

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

**Rebecca Penn**

Submitted to the  
Institute of Graduate Studies and Research  
in partial fulfillment of the requirements for a degree of

Master of Arts  
in  
Marketing Management

Eastern Mediterranean University  
January 2017  
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

---

Prof. Dr. Mustafa Tümer  
Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Arts in Marketing Management.

---

Assoc. Prof. Dr. Melek Şule Aker  
Chair, Department of Business Administration

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Arts in Marketing Management.

---

Assoc. Prof. Dr. Melek Şule Aker  
Supervisor

---

Examining Committee

1. Prof. Dr. Mustafa Tümer

2. Assoc. Prof. Dr. Melek Şule Aker

3. Assoc. Prof. Dr. İlhan Dalci

---

---

---

## ABSTRACT

The main aim of this thesis is to analyze the determinants of foreign direct investment in India by using GDP, Inflation, Economy Openness and Real Effective Exchange rate as determining variables. This study uses time series data from 1978 to 2014. The unit root test revealed that the variables were stationary at first level  $I(1)$ . The variables were found to be co-integrated after conducting the Johanson's Co-integration test. In order to determine the long run coefficients of the variables, we used the Vector Error Correction Model (VECM) that produced the following results.

GDP was found to be positive and statistically significant variable exhibiting a positive relationship between FDI and GDP. The VECM reveals exchange rate as a significant determinant of FDI in India. This indicates that the strength of India's currency is a measure factor in attracting FDI to India. The results of this study also provide evidence that inflation is negatively related to FDI in the long run probably because of the instability it causes in the economy. Trade openness is negative and statistically significant indicating a negative relationship with FDI probably because investors coming in are market seeking oriented and not export oriented. Also, trade openness may increase the number of competitors in the domestic market.

**Keywords:** Foreign Direct Investment, Unit root test, Johanson Co-integration, VECM and India.

## ÖZ

Bu tezin temel amacı Hindistan'a yapılan doğrudan yabancı yatırımın (DDY) belirleyicilerini belirleme ve değişkenleri olarak GSYİH, Enflasyon, Ekonomik Açıklık ve Gerçek Etkili Kur kullanarak analiz etmektir. Bu çalışma, 1978-2014 yılları arasındaki zaman serileri verilerini kullanmaktadır. Birim kök testi, değişkenlerin birinci basamak I'de sabit olduğunu ortaya koymaktadır (1). Değişkenlerin, Johanson'un Eş Bütünleştirme metnini uyguladıktan sonra birlikte entegre oldukları bulundu. Değişkenlerin uzun dönem katsayılarını saptamak için aşağıdaki sonuçları üreten VECM (Vector Error Correction Model) kullanılmıştır.

GSYİH'nin pozitif olduğu ve DDY ile GSYİH arasında pozitif bir ilişki sergileyen istatistiksel olarak anlamlı değişken olduğu tespit edildi. VECM, döviz kurunu Hindistan'da doğrudan yabancı yatırımın önemli bir belirleyicisi olarak ortaya koyuyor. Bu, Hindistan'ın para biriminin gücünün Hindistan'a doğrudan yabancı yatırım çekme ölçütü olduğuna işaret ediyor. Bu çalışmanın sonuçları, enflasyonun muhtemelen ekonomide ortaya çıkardığı istikrarsızlık nedeniyle uzun vadede DDY ile negatif ilişkili olduğuna dair kanıt sağlamaktadır. Ticaretin açıklığı olumsuzdur ve istatistiksel olarak anlamlıdır, muhtemelen DDY ile negatif bir ilişki gösterir çünkü gelen yatırımcılar pazar odaklıdır ve ihracat odaklı değildir. Ayrıca, ticaretin açık olması iç pazardaki rakip sayısını artırabilir.

**Anahtar Kelimeler** Doğrudan Yabancı Yatırım, Birim Kök Testi, Johanson Eş-entegrasyonu, VECM ve Hindistan.

*This thesis is dedicated to my parents for their support and encouragement and for  
being my source of inspiration*

## **ACKNOWLEDGEMENT**

I would like to thank my supervisor Assoc. Prof. Dr.Melek Şule Aker for her continuous support and guidance throughout this work and for her motivation and patients. Without her supervision, I wouldn't have gone this far.

Also, I will like to thank my lovely husband Asobo Elvis for all his care and support throughout this work.

Finally, I will like to thank my loving and supporting family.

# TABLE OF CONTENTS

ABSTRACT .....	iii
ÖZ .....	iv
DEDICATION .....	v
ACKNOWLEDGEMENT .....	vi
LIST OF TABLES .....	ix
1 INTRODUCTION .....	1
1.1 Background .....	1
1.2 Aim of the study .....	5
1.3 Research Objectives .....	5
1.4 Research DESIGN.....	5
2 THE OVERVIEW OF FOREIGN DIRECT INVESTMENT (FDI) IN INDIA.....	7
2.1 The Evolution .....	7
2.2 FDI Inflows in Pre-Reform Period.....	8
2.3 Inflows in Post-Reform Period (Since 1991) .....	9
2.4 Trends of FDI during Post-Reform Period.....	9
3 LITERATURE REVIEW.....	11
3.1 Empirical Studies .....	11
3.2 Theoretical Framework .....	18
3.2.1 Theories of FDI on Perfect Competition. ....	18
3.2.2 Firm Specific Advantage .....	19
3.2.3 Internalization Theory of FDI.....	19
3.2.4 Oligopolistic Theory .....	20
3.2.5 Location Specific Advantage.....	20

3.2.6 Product Life Cycle Theory .....	20
4 DATA AND METHODOLOGY .....	22
4.1 Data .....	22
4.2 Hypothesis to be Tested.....	22
4.3 Definition of Variables .....	23
4.3.1 Dependent Variable .....	23
4.3.2 Independent Variables .....	24
4.4 Data Analysis .....	26
4.4.1 Unit Root Tests .....	26
4.4.2 Johansen Co-integration Test.....	26
4.4.3 Vector Error Correction Model.....	26
5 EMPIRICAL RESULTS .....	28
5.1 Unit Root Test Results .....	28
5.2 Johnson Co- integration Test.....	29
5.3 Vector Error Correction Model (VECM) .....	30
6 CONCLUSION .....	34
6.1 Summary of Findings .....	34
6.2 Policy Implication .....	35
6.3 Limitations.....	36
REFERENCES.....	36



## LIST OF TABLES

Table 1. List of independent variables used in the analysis.....	25
Table 2. Results of the Unit Root Test.....	28
Table 3. Johnson Co-Integration Test Results .....	30
Table 4. Vector Error Correction Results .....	31
Table 5. Hypothesis tested and decisions.....	33

# Chapter 1

## INTRODUCTION

### 1.1 Background

Foreign direct investment (FDI) has become a very powerful engine of economic development for some developed and less developed countries, since the world is becoming a global village and is experiencing a great transformation in terms of geopolitics, economics, investment and distribution of production. FDI plays a very important role in this transformation process. Also, there has been a lot of attention on the factors that impact the determinants of FDI in developing countries. This is because FDI is seen as one of the most important source of capital flows to developing countries and is also a mechanism for technological improvements through the use and dissemination of advanced production techniques Bénassy-Quéré et al. (2007).

