



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Relationship of Selected Indices with Foreign Direct Investments

Dr.Sangeeta Porwal

(M.Com, M.Phil., PhD, ICWA)

Associate Professor, Dyal Singh College

University of Delhi

Abstract

No country is self-sufficient in every type of resources. One may be rich in one type and may be poor in other. Foreign investors/corporations play an integral role in providing these resources by making investments in the different country. Indian Government have encouraged various foreign investors in different countries to invest in India (direct route) by transfer of technologies. Recently Foreign Direct Investment (FDI) have shown upward trend. The purpose of writing this paper is to explore the role of various increasing indices towards attracting FDI in India. The regression study has been conducted by taking three indices (Independent variables) and FDI (dependent variable). The period of the study covered is 13 years starting from the year 2009 to 2021. The finding of the study is that there is no significant impact of the three indices on the Foreign Direct Investment.

Key Words: Regression study of GII, BCI, EODB with FDI, Global innovation Index (GII), Ease of Doing Business index (EODB), Business confidence Index (BCI)

Introduction

Lately, India has witnessed many fold increase in inflow of foreign direct investments. It increased from 43.41 \$ Bn in the year 2009 to 83.75 \$Bn in the year 2021 for 13 years period. The reasons that may be attributed to, can be, availability of gigantic different types of markets to various foreign investors, availability of English-speaking persons, its judiciary process, simplification of laws and prompt availability of resources (digitalization and internet facilities etc.). This has become possible because of liberalization, privatization, and globalization. The various initiative by way of Start-Ups, Make-in-India, Stand-Up-India, Vocal-for-Local campaign has given fillip to attracting foreign direct investments.

Foreign direct investment refers to the investments made by foreign investors. Investors/corporations look for diversification, expansion to earn more profits be it their own country or other. The countries who get foreign direct investments tries to ensure that it will be beneficial not only to the country but also to the investors. Foreign direct investment is a faster route to the development and growth as it not only involves transfer of funds but also technologies, skills, and innovations etc. India specifically have become an attractive place of investments in last few years.

Recently, India is consistently attaining better ranks in various indices like Ease of doing business rank, Global Innovation index, Business confidence index, Network Readiness Index etc. India has climbed up six slots and attained 61st rank in Network Readiness Index of 2022 as per the report issued by Portulans Institute (Washington). The report is based on four different pillars: Technology, People, Governance, and impact covering total of 58 variables considering 131 countries. (Source: Posted On: 19 NOV 2022 6:04PM by PIB Delhi, Ministry of communication It is noteworthy that India leads in several indicators. The report states that India secured 1st rank in “AI talent concentration”, 2nd rank in “Mobile broadband internet traffic within the country” and “International Internet bandwidth”, 3rd rank in “Annual investment in telecommunication services” and “Domestic market size”, 4th rank in “ICT Services exports”, 5th rank in “FTTH/Building Internet subscriptions” and “AI scientific publications”).

India has improved rank in Global Innovation Index from 7 in year 2020 to 46 in year 2021. GII is calculated by averaging two sub-indices. These indices are based on seven pillars 1. Institution 2. Human Capital and Research 3. Infrastructure 4. Market Sophistication 5. Business sophistication 6. Knowledge and Technology output 7. Creative outputs. (Source: Annex 1, Global Innovation index Conceptual Framework).

India has also taken a jump in ease of doing business index rank. It was 116 in the year 2006, while it improved to 63 in the year 2020, which is a substantial improvement. The parameters used for nation's ranking is based on an average of 10 subindices which are mentioned as 1. Starting a business 2. Dealing with construction permits 3. Getting electricity 4. Registering property 5. Getting credit 6. Protecting investors 7. Paying taxes 8. Trading across borders, 9. Enforcing contracts, 10. Resolving insolvency.

India's Business confidence index was 100.36 in the year 2009, while it was 95.34 in the year 2020. In the year 2021, it was 102.87. From 2012 to 2020, it moved down in between 99 to 95, which included Corona Virus pandemic period. The business confidence index is based on the opinion of surveys. The surveys are carried on relating to development in production, stock of finished goods in the industry, and orders. It helps in guessing turning points in the economic activity. This index is a barometer and depicts the overall health of the economy of the country. It delineates impetus towards business growth and investment, and employment opportunities. There are various indicators which have impact on consumer and business confidence 1. Financial or economic shocks for example financial crisis 2008-09, 2. Change in business investments and employment levels 3. Fluctuations in interest rate of exchange rate 4. Changes in prices of goods and services example petrol, education, healthcare 5. Change in the fiscal policy by the government. Index below 100 suggests pessimism towards future performance and above 100 is indicative of better confidence in near future business performance.

Why this paper?

Time and again, it has been pointed out that India is scoring higher in its rank in different indices for example Global Innovation Index (GII), Ease of Doing Business Index (EODB), Business Confidence Index (BCI) etc. FDI has been increasing gradually. So far, various regression studies have been conducted to find out the reasons of the increase in FDI, but very few are based the indices. The purpose of this study to explore how these indices can be attributed to in explaining the increase in FDI. Hence, a regression study has been done to explore the relationship of these different indices (independent variables) with the FDI (dependent variable). The study, as we believe, will help researchers, academicians in knowing and predicting the role of various indices in examining FDI in different countries.

Objectives of the study

Null hypothesis: There is no significant impact on the FDI in India on account of improvement in indices figures.

Alternative hypothesis: There is significant impact on the FDI in India account of improvement in indices figures.

FDI is a dependent variable while GII, EODB and BCI are independent variables.

