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PROBLEM OF LIQUIDITY OF THINLY TRADED SHARES

BY

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Chapter I

THE PROBLEM OF LIQUIDITY

The stock markets in India, especially the Bombay stock exchange, have witnessed phenomenal growth. It has been claimed by several critics that such an expansion has not been accompanied by corresponding improvement in their functioning. A major criticism has been their failure to provide liquidity for equity shares affecting adversely the small investor.

In general stock markets are expected to facilitate raising of funds through issuance and sale of securities by providing a continuous market. A continuous market increases liquidity through sale or purchase of securities quickly and easily at a price that varies little from the previous selling price, or with a minimum fluctuation at the time of sale. Actually the primary criterion for a good market is that all issues are traded at fair prices and that market movements are orderly. Stock exchanges have to be judged by their ability to help investors to sell their portfolio holdings quickly with a minimum price fluctuation at the time of sale. Liquidity occupies a central place in evaluating whether an exchange is efficient or not.

The charecterstics of a liquid market are depth, breadth and resiliency. A market has depth if buy and sell orders are forthcoming around the price at which the share is transacting. A market that lacks depth is shallow. Further, the orders forthcoming should be in adequate volume which gives breadth to the market. If adequate volume needed to provide liquidity is not there the markets are called thin markets. The response of orders to price changes renders the market resilient[1].

Empirically liquidity is measured by the number of days a company's

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1) Francis, J.C., Investments : Analysis and Management , Fifth Edition McGraw Hill International Edition

share is traded out of given number of days in the year during which market is open. Normally a share is considered actively traded and liquid if it is traded on 50 per cent of the days (the norm adopted in this study) during which market is open. Liquidity of the market is also measured by the variation of price from one trade to another. If the difference between lowest asked (or offered) price and the highest bid price is wide the market is said to lack depth and is considered shallow. Actually, the bid-asked spread is an inverse measure of liquidity [1]. For example in the United States variation of one-eighth point in price from the immediately preceeding trade is considered liquid. In our own country the minimum ticks start from Re. 0.25.

It has been observed by several committees in the past that our stock exchanges do not assure liquidity and the investor can liquidate his shares only at a loss and after considerable waiting. The High Powered Committee on Stock Exchange Reforms (Patel Committee) in 1984 pointed out that lack of liquidity in a number of securities listed on the stock exchange as a major problem confronting the investors.

The Committe observed that: "A recent analysis of the frequency of transactions in equity shares on major stock exchanges reveals that out of 3401 companies listed on the stock exchanges in 'A' and 'B' group of shares, (i) shares of 959 companies were traded once a year, (ii) shares of 954 companies were traded once a month, (iii) shares of 396 companies were traded once a fortnight; (iv) shares of 538 companies were traded once a week; and (v) shares of 207 companies were traded daily"[2], (see Table I).

The Committee further observed that: "It may be coincidental that equity shares of about 200 companies figure in "specified lists" where settlement trading takes place"[3]. In regard to non-specified shares on Bombay

1. Tinic S., "The Economics of Liquidity Services" Quarterly Journal of Economics, February 1972.

2) Final Report of the High Powered Committee on Stock Exchange Reforms, 1984 p.17

3) Ibid.

Stock Exchange, the Committee remarked that during June to August 1984 nearly 50 per cent of the scrips were not traded at all, while 30 per cent of the scrips were traded only on 50 per cent of the trading days (Table II).

The High Powered Study Group on Establishment of New Stock Exchanges (the Pherwani Study Group) 1991 in its Report projected lack of liquidity as a major structural deficiency of the existing stock exchanges. The Committee observed that: "As a principal objective, therefore, Exchanges must provide both the environment and infrastructure to ensure that there is adequate liquidity in the market. On the supply side this implies that exchanges must be able to attract a sufficiently large number of companies for listing as well as provision of adequate number of trading hours. On the demand side, its members must be of sufficient financial soundness to perform market making function, with adequate infrastructure for efficient inter market operation, effective trading and settlement system etc." [1] The Committee also referred to the liquidity problem at smaller exchanges (outside Bombay, New Delhi, Calcutta, Madras and Ahmedabad) in terms of depth and breadth. The Expert Study on Trading in Shares by Dr. L.C. Gupta (1991) claimed that lack of liquidity in thinly traded shares, especially of small and medium companies, is on account of the neglect on the part of the stock exchanges.

The phenomenon of scrips having few and intermittant bids or offers is referred to as thin trading[2]. Thin trading fails to assure liquidity. It has undesirable consequences all around: for the investor inability to convert his investment into cash at an economical cost; for the companies, non-availability of market valuation would render raising of additional funds for expansion or diversification difficult and distorts financial planning; and for

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1) Report of the High Powered Study Group on Establishment of New Stock Exchanges, 1991, p. 60

2) Friend, Irwin & Others, The Over the Counter Securities market, 1958.

the stock exchanges, the image is damaged because it reflects adversly on their efficiency.

It should be noted, however, that trading is a function of demand and supply. In discussions on the problem of thin trading there is an implicit assumption that all securities are alike and are more or less like a homogeneous commodity as assumed in the theoretical model of perfect competition. Securities would be comparable to a certain extent if we ensure that companies before being listed have a good track record in the sense that they have been in operation for two or three years, made profits and have good balance sheets. That is how things are in stock markets abroad. But in our country companies get listed before operations start. The situation is a little better now since the financial institutions lend first and let the units raise equity just before start up. Earlier they wanted to postpone lending and so let the units raise equity first. But even after successful operation for a year or two or much later, a unit can go bust. Abroad, one can close shop with the help of bankruptacy laws. In our country, exit does not exist and a social stigma is attached to bankruptacy. The financial institutions also penalise the entrepreneur if his venture fails by refusing a second chance. The provisions we have for winding up under the company law are so time consuming that several non operational companies are shown under listed companies.

Returning to the question of trading, stock exchange offers a market place to conduct auction for securities to its members. It cannot by itself create demand or supply for scrips. A large number of scrips listed are just bad eggs and no amount of improvement of facilities would bring in buyers. In the case of supply of good scrips the situation is different. They are in short supply because they are good and the owners, be they owners of the company or institutions, do not want to part with them. Sometimes, the owners may be motivated to keep out outsiders since they like to preserve it as a closely-held company. We cannot compel them to sell their holding. May be we can do that with public financial institutions. But with the entry of private sector mutual funds that would be difficult and is as good as asking them to forego profit. One has to accept the laws of demand and supply and unless a buyer voluntarily comes forward, there is a no way to sell a share. The situation does not alter even if we adopt the system of market makers. It works abroad because, as we mentioned above, basically an equity share represents interest in an operational company with profit-making opportunities. In our country, the cost of acquiring a long position which is difficult to liquidate is heavy. Jobbers are also unwilling to take a position in thinly traded shares because of inadequate availability of credit and its high cost.

This Report has investigated the problem of thin trading in equity shares in terms of an empirical study of the sample drawn out of non-specified shares listed on the Bombay Stock Exchange. After analysing the problem, reasons for thin trading are stated and lines of action are suggested to mitigate the problem.

Table I

Frequency of Transactions in Equity Shares

Sl. No.	Frequency of transactions	Group	Number of companies				Total
			Bombay	Delhi	Madras	Calcutta	
1.	Daily	A B	40 69	4 10	2 6	12 64	58 149
2.	Frequently	A B	26 89	3 28	15 11	13 162	57 290
3.	Once in a week	A	..	6	10	3	19
4.	Once in a fortnight	A B	.. 142	.. 40	2 38	.. 174	2 394
5.	Once a month	..	318	176	148	312	954
6.	Once in a year	..	300	262	165	232	959
	Total Listed Companies	..	1151	617	415	1218	3401

Source: Final Report of the High Powered Committee on Stock Exchange Reforms, 1984 p.246

Table II

Activity in 'B' Group Securities

Frequency Distribution of Securities according to % Days Traded

% of days traded	No. of Securities	% to total
91-100	33	1.72
81-90	206	10.71
71-80	76	3.95
61-70	52	2.71
51-60	62	3.22
41-50	55	2.86
31-40	45	2.34
21-30	78	4.06
11-20	86	4.47
1-10	301	15.65
Not Traded	929	48.31
Total Number of Securities	1923	100.00

Based on activity in June, July and August, 1984.

Source : Final Report of the High Powered Committee on Stock Exchange Reforms. 1984 p.246

Chapter II

GROWTH OF STOCK EXCHANGES AND TRENDS IN THEIR WORKING

The stock exchanges in India which started with one in Bombay in 1875, now (1991) number nineteen. Along with increase in number of stock exchanges, the number of companies listed on the stock exchanges, market capitalisation and turnover have made large strides especially after Independence with the result that Indian stock exchanges have attained global significance. Of the stock exchanges in India, Bombay stands out prominently in terms of size and activity, both in domestic and global terms.

Nature and Organisation

The stock exchange constitutes an organised market for the shares, preference shares and debentures issued by public limited companies and securities issued by the Union and State Governments and units in the public sector. The market for these securities approximates a perfectly competitive one. The shares listed however vary broadly in terms of 'credit rating' and often involve carrying costs. The shares are not really homogenous like a commodity is in a perfectly competitive market.

In the stock exchange there is active bidding and a two-way auction trading takes place. The bargains that are struck are the fairest price determined by the basic laws of supply and demand. The stock exchanges provide an auction market in which members of the stock exchange participate to assure continuity of price and liquidity to investors.

The legislative jurisdiction over stock exchanges is vested in the Union Government by the Constitution of India. The Union Government enacted the Securities Contracts (Regulation) Act in 1956 (SCR Act) for the regulation of stock exchanges and contracts in securities traded in the stock exchanges. The SCR Act and the Securities Contracts (Regulation) Rules, 1957 constitute the legal framework for the regulation of stock exchanges and protection of the interest of investors.

Each exchange has bye-laws and regulations which are more or less uniform in all exchanges for regulation and control of transactions in the exchange.

Under the SCR Act, an exchange is defined as any body of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities. The SCR Act stipulates that stock exchange must be recognised by the Government of India. The nineteen exchanges that are operating in the country are recognised by the Government. There are other statutes which are applicable to stock exchanges. They are mainly Capital Issues (Control) Act 1947[1], Companies Act 1956, Income Tax Act 1961, and Foreign Exchange Regulation Act, 1973

Until 1988, the exchanges were more or less self regulatory with a broad overall supervision by Ministry of Finance in the Government of India. The High Powered Committee on Stock Exchange Reforms in its Report in 1984 highlighted that some of the exchanges have not been discharging well their self-regulatory role with the result that malpractices crept into trading and interests of the investors were adversely affected. Consequent to the Report, Government issued several guidelines to stock exchanges. In 1988, the Securities and Exchange Board of India (SEBI) was constituted to ensure that stock exchanges discharge well their self-regulatory role. To prevent malpractices in trading in shares and to protect the rights of investors, SEBI has assumed the monitoring function envisaged for it and requires the stock exchanges to report on their activities.

