Impact of Reforms on the Liquidity Position of the Indian Capital Market

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Abstract. The main aim of reforms in the Indian capital market sector was to bring a radical transformation and multi dimensional growth in the capital market in India , which was earlier lying as a dormant segment of the financial system. The present article seeks to examine the impact of reforms on the liquidity position of the Indian capital market.

1 Introduction

Capital market provides an alternative mechanism for allocating resources, channelizing household savings to the corporate sector and allocating funds among firms. After the reform period, the magnitude of growth has been rapid and vivid in terms of funds mobilized, the turnover on the stock exchanges, the amount of market capitalization and the expansion of investor population. In order to tackle effectively the problem associated with the massive growth, the regulatory framework of the capital market was strengthened and streamlined. From a historical perspective, the capital market in india has broadly witnessed four distinct phases of development in the post independence period. These are:-

- Period between 1947 and 1973:- during this period the infrastructure for capital market was strengthened through the establishment of a network of development financial institutions such as IFCI and SIDCs.
- Period between 1973 and 1980:- the second phase heralded with the enactment of the Foreign Exchange Regulation Act (FERA) under which shareholding of foreign firms in joint venture was restricted to 40 percent if the companies wanted to be recognized as Indian companies.
- Period between1980-1992:- the third phase of development of the Indian capital market can be termed as a period of change. The capital market witnessed the emergence of several specialized institutions such as SEBI, CRISIL, CARE and ICRA (credit rating agency), OTCEI, mutual funds and venture capital funds.

- Period after 1992:- this period is popularly known as the liberalization period in India. The Indian capital market has been experiencing a process of structural transformation.

There are several factors which have affected the growth of the Indian capital market in the post reform period like dematerialization but our study is restricted to the liquidity aspect. The condition of market liquidity can be considered as one of the factors affecting the price discover function and market efficiency. A liquid market is defined as a market where a large volume of trades can be accommodated without any significant effects of price. On the other hand, while a liquid market implies the absence of market impacts , market efficiency instead requires continuous and significant price adjustments to market news.

2. Literature Review

The capital market reforms have been introduced by the government with the aim of increasing the growth of Indian capital market and to make its working more transparent. During the liberalization period, the Indian capital market has been experiencing a process of structural transformation. However, the moot question is whether all the efforts are helping in the improvement of efficiency of the Indian capital market.

An important feature of the 1990s was the participation of FIIs in the stock market. FIIs were allowed to participate in the Indian capital market in September 1992. Earlier FIIs could invest in India in Indian securities only through the purchase of GDR, Foreign Currency Convertible Bonds (FCCBs), and foreign currency bonds issued by Indian issuers. To facilitate the operations of the FIIs , SEBI granted permission to foreign brokers to extend assistance to all registered FIIs. In a move expected to improve liquidity in stock options , SEBI in October , 2010 has allowed stock exchanges the flexibility to offer either European style or American style contracts. Earlier only American style contracts were allowed in stock options.

To make an effective estimate of the liquidity position, two major stock exchanges are chosen i.e. NSE and BSE. These are two most prominent stock exchanges of India – accounting for about 99% of the total turnover of all the Indian stock exchanges.

3. Research Methodology and Design

In the present study, simple ratio analysis and graphical analysis tools have been used. Liquidity was measured using two main indicators – 1.) The trading volume 2.) Market capitalization. The change in liquidity over the period was also measured using the traded value ratio and turnover ratio, which are commonly used to measure the liquidity. The two ratios have been calculated as follow:-

- Traded Value Ratio = $\frac{\text{Total value traded}}{\text{GDP}}$

- Turnover Ratio = $\frac{\text{Total value traded}}{\text{Market Capitalization}}$

3.1 **Sample period:** The study have considered data for the period 1993-94 to 2010-2011 so as to do a comprehensive study on the post reform era in the capital market.

3.2 **Data sources:** The data used in the study has been collected from various Economic surveys and the annual reports and publications of NSE and BSE. The data is available on the NSE (www.nseindia.com) and BSE(www.bseindia.com) website and can be verified from there.

3.3 **Objective and Hypothesis:** The study aims at examining whether the liquidity position in the Indian capital market has changed in the post reform era. The study highlighted the trends in liquidity using turnover and market capitalization as variables.

Hypothesis:- The liquidity of the Indian capital market has improved in the post reform period.

4. Findings of the Study

Table 1 provides information on two broad indicators of liquidity – the trading volume and market capitalization.

