Chapter 4
Trends of FDI inflow and macroeconomic variables

4.0 Introduction

The Indian economy faced many uncertainties in 1990's that were the impact of the political situation in our country. The persistent fiscal imbalances were accentuated by the Gulf crisis which intensified strains on an already adverse balance of payment position[i]. International Monetary Fund required India to undertake a series of structural economic reform. As a result government started breakthrough reforms. It is a measure of the inherent strength of our economy that it withstood the effects of these shocks. India changed her direction in 1990s. India had initiated broader policies of reforms designed to increase her integration with the global economy[ii]. In 1991, New Industrial policy announced. A major departure with respect to FDI policy with the abolition of industrial licensing system except where it is required for strategic or environment grounds which have been discussed in first chapter in post liberalization regime.

4.1 Factors affecting the FDI inflow and Macroeconomic Variables in India

Broadly, the factors affecting the FDI inflow in any nation can be split into two categories.[iii] First global push factors and, second country specific pull factors discussed below :

4.1.0 Global FDI Push Factors

Sr. No.	Global FDI Push Factors
1	**Growth in capital exporting countries:** The expected effect of economic growth of developed economies on foreign direct investment flows to emerging market economies is somewhat ambiguous, and income growth in developed economies provides an environment that is conducive to expansions into emerging markets and associated with easier financing conditions. It may also make investment in an economy relatively more advantages[iv].
2	**Global Liquidity:** The effects of credit conditions in advanced countries on FDI flows have focused by different economies. Lower interest rates are possibly expected to increase FDI flows. It is making firms to finance projects easily[v].
3	**Global risk environment:** The international risk appetite is also mentioned in the literature as a common push factor which affects FDI flows to emerging market economies. VIX index which is used to capture the role of global risk on FDI inflow[vi].

4.1.1 Country Specific Pull Factors

Sr. No.	Country Specific Pull Factors
1	**Size of an economy market:** The size of the economy market in the form of consumption plays an important role in attracting horizontal FDI. Investor will tend to invest in the host country to hold a share of the domestic market. Apart from size of market capital to labour ratio and productivity of capital are also influenced on FDI inflow[vii].

2	**Education:** Level of education in country also affects the inflow of FDI higher level of education provides the skilled labour to investors. Dunning (1993) argues, education and skill level of labour can influence both the volume of FDI. The activities that the MNC undertakes in an economy before investment[viii].
3	**Location:** This is also a factor for foreign direct investment. If the location is near to market and well developed infrastructure than it saves the transportation cost (Dunning, 1977 and 1988).
4	**Political Environment:** Impact on Foreign Direct Investment in a country is involved with the legal frame, political conditions and institutional environment. Law and order of legal frame, contract enforcement, and to protect the rights of investor are likely to be most important for an investor's decision reading, bringing capital into a foreign economy. Political instability and internal or external conflicts also play a role since they affect economic uncertainty. Safety of invested capital and economic prospects of the host economy is also important[ix]. Government stability and bureaucracy quality is also needed for host country to attract FDI. Domestic conflicts i.e. General Labour Strikes, Major Government Crises, Revolutions, and Anti Government Demonstrations are also factors which are highly sensitive for Foreign Direct Investment.
5	**Macroeconomic environment:** An important task in is the effects of macroeconomic variables on foreign direct investment is the feedback from FDI to macroeconomic variables. Those are economic growth, inflation rate, trade openness and exchange rate.

6	**Economic Policies:** This is also a challenge for FDI because investors always follow the favorable economic policies for trade, exchange rate and many other favorable economic policies. Limitation in capital account transactions linked with FDI and corporate tax rates (Keshava S.R., 2008).

Many studies have came on the simultaneously directions that the global push factors are important which explaining capital flows to emerging market economies. The role of domestic policies plays an important role to control the global push factors and promote favorable FDI policies. The role of global economic conditions has also gained importance. Because the recent global economic crisis subsequent declines FDI inflows.

4.2 Recent trends in inflow of FDI in India

Trends of FDI inflow is explained by growth rate (year on year) in table no.4.1 and behavior of FDI inflow is shown in figure 4.1.It shows that the higher growth rate of FDIINFL recorded in 1992-93, due to liberalization policy initiated by GOI in 1991. A negligible decline in the inflow is recorded in FDI during 1998-99 and 1999-2000. FDI inflow increased in 2000-2001 due to rupee depreciation along with further trade liberalizations, tariff reductions, and more openness to foreign investment in export oriented sector. Negligible decline in FDI inflow again recorded in 2002-03 due to poor performance in agricultural and terrorist attack in USA in 2001 and geo political conditions have been highly volatile with the standoff in Iraq. The pickup in FDI inflow recorded in 2006-07 due to a new industrial resurgence, modest inflation in spite of spiraling global crude prices[x]. Global uncertainty in advanced countries in 2008-09 also effect on FDI inflow from developed nations. In 2012-13, FDI inflow recorded a negative growth rate due to inflationary tendencies. Average of FDIINFL has been 592.08 Billion rupee. The value of standard

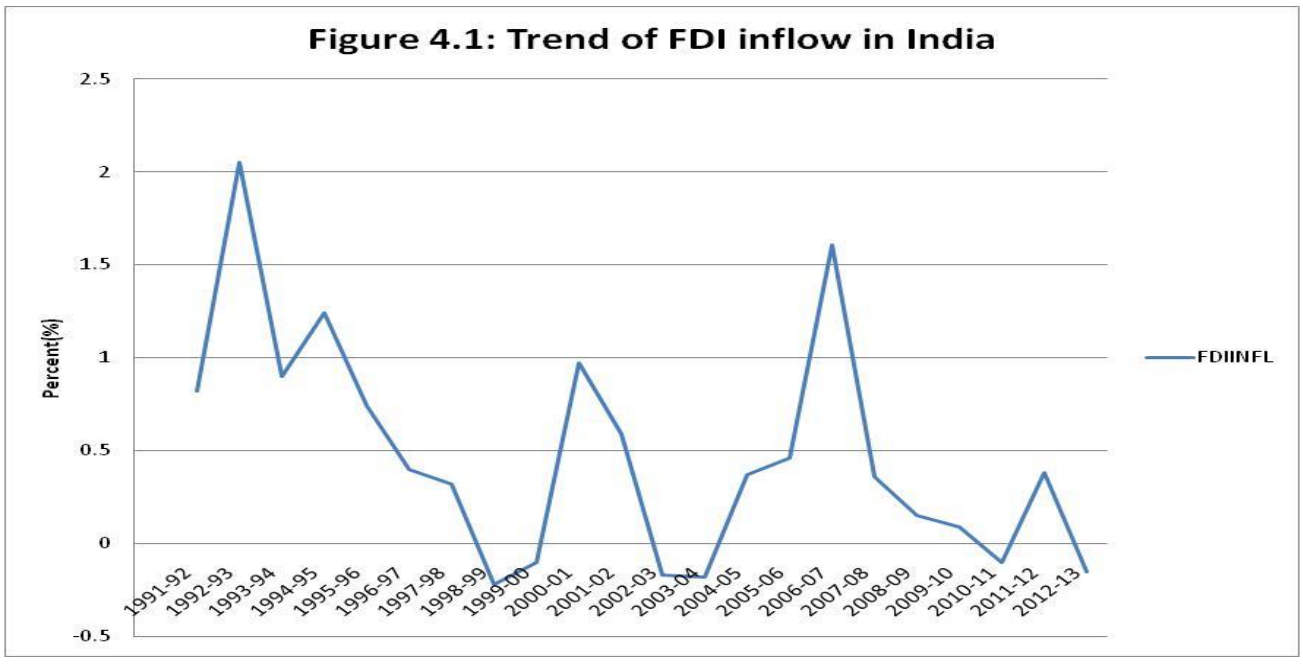
deviation of FDIINFL is 737.92 with the value of C .V. 1.25 (given in Appendix 4 with absolute figure of FDI inflow).

