

# Relation Between Inflow Of FDI and The Development Of India's Economy

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Abstract— Foreign direct investment (FDI) is a direct investment into production or business in a country by an individual or company in another country, either by buying a company in the target country or by expanding operations of an existing business in that country. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds. Foreign investment was introduced in 1991 under Foreign Exchange Management Act (FEMA), driven by then finance minister Manmohan Singh. As Singh subsequently became the prime minister, this has been one of his top political problems, even in the current times. India disallowed overseas corporate bodies (OCB) to invest in India.

Starting from a baseline of less than \$1 billion in 1990, a 2012 UNCTAD survey projected India as the second most important FDI destination (after China) for transnational corporations during 2010–2012. As per the data, the sectors that attracted higher inflows were services, telecommunication, construction activities and computer software and hardware. Mauritius, Singapore, US and UK were among the leading sources of FDI. Based on UNCTAD data FDI flows were \$10.4 billion, a drop of 43% from the first half of the last year. The focus of the research is to find out the relationship between inflows of FDI with the development of India's economy (measured in terms of GDP). Further the paper aims to find out the impact of economic reforms on FDI in India. The study also examines the constraints in increasing the level of FDI in India.

Keywords- FDI, Economic Reforms, Global Financial Crisis, Economic Growth.

#### I. Introduction

The role of FDI in the growth process has been a burning topic of debate in several countries including India. FDI is a vital ingredient of the globalization efforts of the world economy. The growth of international production is driven by economic and technological forces. It is also driven by the ongoing liberalization of Foreign Direct Investment (FDI) and trade policies. One outstanding feature of the present-day world has been the circulation of private capital flow in the form of foreign direct investment (FDI) in developing countries, especially since 1990s. Since the 1980s, multinational corporations (MNCs) have come out as major actors in the globalization context. Governments around the world- in both advanced and developing countries—have been attracting MNCs to come to the respective countries with their FDI. This experience may be related to the broader context of liberalization in which most developing and transition countries have moved to market-oriented strategies. In this context, globalization offers an unparalleled opportunity for developing countries like India to attain quicker economic growth through trade and investment. In the period 1970s, international trade grew more rapidly than FDI, and thus international trade was by far than most other important international economic activities. This situation changed radically in the middle of the 1980s, when world FDI started to increase sharply. In this period, the world FDI has

increased its importance by transferring technologies and establishing marketing and procuring networks for efficient production and sales internationally (ShujiroUrata, 1998).

FDI flows comprise capital provided by foreign investors, directly or indirectly to enterprises in another economy with an expectation of obtaining profits derived from the capital participation in the management of the enterprise in which they invest. The foreign investors acquire ownership of assets in the host country firms in proportion to their equity holdings. This is the empirical definition of FDI adopted by many countries to distinguish it from portfolio flows. According to International Monetary Fund (IMF), FDI is defined as " an investment that is made to acquire a lasting interest in an enterprise operating in a economy other than that of the investor" The investor's purpose is to have an effective voice in the management of the enterprise (IMF,1977).FDI is the process by which the residents of one country (the source country) acquire the ownership of assets for the purpose of controlling the production, distribution and other productive activities of a firm in another country (the host country).

Since the 1997 East Asian financial crisis, the relationship between Foreign Direct investment (FDI), exports and economic growth has gained importance and attention among policy makers and researchers. The concept of 'Investment led Economic Development' has promoted the idea that the outward and inward FDI position of a country is linked to its





economic development relative to the rest of the world. It recommends that the countries changes through five different stages of development.

These stages are being classified according to the propensity of the countries to the outward and/or inward investors (Dunning and Narula, 1999). This propensity, in turn, depends on the extent and pattern of the ownership specific advantages of domestic firms, its location advantages and the degree of utilization of the ownership specific advantages by the domestic and foreign firms in the internationalization of markets.

