

State of the Indian Securities Market: Evidence from the Flow of Funds Accounts of the Indian Economy – Venkateswaran R.*

“As for securities and the stock market, are they finally good or bad? Are they dangerous? Are they things that only capitalism has or can socialism also make use of them? To decide whether they can be used, we must experiment first. If we think they work, if after a year or two we think they are good, then we can expand them. If problems arise, we can close them down, immediately and completely. And even if we close them down, we can do so quickly or slowly, or we could even leave a little tail.”

-- Deng Xiaoping (1992)

I. Introduction

India's financial markets have evolved and undergone structural change during the course of the economic reforms. The Indian economy shifted to higher growth trajectories during the same period. The Indian securities market proved the harbinger of the modern Indian financial markets. The rapid strides made (of course, some dictated by time and circumstances) have helped the Indian securities market emerge as a benchmark for the rest of the world.

The Securities and Exchange Board of India (SEBI) was initially constituted as a non-statutory body on April 12, 1988 through an Extraordinary Notification of the Government of India *for dealing with all matters relating to development and regulation of securities market and investor protection and to advise the Government on all these matters*. An Ordinance promulgated by His Excellency the President of India on January 30, 1992 conferred statutory status and powers on SEBI. SEBI was set up as a statutory body on February 21, 1992. The Ordinance was replaced by an Act of the Parliament on April 04, 1992. The preamble to the SEBI Act, 1992 (Act No. 15 of 1992) states that SEBI has been established *to protect the interests of investors in securities and to promote the development of, and to regulate, the securities market and for matters connected therewith or incidental thereto*.

This Article seeks to trace the development of the Indian securities market during the period 1990 - 2008, as is evident from the flow of funds accounts. It is organized as follows. Section II traces the theoretical foundation of the flow of funds accounts, while the various financial development ratios have been defined in Section III. Section IV introduces the flow of funds accounts of the Indian economy. The trends in India's financial development ratios are presented in Section V. Section VI concludes.

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II. Literature Review

The extant literature describes the modern flow of funds accounts as representing a systematic record of net transactions involving financial instruments during a given period of time. The flow of funds accounts are a branch of social accounting of a country. J.R. Hicks had pointed out the inadequacy of national income and expenditure accounts to judge the performance of an economy and introduced the concept of national balance sheets. The modern flow of funds accounts are based on M A Copeland's pioneering work titled "*A Study of Moneyflows in the United States*" (1952). A well established statistical framework for presenting the flow of funds accounts is provided by the United Nations System of National Accounts.

III. An Introduction to the Flow of Funds Accounts

All the economic transactions in a monetized economy involve the exchange of financial claims among the participants. The flow of funds accounts serve as a useful analytical tool in many respects: identification of individual sectors having financial surpluses or deficits, determination of the causes of these surpluses/deficits, the financing of the deficits and, thereby, the inter-sectoral linkages, tracing the growth of important economic institutions, such as the mutual funds, identification of the pattern of financing of the capital stocks, assessment of the impact of monetary policy actions, to name a few. In this Article, we restrict ourselves to profiling the Indian securities market, as seen through the financial development ratios derived from the flow of funds accounts of the Indian economy.

Financial claims issued by the economic agents are classified as primary issues and secondary issues. Primary issues are the claims issued by non-financial sector or the ultimate borrowers. Claims issued by the financial intermediaries, on the other hand, are called secondary issues. The flow of funds accounts provide data on financial claims which can be further analysed to assess the depth and maturity of the financial markets.

The finance ratio is the ratio of total financial claims (or total financial issues) to national income. This is an indicator of the rate of financial development in relation to economic growth. The financial interrelations ratio is the ratio of total financial issues to net domestic capital formation. This measure reflects the relation between financial development and the growth of physical investment.

The new issue ratio is the ratio of primary issues to net domestic capital formation. This ratio is indicative of the extent of dependence of the non-financial sector on its own funds in financing the capital formation. The intermediation ratio is the ratio between the financial instruments issued by the financial institutions (i.e., secondary issues) and the financial instruments issued by the non-financial sector (i.e., primary issues). This ratio reflects the importance of intermediation by banks and other financial institutions in financing real activities.