Table 4.1: FDI inflow in India(Growth Rate YoY)

Year	FDIINFL	Year	FDIINFL
1991-92	0.82	2002-03	-0.17
1992-93	2.05	2003-04	-0.18
1993-94	0.9	2004-05	0.37
1994-95	1.24	2005-06	0.46
1995-96	0.74	2006-07	1.61
1996-97	0.4	2007-08	0.36
1997-98	0.32	2008-09	0.15
1998-99	-0.22	2009-10	0.09
1999-00	-0.1	2010-11	-0.1
2000-01	0.97	2011-12	0.38
2001-02	0.59	2012-13	-0.15

Calculated by author

Sources: RBI, Handbook on Indian Economy



4.3 FDI inflow in India: Country wise total from 1992-93 to 2013-14

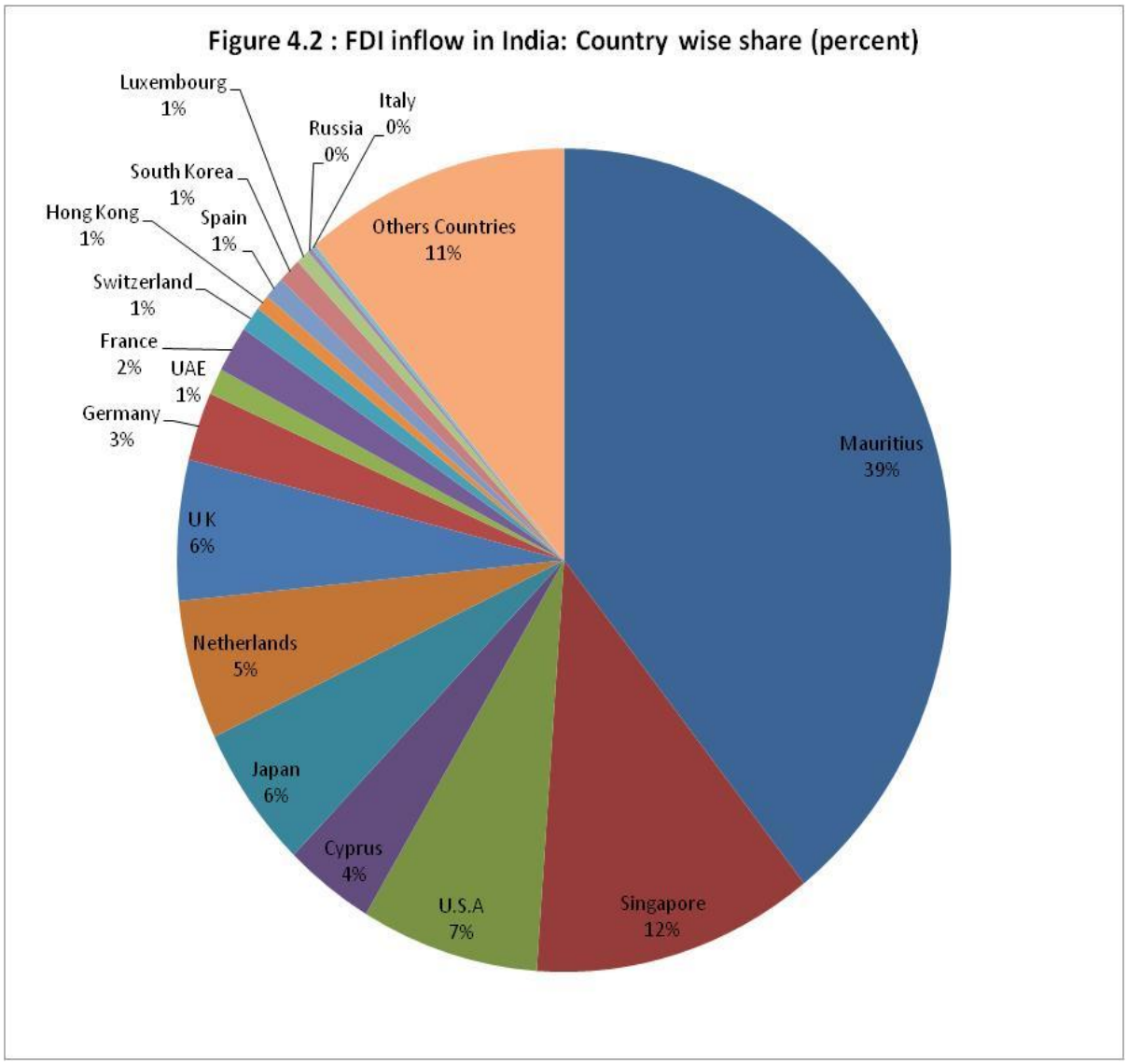
Since 1991, the FDI investors have been continuously increasing. There were only eight nations which invested in India during 1991 and which have increased by number fifteen during 2012. The number of investing countries has increased from eight to fifteen in 2012.Cyprus, UAE, Hongkong, Spain, Luxembourg, Russia and Italy emerged as new source of FDI since 2007-08. Three major investors' were USA, Japan and Switzerland in 1991-92. In 2013-14, Mauritius, Singapore, USA, Japan, Netherland, UK, Germany and France have been joined the group of resources for FDI investment in India. Country wise share of FDI inflow is shown in table 4.2. Figure 4.2 shows the relative contribution in total FDI in India by different nations since 1992-93. Figure depicts that Mauritius is the biggest resource of FDI inflow in India. The reason behind this must be good political relationship and tax regime since 1982. After that the major contribution in FDI inflow is by Singapore, USA, Japan, Netherland, UK and Germany have been major resources of FDI in India. To capture the annual growth rate of study period from different nations computed by CAGR. It shows in last row of table 4.2. Switzerland and South Korea recorded highest compound annual growth rate during the study period.

