FDI AND TRADE: TREND ANALYSIS FOR INDIA AND CHINA

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Abstract: This paper provides an overview of FDI inflows and Trade in India and China. It shows that FDI and Trade is the fastest growing in India and China, contributing significantly to GDP, GDP growth, employment, trade and investment. Labour productivity in this sector is the highest and it has increased overtime. India is a major proponent of liberalizing services both in the WTO and in its bilateral trade agreements. In the result of regression co efficient of simple linear and semi log linear model implies that India and China had a possibility for positive relationship on Foreign Direct Investment and it plays a significant role in enhancing the level of economic growth. Import performance of China shows that regression co efficient in both the models are insignificant, so China had negative impact on their Import performance. Export performance of India shows the regression co efficient on both the models are insignificant. There is also a negative impact on India's Export performance.

Keywords: FDI, Exports, Imports, Simple Linear Regression, Semi Log Linear.

Introduction: India and China are the world's fastest growing economies. Besides this, the variables used in this study viz Trade, FDI and GDP and these comparisons are changing all the time. In India, recent years Exports have seen tremendous growth. However, in China scales are smaller and services are playing larger role. Both Countries have interested to invest globally with Domestic Companies acquiring Foreign Companies and Investing in Greenfield projects abroad. The post three decades China's growth has been mesmerizing. It manufactures 75 per cent of world toys, 58 per cent of the cloths and 29 per cent of the world's mobile.

In 1980 India and China's GDP level was more or less same. In India and China Foreign Direct Investment is one of the most popular issues. The main difference between India and China is that in China the former has a large market size, higher growth and better hard infrastructure. Therefore, the small market size of India remains a critical constraint for attracting FDI. It is most important to recollect the fact that the Chinese growth in 1980s was compel by agriculture and it was concentrated in rural areas. Multinational Corporations (MNCs) entering into China could satisfy the 'Market seeking' as well as 'Cost minimization' strategies. And also availability of goods, 'hard infrastructure' also helped.

Review of Literature:

Introduction: In this study an attempt is made to review some important works related to FDI, TRADE and GDP in India and China the present study. Danish Ramzan and Adiqa Kausar Kiani (2012), Mhanta Devajit (2012), Namita Rajput et. al, (2012) Tarun Kanti Bose (2012) Mr. Shashank goel et. al, (2012) Khalid Javed et. al, (2012), Jesse Mora, Nirvikar Singh (2012), Anowar Hossain and Mohammad Kamal Hossain (2012), Abdullahi, Yahya Zakari, et. al (2012), Sarbapriya Ray (2012), Himachalapathy, et.al (2012), Yutaka Kurihara (2012), Gaurav Agrawal and Mohd Aamir Khan (2011), Amna Tasneem and Babar Aziz ((2011), Chitrakalpa Sen (2011), Zenegnew Abiy Hailu (2010), Har Wai Mun et.al, (2010), Xueli Wan (2010), G. Jayachandran and A. Seilan (2010), Faiz Muhammad Shaikh (2010), Bhatt (2010-11), Puman Ouyang (2009) Sabina Noormamode (2008), Kowalski (2008), Ranjan

Kumar Dash and Chandan Sharma (2007), Bishwanath Goldar and Rashmi Banga (2007), Ozturk and Ilhan (2007), Emrah Bilgic (2007), Muharrem Afsar (1980), Joshua Aizenman and Ilan Noy (2006) Xiaoying Li and Xiaming Liu (2005), Parantap Basu et.al, (2003), Dukhabandhu Sahoo and Maathai K. Mathiyazhagan (2002), Kishor Sharma (2000), Muhammad Azam and Ling Lukman Muhammad Tariq Majeed and Eatzaz Ahmad,and Francis Cai et.al, In these papers to study the role of FDI in accelerating economic growth, the Impact of Globalization on GDP, the Co integration relationship between FDI and GDP in the long run for the Pakistan, Malaysia Australia, China, India, Japan, Republic of Korea, New Zealand and ASEAN.

Methodology: To study the growth, trend and distribution of FDI, Exports and Imports in India and China. To examine the relationship between FDI on GDP, Exports on GDP and Imports on GDP in India and China. The tools such as simple linear regression, semi-log linear regression models, correlation, Compound Growth Rate have been used in this study.