TABLE 1: INDICATORS OF LIQUIDITY:- Turnover & Market Capitalisation

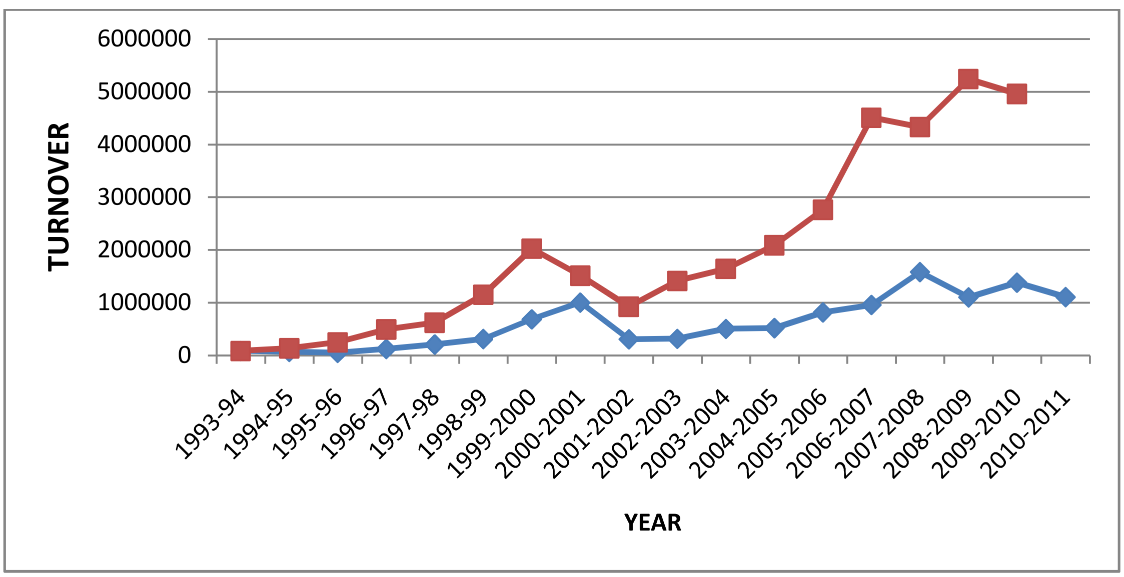
YEAR	TURNOVER		MARKET CAPITALISATION	
	BSE	NSE	BSE	NSE
1993-94	84536	-	368071	-
1994-95	67749	1728	435481	363350
1995-96	50063	68141	526476	401459
1996-97	124284	200000	463915	419367
1997-98	207644	369934	560325	481503
1998-99	311999	414383	545361	491175
1999-2000	685028	839052	912842	1020426
2000-2001	1000032	1339510	571553	657847
2001-2002	307292	513167	612224	636861
2002-2003	314073	617989	572198	537133

2003-2004	502620	1099535	1201207	1120976
2004-2005	518715	1140071	1698428	1585585
2005-2006	816085	1569556	3022191	2813201
2006-2007	956189	1945285	3545041	3367350
2007-2008	1578856	3551038	5138015	4858122
2008-2009	1100074	2752023	3086076	2896194
2009-2010	1378809	4138024	6165620	6009173
2010-2011	1105027	3577412	6839083	6702616

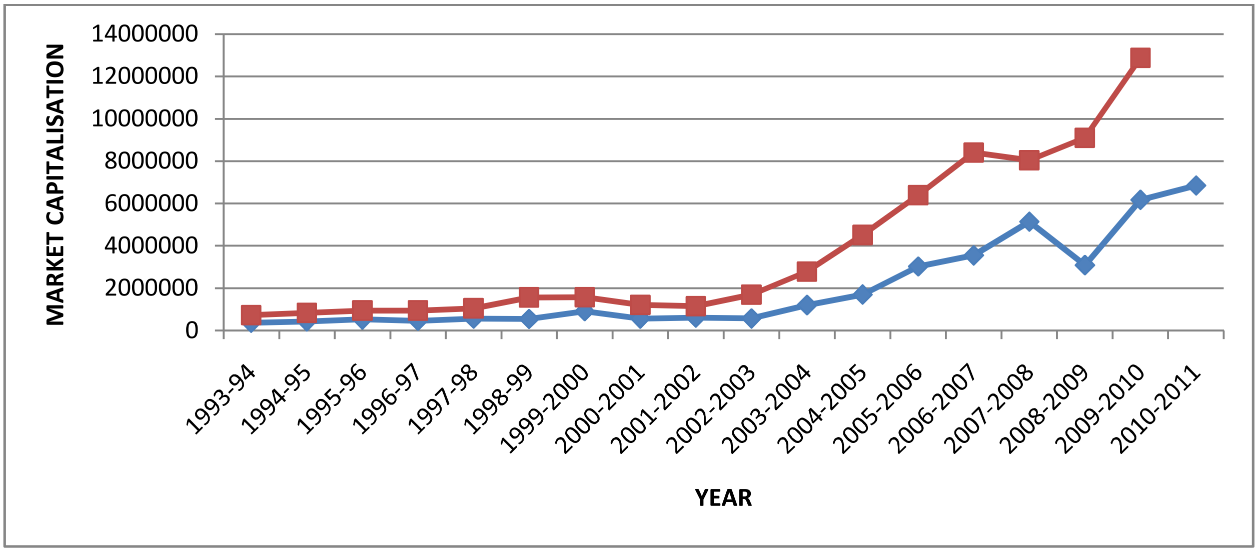
As is evident from the table, the trading volumes in these two years have grown many times over in the post reform period. Though there have been some years which have witnessed a fall in trading volumes but the fact remains that Indian stock market have come a long way during the reform period.

