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Stock Exchange Ownership in India: Rules, Regulation and Policy

By Surjit S. Bhalla**

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**Chairman, Oxus Investments, New Delhi, India.

E-mail address: surjit.bhalla@oxusinvestments.com

Introduction

This paper is concerned with the issue of what should be the prudential, regulatory limit for individual “promoter” ownership in a stock exchange. The urgency and importance of the subject is underlined by the fact that SEBI has constituted a high-level committee headed by former Reserve Bank of India governor, Dr. Bimal Jalan, to look into ownership of exchanges and related issues. As part of the policy making process, SEBI has sought views from market participants for a range of issues pertaining to the regulatory structure governing stock exchanges. In turn, the Bimal Jalan committee has asked, in a survey of market participants, whether diversified ownership (as in the case of stock exchanges in India) or an anchor/strategic investor approach (as in the case of exchange depositories) is a better model.

The ownership problem emerges from the SEBI ruling contained in its 2004 Report on the *Corporatisation and Demutualisation of Stock Exchanges*. After reviewing the experience of different countries, the Report concluded, and recommended, that no single investor can have more than 5 percent ownership of an exchange. This recommendation is now official policy notwithstanding the fact that a later 2006 SEBI report had recommended that the cap be lifted to 26 percent. It is the 5 percent conclusion, and its reasoning, which is examined in this paper.

The paper is organized as follows. Section 2 looks at the history of stock exchange development, and in particular the move towards demutualization in the early 1990s. With demutualization came the recognition that the rules governing stock exchanges would henceforth be the respective company laws and the respective anti-competition laws prevailing in the particular country whose jurisdiction the stock exchange, now company, was under. This led to some divergences in the modes of operation for different exchanges. Each exchange was now faced with the choice of being both an exchange and a self-appointed regulator (Self Regulating Organizations or SROs) or separating the regulatory functions into a different organization. There are further branches to this new exchange order. Should the demutualized stock exchange (hereby Company) be listed or operate as a private firm? If the latter, then what rules are there to obtain, and ensure, governance? This ambiguous development has given rise to a new question for the exchanges and the regulator: how should the exchanges be regulated?

Section 3 documents the stock exchange reality in India – the large increase in volumes over the last decade without the corresponding increase in new entrants. Section 4 looks at the experience of exchanges and regulators outside of India. Section 5 speculates on the rationale behind the

regulation that no new entrant in the exchange space can have more than 5 percent of ownership of the exchange. Section 6 is a brief review of the codes of conduct and governance involved in an exchange. Section 7 looks at the regulations for new entrants in the financial market place, including commercial banks. An interesting result which emerges is that there are considerably less stringent rules for ownership of banks and commodities exchanges than for the ownership of a stock exchange in India. Section 8 examines the different solutions to the assumed problem facing society, and investors, and market participants if an exchange were to be solely owned by one individual. This counter-factual helps illustrate the conclusion that of all the problems facing financial markets in India, who owns how much of an exchange seems to be of least interest, and concern. Section 9 contains recommendations emerging from the research – in particular, that regulators and policymakers should do the maximum to enhance competition among exchanges. This will be forward looking in at least two respects – it will mean lower costs and better performance for domestic investors, and prepare domestic firms for the future when Mumbai is likely to be, and should be, one of the major financial centres of the world. *That* should be the vision of Indian policy makers and regulators.

Section 2: New Technology Affects Exchanges

In the beginning, that is before 1993, all exchanges around the world were privately owned, and in the nature of “clubs”. Throughout this text, the term “exchanges” incorporates both stock and futures exchanges. In some countries, e.g. the US, the regulator for the two exchanges is different. In India, the regulator for both delivery and futures trades is the same – SEBI. However, conceptually and in terms of regulation, there is no difference between the two.

This club had a membership of brokers, and the members operated the exchange for “mutual” benefit. Exchanges were clubs, yes, with membership lists and entry into the club was not automatic. The club members met at an appointed hour each day and conducted business. What was their business? To match the order flow of buyers willing to buy stocks at a given price with the sellers wanting to sell the same security at a different price. Match-making then allowed the exchange, transfer, to take place. The interest of each club member was the same – to maximize the revenue of the club, and hence the profit of each participant. The revenue came from three sources – from private firms which wanted to be listed on the exchange, the revenue from (large) bid-ask spreads and the revenue from brokerage. The “market” limited the opportunity for the fees from listing. If a too high fee was charged, the private firm wanting to be listed could go to another

exchange, another match-maker. Hence, the development of more than one exchange in the same city or country e.g. NASDAQ in the US. This alternate exchange would compete in many ways – it could make the rules of listing less stringent, and/or it could have less or more “governance”.

The advancement of telecommunication technology and personal computers started to change the exchange landscape in the early 1990s. Pit trading started to be replaced by electronic trading; market makers started to be replaced by computers. The exchanges felt a need to capitalize, and modernize. This was not a problem for the major exchanges in the US who had good access to capital; but individual country exchanges faced a stark choice – either merge with a larger exchange or go out of existence. Or raise capital and invest. Survival instincts dictated a desire to invest and grow. But who would lend to a “club” of individuals whose future was bleak? So one option remained – becoming a private company, a company whose business (facilitating financial transactions) was open to all. This meant that the ownership structure had to change. Hence, the term “demutualization” was born i.e. the stock exchanges stopped being mutual, and became more and more like companies.

In the erstwhile club world, there was considerable scope for mis-governance. There was possibility of high brokerage fees, which the club administered due to its near monopoly power, and due to the “utility” status granted to it by some governments. While exact data are difficult to come by, it was the case that in most countries, one exchange dominated the landscape. For example, in India, while there were 24 exchanges in the early 1990s, only one was “recognized” by most market participants - the Bombay Stock Exchange (BSE). It had more than 60 percent of total volume of transactions. Hence, the BSE set the pace for transactions charges, and all else. Brokerage costs were upwards of 1 percent for each *side* of the transaction. Which means that if you did just one round-trip trade a month, you lost 24 percent in commissions!

Technology engineers competition

But this was before the onslaught of new communication technology. The effect of the new technology in different countries was the same – it engineered competition. The existing clubs were obviously resistant to the idea of competition, regardless of its source. Investors in Sweden faced an additional cost – a tax on transactions (yes, exactly like India’s securities transaction tax) imposed by the government. With the advent of technology in the mid-1980s, it became easier for corporations, and investors, to evade the tax (and the higher domestic brokerage costs) by transacting their business overseas where the tax was not present.

Simultaneously, the London Stock Exchange was eager to gain extra business, technological advances had taken place, Swedish investors were eager to move their money, and trades, off-shore and with low trading volumes, the Stockholm exchange was in financial trouble. These developments did not go unnoticed by the Swedish government. This was the combustible mixture that changed the exchange landscape prevalent for the previous two hundred years. This was the start of the demutualization process i.e. conversion of monopoly clubs into private firms, and eventually, and importantly, private *listed* firms. Out went the notion that an exchange was a public utility whose profits were “regulated”; in came the notion that an exchange was in many ways like any other firm – not a goods making firm, but nevertheless a firm providing an important service. How different is a financial firm, a bank, different than another financial firm, a match-maker of buy and sell orders? Not much, and a topic examined in some detail in Section 7.

