



New economic reforms and Indian capital market: An analytical study

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Abstract

The inquiry regarding the effect of new changes on Indian Capital Market, which is one of the essential parts of Indian economy, is as yet unreciprocated. With a specific end goal to study and access the effect of monetary changes on Indian Capital Market, the analysts have considered and dissected some essential parts identifying with the Indian Capital Market. Amid the examination, the auxiliary information have been gathered from different authority site like SEBI, RBI, BSE, NSE and numerous others too. With a view to discover the criticalness of monetary changes on Indian capital market, different factual devices have been utilized, and for testing speculation, the analysts have connected Single Factor ANOVA. It has been recovered amid the examination that there is noteworthy effect of new financial changes on Indian Capital Market.

Keywords: economic reforms, FIIs, foreign exchange reserves, BSE, NSE

Introduction

In India the act of financial reconstruction was started with the point of quickening the monetary development and destroying the destitution. The procedure of monetary progression in India can be followed back to the late 1970s. Be that as it may, the change procedure started vigorously just in July 1991. It was just in 1991 that the Government flagged a foundational move to a more open economy with more noteworthy dependence upon showcase powers, a bigger part for the private segment including outside venture, and a streamlining of the part of Government. The crucial purpose of the changes was progression of the economy, giving more parts to the private division and opening up of the economy to rivalry. New modern approach of 1991 is the core of the new monetary changes. The theory of the new financial arrangement was upgrading rivalry in light of more market introduction. Amid the last a quarter century, the monetary change has delivered noteworthy effect on the economy—for the most part positive. The Indian capital market has additionally watched significant changes in the time of 1990s and from that point. It is very nearly the development. Administration of India and SEBI has taken various measures so as to enhance the working of the Indian stock trades and to make it more dynamic and lively. This exploration examine is an exertion by the analyst to break down the effect of monetary changes on the Capital Market of India with the assistance of different parameters.

Review of Literature

Avadhani V.A. (2002) ^[1] worried on effect of advancement on

rise of capital markets in India. The money related division changes likewise drove the advancement of the capital market in India. Starting with the depreciation of rupee by around 20% in July, 1991, mechanical approach was completely reshaped to forgo permitting of all ventures aside from 18 planned modern gatherings. Further, expulsions of MRTP Act, rise of FEMA rather than FERA, were a portion of alternate changes. The stock trade observation framework and their exchanging control framework go for forcing edges, work the circuit breakers, force restricts on agents in regard of any contents or aggregate for all contents and change over exchange any scrip to moving settlement or for spot exchanging and money conveyance and so forth are other real changes, as described by the analyst.

Gaba Prakash (2003) ^[2] endeavored to put before the importance of NSE in the Indian markets. Right from the innovative trading practices to investor awareness campaigns, NSE has put its mark in the development of the market. The arrival of NSE has its own contribution to the growth of the investors interested in capital markets. The dramatic rise of NSE is being attributed to its aggressive positioning as an exchange for the next revolution. Right from its inception, NSE has been undertaking several investor awareness campaigns to enhance the general understanding of the investors.

Objective of the Study

- To analyze the impact of new economic reforms on Indian Capital Market

¹ Avadhani, V. A. (2002). Investment Management. Himalaya Publishing House.

² Gaba, P. (2004). Derivative Market- New Opportunities. Indian Financial Markets: An Introduction, ICAI University Press, 149-160.

Research Methodology

This study is micro in nature and is based on the secondary data gathered from official websites of various departments of Govt. of India and various stock exchanges especially Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). The study has used various statistical tools such as, Mean, Standard Deviation (SD), Average Annual Growth

Rate (AAGR), Compound Annual Growth Rate (CAGR) and for the purpose of hypothesis testing ANOVA

Hypothesis of the Study

H₀₁: There is no significant impact of Economic Reforms on the Indian Capital Market.