The role of FDI in improving economic growth and development has been a topic for debate. While some views are in favour of FDI and argue that it leads to economic growth and development, other views are totally against it. Those that hold a negative view about FDI emphasize on the risk associated with FDI, pointing out that it leads to the destruction of local capabilities and extracting natural resources without adequate compensation on the part of poor countries also, studies have revealed that domestic firms if relatively uncompetitive might suffer. Today, many studies have place emphasize on the fact that FDI is beneficial. Therefore, all

countries try to provide a very conducive climate for FDI. Also, many countries try to use appropriate FDI policies and general economic policies in order to attract FDI. Governments of countries have now begun to realise that the effect of FDI on economic development is also based on the type of FDI, the characteristics of the firm, economic conditions and policies.

Apart from the fact that FDI has important implications in a host country in terms of its Balance of Payments (BOP), it also influences the host country's productive structure, leads to improved change in technology and innovation and influences the manner in which production and employment is geographically distributed (Anyanwu, 2011). As discussed by Mahalakshmi, et.al. (2015), it is believed by policy makers of most economies that inflow of FDI is accompanied by latest technology, managerial efficiency and employment opportunities which in turn facilitates the overall growth and development of an economy. According to Kishor and Singh (2015), FDI has an impact on income, prices, employment, production, development, economic growth and the general welfare of host countries.

In order to invest in foreign countries, firms take into consideration a number of factors in order to choose the best destination. One of the principal reasons why US firms involve in foreign activities is to realise cost savings for production, transportation and other administrative activities Bevan and Estrin (2012). The reasons a firm might have for launching a new foreign branch might be driven by objectives such as the need to follow a key domestic customer, acquire a new customer base, diversify or respond to competitive pressures. Incentives offered by local governments may draw foreign countries or companies to invest in a particular foreign market.

Due to the fact that foreign companies have different motivations for investing overseas, Duce (2003) presented four different classifications. The number one objective is known as *market seeking*. The motivation for market seeking occurs when owners of companies' discover their product is superior to the competition in foreign markets and they decide to take advantage of this opportunity. This can also occur when producers realise that sales in their home markets have been saturated and they believe that investments overseas will lead to greater returns as compared to increased investments at home. The second category is *resource seeking*. With this approach, a company may find it less expensive to produce its products overseas because it has the opportunity to obtain cheap access to the factors of production which are land, labour, capital and natural resources. The third category is the *strategic asset seeking*, whereby companies invest in foreign countries to help them build strategic assets like new technology or distribution networks. The fourth category is *efficiency seeking* where FDI is used by firms to improve profits and reduce costs.

FDI has been defined by many authors and institutions. According to the United Nations Conference on Trade and Development (UNCTAD, 1993), FDI is defined as “*An investment which involves a long term relationship and reflects a long lasting interest and control by a resident entity of one economy of an enterprise resident in a different economy*”. The International Monetary Fund (IMF 2003) defines FDI as “*investments made by a resident entity in one economy (known as direct investor) with the objectives of establishing a lasting interest in an enterprise in an economy other than that of the investor (direct investment enterprise)*”. According to the World Bank, it is defined as” the net inflows of investment to acquire a lasting

management interest in an enterprise operating in an economy other than that of the investor”.

This study has chosen India which is found among the emerging and transition economies of the world (Brazil, Russian Federation, India, China, and South Africa) as the destination country. These countries are also referred to as the BRICS countries. They are the five biggest emerging economies and their share in FDI inflows has been increasing steadily throughout the years (Kishor and Singh, 2015). FDI into transition economies helps to accelerate growth, technical innovation and also provide capital account relief as explained by (Bevan and Estrin, 2004).

FDI has been seen as a great instrument of economic growth in developed countries as almost all developed countries have been assisted by foreign finance during the early stages of development (Lokesha and Leelavathy, 2012). Therefore, this has encouraged India and many other less developed countries to restructure their economic policies in order to attract FDI. India attracts FDI as a very vital element in their growth strategy because FDI is largely seen as an amalgamation of capital, technology, management and marketing. India is also known to have attracted a very large amount of FDI in the liberalisation era. According to UNCTAD (2007), India has emerged as the second most attractive destination for FDI after China. FDI started flowing into China in a recognisable form after 1991 when the government introduced neo-liberal economic reforms. And it has become one of the most favoured destinations of FDI.

## **1.2 Aim of the Study**

This research proposes to analyse the performance of India which is an emerging economy in the post liberalisation period and by finding the key determinants of FDI in the Indian market and also find out those sectors of the economy which are the most attractive for FDI in India. This will be done by implementing the variable such as:

- market size
- macroeconomic stability
- trade openness
- Strength of host country's currency.

## **1.3 Research Objectives**

The main objective of this research is to evaluate the advantages and disadvantages of FDI and those factors that led to the growth and development of the Indian economy. This will be realised through the following;

- Analysing the economic performance of India from 1978 to 2014
- Examining if FDI has contributed to the economic development of this emerging and transition economy
- Examining the determinants of FDI in India.
- Identifying the key sectors for FDI in the Indian market.
- Determining the suitable mode of entry for FDI inflows in the Indian market.

## **1.4 Research Design**

This refers to the blueprint of the entire research. This section shows how the rest of the work will be structured. Chapter 2 looks at the overview of FDI in India, Chapter 3 provides a review of literature on FDI, Chapter 4 focuses on data and methodology

used for this study, Chapter 5 empirical results and Chapter 6 presents the conclusion and recommendations.

## **Chapter 2**

# **THE OVERVIEW OF FOREIGN DIRECT INVESTMENT (FDI) IN INDIA**

### **2.1 The Evolution**

The historical background of FDI in India can be dated back when the East Indian Company of Britain was established. Before India became independent in 1947, significant amount of FDI came from the British companies and their units were set up mostly in the mining sector and in other sectors that met their own business and economic interests (Shah and Parikh, 2012). After the Second World War, some Japanese firms began to enter the Indian market and increased their trade with India (Hooda, 2011).