Thus, the first firm to demutualize was the Stockholm Stock Exchange (SSE) which did so in 1993. It became a corporate entity, a “firm” where, expectedly, decision making was not joined with participation and access. Prior, the stock exchange, the club, had members (brokers) and only they could have access to and participate in the trading activities. Each member had a seat i.e. a share in the revenues of the club, revenues that came from the trading and listing activities of the exchange. It was “mutual” ownership, and one whose monopoly status was protected by the government. In some countries, this also meant special tax privileges. This was a cozy arrangement, and not surprisingly, led to high prices for doing business.

The conversion of club to company was done on expected grounds; shares in the club were converted into shares in the company. The SSE started a trend and others followed. Today, there is hardly an exchange that is not demutualized.

Meanwhile in India, and prior to the introduction of NSE, the top three clubs – BSE, Calcutta (starting in 1993-94) and Ahmedabad – were practicing outdated methods, used outdated technology, and increasingly outdated forms of governance. To improve matters, the government could have opened up the exchange space to foreign investment (as was done in Sweden) but these were early days of financial openness. The next best alternative was to “force” competition. Towards this end, and actively prompted by the government, financial firms (all government owned) set up the National Stock Exchange as a private firm i.e. as a demutualized exchange. It first started as an exchange trading in *debt* markets and eventually, in November 1994, the NSE started operating as an equity exchange.

Exchanges as Self Regulating Organizations (SROs):

Prior to electronic exchanges, most countries did not have a regulatory board for the operation of stock exchanges. The clubs were self-regulating organizations (SROs). Consequently there was plenty of scope, and opportunity, for “abuse”. The absence of electronic trading meant the following five major possibilities for malpractice; the presence of technology today means that such malpractices are easy to detect and therefore less likely to occur. No technology, however, can eliminate fraud.

First, and common, malpractice was bad pricing of a trade – the investor could not verify that the trade actually happened at the time, or price, it happened. Today, via technology, a trade time stamp, and volume, is displayed against every trade price. Second, given paper certificates, there was considerable credit or counter-party risk. Today, the presence of demat and demat insurance means that this risk is close to zero.

Third, the presence of front-running meant that club members could take advantage of information and act before a major order got executed. Today, electronic trading reduces such possibilities, but cannot eliminate them. On a small scale, such possibilities will always be there, and interestingly, the regulator, any regulator, can do precious little about it. How many front running convictions are there? What happens, and again because of technology, is that the front-running broker is black-listed by the major firms – again, the job is done by the market, rather than the regulator, or the self-regulating exchange. In addition, new anonymous non exchange formats of trading (“dark pools”) effectively reduce prospects for front-running.

The fourth important malpractice was “insider trading”. This is the practice of executing orders on the basis of new, publicly unavailable, information. This has occurred for centuries and will occur for centuries hereafter. However, technology has put in restraints. Trading patterns can be instantly analyzed for unusual activity from individual accounts. Corporate buying and selling is reported on web sites and indexes of such buying and selling are available with a lag. In addition, the definition of insider trading is becoming more exact and rarefied. If I hear rumors of a take-over, is that insider trading?

The fifth possibility of malpractice is market manipulation e.g. ramping up of volumes in a particular stock. Again, in a technology less club world, this was easy. A broker club member could institute block trades, indulge in circular trading, and his fellow club members would either participate in the malpractice, or look the other way. Today, technology and information severely limit this possibility.

Technology can detect patterns, and information about this malpractice would be extremely damaging to the exchange. The key difference is that it is a global market today, and information is accessible equally to those in the club, or outside. There are a lot of avenues for trade, and any malpractice is close to the “kiss of death”.

The above listing of (mostly) past abuses in the system, comprehensive but not exhaustive, is meant to highlight one important point – the availability of technology means that the market is much more disciplined today than it ever was, there is a lot more *international* competition now than ever before, that all of this has happened in the last 20 years, and especially in the last ten, and that this has transformed the exchange market place, for the better. The duties, responsibilities and self-regulating functions of exchanges have considerably diminished.

In addition, there is actual, or perceived, conflict of interest. There is a wider and much more elaborate concern with governance or international best practices. An exchange can and does indulge in self-regulation, but increasingly, exchanges are opting for an independent regulatory firm.

In an influential paper entitled *Changes in the Ownership and Governance of Securities Exchanges: Causes and Consequences*, Steil(2002) discusses in detail the problems inherent with stock exchanges being self-regulatory. He contends (page 2) that “regulatory failures are inevitable any time self-regulatory obligations imposed on an exchange conflict with the commercial interests of the exchange’s owners”. Further, that “a cost of devolving regulation down to officially designated national exchanges is implicit in the risk of stifling competition...Self-regulatory obligations must not be devolved such that an incumbent market-operator is effectively given control over its competitors, or potential competitors. The UK government acknowledged this when it removed from the London Stock Exchange its designation as the primary UK listing authority, transferring that power up to the Financial Services Authority” (p.22)

Other exchanges have followed the same practice. In an IMF survey paper, Elliot(2002) documents how many exchanges are hiving off their regulatory obligations to an independent firm.

“many exchanges that previously carried out licensing, proficiency, prudential and business conduct regulation have shifted that form of regulation to another SRO, relying on the SRO to ensure management of settlement risk and to regulate conduct with clients. The Toronto Stock exchange, for example, passed these regulatory functions to the Canadian SRO...The NASD, as a result of the US SEC enforcement action, split the NASDAQ market (and market conduct regulation and listing requirements) from the regulator, NASDR. The Australian Stock exchange similarly gave up many of its regulatory functions to the regulatory authority (also retaining listings and market conduct regulation) although this was done in the context of demutualization”.

This trend towards an independent firm doing “self-regulation” of exchanges removes the last vestiges of opinion that a stock exchange is a utility. But what are the characteristics of a utility?

Is a stock exchange a utility?

The strict meaning of a utility is a sector or firm which has externalities. These externalities can either be present if there are large barriers to entry, or if the sector possesses special characteristics whose operation is in the “national economic interest”. Both arguments lead to regulation, but only the former, coupled with special features e.g. last mile connectivity, can properly be termed a utility.

A stock exchange is much like a bank, but increasingly less so with the dominant role of technology. Prior to demutualization, and given the large barriers to entry, a stock exchange could be thought of as a utility. The private club was handling the money of the public, but given its private nature, the checks and balances on the operation of the club were few. Further, the private club was providing a service to the public, a service not available because of the closed nature of the Indian economy, and the closed capital market. Even today, an Indian investor cannot invest more than a limited amount of her savings outside the country, and even that permission is plagued by do’s and don’t’s. So if India wants to have a stock market, the exchange has to be in India.

Prior to 1994, the private clubs served a quasi-utility function. Today, and especially if SEBI was to encourage competition, the exchanges would not be a utility. Only 18 percent of the business on Indian stock exchanges has to do with the purchase and sale of shares; the rest are derivatives, futures and options. The Commodity Futures Exchanges also trade in futures of various commodities – gold, silver, copper, agricultural commodities, etc. It is unlikely that any policy maker in India, or elsewhere, views gambling on the future price of gold as a much desired service to be provided by a utility!