The market capitalization has also increased many folds in these two stock exchanges in the post reform period. The combined market capitalization of BSE and NSE in the year 2003-04 was over Rs. 23, 00,000 crores. The increase in liquidity will become more evident from the following two graphs.

GRAPH – 1: INDICATORS OF LIQUIDITY – TURNOVER (in Crores)



GRAPH – 2: Indicators of Liquidity – Market Capitalisation (In Crores)



Both the graphs are showing an upward trend. There have been many ups and downs – the biggest being on May 17, 2004 (popularly known as the 'Black Monday') when the UPA government came to power. Panic selling on that day reduced Dalal Street to rubble and eroded Rs. 2,00,000 crores in a single day. Sensex shed 842 points intra day and trading had to be suspended twice.

The growth of liquidity is also evident from the two ratios viz., traded value ratio and turnover ratio, given in Table 2 which are commonly used to measure liquidity. An analysis of these two ratios also suggests that liquidity has increased in the Indian capital market in the post reform period.

TABLE 2: Indicators Of Liquidity:- Traded Value & Turnover Ratio

YEAR	TRADED VALUE RATIO (in %)		TURNOVER RATIO (in %)	
	BSE	NSE	BSE	NSE
1993-94	10.33	-	22.97	-
1994-95	7.09	0.18	15.56	0.48
1995-96	4.48	6.09	9.51	16.97
1996-97	9.55	15.36	26.79	47.69
1997-98	14.34	25.55	37.06	76.83
1998-99	18.70	24.83	57.21	84.37
1999-2000	36.87	45.15	75.04	82.23

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2000-2001	49.98	66.95	174.97	203.62
2001-2002	14.13	23.59	50.19	80.58
2002-2003	13.40	26.37	54.89	115.05
2003-2004	19.14	41.87	41.84	98.09
2004-2005	17.46	38.37	30.54	71.90
2005-2006	24.07	46.29	27.00	55.79
2006-2007	24.19	49.21	26.97	57.77
2007-2008	34.46	77.50	30.73	73.09
2008-2009	20.74	51.89	35.65	95.02
2009-2010	22.57	67.74	22.36	68.86
2010-2011	15.24	49.35	16.16	53.37

As indicated by Table 2, the traded value ratio at BSE which was 10.33% in 1993-94, rose to 49.98% in 200-01 , though it witnessed a fall in between. The traded value ratio at NSE has not seen any decline till year 200-01 and went up to as high as 66.95% in the year 200-01. The treand however came to halt for the next two years or so but it again increased to 77.50% in 2007-08. Similar trends have also been observed in turnover ratios which went into three digits in the year 2000-01 for both the stock exchanges, while NSE reported it to be 203.62% , it was 174.97% in BSE. It surely shows exuberant growth as this ratio was as low as 15.56% for BSE and 0.48% for NSE in 1994-95.

5. Conclusions

The results of the test applied on the post reform period performance of the Indian stock market shows that liquidity has increased many folds after the reforms. This success can be attributed to the major measures recommended by several committees appointed in the reform period. Among the major measures were free pricing of the initial public offers, empowerment of the regulators, uniform settlement across exchanges, scrip less trading and many more.

6. References

These included the committee on Organisation and Management of Stock Exchange, 1986 (Chairman: Mr. G.S. Patel), the Working Group on the development of the capital market, 1989 (Chairman: Dr. Abid Hussain), the High Powered Study Group on establishment of new stock exchanges, 1991 (Chairman : Mr. M.J. Pherwani) and the committee on Trading in Public Secor Bonds and Units of Mutual Funds, 1992 (Chairman : Mr. S.S. Nadkarni).

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