Table 4.2: Foreign Direct Investment inflow in India: Country wise share in Percent YoY

Year/ Countries	Mauritius	Singapore	U.S.A	Cyprus	Japan	Netherlands	U K	Germany	UAE	France	Switzerland	Hong Kong	Spain	South Korea	Luxembourg	Russia	Italy	Others Countries
1992-93	NA	1.07	7.86	NA	9.29	7.50	2.50	7.50	NA	3.21	12.50	NA	NA	NA	NA	NA	NA	48.57
1993-94	NA	2.48	24.50	NA	9.16	11.63	24.26	8.66	NA	2.48	5.69	NA	NA	NA	NA	NA	NA	11.14
1994-95	22.59	2.87	23.28	NA	10.89	5.16	47.13	4.01	NA	1.61	2.98	NA	NA	1.38	NA	NA	NA	8.72
1995-96	35.73	4.23	13.74	NA	4.30	3.52	5.00	7.05	NA	NA	NA	NA	NA	1.69	NA	NA	NA	24.74
1996-97	41.13	3.69	11.76	NA	4.72	6.03	2.63	8.07	NA	NA	NA	NA	NA	0.29	NA	NA	NA	21.68
1997-98	30.43	NA	23.23	NA	5.54	5.38	NA	5.10	NA	NA	NA	NA	NA	11.26	NA	NA	NA	19.00
1998-99	29.50	NA	22.65	NA	11.75	2.65	NA	5.70	NA	NA	NA	NA	NA	4.25	NA	NA	NA	23.50
1999-00	31.69	NA	22.45	NA	8.98	5.19	NA	1.96	NA	NA	NA	NA	NA	0.51	NA	NA	NA	29.22
2000-01	44.14	1.15	16.75	NA	8.17	3.98	3.19	5.92	NA	4.87	0.42	NA	NA	1.26	NA	NA	NA	10.16
2001-02	62.35	1.81	21.22	NA	4.79	2.28	1.51	2.48	NA	2.95	0.20	NA	NA	0.10	NA	NA	NA	9.37
2002-03	32.21	2.35	16.16	NA	3.98	5.67	13.51	6.21	NA	3.20	2.11	NA	NA	0.90	NA	NA	NA	13.69
2003-04	26.06	1.03	20.31	NA	4.58	13.47	10.74	4.72	NA	2.33	0.34	NA	NA	1.50	NA	NA	NA	14.91
2004-05	35.34	2.33	20.13	NA	5.26	8.45	3.62	6.16	NA	1.90	2.76	NA	NA	0.60	NA	NA	NA	12.93
2005-06	40.58	4.94	10.30	NA	2.56	1.49	7.77	1.34	NA	0.36	2.02	NA	NA	1.82	NA	NA	NA	26.82
2006-07	40.61	6.25	7.59	NA	0.86	6.01	19.44	1.25	NA	1.07	0.61	NA	NA	0.73	NA	0.27	0.61	15.58
2007-08	48.99	14.55	4.89	2.93	2.35	3.09	2.61	2.50	1.16	0.70	0.99	0.55	0.25	0.00	0.08	0.01	0.11	14.31
2008-09	44.79	14.80	5.45	5.34	1.17	3.00	3.04	2.69	1.03	1.93	0.59	0.67	1.60	0.42	0.10	1.35	1.10	13.37
2009-10	43.64	9.87	9.85	7.23	4.32	3.58	2.86	2.68	1.66	1.26	0.43	0.61	0.56	0.71	0.18	NA	NA	10.57
2010-11	37.59	10.31	7.17	3.82	8.41	9.49	3.60	1.09	1.26	3.25	0.89	1.40	1.22	0.91	1.66	NA	NA	7.93
2011-12	34.69	14.08	4.23	6.68	8.90	5.49	11.76	1.57	1.47	2.51	0.90	1.12	1.07	0.96	0.38	NA	NA	4.19
2012-13	44.07	8.78	2.61	2.27	7.33	9.30	5.59	2.55	0.95	2.99	1.47	0.36	1.90	1.22	0.19	NA	NA	8.42
2013-14 P	23.02	27.50	3.84	3.40	11.18	7.21	0.69	4.05	1.49	1.43	2.22	0.53	1.13	1.18	3.36	NA	NA	7.78
Total	**39.63**	**11.85**	**7.48**	**3.78**	**5.67**	**5.51**	**5.56**	**2.71**	**1.03**	**1.84**	**1.00**	**0.59**	**0.87**	**0.99**	**0.57**	**0.19**	**0.19**	**11.20**
CAGR (%)	**0.13**	**0.36**	**0.84**		**0.78**	**1.04**	**0.52**	**2.27**		**2.60**	**5.29**			**3.42**				**0.50**

P: Provisional. Note: Includes FDI through SIA/FIPB and RBI routes only. NA: Not Available

Source: Annual Report, Reserve Bank of India



4.4 Industry wise inflow of FDI in India

Highest FDI inflow is recorded in manufacturedsector followed by financial sector at 13.7 percent, construction at 9.70 percent and power sector at 5.43 percent share in total year on year respectively in table 4.3.Manufacturing sector has been pioneering the FDI inflow due to lower labour cost and big market for product (Rao K.S.Chalapati, et al. 2014). The top six sectors which have attracted the bulk of FDI inflow are Manufacturing, constructions, financial services, electricity and other energy generation distribution and transmissions, computer services and communication services, respectively share is given in table 4.3. The

share of education, research and development, trading, mining, transport and retail and wholesale trade is very low attracting sector for FDI in India are shown in figure 4.3. On the other side CAGR is highest in education, research and development, trading, mining respectively as shown in table 4.3.