Foreign Exchange Reserves

Table 1: Foreign Exchange Reserves during Pre-Reforms and Post-Reforms Period (Decade wise analysis) (US \$ million)

Pre Reform Period			Post Reform Period								
1989-90			1990-91 to 1999-2000			2000-01 to 2009-10			2010-11 to 2014-15		
Year	FER	GR	Year	FER	GR	Year	FER	GR	Year	FER	GR
1980-81	6823	-7.31	1990-91	5834	47.25	2000-01	42281	11.16	2010-11	304818	9.23
1981-82	4390	-35.66	1991-92	9220	58.04	2001-02	54106	27.97	2011-12	294397	-3.42
1982-83	4896	11.53	1992-93	9832	6.64	2002-03	76100	40.65	2012-13	292047	-0.8
1983-84	5649	15.38	1993-94	19254	95.83	2003-04	112959	48.43	2013-14	304224	4.17
1984-85	5952	5.36	1994-95	25186	30.81	2004-05	141514	25.28	2014-15	320649	5.4
1985-86	6520	9.54	1995-96	21687	-13.89	2005-06	151622	7.14			
1986-87	6574	0.83	1996-97	26423	21.84	2006-07	199179	31.37			
1987-88	6223	-5.34	1997-98	29367	11.14	2007-08	309723	55.5			
1988-89	4802	-22.83	1998-99	32490	10.63	2008-09	251986	-18.64			
1989-90	3962	-17.49	1999-00	38036	17.07	2009-10	279057	10.74			
Average	5579.1	-4.6		21732.9	28.54		161853	23.96		303227	2.92
Std. Dev.	1004.46			10702.2			95037.4			11291.7	
CAGR	-5.29			20.62			20.77			1.02	

While examining the above table dealing with foreign exchange reserves, it is determined that during pre-reforms period the AAGR is -4.60% and CAGR is -5.29%, which indicates a significant decrease in the amount of absolute figures. The SD during this period is 1004.46 million US \$, signifying more deviation from the average. During first decade after reforms, a significant growth is observed as AAGR has increased up to 28.54% and CAGR up to 20.62%, but the SD deviation has also increased from what it was during last decade of pre-reforms period figuring 10702.20 million US \$, indicating that data is spread more wide from average than that of previous decade.

During second decade after reforms, AAGR has decreased down to 23.96%, resulting out of a significant decline in the

amount of absolute figures during 2008-09, due to which Growth Rate (GR) has dropped down to -18.64%. The CAGR has also reduced to 20.77%, not significantly but has. The SD during this period is 95037.38 million US \$, which is higher than preceding years, indicating that the data is widely spread from the average. While analyzing AAGR and CAGR during the current decade, it is observed from the data that the former is significantly decreased down to 2.92%, as is case of later depicting 1.02%, keeping the fact in view that this decade is still in progress and this information is based on first five years (2010-11 to 2014-15). The SD during this period is 11291 million US \$, depicting a low range of deviation from average as compared to preceding years.

Bonds issued by PSUs during Pre-Reforms and Post-Reforms Period

Table 2: Bonds issued by PSUs during Pre-Reforms and Post-Reforms Period (Decade wise analysis in billions)

1986-87 to 1995-96			1996-97 to 2005-06			2006-07 to 2015-16		
Year	Total	Growth	Year	Total	Growth	Year	Total	Growth
(1)	Bonds	Rate (%)	(2)	Bonds	Rate (%)	(3)	Bonds	Rate (%)
1986-87	16.74	372.94	1996-97	33.94	48.15	2006-07	103.25	113.09
1987-88	23.34	39.42	1997-98	29.83	-12.13	2007-08	134.04	29.82
1988-89	28.68	22.88	1998-99	43.63	46.28	2008-09	205.46	53.28
1989-90	42.29	47.44	1999-00	86.97	99.34	2009-10	484.09	135.62
1990-91	56.63	33.91	2000-01	166.32	91.24	2010-11	604.33	24.84
1991-92	57.11	0.84	2001-02	144.36	-13.20	2011-12	880.65	45.72
1992-93	10.63	-81.39	2002-03	75.29	-47.84	2012-13	527.17	-40.14
1993-94	55.86	425.73	2003-04	54.43	-27.70	2013-14	508.65	-3.51
1994-95	30.70	-45.04	2004-05	75.91	39.45	2014-15	372.83	-26.70
1995-96	22.91	-25.37	2005-06	48.46	-36.16	2015-16	525.05	40.83
Average	34.49	79.14		75.91	18.74		434.55	37.28
Stand. Dev.	17.35			46.10			237.79	
CAGR	3.19			3.62			17.66	