In addition, and independent of formally regulated stock exchanges, electronic trading via ECN’s (Electronic Communication Networks) and “dark pools” (where the identity of the buyer or seller is not known) are now taking away as much as 15 to 25 percent of the volumes in developed country markets. Given the anonymous, secretive, unregulated but legal behavior of these alternative trading systems, the contention that a stock exchange is a utility is untenable.

There is a further reason to not think of a stock exchange as a utility. It is that the primary interest of a private firm is profits and such a firm can be expected to pursue practices that enhance profits.

That is what it is expected, indeed required, to do. Steil(2002) relates an example of “regulation” that ended up being anti-competition.

“One example in the US is the operation of the Intermarket Trading System (ITS), an electronic network linking the US exchanges that was imposed by the SEC a quarter-century ago. When a new electronic exchange system appeared on the scenes in 1998 – Optimark, operated by the Pacific Stock Exchange – an SEC official obliged the company to negotiate its terms of access to the ITS with the New York Stock Exchange, its most powerful competitor. These costly and time-consuming negotiations resulted in what Optimark and its lawyers believed, not surprisingly, to be terms unduly favorable to NYSE; terms which almost certainly contributed to Optimark’s quick demise”. (2002, p.24-25).

For all these reasons, a stock exchange cannot be considered today to be a utility, though it might have served some utility functions some 20 years back. Hence, it should not be treated as a utility by the policy makers.

Section 3: The reality in India - Is the Indian stock exchange market competitive?

The previous section documented the changing technological landscape in the world, and in India. Sweden obtained competition via demutualization; India obtained competition via demutualization *and* a new entrant. The setting up of the NSE, with support of major financial institutions (all owned by the government) meant that the quasi monopoly of BSE could be effectively countered. Note that as a private sector company, the NSE began life as a demutualized exchange. As documented below, NSE has enjoyed unprecedented success, a success not equaled perhaps by any stock exchange in the world. Few, if any, monopolies enjoy a 66 fold increase in turnover in the short space of nine years; but to do it with competition, and in competition with a former dominant player, is remarkable.

This coincidence of events – the introduction of NSE and its meteoric rise – has led to a belief, in some quarters, that with the entry of NSE in 1994, a pioneering and unique model of stock exchange operations was initiated. This belief is supported by Shah-Patnaik(2010) who state that with NSE “A new governance model was *invented* for critical financial infrastructure such as exchanges, depositories and clearing corporations. This involved a three-way separation between shareholders, the management team and member financial firms”. (p. 17 emphasis added). Since this maybe the accepted guiding principle at SEBI, it deserves a detailed examination.

For both the stock exchanges in India, BSE and NSE, the shareholders are generally financial firms and insurance companies. The firms are not listed, and therefore a major corporate governance vehicle is ruled out. The non-listing also means that if the firm is highly profitable then there is very little trading in the shares of the firm. The owners, diffused as they might be among various institutions, are interested in non-fraudulent profits. Obviously, the more monopolistic the firm, the higher the profits, and the keener the interest of the owners to keep it that way. Towards this end, the owners would want to have the best management in place. But all of these concerns, interests, have little, if anything, to do with the size of the ownership and Shah-Patnaik devote only a paragraph, without evidence, to their controversial thesis.

“One important element of the success story of the equity market is the ownership and governance model which was conceived in the early 1990s for NSE and NSDL. On one hand, these were not government agencies: this freed them from the human resource and contracting constraints of government. At the same time, these were not simple profit-maximising firms. A three-way separation was established, between shareholders, the management team and member financial firms. These three groups were held distinct in order to avoid conflicts of interest. The shareholders were configured to have an interest in liquid markets, and not maximise dividends. Further, NSE and NSDL operated in competitive markets: they were not monopolies. SEBI stood distinct from these organisations, and supervised them.” (Shah-Patnaik, 2010, p. 17)

As evidence of the efficacy of the new model of operations and governance, Shah-Patnaik identify eight desirable changes that occurred once NSE was formed e.g. floor trading was replaced by electronic order books, clearing corporations for elimination of counter-party risk were formed, electronic demat accounts replaced paper share certificates, derivatives trading was introduced, and FII ownership rules were liberalized.

As this list of achievements indicates, an analyst faces several *identification* problems in reaching the conclusion that there is either a new governance model or that the new governance has achieved anything that would not have happened in its absence. In other words, a simple correlation has been taken by Shah-Patnaik to mean a massive causation. The sequence of outcomes identified by the authors has been observed for all exchanges in the world, including the BSE. And the outcomes are observed regardless of the nature of ownership of the exchange, or the independence, or quality, of management.

The authors correctly point out that there are problems with public ownership (lack of incentives, anti-competition mindset and reality) yet with public firm ownership of NSE and for good measure NSIEDL, somehow the right competitive combination was reached; this controversial conclusion

appears to be based only on intuition, and unfortunately cannot be coded and therefore replicated. If this was written in 1994 or 1998, there would be some sympathy with that view. But in 2010 when the NSE has more than 95 percent of the total market, and a complete lack of competition, the thesis is a bit thin, and extreme.

Deconstructing the three-way model, it is the case that most firms do not have “members” or “member financial firms” anymore – they just have shareholders and a management team. Member brokers, or member financial firms, are an anachronism from the era *prior* to demutualization. (A member could be a brokering firm who is also part owner, as is the case with BSE today and most demutualized exchanges in the world.) It wasn’t that a three way model was invented with NSE, it was just that with a demutualized exchange, membership is redundant. It can be argued, however, that by not allowing brokering firms to have very small shares in the firm, that governance is somehow improved or achieved – but this is most likely an assertion rather than a fact.

Thus, today, there is only a two-way separation in stock exchanges or firms anywhere in the world – there are the owners and there is the management team. In the case of NSE, it is argued by some that the special nature of the NSE firm – an unlisted entity where the management team and/or employees cannot be shareholders - is in large part responsible for its success. However, around the world and in India, there are various successful combinations of ownership and management. Wipro has one owner who has more than 80 percent ownership – yet few will accuse Wipro of having an unsound, or inefficient, management team. Infosys is more like a stock exchange club in terms of ownership; its creators owned a 100 percent before they went public. Even afterwards, these original owners collectively held a large fraction of the shares – yet few would accuse Infosys of having a bad management team. Examples of every sort can be offered to suggest that the positive link between NSE success and the fact that its management is delinked from ownership is spurious at best. Or that the “negative” link between percent ownership and “bad” management is just another one of those myths that unfortunately prevail all too often in the Indian policy space.

Turnover in Indian stock exchanges 2001-2010

Tables 1 to 3 provide data on the transactions in the two major stock exchanges in India. There are three statistics worthy of note. First, in the space of the last 10 years, the cash market has gone up

from some Rs. 554 thousand crores a month to a level 8 times as high in 2010. Second, derivative trading is now more than 5 times the level of cash trading. The third fact worthy of note is that the Indian stock market trades are around 5.7 trillion dollars a year, or Rs. 26145 thousand crores, or 261 trillion or around 5 times of India's GDP! And more than 95 percent of this volume occurs on one exchange, the NSE. A fourth fact also bears note – the volume has nearly tripled since Dec. 2006, but market participants (either NSE brokers or individual investors) have yet to see any significant lowering of brokerage charges for either cash or derivative transactions. There has been some lowering of brokerage charges – they are about half of those which prevailed five years ago. But volumes during the same period have gone up by more than 300 percent! It is in this regard that there hasn't been a *significant* lowering of brokerage charges.