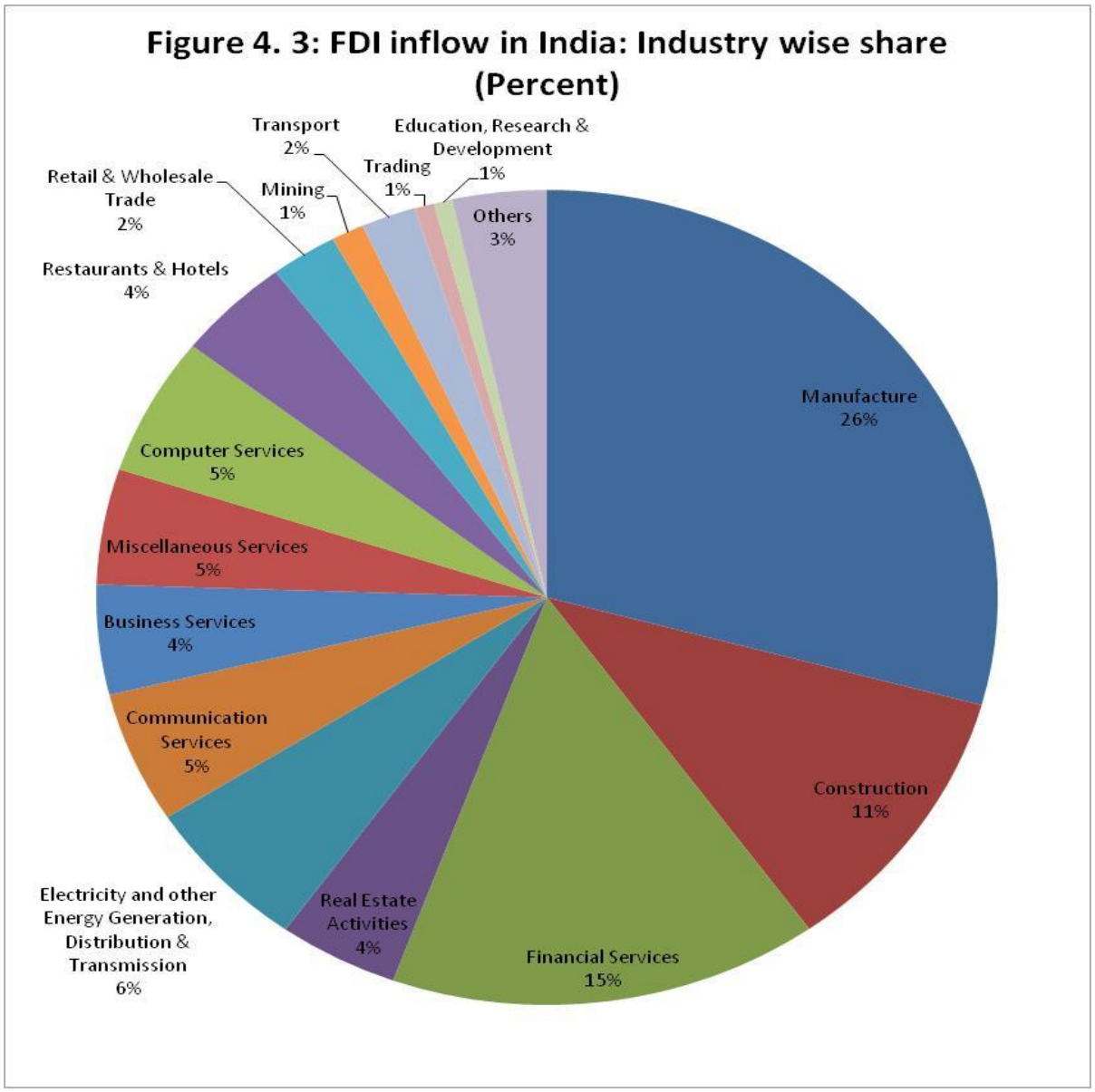


Table 4.3: Foreign Direct Investment inflow in India: Industry wise share in Percent YoY

Year/ Sector-wise Inflows	Manufacture	Construction	Financial Services	Real Estate Activities	Electricity and other Energy Generation, Distribution & Transmission	Communication Services	Business Services	Miscellaneous Services	Computer Services	Restaurants & Hotels	Retail & Wholesale Trade	Mining	Transport	Trading	Education, Research & Development	Others
2003-04	29.14	11.76	14.09	NA	6.16	NA	NA	NA	11.35	4.58	NA	0.14	1.37	NA	0.07	17.10
2004-05	39.83	9.01	15.65	NA	0.60	NA	NA	NA	16.03	0.95	NA	0.43	3.02	NA	0.30	6.72
2005-06	37.42	5.69	13.46	NA	2.47	NA	NA	NA	22.92	2.83	NA	0.83	1.96	NA	0.27	8.54
2006-07	17.30	10.40	47.45	NA	1.19	NA	NA	NA	8.84	2.98	NA	0.43	1.50	NA	1.04	9.20
2007-08	19.18	13.13	19.82	6.88	4.27	0.34	5.96	9.79	5.33	1.44	1.03	2.37	4.20	0.91	0.80	4.56
2008-09	21.05	9.86	19.52	8.31	2.95	9.11	2.83	6.42	7.26	1.51	1.30	0.46	1.77	1.76	1.07	4.83
2009-10	22.90	15.65	9.82	9.75	8.36	8.25	6.92	3.95	3.86	2.99	2.39	1.19	0.98	0.88	0.41	1.71
2010-11	32.08	10.70	9.06	2.97	8.96	8.22	3.81	3.41	5.64	1.46	2.62	3.96	2.30	1.04	0.37	3.39
2011-12	39.78	11.22	11.09	1.45	5.94	6.21	6.77	3.41	3.14	3.71	2.42	0.87	1.75	0.03	0.44	1.79
2012-13	35.70	7.21	15.09	1.08	9.04	0.50	3.52	3.02	1.35	17.11	3.01	0.38	1.16	0.77	0.82	0.24
2013-14 P	39.75	7.95	6.39	1.25	8.00	7.82	3.25	5.86	5.82	2.25	7.09	0.15	1.94	0.00	0.67	1.83
Total	**26.12**	**9.70**	**13.77**	**3.84**	**5.43**	**4.66**	**3.88**	**4.10**	**4.91**	**3.68**	**2.14**	**1.05**	**1.75**	**0.63**	**0.59**	**3.01**
CAGR (%)	**0.10**	**0.15**	**0.04**	**0.06**	**0.41**	**0.21**	**0.31**	**0.22**	**0.18**	**0.21**	**0.85**	**0.44**	**0.56**	**0.53**	**2.27**	**-0.09**

P: Provisional. Note: Includes FDI through SIA/FIPB and RBI routes only. NA: Not Available

