Investigation various empirical approaches for stock exchange

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Abstract: This paper will investigate some empirical approaches for stock exchange. First of all, several theory approaches will define and then, we discuss empirical approaches which they have general usage in many stock exchange market. After all, model of these general approaches will be introduced by a positive view. As you know, there are different types of competition scenarios that exchanges organized as mutuals are particularly compared to trading by outside investors. Three variables of exchange rate, company size, and oil revenues evaluated by this model as control variables in addition to the dependent and independent variables. The interest rate at an assurance level of 95% had a negative and meaningful correlation with the return of the stocks of private banks admitted in stock exchange. The regression equation was generally meaningful.
[Hamed Asl Hadad. **Investigation various empirical approaches for stock exchange.** *Researcher* 2015;7(8):1-5]. (ISSN: 1553-9865). http://www.sciencepub.net/researcher. 1

Key words: stock exchanges, investment decision, profit regressions

Introduction:

Currency Future in the stock exchanges is a land mark history in the stock market trading. The stock exchange industry has been subject to unprecedented dynamics in recent decades, particularly in Europe and the US. As an example one should think of brokers, dealers or broker-dealers, each with diverging preferences on exchange-related issues such as the imposed fee structure or the investments undertaken. On the other hand, members also vary in size and the scope of activities outside the exchanges. A major catalyst for increased competitive pressure is also advances in communication and information technology, creating new forms to conduct business in this industry.

Overall competitive pressure increased on many stock exchanges due to a range of significant changes of the industry environment. Besides globalization tendencies that led to less home-biased investors and issuers and consequently stronger competition between national exchanges for order flow and listings, the deregulation of financial markets resulted in lower barriers to entry, making the incumbents' home markets more contestable. Furthermore, the trading members of the exchanges have become increasingly heterogeneous in nature. On the one hand, they differ in the activity they perform at the exchange. Remote membership, electronic order book trading, alternative trading systems, and the internalization of order by financial intermediaries all became viable threats to the core business of stock exchanges, i.e. the traditional floor trading activity.

Some banks, for example, are engaged in activities such as over-the-counter trading, derivatives trading and post-trading services. To the extent that exchanges were also active in these fields, they became competitors of the exchanges. Efficiency gains due to straight-through-processing possibilities. The strong growth in the derivatives market induced many exchanges to horizontally integrate this business field by offering a derivatives trading platform.

Increased competition and divergence in the interests of the trading members led to a decline in the prosperity of stock exchanges. Some of them arrived at a point where their viability was at stake. In many cases, this resulted in a restructuring of their governance system, a process which is usually denoted as *demutualization*.

As a consequence, their organizational form converted from the traditional mutual structure towards a regular outsider-owned, for-profit corporation. Take as an example the New York Stock Exchange (NYSE), whose seat price, a proxy for the profitability of possessing a license to trade on the Big Board, declined sharply in the last years because of ever-growing pressure from competing trading venues and its members' resistance to implement a modern trading platform. Recently, the NYSE announced its demutualization and the successive migration towards electronic trading. Since March 2006, the exchange has floated its shares on its own market.

Meanwhile, new business opportunities emerged, partly due to the same techno- logical advances that threatened the exchanges' core business. Exchanges could for example embrace the new IT technology to modernize their trading and information dissemination systems. This promised lower transaction costs and potentially higher rents for their members. Furthermore, related business activities that offered both growth opportunities and new sources of income induced exchanges to diversify into these fields. Vertical integration of post-trading services, for example, was easier to accomplish with the availability of modern IT-systems and promised.

Literature Review

Anuradha Guru (2009), 'Forex Derivative Markets in India: Developments thus far and road ahead', exchanges the view on forex derivative market development from early period of currency system till the currency trade in national stock exchanges in India. It presents about the trade activities at NSE.

Further more studies also available on currency derivative but not specific on currency future at National Stock of India (NSE). Based on this study is being initiated to find out the facts of trade practices at NSE and MCX-SX.

Need and purpose the research

The foreign currency market continues with great deal of volatility which makes traders more unsecure in the international trade. Recently introduced product of currency future makes more comfort for the traders to hedge their trade exposure to foreign currencies. Concerning to these factors currency future seems to be more innovative product to both individuals as well as to the commercial traders or to be a business entity that makes trade against foreign currency trade. This study is aimed to know how investors behave towards currency future derivative especially in trading in two different exchanges in India in terms of trade volumes and open positions. Next to identify the reason behind the success of these exchanges with continuous improvement in the volume of the trade and to know how these exchanges have been rewarded.