Given the large number of NSE brokers, it is surprising that competition for lowering brokerage fees to investors is not intense. But perhaps it is because of a win-win world for NSE brokers – they gain the benefits of larger volumes, and just pass on the costs, including fees to NSE, to the individual investor.

As is well known, monopolists eventually do get challenged. IBM missed out on the PC because it got lazy and did not see the opportunity. Competition also lowers costs and increases efficiency. But challenge, lowering of costs, innovation etc. is not possible without the regulator allowing competition to take place. It is somewhat surprising, if not incredulous, that no Indian entrepreneur has been found fit by SEBI to enter the exchange space. Part of the problem, perhaps the major part, is that SEBI rules for ownership of an exchange are prohibitory at best. By stipulating that no single owner can own more than 5 percent of the new firm, SEBI has, in effect, ruled out competition for all times to come. It is true that a single owner, provided it is a financial firm, can own upto 15 percent of the exchange, but the movement, or permission, from 5 to 15 percent is not automatic.

The rest of this paper is concerned with the history, logic and applicability of the SEBI 5 percent rule. A comparison is made with other "like-minded" institutions and regulators e.g. other non-stock exchanges, commercial banks, etc. What kind of ownership rules apply in these sister sectors? Are they as restrictive as SEBI? If not, why not?

Table 1: Indian Stock Exchanges : Turnover						
Year	Delivery	Derivatives	Total	Delivery	Derivatives	Total
	(in Rs. '000 crores)			(in billion dollars)		
2001	554	40	594	117	8	125
2002	965	346	1311	199	71	270
2003	1312	1440	2752	284	313	597
2004	1708	2606	4314	378	577	956
2005	2073	3929	6002	471	890	1360
2006	2849	7065	9913	632	1567	2198
2007	4470	12161	16631	1100	2993	4093
2008	4518	11730	16248	1062	2732	3793
2009	5080	15566	20645	1057	3240	4297
2010*	4629	21516	26145	1007	4679	5686

Notes: Data for 2010 are extrapolated and based on data for Jan-August 2010; this extrapolation gives a lower bound estimate for 2010 (volume data in September and October is running at a 15 to 25 percent higher pace than the first eight months of the year).

Table 2: Turnover by Exchanges							
	BSE	NSE			Annual Change		
Year	Cash	Cash	Derivatives	Total	BSE- Cash	NSE- Cash	NSE- Total
	(in Rs. '000 crores)	(in Rs. '000 crores)			(in %)		
2001	214	340	38	379			
2002	333	632	345	977	55.7	85.6	157.9
2003	410	902	1431	2333	23.1	42.9	138.8
2004	533	1175	2587	3762	30.2	30.2	61.2
2005	701	1372	3927	5299	31.4	16.8	40.9
2006	969	1879	7047	8926	38.3	37	68.5
2007	1415	3055	11941	14996	46	62.6	68
2008	1324	3194	11654	14849	-6.4	4.6	-1
2009	1274	3806	15566	19371	-3.8	19.1	30.5
2010	1167	3462	21516	24977	-8.4	-9	28.9

Table 3:Share of the Exchanges					
Year	NSE+BSE		BSE		NSE
	Delivery/Total	Derivatives/ Total	Delivery/Total Delivery	(Delivery+Futures)/ Total	NSE Delivery/NSE Total
	(in %)		(in %)		(in %)
2001	93.6	6.4	38.8	36.6	89.8
2002	73.9	26.1	34.5	25.6	64.6
2003	51	49	31.1	16.1	38.7
2004	39.9	60.1	31.1	12.8	31.2
2005	35.1	64.9	33.6	11.9	25.9
2006	28.8	71.2	33.9	9.9	21.1
2007	27	73	32	10	20.4
2008	27.8	72.2	29.1	8.6	21.5
2009	24.4	75.6	25.3	6.2	19.6
2010	17.9	82.1	25.2	4.5	13.9

But before proceeding, an analysis of the costs and benefits of the lack of innovation in the stock exchange space. As documented above, derivatives (futures and options) now account for more than 86 percent of the total volume on NSE (Table 3). Within derivatives, options have a higher cost to the investor, and a higher share of the total derivatives volume (60 percent in 2010). These derivatives “roll over” every month. In other words, an investor is *forced* to do an extra trade every month, if she wants to continue investing in derivatives. What is the approximate magnitude of these extra trades? About 16 percent of “normal” trades each month, at least as far as futures are concerned. Both the share, and transaction costs, of options is higher than that of futures, so 16 percent can be taken as a conservative figure for the extra costs involved each month.

Most stock exchanges have only 4 expiry months a year – generally, March, June, September and December. If the Indian stock exchanges were to move to only a four month expiry system – in keeping with the best practice in the rest of the world – the total transaction costs will be lowered by two-thirds of 16 percent or around 11 percent. (Two thirds because there are 8 extra months of expiry compared to the desirable 4 months). Note that this lowering of costs is independent of any cost reductions brought about by increased competition. This is something that the regulator should consider. Incidentally, in the commodities arena, and one subject to a different regulator (the

Forward Markets Commission) expiry months for commodities are the same as those present on the international exchanges e.g. monthly expiration for crude oil, 5 expiration months for copper and silver, and six expiry months for gold

However, the example of mini Silver contracts on the FMC provides further proof that Indian exchanges favor the extra revenue generated by extra rollovers caused by monthly expiry contracts. In the case of the 30 kg silver contract, the one traded on international exchanges, the expiry months are February, April, June, August and November. There is no mini Silver contract on the international exchange; the expiry months for this contract on the Indian exchanges are twelve!

It is instructive to note that many exchanges around the world introduce mini-contracts to allow more retail investors to participate. In the US there are mini-S&P stock index contracts; however, the US exchanges (or the regulator) has not seen it fit to allow monthly expiration levels – the mini and the regular contracts trade in exactly the same manner, with the same expiration months (March, June, September and December) with the same settlement price, etc. The only difference – in value, the mini is one-fifth the value of the regular contract. In contrast, on the FMC, the mini silver contract is one-sixth in value of the regular contract. Instead of a 5 expiration month system of the parent contract, the regulator FMC allows Indian exchanges to operate mini-silver on a monthly basis!

Given the volumes and (unless costs have gone up exponentially), the profits, at the major exchange, the natural forecast would be that there should be a lot of pressure for entry into the stock exchange space. Curiously, while in the competing exchange space (commodities exchange) there are eight entrants, in the stock exchange space there has not been a single new entrant since NSE's debut in 1994. From a regulator's point of view, and for a sector whose volume of transactions is more than 5 times India's GDP, competition is of the essence. This competition can either be provided by foreign or domestic firms. Foreign firms are ruled out by definition; home grown is the only alternative. Yet there is no effective homegrown competition.

The stock exchange arena is one where monopolistic competition is likely to prevail, and once entry is allowed, where creative destruction should allow only a few firms, perhaps two or three, to survive. But one cannot look forward to creative destruction unless there is some construction!