Limitations of study

The period covered is only 13 years. Data of all the indices earlier to 2009 could not be accessed. It is confined only to multiple regression using only three indices. Ranking the economies by various international agencies with respect to indices have been questioned (though few times) about the reliability and the methodology adopted for calculating these indices in the past

Scope

The period covered by the study is from the year 2009 to 2021. For conducting the study, only three indices have been considered namely 1. Global innovation index, 2. Ease of doing business index and 3. Business confidence index. Indices figures and FDI data have been collected from various websites. We have selected these indices on account of the reasons: 1. Foreign investors are attracted for doing business given the simplicity in procedures, proper laws, availability of infra structure, technology, skills etc. 2. Foreign investors not only look for how a country is ranked by various international agencies with respect to its innovation but also the consumer confidence and business confidence it has. We have confined the study for examining the association of these indices with respect to foreign direct investments.

Methodology and Analysis

Given below (Table 1) is the data with respect to four variables BCI (Business Confidence Index), GII (Global Innovation Index), Ease of Doing Business Index (EODB) and FDI (Foreign Direct Index) for thirteen years.

Table 1

year	BCI	GII	EODB	FDI inflow Bn \$
2021	102.87	46	63	83.75
2020	95.97013	47	77	50.60
2019	99.62721	52	77	42.12
2018	98.80312	56	100	39.97
2017	97.5235	60	130	44.46
2016	97.95447	66	131	44.01
2015	98.44618	81	134	34.58
2014	97.38076	77	134	28.15
2013	99.13656	66	131	24.00
2012	101.2202	64	132	36.50
2011	102.3302	62	139	27.40
2010	96.54185	56	135	43.41
2009	100.3685	56	132	25.23

Table 2

Regression Statistics								
Multiple R	0.7525129							
R Square	0.5662757							
Adjusted R Square	0.4217009							
Standard Error	11.805787							
Observations	13							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	3	1637.745869	545.9152897	3.916835726	0.048364955			
Residual	9	1254.3895	139.3766111					
Total	12	2892.135369						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	46.403354	165.2057061	0.28088227	0.785151004	-327.317918	420.1246252	-327.317918	420.1246252
BCI	0.4789113	1.620465418	0.295539377	0.774286858	-3.18683611	4.144658792	-3.18683611	4.144658792
GII	-0.152988	0.481081728	-0.31800829	0.757733519	-1.24127046	0.935294497	-1.24127046	0.935294497
EODB	-0.379721	0.183520491	-2.06909058	0.068464817	-0.79487271	0.035431673	-0.79487271	0.035431673

Table 2 above depicts the summary output of regression done using Excel. The adjusted R square value is 0.421, depicting the three independent variables account 42.1% variance in the Dependent variable – FDI. Model suggests that some other factors should also be used to get higher values of R square.

Let us construct Ordinary Least Square (OLS) by using Regression coefficient

$$FDI = 46.40 + BCI (0.478) - GII (0.152) - EODB (0.379).$$

Given the values of independent variable one can predict the value of independent variable i.e., FDI.

Since the calculated significance p values of variables BC, GIII and EODB are 0.774, 0.757, and 0.06 respectively which is higher than 0.05, We accept the null hypothesis, which means there is no significant impact of these three indices on FDI.

Findings and suggestions

FDI is a faster route of growth and development of the country since it involves transfer of funds and technologies. The purpose of the study was to find the impact of three indices selected in the FDI in India. The study concludes with outcome that there is no significant impact of the three selected indices on the FDI in India. An extended study can be done by increasing the period. Other factors including different indices can be identified by the researchers and academicians which can be incorporated in further studies to explore the role of different indices in attracting FDI.

Websites

<https://data.oecd.org/leadind/business-confidence-index-bci.htm><https://stats.oecd.org/index.aspx?queryid=299>

https://www.theglobaleconomy.com/rankings/gii_index/

https://stats.areppim.com/listes/list_innovation_2009_2010.htm#gii

www.gurukulbusinessreview.in/current-and-past-issues-2/

<https://doi.org/10.48205/gbr.v18.8>

https://govdata360.worldbank.org/indicators/3aa2eb70?country=BRA&indicator=40712&viz=line_chart&years=2013,2020

<https://www.makeinindia.com/global-innovation-index>

<https://www.nextias.com/current-affairs/21-09-2021/global-innovation-index-2021>

References

1. Dr. Sangeeta Porwal, Relation of Ease of Doing Business with FDI, International Research Journal of Commerce, Arts and Science, Vol 13 Issue 8, August 2022, ISSN: 2319 – 9202, Page 18 – 26. 7.
2. Murat Çemberci Yildiz Technical University , Turkey Mustafa Emre Civelek Istanbul Commerce University, Turkey Perlin Naz Cömert Yildiz Technical University, Turkey, Gurukul Business Review (GBR) Vol. 18 (Spring 2022), pp. 101-111 ISSN : 0973-1466 (off line) ISSN : 0973-9262 (on line) RNI No. : UTTENG00072 Impact Factor : 2.82 (IIFS 2019).
3. Annex 1, Global Innovation Index Conceptual Framework page 49. Refhttps://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016-annex1.pdfferences
4. World Bank: "Doing Business 2010", World Bank Group, 2010, U.S.A.
5. Okwudili Iweama, Vincent; Chukwuemeka Idoko, Edwin; Musa Muhammad, Yusuf (2021). "Effect of ease of doing business dimensions on foreign direct investment in Nigeria". SCIREA Journal of Management. 5 (2): 34–52. doi: 10.54647/management63054.
6. Machen, Ronald; Jones, Matthew; Varghese, George; Stark, Emily (15 September 2021). "Investigation of Data Irregularities in Doing Business 2018 and Doing Business 2020" . World Bank.