The organisation of stock exchanges varies. Some are public limited companies, while others are companies limited by guarantee or voluntary

1) Since repealed by Ordinance in 1992

non profit making associations. But Government of India ensures broad uniformity in their structure while granting recognition. The stock exchanges are managed by a Governing Body which consists of a President, a Vice-President, Executive Director, elected Directors, Public representatives and nominees of the Government. The Governing Body is responsible for policy formation and for ensuring the smooth functioning of the exchange. The executive functions are discharged by the Executive Director or by a Secretary.

Structural Pattern

All India: Table III presents the growth pattern of listed stocks in selected years in all stock exchanges. In the past 46 years (1946 to 1992) stock markets have made remarkable progress. While the number of companies have increased by about six times, capital of listed companies has gone up by about 151 times and market value by 365 times. The average capital of listed company has gone up from Rs. 24 lakhs in 1946 to Rs. 423 lakhs in 1992. In 1992, the number of listed companies was 6480, paid-up capital of listed companies Rs. 40,796 crores and market value of capital of listed companies Rs. 354,106 crores.

The Bombay Stock Exchange: The relative position of the Bombay Stock Exchange (BSE) during the period 1986-87 and 1990-91 in terms of number of companies listed, paid up capital and market value of listed capital is presented in Table IV. Table IV brings out the premier position occupied by BSE and the strength it has been gathering from year to year. BSE accounted for 40.5 per cent of the listed companies in 1990-91. The paid-up capital of the companies listed on the BSE has gone up in the five year period. 1986-87 to 1990-91 by about 219 per cent from Rs. 8,661 crores to Rs. 27,592 crores. The share of paid-up capital of companies listed at BSE in total paid-up capital of companies listed on all stock exchanges has also gone up from 66 per cent to 88 per cent. The growth in market capitalisation of securities listed on the Bombay stock exchange has also shown a phenomenal growth of 320 per cent in the five year period establishing BSE as an active and dynamic market. Relative share of market capitalisation of securities listed on BSE in the total for all stock exchanges has also registered sizeable increase from 78.5 per cent in 1986-87 to 91 per cent in 1990-91.

In regard to structural pattern, Table IV shows that in 1986-87 as compared to all stock exchanges, BSE accounted for equity of Rs. 4,724 crores (66.1 per cent of total for all stock exchanges); Rs. 98 crores of preference shares (44.1 per cent of total); and Rs. 3,839 of debentures (66.9 per cent of total). In 1990-91, equity of listed companies at BSE amounted to Rs. 12,205 crores (84.1 per cent of total), preference shares, Rs. 75 crores (39.4 per cent of total) and debentures Rs. 15,312 crores (92.2 per cent of total).

In regard to market capitalisation, equity listed on BSE in 1986-87 amounted to Rs.17,830 crores (80.5 per cent of total of all stock exchanges); preference shares Rs. 84 crores (45.6 per cent of total); and debentures Rs. 3,722 crores, (71.2 per cent). In 1990-91, the market value of equity on BSE has gone up to Rs. 75,348 crores (90.9 per cent of total) demonstrating the preference of investors for trading in Bombay where ready market exists and transctions are put through with care and speed and economically; preference shares declined as is the national trend to Rs. 62 crores (33.5 per cent); and debentures Rs. 15,426 crores (91.8 per cent of total). Total market value of debentures at Rs. 15,426 crores hardly differs from paid-up capital since interest on debentures is an administratered one and fixed[1]. Actually when rates were deregulated in 1991 market values have fallen. The debenture market, especially the non-convertible component can be activated only if the rates are substantially raised, say 20 per cent to compete with other types

1) It may also be noted that of debentures, convertible debentures are quoted at a premium while non-convertible ones especially residuals of non-convertible debentures are quoted at a discount.

of financial assests. Actually with the abolition of tax concessions for investment under Section 80L, 80CCA and 80CCB of the Income Tax Act and abolition of Wealth Tax on securities in the Budget for 1992-93 savings are likely to flow into debentures if the rates offered are high enough to compensate also for inflation.

The activity at BSE measured in terms of turnover has increased by 163 per cent in the five year period from Rs. 13,692 crores in 1986-87 to Rs. 36,011 crores in 1990-91. But for the decline in 1987-88, last three years 1988-89, 1989-90 and 1990-91 proved to be bouyant. The average daily turnover during 1990-91 was about Rs. 250 crores as compared to Rs. 135.42 crores in 1989-90. Table V presents the turnover data during the period. During the period physical delivery of number of shares has gone up by 264 per cent from 5.3 crore pieces to 19.31 crores The number of trades per day has also reached a record level of about 100000 per day which is quite high even in global terms. The turnover at BSE is achieved in a period of two hours while stock exchanges abroad like Tokyo, New York and London have much lower hourly trades.

Table VI presents the turnover ratio which declined over the five year period from 76.8 per cent in 1986-87 to 47.8 per cent in 1990-91. The decline in the ratio is on account of the larger increase (320 per cent) in market capitalisation as compared to increase in turnover (163 per cent) during the period. The ratio in 1990-91 compares favourably with those observed in developed markets such as USA (58.2) Japan (54.9), U.K. (32.3) as well as emerging markets, Korea (68.7) and Taiwan (71.0)

The growth in the listed companies, paid-up capital and market value of shares of listed companies is also reflected in the rising proportion of market value of listed equity in the gross domestic product (GDP) from 8.6 per cent in 1986-87 to 18.7 per cent in 1990-91 (Table VII). While GDP increased by 72 percent during the period 1986-87 -- 1990-91, there was much higher increase of 274 per cent in market capitalisation

Trends in Savings of the Household Sector

Households constitute the primary source for capital formation in the country. Of the savings ratio (the ratio of gross domestic savings to gross domestic product) of 21.7 per cent households account for 82.3 per cent; and household sector ratio is 17.8 per cent. However, in financial analysis, net savings ratio and investment in net financial assets are considered.

Net Savings ratio of households during the period 1986-87 - 1990-91 has registered a substantial increase from 11.8 per cent of net domestic product to 15.5 per cent in 1990-91 (Table VIII). The proporition saved in financial assets has only shown a marginal improvement. Net financial assets as a per cent of net domestic product have gone up from 8.8 per cent of net domestic product in 1986-87 to 9.7 per cent in 1990-91. Households' investment in shares declined from 5.4 per cent of net financial assets in 1986-87, to 3.8 per cent in 1990-91. There has, however, been a marginal increase in investment in units of UTI. A portion of household saving has probably gone into investment in mutual funds for which data are not available.

In the new issue market, equities show a steady upward trend from Rs. 1007.9 crores in 1986-87 to Rs. 1247.5 crores in 1990-91 (Table IX). There have, however, been wide fluctuations in debentures mainly on account of offer of mega issues in some years; and preference shares have more or less lost significance. The total capital issued of Rs. 2564.9 crores in 1986-87 rose to a peak of Rs. 6475.1 crores in 1989-90 (of which debentures accounted for Rs. 5246.4 crores) and declined in 1990-91 to Rs. 4201.8 crores.

If we take a longer period, we find that the participation of the households in the new issue market and stock market has led to a sizeable increase in the number of individual share owners from about 24 lakhs in 1980 to 90 lakhs in 1990[1).

1) Gupta, L.C., Indian Shareowners, Society for Capital Market Research and Development, New Delhi, p. 15

Data relating to ownership pattern are available only for 1978 when individuals held 37.3 per cent of shares in listed companies[1]; and it is of interest to note that individuals occupied a similar position in the U.K. and Japan. It was only in the United States they accounted for 52.7 per cent (1975). It is also observed that while the share of the individuals declined, the share of institutions had increased not only in India but also in the UK and Japan. Direct subscription and investment in shares through purchases in the stock exchanges is being replaced by indirect purchases through mutual funds.

While individual investors participated widely in the primary market for new issues and secondary market in the stock exchanges directly, a portion of their savings went into mutual funds. Mutual funds along with the support of their principals in some cases, especially those set up by banks became large participators in the stock markets. Mutual funds have grown both in size and importance. They play a pivotal role in mobilising savings of the households by providing them the benefits of expert portfolio management aimed at both minimising risks by spreading them across a large number of securities and realising a fair return on investment. Unit Trust of India set up in 1964 is the leading institution in mutual funds and outstanding funds mobilized by UTI stood at 18,105 crores as at the end of 1990. The wide variety of schemes offered had netted Rs. 3,926 crores in 1990-91 alone.

Since 1987 the merchant bank subsidiaries of commercial banks have set up mutual funds: State Bank of India (1987), Canara Bank (1987) Indian Bank (1989) Punjab National Bank (1990) and Bank of India (1990). Insurance Companies have also launched mutual funds : Life Insurance Corporation of India (LIC) in 1989; and General Insurance Corporation of India (GIC) in 1990-91. Mutual funds raised Rs. 1,500 crores in 1989-90; and mutual funds

1) Individual ownership is placed at 45.9 per cent in 1989 in Dr. V.A. Avadhani, "Ownership and Distribution Pattern of Shareholdings Companies" and 42.32 per cent in 1986 by IDBI as quoted by Dr. Avadhani.

including UTI raised in the last 3 years an estimated sum of Rs. 20,000 crores.

The impact on stock exchanges of the entry of mutual funds has been dramatic. Since 1988-89 turnover as well as market capitalisation have shown large increase. Turnover figures presented in Table VI show an increase of Rs. 28,099 crores in Bombay Stock Exchange alone over a three year period; and value of deliveries increased by Rs. 1,890 crores during the period. During the three year period the BSE Sensitive Index rose by 130.9 per cent, BSE National Index by 131.2 per cent and RBI Index number of security prices by 100.1 per cent. Since 1987-88 was a poor year for the capital market in view of several adverse factors such as drought, political uncertainties, law and order problems and tensions across the international boarder, we may take 1986-87 as the base. Over the period 1986-87 - 1990-91, the BSE Sensitive Index has gone up by 84.9 per cent, National Index by 109 per cent and RBI index by 70.9 per cent. The sustained rise in prices especially in the last three years is the result of not only speculative activity of stock brokers but large investment by mutual funds. The prices of individual scrips ruling today do not have any relationship to the earning potential of the companies as revealed by their past earnings. The price earning ratios are too high and are being sustained at those levels and even being pushed up further and further because of lack of good scrips. The situation in the stock market today is basically due to large amout of funds looking for investment outlets. It is not earning potential but scarcity of good scrips that is driving prices up. The demand is percolating to non specified scrips and in the last three years the scrips traded have increased several fold.

Data relating to trading activity measured by the number of days scrips are traded show that the number of companies whose shares are actively traded (more than 50 per cent of the days the market is open) has increased by 40 per cent, from 831 companies in 1988-89 to 1166 companies in 1990-91. The frequency distribution of the companies by the number of days traded listed on the Bombay Stock Exchange at the end of March, 1989 and 1991 is presented in Table X. At the end of March, 1991, 1685 companies out of a total of 2471 companies (68.2 per cent) were traded. The shares of about 786 companies, representing 31.8 per cent of the companies listed were not traded at all. These companies were either closely held, moribund or sick companies. Among the traded companies, shares of 795 companies (47.2 per cent of total traded) were traded on 90-100 per cent of the 186 days trading took place in 1990-91 at the Bombay Stock Exchange. It is interesting to note that in 1990-91 out of 795 companies only 80 companies or 10 per cent belong to the specified group. Balance of 715 companies belong to the non-specified group belying the often repeated statement that active trading takes place only in specified shares. On the other hand, two years ago at the end of March, 1989 only 20 per cent of the total shares listed were actively traded (90 - 100 per cent of the days). Obviously in the past two years the ever increasing demand for equity shares has drawn into the trading ring more and more shares of companies. If we move down and include shares traded on 50 per cent of the days trading took place, we find that as compared to March, 1989 when 36.5 per cent of companies shares were traded, in March, 1991 68.2 per cent of the shares of the listed companies were traded. The trading ring like a vortex is sucking in ever increasing number of shares of companies. The excess demand has manifested itself in not only pushing up prices of the shares which were traded earlier but also widening the number of companies whose shares are traded.