Source: Annual Report, Reserve Bank of India

4.5 Recent trends in differentMacroeconomic Variables of India

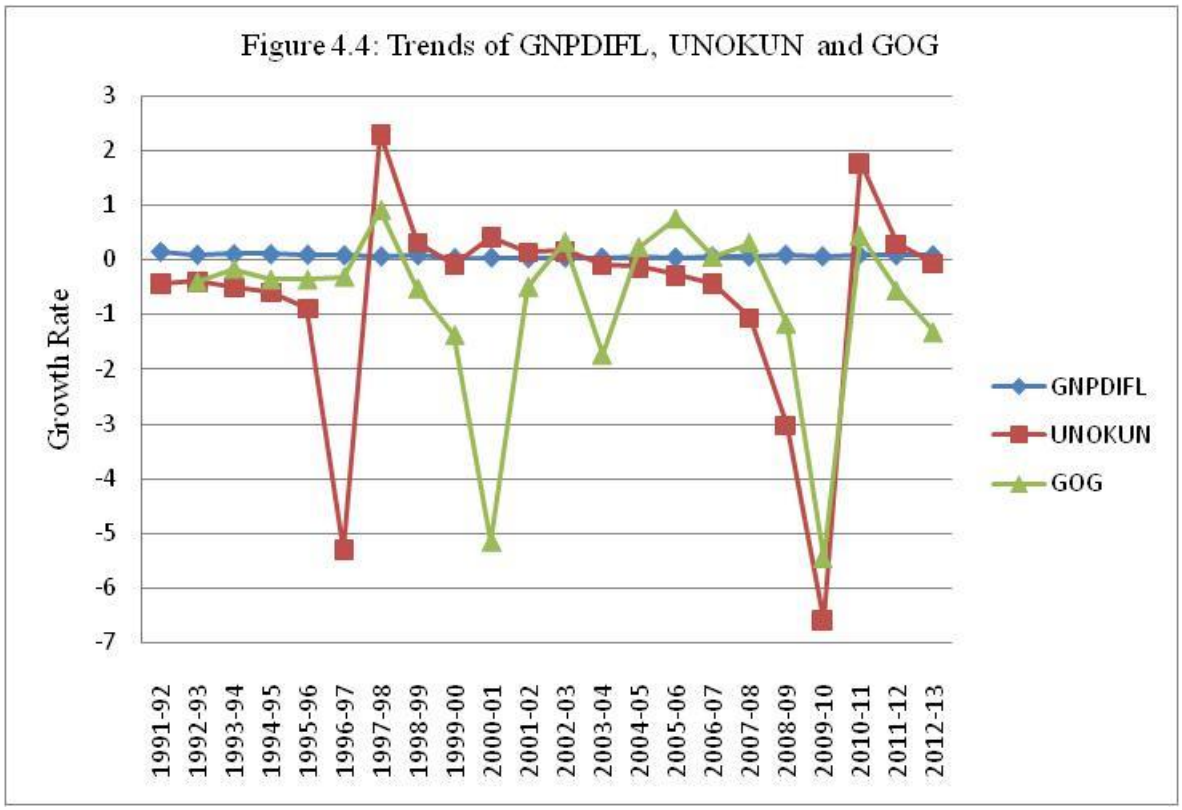
The economic crisis of 1991 stimulated the launch of globalization from the 1990s onwards. The position of different macroeconomic variables in 1991-1992, the market size in 1990-1991 according to GDP was 14876.15billion rupees; inflation index stood on point 0.39 with the highest inflation rate 14 percent; gap between output growths from its expected growth rate was largest; development expenditure and non-development expenditure was 586 and 493 billion rupees; reserve of foreign exchange was 114 billion rupees; exchange rate was 17.94 rupees per dollar; trade openness was also lowest with 12 percent of GDP; net external assistance, net commercial borrowing and net NRI deposit was 39, 40 and 27 billion rupees, respectively.

The picture of the Indian economy has been varying since 1991-1992. In 2012-2013, the inflation rate in India was 8 percent;while market size has folded four times;; development expenditure and non-development expenditure has been increased; foreign exchange reserve is 15884.20 billion rupees; annual exchange rate is 54 rupees per dollar; economy has opened in larger size compare than that period; net external assistance, net commercial borrowing and net NRI deposit has been controlled 69, 466 and 807 billion rupees respectively.

4.5.1Recent trends in endogenousMacroeconomic Variables of India

The trend and behavior of endogenous macroeconomic variables is measured in this section. Prices show the picture of economy in the form of demand, supply and monetary problems. In 1991, GNP Deflator as an indicator of inflation is 14 percent which was too much high. The fiscal crisis of 1991 was marked by deficits in government finances. Devaluation of the rupee was whopping inflation in Indian economy. In 1999-2000 and 2001-2002, inflation rate was 3 percent which was lowest.UNOKON shows the general level of unemployment and it was calculatedby the ratio of output gap. Highest unemployment was recorded in 1997-

1998in the study period and highly decline in this growth recorded 6.60 in 2009-10 due to fast-paced recovery of the economy.



Gap in output growth (GOG), growth rate of GOG was positive in 1997-98 due to increasing growth and declining inflation. Gap in output growth has been declined in 2009-10which shows the decline in the gap of output growth due to effectiveness of economic policies as shown in figure 4.4. The value of standard deviation is 0.037, 0.18 and 0.06showing less variation for GNPDIFL, UNOKUN and GOG respectively (given in Appendix 4).

Figure 4.5 highlightslowest growth was recorded for development expenditure in 1999-2000 which was negative. While, highest growth rate in 2008-09 due to some institutional foundation for faster development of physical infrastructure[xi], progress in fiscal consolidation and launching of the NREGA scheme for inclusive growth. Average development expenditure is 2500.96 billion rupee with the 89 percent of c.v. which is highest variation in development expenditure.

Non-development expenditure was higher in 1993-94 in study period. While lowest growth rate of Non-development expenditure was in 2003-04 due. Average Non-development expenditure is 2630.86 billion rupee with c.v. 75 percent or .75, which is highest variation in non-development expenditure.