The gap between the world's rich and poor countries largely comes down to the financial and physical assets that create wealth. Developed economies posses more of this capital than developing ones, and what they have, usually incorporates more advanced technologies. The implication is clear: A key aspect of economic advancement lies in poorer nations' capacity to acquire more capital and scale the technological ladder. Emerging economies undertake some capital formation on their own, but in this era of globalization, they increasingly rely on foreign capital Foreign Direct Investment (FDI) has appeared as the most significant source of external resource flows to developing countries over the years and has become a significant part of capital formation in these countries, despite their share in global distribution of FDI continuing to remain small or even declining. The effects of FDI in the host economy are usually believed to be increase in the employment, augment in the productivity, boost in exports and amplified pace of transfer of technology. It facilitates the utilization and exploitation of local raw materials, introduces modern techniques of management and

marketing, eases the access to new technologies, foreign inflows can be used for financing current account deficits, finance flows in form of FDI do not generate repayment of principal and interests (as opposed to external debt) and increases the stock of human capital via on the job training.

The effect of FDI on growth rate of output was constrained by the existence of diminishing returns of physical capital. Consequently, FDI could only put forth an effect on the level of output per capita, but not on the growth rate. In other words, it was unable to modify the growth of output in the long run. In the context of the new theory of Economic Growth, FDI is considered as an engine of growth of mainstream economies. As noted by the World Bank (2002), several recent studies concluded that FDI can promote the economic development of the host Country by promoting productivity growth and export. However, the exact relationship between foreign multinational corporations and their host countries varies considerably between countries and among industries. The characteristics of the host country and the policy environment are important determinants of net benefit of FDI.

In view of the above discussion, this discussion provides rich insight into the relationship between FDI and Growth. Therefore, this paper is an attempt to analyze the causal

relationship between Foreign Direct Investment (FDI) and economic growth in India. The present paper tries to analyze and empirically estimate the effect of FDI on economic growth in India, using the co integration approach for the period, 1990-91 to 2010-11.

Indeed total capital flows to developing economies have sky rocketed from \$104 billion in 1980 to \$472 billion in 2006. The foreign capital has the potential to deliver enormous benefit to developing nations. Besides helping bridge the gap between savings and investment in capital-scarce economies, capital often brings with it modern technology and encourages development of more mature financial sectors. Capital flows have proven effective in promoting growth and productivity in countries that have enough skilled workers and infrastructure. Some economists believe capital flows also help discipline governments' macroeconomic policies.

# A. Capital Flows Come In Three Primary ways

- Portfolio equity investment, which involves buying company shares, usually through stock markets, without gaining effective control.
- Portfolio debt investment, which typically covers bonds and short and long-term borrowing from banks and multilateral institutions, such as the World Bank.
- Foreign direct investment (FDI), which involves forging long-term relationships with enterprises in foreign countries.

#### B. FDI and Growth:

Despite FDI's potential to boost technology, productivity, investment and savings, economists have somewhat surprisingly- struggled to find a strong causal link to economic growth. Some studies have detected a positive impact, but only if the country has a threshold level of human capital. This seems to confirm FDI's important role in propelling growth in India, which have vast, untapped technical workforces. China graduates 600,000 engineers every year; India produces 215,000.

A stumbling block to identifying FDI's impact on growth lies in the fact that these investments can be the cause as well as the result of economic vitality because foreign capital beats a path to the world's hottest developing –market economies. Other problems make it difficult to disentangle FDI's effect on GDP growth. For countries with high tariff and non-tariff barriers, FDI may simply be the result of multinational corporations trying to access domestic markets because the export route has been closed. In the case, FDI may contribute to economic growth, but the impact will be reduced to the extent high tariffs stunt growth.





India also woos foreign investors with tax breaks and subsidies. Fiscal incentives are doubtlessly a good way to promote FDI. After all, tax havens are prominent FDI recipient. However, researchers have found that such policies aren't effective ways to reap FDI's economic benefits. Indeed the policies may create distortions that significantly blunt FDI's efficiency and productivity gains. Tax incentives may prove wasteful because FDI responds more to such factors as labor market flexibility, the cost of doing business and the quality of the infrastructure.