Section 4 – Other Exchanges and Regulators

In the financial markets in India, there are four different regulators. The RBI regulates the entry of new banks, SEBI regulates the entry of stock exchanges, the Forward Markets Commission (FMC) regulates the markets for commodities, and IRDA regulates the market for insurance. Each has its own rules for the entry of new participants. The two that are directly comparable are SEBI and FMC. From a policy point of view, there is little difference in the regulation requirements of the two. Both are exchanges involving trading, except one does equities and the other commodities. A comparison of the futures markets reveals the identity of the regulator; stock index, and currency futures are regulated by SEBI, and commodity futures are regulated by FMC. Why the difference?

Table 4 shows the expansion of volume in the FMC, and for the three major exchanges operating. (There is a lesson here for FMC from the senior regulator, SEBI – data dissemination of the latter is considerably more user friendly). Three conclusions emerge. First, that the rate of growth in volumes has been impressive, and since 2006-7, the growth in volumes in commodity and stock exchanges has been the same. In 2006-7, commodity exchanges had 36 percent of the stock volume in 2006-7 and have 38 percent of the volume in 2010-11 – about 9860 thousand crores vs, 26145 thousand crores for the stock exchanges. Second, and not shown in the table, there is a polarization of trades between the top two exchanges – MCDEX dominates in terms of volumes energy and metals futures (upwards of 95 percent) while NCDEX dominates agricultural futures (upwards of 95 percent). Interestingly, in the currency derivatives space where NSE and MCX are also in head to head competition, the respective shares in volume are approximately equal. They are also competitors in crude oil, but the latest data show that NCDEX has only 5 percent of the total crude oil volume.

It is beyond the scope of this paper to go into the details of why one exchange has greater volume, or the same, as the other. For the moment, it bears emphasis that the FMC allows 26 percent ownership for a single investor, and that such an anchor investor can have an initial ownership level above 26 percent. The 26 percent limit has to be reached within six years of the start of operations. There are two major differences with SEBI regulations: an investor can have an initial ownership level above 26 percent at the FMC versus only 5 percent at SEBI and second, and more importantly, the FMC regulated firm has six years to reach the mandated maximum level of 26 percent while the SEBI firm has to reach 5 percent before the start of operations. Not surprisingly, today, there are five exchanges operating under FMC regulation, and three more have been given the license to

operate. For the moment, FMC has stated that 8 is the limit, and no more licenses are in the offing. It is likely that 8 exchanges are a few too many for the Indian market, but it is desirable that the market sorts this out rather than some regulator.

Table 4: Value of Trade in Commodity Markets							
Year	(in Rs.'000 Crores)				Share of market(in %)		
	MCX	NCDEX	NMCE	Total	MCX	NCDEX	NMCE
2002-03	0	0	5	5	0	0	100
2003-04	2	1	24	28	8.8	5.4	85.8
2004-05	165	266	14	445	37.1	59.8	3.1
2005-06	962	1067	18	2047	47.0	52.1	0.9
2006-07	2294	1167	113	3574	64.2	32.7	3.2
2007-08	3126	776	25	3927	79.6	19.8	0.6
2008-09	4415	521	59	4995	88.4	10.4	1.2
2009-10	6393	918	237	7548	84.7	12.2	3.1
2010-11*	8669	1002	190	9860	87.9	10.2	1.9

Note: 1.MCX- Multi Commodity Exchange of India Ltd., Mumbai

NCDEX- National Commodity and Derivative Exchange Ltd. , Mumbai

NMCE- The National Multi Commodity Exchange of India Ltd., Ahmedabad

2.Figures for FY2010-11 have been estimated on the basis of figures available till September,2010

In contrast, but not surprisingly given the SEBI regulations, there has been *no* new entrant in the Indian stock market space, ever. Actually, that is not entirely correct. SEBI has granted recognition to two new Stock Exchanges, viz. MCX Stock Exchange and United Stock Exchange of India. However, somewhat surprisingly if not inconsistently, these exchanges have been permitted by SEBI to operate *only* in the currency derivative segment.

India had some 20 plus odd exchanges in the late 1990s and four of them (BSE, Calcutta, NSE and Ahemdabad) were in active competition with each other – monopolistic competition if you will. The NSE was able to gain front position because of both excellent management *and* mis-governance on the part of the member-broker clubs. That is how markets, and governance, is supposed to work. However, what has not apparently been registered strongly with the regulator is the fact that there

is a great lack of competition in the stock exchange space, and the responsibility of rectifying this undesirable situation (for institutions and especially the *aam aadmi* investor) rests squarely with SEBI.

The rules for maximum ownership in stock exchanges in India are very stringent. No individual investor is allowed to own more than 5 percent of a stock exchange – ever! A financial firm, if considered “fit and proper” can have an ownership stake upto 10 percent and perhaps even 15 percent; but all these increases beyond the 5 percent minimum have to be reviewed before being approved. Contrast this with well regulated Singapore where an individual firm can, and does, own a 100 percent of an exchange.

What does this difference imply, more or less regulation? The first reaction is that SEBI should have stricter norms. Lack of information about individual firms means the chances of manipulation of a stock price is that much greater. But is this something that listing norms should try to correct or is it achieved through ownership norms? Some of the implications are discussed in the next section entitled “From 5 to 100 percent ownership – what’s the difference”.

Whenever the issue of competition comes up, domestic and/or dominant firms argue that emerging countries are different and deserve more strangulation of competition, or different regulation, etc. Emerging country development is replete with such protests. Every time a domestic firm faced a competitive threat, it went pleading to the government for protection. The link between government and major corporate interests is well known, well documented, and has existed in almost every area of human activity. We in India are all too aware of its existence, even twenty years after reforms, and attempts to reform. Whether it is food exports or imports, or sale of private property, or manufacture of widgets, or banking, or stock exchanges, the domestic firms are ever eager to invoke the law off “India the Incomparable” or we are different etc. Not only we are not different, but that refrain sounds somewhat comic in the context of the rest of the images of India as an emerging power etc.

Summarizing, the competitive position of Indian exchanges in 2010 is as follows. There are at least three firms competing with each other in the currency derivatives space. The commodities regulator has given licenses to eight firms. And in the biggest market in India – equities – there is not even monopolistic competition as the second largest player has less than 5 percent of the market. And this market has grown at a compound annual growth rate of 44 percent for the last eight years.

There are many reasons for the monopoly position of the NSE, and prominent among these is the brand reputation of NSE, and the brand reputation of its competitor, BSE. Regardless of the fact that merit should be rewarded, it is the case that a primary job of a regulator is to not only ensure that the trains run on time, or that the trades get executed efficiently, but also that competition is encouraged. It is important that this background be kept in mind as the issue of ownership regulation of stock exchanges in India is examined.

One final point. Judging by media stories over the last few years, there appears to be a conflict between the regulator and member exchanges for both the major regulators in India – SEBI and FMC. How should such conflicts be resolved? One possible avenue, and one pursued in other countries, is that the regulator is brought to court by one of the exchanges. This seems appropriate in a democratic framework, and indeed is the only choice available.

What is happening to competition in other countries?

There have been several recent announcements about competition among exchanges in the rest of the non-India world. Just two weeks ago, the Singapore stock exchange bid US \$ 8.4 billion for acquiring the Australian Securities Exchange; this merger, if allowed, would create the world's fifth largest listed exchange operator. According to an Oct. 26, 2010 Bloomberg story,

“Rising competition from electronic venues and investor demands to cut trading costs have driven at least \$68 billion in acquisitions among global exchanges since January 2007, including NYSE Group Inc.’s purchase of Euronext NV and Nasdaq Stock Market Inc.’s takeover of OMX AB, according to data compiled by Bloomberg. The Hong Kong and Malaysian bourses said yesterday they would consider alliances.”