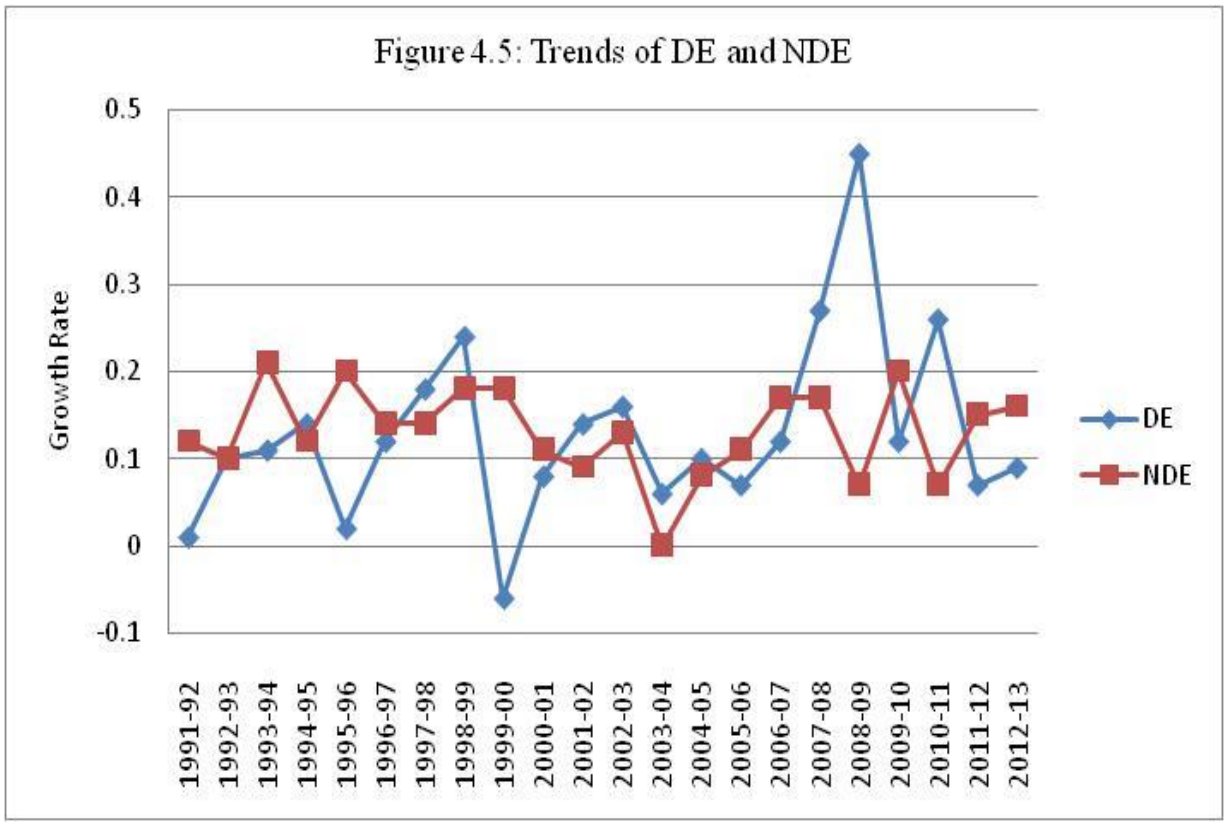
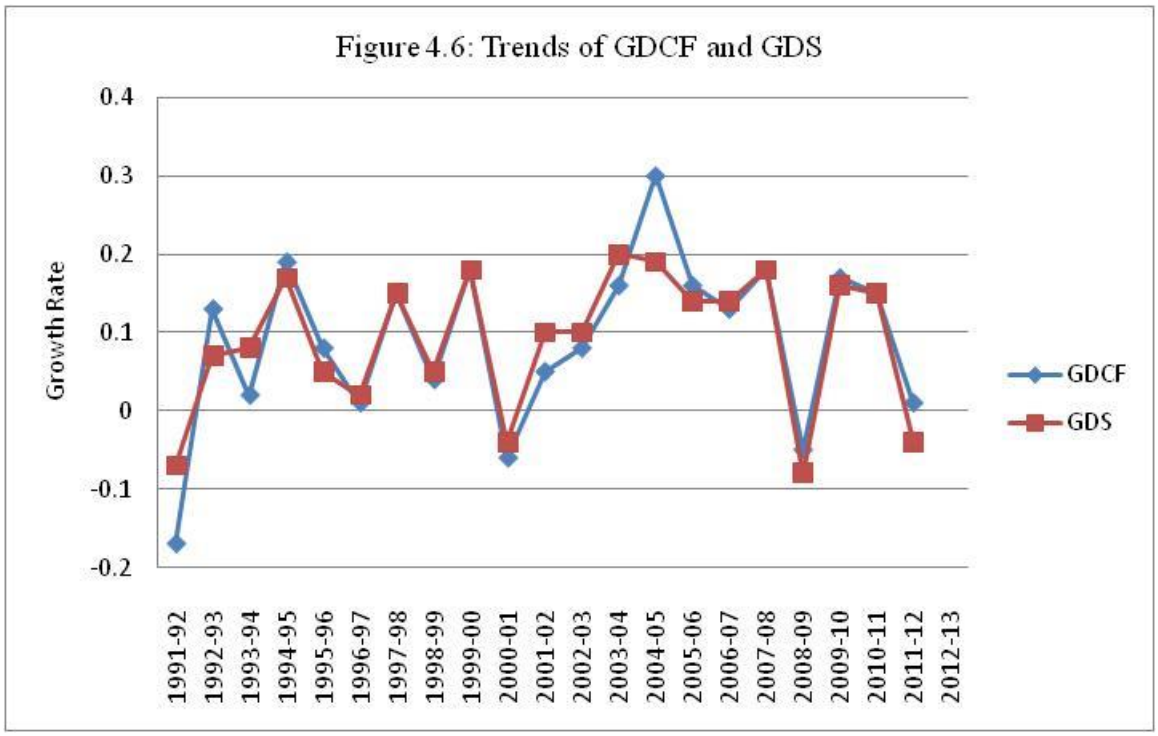


table 4.6shows that negative growth rate in gross domestic capital formation in 1991-92. While highest growth in gross domestic capital formation was recorded highest in 2004-05.This is also shown in figure 4.6.



Average of gross domestic capital formation for the study period is 9284 billion rupees with the value of c.v. is 64 percent which is higher than average variation.

Growth of GDS was recorded negative in 1991-92 as in table 4.6. Average gross domestic saving for the study period was 8845 billion rupees with the value of C.V. is 0.62 or 62 percent variation in GDS.

Table 4.4: Performance of selected endogenous Macroeconomic Variables in India(Growth Rate YoY)

Year	GNPDIFL	UNOKUN	GOG	DE	NDE	GDCF	GDS
1991-92	0.14	-0.44		0.01	0.12	-0.17	-0.07
1992-93	0.09	-0.4	-0.41	0.1	0.1	0.13	0.07
1993-94	0.1	-0.51	-0.17	0.11	0.21	0.02	0.08
1994-95	0.1	-0.6	-0.37	0.14	0.12	0.19	0.17
1995-96	0.09	-0.89	-0.37	0.02	0.2	0.08	0.05
1996-97	0.08	-5.3	-0.32	0.12	0.14	0.01	0.02
1997-98	0.06	2.3	0.9	0.18	0.14	0.15	0.15
1998-99	0.08	0.31	-0.53	0.24	0.18	0.04	0.05
1999-00	0.03	-0.09	-1.38	-0.06	0.18	0.18	0.18
2000-01	0.04	0.41	-5.15	0.08	0.11	-0.06	-0.04
2001-02	0.03	0.14	-0.5	0.14	0.09	0.05	0.1
2002-03	0.04	0.16	0.32	0.16	0.13	0.08	0.1
2003-04	0.04	-0.1	-1.74	0.06	0	0.16	0.2
2004-05	0.06	-0.14	0.22	0.1	0.08	0.3	0.19
2005-06	0.04	-0.29	0.74	0.07	0.11	0.16	0.14
2006-07	0.06	-0.44	0.05	0.12	0.17	0.13	0.14
2007-08	0.06	-1.06	0.3	0.27	0.17	0.18	0.18
2008-09	0.09	-3.03	-1.17	0.45	0.07	-0.05	-0.08
2009-10	0.06	-6.6	-5.45	0.12	0.2	0.17	0.16
2010-11	0.09	1.76	0.43	0.26	0.07	0.15	0.15
2011-12	0.08	0.29	-0.57	0.07	0.15	0.01	-0.04
2012-13	0.08	-0.07	-1.33	0.09	0.16		