After independence, the attention of policy makers was focused on facts relating to foreign capital and operations of multinational companies (MNCs), keeping in mind the interest of the nation. FDI policies were designed by policy makers which aimed at making FDI a means for acquiring technology and to gathering foreign exchange resources. The 1965 industrial policy gave room for MNCs to open ventures through technical cooperation with local firms in India.

The importance of FDI has grown considerably in the Indian economy. Its role changed significantly after liberalization. Before liberalization, the amount of FDI into India was small and confined to some few sectors. But today, FDI inflows have grown mightily and in almost all sectors of the economy.



## **2.2 FDI Inflows in Pre-Reform Period**

Before the economic liberalization period, the constitutional and legal framework that governed FDI in India constituted of complex legislative policies. The Indian government exercised complete carefulness and authority in applying these legal and policy provisions to govern FDI.

According to Akhtar (2013), government policies regulating FDI before economic reform is classified under three phases which are:

- The phase of selective and cautious attitude towards FDI (1948-1967).
- The second phase is the restrictive attitude towards FDI (1968-1979).
- The final phase is that of semi- liberalization (1980-1990).

The selective FDI policy started when India became independent from Britain in 1947. This policy resulted to low level of FDI inflow in India because there were very strict laws governing FDI in India. The volume of FDI increased from \$79 million in 1980 to \$252 million in 1989 and later on declined to 237 million USD in 1990 (Akhtar, 2013). During the semi-liberalization period, the overall FDI inflows were fluctuating.

In 1981, the top five countries that accounted for 86% of total FDI inflows were Germany, USA, UK, Japan and Switzerland. In 1990, the top five countries were USA, Switzerland, Germany, UK and Italy and they accounted for almost 57% of FDI inflows. The top five sectors which that attracted a large amount of FDI in 1981 were chemicals, industrial machinery, mechanical engineering, electrical, and electronics and metallurgy. These sectors accounted for 54.87% of the total FDI inflows. While In 1990, electrical and electronics, chemicals, industrial machinery,

mechanical engineering and metallurgy were the top 5 sectors which altogether accounted for 68.14% of the total FDI inflows.

### **2.3 Inflows in Post-Reform Period (Since 1991)**

After mid1990, India faced severe financial crises caused by political disturbances alongside economic problems. The international credit of the country was downgraded by the high rate of inflation, political instability and fiscal deficit. The economy faced BOP crises and serious difficulties were being experienced by exports. Due to the sudden break out of Gulf War in January 1991, there was a marked increase in the price of petroleum and the foreign exchange reserve was not enough to pay even for one week imports. And because of this critical phase of the Indian economy, the Minister of Finance Dr. Manmohan Singh with the support of IMF and World Bank introduced the economic liberalization process and Structural Adjustment Program (SAP). This led to a series of economic reforms in 1991 and due to these reforms, India's doors were opened to FDI inflows and a more liberal foreign policy was adopted so as to restore the confidence of foreign investors.

Furthermore, a Foreign Investment Promotion Board (FIPB) was set up by the Indian Government and its major function was to invite and facilitate FDI. New sectors like telecommunications, highway construction, banking, mining and management were open to foreign investors (Com, 2014).

### **2.4 Trends of FDI during Post-Reform Period**

The new economic policies of 1991 kept aside the past policies and rebuild the trust of foreign investors in engaging into foreign investments in India. During the early years of the reform period, there was a big gap between FDI approved by the government and the actual FDI inflows that were realized in the country. Also,

during this period, many sectors were unavailable for FDI and those sectors that were available for FDI could not attract many investors because foreign investors were still not sure about the continuous implementation of the policy changes in the future. This resulted to a large difference in FDI that was approved and actual inflows. FDI growth rate fluctuated during 1991 to 2009.

Furthermore, during this period, India experienced a changing composition of FDI inflows by country of origin. There was a positive response to liberalization policies from almost all the pre-liberalization countries. But Mauritius became main source of FDI inflows because of its “tax haven” status. During 1992-2008, the top ten countries with the highest FDI inflows were Mauritius, USA, UK, Germany, Netherlands, Japan, France, Singapore, Switzerland and South Korea. The percentage shares of inflows from this top ten countries accounted for almost 84.9% (Akhtar, 2013).

Also, liberalization also led to a sectorial distribution of FDI inflows into India. The service sector emerged as an important recipient of FDI which caused the manufacturing sector and other sectors that were dominating in FDI inflows during 1990 to drop down. According to Com (2014), the sectorial inflow for the period 2000-2013 is highest in the service sector, followed by construction development sectors.

## Chapter 3

### LITERATURE REVIEW

Foreign direct investment (FDI) is defined as an investment made by an entity or individual of one country with business interests in another country. It involves the flow of capital from one country to another, permitting extensive ownership stakes in local companies and. It can be made by individuals. But, these endeavors are most often pursued by companies with substantial assets wanting to expand their reach. With an increase in globalization, more companies endeavor to have branches in countries around the world, so as to get the opportunities for cheaper production, labor and lower taxes. FDI can be made in a number of ways including the establishment of foreign subsidiaries, or by means of joint venture with a foreign company.

#### 3.1 Empirical Studies

The determinants of FDI have been explored over the past years by many researchers, who came up with different conclusions and recommendations based on the outcomes of their research. These studies can be divided into three groups.

The **first group** of studies concentrated on macroeconomic determinants of FDI. Lokesha and Leelavathy (2012) in their study of the macro determinants of FDI found that FDI inflows into India is simultaneously influenced by the market size, political framework, economic stability, economic factors and political factors. Sharma (2015) studied the determinants of FDI in India for the post liberalization

period. They employed an Ordinary Least Square Regression Analysis and data from 1991 to 2014 was used for identifying the trends and policies for FDI inflows. Also the annual series from 1991 to 2010 was used for calculating the determinants of FDI inflows. According to their results market size, trade openness, infrastructure, inflation and interest rate are the main factors that significantly and positively affect FDI inflow.

Pradhan and Kelkar (2014) made an empirical analysis of some of the macroeconomic factors that impacts FDI inflows into India. Time Series Data for the period 1991 to 2012 was used. Multivariate Linear Regression Model was used to examine the relationships between the variables. The results suggested that foreign exchange reserves (FOREX), inflation and gross capital formation (GCF) are the significant explanatory variables of FDI inflows while GCF was found to have a negative impact on FDI. The variables GDP, trade openness, and exchange rate were found to have a positive but insignificant impact.

Kaur and Sharma (2013) conducted an empirical analysis on the determinants of FDI in India. The explanatory variables used were GDP, foreign exchange reserves, long-term debt, inflation, exchange rate and trade openness. The results indicated a positive relationship between foreign exchange reserves, GDP and long term debt on FDI while inflation and exchange rate have a negative impact on FDI inflows to India.