Returning to the question of participation of mutual funds it may be stated that the dividends declared by them indirectly establishes that they are very active. The current yields from shares are so low that return on investment paid out by mutual funds cannot be supported. Table XI presents the RBI gross yields on Industrial Securities and their index numbers, profitability rates of large and medium public limited companies and the dividends declared by mutual funds. To support high dividend levels, mutual funds are probably resorting to pushing prices up by buying and unloading them later when their target yield rate could be met out of the higher price. UTI has been paying 13-14 per cent as dividend. Other mutual funds are advertising for a 300 per cent appreciation/return over a 90 month period.

While we have not gone global in letting foreigners participate in the Indian stock market foreign investment is sought through country funds. The first country fund, the India Fund was launched abroad by the UTI in association with Merrill Lynch Capital markets in 1986 to enable foreign nationals and non resident Indians to invest in the Indian stock markets. The shares of the "Fund" are listed on the London Stock Exchange. Another Fund, "India Growth Fund" was launched in 1988 by UTI and Merrill Lynch. The shares of India Growth Fund are listed on the New York Stock Exchange. Subsequently State Bank of India and Canara Bank also launched country Funds abroad in 1989 and 1990.

Share Prices

Share prices during the period 1986-87 - 1990-91 have shown an upward trend. Table XII presents index number of share prices of Bombay Stock Exchange (Sensitive and National) and Reserve Bank Index Number of Security Prices. Except in 1987-88 when prices declined on account of several adverse factors such as drought, political uncertainty and law and order, annual increases have been hefty. During three years in a row, 1988-89, 1989-90, 1990-91, BSE Sensitive Index rose by 35.0 per cent 18.9 per cent and 43.9 per cent; and National Index by 32.6 per cent, 25.0 per cent and 39.5 per cent, respectively. The RBI index number of ordinary share prices shows a trend similar to the BSE indices: up by 19.4 per cent in 1988-89; 45.2 per cent in 1989-90; and 39.2 per cent in 1990-91. On the other hand inflation measured by increase in whole sale price index rose by 7.5 per cent each in 1987-88 and 1988-89; and in 1990-91 by 16.3 per cent. Equity has proved to be a good hedge against inflation. Compared to assets like gold, silver and even foreign exchange such as dollar, the appreciation is highest in the case of investment in equity. The appreciation based on BSE National Index is 47 per cent, gold 37.4 per cent, silver 9.2 per cent and US Dollar 43 per cent.[1] These trends it may be noted are not in consonance with the trends observed in the stock markets abroad. For instance in 1990 Morgan Stanley Capital Internationals world Index fell by 18.6 per cent on account of rising interest rates (influencing bond yields), economic slow down and Gulf crisis.

The volatility and dispersion of share prices during the period 1986-87 -- 1990-91 are presented in Table XIII. The average coefficient of variation which measures the volatility was higher than average of 9.15 for the five year period during 1988-89 (16.36) and 1990-91 (14.80)[2]. The years 1988-89 and 1990-91 also witnessed wide fluctuations in terms of the range between high and low[3]. The dispersion in the index of ordinary shares was higher than average of 110.3 for the five year period, in 1988-89 (121.1) and 1990-91 (258.6).

The large increase in share prices posted in the last three years and volatility and wide dispersion of share prices are a manifestation of short

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1) Investment week : Express, Vol.4, No. 49, Page 54.

2) Coeffcient of Variation is computed by , $\dfrac{\text{Standard deviation X 100}}{\text{Arithmatic mean}}$

3) The range is computed by the difference in two extreme values such as low and high prices divided by the average of low and high and multiplied by 100

supply of good equity scrips. It is to be noted that hefty share price increases coincided with the entry of mutual funds into the markets. The large inflow of funds into the market is pushing up prices. A fall out of what looks like an insatiable thirst for securities is the pull on formerly infrequently traded shares into the trading net. In the last six months a lot of scrips which we ignored earlier have found buyers. This has in turn improved trading reducing the serverity of the liquidity problem of thinly traded shares. But the continuous and sustained inflow of funds into stock markets seeking investment outlets cannot be met by currently listed securities. The remedy is to enlarge the supply of scrips. Quick clearance of new proposals by existing and new companies would help in augmenting supply. The recent proposal to partly privatise public sector units would take pressure off the market. It is estimated that 20 percent of the estimated market capitalisation of the 26 dividend paying public enterprises amounting to Rs. 65,070 crores would amount to Rs. 13,014 crores. This would raise the present market capitalisation of BSE by about 25 per cent. The addition to supply can easily be absorbed with the large potential of domestic saving and well recognised ability of mutual funds to mobilise them. We have noted earlier that mutual funds (including UTI) have raised more than Rs. 20,000 crores in the last three years. There has also been a sizeable inflow of funds into the stock market from disinvestment by traders, commission agents and other middlemen who were lured by the sharp appreciation in share prices in the recent past. Funds have also been flowing in from Indians working abroad for investment in shares. Unless the supply of instruments is augmented we cannot cap the market[1].

1. Throwing open the primary and secondary markets for investment by Foreign Institutional Investors (FIIs) without initiating steps for a corresponding increase in supply of shares is likely to usher in runaway prices and markets assuming ofcourse, that our shares have features which are as attractive as those traded in other emerging markets.

Table III

Growth Pattern of Listed Stock in Selected Years (All Stock Exchange)

As at 31st December	1946	1961	1971	1975	1980	1985	1991	1992	% increase in 1992						
									Over 1946	Over 1961	Over 1971	Over 1975	Over 1980	Over 1985	Over 1991
1. No. of Stock Exchanges	7	7	8	8	9	14	20	21	185	185	162	162	133	50	5
2. No. of Listed Companies	1,125	1,203	1,599	1,852	2,265	4,344	6,229	6,480	476	439	305	250	186	49	4
3. No. of Stock Issues of Listed Companies	1,506	2,111	2,838	3,230	3,697	6,174	8,967	9,642	540	357	240	199	161	56	8
4. Capital of Listed Companies (Cr. Rs.)	2,70	7,53	18,12	26,14	39,73	97,23	320,41	407,96	15009	5317	2151	1460	927	320	29
5. Market Value of Capital of Listed Companies (Rs. Cr.)	9,71	12,92	26,75	32,73	67,50	253,02	1102,79	354106	36368	27307	13,137	10719	5146	1300	221
6. Capital per Listed Company (Lakh Rs.)	24	63	113	141	175	224	357	423	1663	671.42	274	200	89	88	18
7. Market Value of Capital per Listed Company (Lakh Rs.)	86	107	167	177	298	582	1230	3673	4170	3333	1461	2075	1133	631	187

Source : The Stock Exchange Bombay, *The Stock Market Today*, 1992.

Table IV

Relative Position of Bombay Stock Exchange Among all Stock Exchanges in India

	No. of Listed Companies			Paid up Capital											
				Equity			Preference			Debentures			Total		
Year	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total
1986-87	4744	1911	40.3	7142	4724	66.1	222	98	44.1	5738	3839	66.9	13,102	8661	66.10
1987-88	5560	2095	37.7	8941	6460	72.2	191	90	47.1	7756	6840	88.2	16,888	13390	79.2
1988-89	5841	2240	38.3	10,549	8077	76.6	176	88	50.0	10,740	9740	90.6	21,465	17905	83.4
1989-90	5968	2447	41.0	12,681	10,426	82.2	197	89	45.1	14,883	13,723	92.2	27,761	24,237	87.3
1990-91	6100	2471	40.5	14,500	12,205	84.1	190	75	39.4	16,600	15,312	92.2	31,290	27,592	88.2

Market Value												
Equity			Preference				Debentures			Total		
Year	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total	All SEs	BSE	BSE as a % of Total
1986-87	22,159	17,830	80.5	184	84	45.6	5,229	3,722	71.2	27,572	21,636	78.5
1987-88	26,511	21,987	82.9	161	82	50.9	8,849	7,953	89.9	35,521	30,022	84.5
1988-89	39,133	35,482	90.6	158	73	46.2	12,088	9,964	82.4	51,379	45,519	88.6
1989-90	55,409	51,343	92.7	196	76	38.8	14,933	13,787	92.3	70,538	65,206	92.4
1990	82,870	75,348	90.9	185	62	33.5	16,800	15,426	91.8	99,855	90,836	91.0

Note : All SEs = All Stock Exchanges, BSE = Bombay Stock Exchange
Source : The Bombay Stock Exchange.

Table V

Activity in the Bombay Stock Exchange

Year	Turnover		Deliveries				Delivery Value as % of Turnover
			No. of Shares		Value		
	Rs. Cr.	Percent change	No.(000)	Percent	Rs. Crores	% change	
1986-87	13,692	--	5,30,22	--	684	--	5.0
1987-88	7,912	- 42.2	5,16,91	- 2.5	470	-31.3	6.0
1988-89	20,562	+160.0	11,37,41	120.0	1225	+164.9	6.0
1989-90	29,384	+42.9	14,14,07	24.3	1539	+25.6	5.2
1990-91	36,011	+22.5	19,31,23	36.6	2360	+53.3	6.6
Percentage increase over 5 years		163.00		264.2		245.0	

Source : The Bombay Stock Exchange: *Annual Reports 1987,1988-89,1989-90 and 1990-91.*

Table VI

Turnover Ratio

Year	Market Capitalisation Equity (Rs. crores)	Turnover Rs. Crores	Turnover Ratio
1986-87	17,830	13,692	76.8
1987-88	21,987	7,912	36.0
1988-89	35,482	20,562	58.0
1989-90	51,343	29,384	57.2
1990-91	75,348	36,011	47.8

Source : The Bombay Stock Exchange, *Annual Reports 1987,1988-89,1989-90 and 1990-91.*

Table VII

Market Value of Equity (All Stock Exchanges) and Gross National Product

Year	Gross National Product (Current Prices)	Market Value of Listed Equity	Col. 3 as % of Col. 2
1	2	3	4
1986-87	257250	22159	8.6
1987-88	291647	26,511	9.0
1988-89	349105	38,133	10.9
1989-90	392524	55,409	14.1
1990-91 (Estimate)	443552	82,810	18.7

Source: Government of India, *Economic Survey 1990-91 and* Bombay Stock Exchange: *Annual Report 1990-91*

Table VIII

Net Savings of the Household Sector and Savings in Financial Assets
(Rs. Crores)

Year	Net Savings	Net Saving as per cent of NDP	Net Financial Assets	Net Financial Assets as % of NDP	Investment in Shares & Debentures	Investment in Shares & Deb. as % of Net Financial Assets	Investment in Units & Mutual Funds	Investment in Units of UTI and Mutual Funds as % of Financial Assets
1980-81	16,355	13.2	8609	7.0	412	4.8	31	0.3
1986-87	30,989	11.8	23016	8.8	1255	5.4	943	4.0
1987-88	38,169	12.8	26075	8.7	708	2.7	1196	4.6
1988-89	50,837	14.5	28475	8.1	818	2.9	1427	5.0
1989-90	59089	14.9	39212	9.9	1505	3.8	1756	4.5
1990-91	71,958	15.5	45032	9.7	--	--	--	--

Source: Reserve Bank of India: *Report on Currency & Finance-1987-88,1988-89 and Annual Report 1991.*

Table IX

Capital Issued by Non Government Public Limited Companies

(Rs. Crores)

Year	Equity	Pref.	Debentures			Total
			Conv.	Non	Total	
1986-87	1007.9	0.7	--	--	1556.3	2564.9
1987-88	1102.8	6.9	--	--	664.2	1773.9
1988-89	1007.0	3.3	--	--	2124.9	3135.2
1989-90	1218.8	7.9	4762.2	484.2	5246.4	6475.1
1990-91	1247.5	13.3	2288.7	652.3	2941.0	4201.8

Source: Reserve Bank of India
Report on Currency and Finance 1988-89 and Annual Report 1991.