Calculated by scholar

Source: Reserve Bank of India

4.5.2Recent trends in exogenousMacroeconomic Variables of India

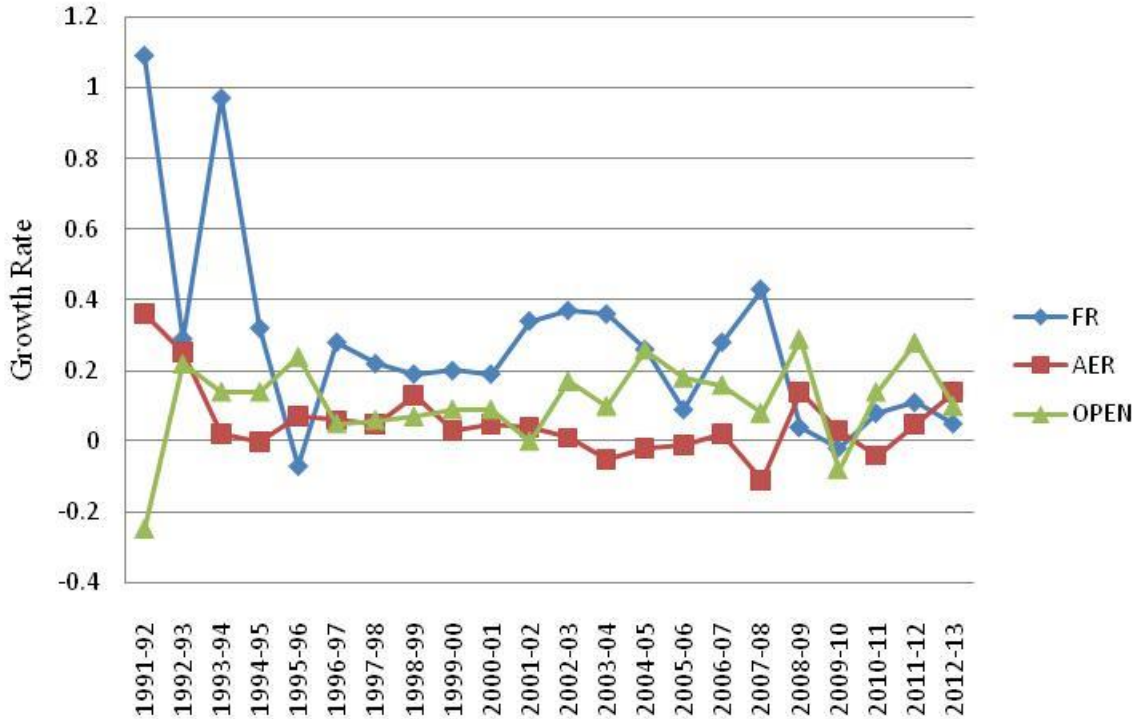
Foreign reserve, annual exchange rate, trade openness and the components of capital account as exogenous macroeconomic variables are used to study the trend and behavior.

Figure 4.5 shows the growth rate offoreign reserve, annual exchange rate and openness of a country for trade. The growth of foreign exchange reserve was highest in 1991-1992. While growth of foreign exchange reserve was recorded lowest in 2009-10.Annual exchange growth rate was also highest in 1991-92 due to devaluation of currency from 18 rupees per dollar to 24 rupees per dollar. While lowest growth rate recorded in 2007-08 due to appreciation of the rupee, a slowdown in the consumer goods segment of industry and infrastructure constraints.

Growth of openness of an economy was negative 25 percent in 1991-92 and growth of openness for trade has grown highest in 2008-09.Same has also been depicted by figure 4.5.

Average openness in economy was 0.42 with the value of standard deviation 0.33 and C.V. was 78 percent which is higher variation. Average foreign reserve was 5438.68 billion rupees during the study period with 5546.73 value of standard deviation. Coefficient of variation is 1.25 or 125 percent. Average exchange rate is 40.48 rupee for a dollar for the study period with the 22 percent value of C.V. (appendix 5).

