economy and its people. It will spur economic growth by increasing the amount of Foreign Direct Investments, increase domestic consumption as the public becomes more confident in the economy and is more willing to spend. There will also be a new wave of job creation as new industries such as the credit rating industry, investment banks, accounting profession will experience a surge in demand for their services. Capital markets will also be increasingly seen as an additional source of funding for mainland enterprises. This is especially important for the sustaining the growth of the Nepalese economy.

The improvements to the NEPSE such as improved regulatory framework, streamlined decision making and operations and new business models will also strengthen the domestic Nepalese stock exchanges in the face of strong competition from other exchanges. With the increased confidence in the capital markets, Nepalese will also see the benefits in diverting their savings into investments. The benefits are plentiful but most importantly it will create a more even distribution of income, thereby relieving the poverty pressure and increase the living standards of the majority of Nepalese citizens.

5.3 Recommendations

After the analysis of the data, and drawing major findings of the study and drawing conclusion, the following recommendations have been provided;

- In recent periods, the performance of the stock exchange is deteriorating, the NEPSE index, the turnover, the market days, and the average daily turnover and others are all decreased mostly from the fiscal year 2008/09. The concerned bodies, after examining the effectiveness of the demutualization to address these problems, should demutualize the exchange without any procrastination.
- A demutualized exchange continues to perform all of its regulatory functions, even after becoming a for-profit organization. Although conflicts of interest arise in both non-profit and for-profit exchanges, concerns have been raised about whether a demutualized exchange will take enforcement actions and impose penalties on those who are major providers of revenue. In order to avoid some of the conflict-of-interest issues, a demutualized exchange, if NEPSE adopted, should establish a separate entity to conduct regulatory functions.
- The consensus decision making process is cumbersome and ill-suited to the dynamics of a changing economy and a highly competitive capital market. Professional management is likely to be more efficient in its decision making allowing the exchange to respond quickly to change and to remain innovative and competitive. The exchanges' operations will also have to be tailored to meet market needs and generate profits because a demutualized exchange must be accountable to its shareholders who are not members.
- The capital market is a market of information where timely and accurate information is vital. The concerned bodies should exert more efforts in to improve corporate governance structure, develop an effective check and-balance mechanism between power organs, decision-making bodies, regulatory authorities and corporate leadership, reinforce responsibilities of listed companies and others that have the obligation to disclose

information, effectively ensure truthfulness, accuracy, completeness and timeliness of information disclosure and protect interests of investors.

BIBLIOGRAPHY

- Aggarwal, R. (2002). Demutualization and Corporate Governance of Stock Exchanges. *Journal of Applied Corporate Finance*. Vol. 4 (2): 105-113.
- Akhtar, Shamshad (2002). Demutualization of Asian Stock Exchanges: Critical Issues and Challenges. New Delhi: McGraw Hill.
- Baniya, Deependra (2006). *Determinants of Share Price in Nepalese Financial Market*. An Unpublished Masters' Degree Thesis submitted to Faculty of Management, T.U.
- Belth, Joseph M. (1994). The Demutualization of Midland Mutual Life. *Insurance Forum.* Vol. 21 (3): 125–128.
- Cagle, Julie A.B., Lippert, Robert L. & Moore, William T. (1996).
 Demutualization in the Property-Liability Insurance Industry. *Journal of Insurance Regulation*. Vol. 7 (3): 343–369.
- Carowa, Kenneth A., Cox, Steven R. & Roden, Dianne M. (2008). Demutualization: Determinants and Consequences of the Mutual Holding Company Choice. *Journal of Business and Management*. Vol. 8 (2): 71-105.
- Carson, James M., Forster, Mark D. & McNamara, Michael J. (2009). Changes in Ownership Structure: Theory and Evidence from Life Insurer Demutualization. *Journal of Economic Behavior and Organization*. Vol. 27 (4): 1-86.
- Carson, John W. (2003). *Implications of Demutualization for the Self-Regulatory and Public Interest Roles of Securities Exchanges*. Missouri: Springfield Mass.
- Cole, C. Steven, McNamara, Michael J. & Wells, Brenda P. (1995). Demutualization and Free Cash Flow. *Journal of Insurance Issues*. Vol. 18 (3): 37–56.
- Elliott, J. (2002). Demutualization of Securities Exchanges: A Regulatory Perspective. *IMF Working Paper*. Vol. 52 (1): 1-29.

