

### **The Determinants of Foreign Direct Investment in India**

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**Abstract:**

*Foreign Direct Investment (FDI) is considered as one of the major source of external finance available to developing countries. It generally consists of investments in retail sector, infrastructure development such as making of bridges, flyovers etc. and finance sector such as insurance, banking etc. It offers various benefits to the host countries by bringing international technologies, management know-how, managerial skills etc. India has continuously tried to attract FDI from major investors of the world. For having an uninterrupted flow of foreign direct investment, the Indian government has taken a number of steps to create effective trade policies and conducive trade environment. The present study aims to find the impact of corporate taxes on FDI by taking a time period of 20 years. The paper has also focused on the presence of two other determinants, Exchange rate and Trade openness. It concludes that corporate taxes have a negative impact on attracting FDI in the presence of aforesaid control variables.*

**Introduction**

Foreign Direct Investment plays a significant role in capital formation of a nation by serving as a non-debt source of external finance and offering various advantages such as better access to global market, upgrading existing technology, boosting the human resources by better skills and technical know-how etc.(D Ramesh, S.Packia). Nations with limited capital benefit from FDI by having an access to external finance from wealthier nations. Also, Organizations entering the host countries by way of FDI tend to have a long term interest as compared to other foreign investors (kalodkin, 2017). After economic crisis in 1991, FDI helped India to maintain its financial stability through investment in various sectors. It boosted the development of Indian economy by giving employment to unemployed, infrastructure development, establishing forward and backward linkages to domestic establishments for fulfilling the need of business infrastructure, raw material etc. and increasing revenue from taxes and income.

Literature in this field has given various factors which influence the extent of FDI in a nation. Bellington (1999) applied a model for UK using statutory CIT rate and concluded that taxes have negative impact on FDI. He also concluded that factors such as unemployment and labor cost influence location. Unemployment acts as substitute for labor availability and hence impacts FDI positively (Bellington, 1999). Study by Avik Chakrabarti (2001) conducted on the determinants of FDI found that various variables are correlated to FDI statistically. The study used econometric model in which all variables were divided in three different groups. Variables included market size (shown by GDP), openness, exchange rate, growth rate, labor cost, trade deficit and tax. Each variable showed either positive or negative correlation.

The study also used less convincing variables, which it referred as 'doubtful variables' such as inflation, government consumption, budget deficit, external debt and political stability. The study concluded that the most powerful variable was market size, followed by trade, net export and tax. (Avik Chakrabarti, 2001) Study by Becker et al., 2006 mentions that reduction in corporate taxes tends to have a positive impact in attracting FDI but it also cautioned the policy makers to consider the cost of reducing taxes in terms of loss of appropriate tax revenue for well-being (Becker et al., 2006). Babatunde & Adepeju, 2012 focused on the significance of tax incentives and used correlation

of Pearson to state that tax incentives play a positive role in attracting more FDI by investors. Apart from taxes, literature has stated various other determinants of FDI such as extent of trade openness, volatility of exchange rate, market size, labour costs, political risks etc. Nations with larger and growing market tend to attract more FDI as the investors expect large amount of profits from their investment (Jordaan 2004).

### Objectives of The Study

The aim of the study is to carry out the impact of Corporate Tax rate structure on the total FDI inflows in India in the presence of Trade openness and Exchange rate.

### Research Methodology

Research Methodology is the systematic way of developing and specifying the methods used in the study to fulfill the objectives (Saunders et al. 2009). To achieve the objective of the present research study, the researcher has followed realism philosophical paradigm, where insights are presented through a quantitative research approach, under which secondary research method has been adopted for data collection. A quantitative data has been attained from various secondary sources about aggregate corporate tax rate structure, Trade openness (Import plus total exports/ GDP), and Exchange Rate of India. The data has been collected from secondary sources such as Trading Economics 2017c; Trading Economics 2017b; DIPP 2017; Trading Economics 2017; Trading Economics 2017(a) for last 20 years i.e 1996-2015. Regression and Correlation has been performed using the software Stata 11.1 version.

### Data Analysis

In order to find the impact of corporate tax on foreign direct investment, Time series analysis has been performed including two control variables Exchange Rate and trade openness. Control variables are those entities which remain constant in the study, but if left isolated, generate invalid results of the study (Shuttleworth 2017). Under time series analysis regression analysis has been performed.

Correlation Analysis has been used in the present study to gauge the association between Foreign Direct Investment, Corporate Tax, Trade Openness and Exchange Rate. The results of Correlation Analysis have been shown in table 1 below.

**Table 1 Correlation Analysis Foreign Direct Investment Corporate Tax, Trade openness and Exchange Rate**

Correlation Analysis	Foreign Direct Investment	Corporate Tax	Trade Openness	Exchange Rate
Corporate Tax	-0.6992	1.0000		
Trade Openness	0.8944	-0.6405	1.0000	
Exchange Rate	0.6289	-0.2001	0.5787	1.0000

The correlation results in all suggest a strong degree of association among the data set chosen for the present study. The correlation results further paves the way for regression analysis. Therefore, the subsequent section of the study intend to conduct regression analysis on the basis of correlation results.