Mahalakshmi et al. (2015) in their study to find out the determinants of FDI inflows into India, selected few macroeconomic indicators such as GDP, real effective exchange and average real wages. They applied Auto Regression Distribution Lag

Model (ARDL) and innovation accounting of VAR system in order to investigate the main determinants of FDI inflows. Their results proved that FDI inflow in to India has been highly influenced by real effective exchange rate and GDP.

Considering the impact of FDI inflows in other developing countries, Ang (2008) investigated the determinants of FDI in Malaysia. Using time series data from 1960-2005, he found that real GDP have a positive significant impact on FDI inflows. This study also revealed that, increase in the level of financial development, infrastructure and trade openness positively affects FDI while higher corporate tax rate and appreciation of real exchange rate discourage FDI inflows. Kishor and Singh (2015) also examined the impact of factors determining FDI inflows of BRICS countries. Using panel data approach from 1994-2014, and selected variables like infrastructure index, stock market turnover ratio and stock market capitalization. Their results revealed that the above variables have a very strong impact in determining FDI inflows into these countries.

Cuyvers, et al. (2011) investigated the determinants of the factors that might affect FDI into Cambodia. They used panel data sets from the period 1995 to 2005. Their results showed that the determinants of approved and realized FDI are similar. The FDI home country's GDP, its bilateral trade with host country and the rate of exchange has a positive effect on FDI flows into Cambodia. Also, their results proved that the geographical distance negatively affects the level of FDI inflow in Cambodia.

Bekana (2016) explored the determinants of FDI inflow to the Ethiopian economy for both the short and long run period. The researcher used a time series model,

estimated using Error Correction Model (ECM) formulation for the period 1991 to 2013 and annual data from the World Bank. The results revealed that the determinants of FDI inflow to Ethiopia were found to be consistent in the short and long run models. The most important factors influencing FDI were GDP per capita, GDP growth rate, inflation rate, and gross capital formation.

Faith and Rifat (2015) studied the economic determinants of FDI on the Turkish economy. They used a time series analysis for the period of 1974-2014. Their empirical findings revealed that, the variable GDP, real exchange rate and financial development affects FDI positively while the effects of external debt and trade deficit were negative. On the other hand, their results also indicated that the trade openness variable is positive but insignificant.

Jabri, et. al. (2013) explored the determinants of FDI inflows to Middle East and North Africa (MENA region) during the period 1970-2010 using panel data techniques. According to their results, they found that the macro determinants like openness, growth rate economic instability and exchange rate have a long run effect on FDI inflows. Offiong and Atsu (2014) did a study to investigate the determinants of FDI into Nigeria during 1980-2011. They aimed at examining the functional relationship that exists between GDP, interest rate, wage rate, relative openness and also the degree to which each of these variables has affected FDI inflow to Nigeria. Using the multiple regression analyses, they found that a significant relationship existed between GDP and inflow of FDI and also real wage rate and FDI inflow. No significant relationship was seen between FDI inflows and relative openness index. It was also realized that improvements in GDP would lead to an improvement in FDI inflow, since income per capita is too small to effectively attract FDI into Nigeria.

They further suggested that the Nigerian government should pursue policies that will lead to an increase in the GDP and income per capita and review trade and investment policies.

Bevan and Estrin (2004) also looked at the determinants of foreign direct investment into European transition economies. They used a panel dataset for the period 1994-2000 of bilateral flows of FDI from the European Union (EU) to Central and Eastern European countries. Their results showed that, unit labor costs, gravity factors, market size and proximity had the most important influence. Also, according to their results host country risk proved not to be a significant determinant.

Nouri and Soltani (2016) attempted to investigate factors influencing FDI in Cyprus. Data was collected for the period 1995-2015. Vector Error Correlation Model was used to estimate the hypothesis. The results demonstrated that degree of economic openness, market size, infrastructure, rate of capital return, tax rate liquidity, and economic growth have a significant effect on FDI in Cyprus while inflation rate, exchange rate, and government expenditure has no significant effect on FDI.

The determinants of FDI in Australia were analyzed by Koojaroenprasit (2013), using data from 1986-2011. Aggregate FDI inflows and FDI inflows by the top three source countries; USA, UK and Japan were considered. Four empirical results were identified:

- A bigger market size will encourage more FDI in Australia while corporate tax rates and more openness will discourage FDI inflows into Australia. Also, lower interest rates, depreciation of exchange rates and lower customs duty will attract



more FDI. There was no significant relationship between wages and FDI inflows into Australia.

- A larger market size will encourage more US inward FDI in Australia while an appreciation of exchange rate and more openness will discourage US inward inflow into Australia.
- Increased research and development will attract UK firms to invest in Australia while a high corporate tax rate will discourage UK inward FDI. Market size was found to have a positive and insignificant impact on UK inward FDI.
- No significant relationship was found between Japanese inward FDI in Australia neither in the exchange nor interest rates. While higher wages will increase more Japanese inward FDI and higher corporate tax will discourage Japanese inward FDI in Australia.

The **second group** of studies based their research on micro-economic determinants of FDI. Dua and Garg (2015) conducted a research on the microeconomic factors underlying FDI flows to India using co-integration analysis. The results indicated that determinants such as higher domestic returns, higher domestic output, a depreciating exchange rate and better infrastructure are conducive to FDI flows to India. Their results also indicated a negative relationship between trade openness and FDI.

Vivoda (2011) conducted a research on the factors that influence FDI in the mineral industries of China and India. Its findings showed that the overall conditions for FDI in the mining sector of India and China are not favorable and a change needs to be made in the policies of both countries for FDI to flow.

Blonigen and Piger (2014) also did a study to examine the determinants of FDI. These researchers used Bayesian Statistical Techniques to select from a large set of variables the ones that are most likely to be determinants of FDI activities. Their results showed that, variables with a constantly high impact are traditional gravity variables, relative labor endowments, cultural distance factors and trade agreements. Polat and Payaslioglu (2015) also investigated the sectorial determinants of FDI into Turkey. In his study, he used a panel data for the 2007-2012 period to analyze the main factors that determines the level of FDI into the manufacturing subsectors in Turkey. He found strong evidence that turnover indices and the new investment incentives that were introduced in 2009 have a positive impact on FDI while taxes, country risk index of the USA and the price of cooking coal have a negative effect.

