

BUSINESS AND MANAGEMENT

Contemporary Research Issues

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Foreword

The nation today needs to focus on the development of technology and human resources. Competitiveness and excellence in organisations depends mainly on the available technology and quality of resources. Leaders, managers and educators at the global level, often encounter difficulties in finding education materials that are both educationally sound as well as appropriate to our context. This book, compiled by Prof S.C. Kundu, Prof B.K. Punia, Dr Mahesh Chand Garg and Dr Anju Verma will be an extremely valuable resource for people in educational institutions and the corporate sector, who want to develop their leadership potential, skills and policy implications.

The book combines a thoughtful, critical understanding of the theory and practices of various functions of management, particularly in the areas of accounting and finance, marketing, international business, banking and insurance, human resource management, and information technology.

The book encourages its readers to rethink their assumptions, and develop a critical 'gaze' not only on their organisations and social context, but also on themselves, and its holistic approach emphasizes not only the politics of the organisation, but also the politics of 'self'.

In my opinion, the present work is a curtain-raiser on various issues pertaining to various critical issues in the emerging areas of business and management still untouched in theory, as well as in practice. The Editors have successfully brought out facts which would be of immense value to those who are concerned with emerging areas of business and management. It is hoped that the inferences drawn will be highly useful for researchers, policy-makers, professionals working in the corporate world and regulatory bodies.

I congratulate the organizers of the conference and editors of this book for their sincere and constructive endeavor.

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Foreign Direct Investment and Economic Growth of India: A Regression Analysis

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ABSTRACT

The Indian economy embarked on various reforms and attempts to create an enabling environment to attract Foreign Direct Investment (FDI). India took steps towards trade reforms and macroeconomic regime and introduced measures aimed at improving the FDI regulatory framework. The present study is an attempt to study the trends of FDI inflows, exports and imports in India during the post-liberalized era (1991-2009) and to analyze the impact of FDI on GDP, exports and imports or economic growth of India. To achieve the answers of research questions of study, secondary data for 18 years time-period i.e. 1991-2009 have been used for analysis purpose through simple linear regression analysis and other techniques like mean, percentage, etc. and found that Mauritius is at the top for providing FDI inflows to India. Further, it is analyzed that FDI has significant influence on the economic growth rate, exports and imports of the Indian economy. Therefore, it may be suggested that to attract more FDI inflows, Government of India have to prepare the policies focusing on rationalization of tax structure, simplification of procedure for flow of funds, modernization of government systems and reduction in bureaucracy, improvement in infrastructure facilities, rationalization of labour laws, liberalization of employment visa rules and strengthening and supporting industries at all levels for creating a positive business environment along with higher investment potentialities because FDI leads to economic growth of India.

Keywords: Foreign direct investment, GDP, VECM, Exchange rate, Globalization

INTRODUCTION

According to economic theories, it is argued that there is a positive relationship between Foreign Direct Investment (FDI) and economic growth of a nation. To understand this causal relationship between economic variables becomes very important because it provides useful information on the variables to the

government and its agencies to control for achieving the desired levels of targeted variables (Sajid and Sarfraz, 2008). For instance, if empirical analysis indicates that causality runs from FDI to economic growth, then government and policy makers would employ strategies to attract foreign investment so as to promote economic growth. On the other hand, if causality is found to run from economic growth to FDI, government would employ policies that accelerate economic growth in order to encourage foreign investment inflows. India is in the dire need of foreign investment to complement the domestic investment and resources. Contrary, the supply side of the Indian economy requires a massive injection of foreign resources to generate the necessary increase in production which is required to reduce the rate of inflation, accelerate growth in the industrial sector and stimulate the acquisition of foreign technology which would further enhance economic growth. As in most developing countries, the perceived benefits of FDI have led to a heavy emphasis being placed on attracting large sums of FDI to India in the post-liberalization period (Chalapathi Rao and Murthy 2006). FDI depends upon two key agents, viz., a firm desirous to invest in another country, i.e. investing foreign firm and a country open to foreign investment i.e. host country. The interplay between these two agents determines the factors that affect flow of FDI and subsequent relationship between these two agents generates varied results for each (Nayak 2005).