The regression analysis is used to construct an exact relationship between dependent and independent variables. In the context of present study, the dependent variable is foreign direct investment and independent variable is Corporate Tax structure. It should be noted that an aggregate rate structure of

corporate tax has been undertaken in the present study. Apart from Corporate Tax structure, the present study has also undertaken control variables Trade openness and Exchange Rate.

**Table 2 List of Dependent, Independent Variables and control variables**

Independent Variables	Dependent Variable
Corporate Tax Rate	Foreign Direct Investment
Control Variables	
Trade Openness	
Exchange Rate	

**Regression Analysis of FDI with Corporate Tax, Trade Openness and Exchange Rate**

Regression Analysis of FDI with corporate tax, Trade Openness and Exchange Rate has been presented in table 3 and 4. Whilst regressing FDI on corporate tax, Trade Openness and Exchange rate, the following results have been extracted.

**Table 3 Model Summary of Regression, Corporate Tax, Exchange Rate and Trade Openness Impact on FDI**

Model Summary					
Source	SS	df	MS	Number of observation	= 20
Model	22.7836707	3	7.5945569	Prob > F	= 0.000
Residual	4.15299311	16	0.25956207	R-squared	= 0.8458
Total	26.9366638	19	1.41771915	Adjusted R-squared	= 0.8169

As per table 3, the Prob (F) is the probability that the null hypothesis for the full model is true. As can be seen in the table the value for Prob (F) is 0.000, which is low enough to indicate that at least one of regression coefficient is non-zero. Further, the value R square and Adjusted R square is 0.8458 and 0.8169, suggesting the model fitness is significant and represent around 81-84% of the variation in dependent variable is answerable with chosen independent variable. It shows that corporate tax rate taken with Trade openness and Exchange Rate in this regression model is shown to have responsible for 84% of variation in FDI. Therefore, it can be said that overall impact of corporate tax, trade openness and Exchange rate on FDI is significant.

**Table 4 Coefficient Table of Regression III, Corporate Tax, Exchange Rate and Trade Openness Impact on FDI**

Log FDI	Coefficient	Standard Error	t	P> t	[95% Conf. Interval]
Trade Openness	0.0069804	0.0020834	3.35	0.004	.0025637 .0113971
Exchange Rate	0.041694	0.0202609	2.06	0.046	-.0012571 .0846452
Corporate Tax	-.020657	0.0897762	-2.3	0.035	-.3968907 .0162569

	38				
<b>Constant</b>	12.7517	3.327638	3.83	0.001	5.697476
	5				19.80603

The coefficient summary of regression model is represented in table 4. As per the table, the corporate tax rate attains a negative coefficient of 0.2065738, suggesting a negative impact on FDI. The coefficient 0.2065738 suggests that 20% of the variation in FDI is responsible for changes in corporate tax structure of period 1996 to 2015. Also, it can be noted that the measure of precision, standard error of the coefficient is 0.08 with t value of -2.3. Further, the p values of the coefficients are 0.035 for corporate tax, which is also significant. Therefore, in the present case of regression, the impact of corporate tax rate is significant with the presence of both Trade Openness and Exchange rate.

Looking towards the situation of Trade Openness and Exchange Rate, it can be seen that the variables are absolutely significant with positive coefficient of 0.0069804 and 0.041694. Although, the impact is least, the same is significant with p value of 0.004 and 0.046.

Therefore, after performing regression in the model, corporate tax rate suggest a significant impact on FDI of India.

**Conclusion**

Tending towards analyzing the impact of corporate tax on FDI in India in the presence of control variable Exchange rate, it has been concluded that corporate tax have significant negative impact on foreign direct investment of India in the presence of control variables trade openness and exchange rate too. A study conducted by Singh, Kumar, & Singh (2013) have shown consistency in the results obtained in the current study, and have shown that economic indicator exchange rate has significant impact on FDI. High volatility of the exchange rate of the currency in the host country discourages investment by the foreign firms as it increases uncertainty regarding the future economic and business prospects of the host country. Another comparative study by Khandare, (2016) has shown that exchange rates in case of India have significantly negative impact on FDI of India.

Therefore, it has been concluded that Exchange rate has also a crucial role in attracting foreign direct investment in India and can be considered as a major determinant of FDI. More weakened value of Indian Rupee, the lesser FD investment India gets.

**Recommendations Of The Study**

This section of current study is prepared to determine the consequences faced by Indian industries in the lack of FDI inflows due to the fluctuations of its determinants such as corporate tax, trade openness and exchange rate. In a cut throat competition of attracting FDI, India is continuously trying to perform well among all countries in global markets. India also has sufficient degree of trade openness which can enhance the economic growth of the country. Therefore the government should focus on image building of the country in trade by making more public relations with other countries, using public media, participating in international promotional event and others to build a better trade network, which ultimately will affect the investment decision of foreign capitalist. From the analysis part it has been found that higher corporate tax results into less FDI in India. Investors complain that Indian government charges higher corporate tax in comparison to countries like Malaysia, Taiwan, and others. Due to its rigid and complex taxation policies, India tends to discourage foreign capitalists in investing. Therefore it is highly recommended to Indian Government that the Indian tax policy

should be reviewed timely, and also corporate tax rates should be planned in such a way that range of tax rates gives a profitable opportunity for stockholders.

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