While analyzing the above table, it is revealed that during the period (1986-87 to 1995-96), the AAGR is 79.14%, indicating a significant increase in the amount of absolute figures. The CAGR during this period is 3.18% and SD is 17.35 billion, depicting deviation from the average. During next ten years AAGR has significantly decreased down to 18.74%, indicating very low increase in the amount of absolute figures, however CAGR has increased up to 3.62%. While examining the bonds issued during (2006-07 to 2015-16), it is ascertained

that AAGR has increased up to 37.28%, indicating a significant increase in the amount of absolute figures, the CAGR has also increased up to 17.66% during this period. The SD during this period is 237.79 billion, signifying more deviation from the average. It is revealed that during last decade, there is significant increase in the amount of absolute figures of bonds issued by PSUs as depicted by AAGR (37.28 %), as compared to last decade.

Table 3: Market Capitalization-BSE during Pre-Reforms and Post-Reforms Period (in millions)

Year	MC BSE	GR	Year	MC BSE	GR	Year	MC BSE	GR	YEAR	MC BSE	GR
1980-81	NA	NA	1990-91	908.36	39	2000-01	5715.53	-37	2010-11	68390.8	11
1981-82	NA	NA	1991-92	3233.63	256	2001-02	6122.24	7	2011-12	62149.1	-9
1982-83	97.69	NA	1992-93	1881.46	-42	2002-03	5721.98	-7	2012-13	63878.9	3
1983-84	102.19	5	1993-94	3680.71	96	2003-04	12012.1	110	2013-14	74153	16
1984-85	203.78	99	1994-95	4354.81	18	2004-05	16984.3	41	2014-15	101493	37
1985-86	216.36	6	1995-96	5264.76	21	2005-06	30221.9	78	2015-16	94753.3	-7
1986-87	259.37	20	1996-97	4639.15	-12	2006-07	35450.4	17	2016-17 P	110994	17
1987-88	455.19	75	1997-98	5603.25	21	2007-08	51380.2	45			
1988-89	545.6	20	1998-99	5453.61	-3	2008-09	30860.8	-40			
1989-90	652.06	20	1999-00	9128.42	67	2009-10	61656.2	100			
Average	317	35		4415	46		25613	31		82259	10
Std.Dev.	208.44			2264.05			19831.3			19799.1	
CAGR	26.78			25.95			26.85			7.16	

While examining the above table, it is ascertained that during post-reforms period, the Market Capitalization –BSE is continuously increased during (1980-81 to 1989-90), as depicted from AAGR 35% and CAGR 26.78%. The SD during this period is 208.44 billion, indicating the quantum of deviation from the average amount. During the first ten years after economic reforms, the absolute amount of market capitalization is significantly increased, particularly during 1991-92 amounting 3233.63 billion which is 256% more than what it was during 1990-91, reflecting the impact of new economic reforms. After 1991-92, this amount is dropped down to 1881.49 billion during (1992-93) resulting decrease

in GR down to -42%. The AAGR during this period is 46%, which is 11% more than previous decade. While assessing the second decade after reforms, the AAGR is decreased down to 31%, indicating less increase in the amount of absolute figures. The CAGR and SD during this period is 26.85% and 19831.25 billion respectively. The AAGR during the current decade, although in progress has decreased down to 10%, the lowest among all the decades under study and CAGR has also decreased down to 7.16%, recording the lowest rate as well. The SD during third decade is 19799.16 billion, indicating more deviation from the average.