#### II. LITERATURE REVIEW

The FDI-growth nexus is evidently identified by the neo classical growth models. The neoclassical growth model considers technological progress and labour force as exogenous, and thus argues that FDI increases level of income only while it has no long run growth effect if it does not expand technology. Long run growth can only be increased through technological and population growth and if FDI positively influences technology, then it will be growth advancing (Solow 1956). Somwaru and Makki (2004) indicate that according to recent endogenous growth theory, FDI can be growth advancing if it results in increasing returns in production through spillover and technological transfers via diffusion processes. In addition, Easterly et al. (1995) argue that technology transfer depends on the diffusion process and that can take place through four modes: transfer of new technologies and ideas; high technology imports; foreign technology adoption; and level of human capital. Findlay (1978) presents the contagion effect of managerial practices and advanced technology introduced by foreign firms on the host country's technology. Yangruni Wu (1999) emphasizes the role of the learning process through FDI in the growth of a country. In contrast, Charkovic and Levine (2002) claim that FDI creates the crowding out effect on domestic capital and hence the effect of FDI on growth is either insignificant or negative. In addition, other studies reason that causality can be the other way and market seeking FDI tends to serve the growing economies. Similarly, multinational corporations are attracted towards growing and productive economies.

Therefore, this bi-directional behavior between FDI and GDP can create simultaneity bias between the two variables. Further, there is the similar two-way causality discussion between exports and GDP. The first is the export led growth hypothesis, while the other equally appealing hypothesis is that output growth causes export growth. Finally, there is a same bi-directional argument in the case of FDI and the export nexus. Petri and Plummer (1998) argue that it is not clear whether FDI causes exports or exports cause FDI. Then there are other concerns such as specified by Gray (1998) regarding market seeking (substitute) FDI or efficiency seeking (complement) FDI.

Furthermore, Kjima (1973) analyze whether FDI is trade oriented or anti trade oriented. Vernon (1966) explores whether FDI is at the early product life cycle stage (substitute) or at the mature stage (complement). The theoretical and empirical literature on the growth effects of FDI by transnational corporations (TNCs) on host countries is enormous. Recent researches attempt to analyze the impacts of FDI on host country's economy and competitiveness of firms, empirical results show that the consequence is different. Some studies indicate that FDI can stimulate the economic growth through spillover effect such as new technologies, capital formulation, the expansion of international trade and the development of human capital (labor skills and employment) (Alguacilet al., 2002; Baharumshan and Thanoon, 2006; Balasubramanyamet al., 1996, 1999; Bende-Nabende and Ford, 1998; Borenszteinet al., 1998; Chakraborty and Basu, 2002; De Mello, 1997, 1999; Liu et al., 2002; Wang, 2005). However, others point put that FDI can offset then economic growth (Bende-Nabendeet al., 2003; Carkovic and Levine, 2005). Bende-Nabendemet al. (2003) found that FDI in some countries had a negative relation with economic growth.

Hsiao and Hsiao (2006) assert that exports increase FDI by paving the way for FDI by gathering information of the host country that helps to reduce investors. Transaction costs. Also FDI may reduce exports by serving foreign markets through establishment of production facilities there. Balasubramanyam et. al. (1996) tested the hypothesis that exports promoting (EP) FDI in countries like India confer greater benefit than FDI in other sectors. They have used production function approach in which FDI is treated as an independent factor input in addition to domestic capital and labour. As FDI is a source of human capital accumulation and development of new technology for developing countries, FDI captures such externalities as learning by watching and/or doing and various spillover effects. Exports are also used as an additional factor input in this production function. Once FDI enters a country, some of the erstwhile imports become domestic products.

Hence, their output becomes a part of GDP which needs consideration as a part of output or growth effect of FDI. In their model, real GDP depends on labour, domestic capital stock, foreign capital stock, exports, and technical progress through time. Time is an all inclusive proxy variable which captures the influence of all factors, including changing technology, that are impounded under the assumption of ceteris paribus. This is why time is defined as the parameter of functional shift. Thus, it is erroneous to interpret the coefficient of T as representing change in technology alone. However, it has become a customary to treat time as a representative of technological change.

Borensztein et al. (1998) examine absorptive capacity of recipient country, which is measured by stock of human capital required for technological progress; it takes place through 'capital deepening' associated with new capital goods



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brought into an economy by FDI. It has been found out that the fructification of growth effect of FDI requires adequate infrastructure as a pre-requisite.