Foreign investment is broadly divided into two parts: Foreign Direct Investment (FDI) and portfolio investment. FDI refers to investment in a foreign country where the investor retains control over the investment. It typically takes the form of starting a subsidiary and acquiring a joint venture in the foreign country comprising of those investments which are generally approved by Secretariat for Industrial Assistance (SIA), Foreign Investment Promotion Board (FIPB) and Reserve Bank of India (RBI) and provided by Non-Resident Indians (NRIs). FDI is usually governed by long-term considerations because these investments cannot be easily liquidated (Pradhan 2008). The present study is concerning with the first part of investment i.e. FDI. Over the last few years, India has emerged as a key destination for foreign investors. Its strong growth performance, a large and growing domestic market, a large pool of technically qualified manpower and robust regulatory structures are some of the factors that make India a top choice for investors across the globe. The government is also continuously trying to improve the investment environment, addressing investor concerns and enhancing the ease of doing business in India. Although, over time several policy and procedural impediments to investments have been addressed, yet there are areas which require more work if investment intentions are to be converted into investment flows on the ground. FDI is seen as a means to supplement domestic investment for achieving a higher level of economic growth and development of a nation. FDI benefits domestic industry as well as the Indian consumers by providing opportunities for technological up-gradation, access to global managerial skills and practices, optimal utilization of human and natural resources, making Indian industry internationally competitive, opening up export markets, providing backward and forward linkages and access to international quality goods and services.

REVIEW OF LITERATURE

There is an enormous theoretical and empirical literature dealing with the relationship between Foreign Direct Investment and economic growth and on the impact of FDI on economic growth of different countries. After reviewing the most of studies it is found that there are many factors determining the inflow of FDI in developing countries. Some of the recent empirical studies suggested that the most important factors determining the surge of FDI inflows into the developing countries in recent years have been the privatization and globalization of production (De Mello (1997)). Weinhold and Nair (2000) used the new test of causality to emphasize and found that the effect of FDI on growth is quite heterogeneous across countries. Chakraborty and Basu (2002) explored the two-way link between FDI and growth for India using a structural co-integration model (SCM) with vector error correction mechanism (VECM).