Just recently, the Singapore regulator allowed an Indian firm, [FTIL](#), one of the promoters of [MCX-SX](#), to operate [SMX in Singapore with 100 percent ownership](#). Interestingly, MCX-SX has applied to operate an exchange in India but to date has been prohibited from doing so. The rationale offered by SEBI is that the firm does not meet the “fit and proper” requirement. It is commonly felt, (and all governance indices suggest the same), that Singapore ranks near the top in terms of governance and India somewhere in the bottom quarter. This is not to suggest that the Indian regulator is not good – rather, it is to assert that the Singapore government, and regulator, are universally thought to be among the best. Therefore it is at least of some interest to know about the discrepancy between the two regulators.

Section 5: Origins of the 5 percent ownership rule

There is a history to the introduction of SEBI's strange 5 percent rule. It starts, appropriately, with the demutualization trend, a mega-trend started by the Stockholm stock exchange in 1993. In a few years, and by the end of the 1990s, 18 of the top 20 exchanges had become private. As of today, only the Tokyo Stock Exchange remains a club and the Warsaw Stock Exchange is seeking a strategic investor. Privatization resulted in a peculiar pattern – almost all of the exchanges required that a single investor not own more than 5 percent of the demutualized firm, listed or otherwise.

Individual financial firms were allowed a stake of upto 10 or 15 percent. The single shareholder ceiling of 5 percent has over the years been questioned and some regulators (e.g. Singapore, as noted above) no longer consider the ownership limit as important or relevant to the operation of an exchange.

Even when the government privatizes, it does not converge to this extreme rule – on the contrary, it seeks a strategic investor, an entrepreneur who can make the firm more competitive, and hence more profitable. So why the anti-competitive 5 percent cap set in by the stock exchange regulators? The literature does not provide much answers – indeed, the various studies and surveys on the subject and many of them from quasi-governmental organizations like the World Bank, OECD etc. just echo (and indirectly support) the conclusion of the 5 percent rule. But the 5 percent limit would not have been dictated by the “veil of ignorance” rule. If non-conflicted stock exchange participants and policy makers had assembled in a room to decide what was the best course of action after demutualization, they would not choose the 5 percent rule. Why? Because the 5 percent rule makes it almost impossible for any competitor to emerge.

And that is the clue to the existence, prevalence and blind acceptance of the 5 percent ownership limit. When the Stockholm, or other stock exchanges, demutualized, they had one major concern – they did not want any single member of their club to have an unfair advantage. Corporatization, and especially listing, would mean large capital gains, and why should a club member sacrifice his profits to a richer club member? Hence, the rule that no single club member (future stock holder) should have more than 5 percent. Though such data are difficult to track, it most likely was the case, at Stockholm and elsewhere, that post demutualization share ownership was equally divided among all the club members. So if there were a 100 brokers as members, each individual got a 1 percent share in the new company.

While this equal division rule was equitable prior to becoming a for-profit company, why the persistence of this rule post corporatization? Most likely this was an (*intended*) consequence. Exchange members wanted to simultaneously achieve several goals – first privatization and along with it survival by raising capital; then possibly listing but all with the eye towards near monopoly status. In other words, a continuation of the *ex-ante* situation. A 5 percent rule presents a strong disincentive to any individual promoter to start a competing exchange. This is what the erstwhile club members wanted to avoid – that one of them, who was an equal just the day before, would now become the major owner, the “boss”.

What a regulator would, should, advocate is competition among exchanges. In its *Report of the Group on Corporatisation and Demutualization of Stock Exchanges*, led by former chief justice Mr M.H. Kania, on what to do about the emergence of demutualization, SEBI has only one small paragraph on ownership, a somewhat blind following of the existing order. On page 7 the SEBI expert committee report states: “These stock exchanges however, have imposed a ceiling on individual shareholdings in the demutualized entity. Most stock exchanges such as LSE, SCX and several others have maintained the ceiling at 5 %. In the case of ASX, the ceiling was initially 5 %, which is being increased to 15 %.” That is all there is on what must have been recognized as an important regulatory ruling. In the executive summary, the report goes further: “There *should* be a ceiling of 5 % of the voting rights which can be exercised by a single entity or groups of related entities, irrespective of the size of ownership of shares” (emphasis added).

Having set the ground rules for the perpetuation of the existing 2 stock exchange model in India (NSE and BSE), the committee was nevertheless conscious of the possibilities of potential conflict of interest between the pursuit of profit and the self-regulatory responsibilities of “for profit” exchanges. The report confidently notes that “competition among stock exchanges should mitigate most of these issues of conflict”. Unfortunately, nowhere in this expert report is it noted, let alone discussed, that the possibilities of a competitor arising with the carrot of a 5 percent share would, like the invisible hand, be nowhere to be seen.

It is difficult to imagine a more anti-competitive device than the maximum 5 percent rule of ownership in a stock exchange. What makes the application of this policy worse is the reality that there is no other financial sector where the ownership restrictions are so onerous – not even commercial banks; a subject explored in Section 8.

That was in 2005 [check]. Later in 2006, in a report entitled “Report of the Committee to Study The Future of Regional Stock Exchanges (RSEs) – Post Demutualisation” SEBI does recommend a 26 percent share for the post demutualization world.

“The Committee, therefore, recommends that any entity other than exchange, multilateral agency, insurance company, bank, depository and clearing corporation can be allowed to hold less than 15% of the share capital and voting rights of the stock exchange either singly or collectively along with persons acting in concert. However, in case a strategic partner is an exchange, multilateral agency, insurance company, bank, depository or clearing corporation, it would be allowed to hold upto a maximum of 26% of the share capital and voting rights of the stock exchange either singly or collectively along with persons acting in concert.” (SEBI, 2006, Para 34)

Later still, in 2008, SEBI, in its discussion paper, presents both a rationale for its decision to have the low 5 percent limit - and to suggest that there might be reasons to raise this limit

“The stock exchanges are public institutions and therefore as a matter of public policy, no individual investor should be allowed to hold a predominant position in them. At the same time, considering the market demands, it would be desirable to provide a high enough shareholding limit so as to encourage long term anchor / strategic investors who can contribute to the development of the stock exchanges. Such long term anchor / strategic investors need to be sufficiently motivated to take a keen interest in the functioning of the stock exchange and to contribute to its growth by providing the necessary value addition in terms of technology, market / product design, managerial inputs, etc. In view of the above, it would be desirable to explore a via media to enable a higher, but not too high a shareholding in stock exchanges by certain categories of investors in the financial market.”

Section 6: Codes of Conduct, Governance and Competition

The major regulatory question regarding exchanges is “governance”. Simultaneously and unrelated to the advent of demutualization, corporate governance, as an official statement of firms, was born. This was enunciated in the Cadbury Code of Conduct and all manner of firms started to move towards an officially stated policy of governance. Not that corporate governance was not practiced before, and nor is it likely that the formal articulation has contributed much to improved corporate practices today. Enron occurred a full decade after its introduction, and Tyco, Anderson and others a few years after Enron; a few years later, most likely as a consequence of the Great Recession, our own Satyam! As discussed below, the Pentafour/Infosys example illustrates how effectively the market enforces governance, *independent* of any codified practices.