- Garber, Harry D. (1986). Demutualization: Wave of the Future or a Passing Fad? *Journal of the American Society of CLU and CHFC*. Vol. 9 (4): 58–63.
- Hughes, Pamela and Ehsan, Zargar (2006). Demutualization of Stock Exchanges. *Blackes Bulletin on Security Law.* Vol. 5 (8): 93-121.
- Karmel, Roberta S. (2010). Turning Seats into Shares: Implications of Demutualization for the Regulation of Stock and Futures Exchanges. *Journal of Economic Behavior and Organization*. Vol. 28 (2): 1-35.
- Kharel, Samita (2005). *Current Problems and Prospects of Securities Market in Nepal*. An Unpublished Masters' Degree Thesis submitted to Faculty of Management, T.U.
- Krishnamurti, C., Sequeira, J. M. & Fangjian, F. (2002). Stock Exchange Governance and Market Quality. *Nanyang Business Paper*. Vol. 12 (4): 1-49.
- Lucy, J. (2004). Market Demutualization and Privatization: The Australian Experience. Kunming: Aurora Publishing House.
- Morsy, Arwa & Rwegasira, Kami (2009). 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*. Vol. 31 (40): 1-79.
- Ojha, Sanjay (2010). Stock Price Movement in Nepalese Securities Market. An Unpublished Masters' Degree Thesis submitted to Faculty of Management, T.U.
- Pomerantz, Frederick J. (1996). Iowa Offers New Wrinkle in Demutualization. *Best's Review*. Vol. 17 (6): 67–69.
- Rijal, Abhiraj (2008). *Role of Financial Indicators in Determining Share Price* in Nepalese Financial Market. An Unpublished Masters' Degree Thesis submitted to Faculty of Management, T.U.
- Robb, J. A. and Cromble, A. N. (2006). Defeating a Demutualisation: A Case Study. *Journal of Co-operative Studies*. Vol 39 (3): 35-73.

- Segal, Jillian (2002). Market Demutualization and Cross Border Alliances: The Australian Experience. Kunming: Aurora Publishing House.
- Serifsoy, Baris (2007). The Impact of Demutualization and Outsider Ownership on Stock Exchange Performance Empirical Evidence. *International Journal of Business*. Vol. 9 (7): 1-45.
- Shrestha, Ranjit (2009). Share Price Behaviour of Commercial Banks listed in NEPSE. An Unpublished Masters' Degree Thesis submitted to Faculty of Management, T.U.
- Singh, Ranjit Ajit (2004). *Mergers, Demutualization and Governance of Exchanges*. Toronto: Annick Press Ltd.
- Taylor, M. R. (2004). Demutualization Still Rare But Pressures Growing, Study Finds. *Cooperative Business Journal*. Vol. 19 (2): 1-17
- Treptow, F. (2006). *The Economics of Demutualization: An Empirical Analysis of the Securities Exchange Industry*. Wiesbaden: Deutscher Universitaets-Verlag.
- West, Diane (1995). Group Takes Action to Block State Mutual Demutualization. *National Underwriter*. Vol. 11 (5): 1-23.
- Worthington, Andrew & Higgs, Helen (2010). Market Risk in Demutualised Self-Listed Stock Exchanges: An International Analysis of Selected Time-Varying Betas. Journal of Economics and Finance. London: Alastair Sawday Publishing. 10 (8): 61-82.
- Yong, Kwek Ping & Fu, Wenhao Kelvin (2010). Introducing Demutualization and Listing as a Mean to Improve the Management of Chinese Stock Exchanges. *Journal of Chinese Economy*. Vol. 27 (6): 1-66.

APPENDIX – I QUESTIONNAIRE

Sir/Madam,

c. Transparency

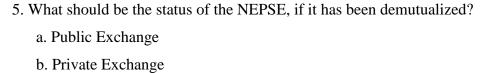
d. Strengthening Professionalism

e. Enhance Management Flexibility

As I am doing research *Appropriateness of Demutualization for Optimal Governance of Nepal Stock Exchange*, for the partial fulfillment for the degree of Master's of Business Studies, I would like to understand your opinions on the subject related to demutualization. It would be an generous cooperation if you express your views on this questionnaire on the basis of your experience.

Personal Information:
Name:
Status: Personnel of Brokerage Firm/Investor/Student (Please Tick One)
Please tick the best option;
1. Do you think that Nepal Stock Exchange should be demutualized?
a. Yes b. No c. Don't Know
2. What force do you think will be the major cause for the demutualization of NEPSE?
a. Advancement in Technology
b. Increasing Competition for Growing Order-Flow
c. Growing Conflicts of Interest between Existing Owners
3. What major benefits have you expected if NEPSE is demutualized?
a. Good Governance
b. Tap Capital Markets

33333	
4. What type of demutualization should be adopted if decided to change the ca	pital
structure?	
a. Full Demutualization	
b. Sponsored Demutualization	
c. Mutual Holding Company	



- c. Don't Know
- 6. Do you think that Demutualization leads to better financial performance of stock exchanges that have undergone the demutualization process?
 - a. Yes
 - b. No
 - c. Can't Say
- 7. Do you agree that basic earning power of demutualized Nepal stock exchange after demutualization is greater than that before demutualization?
 - a. Yes
 - b. No
 - c. Can't Say
- 8. Do you believe that the NEPSE will have good governance and less conflict if it decides to go demutualization?
 - a. Yes
 - b. No
 - c. Can't Say

Thank You for your kind cooperation.