FDI, Exports And Imports Trends In India And China: Table 4.1 shows that a result of trend analysis for FDI inflows into China has increased annually by 388.465 million of US Dollar in 1981. The Regression Co efficient of Semi log linear Model implies that FDI inflows increased at the Compound Growth Rate of 31.78 per cent per year. The Regression Co efficient in both Models are significant at one per cent level. The value of adjusted R square is 0.98 in Simple Linear Regression Model and it is 0.86 in Semi Log Linear Model. It means that FDI inflows into China has registered a consistent Linear trend in this period and it is more than 85 per cent of variation in dependent variable and it is explained by the independent variable. In 1991 China's FDI inflows increased annually by 4004.426 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that FDI inflows decreased at the Compound Growth Rate of 21.90 per cent per year. The Regression Co efficient in both Models are significant at one per cent level. The value of adjusted R square is 0.68 in Simple Linear Regression Model and it is 0.56 in Semi Log Linear Model. It means that FDI inflows into China have registered a consistent linear trend in this period and it has 55 per cent of variation in dependent variable and it is explained by the independent variable. In 2001 China's FDI inflows increased annually by 7572.886 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that FDI inflows decreased at the Compound Growth Rate of 10.63 per cent per year. The Regression Co efficient in both Models are significant at one per cent level. The value of adjusted R square is 0.92 in Simple Linear Regression Model and it is 0.95 in Semi Log Linear Model. It means that FDI inflows into China have registered a consistent linear trend in this period and it has 95 per cent of variation in dependent variable and it is explained by the independent variable.

Table 4.2 shows that a results for trend analysis for India's FDI inflows increased annually by 21.709 million of US Dollar in 1981. The Regression Co efficient of Semi log linear Model implies that FDI inflows increased at the Compound Growth Rate of 26.24 per cent per year. The Regression Co efficient in both Models are significant at one per cent level. The value of adjusted R square is 0.53 in Simple Linear Regression Model and it is 0.27 in Semi Log Linear Model. It means that FDI inflows into China have registered a consistent linear trend in this period and it has 27 per cent of variation in dependent variable and it is explained by the independent variable. In 1991 India's FDI inflows increased annually by 386.927 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that FDI inflows increased at the Compound Growth Rate of 45.64 per cent per year. The Regression Co efficient in both Models are significant at one

per cent level. The value of adjusted R square is 0.77 in Simple Linear Regression Model and it is 0.74 in Semi Log Linear Model. It means that FDI inflows into China have registered a consistent linear trend in this period and it has 74 per cent of variation in dependent variable and it is explained by the independent variable. In 2001 India's FDI inflows increased annually by 3910.383 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that FDI inflows decreased at the Compound Growth Rate of 29.95 per cent per year. The Regression Co efficient in both Models are significant at one per cent level. The value of adjusted R square is 0.66 in Simple Linear Regression Model and it is 0.77 in Semi Log Linear Model. It means that FDI inflows into China have registered a consistent linear trend in this period and it has 77 per cent of variation in dependent variable and it is explained by the independent variable.

Table 4.3 shows that results for trend analysis for China's Export increased annually by 5079.291 million of US Dollar in 1981. The Regression Co efficient of Semi log linear Model implies that Export inflows increased at the Compound Growth Rate of 12.63 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.89 in Simple Linear Regression Model and it is 0.94 in Semi Log Linear Model. It means that Export inflows into China have registered a consistent linear trend in this period and it has 94 per cent of variation in dependent variable and it is explained by the independent variable. In 1991 China's Export inflows increased annually by 1378.987 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Export inflows increased at the Compound Growth Rate of 17.35 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.97 in Simple Linear Regression Model and it is 0.96 in Semi Log Linear Model. It means that Export inflows into China have registered a consistent linear trend in this period and it has 96 per cent of variation in dependent variable and it is explained by the independent variable. In 2001 China's Export inflows increased annually by 180233.643 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Export inflows increased at the Compound Growth Rate of 20.08 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.96 in Simple Linear Regression Model and it is 0.94 in Semi Log Linear Model. It means that Export inflows into China have registered a consistent linear trend in this period and it has 94 per cent of variation in dependent variable and it is explained by the independent variable.

Table 4.4 shows that results for trend analysis for China's Import increased annually by 1534.916 million of US Dollar in 1981. The Regression Co efficient of Semi log linear Model implies that Import increased at the Compound Growth Rate of 15.83 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.94 in Simple Linear Regression Model and it is 0.93 in Semi Log Linear Model. It means that Import into China has registered a consistent linear trend in this period and it has 93 per cent of variation in dependent variable and it is explained by the independent variable. In 1991 China's Import increased annually by 5069.224 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Import decreased at the Compound Growth Rate of 13.54 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.85 in Simple Linear Regression Model and it is 0.83 in Semi Log Linear Model. It means that Import into China has registered a consistent linear trend in this period and it is more than 82 per cent of variation in dependent variable and it is explained by the independent variable. In 2001 China's Import increased annually by 157760.488

million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Import increased at the Compound Growth Rate of 19.60 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.95 in Simple Linear Regression Model and it is 0.97 in Semi Log Linear Model. It means that Import into China has registered a consistent linear trend in this period and it is more than 96 per cent of variation in dependent variable and it is explained by the independent variable.