The VECM model reveals three important features: (i) GDP in India is not caused by FDI; the causality runs more from GDP to FDI; (ii) trade liberalization policy of the Indian government had some positive short run impact on the FDI flow; and (iii) FDI tends to lower the unit labour cost suggesting that FDI in India is labour displacing. Yusop *et al.*, (2002) found that economic prosperity is always linked with massive inflows of FDI into the economy. Thus, FDI is assumed as a key player and plays a pivotal role in boosting economic growth and technology development and provides the impetus for accelerating the development of an economy (Dimowo and Edo, 2002; Banga, 2004; and Kumar, 2005). Marwah and Takavoli (2004) examined the effect of FDI and imports on economic growth in four Association of South-East Asian Nations (ASEAN) countries. They concluded that both FDI and imports had a significant impact on growth. Li and Liu (2005) used the panel data of 84 countries to investigate the impact of FDI on growth and found a significant relationship between FDI and economic growth. Khawar (2005) conducted an empirical cross-country growth analysis to investigate the impact over two decades, of FDI at the 'aggregate' level and found that it has a significant and positive relationship with real income per capita, irrespective of any human capital requirements. Further, they concluded that there is positive relationship between FDI and economic growth of an economy. Sharma *et al.* (2007) analysed the trends and patterns of FDI inflows in India and it has been observed that FDI is more stable component of all kinds of capital inflows and gained great importance in recent times. There seems a large gap between approvals and inflows in different sectors and top 10 sectors constitute nearly 72 per cent of total FDI inflows in the country. Mauritius is top FDI investing country followed by USA, UK, Japan and Netherlands in that order. Kamath (2008) analyzed the impact of FDI on GDP and exports in India for the post-liberalization period (1991-2005). This study establishes the relationship between the FDI inflows and exports and GDP in the Indian economy. Rameshkumar and Alagappan (2008) examined the trends and patterns in the FDI inflows into India during the post-liberalization period and found that the approvals had been slow in materializing themselves into actual inflows. Jajri (2009) examined the influence of FDI on the growth of Malaysia for the period 1970-2003 and found that FDI has significant influence on the growth rate of the Malaysian economy. Further, the results revealed the existence of a long-run relationship between FDI and the variables involved and GDP, exchange rate, public development expenditure, openness of the economy and labor cost have a direct impact on FDI. Pradhan (2010) investigated the role of trade openness on FDI inflows in the economy during the period 1980-2007. It found that trade openness has a significant positive impact on FDI inflows. However, its impact is much stronger in the post-globalization era from 1991-2007 compared to the pre-globalization era from 1980-1990. Other factors that significantly affected India's FDI inflows during this period are real effective exchange rate and terms of trade. FICCI Survey (2010) highlighted the key messages FDI investors want to deliver to the government for bringing improvement in India's investment environment are: rationalization of the tax structure; simplification of procedures for flow of funds; modernization of government systems and reduction in bureaucracy; improvement in infrastructure facilities; rationalization of labour laws and liberalization of employment visa rules. In contrast, there are several studies indicating a negative or no relationship between FDI and growth. Sahoo and Mathiyazhagan (2003) showed that FDI had a lesser positive elasticity coefficient than exports when compared with GDP and Industrial productivity. Akinlo (2004) investigated the impact of FDI on economic growth in Nigeria and found an insignificant negative influence of FDI on growth. Pradhan (2008) analyzed the impact of infrastructure on FDI inflows in India and found that infrastructure has significant negative impact on FDI inflows in India. It implies that increase in infrastructure investment will lead to decrease in FDI inflows in the economy. Hence, it may be argued that as infrastructure increases, domestic investment will rise and this will restrict the FDI inflows in Indian economy.

OBJECTIVE AND METHODOLOGY OF THE STUDY

The present study is an attempt to study the trends of FDI inflows, exports and imports in India during the post-liberalized era (1991-2009) and to analyze the impact of FDI on GDP, exports and imports or economic growth in total. To validate the results, the following hypotheses have been developed:

H₁: There is an increasing trend in FDI inflows, exports and imports;

H₂: There is a positive impact of FDI inflows on GDP, exports and imports of India.

To achieve the answers of research questions of study, secondary data have been used. The relevant data is collected for 18 years time-period i.e. 1991-2009 from various published sources such as Annual Reports on Foreign Trade Policy, Reserve Bank of India (RBI)'s Annual Reports and Online database available for Indian economy, Secretariat for Industrial Assistance, Websites, Journals and Newspapers. The reason for the selection of the year 1991 as the base year is the fact that Government of India (GOI) had initiated the process of economic reforms in July 1991 which liberalized, privatized and globalized the Indian economy for the purpose of growth. The data is then analyzed using simple linear regression analysis to study the trends in FDI inflows, exports and imports and to examine the impact of FDI on economic growth, GDP, exports and imports of India. Further, the percentage analysis is used to measure the share of each investing countries in the total inflows of FDI in India. The study has chosen a sample of top ten investing countries which have attracted larger inflow of the FDI. For the purpose of hypothesis testing the data was normalized by taking natural logarithm values of FDI, Gross Domestic Product at Market Price (GDP_{mp}), exports and imports of India.

During data analysis, the simple statistical techniques like percentages and growth rates are used. To study the impact of FDI on economic growth as measured by GDP_{mp}, exports and imports, mean, standard deviation and simple regression analysis are used.

$$Y = a + bX$$

where,

Y = Dependent variable.

a = Intercept of the line on y-axis.

b = Regression coefficient.

X = Independent variable.

Thus, the following three simple linear regression equations used to study the impact of FDI on GDP, exports and imports of India.

$$X = a_1 + b_1 \text{ FDI} \quad \dots (1)$$

$$Y = a_2 + b_2 \text{ FDI} \quad \dots (2)$$

$$Z = a_3 + b_3 \text{ FDI} \quad \dots (3)$$

where,

X = Exports.