IV. Flow of Funds Accounts of the Indian Economy

According to the Reserve Bank of India (RBI), flow of funds accounts is a set of accounts which depicts the inter-sectoral flow of funds among major sectors of the economy 'from whom to whom' basis. The RBI has been publishing the flow of funds accounts of the country since December 1964. The data for India, at present, pertain to one year, the financial year. The published accounts pertaining to the period 1951-52 to 2007-08 are available in the several issues of the RBI's monthly Bulletin.

In the Indian economy, the institutional units, i.e., the economic entities capable of engaging in transactions with other units, are grouped into six categories, viz., (i) banking sector; (ii) other financial institutions; (iii) private corporate business; (iv) government sector; (v) rest of the world; and (vi) household sector. Financial assets and liabilities are classified under ten major categories of financial instruments, viz., (i) currency; (ii) deposits; (iii) investments; (iv) loans and advances; (v) small savings; (vi) life funds; (vii) provident funds; (viii) trade debts; (ix) foreign claims not elsewhere classified; and (x) other claims not elsewhere classified.

This Article seeks to trace the development of the Indian securities market during the 1990 - 2008, as is evident from the flow of funds accounts. Wherever the reporting period has overlapped, we have taken into account the latest data. The data on the indicators of India's financial development have been presented in Table I and Chart I.

V. India's Financial Development Ratios: 1990 - 91 to 2007 - 08

Over the period, in consonance with the development of the financial markets, total financial issues rose phenomenally. While the total financial issues were only Rs. 1,67,524 crore in 1990 - 91 and Rs. 7,79,226 crore in 2000 - 01, the total financial issues amounted to Rs. 29,17,987 crore in 2007 - 08. During the decade 1997 - 98 to 2007 - 08, the total financial issues registered a CAGR of 17.08%. The secondary issues and primary issues registered comparable CAGRs of 18.24% and 16.25% respectively during the same period. Similarly, during the five years between 2002 - 03 and 2007 - 08, total financial issues registered a CAGR of 23.61%. The secondary issues and primary issues registered CAGRs of 25.55% and 22.20% respectively during the same period.

The finance ratio exhibited an increasing trend during this period and stood at 0.77 during 2007 - 08. This once again reaffirms the fact that the growth in the total financial issues have at least kept pace with the economic growth during the period.

The financial interrelations ratio exhibited year-to-year fluctuations during the period. The emergence of kinks in the financial interrelations ratio is attributed to the acceleration/deceleration in the investment activity or the net domestic capital formation. The financial interrelations ratio rose from 1.72 during 2004 - 05 to 2.18 during 2007 - 08. It may be inferred that there is a higher level of participation of the financial system in the domestic capital formation process.

The new issue ratio ranged from 1.01 to 2.23 during the period. The sharp fluctuations in the new issue ratio are also attributed to the acceleration/deceleration in the investment activity or the net domestic capital formation. During 2006 - 07 and 2007 - 08, the new issue ratio displayed an increasing trend. If this trend is sustained in the subsequent years, we may infer a greater role of financial disintermediation in the domestic capital formation process.

The intermediation ratio remained between 0.46 and 0.90 during the period. The intermediation ratio remaining below 1.00 points to the lower involvement of the financial sector in the secondary issues as compared to the primary issues.

The trends in all the financial development ratios, thus, reflect the gradualist approach in the economic reforms that India embraced. Looking at from the securities market angle, the growth in the volume of financial issues would have definitely contributed to growth in market capitalization, growth in investor population, development of financial institutions and market participants, lower weighted average cost of capital for the India Inc., more business and increased revenues and profits for the market intermediaries, product innovation, greater stock market liquidity and lower market impact costs.