The participants in this financial currency future derivative include exporters, importers, corporates, banks, investors and arbitrageurs. In India, there are well known three exchanges involved in the foreign currency futures trading, but people behave differently towards these exchanges, because people trade mainly through NSE or MCX-SX, it's being compared to BSE.

The literature review provides foundation for the study on currency future derivatives. During this study some of the literatures have proved to be a supportive in bringing out this paper. The literatures discuss on the concepts and introduction of currency future derivative in the stock exchanges of NSE and MCX-SX. It is estimated that the developing nations would join the systematic exchange system which is high liquid and flexible for the traders to protect their risk in the foreign exchange rate differences through this mechanism. Foreign exchange which had long history when nations moved on from fixed exchange system to floating rate exchange system. Reviews have been collected only from 2008 as trade of currency future started only from august 2008 in India. Due to that minimum number literature is available. Some the review of earlier studies opinion

SB Kamashetty (2008), 'Exchange traded currency futures: A bird's eye view', provides details on currency futures report presented by Reserve Bank of India (RBI) and Securities Exchange Board of India (SEBI) in issues related to exchange traded currency futures introduction into stock exchanges. It also discuss on the guidelines on trading of currency futures in the stock exchanges.

Manoj Anand and K.P. Kaushik (2008), 'Management Motivations for Use of Foreign Currency Derivatives in India', examines the management motivation of foreign currency derivatives usage in corporate India. For this study 640 companies are selected having using currency derivatives or documented foreign exchange risk management practices at their companies. It is found that management of the studied companies find currency future derivative is critical for their risk exposure in the foreign trade and volatility of price movement in the foreign market trade. They find currency future as hedging instrument.

Methodology of the study

Methodology adopted for this study is well structured along simple line. The study is used to compare the growth trend of the currency future trade in both the exchanges of NSE & MCX-SX in India. For this study secondary data is collected from the NSE and MCX-SX. The variables selected for the study is exchange rates, trade volume, and open interest against US dollar. The period of study is during August 2008 to January 2010 as data available still this period only. Tools used for this study is simple average, the percentage method and well represented through graphical charts.

Hypothesis of the study

The study has set a hypothesis of comparing a number traders which have influence on the growth of the business towards currency derivative in both the exchanges, second, it is assumed that positive trend will have effect on the traded volume and open interest position of the contracts trade, and price formation. With this assumptions study is being conducted to know the growth trend of currency future trade in NSE and MCX-SX stock exchanges.

Hence, the industry seems to experience both a trend towards demutualization and diversification into related business activities. Figure 1 confrms this notion for the 50 largest stock exchanges that report to the World Federation of Exchanges (FIBV). The left panel shows the number of exchanges according to their governance regime for the years 1999 to 2003. It becomes clear that the number of exchanges that are organized as mutuals, or are state-controlled, decreased substantially from 40 to only 25. In the same time period, the number of demutualized exchanges has increased from 10 to 25. Note that we distinguish between demutualized and publicly listed exchanges. The main difference between the two

groups is that the latter not only underwent a demutualization process, but also sought a public listing. This will be relevant in the following, as the two groups differ in the type of owners they possess.

The right panel shows the increase in diversification activity for the same sample of exchanges. The number of exchanges that added post-trading services to their business portfolio rose from 22 to 30, while the number of entities that operate a derivatives trading platform marked up from 25 to 31. Despite the strongest relative increase, providers of software solutions remained rather scarce, with three exchanges offering this service in 1999 and seven in 2003.

A preliminary event-study An obvious question seems whether there is a link between the two trends. One could argue that, since demutualized exchanges are profit-oriented entities, they are more likely to invest into related business segments to increase their revenues (and possibly profits, too). Figure 2 seeks to provide some preliminary empirical evidence by presenting two small 'event-studies'. We compare both the average degree of diversification and the development in operating revenues of exchanges that underwent governance restructuring with entities that remained organized as mutuals. Without laying out the full details of the employed methodology at this point, we provide a detailed description in appendix F – the graphs make clear that the change in governance, especially for exchanges that went the left graph shows that the average excess degree of diversification increased after the event of demutualizing and going public in period t, where one period equals one year, respectively. Note that exchanges that experienced such an 'event' have already been more diversified on average than the control sample of mutual exchanges prior to the event. This can be seen by the fact that both lines are in positive territory in period t-1. However, as our graph indicates, we still witness a significant rise in our measure after the event period.1