A comprehensive study by Bosworth and Collins (1999) provides evidence concerning the effect of capital inflows on domestic investment for fifty-eight developing countries during 1978–95. The authors distinguish among three types of inflows: FDI, portfolio investment, and other financial flows (primarily bank loans). It has been found out that an increase of a dollar in capital inflows is associated with an increase in domestic investment of about fifty cents. This result covers significant differences among different types of inflows. Foreign direct investment appears to bring about close to a one-for-one increase in domestic investment; there is virtually no discernible relationship between portfolio inflows and investment (little or no impact), and the impact of loans falls between those of the other two.

These results hold both for the fifty-eight-country sample and for a subset of eighteen emerging markets. An additional striking feature of FDI flows that was noted in previous literature is that the share of FDI in total inflows is higher in riskier countries, as measured either by countries credit ratings for sovereign (government) debt or other indicators of country risk. There is also some evidence that the FDI share is higher in countries where the quality of corporate governance institutions is lower. One explanation for this is that FDI is more likely, compared with other forms of capital flows, to take place in countries with missing or inefficient markets. In such settings, foreign investors will prefer to operate directly instead of relying on local financial markets, suppliers, or legal arrangements.

According to the study done by Pradeep Agarwal (2000) on economic impact of foreign direct investment in south Asia by undertaking time-series, cross-section analysis of panel data from five South Asian countries; India, Pakistan, Bangladesh, Sri Lanka and Nepal, that there exist complementarily and linkage effects between foreign and national investment. Further he argues that, the impact of FDI inflows on GDP growth rate is negative prior to 1980, mildly positive for early eighties and strongly positive over the late eighties and early nineties. Most South Asian countries followed the import substitution policies and had high import tariffs in the 1960s and 1970s.

These policies gradually changed over the 1980s, and by the early 1990s, most countries had largely abandoned the import substitution strategy in favor of more open international trade and generally, market oriented policies (PradeepAgrawal, 2000). But the analysis of Brecher and Diaz-Alejandro (1977), gives us evidence that foreign capital can lower the economic growth by earning excessive profits in a country with severe trade distortions such as high tariffs. Maria Carkovic and Ross Levine (2002) also concluded in their econometric study on

FDI and GDP growth that the exogenous component of FDI does not exert a robust, independent influence on growth.

FDI inflows had a significant positive effect on the average growth rate of per capita income for a sample of 78 developing and 23 developed countries as found by (Blomström teals, 1994). However, when the sample of developing countries was split between two groups based on level of per capita income, the effect of FDI on growth of lower income developing countries was not statistically significant although still with a positive sign. They argue that least developed countries learn very little from MNEs because domestic enterprises are too far behind in their technological levels to be either imitators or suppliers to MNEs.

Borensztein, et al., (1998) found that the effect of FDI on host country growth is dependent on stock of human capital. They infer from it that flow of advanced technology brought along by FDI can increase the growth rate only by interacting with country's absorptive capability. They also find FDI to be stimulating total fixed investment more than proportionately. In other words, FDI crowds-in domestic investment. However, the results are not robust across specifications.

A recent study by Banga (2005) demonstrates that FDI, trade and technological progress have differential impact on wages and employment. While higher extent of FDI in an industry leads to higher wage rate in the industry, it has no impact on its employment. On the other hand, higher export intensity of an industry increases employment in the industry but has no effect on its wage rate. Technological progress is found to be labor saving but does not influence the wage rate. Further, the results show that domestic innovation in terms of research and development intensity has been labor utilizing in nature but import of technology has unfavorably affected employment in India.

Rajit Kumar Sahoo(2005) has pointed out that FDI has a direct and indirect impact and on a certain particular sectors

of the economy. A study on the impact of FDI on manufacturing sector reveals that FDI inflows in chemicals, electrical and electronics shows direct impact and FDI inflow in drugs and pharmaceutical sectors shows indirect impact (spillover effects). FDI is an important vehicle for the transfer of technology and knowledge and it demonstrates that it can have a long run effect on growth by generating increasing return in production via positive externalities and productive spillovers. Thus, FDI can lead to a higher growth by incorporating new inputs and techniques (Feenstra and Markusen, 1994).

Jaya Gupta (2007) made an attempt to review the change insectoral trends in India due to FDI Inflows since liberalization. This paper also examines the changed policy implications on sectoral growth and economic development of India as a whole. Singh and Jun (2005) by using a pooled model of developing countries, tested three groups of hypotheses on what influences direct investment – that



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political risk matters, that business conditions matter, that macroeconomic variables matter.