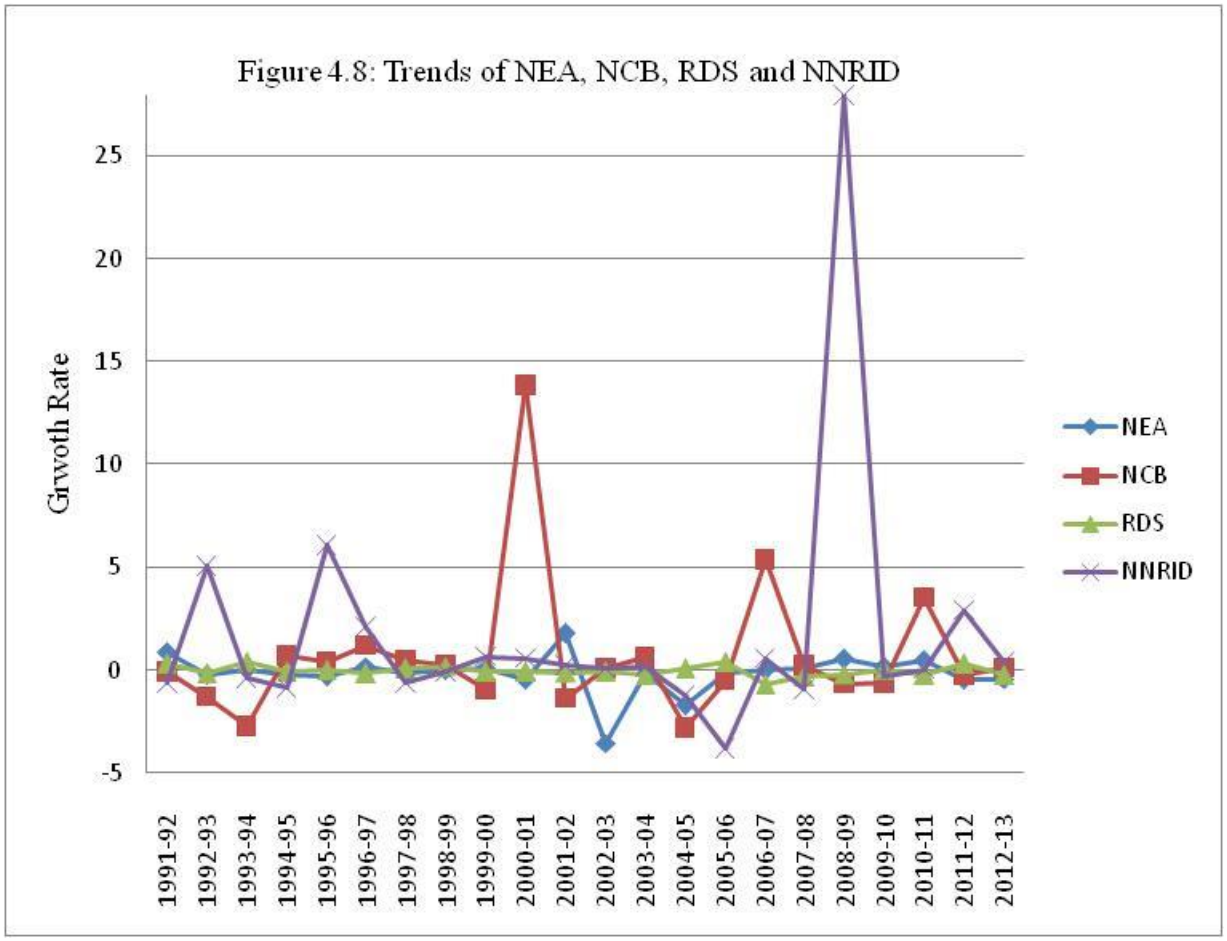
Figure 4.7: Trends of FR, AER and OPEN



Highest growth rate for Net External Assistance is recorded in 2001-02 due to several unfavorable domestic and external causes. While lowest negative growth was found in net external assistance in 2002-03. Trends are shown in figure 4.6.

Average Net External Assistance is 56.50 Billion Rupee for the study period with the 1.36 value of coefficient of variation.

Net commercial borrowing growth rate was highest in 2000-01 due to second phase reform policies towards trade, tariff reductions and more openness to foreign investment in export oriented sectors. While lowest growth rate was also noticed in net commercial borrowing in 2004-05 due to strong performance of US, China, Russia and Japan in output growth. Average net commercial borrowing has been 190.56 billionrupee with the 1.39 value of coefficient of variation which is higher variation in commercial borrowing.



Rupees debt services growth was highest in 1993-94. The stand-by arrangement with the IMF negotiated in 1991 was successfully completed in June 1993. While lowest value was found

in 2007-08. The value of C.V. is negative 0.57 which is average variation (given in the appendix 5).

NNRID shows the net NRI deposits which were highest in 2008-09 because the environment of India in this period was positive compared to advanced countries economy. Whilelowest value recorded for NNRID in 2005-06 due to macro obstacles i.e. global petroleum prices, deficient rainfall-induced inflationary expectations and monetary overhang from accretion of foreign exchange reserve. Average Net NRI deposit is 137.72 billion rupees for the study period with the 1.39 value of coefficient variation.

Table 4.5: Performance of selected exogenous Macroeconomic Variables in India(Growth Rate YoY)

Year	FR	AER	OPEN	NEA	NCB	RDS	NNRID
1991-92	1.09	0.36	-0.25	0.87	-0.06	0.3	-0.63
1992-93	0.29	0.25	0.22	-0.22	-1.29	-0.16	5.05
1993-94	0.97	0.02	0.14	0.04	-2.74	0.41	-0.38
1994-95	0.32	0	0.14	-0.2	0.7	-0.06	-0.86
1995-96	-0.07	0.07	0.24	-0.3	0.4	0	6.09
1996-97	0.28	0.06	0.05	0.19	1.2	-0.18	2.11
1997-98	0.22	0.05	0.06	-0.13	0.46	0.1	-0.64
1998-99	0.19	0.13	0.07	0.01	0.27	0.19	-0.06
1999-00	0.2	0.03	0.09	0.12	-0.93	-0.08	0.65
2000-01	0.19	0.05	0.09	-0.47	13.85	-0.1	0.57
2001-02	0.34	0.04	0	1.8	-1.37	-0.11	0.24
2002-03	0.37	0.01	0.17	-3.55	0.1	-0.06	0.1
2003-04	0.36	-0.05	0.1	-0.16	0.61	-0.24	0.17
2004-05	0.26	-0.02	0.26	-1.72	-2.82	0.06	-1.26
2005-06	0.09	-0.01	0.18	-0.12	-0.52	0.38	-3.81
2006-07	0.28	0.02	0.16	0.02	5.36	-0.72	0.57
2007-08	0.43	-0.11	0.08	0.06	0.23	-0.32	-0.96
2008-09	0.04	0.14	0.29	0.54	-0.66	-0.19	27.94
2009-10	-0.02	0.03	-0.08	0.17	-0.61	0	-0.29
2010-11	0.08	-0.04	0.14	0.48	3.53	-0.25	0.03
2011-12	0.11	0.05	0.28	-0.46	-0.22	0.33	2.93
2012-13	0.05	0.14	0.1	-0.43	0.11	-0.25	0.39

Calculated by scholar

Source: Reserve Bank of India

As table figure shows that the internal and external environment also influence on the growth figure of macroeconomic variables.

4.6 Summery of this chapter

Trend and behaviour of exogenous and endogenous macroeconomic variables are analysed by the tables of growth rates, share, and pie chart and figures. All the fluctuations occurred due to internal and external environment of economy and global push factors and country specific pull factors also effects the economic variables. Country wise FDI inflow is also analysed in this chapter and found that the number of big investor countries has increased from eight in 1991 to fifteen in 2012. Industry wise flow of FDI has been higher in manufacturing while highest annual growth rate is recorded in education and research and development sector. Fluctuation in growth rate of endogenous macroeconomic variables and exogenous macroeconomic variables are also recorded to show the trends of economic variables in different years. Most of the time global environment also has affected on the macroeconomic variables. The period of 1990-91, witnessed of the reform and the crucial stage of the Indian economy. Internal and external economic and political environment is also the reason for the fluctuation of macroeconomic variables as supported by Elif Arbatli (2011) and Keshava S.R. (2008).

[i] Maitra Ramtanu et al. (1991)

[ii] http://shodhganga.inflibnet.ac.in/bitstream/10603/15840/13/13_chapter%205.pdf

[iii] Elif Arbatli (2011)
[iv] Elif Arbatli (2011)
[v] Calvo Guillermo A. et al. 1993
[vi] Elif Arbatli (2011)
[vii] Elif Arbatli (2011)
[viii] Dunning (1993)
[ix] Elif Arbatli (2011)

[x] http://shodhganga.inflibnet.ac.in:8080/jspui/bitstream/10603/3659/10/10_chapter%204.pdf

[xi] http://shodhganga.inflibnet.ac.in:8080/jspui/bitstream/10603/3659/10/10_chapter%204.pdf