A somewhat similar picture provides the right graph, especially for publicly listed exchanges. Here, the indexed development in operating revenues for exchanges that either demutualized or went public are adjusted for the development in revenues of the control group of mutuals. As can be seen, publicly listed exchanges have outpaced their mutual counterparts on average after their respective IPO (at period t), whereas demutualized exchanges did not experience any significant excess rise in their revenues. We argue that the lion's share of the increase in revenues stems from these new related activities. Although one could propose that exchanges may have also earned more from the traditional cash market operation, our data lends only limited support to this notion.

Our contribution and main findings the purpose of the first part of the paper is to provide a theory that explains the diverging investment behavior of exchanges and trading platforms3 with diferent governance regimes. To model this, we build on a simplified version of Rey and Tirole (2000) which we adapt and extend to certain characteristics of stock exchanges. In a static model, we analyze the competition between stock exchanges and their investment behavior. In our basic setup with homogeneous users, both competitors are considering to invest in an innovation which improves their trading technology and provides uniformly distributed benefits to all users. The investment is value-enhancing for their users, if the (fixed) costs can be recouped by charging a transaction fee on a succulently large trading volume.

We show that in competition with an outsider-owned stock exchange, the mutual exchange is typically at a disadvantage. Our argument mainly bases on the idea that the latter has no financial bu®er provided by outside investors and therefore has to pass on its investment costs to its members, irrespective of the trading volume that remains on its platform. Consequently, the mutual exchange is exposed to the possibility of runs, as a member's exit exerts a negative externality on the remaining members. We show that, in most circumstances, the outsider-owned exchange can exploit this fragility, thereby undermining the ability of the mutual exchange to invest, despite the existence of a countervailing "second-sourcing", which supports the investment propensity of a mutual. Second-sourcing connotes a situation where the mutual exchange invests into the project, even though it knows that its members will migrate to the competing for-profit exchange. The reason for this is that the mutual can improve the price conditions of the transfer for its members by investing into the project.

National Stock Exchange (NSE)

The National Stock Exchange (NSE) of India was incorporated in November 1992 is known for its innovation and best practices in the financial market. During 1994 NSE started trading in whole sale debt and capital market activities in equity segment, becoming largest exchange in the country within a year. In 2000 internet trading was introduced and later came out with index future trading in the derivative segment. It was the initiative in the derivative trading in the NSE turnout to be an important turning point with index options and individual securities is being launched. It took another eight years for NSE to launch futures trading in the currency exchange in the Forex market Indian currency (INR) against US dollar on 29th August 2008. Interestingly NSE is has introduced many such products and services year on

year all turn out to be a great success.

Introducing heterogeneity of members into the model confirms our results, when a majority of members experience a negative externality from the investment project.

We argue that this extension of the model structure should be interpreted as investments in related non-core business activities of an exchange, whose potential benefits are not distributed evenly across diferent types of members. This aspect of our model has important practical implications, as industry participants are concerned about certain investments undertaken by exchanges, such as the vertical integration of post-trading services, which are profitable for the exchange, but may be detrimental to its users. In Europe, outsider-owned Deutsche BÄorse, which bought post-trading services provider Clearstream in 2003, is therefore under particular scrutiny by both users and regulatory authorities due to fears of anti-competitive behavior.5 The results from our model underline the fact that outsider-owned exchanges are less constrained in their investment behavior, which could lead to overall welfare losses, if the negative externalities borne by the users are larger than the gains for the exchange and its owners.