Khalil (2015) did an analysis of the determinants of FDI in Egypt in order to identify and measure the most important economic factors that affects FDI flows to Egypt for the period 1970- 2013. He used SPSS, Eviews and stat graphics software to select the econometric model explaining the relationship between FDI as the dependent variable and 13 economic independent variables related to FDI. In this study, he also attempted to predict the size of FDI and also its determinants for the next 5 years so as to help economic responsible personnel to improve the environment of FDI in Egypt. His result showed that, the variables households' expenditure, GDP and commercial exchange have a positive effect while inflation, general government expenditure, exchange rate, unemployment and interest rate have negative effects on FDI.

The **third group** of studies focused on both macro and micro-economic variables determining FDI. Ayanwu (2011) analyzed the determinants of FDI in Spain, using

panel data taken for the period 1993- 2002 to estimate the determinants of FDI at the sectorial level and at the regional level. Empirical results revealed that the difference between labor productivity and cost of labor is a major determinant of FDI in Spain. Also, factors related to the evolution of human capital, demand and the export potential of the sectors also play a very crucial role in encouraging FDI flows.

Ravinthirakumaran et al. (2015) investigated the factors that could influence FDI inflows into Sri Lanka. These researchers used an annual data for the period 1978-2013 and applied the latest econometric techniques in time series analysis. Their results proved that market size, trade openness and level of infrastructure have a positive impact while political instability and wage have a negative impact on FDI inflows to Sri Lanka. They further suggested that, Sri Lanka should develop and introduce policies that would lead to an improvement on the level of trade openness, market size, political stability and infrastructure. But, the cost of labor should be reduced.

## **3.2 Theoretical Framework**

### **3.2.1 Theories of FDI on Perfect Competition.**

This theory was first developed by MacDougall (1958) on his established model based on the assumptions of a two-country (home and host country) model with prices of capital being equivalent to its marginal productivity. They stated that when the movement of capital from a home country to a host country was free, the marginal productivity of capital became equalized in both countries. They discovered that after investment had taken place, there was a decrease in the output of the home country without any fall in its national income. This is because in the long run, the country receives higher income from its abroad investment. The works of Frankel

(1965), Caves (1971) and Simpson (1962) are also found to explain theories of international investment in a similar manner.

### **3.2.2 Firm Specific Advantage**

This theory was developed by Hymer (1976). This was one of the first theories that explained FDI in an imperfect market. The essence of this theory is that firms operating in foreign countries have to go into competition with local firms that are in an advantageous position in terms of aspects like language and culture. Therefore, these disadvantages must be compensated by some form of market power so that international investments can be profitable. According to Hymer (1976), the sources of market power are in the form of economies of scale, cheaper sources of finance, access to raw materials marketing and management skills, patent-protected superior technology and brand names. He argued that since the market is imperfect, firms are able to take advantage of their power to invest abroad and reap good profits. The argument was supported by researchers such as Graham and Krugman (1989). Also, there were critics such as Simmond and Robck (1983) who argued that possessing their advantages did not necessarily mean investment abroad since firms can still exploit their advantages through exporting and licensing.

### **3.2.3 Internalization Theory of FDI**

This theory tries to explain FDI by putting emphasis on intermediate inputs and technology. It was developed by Buckley and Casson (1976). They analyzed MNCs within a broad framework that was developed by Coase ,(1973). They based their theory on three beliefs:

- Firm's profits are maximized in a market that is imperfect.
- When the markets in intermediate products are imperfect, there is an incentive to create internal markets thereby bypassing them.

- Internalization of markets across the world leads to MNCs.

### **3.2.4 Oligopolistic Theory**

This theory was formulated by Knickerbocker (1973) based on market imperfections. It is focused on the fact that FDI flows are a reflection of strategic rivalry between firms in a global market. Since an oligopolistic industry is made up of a fewer number of large firms, what one firm does has a direct impact on the major competitors, causing them to respond in a similar manner, thus leading to an imitative behavior. Firms follow the internationalization of competitors so that they won't lose their strategic advantage. Therefore, in an oligopolistic industry, firms tend to follow each other's location decision.

### **3.2.5 Location Specific Advantage**

This is another very interesting theory of FDI. Dunning (1993) put forward this theory known as Eclectic Paradigm or OLI Theory on basis of the above. In his theory, Dunning suggested that a firm will engage in FDI based on the fulfillment of three conditions:

- It should have ownership advantage as compared to other firms.
- When internalization of this ownership specific advantages are profitable
- There exist some location advantage in using a firm's ownership advantage abroad

### **3.2.6 Product Life Cycle Theory**

This was developed by Raymond Vernon (1966). This theory explains that products go through various stages in their life cycle and firms undertake FDI at a particular stage in the life cycle of a product. At the introductory stage, the product is invented and sold in countries with highest income. As production increases, the product moves to the growth stage and the firm begins to explore new markets and export

this product to foreign markets. As the product moves upward to maturity, competitors emerge and the original producer begins to establish production units in developing countries where labor costs are lower. At a later stage in the life cycle, the original country of innovation becomes an importer of this product.

## Chapter 4

### DATA AND METHODOLOGY

In this section, both the data used for this study and the approaches used to obtain results from the data will be explained.

#### 4.1 Data

This study uses the time series data analysis for 37 years for the period 1978-2014. The current study tries to examine the significant variables that determine the flow of FDI into the Indian economy. The study is based on secondary data analysis sources which are obtained from two main data sources which are the World Bank and Thomson Reuters' data stream. Also, since this study focuses on emerging markets, India is chosen, which is found among the five biggest transition economies of the world and also the most attractive destination for FDI after China (UNCTA, 2007).

#### 4.2 Hypothesis to be Tested

The following hypothesis will be tested:

a) H0: Market size does not have a positive significant effect on FDI

H1: Market size has a positive significant effect on FDI

b) H0: Openness does not have a negative significant effect on FDI

H1: Openness has a significant effect on FDI

c) H0: Exchange rate value does not have a positive significant effect on FDI

H1: Exchange rate value has a positive significant effect on FDI

d) H0: Inflation rate does not have a negative significant effect on FDI

H1: Inflation rate has a negative significant effect on FDI.

Based on the hypotheses that have been stated, the following model can be derived:

$$\text{LNFDI} = \beta_0 + \beta_1 \text{LNGDP} + \beta_2 \text{LNINF} + \beta_3 \text{LNEX} + \beta_4 \text{LNOPEN} + U_t$$

Where:

LNFDI= log of foreign direct investment (in US dollars)

$\beta_0$ = constant

LNGDP= log of gross domestic product per capita (in US dollars)

LNINF= log of inflation rate

LNEX= log of exchange rate

LNOPEN= log of trade openness

$U_t$ = error term.