Y = Imports.

Z = GDP_{mp}

and a and b are the coefficients of FDI.

The present study is divided into five sections like introduction, objectives and methodology of the study, analysis and interpretation and conclusion and suggestions.

ANALYSIS AND INTERPRETATION

In this section, a detailed analysis of FDI inflows in India and analysis of the impact of FDI on economic growth, exports and imports is done.

(a) FDI Inflows in India

The Government of India (GOI) has taken many steps through its wide attractive policies and reforms of economic liberalization to attract FDI inflows, to boost the Indian economy and to make it competitive at par with developed economies. As a result, India has received FDI to the tune of Rs.4,53,624 crore (US \$ million 1,06,519) at the end of March 2009, as depicted in Table 1. The FDI inflows increased from Rs. 409 crore (US \$ million 167) in 1991-92 to Rs.1,22,919 crore (US \$ million 1,06,519) in 2008-09.

Table 1: FDI Inflows in India (Equity Capital Components Only)

Year (April-March)	In rupees Crore	Growth Rate (%) (Base Year)	In US \$ million	Growth Rate (%) (Base Year)
1991-92 (Aug-March)	409		167	
1992-93	1094	167.48	393	135.33
1993-94	2018	84.46	654	66.41
1994-95	4312	113.68	1374	110.09
1995-96	6916	60.39	2141	55.82
1996-97	9654	39.59	2770	29.38
1997-98	13548	40.34	3682	32.92
1998-99	12343	-8.89	3083	-16.27
1999-00	10311	-16.46	2439	-20.89
2000-01	12645	22.64	2908	19.23
2001-02	19361	53.11	4222	45.19
2002-03	14932	-22.88	3134	-25.77
2003-04	12117	-18.85	2634	-15.95
2004-05	17138	41.44	3755	42.56
2005-06	24613	43.62	5549	47.78
2006-07	70630	186.96	15726	183.40
2007-08	98664	39.69	24579	56.30
2008-09	122919	24.58	27309	11.11
Grand Total	453624		106519	

Source: Data compiled from Fact Sheet of SIA on Foreign Direct Investment.

i.e. an increase by more than 300 times within a span of 18 years. This is mainly due to the steps taken by the GOI for attracting FDI inflows in India. However, the study discloses inconsistency in the growth rate of FDI inflows. The FDI growth rate is positive till the end of 1997-98, but thereafter it is negative in 1998-99, 1999-00, 2002-03 and 2003-04 and become again positive in 2000-01, 2001-02 and 2004-05 and in subsequent years. The FDI growth rate is highest in 2006-07 (186.96 per cent) and lowest in 2002-03 (-22.88 per cent) as compared to their respective previous years.

As far as country-wise FDI inflows is concerned, Table 2 shows that Mauritius is investing the most in various sectors of Indian economy among the top 10 investing countries in India from August 1991 to March 2009. Out of the total FDI inflows from the top 10 investing countries, (51.26 per cent) is from Mauritius at the end of March 2009. Further, it also reveals that inflow of FDI from Switzerland is the lowest (i.e. 1.48 per cent) among the top 10 investing countries in India. The USA, UK and Japan are holding the second, third and fourth positions among the top 10 investing countries in India in terms of FDI. Hence, it may be concluded that there is inconsistency in the shares of FDI inflows from almost all the countries. In all, it may also be stated that there is an increasing trend in FDI inflows of India.....H₁.