Codes of conduct are most likely *endogenous* i.e. the more successful a company, the more enlightened its self-imposed codes of governance. For long, Infosys has been the leading “darling” of foreign, and domestic, investors. It has also delivered profits. From this, does it follow that its profits were generated by its code of conduct? One could be tempted to argue yes. But note that there is a lower risk to owning an Infosys share than owning a Pentafour Software share. Thus, the valuation of Infosys is higher i.e. for the same stream of earnings, investors are willing to pay a premium. Correspondingly, for Pentafour Software, investors will only invest if the shares are offered at a discount to the valuation dictated by its earnings stream. The issue is settled by the market, rather than by codes of “corporate governance”. At the time it went out of existence, Pentafour had a SEBI mandated code of conduct, but that did precious little to prevent it from practising shady practices, or prevent it from bankruptcy.

It is likely, indeed quite likely, that a considerable proportion of regulator attitudes are shaped by what happened just twenty years ago. Not just in India, but around the world. Not enough recognition is given to the fact that markets, and “determinants” of successful business, have changed markedly. Less and less do old feudal practices, or old boy networks, matter. What matters most of all, and especially if the government allows this openness, is what does the international investor think. This investor is nameless, faceless, and fiercely competitive. She will seek out opportunity in Vietnam or China or Brazil or India. And she will determine valuations, and interest. She demands transparency and cleanliness and she can get it. Why bother with Himachal Futuristic if a better and more *profitable* opportunity is there with Airtel?

In an article entitled “Self-Regulation and Securities Markets” written in 2003 i.e. five years before the Great Crisis of 2008, Pritchard comments: “markets known for fraud, insider trading and manipulation risk a downward spiral as investors depart in search of safer investments...Washington has responded to public outrage over corporate shenanigans by proposing a laundry list of new laws and regulations to crack down on corporate abuses” (p.32) While despairing of what government can do, he concludes that “Exchanges can help create trust that leads to deep and liquid securities markets by designing transparent trading mechanisms, vigilantly monitoring trading, and imposing demanding disclosure standards on companies”. Note that nowhere in this sentence, or anywhere else in the article, is there any mention of the need for strict limits on ownership.

Section 7: Equivalence between a commercial bank and a stock exchange

Of greater interest and relevance even is the comparison of the new entrant rules for a commercial bank and for a stock exchange. It is generally accepted that regulation of a bank should be *more* stringent than regulation of a stock exchange. But in India, the ordering is strange and possibly without much logic. As noted above, a commodity exchange is permitted to have large promoter holdings which have to be brought down to 26 percent after six years of operation. The SEBI regulation is that the ownership should be 5 percent *before* operation! But what about commercial banks?

Though it might be a surprise to some, the RBI has evolved with the times. Private banks were allowed to exist as part of the 1991 economic reforms package. Recall that all banks were nationalized in 1969. As far back as 2001, RBI suggested “guidelines” that the rules for new banks be further liberalized and that (i) industrial houses could own upto 10 percent equity in the bank; (ii) the promoters’ capital shall be a *minimum* of 40 per cent of the paid-up capital at any point in time; and (iii) “While augmenting capital to Rs.300 crore within three years of commencement of business, the promoters will have to bring in additional capital, which would be at least 40 per cent of the fresh capital raised. The remaining portion could be raised through public issue or private placement. The promoters’ contribution of a minimum of 40% of additional capital will also be locked in for a minimum period of 5 years from the date of receipt of capital by the bank.”

There are further developments in the banking sector. As SEBI stays locked in with its position that a promoter can have no more than 5 percent at the *start* of operations, RBI has recently distributed a discussion paper for further liberalization of the banking sector. There were two reports in 2006 which recommended the opening up of the Indian bank space to a heretofore taboo area – industrial houses. The High level Investment Commission, in its Feb. 2006 report, “recommended permitting ownership in Indian banks of up to 15 percent by Indian corporates, and also to increase limits of holdings by any one foreign bank up to 15 percent in private banks”. The July 2006 Fuller Capital Account Convertibility Report “recommended that RBI should evolve policies to allow, on a case by case basis, industrial houses to have a stake in Indian banks or promote new banks. The policy may also encourage non-banking finance companies to convert into banks. It has also recommended that after exploring these avenues until 2009, foreign banks may be allowed to enhance their presence in the banking system”. Thus, it is likely that very soon, corporate houses will now be allowed to own banks, subject, of course, to regulatory approval.

The 2010 RBI discussion paper reviews the international regulatory policy towards new banks and points out that prior regulatory approval is needed to allow a promoter to increase her share; “The general threshold limits in various countries that require approval from the competent authorities are - Germany (20%, 30%, 50%), Australia (15%), Canada (10%, 20%, 30%), European Union (20%, 30%, 50%), France (10%), Japan (5%).” In the case of Hong Kong, there is no limit to individual holding, but ownership above 50 percent has to be approved by the regulator (“the fit and proper person” criterion etc.)

“The February 2005 Ownership and Governance (O & G) guidelines require promoters and other shareholders of the banks to divest/dilute their shareholding to a level of 10 percent or below of the bank’s share capital within a specified time frame. However, under exceptional circumstances and where the ownership is that of a financial entity, that is well established, well regulated, widely held, publicly listed and enjoying good standing in the financial community, higher shareholding is permitted to a level of more than 10 percent up to 30 percent. A level exceeding 30 percent is subject to higher due diligence standards prescribed in the February 2004 guidelines for acknowledgement of transfer / allotment of shares in private sector”

Both the spirit and the letter of the new RBI guidelines can be summarized as follows: promoter ownership should be large, above 40 percent, in the initial stages of operation. Once this initial stage is passed, at least 5 years *after* operations have begun, dilution of the promoter stake is “recommended”, but not generally below 10 percent. However, an increase in the stake is not disallowed, but is possible after the passing of some regulatory hoops.

With the acceptance of these new principles, the banking sector in India will be open to competition, and the RBI needs to be applauded for finally bringing in much needed reforms. But if the banking sector can be so liberalized, why more stringent requirements for the stock exchanges?

There is a large minimum equivalence between the operations of a bank and a stock exchange. The bank takes in deposits and lends money. There is a buyer of funds (the borrower) and a seller of funds (the depositor); the bank is the custodian of an individual’s savings. There are several transactions a day involving several different intermediaries (firms, other banks etc.). The market for funds is cleared by the price of money, the interest rate. It is different for the borrower and lender, and there is a mark-up (brokerage and management fee?) involved.

Compare and contrast this with the operations of a stock exchange. Several different transactions in a day, involving many buyers and sellers. There are transaction costs involved, and a market clearing price. In both cases, there is room for unfair promotion of promoter “interests”. A bank can lend the promoter money at a lower than competitive rate, thereby robbing minority shareholders of their “just” profits. Insider trading at an exchange leads to losses for the counter-party involved. So what is the difference between the two? There are some differences. The bank is the custodian of people’s non-speculative savings; the exchange is guaranteeing that there is good governance involved in the execution of *speculative* trades involving two different speculators. The regulator should be concerned about malpractices in both cases, but should be concerned *more* in the case of the banks.