Finar (2002) argue that a qualitative index of political risk is a significant determinant of FDI flows for countries that have historically attracted high FDI flows. For countries that have not attracted such flows, socio-political instability (proxied by work hours lost in industrial disputes) has a negative impact on investment flows Jayashree Bose (2007) in his book studied the sectoral experiences faced by India and China in connection with FDI inflows. This book provides information on FDI in India and China, emerging issues, globalization, foreign factors, trends and issues in FDI inflows, FDI inflows in selected sectors. A comparative study has also been conducted on FDI outflows from India and China. This book also revealed the potential and opportunities in various sectors in India that would surpass FDI inflows in India as compared to China.

Several studies have focused on theoretical positive impact of FDI on growth. But there are only few empirical studies of this fact. Both macro and micro studies have generally been Conducted to study the relationship between FDI and growth. Micro studies find no positive evidence to support the thesis that FDI positively contributes to growth. Macro studies, have, however, thrown up some evidence to show that FDI positively affects economic growth under certain conditions. Although there are many literatures between FDI and growth, there are also ambiguous in this issue. UNCTAD (2002) found that FDI might have positive effect on output for some countries and negative for others, because of different dependent variables. Compare to the major literatures of endogenous growth model, it seems that the studies of the impact of FDI on growth are still too narrow, since there are some undecided factors. First, there are not enough determined proofs to show that FDI has direct real benefits on growth (or output level), except spillover effect. Second, FDI

is a new phenomenon in social, economic and global politics, but the empirical studies in the long-term relationship between FDI and output are still very few.

A number of studies have analyzed the relationship between FDI inflows and economic growth, the issue is far from settled in view of the mixed findings reached. Most of these studies have typically adopted standard growth accounting framework for analyzing the effect of FDI inflows on growth of national income along with other factors of production. Existing studies do not fully control for simultaneity bias, country-specific effects, and the routine use of lagged dependent variables in growth regressions. These weaknesses can bias the coefficient estimates as well as the coefficient standard errors. Thus, the profession needs to reassess the macroeconomic evidence with econometric procedures that eliminate these potential biases. Although there are literatures using VAR or VECM analysis to do Granger causality test, but most of them were lacking economic theory or ignored

important disturbance variables. Our study will strive to highlight the nexus between FDI and economic growth in India under co integration framework.

An export orientation is the strongest variable explaining why a country attracts foreign direct investment. Singh and Jun (2005) elaborate the determinants of Foreign Direct Investment (FDI) by empirically analyzing various factors including-

- Political risk.
- Business conditions, and
- Macroeconomic variables

According to them these are the factors that influence direct investment flows to developing countries. Singh and Jun (2005) also explain that exports generally, especially manufacturing exports, are a significant determinant of FDI flows for countries in which FDI is high. This fact is further supported by standard regression analysis and by Granger causality tests, which indicate that the feedback is predominantly from exports to FDI. Export orientation is the strongest variable for explaining why a country attracts FDI. This finding is in line with the secular trend toward increasing complementarities between trade and FDI.

#### III. OBJECTIVE OF THE STUDY

- To find out the relationship of Inflow of FDI with the development of India's economy (measured in terms of GDP)
- To study if there is an impact of economic reforms on FDI or not.
- To have an insight of the areas where further reforms in FDI are needed.
- To study the major constraints on FDI in India.

#### A. Impact of Foreign Direct Investment

India today is ranked among the most favored destinations for Foreign Direct Investment (FDI), with the services sector at the top in attracting FDI in April-November 2006. India has also emerged as the most ATTRACTIVE FDI DESTINATION in Asia with an 18 percent rate of return on equity investments. However, experts are still divided on the problems and prospects of FDI in retail. Some say it will shrink employment opportunities, completely alter the retail distributional structure and deal a death below to the corner shop structure. The optimists, on the other hand, see a whole range of opportunities – from improved collection, processing and better distribution of farm products to generation of more opportunities for the rural and urban unemployed.

FDI flows into India are mostly in IT and communications centre. Despite India's successful positioning as a business processing and IT outsourcing hub, these activities often translate into Indian Services sector exports via third-party transactions- not FDI. India has yet to build a critical mass in FDI having only initiated investment attracting reforms in





1991. There have recently been positive signs of increased FDI into other sectors. Despite the attention to services outsourcing, two of the sectors that received large amount of inward FDI in 2005 were automobile manufacturing and mining.