Table 2: Country-wise FDI Inflows in India (Financial year-wise)

Country	1991-2002	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total FDI from Aug 1991 to March 2009
Mauritius	27446 (43.09)	3766 (32.14)	2609 (30.05)	5141 (39.61)	11411 (58.85)	28759 (59.17)	44483 (56.28)	50794 (52.83)	174409 (51.26)
USA	12248 (19.23)	1504 (12.84)	1658 (19.10)	3055 (23.54)	2210 (11.40)	3861 (17.94)	4377 (5.54)	15727 (16.36)	44640 (13.20)
UK	4263 (6.69)	1617 (13.80)	769 (8.86)	458 (3.53)	925 (4.77)	8389 (17.30)	4690 (5.94)	8002 (8.32)	29113 (8.56)
Japan	5099 (8.00)	1971 (16.82)	360 (4.15)	575 (4.43)	340 (1.75)	2905 (12.19)	12319 (3.99)	3840 (3.99)	27409 (8.06)
Netherlands	3856 (6.05)	836 (7.13)	2247 (25.88)	1217 (9.38)	1164 (6.00)	382 (0.79)	2780 (3.52)	3922 (4.08)	16404 (4.82)
Germany	3455 (5.42)	684 (5.84)	373 (4.30)	663 (5.11)	1345 (6.94)	540 (1.11)	3336 (4.22)	1889 (1.98)	12285 (3.61)
Singapore	1997 (3.14)	180 (1.54)	172 (1.98)	822 (6.33)	1218 (6.28)	2662 (5.48)	2075 (2.63)	5983 (6.22)	15109 (4.44)
France	1947 (3.06)	534 (4.56)	176 (2.02)	537 (4.14)	82 (0.42)	528 (1.09)	3385 (4.28)	2750 (2.92)	9939 (2.92)
South Korea	2189 (3.44)	188 (1.60)	110 (1.27)	157 (1.21)	269 (1.39)	321 (0.66)	583 (0.74)	2098 (2.18)	5915 (1.74)
Switzerland	1200 (1.88)	437 (3.73)	207 (2.38)	353 (2.72)	426 (2.20)	257 (0.53)	1009 (1.28)	1153 (1.18)	5022 (1.48)
Total FDI Inflows*	63700 (100)	11717 (100)	8681 (100)	12978 (100)	19390 (100)	48604 (100)	79037 (100)	96138 (100)	340245 (100)

Note: * Includes inflows under NRI schemes of RBI, stock swapped and advances pending issue of shares.

Figures in parentheses indicate the percentages to the respective column total.

Source: Data compiled from Fact Sheet of SIA on Foreign Direct Investment.

(b) Exports and Imports of India

The trends in exports and imports of India in absolute and percentage terms are presented in Table 3. It is evident from Table 4 that total exports from India are increased from Rs. 44,042 Crore in 1991-92 to Rs. 8,40,755 Crore, with an increase of more than 18 times within a span of 18 years. The growth in exports is due to increased investment in export-oriented industries by the government, public and the foreign investors. The total imports to India are increased from Rs. 47,851 crore in 1991-92 to Rs. 13,74,436 Crore, with an increase of 27.72 times within a time period of 18 years. The rate of growth of exports is highest in the year of 1993-94 (29.90 per cent) and lowest (2.7 per cent) in 2001-02 year. The import growth rate is highest (36.6 per cent) in 2004-05 year and lowest (6.2 per cent) in 2001-02 year. It is also clear from the table that there is inconsistency in the growth rate of exports as well as imports even though there is an increasing trend in exports and imports of India..... H_1 (accepted based on observation).

Table 3: Export and Imports in India

(Rs. Crore)

Year	Exports	Imports	Rate of Growth of Exports (%)	Rate of Growth of Imports (%)
1991-92	44042	47851	-	-
1992-93	53688	63375	21.9	32.4
1993-94	69751	73101	29.9	15.3
1994-95	82674	89971	18.5	23.1
1995-96	106353	122678	28.6	36.4
1996-97	118817	138920	11.7	13.2
1997-98	130101	154176	9.5	11.0
1998-99	139753	178332	7.4	15.7
1999-00	159561	215236	14.2	20.7
2000-01	203571	230873	27.6	7.3
2001-02	209018	245200	2.7	6.2
2002-03	255137	297206	22.1	21.2
2003-04	293367	359108	15.0	20.8
2004-05	361879	490532	23.4	36.6
2005-06	456418	660409	26.1	34.6
2006-07	571779	840506	25.3	27.3
2007-08	655864	1012312	14.7	20.4
2008-09	840755	1374436	28.19	35.8

Source: Annual Report on Foreign Trade Policy 2008-09; 2009-10.