Conclusions

It is evident that despite the short term oscillations, various financial development ratios have been on an upward trajectory over the medium term and the long term. The developments in the financial sector have a significant bearing on the real sector. The experience during the current global financial crisis has underscored the same. The financial development indicators have, thus, emphasized the need for carrying forward the comprehensive reforms in the economy, covering both the real and the financial sectors.

It is widely recognized that the development of the securities market brings in a host of benefits, including the creation of more complete financial markets, facilitating financial disintermediation and risk diversification, financing of the government deficit, smooth conduct of the monetary policy, sterilization of capital inflows and product innovation. Further reforming the securities market in India will, thus, usher in greater benefits.

The High Level Committee on Savings and Investment (2009) (HLC) has identified the new challenges in compiling the flow of funds accounts in the context of the widening and deepening of the Indian financial system during the last two decades. The recommendations of the HLC, once implemented, will remove the data gaps and broaden the coverage of the flow of funds accounts. SEBI, among other institutions, has also been assigned a role to gather the relevant information from the regulated entities for incorporation in the flow of funds accounts.

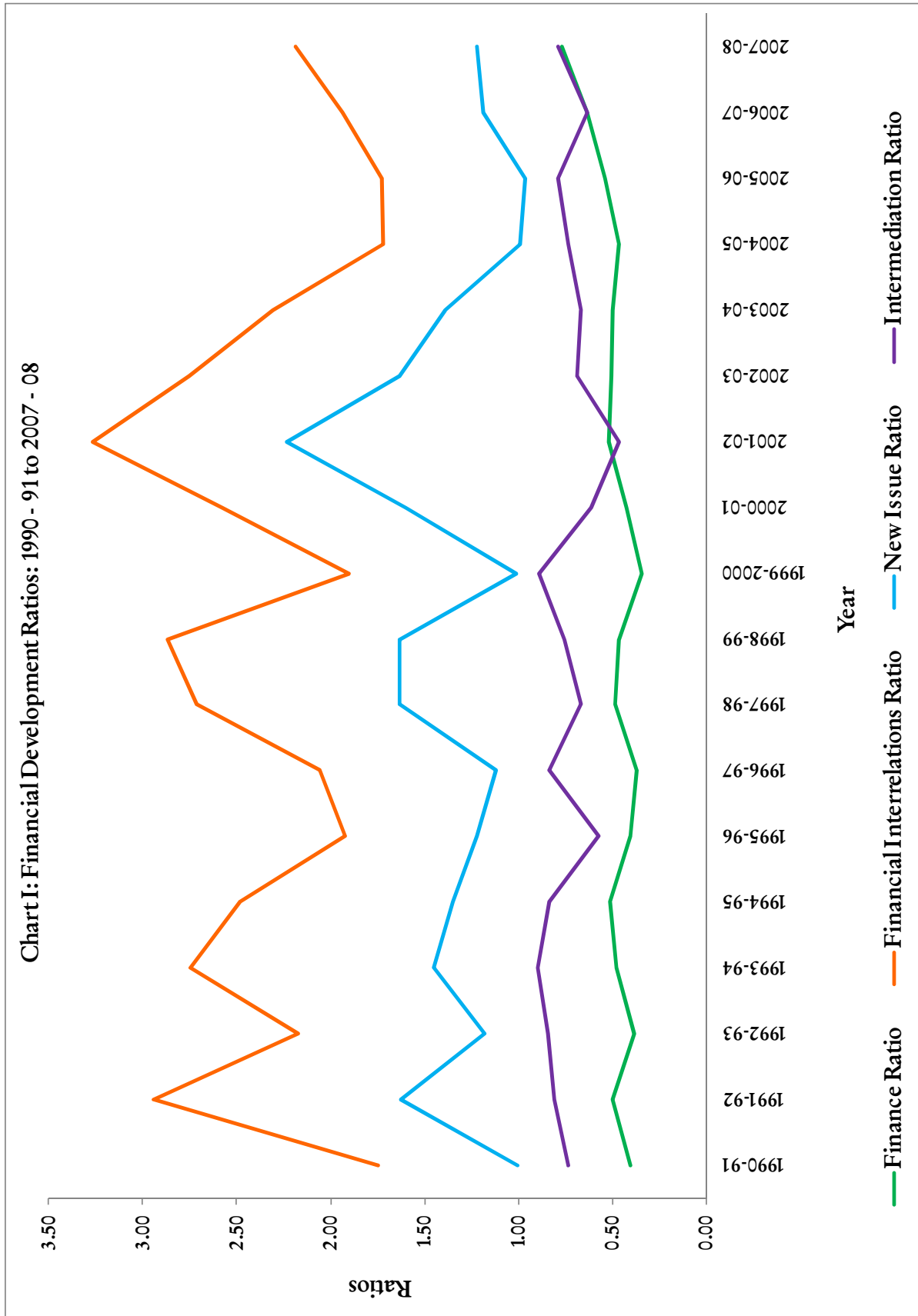
Table I: Indicators of India's Financial Development