FDI into India will grow but will remain very low in relation to the size and potential of its economy. However, some of the world's leading MNCs are taking an active interest in the country. Intel, Microsoft, Cisco, Posco and an AMD- backed chip fabrication consortium have proposed large multi-year investments. The recent increase in the ceiling on foreign ownership in some telecoms services to 74% (from 49%) and in civil aviation companies to 49% (from 24%) is also helping to generate greater inflows. Although manufacturing is generally open to foreign investment and there has recently been substantial liberalization of the FDI regime in some sectors, such as telecoms, FDI opportunities in other sectors are limited. Inflexible labor laws are also restricting FDIinflows into India, despite its huge potential and growth prospects. India's ability to attract FDI is also hampered by its poor infrastructure. A recent survey by KPMG showed that India's poor infrastructure (the road network, the ports, the distribution networks and in particular the power supply) is a cause for concern and a major barrier to investment. Most of the companies surveyed doubted that rapid changes could be made to solve the infrastructure issues. The scope for making improvement is limited by the state of Public Finances. The combined deficit of the federal and state government is running at around 10% of GDP.

In investor surveys, India continues to lag far behind China as a preferred destination for investment. For example, in a recent survey of MNC executives conducted by Ernst & young, only 18% of respondents cited India as one of their three preferred locations for investment, compared with a figure of 41% for China.

# IV. RESEARCH METHODOLOGY

For the purpose of the research work, a structured questionnaire on "A survey of perception on FDI in India" has been used. The secondary source of data includes relevant literature including periodicals, journals articles and research reports in the areas of FDI. The books and journals provide esoteric and quantitative data.

#### A. SAMPLING PLAN

- Sample Frame:- The Investment Managers, Portfolio Managers, Investment Advisors and Investment Bankers in INDUSIND Bank in Barakhamba Branch and HDFC Bank in Ashok Vihar Branch.
- Sample size:- The sample size taken is 35

Sampling Techniques:- Convenience sampling (for selecting banks) and Purposive Sampling (for selecting respondents)

# B. Data Analysis & Interpretation

# **B.1 Hypothesis**

Hypothesis-1

H0-inflow of FDI has no relation with the development of India's economy (measured in terms of GDP).

H1-There is a positive relation between inflow of FDI and the development of India's economy (measured in terms of GDP)

Hypothesis Testing: To show whether Inflow of FDI and Development of India's economy (measured in terms of GDP) are related or not, Karl Pearson's Coefficient of correlation will be used

# Hypothesis-2

H0- There is no impact of economic reforms on Foreign Direct Investment.

H1- There is an impact of economic reforms on Foreign Direct Investment.

Hypothesis Testing: To show whether there is an impact of economic reforms on Foreign Direct Investment or not, chi square test will be used.

# **B.2** Testing of Hypothesis

### i). Karl Pearson's Coefficient of Correlation

The first hypothesis seeks to check whether there is a relation between inflow of FDI and the economic development of India measured in terms of GDP. For testing this hypothesis Karl Pearson's coefficient of correlation is calculated.

Karl Pearson's coefficient of correlation is a Non-parametric method. It is used to determine the degree of relation between 2 variables of a nominal scale. It is used to find out the extent of degree of relationship between variables.

# **Date Table for Correlation**

# TABLE I.

YEAR	FDI INFLOW	GDP		
2000-01	149.24	21686.52		
2001-02	226.30	23483.30		
2001-03	155.94	25306.63		
2003-04	109.44	28379.00		
2004-05	167.45	.5 32422.09		





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2005-06	134.25	36933.69
2006-07	349.10	42947.06
2007-08	637.76	49870.90
2008-09	1001.00	56300.63
2009-10	860	64573.52
2010-11	429	76741.48
2011-12	1032	88557.97

FDI flows to India from 2000-2001 to 2011-2012 (Rs in billion); Source: Handbook of Statistics on Indian Economy, 2011-2012, (Table No. 155 Foreign Investment Inflows) Page No.242