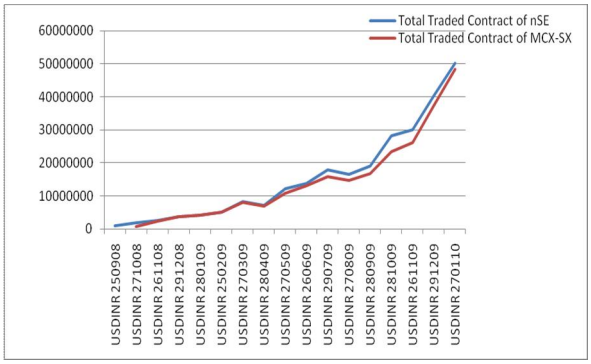
The number of empirical papers on the governance of stock exchanges is relatively small. Krishnamurti, Sequeira, and Fangjian (2003) analyze the market quality of exchanges with different organizational form. They find evidence that the demutualized National Exchange of India provides a higher market quality than the mutual Bombay Stock Exchange. Mendiola and O'Hara (2003) focus on the post-IPO performance of publicly listed exchanges and find that these exchanges outperform both the general market and other IPOs. Furthermore, they find evidence for a positive link between the fraction of equity sold to outside investors and stock exchange performance. Yet, their findings are confined to the group of publicly listed exchanges and cannot provide any comparison to exchanges that are not outsider-owned. Other empirical attempts to compare different governance regimes in the stock exchange industry mainly rely on frontier efficiency methods. While Schmiedel (2001) employs a parametric stochastic frontier model to evaluate the cost efficiency of European stock exchanges, he applies a non-parametric method in a second paper (Schmiedel (2002)). The former paper controls for demutualized exchanges within the regression and displays a positive impact of demutualization on cost efficiency.

In his second paper, the mean of factor productivity gains is higher among mutual exchanges.

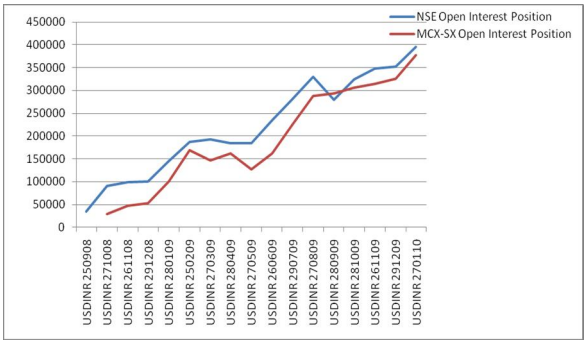
A recent paper by Ramos (2005) employs unvaried Probity regressions to evaluate the propensity of exchanges to demutualize. It finds evidence that competitive pressure has a positive effect on the likelihood of exchanges to demutualize. Our paper has most similarities to the analysis of Ramos (2005) as we will also conduct Probit regressions to analyze the influence competition has on the decision of exchanges to demutualize. However, we need to employ a more involved estimation technique. As we also seek to provide evidence for the impact of organizational forms on investment decisions at exchanges, we use a bivariate Probit approach to account for potential endogeneity issues stemming from our governance variable.

The paper is structured as follows. Section 2 presents our model and states our propositions. Section 3 formulates the hypotheses, which we want to test, discusses the data and methodology employed, and finally presents our empirical results.

Numbers of Contracts Traded at NSE and MCX-SX- Open Interest Position at NSE and MCX-SX



Source: *Compiled from the original data*



Source: *Compiled from the original data*

The currency future derivative trade at National Stock Exchange and MCX- Stock Exchange shows positive growth pattern in the trade history of the data. The following information have been noted during the study,

Currency Future traded in NSE and MCX-SX shows positive growth pattern for the past 17 months

of trade.NSE found to be a leader with large volume of contracts begin traded in the exchange.

From introduction of currency futures contract volumes have grown to 56 percent in NSE and 57 percent in MCX-SX.

This growth is due to inceptional awareness of people and currency future trading have implused traders to start trading in this for averting the exchange rate risks otherwise that would erode the the profit of the business. So over trend of the comparative analysis shows positive volume of business with strong open interest position shows good sign of future trade on Currency future derivative product. There is a positive correlation with volume in both the exchanges of currency future trade

Strong build-up in open interest position shows primarily traders have interested to go long or short position of the trade, more than that it proves that traders have good trust with these exchanges and liquidity nature of the trade. Other it is difficult to make trade in the derivative segment, once if it is found to be illiquid trade derivatives.

Conclusion:

This study presents on the growth pattern of the currency future trade in NSE and MCX-SX. It shows the importance of the currency future for the foreign traders in the EXIM market to hedge their trade activities. Generally, the results of this study which was about the published news about stock return revealed that in TSE the type of the mentioned variable affects the ability of correct prediction of profit components especially accruals. The findings of this study generally indicated that stockholders do not analyze received information correctly, do not react correctly to them and make false decisions depending on conditions.

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7/27/2015