Table X

Frequency Distribution of BSE Listed Companies by Number of Days (%) Traded in 1988-89 (215 days) and 1990-91 (186 days)

Percent of Total Days	No. of Listed Companies 1988-89	Percent to Total	No. of Listed Companies 1990-91	Percent to Total
90-100	456	20.0	795	47.2
80-90	152	6.7	185	11.1
70-80	94	4.1	83	4.9
60-70	57	2.5	63	3.7
50-60	72	3.2	40	2.4
40-50	66	2.9	46	2.7
30-40	51	2.2	38	2.3
20-30	79	3.5	40	2.4
10-20	93	4.1	66	3.9
1-10	1155	50.8	329	19.5
Total traded	--	--	1685	100.0
Total traded as % of Listed Cos.	--	--	1685	68.2
Not traded	--	--	786	31.8
Total	2275	100.0	2471	100.0

Source: Bombay Stock Exchange

Table XI

Yields, Profitability and Dividends

Year	Reserve Bank of India		RBI Studies on Company Finances Profits After Tax as percent of Net Worth		Mutual Funds	
	Gross Yield on Industrial Securities (Bombay)	Index No. of Yields (1980-81=100) (Bombay)	Various p-u Capital Groups	Above Rs.1 crore of p-u capital	UTI Yield Rate	Others (Promised)
1986-87	3.64	62.7	5.4	7.8	12.27	300% in 90 months
1987-88	4.32	74.8	4.3	6.3	12.56	
1988-89	3.76	59.7	7.8	10.0	13.58	
1989-90	3.18	47.6	--	12.3	13.35	
1990-91	2.59	40.0	--	--		

Note : P-u Capital = Paid-up Capital

Source: Reserve Bank of India: *Bulletin December 1989 and Oct. 1991 and Report on Currency & Finance 1989-90 and 1990-91*

Table XII

Index Numbers of Share Prices
(1986-87 - 1990-91)

Years	Bombay Stock Exchange				Reserve Bank		Inflation
	Sensitive Index		National Index		Index No.of Security prices 1980-81 = 100		Whole Sale Price Index
	Index	% Change	Index	% Change	Index	% Change	% Change
1986-87	567.39	--	256.85	--	230.6	--	5.7
1987-88	454.46	(-)19.9	232.23	(-)9.6	207.3	(-) 10.1	8.2
1988-89	613.66	+35.0	307.84	+32.6	247.5	+19.4	7.5
1989-90	729.49	+18.9	384.84	25.0	359.4	+45.2	7.5
1990-91	1049.53	+43.9	536.99	39.5	414.9	+15.4	10.3

Source : Bombay Stock Exchange and
Reserve Bank of India; Report on Currency and FInance, 1989-90
and Bulletin, October 1991.

Table XIII

Volatility and Dispersion of Share Prices

Year	Coefficient Variation (Percent)	Dispersion (The Range)
1986-87	3.65	3.83
1987-88	4.82	40.0
1988-89	16.36	121.1
1989-90	6.10	93.7
1990-91	14.80	258.6
Average for the five year period (1986-87 -- 1990-91)	9.15	110.3

Source: Reserve Bank of India, *Annual Report 1990-91*

Chapter III

AN EMPIRICAL ANALYSIS OF THINLY TRADED SHARES

As stated above in Chapter I, the phenomenon of scrips having few and intermittant bids or offers is referred to as thin trading which gives rise to the problem of liquidity. For purpose of empirical analysis thin trading is measured by the number days a company's share is traded out of a given number of days in the year during which market is open. Liquidity of the market is also measured by variation of price from one trade to another. Stock markets abroad, especially, the New York Stock Exchange (NYSE) is extremely stable and liquid because listing is restricted to companies with proven track record. Such restriction has ensured in NYSE in the past several years, no price change or minimum variation of one-eighth point from the immediately preceeding trade in the case of 92 per cent of all trades. In the Indian context, since there is no restriction in terms of proven track record for listing, shares of several companies are not actively traded. Of the shares of 2471 companies in the non-specified group listed on the Bombay Stock Exchange, shares of 1709 companies or 69.2 per cent are currently traded.

With a view to identify thinly traded shares, the shares in non-specified group listed on the Bombay Stock Exchange are distributed into 4 categories and presented in Table XIV. First, finance, leasing, construction and trading companies have been identified and classified into one group because their activity does not fall into the mainstream of industrial and economic activity and such companies are most probably closely held. They constitute 11.5 per cent (285) of the listed companies. It may, however, be noted that about 20 per cent of their shares (estimated) are currently traded. The second category consists of companies whose shares have not been traded for more than three years and obviously moribund. They account for nine per cent (223) of the listed companies. The third category consists of currently traded shares of companies (1709) which account for 69.2 per cent of the total. The balance of companies, 10.3 per cent (254) of the listed companies are infrequently traded. It may be noted that the number of companies whose shares are not traded/infrequently traded has dwindled between end-March 1991 (Table X) and September 20, 1991 from 786 to 477, (including items 2 and 4 in Table XIV).

For an empirical analysis of the problem of liquidity a cut off point is required to segregate illiquid shares. This point is taken as 50 per cent of the number of total trading days. While any cut off point sounds arbitrary, on closer analysis we find that 50 per cent trading assures price continuity. We may define a share as illiquid or thinly traded if it has not been traded for more than 50 per cent of the trading days in the year. After excluding finance/leasing companies and companies which have not been traded for more than 3 years, companies which have not been traded between April 1991 and August 1991 have been identified and shown under infrequently traded group (item 4 in Table XIV). From this group numbering 254 a sample of 117 companies has been drawn. The list of companies covered by the sample and their profile is presented in Appendix A. Before we proceed with an analysis of the sample companies the broad features or characteristics of the sample companies among thinly traded companies may be noted.

1. <u>Trading</u> : While 31.8 per cent of the companies (which are accounted in the main by moribund companies and infrequently traded companies) listed on the Bombay Stock Exchange were not traded even on a single day, in the case of the sample it is much higher at 41 per cent.

2. <u>Size of the Company</u> : Of the 117 companies in the sample 85 per cent of the companies have paid up capital of less than Rs. 3 crores.

Under the listing requirements in force they would not qualify for listing. Actually the sample reveals that equity capital base of the companies is very narrow. About 39 per cent of the companies have paid-up capital of less than Rs. 1 crore.

3. Public Holding : Wide distribution of the ownership of shares in a company is a *sin qua non* for active trading. Narrow ownership restricts supply of shares for trading. A number of companies especially old ones, have very restricted ownership and the shares are closely held. Public holding of 60 per cent which is stipulated currently for listing ensures a balance between the investing public and company promoters. It is observed in the sample that in 86.4 per cent of the companies public holding is less than 60 per cent.

4. Number of Shareholders: An important plank of financial policy of the government relating to capital market is the promotion of the cult of equity. Trading activity especially in the stock exchange depends on the number of shareholders. It is found in the sample of thinly traded companies 33 per cent of the sample companies have share-holders numbering less than 1000; and 94.9 per cent less than 10,000.

5. Earnings, Profit, Book value and Dividends : Among the sample of thinly traded companies earnings per share are negative in the case of 46 per cent of the companies. An earning level of more than Rs. 5 per share exists only in the case of 24 per cent of the sample companies. Similarly other reasons for public neglect or thin trading, no profit/or loss (38 per cent of sample), negative earnings per share (46.2 per cent) and negative book value of shares (45 per cent of sample) are observed. The practice of skipping dividend is widespread in the case of thinly traded companies. In the sample as many as

66 per cent of the companies have skipped dividends in the past three years.

It is now proposed to take up in detail each aspect.

Trading

The frequency distribution of sample companies by percentage of trading days (186 days in 1990-91) is presented in Table XV. Among the thinly traded shares, the proportion not traded (41.0 per cent of the total) and upto 10 per cent of the number of trading days (33.3 per cent) are very high. A major portion then (74.3 per cent of the total) are not traded at all or traded less than twice in three months. On the other hand, the average for the market (BSE) is 50 per cent. Among the factors that are responsible for such high level of inactivity or thin trading are company size, proportion of shares held by public, being low, closely-held ownership or small number of shareholders and poor earnings eroding equity and leading to low profits/ or incurring losses and non payment of dividends.

Company size

Table XVI presents the frequency distribution of the sample companies by the size of paid-up capital. The Table shows that narrow capital base is a basic trait of the thinly traded shares. Companies with paid-up capital of less than Rs. 50 lakhs constitute 17.1 per cent of the total sample; companices with paid-up capital of more than Rs. 50 lakhs but less than Rs. 1 crore account for 22.3 per cent; and companies with paid-up capital of more than Rs. 1 crore but less than Rs. 3 crores account for 45.2 per cent. These three groups together which account for 84.6 per cent of the companies have paid-up capital of less than Rs. 3 crores and would not qualify for listing under the regulations currently in force for listing on Stock Exchange which stipulates a minimum of Rs. 3 crores. Companies with less than Rs. 3 crores paid up capital but paying dividends include, Albright Morarjee & Pandit Co. Ltd. (sl. no.2 of Appendix A), The Amalgamated Electricity Co. Ltd. (sl. no. 4), Arunodaya Mills Ltd. (sl. no. 11), Coats of India Ltd. (sl. no. 23) , Cochin Malbar Estates & Industries Ltd. (sl. no. 24) and Curewell India Ltd. (sl. no. 26) Facit Asia Ltd. (sl. no. 34), High Energy Batteries Ltd. (sl. no. 43) Hindustan Sanitary Ware & Industries Ltd. (sl. no. 46) Herculas Hoists Ltd. (sl. no. 48) Indabrator Ltd. (sl. no. 50), Indo National Ltd. (sl. no. 51), Josts Engineering Co. Ltd. (sl. no. 57) J.S. Ranjitsinghji Spinning & Weaving Mills Ltd. (sl. no. 58) and Kaira Commercial Co. Ltd. (sl. no. 59).