#### TABLE II.

FDI INFLOW	7 (X)	GDP(Y)	
149.24		21686.52	
226.30		23483.30	
155.94	•	25306.63	
109.44		28379.00	
167.45		32422.09	
134.25		36933.69	
349.10	U	42947.06	
637.76		49870.90	
1001.00		56300.63	
860		64573.52	
429		76741.48	
1032		88557.97	

Karl Pearson's Coefficient of Correlation (Rs.in billion)

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		FDI	GDP
FDI	Pearson Correlation	1.000	.811**
	Sig. (2-tailed)		.001
	N	12.000	12
GDP	Pearson Correlation	.811**	1.000
	Sig. (2-tailed)	.001	
	N	12	12.000

\*\*. Correlation is significant at the 0.01 level (2-tailed).

 $r ext{ (correlation)} = 0.811$ 

Karl Pearson's Coefficient of Correlation = 0.811

So, from the above calculation we can say that correlation cofficeient between the X and Y is positive so the Null Hypothesis H1 get accepted. This we can say that there is a positive correlation between inflow of FDI and the development of Indian economy (measured in term of GDP).

#### B.2 Testing of Hypothesis -2

# (i). CHI-Square

The second hypothesis seeks to measure whether there is an impact of economic reforms on FDI or not. Chi square test is a non- parametric test which is used to test the association or interdependence of variables and to check the goodness of fit.

The test will help to find out that whether there is any impact of economic reforms on FDI or not.

TABLE IV.

	High Impact to Econo mic Reform s on FDI	Medium Impact of Economi c Reforms on FDI	Low Impact of Economi c Reforms FDI	Tot al
High Inflow of FDI	1	2	0	3
Medium Inflow of FDI	8	16	4	28







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Low Inflow FDI	3	1	0	4
Total	12	19	4	35

CHI SQUARE TEST TABLE

# **Calculation of CHI-Square:**

TABLE V.

Of	Ef	Of-Ef	(Of-Ef) <sup>2</sup>	(Of-Ef.) <sup>2</sup> /Ef
1	1.03	-0.03	0.0009	0.00087
2	1.63	0.37	0.1369	0.0839
0	0.34	-0.34	0.1156	0.34
8	9.6	-1.6	2.56	0.2666
16	5.5	10.5	110.25	20.045
4	3.2	0.8	0.64	0.2
3	1.37	1.63	2.6569	1.94
1	2.17	-1.17	1.3689	0.630
0	0.46	-0.46	0.2116	0.46
TOTAL				23.96

Where,

Of stands for Observed frequency.

Ef stands for Expected frequency.

DOF = (r-1)(c-1)

DOF = 4

Level of significance = 0.05

From the above table the calculated value for Ch-Square is coming out to be 23.96.

Table value for Chi-square is 5.991 with 4 degrees of freedom & level of significance is 0.05.

Since calculated value for chi-square is greater then the Table value hence we reject the Null Hypothesis (Ho) and accept Alternate Hypothesis (H1).

#### V. MAJOR FINDINGS

- A large number (80%) of respondents agreed that the constraints on FDI India are Poor infrastructure, labor laws, tax laws, financial sector and political climate.
- 48.57% of the respondents also agreed that the inflow of FDI in India is quite satisfactory.
- The study also reveals that there is a positive

relationship between the inflow of FDI and the development of India's economy (measured in terms of GDP). This is evidenced in the first hypothesis tested in which the calculated value of Correlation is 0.51.

Also the study depicts that there is an impact of economic reforms on FDI. This fact is evidenced in second hypothesis wherein the calculated value of Chi square is 23.96 which is greater than table value 5.991.

#### VI. CONCLUSION

India is becoming one of the hottest investment destinations among the various investment options in the fast growing emerging economies. The booming Indian economy has a lot to offer to foreign investors, foreign institutional investors, venture capitalists, and portfolio managers etc. to leverage vast pool of natural, human and intellectual resources of rich Indian economy apart from various attractive investment opportunities. The developed stock exchange, liberal investment policy and various other factors have given new dimensions to the lucrative new of Investment Possibilities in the Indian Economy.

As India's economy continues to steadily grow at a reasonably good rate, with a growing role for the private sector in the economy, the Government would very much like to encourage greater foreign investment to supplement domestic resources to achieve target of 10% economic growth over the next five years.

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