Table 4.5 shows that results for trend analysis for India's Export increased annually by 1147.053 million of US Dollar in 1981. The Regression Co efficient of Semi log linear Model implies that Export increased at the Compound Growth Rate of 7.46 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.80 in Simple Linear Regression Model and it is 0.86 in Semi Log Linear Model. It means that Export into India has registered a consistent linear trend in this period and it has 86 per cent of variation in dependent variable and it is explained by the independent variable. In 1991 India's Export increased annually by 3958.605 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Export increased at the Compound Growth Rate of 11.18 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.97 in Simple Linear Regression Model and it is 0.98 in Semi Log Linear Model. It means that Export into India has registered a consistent linear trend in this period and it has 98 per cent of variation in dependent variable and it is explained by the independent variable. In 2001 India's Export increased annually by 37214.199 million of US Dollar. The Regression Co efficient of Semi log linear Model implies that Export increased at the Compound Growth Rate of 22.26 per cent per year. The Regression Co efficient in both Models are insignificant. The value of adjusted R square is 0.93 in Simple Linear Regression Model and it is 0.97 in Semi Log Linear Model. It means that Export into India has registered a consistent linear trend in this period and it is more than 96 per cent of variation in dependent variable and it is explained by the independent variable.

Conclusion: India's FDI inflows increased in the year from 2001 to 2010 when compare to the earlier decades. The level of percentage of FDI inflows in China is more But in India their FDI inflows is not that much per cent. It shows that FDI has not contributed much to the economic growth in India for the time period from 1981 to 1990 and 1991 to 2000. The overall result of a trend analysis shows that the Foreign Direct Investment, Trade and GDP into India and China have a increasing trend from 1981-2010. China's Export performance is higher than the India's Export performance. The results of trend analysis on India's Export and GDP had a positive relationship between India's Export and GDP, Import and GDP, FDI and GDP. Relationship between China's Export and GDP is very higher than the India's Export. Their Import is less when compare to their Export

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Trend Analysis for the FDI, Exports and Imports into India and China Table 4.1, 4.2,4.3 and 4.4.
Results for Trend Analysis of Fdi Inflows into China

S.No	Variable	Year	Model	a	b	St_b	t	sig	R^2	Adjusted R^2	CGR
			simple linear	-174.895	388.465	19.796	19.623	0.000	0.980	0.977	-
1	FDI	1981-1990	Semi log linear	5.795	0.276	0.037	7.436	0.000	0.874	0.858	31.78
			simple linear	10741.13	4004.426	892.701	4.486	0.002	0.716	0.680	-
2	FDI	1991-2000	Semi log linear	9.128	0.198	0.056	3.509	0.008	0.606	0.557	21.90
			simple linear	34393.44	7572.886	764.424	9.907	0.000	0.925	0.915	-
3	FDI	2001-2010	Semi log linear	10.640	0.101	0.008	13.185	0.000	0.956	0.951	10.63

S.No	Variable	Year	Model	a	B	std_b	t	sig.	R^2	Adjusted R^2	CGR
			simple linear	1.106	21.709	6.519	3.330	0.010	0.581	0.529	-
1	FDI	1981-1990	Semi log linear	3.095	0.233	0.112	2.081	0.071	0.351	0.270	26.24
			simple linear	-276.398	386.927	70.365	5.499	0.001	0.791	0.765	-
2	FDI	1991-2000	Semi log linear	4.979	0.376	0.072	5.195	0.001	0.771	0.743	45.64
			simple linear	-3724.83	3910.383	910.238	4.296	0.003	0.698	0.660	-
3	FDI	2001-2010	Semi log linear	8.012	0.262	0.047	5.608	0.001	0.797	0.772	29.95

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Results for Trend Analysis of FDI Inflows into India

Results for Trend Analysis of Export Performance into China

S.No	Variable	Year	Model	a	B	St_b	t	sig	R^2	Adjusted R^2	CGR
			simple linear	-1.005	5079.291	591.105	8.593	0.000	0.902	0.890	
1	EXPORT	1981-1990	Semi log linear	-225.631	0.119	0.010	11.565	0.000	0.950	0.943	12.6
			simple linear	-4.591	23087.710	1378.987	16.743	0.000	0.972	0.969	
2	EXPORT	1991-2000	Semi log linear	-307.265	0.160	0.011	14.920	0.000	0.965	0.961	17.35
			simple linear	-3.605	180233.643	10524.252	17.126	0.000	0.967	0.964	
3	EXPORT	2001-2010	Semi log linear	-354.146	0.183	0.014	13.499	0.000	0.948	0.943	20.08

Results for Trend Analysis of Import Performance into China

S.No	**Variable**	**Year**	**Model**	**a**	**B**	**St_b**	**t**	**Sig**	**R^2**	**Adjusted R^2**	**CGR**
			simple linear	-3.719	18706.759	1534.916	12.187	0.000	0.949	0.943	-
1	IMPORT	1981-1990	Semi log linear	-281.339	0.147	0.13	11.057	0.000	0.939	0.931	15.83
			simple linear	-1.003	5069.224	712.789	7.112	0.000	0.863	0.846	-
2	IMPORT	1991-2000	Semi log linear	-241.976	0.127	0.020	6.246	0.000	0.848	0.826	13.54
			simple linear	-3.155	157760.488	10826.171	14.572	0.000	0.955	0.951	-
3	IMPORT	2001-2010	Semi log linear	-346.135	0.179	0.010	17.87	0.000	0.970	0.967	19.60

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