On the other hand large size of paid-up capital does not ensure active trading. In the case of closely held companies a company with large paid-up capital may be in the thinly traded group. In the sample there are seventeen companies with a paid up capital of more than Rs. 3 crores which are not actively traded. They are Bimetallac Steel & Alloys Ltd. (sl. no. 18), Chemical & Plastics India Ltd. (sl. no.22), DCM Ltd. (sl. no. 27), Godavari Ceramics Ltd. (sl. no. 35), I.B.P. Co. Ltd. (sl. no. 49), IVP Ltd., (sl. no. 53), Jagjit Industries Ltd. (sl. no. 54), Kanoria Chemicals Ltd. (sl. no. 60), Laxmi Automatic Loom Works Ltd.(sl.no. 68), Mafatlal Engineering Industries Ltd. (sl. no. 71), Modi Spinning & Weaving Mills Ltd. (sl. no. 79), Nicco Industries Ltd. (sl. no. 84), Pamwi Tissues Ltd. (sl. no. 88) Shaw Wallace & Co. Ltd. (sl. no. 100), Shruti Synthetics Ltd. (sl. no. 102), and Wipro Ltd. (sl. no. 117). Of these Bimetallic Steel & Alloys, DCM Ltd., Godavari Ceremics, Mafatlal Engineering Industries Ltd., Modi Spinning & Weaving Mills Ltd., Pamwi Tissues, Premier Tyres and Shruti Synthetics are not traded because they are incurring losses or not paying dividends. On the other hand Chemical & Plastics India Ltd. (no. of days of traded, Nil), IBP Co. Ltd. (71 days), IVP Ltd. (72 days), Jagjit Industries Ltd. (36 days), Kanoria Chemical &

Industries Ltd. (Nil), The Mysore Amalgamated Coffee Estates Ltd. (Nil), Nicco Industries Ltd. (23 days), Shaw Wallace & Co. Ltd. (70 days), Shruti Synthetics Ltd. (2 days), and Wipro Ltd. (8 days) have been making profits and paying dividends but thinly traded.

Public Holding

A minimum public offer of 60 per cent of the issued capital is stipulated in the interest of diffusion of ownership and distributiive justice. Apart from the promoters who could take up remaining of the issued capital, another group that has emerged on the ownership arena are institutions. If the bulk of the share capital is held closely by promoters and financial institutions, the amount of floating stock would be inadequate for active trading. Table XVII presents frequency distribution of sample companies by public holding. Only 13.6 per cent of the sample companies (16) have public holding of more than 60 per cent. The sample includes 45 companies or 38.5 per cent with less than 20 per cent of public holding, 18 companies or 15.4 per cent with public holding of more than 20 per cent but less than 30 per cent, and 23 companies or 19.7 per cent with more than 30 per cent but less than 40 per cent. A large number of the sample companies have narrow and restricted public holding with the result that no floating stock is forthcoming for trading.

Number of Shareholders

The size of paid-up capital and public holding determine the number of public shareholders whose shares are generally available for trading. Number of shareholders have an impact on trading activity. The fequency distribution of 117 sample companies according to number of shareholders is presented in table XVIII. Of the sample, 39 companies or 33.3 per cent had less than 1000 share holders, 55 companies or 47.0 per cent had between 1000 and 5000 shareholders and 17 companies (14.6 per cent) had 5000 to

10,000 shareholders. If we assume that 10,000 or more shareholders are necessary to generate adequate trading, of the sample, 111 companies or 94.0 per cent had inadequate number of shareholders. The sample did not have any company with more than 25,000 shareholders. Among companies, with small number of public shareholders thin trading could occur even when other factors are favourable. In the sample such companies are Arunodaya Mills Ltd. (sl. no. 11 of Appendex A), Facit Asia Ltd. (sl. no. 34), High Energy Batteries Ltd. (sl. no. 43), Hercules Hoists Ltd. (sl. no. 48), Indabrator Ltd. (sl. no. 50), Josts Engineering Ltd. (sl. no. 57), Kedia Chemicals Ltd. (sl. no. 59), Mysore Amalgamated Coffee Estates Ltd. (sl. no. 88), Vishnu Sugar Mills Ltd. (sl. no. 114), and Wipro Ltd. (sl. no. 117).

Ratio of Book Value to Face Value

Among the fundamentals which help in assessing the strength of a company and its potential are net worth or book value, net profits, earnings per share, price earnings ratio and dividends. The sample companies are assessed in this regard to ascertain their position.

Book Value is based on the financial performance of the company in the past. The higher the book value the greater the financial strength and potential to perform well in furture. Table XIX presents the book value of 117 sample companies as a ratio to face value. Of the sample, 45.3 per cent have negative book value and 22.2 per cent have book value of less than twice the face value. The book value exceeded face value by more than 5 times in the case of 12.8 per cent of the sample companies and by more than 10 times in 4.3 per cent of the cases.

Profitability

Sustained profits over years give strength to a company. Posting losses leads to public neglect and thin trading. Table XX presents the frequency distribution of the sample companies by net profits for three years. Of the sample companies, 34.1 per cent made profits in all the three years. At the other extreme, no profit was made or loss incured in all the three years by 37.6 per cent of the companies. The Table shows that 18.8 per cent of the companies made profits in 2 years out of three years and 9.4 per cent of companies profits were made in one out of three years. The performance of the remaining 63.8 per cent companies in the sample is very poor.

Earnings Per Share

Earnings per share indicate the level of profitability from the view point of the shareholder. In the evaluation of prices of shares, earnings are compared to its market price. Currently, (1991) EP ratio stands at 20. In the sample only 17 companies (or 14.5 per cent) have a ratio of more than 10. Table XXI presents the frequency distribution of the sample companies by earning per share. Of the sample companies, 46.2 per cent had negative earnings and 13.7 per cent of companies had earning of less than Rs. 2 per share. Thus, 59.9 per cent of the companies had negative or relatively low earnings per share. Of the balance 16.2 per cent had earnings of more than Rs. 2 and up to Rs. 5, and 9.4 per cent of the companies between Rs. 5 and Rs. 10.

Dividends

Return by way of dividend plays an important role in the evaluation of a share although retained profits could lead to capital gains or bonus issues. The frequency distribution of the sample companies by dividend payment is presented in Table XXII. The three year data, firstly show that 66 per cent of the sample companies skipped dividend in the first year, 70 per cent in the second year and 68.4 per cent in the third year. Non-dividend paying companies dominate the sample and shares of companies which do not pay dividends regularly do not attract trading activity and are difficult to sell.

To sum up, the analysis of the sample reveals that causes of thin trading are narrow capital base, relatively small public holding, small number of shareholders and poor performance of the companies as indicated by low or negative book value of shares, posting losses or realising low levels of net profits, negative or poor earnings per share and non-payment of dividends.

Table XIV

Distribution of Shares in Non-Specified Group (20.9.1991) (Estimated)

	No.	Percentage
1. Finance, Leasing, Construction Trading companies	285+	11.5
2. Companies which were not traded for more than 3 years	223	9.0
3. Currently traded companies	1709	69.2
4. Infrequently traded	254	10.3
Total	2471	100.0

+ It is estimated that about 20 per cent of the companies are actively traded.

Source: The Stock Exchange, Bombay

Table XV

Frequency Distribution of Sample Companies by percentage Trading Days During April 1990 - March 1991

Percentage of Trading Days	No. of companies	Percentage to Total
More than 40% and upto 50%	6	5.2
More than 30% and upto 40 %	8	6.8
More than 20% and upto 30%	7	5.9
More than 10% and upto 20%	9	7.8
Upto 10%	39	33.3
Nil	48	41.0
Total	117	100.0

Table XVI

Frequency Distribution of Sample Companies by the size of Paid-up Capital

Paid up Capital	No. of Companies	Percentage to Total
Less than Rs. 50 lakhs	20	17.1
Rs. 50 lakhs to Rs. 1 crore	26	22.3
Rs. 1 crore to Rs. 3 crores	53	45.2
Rs. 3 crores to Rs. 5 crores	12	10.2
Rs. 5 crores to Rs. 10 crores	5	4.3
More than Rs. 10 crores	1	0.9
Total	117	100.0

Table XVII

Frequency Distribution of Sample Companies by Public Holdings

Public Holdings	No. of Companies	Percentage to Total
Upto 20%	45	38.5
More than 20% and upto 30%	18	15.4
More than 30% and upto 40%	23	19.7
More than 40% and upto 50%	8	6.8
More than 50% and upto 60%	7	6.8
More than 60% and upto 70%	11	9.3
More than 70% and upto 80%	5	4.3
More than 80% and upto 100%	Nil	--
Total	117	100.

Table XVIII

Frequency Distribution by No. of Shareholders of Sample Companies

No. of Shareholders	No. of Companies	Percentage to Total
Upto 1000	39	33.3
More than 1000 and upto 5000	55	47.0
More than 5000 and upto 10000	17	14.6
More than 10000 and upto 25000	6	5.1
Total	117	100.0

Table XIX

Frequency Distribution of Sample Companies in Terms of Ratio of Book Value to Face Value

Book Value	No. of Companies	Percentage to Total
Negative	53	45.3
Upto 2 times of face value	26	22.2
More than 2 times and upto 5 times of face value	18	15.4
More than 5 times and upto 10 times of face value	15	12.8
More than 10 times	5	4.3
	117	100.0

Table XX

Frequency Distribution of Sample Companies by Net Profit for Three years

Net Profit	No. of Companies	Percentage to Total
Profit for all 3 years	40	34.2
Profit for 2 years out of 3 years	22	18.8
Pfofit for 1 year out of 3 years	11	9.4
No Profit in any year	44	37.6
Total	117	100.0

Table XXI

Frequency Distribution of Sample Companies by Earning Per Share

Earnings per share (in Rs.)	No. of Companies	Percentage to total
Negative	54	46.2
Upto 2	16	13.7
More than 2 and upto 5	19	16.2
More than 5 and upto 10	11	9.4
More than 10	17	14.5
Total	117	100.0

Table XXII

Frequency Distribution of Sample Companies by Dividend Payment

Paid up Capital	1887-88		1988-89		1989-90	
	No. of Cos.	Percentage to total	No. of Cos.	Percentage to total	No. of Cos.	Percentage to total
No Dividend	77	66.0	82	70.0	80	68.4
More than 5 and upto 10	20	17.0	9	7.7	5	4.3
More than 10 and upto 20	16	13.6	20	17.1	17	13.7
More than Than 20	4	3.4	6	5.2	15	13.6
Total	117	100	117	100	117	100

