

Determinants of Manufacturing Outward FDI from India : Role of Host Country Factors¹

K.V. BHANU MURTHY*
ANINDITA GOLDAR**

Abstract

The paper looks into the determinants of manufacturing outward foreign direct investment (OFDI) from India. Based on the insights from the theory, thirteen important variables have been considered in the analysis, and a Panel Tobit Model has been estimated for a sample of 213 countries for a period of 11 years (2008-2018). The paper concludes that the significant determinants are market index, geographical distance, and import intensity of the host country in the case of Indian manufacturing OFDI. Further, the manufacturing sector multinationals from India are found to have a special attraction for investing in fuel-rich countries, and those having technological assets and skill base. Indian manufacturing multinational enterprises (MNEs) are also favorably attracted if a host country enters into an RTA or signs a DTAA with India. Likewise, the better governance and quality of institutions of host countries is a powerful pull factor for OFDI by Indian manufacturing MNEs.

I. Introduction

THE POPULAR NOTION of internationalization is export development. But, in fact, according to the theory of the multinational enterprise (MNE), outward Foreign Direct Investment (OFDI) is the main indicator of internationalization. The interest in this study is the OFDI of developing countries that have been rising in India. A palpable pattern across the world has been developing country FDI growth. According to UNCTAD's World Investment Report (2019), the share of developing economies in the global FDI outflows which stood at a meager 5 percent in 1990 has dramatically increased to 41 percent in 2018. If we look at the Indian case, she is currently one of the leaders among developing countries in terms of outward FDI flows. Between the 1990s and 2000s, India's OFDI increased more than 113-

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* Professor, Delhi Technological University, DTU East Campus, Vivek Vihar, Phase 2, Delhi, 110095, INDIA

** Assistant Professor, University of Delhi, PGDAV College, Ring Road, Nehru Nagar, Lajpat Nagar, Delhi 110065, INDIA

- product, population, and GDP growth rate shall act as pull factors encourage FDI flows while the distance between them shall discourage it.
3. There are a large number of studies from other countries including developed countries, which examine the factors affecting FDI by using Tobit models. For example, Lemi and Asefa (2003), Gao (2005), Razin and Sadka (2007), Schiavo (2007), Dinga and Dingova (2011), Aguiar, Aguiar-Conraria, Gulamhussen and Magalhaes (2012), Cui and Jiang (2012), Kandilo, Leblebiciodlu and Petkova (2013), Guris, Sacildi and Genc (2015).
 4. The phrase 'RTA(s) with India' is used in the sense that either the host country has a bilateral trade agreement with India or the host country is a member of an RTA, which includes India (or both). Bootstrapping techniques have become increasingly popular in applied econometrics and other areas. With few assumptions, bootstrapping provides a way of estimating standard errors and other measures of statistical precision. It is a nonparametric approach for evaluating the distribution of a statistic based on random resampling. The bootstrap is an alternative method for estimating the standard errors when no formula is otherwise available or when available formulas make inappropriate assumptions. It utilizes the same theory underlying Monte Carlo simulation methods.
 5. Heteroskedasticity occurs when the variance of the error terms differs across observations.

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Annexure
Table A1
Summary Statistics for Variables

Variable	Observations	Mean	Std. Dev.	Min	Max
OFDI	2377	38.541	256.729	0.000	7931.723
GDP	2205	3.64e+11	1.49e+12	2.71e+07	2.05e+13
POP	2336	3.36e+07	1.32e+08	9891.000	1.39e+09
GDPG	2183	3.109	5.436	-62.076	123.140
DIST	2189	7884.689	4227.686	868.567	16916.320
IMP	2156	0.037	0.096	0.000	2.220
FOPN	2109	362.883	3840.635	4.60e-09	70986.250
FUEL	1637	16.514	26.247	0.000	99.986
ORE	1659	8.628	14.486	0.000	86.420
PAT	2377	6540.181	55756.720	0.000	1245709.000
ENRL	1439	83.843	27.311	10.914	163.935
INFLA	2183	4.947	8.297	-36.565	95.409
RTA	2377	0.120	0.325	0.000	1.000
BITS	2377	0.291	0.454	0.000	1.000
DTAA	2377	0.301	0.459	0.000	1.000
GOVR	2177	-0.005	0.904	-2.449	1.873

Note: The values for each variable are the ones before taking the natural log.

<i>OFDI</i> :	Outward Foreign Direct Investment
<i>GDP</i> :	Gross Domestic Product
<i>POP</i> :	Population
<i>GDPG</i> :	Gross Domestic Product Growth Rate
<i>DIST</i> :	Distance
<i>IMP</i> :	Import Intensity
<i>FOPN</i> :	FDI Openness
<i>FUEL</i> :	Fuel Exports
<i>ORE</i> :	Ore and Steel Exports
<i>PAT</i> :	Resident Patent Applications
<i>ENRL</i> :	Gross Secondary School Enrolment
<i>INFLA</i> :	Inflation Rate
<i>RTA</i> :	Regional Trade Agreements
<i>BITS</i> :	Bilateral Investment Treaties
<i>DTAA</i> :	Double Tax Avoidance Agreements
<i>GOVR</i> :	Governance

Source: Self Computed