### **4.3 Definition of variables**

In order to investigate the determinants of FDI in India for the period under study, a number of variables have been selected which includes the dependent and independent variables and this study will critically investigate the link between FDI and the key independent variables.

#### **4.3.1 Dependent Variable**

In this study the log of foreign direct investment inflows (LFDI) in India in US dollars (US\$) is included as the dependent variable, where foreign direct investment is investments made by a nonresident entity in one economy (direct investor) with the objectives of establishing a lasting interest in an enterprise in an economy other than that of the investor (direct investment enterprise). Inward foreign direct investment data is extracted from the World Bank database using the key word BX.KLT.DINV.CD.WD.



### 4.3.2 Independent Variables

In this study, the independent variables are market size, trade openness, macroeconomic stability and strength of host country's currency.

*Market Size:* A large market is known to have higher profit opportunities than a small market since large markets have a greater purchasing power (Goh, 2011). Market size is the most vital determinant of FDI (Demirhan and Masca, 2008) in economic studies. A country with a large market size tends to attract more FDI and most investors pay attention to this variable as it leads to economies of scale and utilization of resources. The market size variable for this study is measured using the GDP of India. GDP for this study has been extracted from the World Bank using the key word NY.GDP.PCAP.KN.

*Trade openness:* Increase in trade openness of a country encourages IFDI. According to Demirhan(2008), the impact of openness on FDI depends on the type of investments. For example, when investments are market seeking, less openness can have a positive impact on FDI. On the other hand, if multinational firms engage in export oriented investments, they will prefer a more open economy to invest in. The degree of openness is measured by the sum of the host country's imports and exports as a proportion of its GDP in this analysis. That is,  $[(Imports + Exports)/GDP]*100$ .

Export is one factor that can greatly affect the level of FDI in a host country. It has different effects on FDI which could differ from country to country. Data related to exports has been extracted from the World Bank using the key word NE.EXP.GNFS.KD. It has been recognized by researchers that, imports and FDI are related in two ways firstly, imports can improve FDI if it proves that when a market

exists for a particular commodity. Secondly, when firms are established in a particular country, they will import different types of goods so as to meet the quality standards required by the foreign market. Data related to imports has been extracted from the World Bank using the key word NE.IMP.GNFS.KD.

*Macroeconomic stability:* Macroeconomic stability of a nation is measured by the nation's rate of inflation. Inflation occurs when there is an increase in money supply in an economy or when price level increases. This usually leads to a reduction in buying power. Inflation rate for this study have been collected from the World Bank using the key word FP. CPI.TOTL.ZG.

*Strength of host country's currency:* the strength of a nation's currency is a measure of its exchange rate against other currencies also known in finance as foreign exchange rate (FOREX). It specifies how much one currency is worth in terms of another currency. It is the value of a foreign country's currency in terms of the home country's currency. The exchange rate for this study has been collected from Thomson Reuter's Data Stream. The list of independent variables used in the analysis can be summarized in Table 1.

Table 1. List of independent variables used in the analysis

<b>Variable</b>	<b>Definition</b>	<b>Reason for inclusion</b>	<b>Source</b>
<b>LNGDP</b>	Gross Domestic Product	Measure of market size	World Bank (2016)
<b>LNOPEN</b>	Trade openness	Measure of import + export as a proportion of GDP	World Bank (2016)
<b>LNINF</b>	Inflation	Measure of macroeconomic stability	World Bank (2016)
<b>LNEX</b>	Exchange rate	measure of the strength of host country currency	Thomson's Reuter (2016)

## **4.4 Data Analysis**

This section describes the different techniques used in this analysis.

### **4.4.1 Unit Root Tests**

One of the most important characteristic of a variable is stationarity. The mean and variance of a nonstationary variable are not constant. The unit root properties of a variable needs to be investigated before carrying out any regression analysis. The purpose of a unit root test is to know the order of integration of a series. The Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests are used in this study.

$$\mathbf{y}_t = \rho\mathbf{y}_{t-1} + \mathbf{e}_t$$

Where  $\rho$  shows the stationarity of the series,  $|\rho| < 1$  and  $\rho = 1$  indicates stationary and nonstationary series respectively. Phillips-Perron (1988) unite root test is similar to ADF test but deals with serial correlation and heteroschadasticity in the error terms in a different way.

### **4.4.2 Johansen Co-integration Test**

After confirming with the unit root tests that the variables for this study are non-stationary implying that there is no short term relationship between the variables. The Co-integration Test is applied to determine the long run relationship between variables. Johansen Co-integration Test assumes that all the variables are in the same order. Co-integration solves the problem of spurious regression which is carrying out regression analysis on un-stationary series

### **4.4.3 Vector Error Correction Model**

Granger Representation Theorem states that if two variables Y and X are co-integrated, then the relationship between them can be express as Error Correction Mechanism. Error correction model estimate the speed at which a dependent variable

returns to its equilibrium after any change in independent variables and shows how to restore the short term behavior of a time series variable with its long term behavior. This model helps us to determine both the long run and short run coefficients of the independent variables and their impacts on the dependent variable.

## Chapter 5

### EMPIRICAL RESULTS

In this session, the results of the empirical findings will be discussed.

#### 5.1 Unit Root Test Results

The Unit Root Test is carried out in the natural logarithm form of the variables.

Where, *ti* stands for trends and intercept and *i* stands for intercept without trend. The significant levels are 1%, 5% and 10% respectively.

Table 2. Results of the Unit Root Test

Test method	ADF		PP	
	Level	1 <sup>st</sup> difference	Level	1 <sup>st</sup> difference
<i>ti</i> LNFDI	-3.35	-5.17	-3.17	-8.5
<i>i</i> LNFDI	-1.14	-5.13	-0.98	-8.7
<i>ti</i> LNGDP	-2.27	-8.16	-2.22	-11.55
<i>i</i> LNGDP	3.23	-6.88	4.67	-6.68
<i>ti</i> LNINF	-4.19	-3.98	-4.24	-8.9
<i>i</i> LNINF	-4.16	-4.18	-4.21	-10.03
<i>ti</i> LNEX	-0.44	-3.3	-1.09	-3.29
<i>i</i> LNEX	-1.49	-3.2	-1.53	-3.26
<i>ti</i> OPEN	-1.51	-5.44	-1.66	-5.45
<i>i</i> OPEN	-0.54	-5.51	0.55	-5.52

As shown on table 5.1, the null hypothesis of the unit root test which states that the unit root cannot be rejected in the level form but is rejected when the first difference

of the variables is taken. This results show that there is unit root and the variables are integrated of order one  $I(1)$ .