Appendix A

Profile of Sample Companies

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
1.	Ajanta Tubes Ltd.	1973	120	1241	39	536	541	524	96	23	17	12.8	12.5	--
2.	Albright Morarjee & Pandit Ltd.	1965	280	1467	77	376	448	563	91	112	173	10	14	21
3.	Alfred Herbert (India) Ltd.	1972	105	4645	6	792	764	775	- 17	- 21	30	6	6	18
4.	The Amalgamated Electricity Co. Ltd.	1936	139	5880	2	107	107	116	- 16	1	4	--	--	--
5.	Anand Elect. Supply Co.	1036	2	50	1	--	--	20	--	--	1	--	--	--
6.	Andhra Sintere & Products Ltd.	1982	153	1801	Nil	- 75	- 240	-368	-107	-145	-127	--	--	--
7.	Anil Steel & Industries Ltd.	1968	96	1348	Nil	192	226	264	23	44	50	--	--	10
8.	Annuh Pharma Ltd.	1960	4	125	Nil	1	1	1	--	--	--	--	--	--
9.	Anupama Steel Ltd.	1980	190	1586	Nil	224	226	227	0.3	0.6	0.6	--	--	--
10.	Arihant Agro Products Ltd.	1986	153	2056	1	--	--	123	--	--	-30	--	--	--
11.	Arunoday Mills Ltd.	1962	70	612	1	540	558	723	10	25	171	10	10	30
12.	Asia Automobile Products Ltd.	1979	95	13,986	5	85	83	83	12	-2	0.1	--	--	--
13.	AutomobileProd. of India Ltd.	1949	209	4104	1	-205	-119	-529	-44	=23	-410	--	--	--
14.	B. Arunkumar's Intl. Ltd.	1985	99	423	13	81	173	179	1	36	78	--	13	22
15.	Banswara Syntex Ltd.	1976	122	586	1	987	980	855	-65	-3	-97	--	--	--

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
16.	Barium Chemicals Ltd.	1961	75	2896	1	93	93	94	7	--	1	--	--	--
17.	Belapur Sugar & Allied Industries Ltd.	1955	161	14,943	1	-63	-160	-173	-185	-98	-13	--	--	--
18.	Bimetallic Steel & Alloys Ltd.	1982	366	13,487	33	--	357	67	--	-6	-300	--	--	--
19.	Banbay Potteries & Tiles Ltd.	1933	130	634	Nil	-238	-200	-280	-85	-70	-80	--	--	--
20.	Brown Bull Silk Mills Ltd.	1986	77	1177	Nil	77	74	78	--	-3	-4	--	--	--
21.	Chemicoat Ltd.	1961	24	1047	2	-2	-1	-5	6	2	-5	--	--	--
22.	Chemical & Plastics India Ltd.	1962	887	6256	Nil	1545	2702	3251	238	575	726	10	16	20
23.	Coates of India Ltd.	1947	221	6493	46	614	788	964	229	212	211	21	1745	24
24.	CochinMalbar Estates & Industries Ltd.	1930	165	1809	Nil	348	511	576	22	60	50	73	11	17.5
25.	Cranex Ltd.	1973	142	7155	1	62	193	198	12	-7	4	--	--	--
26.	Curewel (India) Ltd.	1966	74	1542	Nil	121	140	144	11	16	17	5	13	15
27.	DCM Ltd.	1989	575	59131	5	5115	5984	6802	-2481	369	399	--	--	--
28.	DH Woodhead Ltd.	1982	248	2787	Nil	--	--	148	--	--	-101	--	--	--
29.	Diamaunt Carbon & Graphite Products Ltd.	1980	95	2470	Nil	--	45	-28	--	-62	-80	--	--	--
30.	Divya Chemicals Ltd.	1980	34	535	86	34	-7	-38	-15	-40	-31	--	--	--
31.	Dr. Sabharwal's Mfg. Labs Ltd.	1984	74	2872	Nil	--	24	90	--	2	1	--	--	--

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
32.	East India Iron & Steel Co. Ltd.	1983	121	8170	1	--	--	127	--	--	-15	--	--	--
33.	Ellora Paper Mills Ltd.	1974	174	589	Nil	-385	-401	-300	-158	-17	13	--	--	--
34.	Facit Asia Ltd.	1962	191	969	86	572	660	812	139	122	199	21	18	25
35.	Godavari Ceramics Ltd.	1985	356	5676	19	--	--	301	--	--	-37	--	--	--
36.	Golden Proteins Ltd.	1971	189	10582	3	213	96	-27	-57	-146	-123	--	--	--
37.	Graphic Charts Ltd.	1968	15	1842	Nil	25	27	31	1	3	7	--	10	20
38.	G.S. Auto Ltd.	1965	167	10085	19	282	285	287	--	2	2	--	--	--
39.	Gujarat Himalaya Cements Ltd.	1974	287	8334	1	--	-15	-180	--	-317	-165	--	--	--
40.	Guj. Reclaim & Rubber Products Ltd.	1974	25	242	2	38	38	75	11	-11	19	--	--	--
41.	Gujarat Refractories Ltd.	1985	202	5143	27	4	49	165	-2	--	-16	--	--	--
42.	Guj. Wedgewire Screens Ltd.	1978	82	1379	7	--	72	68	--	-15	-8	--	--	--
43.	High Energy Batteries (I) Ltd.	1961	89	877	Nil	342	402	414	74	46	22	15	15	15
44.	Hind Rectifiers Ltd.	1958	45	944	62	58	63	118	-2	5	50	--	--	21
45.	Hindustan Everest Tools Ltd.	1962	40	1200	Nil	181	153	161	45	-28	9	--	--	--
46.	Hind. Sanitary ware Ind. Ltd.	1960	194	3075	Nil	1160	1429	1445	147	35	1	6	12	10
47.	Hi-tek Industries (Bihar) Ltd.	1983	143	5578	Nil	62	-96	-439	-49	-162	-343	--	--	--
48.	Hercules Hoists Ltd.	1962	40	125	Nil	123	144	196	34	26	61	18	12	25

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
49.	IBP Co. Ltd.	1909	736	2990	71	3572	4371	6622	728	885	602	11	11.5	14..6
50.	Indabrator Ltd.	1963	49	178	Nil	146	154	155	17	14	6	12	12	12
51.	Indo National Ltd.	1972	94	2025	85	550	602	702	146	83	178	20	25	30
52.	Ishwar Textiles Ltd.	1983	24	510	Nil	--	27	25	--	1	1	--	--	--
53.	IVP Ltd.	1929	459	1508	72	988	1586	1716	151	241	226	10	15	15
54.	Jagjit Industries Ltd.	1944	606	3015	36	2286	2910	3322	327	844	633	15	36	36
55.	Jayshree Chemicals Ltd.	1962	184	1141	Nil	-108	-230	-339	-167	-124	-110	--	--	--
56.	Jolly Boards Ltd.	1956	91	928	Nil	296	295	297	25	-1	2	10	--	--
57.	Jost's Engineering Co. Ltd.	1907	38	543	2	155	173	225	33	27	61	25	25	25
58.	J.S. Ranjit Singhji Spg. & Wvg. Mills Ltd.	1907	70	350	85	923	885	903	-10	-35	30	10	10	14
59.	Kaira Com. Co Ltd.	1962	87	76	Nil	365	404	485	75	96	107	20	20	30
60.	Kanoria Chemicals & Ind. Ltd.	1960	405	1074	Nil	2974	2682	2706	28	59	189	10	15	20
61.	Kanpur Plasti Packs Ltd.	1971	256	12744	1	332	498	383	71	7	-89	3	--	--
62.	Kapil Cotex Ltd.	1983	24	90	Nil	--	--	24	--	--	--	--	--	--
63.	Kediya Vanaspati Ltd.	1971	147	9441	Nil	88	201	179	38	3	-23	--	4.7	--
64.	Khandelwal Ferro Alloys	1958	262	3148	50	706	581	505	26	-140	68	9	--	15
65.	Khetwat Chemical & Fert. Ltd.	1983	235	1200	Nil	235	111	-189	--	-124	-300	--	--	--
66.	Khodiyar Pottery Works Ltd.	1946	200	359	2	14	-12	-41	-3	-27	-29	--	--	--
67.	KTC Tyres (India) Ltd.	1982	225	7270	Nil	--	142	-10	--	-81	-153	--	--	--

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
68.	Laxmi Automatic Loom Works Ltd.	1973	300	1660	9	373	378	412	45	49	75	15	15	15
69.	Laxmi Vishnu Cotton Mills Ltd.	1908	90	3574	Nil	1221	264	1435	17	-873	1511	--	--	--
70.	Mackinnon Mackenzie & Co. Ltd.	1951	250	4785	Nil	-3303	-4417	-5536	-1378	-1113	-1119	--	--	--
71.	Mafatlal Eng. Industries Ltd.	1947	660	15432	57	53	-1663	-2384	-128	-1699	-738	--	--	--
72.	Magnetix (India) Ltd.	1983	261	2981	1	--	120	-83	--	-157	-165	---	--	--
73.	The Maharashtra Sugar Mills Ltd.	1933	132	7704	Nil	357	90	57	-175	-282	-15	--	--	--
74.	Maheshwari Nutrients Ltd.	1986	111	6958	5	103	104	108	4	1	-18	--	--	--
75.	Mayur Syntex Ltd.	1979	232	4595	Nil	-98	-393	-505	-67	-204	-112	--	--	--
76.	Meltech Alloy Powders (I) Ltd.	1983	103	N.A	Nil	--	--	73	--	--	-49	--	--	--
77.	Mirch-Mirex Ltd.	1972	39	1847	Nil	-20	-38	-43	-3	-18	-5	--	--	--
78.	The Modern Mills Ltd.	1933	151	3890	Nil	-1077	-1300	-1529	-287	-223	-229	--	--	--
79.	Modi Spg. & Wvg. Mills Co. Ltd.	1946	487	1180	Nil	1424	1109	757	-341	-315	-333	--	--	--
80.	The Mysore Amalgamated Coffee Estates Ltd.	1944	450	120	Nil	22	24	36	1	2	3	13	20	20
81.	National Oxygen Ltd.	1974	104	5695	6	142	146	138	8	-4	-25	6	--	--
82.	Navasari Cotten & Silk Mills Ltd.	1936	91	1019	34	468	330	90	-244	-333	-39	--	--	--
83.	Neveli Ceremics	1960	211	1112	Nil	476	312	238	174	-189	-74	15	--	--

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
84.	Nicco Industries Ltd. (Formerly Nicco Orissa)	1979	487	4228	23	785	833	992	149	109	122	10	10	10
85.	Nuware India Ltd.	1982	114	7360	54	133	90	76	22	-43	-15	--	--	--
86.	Ottoklin Ltd.	1982	175	14010	19	23	-15	-66	-47	-113	-127	--	--	--
87.	Pace Electronics	1986	80	930	1	--	1	36	--	--	--	--	--	--
88.	Pamwi Tissues Ltd.	1968	461	1678	Nil	-1030	-1176	-1409	-748	-146	-229	--	--	--
89.	Pantape Magnetics Ltd.	1984	105	1987	37	--	93	67	--	-27	-141	--	--	--
90.	Parashuram Pottery Works Co. Ltd.	1930	49	804	Nil	87	83	83	-33	-4	-9	--	--	--
91.	Patel Engineering Co. Ltd.	1949	167	5769	Nil	391	364	372	16	-28	8	7.5	--	--
92.	Poineer Autolamps Ltd.	1983	97	5412	17	101	82	81	8	-30	-2	7	--	--
93.	Polar Fan Industries Ltd.	1978	100	215	2	90	144	148	19	16	4	7.5	11	--
94.	Premier Tyres Ltd.	1959	324	4775	74	-2060	-2099	-1862	821	-38	237	--	--	--
95.	Raasi Ceramics India Ltd.	1981	214	8519	Nil	168	145	14	-46	-34	-136	--	--	--
96.	Ram Fibres Ltd.	1979	247	1232	80	61	13	-31	-107	-89	-86	--	--	--
97.	Ramon & Demm Ltd.	1964	251	4204	Nil	-348	-485	-877	-221	=138	-391	--	--	--
98.	Ruby Mills Ltd.	1917	32	78	3	121	214	300	2	92	91	--	--	20
99.	Shah Foods Ltd.	1982	55	N.A	15	--	55	56	Nil	2	1	--	--	--
100.	Shaw Wallace & Co. Ltd.	1946	1200	3579	70	3561	4011	6045	238	885	1393	35	29	42