	(Rs. crore)									
	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	
I. Secondary Issues	71,016	106,386	95,790	142,897	186,675	140,337	185,638	240,884	277,498	
II. Primary Issues	96,508	131,918	113,990	159,200	223,512	246,614	222,351	362,009	367,061	
II.1 Domestic Sectors	103,558	124,666	117,511	140,079	208,448	239,849	193,502	342,359	350,075	
II.2 Rest of the World	-7,050	7,252	-3,521	19,121	15,064	6,765	28,849	19,650	16,986	
III. Total Issues (I + II)	167,524	238,304	209,780	302,097	410,187	386,951	407,989	602,893	644,559	
IV. Net Domestic Capital Formation	96,000	81,034	96,603	109,946	162,341	197,127	198,627	238,099	241,820	
V. National Income	418,074	479,612	546,023	637,996	815,142	955,150	1,115,449	1,241,019	1,434,826	
VI. Finance Ratio	0.40	0.50	0.38	0.47	0.51	0.41	0.37	0.49	0.46	
VII. Financial Inter-relationships Ratio	1.75	2.94	2.17	2.75	2.48	1.92	2.06	2.71	2.87	
VIII. New Issue Ratio	1.01	1.63	1.18	1.45	1.35	1.22	1.12	1.63	1.63	
IX. Intermediation Ratio	0.74	0.81	0.84	0.90	0.84	0.57	0.83	0.67	0.76	

Source: Reserve Bank of India

Table I: Indicators of India's Financial Development (Concluded)

	(Rs. crore)										
	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08		
I. Secondary Issues	273,759	294,765	302,636	412,295	441,713	495,885	678,092	812,299	1,286,082		
II. Primary Issues	307,956	484,461	652,984	598,771	665,771	677,199	862,361	1,286,476	1,631,905		
II.1 Domestic Sectors	293,354	434,573	590,853	535,123	524,011	552,807	760,250	1,056,715	1,252,510		
II.2 Rest of the World	14,602	49,888	62,131	63,648	141,760	124,392	102,111	229,761	379,395		
III. Total Issues (I + II)	581,715	779,226	955,620	1,011,067	1,107,484	1,173,084	1,540,452	2,098,776	2,917,987		
IV. Net Domestic Capital Formation	320,651	303,677	292,359	367,528	479,277	682,171	892,318	1,084,768	1,336,064		
V. National Income	1,585,502	1,696,387	1,849,361	1,994,217	2,237,414	2,526,285	2,875,958	3,312,569	3,787,596		
VI. Finance Ratio	0.34	0.42	0.52	0.51	0.49	0.46	0.54	0.63	0.77		
VII. Financial Inter- relations Ratio	1.90	2.58	3.27	2.75	2.31	1.72	1.73	1.93	2.18		
VIII. New Issue Ratio	1.01	1.60	2.23	1.63	1.39	0.99	0.97	1.19	1.22		
IX. Intermediation Ratio	0.89	0.61	0.46	0.69	0.66	0.73	0.79	0.63	0.79		



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