There are *no* arguments to suggest greater regulation of promoters in the case of stock exchanges than banks. It is thus ironic that one of the most prudent, cautious and conservative regulatory bodies in the world, the Reserve Bank of India, should have radically less stringent requirements for promoter ownership than the regulator for stock exchanges.

So what would prudent regulation in India look like? Elements to such regulation must include the following. First and foremost, there should be competition, at least monopolistic competition. One can argue that there are already two firms operating, and one of these two is the oldest stock exchange in India. Why not wait for the BSE to compete and claw back some of its former market share? If it were able to do so, that would be great for competition, but that is neither necessary nor sufficient for the encouragement of competition. The question to be asked is: what is the harm in encouraging competition, especially in a field with monopolistic tendencies.

The Indian market is large, and set to become larger. In this new world order, surely one does not envision that only one firm, albeit a brilliant firm, is desirable. If India has to emerge as a major financial center, then anti-competitive regulation will not make that happen. Indeed, what SEBI should recognize is that new entrants need advantages in order to compete with well established firms. It is recognized that stock exchanges is a field in which only a few firms will survive. But the process of creative destruction is necessary even though it is recognized that only a few players can emerge as eventual winners.

Section 8: From 5 to 40 to 100 percent ownership – what’s the difference ?

There is a counter-factual that deserves examination. This counter-factual is an extension of the RBI rule for new banks, taken to an extreme. What will go wrong, or what is undesirable, if a new stock exchange was able to have only one person owning the exchange, at least for 10 years. Instead of a 5 percent maximum, let us assume the regulation is 100 percent minimum. Assume further for the moment that the person obtaining the license is drawn by lottery. [As will soon be shown, it does not really matter, but the assumption is given for ease of illustration]. In this scenario, the promoter is the shareholder and appoints his own management team. The only requirement is that the firm be listed, or have its accounting books open for scrutiny. Actually, let us not even assume that. Let us call this firm Firm Z.

In the opposite end is an established stock exchange where the Shah-Patnaik[2010] three way division “between shareholders, the management team and member financial firms” is in full play. Let us call this firm Firm A. How will corporate governance, brokerage and execution costs be different in the two exchanges?

Given that the assumed problem is with Firm Z, let us examine what the market participants and Firm Z do. It deserves emphasis that the discussion is for the period 2010 and beyond, rather than the business and political environment of a bygone era. Firm Z wants to cut corners, indulge in insider trading, not practice corporate governance, any or all of the above. How long will the exchange last? An exchange’s profitability is not based on the trades of newcomers to the market, who it can be argued would be the first target of a corrupt Firm Z. Profits are based on the trades of institutions, both domestic and international. FII’s today account for a substantial chunk of trades, at least in the top 100 stocks. These FII’s are constrained by their own regulator as to what they can, or cannot, trade in. For example, the US Commodity Futures and Trade Commission (CFTC) allows US based firms to trade Nifty futures, but the application to trade any individual stock future on the NSE is still pending.

With instant communications, and intense competition, there is very little room for error on the part of an exchange. An exchange is not Boeing, where there is only one major competitor. One foot wrong and the institutional investors will flee. The quality of the management will not be able to surmount any malpractice. And member financial firms (brokers but not shareholders in the exchange) will flee to an alternative exchange even before the bad trade had begun. The exchange will not be able to last more than a few days, the 100 percent ownership notwithstanding. The only

way the exchange could continue with malpractices is if it were able to attract new customers and new volumes every day. Given that this would be retail and *not* institutional customers, the volumes will be infinitesimally small compared to that obtained from one institutional trade. Contrast this with the old days when buddies of the promoter could be expected to ramp up volumes, and trades, and profits. And the regulator was non-existent or toothless.

So what should the policy be towards the setting up of new exchanges? If one combines the best practices available in India, and outside, the following three policies emerge. While 100 percent may seem somewhat unrealistic and even undesirable (but not to Singapore!), the objection to the 5 percent rule is equal in intensity. If the RBI has found that 40 percent ownership for at least six years of operation is desirable and recommended, there is no reason why SEBI cannot follow this best practice. Over time i.e. after 6 years, instead of a 10 percent limit, perhaps a compromise 26 percent limit can be considered. Second, there is no reason for an exchange to do regulation – these can be done by a separate agency or firm. Third, exchanges should be required to list themselves after a suitable period of time. Listing achieves comparable governance and checks and balances that an exchange enforces on its member firms!

Section 9: Some conclusions

The simple point, and simple conclusion, is that the old rules do not apply – at all. And that provides both a clue to the current state of affairs and future prospects. At the risk of only a slight exaggeration, it is the case that not just in India, but around the world, regulatory policy etc. is being made by bureaucrats in their late fifties or early sixties. The world has changed more in the last twenty years than in the last 500 years.¹ When it comes to stock exchanges, the change is even more dramatic. Information dissemination is super-fast, as is knowledge (research) about firms. Place of residence, or place of incorporation of a firm, is irrelevant. Who you know, or who you can influence, is part of the distant past. But our policy makers have, generally, not emerged from this past. Hence, the rules are being made for a mindset of the past, rather than the reality of the present. This same point is echoed by Shah-Patnaik(2010, p.8), who conclude: “This assignment of functions into agencies is embedded in the texts of laws before 1956, and thus reflects a vision of economic policy, and a state of development of the financial system, rooted in mid-20th century India.”

¹ Consider this fact: China and India together will gain in their share of world income in 45 years (approximately 1980 to 2015) what they lost in the previous 450 years – 1530 to 1980. See Bhalla(2007) for details.

Today, there is competition among firms, and even more so, among countries. While we are all detached and international residents to some extent, and more detached and international than ever, there is still the issue of “home-country”. Even though capital markets are extremely mobile, labor markets are not. Residents of each country, and the regulators, should endeavor to maximize domestic incomes and domestic employment. Given that most of the job of the regulator is done by the market, this maybe the only job left for the regulator!

As far as India is concerned, what needs to be kept in mind by all the regulators is the changing position of India in the financial world. India has a major time-zone advantage for financial markets; it straddles all the three time-zones rather comfortably – Asia, Europe, and the North Americas. And indeed is the only region to have size and this specific location advantage. What the regulators should endeavor to do is to have many more banks, and a few more exchanges. Only one exchange, NSE, good as it is, is not really sufficient for the present Indian market place, let alone the emerging future market place.

So what needs to be done? First, and foremost, the onerous ownership restrictions for stock market ownership need to be lifted. India needs more entrepreneurs, not less, and if ever there was a competition busting ruling, it is the SEBI ruling of no more than 5 percent ownership of stock exchanges. Second, the regulator needs to think outside of its traditional domain. Market forces are now doing its job, so it needs to re-invent itself. An important goal of the securities (and banking) regulator is to encourage the maximum dissemination of information.

It also needs to be recognized that the quality of self-regulation in exchanges is *endogenous* i.e. the more the benefits (profits) of self-regulation are seen, the more good governance is practiced. This kind of endogeneity exists for all ownership patterns, and are likely to exist more for newcomers who are fighting for a piece of the action. This would imply that as new exchanges enter the system, overall governance would improve. Eventually, there will be a sorting out, as exchanges do possess economies of scale. Even that conclusion needs to be tempered, however, by the realization that exchange networks or dark pools are now stealing part of the action at the official, ownership regulated, exchanges.

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