Sr. No.	Name of Company	Year of incorp-ration	Paidup Capital (Rs. lakhs)	Total no. of Share-holders	No. of days traded in 1990-91	Net Worth (Rs. Lakhs)			Net Profits (Rs. Lakhs)			Dividend Percentage		
						1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
101.	Shriram Bearings Ltd.	1960	140	2657	Nil	-538	-781	-585	-128	-242	-105	--	--	--
102.	Shruti Synthetics Ltd.	1979	302	2222	2	475	475	476	21	--	1	6	--	--
103.	Sica Breweries Ltd.	1972	140	1221	2	449	644	677	49	66	61	13	18	18
104.	Sirdar Carbonic Gas Co. Ltd.	1904	16	328	Nil	59	54	33	2	-5	15	16	--	--
105.	South India Sugar Ltd.	1944	98	5431	3	243	932	745	69	330	243	20	30	30
106.	Speciality Papers Ltd.	1961	29	1513	Nil	52	17	10	-8	-35	-27	--	--	--
107	Starlite Projects Ltd.	1980	97	6378	1	173	129	129	4	9	7	--	7	6
108.	Tappria Tools Ltd.	1965	91	N.A	3	13	59	90	59	72	27	--	--	--
109.	Tasty Bites Eatables Ltd.	1985	196	2192	1	--	154	32	--	-51	-225	--	--	--
110.	Thacker & Co. Ltd.	1877	8	110	1	8	8	8	8	-	2	--	--	--
111.	Tilaknagar Distilleries& Ind. Ltd.	1967	82	3555	61	154	172	213	29	26	22	18	10	10
112.	Travancore Electro-Chemical Industries Ltd.	1945	233	1588	Nil	459	409	313	11	-33	-96	6	--	--
113.	Triveni Sheet Glass Works Ltd.	1971	117	1012	39	1021	1051	1020	106	105	50	20	20	15
114.	Vishnu Sugar Mills Ltd.	1932	15	125	Nil	153	156	154	13	4	1	10	10	8
115.	W.H. Brady & Co. Ltd.	1913	120	504	3	164	96	70	-17	-68	-26	--	--	--
116.	Willard India Ltd.	1973	241	9091	44	1172	1072	1135	34	-24	66	--	--	--
117.	Wipro Ltd.	1945	368	323	81	1015	2038	2401	289	268	456	12	68	76

Source: *The Stock Exchange Official Directory*
Note : *Data relating to net worth and net profit/loss relate to the latest three years available.*

Chapter IV

Measures to Mitigate the Problem of Illiquidity

The trends in trading analysed in Chapter II and the empirical analysis of thinly traded shares presented in Chapter III have revealed that whatever could be drawn into the trading ring on account of the inherent strength of the scrip is being traded. A few good scrips among thinly traded shares are not coming into the market because of supply constraints. Either the public holding is low or the number of share holders is small. There are, of course, cases which constitute a major proportion of thinly traded companies whose share capital is below Rs. 3 crores. They would not qualify for listing under the present regulations. We have, therefore, to distinguish the problem of illiquidity of shares of existing listed companies and avoidance of the problem in future.

Currently Listed Companies

First, the moribund companies which have not been traded for the past three years obviously do not exist or are in the process of liquidation. Such companies are estimated to number about 223 companies or 9 per cent of the currently listed companies (see Table XIV). Such companies, if the rules do not permit their being dropped, should at least be segregated and shown separately.

Among the thinly traded companies which account for 10 per cent of the currently listed companies, several of them (about 50) do not exist. The questionaires sent were returned undelivered with the comment 'addressee left'. After confirmation names of these companies may also be shed from the list. These two categories would reduce the numbers by about 273 leaving roughly 2200 companies.

Among the thinly traded shares there are the non-profit making companies, which number about 100, for whom the remedial measures would consist of those internal to the company such as revamping their management to improve profitability. The profit making companies among the thinly traded which number about another 90 companies have to be required to widen their public holding and number of shareholders which would improve their supply and facilitate trading.

The finance/leasing, construction and trading companies numbering about 285 may also be shown in a separate category as they are not apart of the mainstream of industrial and economic activity and are likely to be closely-held. The listed companies would therefore be shown under there categories : first one consisting of 1900 companies (of which 100 are sick companies and 90 closely-held leaving about 1700 companies which are currently traded); second, finance, leasing, trading etc. companies which number 285; and third moribund companies numbering 273 which have ceased to function and exist.

Future Course of Action

Returning to the future, listing and trading in shares should be related to the nature of the company, size in terms of paid-up capital and number of shareholders, public holding of shares and track record. We have noted that shares are not a homogenous commodity and the market forum should be devised to match their characteristics. There is no point in listing shares of small and medium companies without an established track record in the company of those which are established, big and leaders in their own industry with good track record including dividend payment. They will be ignored and lead to the phenomenon of thinly traded shares. A system of tiers or parallel net works is normally devised to meet the problem. Both the United Kingdom and the United States have such tiers in vogue. The essence of these tiered markets is to provide a market matching the characteristics of scrips. Basically these characteristics boil down to shares of companies with established track record and which are big. They are listed and traded on the International Stock Exchange in London or New York Stock Exchange. Shares of medium and small sized companies which are not eligible for listing on the stock exchanges are listed on the Unlisted Securities market in the U.K. and Over the Counter Market/NASDAQ in the U.S.A. Finally, shares of companies which are highly risky but show signs of growth are privately funded by venture capital funds. Venture capital funds are not part of the market. They disinvest the shares of the unit they finance once the unit sets up a track record and meets the listing requirements.

United Kingdom

International Stock Exchange : The United Kingdom has two tiers the International Stock Exchange (ISE) and the Unlisted Securities Market[1]. The International Stock Exchange in Lodnon is the third largest in the world in terms of market capitalisation. ISE's role as one of the three major stock markets was reinforced by the deregulation of the stock market, the dismantling of fixed commission and the admission of foreign members after the Big Bang of 1986. ISE's regional net work established in 1973 is based on six geographical regions represented by six stock exchanges which form the Assocaited Stock Exchange. London is the hub of the intermarket system. Companies applying to the official list have to disclose a three year record.

Unlisted Securities Market : Unlisted Securities Market (USM) has provided since 1980 a formal, regulated market designed to meet the needs of those smaller, less mature companies which are unlikely or unable to apply for full listing. The requirements for admission to USM are two years track

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1) The Third Market ceased to exist from December, 1990

record. The conditions for admission to USM are less onerous than for admission to full listing on ISE.

Venture capital funds, provide equity capital to high risk ventures, undertake investment activity encompassing provision of seed capital, finance for expansion, and acquisition. In the U.K. venture capital funds are subsidiaries of pension funds, insurance companies and banks. Independent funds also exist. Basically venture capital is a source of equity for companies which cannot raise funds in the primary or new issue makret.

The United States of America

The Intermarket Trading System : In the United States, the New York Stock Exchange (NYSE) is the world's largest in terms of market capitalisation. It accounts for about 50 per cent of the total volume and 70 per cent of Dollar value. Superdot 250 which is an electronic routing system links member firms all over the USA directly to the trading floor of the NYSE. In New York there is another exchange, American Stock Exchange set up in 1921 which was originally curb market. Compared to the New York Stock Exchange its market capitalisation constituted 3.9 per cent and turnover 2.8 per cent of the New York Stock Exchange at the end of 1990. Apart from these, five other exchanges, the Boston Stock Exchange Inc., Midwest Stock Exchange Inc., Pacific Stock Exchange Inc., Cincinnati Stock Exchange and Philadelphia Stock Exchange exist. All the exchanges are linked together under a system known as the Intermarket Trading System (ITS) to form a National Market System. ITS facilitates through its composite quotation display system the current quotes as well as the best quote in all the participating markets of all the listed securities. Location confers neither an advantage nor a cost. The investor can buy at the lowest price and sell at highest price prevailing in any of the markets.

NASDAQ : There is another market born out of the Over the Counter Market about two decades ago. The National Association of Securities

Dealers Automated Quotations (NASDAQ) Market is now the second largest equity market in the U.S.A. NASDAQ is a nationwide electronic screen based trading net work. More than 40 per cent of the shares traded in the U.S.A. are traded in the NASDAQ market. The companies listed on NASDAQ exceed those on all stock exchanges in the U.S.A. combined. NASDAQ uses a blend of screen based trading technology and market competition. It is also highly automated with more than 60 per cent of the orders executed automatically over the computers at the best prices available. NASDAQ is linked internationally. Before adoption of the central computerised database linking the member firms to provide upto date price and trading information, OTC market since the 1930's served as a nursery for companies for maturing into listing on NYSE. The brokers and dealers who do business in the OTC market and its later version NASDAQ are required to be registered with the Securities and Exchange Commission.

Specialists: The specialist acts as both dealer and broker trading in a particular group of shares. In his role as a broker he executes orders for shares in which he is registered as a specialist; as a dealer he buys and sells shares for which he is registered as a specialist for his own account. Instead of a single specialist on the traditional exchanges, NASDAQ has competing market makers which include some of the largest and best capitalised firms in the world. The market makers on NASDAQ number about 500. There is no limit on the number of market makers in a particular share. There are sometimes as many as 40 market makers but the typical share has 10 market makers in NASDAQ.

The New York Stock Exchange has specialists who are members of the exchange and act as brokers or dealers in shares. They buy and sell shares of one or more companies and help in maintaining a free and continuous market in the shares of companies in which they act as specialists.

The specialists are expected to maintain a fair and orderly market for shares in which they act as a specialist.

Venture Capital Funds : In the U.S.A. the venture capital funds got a boost after the creation of the Small Business Investment Company under the Small Business Investment Act in 1958. Venture capital funds are privately owned and constitute the largest source of equity capital. The ventures financed are risky but carry a proportionate promise of high return. The venture capital funds take a good deal of interest in the units financed by them and assist the companies with several financial, managerial and technical services.

After examining the different tiers available for trading in the U.K. and U.S.A, we may examine what meets our requirements.

FIrst about our stock exchanges. The BSE along with the other 18 stock exchanges have now restricted listing to companies with more than Rs. 3 crores of capital and, 60 per cent public holding reducing the prospect of infrequent trading in some scrips. To eliminate the addition of any unattractive scrips in terms of trading, a provision that companies seeking listing should have a minimum of three years track record and shareholders in excess of, say, 10,000 may be incorporated along with raising the minimum paid up capital to Rs. 5 crores.