(c) Relationship between Exports, Imports, GDP and FDI

Table 4 shows that the imports have a higher mean, standard deviation and also a higher skewness and the exports have all the statistics are in lower side. It reflects that the imports are higher than exports in India, in the other words, India is having trade deficit in its foreign trade. Further, Table 5 depicts that the coefficient of determination (R^2) between the FDI and exports is very high and also significant at 1 per cent level of significance. In other words, FDI inflows of Rs. 1 crore attracts Rs.0.56 Crore exports in India. The variation in exports due to changes in FDI can be explained to the extent of 88 per cent. All the estimated coefficients are statistically significant and have an acceptable standard error. The coefficient indicating variation in exports is significant and positive means that the FDI has promoted exports during the period of study. On imports front, it is concluded that the coefficient, as expected, has a positive value and is statistically significant that there is an increase in imports along with an increase in the exports with every inflow of FDI in the economy. The regression analysis indicate that with every Rs crore increase in the FDI, there is an increase of imports to the extent of Rs. 0.63 crore. It shows that imports are increasing with FDI simultaneously and increase in imports is higher than increase in exports with every rupee flow of FDI in the economy. However, the coefficient of determination is 87 per cent showing that there are other factors than FDI which explain the changes in imports in the Indian economy over the study period. The primary purpose of an economy to attract FDI is to accelerate the economic growth of the economy and improving the standard of living of the people of the country. The very close indicator of economic growth is the GDP of the economy. Here, the results indicate a positive and statistically significant relationship between GDP and FDI in the Indian economy during the period of study. There is an increase in the GDP variable due to FDI inflows in India. The coefficient of determination is also very high (89.20 per cent) showing that the most of the changes in GDP is explained by FDI in the economy. Thus, it may be concluded that to attract the FDI inflows for accelerate growth rate of India is fulfilled is the need of the hour.

Table 4: Descriptive Statistics for Exports, Imports, GDP and FDI

Variables	Sum	Mean	Minimum	Maximum	Std. Dev.	Variance	Skewness
Exports	218.55	12.1417	10.69	13.64	.86418	.747	.093
Imports	222.58	12.3656	10.78	14.13	.97522	.951	.223
GDP	260.53	14.4739	13.39	15.49	.63136	.399	-.119
FDI	167.76	9.3200	6.01	11.72	1.44754	2.095	-.511

Source: Estimated on the basis of data given in Table 1 and 3.

Table 5: Impact of FDI on for Exports, Imports and GDP-Regression Analysis

Variables	Constant	B Coefficient	Std. Error	t-value	Sig.	R	R ²
Exports	6.908	.562	.051	11.088	.000	.941	.885
Imports	6.478	.632	.059	10.798	.000	.938	.879
GDP	10.634	.412	.036	11.504	.000	.945	.892

Source: Estimated on the basis of data given in Table 1 and 3.

CONCLUSION AND SUGGESTIONS

Foreign Direct Investment is considered as one of the major factors under laying the economic growth experienced by many developing countries. In India, FDI has played an important role not only in stimulating economic growth, but also contributed significantly to the growth of the industrial sector and the transformation of the Indian economic structure from agricultural to a major producer and exporter of manufactured goods. However, the pace for FDI has become increasingly competitive, especially in view of the emergence of China as a new destination for FDI. The study analyzed the year-wise and country-wise FDI inflows in India during the post-liberalized era (1991-2009), the trends in exports and imports that FDI has played an important role in stimulating economic growth, exports and imports of Indian economy and strong market and macroeconomic stability promote FDI. It is clear that FDI has positive impact on exports, imports and greatly contributed to GDP on Indian economy. As a whole, since FDI has become increasingly important, policies focusing on rationalization of tax structure, simplification of procedure for flow of funds, modernization of government systems and reduction in bureaucracy, improvement in infrastructure facilities, rationalization of labour laws, liberalization of employment visa rules and strengthening and supporting industries are to be supported by the government for creating a positive business environment along with higher investment potentialities.

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