## **5.2 Johnson Co- integration Test**

In order to know the long term relationship among FDI, Exchange Rate, Openness, Inflation and GDP, Johnson Co-integration test is applied. The unit root test revealed that, all variables are non-stationary and as a result of this, Johnson Co-integration test is applicable to the chosen variables. Five hypotheses are chosen for this test.

As stated by the first hypothesis, there is no co-integration among the variables. This hypothesis is rejected at both 5% and 1% level of significance using trace statistics as shown on Table 5.2 below and the alternative which states that there is co-integration among the variables is implemented.

The second hypothesis states that, there is less than or equal to one co-integration equation. This hypothesis is rejected at 1% level of significance using trace statistics as shown in Table 5.2. The third and fourth hypotheses are also rejected at 1% level of significance.

The fifth hypothesis states that there is less than or equal to four co-integrating equations. This hypothesis is accepted. Thus, there are at most 4 co-integrating equations between the variables

Table 3. Johnson Co-Integration Test Results

HYPOTHESIS			
Number of co-integrating Equations	Trace statistics	5%	1%
None**	153.24	76.07	84.45
At most one**	88.81	53.12	60.16
At most two**	54.08	34.91	41.07
At most three*	22.89	19.96	24.60
At most four	7.85	9.24	12.97
Trace test indicates 4 co-integrating equations at 5% level of significance			
Trace test indicates 3 co-integrating equations at 1% level of significance			
*denotes rejection of the hypothesis at 5% level of significance			
**denotes rejection of the hypothesis at 1% level of significance			

The results of Johnson co-integration test as shown on the table below reveals 4 co-integrating equations at 5% level of significance and 3 cointegrating equations at 1% level of significance.

### 5.3 Vector Error Correction Model (VECM)

Haven confirmed that there is co-integration between GDP, Inflation, openness, exchange rate and FDI, the Vector Error Correction Model is applied to determine the long run and short run coefficients between the variables. The results of the Vector Error Correction Model analyzed using Eviews is represented on the table below using the following model:

$$FDI = F (GDP, Inflation, Openness, Exchange rate)$$

Table 4. Vector Error Correction Results

Co-integrating Equation	Coefficient	Standard error	t-statistics
LNFDI (-1)	1.000000		
LNEX (-1)	3.001	0.32	9.3
LNGDP (-1)	11.99	2.20	5.49
LNINF (-1)	-0.53	0.21	-2.49
LNOPEN (-1)	-10.33	1.34	-7.70
C	46.92		
Error Correction	Coefficient	Standard error	t-statistics
Coin Eq 1	-0.831450	0.30	-2.75
$\Delta$ (LNFDI (-1))	0.241466	0.25238	0.956
$\Delta$ (LNFDI (-2))	-0.084400	0.21876	-0.385
$\Delta$ (LNFDI (-3))	-0.161670	0.22655	-0.713
$\Delta$ (LNEX (-1))	-3.904506	3.50607	-1.113
$\Delta$ (LNEX (-2))	-4.102448	3.40689	-1.204
$\Delta$ (LNEX (-3))	-0.517338	3.047	-0.169
$\Delta$ (LNGDP (-1))	16.18866	7.99929	2.0237
$\Delta$ (LNGDP (-2))	6.049299	8.36902	0.722
$\Delta$ (LNGDP (-3))	-12.54323	5.53213	-2.2673
$\Delta$ (LNINF (-1))	-0.214901	0.40593	-0.529
$\Delta$ (LNINF (-2))	-0.488625	0.42162	-1.1589
$\Delta$ (LNINF (-3))	0.691707	0.30930	-2.236
$\Delta$ (LNOPEN (-1))	-8.156220	4.19224	-1.9455
$\Delta$ (LNOPEN(-2))	-5.695834	3.37481	-1.639
$\Delta$ (LNOPEN (-3))	-1.873853	2.84016	-0.6597
C	0.599759	0.47647	1.25876
R-squared	0.607232		
Adj. R-squared	0.214465		
Sum sq. resids	7.619805		
S.E. equation	0.6901		
F-statistic	1.546034		
Log likelihood	-22.63998		
Akaike AIC	2.402423		
Schwarz SC	3.173351		
Mean dependent	0.179073		
S.D. dependent	0.778626		

The lag length used for this estimation is 3 chosen in Eviews according to Akaike AIC and Shwarz SC.

The co-integrating equation is reported to be negative and statistically significant.

This can be interpreted as; FDI converges to its long run equilibrium by 83.145



speeds of adjustment using short run values of GDP, Inflation, Exchange rate and openness.

LNEX is positive and statistically significant as shown on Table 5.3. This means that when exchange rate changes by 1%, LNFDI will increase by 3% in the long run. This result is consistent with those of (Cuyvers, et.al (2011), Pradhan and Kelkar (2014)). However, Kaur and Sharma (2013) found a negative relationship with FDI.

LNGDP is also positive and statistically significant. This can be interpreted as, when GDP changes by 1%, LNFDI increases by 11% in the long run. This result is in accordance with the work of Cuyvers, et.al (2011), Ang (2008), Faith and Rifat (2015)

LNINF is negative but statistically significant. This means that when INF changes by 1%, LNFDI will decrease by 0.53% indicating that inflation has a negative impact on inward FDI in India. Authors such as Kaur and Sharma (2013), Sharma (2015) also found similar results.

LNOPEN is also reported to be negative and statistically significant. This indicates that if trade openness changes by 1%, LNFDI will decrease by 10% in the long run.

As indicated on Table 5.3, short run coefficients are not statistically significant. This implies that GDP, inflation, exchange rate and trade openness do not have any short run relationship with FDI.

Table 5. Hypothesis tested and decisions

Hypothesis	Decision
<b>H0<sub>1</sub></b> : Market size does not have a positive significant effect on FDI	Rejected
<b>H0<sub>2</sub></b> : Openness does not have a negative significant effect on FDI	Rejected
<b>H0<sub>3</sub></b> : Exchange rate value does not have a positive significant effect on FDI	Rejected
<b>H0<sub>4</sub></b> : Inflation rate does not have a negative significant effect on FDI	Rejected

As shown on Table 5.4 the entire null hypotheses are rejected and thus the alternative hypotheses which state the opposite are not rejected.

## Chapter 6

### CONCLUSION

#### 6.1 Summary of Findings

The main aim of this thesis is to analyze the determinants of FDI in India by using GDP, Inflation, Economy Openness and Real effective Exchange rate as determining variables using time series data from 1978 - 2014.

The variables were found to be co-integrated after conducting the Johanson's Co-integration test. In order to determine the long run coefficients of the variables, we used the Vector Error Correction Model (VECM) that produced the following results.