Secondly, the automation of the stock exchanges as contemplated by BSE and linking of all exchanges electronically may be taken on hand. BSE has an ICIM series 39 mainframe computer with computing capacity of 1,50,000 trades a day. A large mainframe computer connected to the offices of the members by terminals is proposed to be installed. The computer system proposed is expected to support on-line processing and at the same time facilitate real time display of trade information so as to inject complete transperancy to trading. The computerisation is expected to be completed by first quarter of 1993. Trading and settlement on BSE will than be on par with those of the most developed financial markets like Tokyo and New York. The technological infrastructure created would also enable the linking up of markets at different centres to facilitate intermarket trading or national market system. Similar computerisation has to be adopted at all stock exchanges.

National Market System : The High Powered Study Group on Establishment of New Stock Exchanges, 1991 has recommended the establishment of a National Market System. While the establishment of a separate stock exchange is not necessary to achieve this objective, the growth of stock market activity has reached a stage where the establishment of a national stock market system has become necessary. A beginning has been made in this direction in 1987. The five major markets viz., Bombay, Calcutta, Delhi, Madras and Ahmedabad are linked electronically through PTI Stockscan. Quotations of over 500 scrips traded on these exchanges and other market related information are continuously displayed. To really integrate all the stock exchanges and evolve a national market system comparable to ITS in the USA an electronic routing system based on something similar to Superdot 250 has to be adopted. Such a system would provide equal opportunity to all investors throughout the country to trade in any security irrespective of the size of the order or the broker through whom the order is routed. The system helps to execute the buy order at the lowest price in any stock exchange located any where in the country and to sell at the highest price prevailing anywhere in the country without any extra cost to the investor. It would ensure price continuity and liquidity. The expenditure may be publicly/internationally funded and amortized over a ten year period by a special surcharge per transaction. Actually, the additional expenditure would easily be covered by the savings in costs on accoount of the adoption of an electronic system.

OTCEI : The shares of medium and small companies may be listed on the Over the Counter Exchnange of India (OTCEI). OTCEI was set up in 1989 to promote the growth of small and start-up companies with potentially viable greenfield ventures. But this market will be a going one only if electronic screen based trading is adopted as in the case of NASDAQ. A central computerised database linking the dealers to provide upto date pricing and trading information should be set up.

The brokers and dealers in OTCEI may be required to register with a National Association of Security Dealers (proposed) as well as SEBI on lines similar to the U.S.A. where brokers and dealers of NASDAQ are registered with National Association of Security Dealers as well as Securities and Exchange Commission. The system has immense potential not only to improve liquidity and price continuity but mobilisation of funds from remote rural areas.

Venture Capital Funds : Venture capital funds may be encouraged to finance the equity of new companies which are highly risky but hold promise of return. The guidelines issued for the establishment of Venture Capital funds envisage assistance to enterprises where the risk element is comparatively high. Such projects may not be able to raise equity from the market especially when public issues are no longer readily available for small greenfield companies.

Venture capital, under the guidelines is restricted to companies whose total investment does not exceed Rs. 10 crores, are based on relatively new technology and promoted by an enterpreneur professionally or technically qualified. Once the venture becomes operational and sets up a track record the venture capital funds may disinvest by a public issue of general offer.

A venture capital fund [VECAUS -1 Rs. 20 crores] was set up by the UTI in 1988-89 in collaboration with the ICICI for fostering industrial development. Technology Development and Information Company of India

Ltd. (TDICI) established by UTI jointly with ICICI acts as an adviser to the VECAUS. To augment further resources under the scheme, the second venture capital fund (VECAUS II) was set up in March, 1990 with a capital of Rs. 100 crores with the objective of financing greenfield ventures and steering industrial development.

During 1989-90 TDICI approved assistance of Rs. 21.3 crores to 50 companies. Cumulatively, upto March, 31, 1990 total assistance of Rs. 34.2 crores has been approved to 67 companies.

Post trading operations have an impact on trading and convenience of the investor. Stock Holding Corporation of India (SHCIL) established by IDBI and other public and financial institutions in 1986 is expected to function as a Central Securities Depository. BSE has also set up BOI Shareholding Ltd. to effect transfers, involved in settlements by mere book entries. The ultimate objective should be to establish a paperless trading and settlement. Several exchanges abroad have achieved dematerialisation. ISE in London set up a new share transfer system called TAURUS with a view to ushering in a paperless trading and settlement system by the end of 1991. We have to initiate steps towards dematerialisation.

Market Makers : Finally, the system of market makers is put forward to mitigate the problem of illiquidity, prevent exploitation of investors and promote orderly markets. The market maker is a member of the exchange who remains at a specific post on the floor where he combines the work of a broker and dealer by specialisation in issues assigned to him[1]. As a broker he executes orders for the public which have been left with him by other members of the exchange. As a dealer he buys and sells for his own account in order to make a market in the issues in which he specialises, thereby putting his own capital at risk. The specialist increases the oppor-

1) Eiteman, Wilford J.E. and others, The Stock Market, Fourth Edition. McGraw-Hill Book Company, New York, p. 233.

tunities by making a market in specific stocks by standing ready at all times or buy for his own account at one price and sell for his own account at a slightly higher price. Such effort provides continuity of price.

Specialist maintains a fair and orderly market in the issues in which he specialises. To keep the market in a share fair and orderly when there are more buy orders than sell orders, specialist must raise the market price or sell shares out of his holdings to meet the excess demand. Similarly, when there are more sell orders than buy orders, specialists must either lower the price of the share or buy it for his own account in order to equalise supply and demand. Within the limits set by his own motive for profit maximisation from shifts of supply and demand, specialist sets the market prices for shares assigned to him. He earns profit from two kinds of activities. First, he earns a spread between the bid-asked price from every share that passes through his post and secondly by managing his holdings so that he can buy shares at a price that is below the selling price.

Specialists help in the maintenance of price continuity so that only small price changes occur from trade to trade. Otherwise, in the case of NYSE the Board of Directors would remove this specialists from his position. Specialists in NYSE are required to have adequate capital to own a position of atleast 4000 shares of each company in which they make the market.

Although there is no obligatory and regulated market making system in the stock exchanges in India, the voluntary market making system that had emerged at some of the stock exchanges particularly at the Bombay Stock Exchange, has resulted in narrow spreads between bids and offers in respect of active scrips. The volatality of the market in the recent past has widened the spreads even in the highly active scrips. In respect of less active scrips the spreads are wider[1)]. Less active scrips are risker to purchase on own account by market makers. We have noted above that the shares of all companies listed do not share norms of corporate financial performance of a minimum standard such as net worth, net profits, earnings per share and dividend record. Actually it is shares of such companies which fall below such norms that are thinly traded. No system would improve market or liquidity of such shares. The market maker would not invest his money by dealing on his own in such shares if there is no prospect of selling them let alone at a higher price. It is basically a question of supply and demand for shares, risk and finance for investment. Credit is not available in required measure at reasonable cost especially to carry shares.

Companies seeking listing on the Bombay Stock Exchange are now required to appoint market makers. However, appointment of market makers for shares already listed especially in the case of companies which are not doing well but expected to turn the corner is going to be difficult. Financial institutions could take a lead. But in the case of recent issues (say upto 5 years) as well as new issues, market makers can improve liquidity of shares of such companies if the companies actively involve them by sharing information about the project, market and prospects. We should also create conditions conducive to market making system in recent new issues which are less active. Reservation of say even half a per cent of the new issues and grant of liberal bank finance at concessional rates to market makers would improve out look for market making.

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1) On-line System for Thinly Traded Securities (BOOSTS) launched by the Bombay Stock Exchange in January, 1988 has not proved to be effective, among others for the reasons stated in this paragraph.

Chapter V

Epilogue

To get out of the strait jacket of enumeration of conclusions by Chapters, the freedom Epilogue gives, is chosen.

Liquidity is basically related to market conditions. The stock markets in the medium term, for the past three and half years have been on a rising trend. The outlook until the Budget (February 29, 1992) is a continuation of the trend. During this period the players in the market have been augmented not only by mutual funds but others engaged mainly in trade and Indian nationals working abroad. The supply of securities, especially shares during this period has not been on a matching scale to absorb new funds (savings and disinvestment from other trades). The result has been a surfeit of money leading to 'too much money chasing too few scrips' phenomenon.

In this phase of trading, 'second best' shares have also been drawn in for trading. The character of the present position in regard to liquidity of shares is vitally different from what it was in the past, say four or five years ago. Actually there was improvement from year to year in liquidity. Compared to 1988-89, in 1990-91 volumes are higher and scrips traded more numerous with the result that more and more shares enjoyed liquidity. The magnitude of the problem got dwindled as years passed in the last 3-4 years. We cannot take comfort in this because, the problem exists on account of the reasons identified, narrow capital base and public holding, small number of shareholders and poor record of profits and dividend payments.

To put in perspective the problem of liquidity, companies with narrow capital base i.e. with paid-up capital of less than Rs. 3 crores may be classified into a separate group. The companies listed earlier with paid-up capital of Rs. 3 crores and above should also be prodded to conform to certain financial performance norms and dividend payment so that trading volumes are not adversely affected and liquidity problem does not arise in future.

Again for proper appreciation of the actual position, companies with small public holding should grouped together and presented separately. Similarly operations and holdings of mutual funds have been affecting prices and floating stock. Ratios and percentages linked to their portfolio or company's paid-up capital would not really be effecive. A case by case or transaction by transaction monitoring has to be done. The playing field is no longer level with mutual funds participating.

The shares of finance, leasing and trading companies which are not a part of the mainstream of industrial and economic activity and are closely held should be categorised separately so that meaningful analysis and discussion about the performance of stock exchanges can be carried out.

In regard to moribund companies (which have not been traded for more than 3 years) they should be identified and presented separately. Appropriate action is necessary since they add to the number of illiquid shares and spoil the image of the stock exchange.

In regard to future it is suggested that we should have a two tier market. First, National Market System consisting of the present exchanges and the second OTCEI. All big companies with paid-up capital of more than Rs. 5 crores, with three years of track record may be listed on the existing stock exchanges. Computerisation of the exchanges and adoption of electronic routing system to link all exchanges are recommended. Not only would the problem of liquidity solved but best price can be assured. The investor irrespective of his location can sell and buy at best prices.

In the case of medium and small companies with a paid-up capital of less than Rs. 5 crores listing on OTCEI is suggested. But the system would assure liquidity and best price only if electronic screen based system is adopted as is the practice with NASDAQ in the U.S.A. OTCEI would have an electronic floor. The dealers would be registered with a national association of security dealers (proposed) as well as SEBI. The clamour for enlarging scope to deal in shares can be met through membership of OTCEI if a person meeting specified professional standards by passing a professional examination conducted by national association of securities dealers, can locate (ensuring regional district and taluka dispersal) and set up shop with necessary P.C. and other accessories for access to screen based system.

Venture capital funds are not a part of the secondary market. They are suppliers of equity to ventures which are risky but promise high return. They finance equity of units which propose to use new technology and are promoted by technical and professional entrepreneurs. Venture capital funds also provide technical, financial and managerial assistance. They help the company to set up a track record. Once the company meets the listing requirements of either OTCEI or the exchanges of the National Market System, venture capital fund can disinvest its shares.

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