Table 4: Market Capitalization - NSE during Post-Reforms Period (Decade wise analysis) Post-Reforms Period (in Billion)

1994-95 to 2003-04			2004-05 to 2013-14			2014-15 to 2016-17		
Year	MC BSE	GR	Year	MC BSE	GR	Year	MC BSE	GR
1994-95	3633.50	NA	2004-05	15855.85	41.45	2014-15	99301.22	36.45
1995-96	4014.59	10.49	2005-06	28132.01	77.42	2015-16	93104.71	-6.24
1996-97	4193.67	4.46	2006-07	33673.50	19.70	2016-17	108660.63	16.71
1997-98	4815.03	14.82	2007-08	48581.22	44.27			
1998-99	4911.75	2.01	2008-09	28961.94	-40.38			
1999-00	10204.26	107.75	2009-10	60091.73	107.49			
2000-01	6578.47	-35.53	2010-11	67026.16	11.54			
2001-02	6368.61	-3.19	2011-12	60965.18	-9.04			
2002-03	5371.33	-15.66	2012-13	62390.35	2.34			
2003-04	11209.76	108.70	2013-14	72777.20	16.65			
Average	6130.10	21.54		47845.51	27.14		100355.52	15.64
Std. Dev.	2601.44			19700.74			7831.37	
CAGR	11.93			16.46			3.05	

During the analysis of above table it is revealed that the market Capitalization–NSE is continuously but not significantly increased during the period (1994-95 to 2003-04), as depicted from AAGR and CAGR i.e. 21.54% and 11.93%. The SD during this period is 2601.44 billion,

indicating the amount of deviation from the average. The AAGR and CAGR during the period (2004-05 to 2013-04) are increased up to 27.14% and 16.46% respectively, as compared to previous decade. The SD deviation during this period is 19700.74 billion, indicating less deviation from what it was

during the previous decade. During the current in progress, the AAGR and CAGR have dropped down to 15.64% and 3.05%, than what it was during preceding years. The SD during this period is 7831.37 billion, indicating deviation from the

average.

H₀₁: There is no significant impact of Economic Reforms on the Indian Capital Market

Table 5

Decade Wise Analysis	Groups	Count	Sum	Average	Variance
	1980-81 to 1989-1990	10	2532.24	253.22	51603.61
	1990-91 to 1999-2000	10	44148.16	4414.82	5125900.06
	2000-01 to 2009-2010	10	256125.53	25612.55	393278419.49

Table 6: ANOVA

Source of Variation	SS	df	MS	F	P value	F crit
Between Groups	3699194897.42	2	1849597448.71	13.93	0.00	3.35
Within Groups	3586103308.44	27	132818641.05			
Total	7285298205.86	29				

Form the above description of various tables, it is depicted that new economic reforms has played an important role in the development of Indian Capital Market. Due to these reforms, the capital market of India has developed a lot by making it possible to compete with international capital markets. SEBI, the regulator of Indian Capital Market has brought greater transparency in the affairs of organizations and stock exchanges, though not to the optimum mark yet. However, all the variables used for study have shown growth with satisfactory speed. Although this growth has declined because of global meltdown in the year 2008-09, during the second decade after reforms, but after this jolt of recession, Indian Capital Market has well coped, and has again put itself on progressive track. This description is supported by hypothesis as well, as it is clear that calculated value of F is more than critical value, i.e. $F = 13.93 > F_{crit} = 3.35$, and $p\text{-value} = 0.00$. Hence it is worth concluding that null hypothesis (H_0) is rejected and alternate hypothesis (H_a) is accepted, revealing that there is significant impact of new economic reforms on Indian Capital Market. It is very apparent that the Capital Market encourages economic growth. The various institutions which operate in the Capital Market give quantitative and qualitative direction to the flow of funds and bring realistic allocation of resources. They do so by converting financial assets into productive physical assets. This leads to the development of commerce and industry through the private and public sector, thereby inducing economic growth.

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