GDP was found to be positive and statistically significant with a correlation coefficient of 12%, indicating a positive relationship between FDI and GDP. A large market is known to have higher profit opportunities than a small market since large markets have a greater purchasing power. (Goh, 2011). Market size is the most vital determinant of FDI (Demirhan, 2008) in economic studies. A country with a large market size tends to attract more FDI and most investors pay attention to this variable as it leads to economies of scale and utilization of resources.

The VECM reveals exchange rate with a correlation coefficient of 3% as a significant determinant of FDI in India. This indicates that the strength of India's

currency is a measure factor in attracting FDI to India. The results of this study also provide evidence that inflation is negatively related to FDI in the long run with a correlation coefficient of 0.5%. This is probably because of high domestic supply of money. Macroeconomic stability of a nation is measured by the nation's rate of inflation. Inflation occurs when there is an increase in money supply in an economy or when price levels increases. This usually leads to a reduction in buying power which is not favorable for foreign investors.

Trade openness is negative and statistically significant with a correlation coefficient of 10.33% indicating a negative relationship with FDI probably because investors coming in are market seeking oriented and not export oriented. According to (Demirhan 2008), the effect of openness on FDI depends on the type of investments. For example, when investments are market seeking, less openness can have a positive impact on FDI. On the other hand, if international companies engage in export oriented investments, they will prefer an open economy to invest in.

## **6.2 Policy Implication**

Since inflation is significant but has a negative impact on FDI, it therefore implies that the government should reduce the amount of money in circulation since a high supply of money leads to inflation.

The study further reveals that most investors coming into India are market oriented rather than export oriented and since the economy is too open, it leads to a negative relationship between trade openness and FDI. Therefore, I suggest that the Indian government should make the economy less liberal as this will help to attract more investors.

Market size and Exchange rate have a positive impact on FDI; therefore, the government should maintain a good market size so as to attract more FDI

### **6.3 Limitations**

The study focused on four independent variables which were limited to macro-economic variables only. Other macro, micro-economic and institutional factors were not considered for this study.

To have more accurate results, the period chosen could be divided into two sub periods, before and after economic reforms. Also, the study could be carried out in the sectorial and regional levels in order to find out which sector attracts the highest FDI and in which region of the economy.

## REFERENCES

- Acosta, A. G., Iregui, A. M., & Ramírez, M. T. (2014). An empirical examination of the determinants of foreign direct investment: a firm-level analysis for the Colombian economy. *Revista de Economía del Rosario*, 17(1), 5-31.
- Akhtar, G. (2014). Inflows of FDI in India: pre and post reform period. *International Journal of Humanities and Social Science Invention*, 2(2), 1-11.
- Ang, J. B. (2008). Determinants of foreign direct investment in Malaysia. *Journal of Policy Modeling*, 30(1), 185-189.
- Anyanwu, J. C. (2011). *Determinants of foreign direct investment inflows to Africa, 1980-2007*. African Development Bank Group.
- Banerji, S. (2013). Effects of Foreign Direct Investment (FDI) in the Indian Economy. Retrieved from : <https://halshs.archives-ouvertes.fr/hal-00846825/document>
- Bekana, D. M. (2016). Determinants of foreign direct investment in Ethiopia; time series evidence from 1991-2013. *The Journal of Developing Areas*, 50(1), 141-155.
- Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional determinants of foreign direct investment. *The World Economy*, 30(5), 764-782.

- Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775-787.
- Blonigen, B. A., & Piger, J. (2014). Determinants of foreign direct investment. *Canadian Journal of Economics/Revue Canadienne d'Economique*, 47(3), 775-812.
- Com, M. S. H. M. Foreign direct investment, the Indian scenario. *International Journal of Scientific and Research Publications*, 4(2), 604.
- Cuyvers, L., Soeng, R., Plasmans, J., & Van Den Bulcke, D. (2011). Determinants of foreign direct investment in Cambodia. *Journal of Asian Economics*, 22(3), 222-234.
- Demirhan, E., & Masca, M. (2008). Determinants of foreign direct investment flows to developing countries: a cross-sectional analysis. *Prague Economic Papers*, 4(4), 356-369.
- Denisia, V. (2010). Foreign direct investment theories: An overview of the main FDI theories. *European Journal of Interdisciplinary Studies*, 3, 53-59.
- Dua, P., & Garg, R. (2015). Macroeconomic determinants of foreign direct investment: evidence from India. *The Journal of Developing Areas*, 49(1), 133-155.

- Faeth, I. (2009). Determinants of foreign direct investment—a tale of nine theoretical models. *Journal of Economic Surveys*, 23(1), 165-196.
- Goh, S. K. (2011). Malaysia's outward FDI: The effects of market size and government policy. *Journal of Policy Modeling*, 33(3), 497-510.
- Hooda, M. S. (2011). *A study of FDI and Indian Economy* (Doctoral dissertation, National Institute of Technology, Deemed University).
- Jabri, A., Guesmi, K., & Abid, I. (2013). Determinants of foreign direct investment in MENA region: panel co-integration analysis. *Journal of Applied Business Research*, 29(4), 1103-1109.
- Jiang, N., Liping, W., & Sharma, K. (2013). Trends, patters and determinants of foreign direct investment in china. *Global Business Review*, 14(2), 201-210.
- Kaur, M., & Sharma, R. (2013). Determinants of foreign direct investment in India: an empirical analysis. *Decision*, 40(1-2), 57-67.
- Khalil, E. (2015). Analysis of determinants of foreign direct investment in Egypt (1970-2013). *European Scientific Journal*, ESJ, 11(10), 329-361.
- Kishor, N., & Singh, R. P. (2015). Determinants of FDI and its impact on BRICS countries: A panel data approach. *Transnational Corporations Review*, 7(3), 269-278.



- Kolstad, I., & Villanger, E. (2008). Determinants of foreign direct investment in services. *European Journal of Political Economy*, 24(2), 518-533.
- Koojaroenprasit, S. (2013). Determinants of foreign direct investment in Australia. *Australian Journal of Business and Management Research*, 3(8), 20-30.
- Leitão, N. C., & Faustino, H. C. (2010). Determinants of foreign direct investment in Portugal. *The Journal of Applied Business and Economics*, 11(3), 19-26.
- Lokesha, B. K., & Leelavathy, D. S. (2012). Determinants of foreign direct investment: A macro perspective. *Indian Journal of Industrial Relations*, 459-469.
- Mahalakshmi, S., Thiyagarajan, S., & Naresh, G. (2015). Determinants of foreign direct investment inflows into India. *Journal of International Economics*, 6(1), 24-43.
- Malki, S. (2014). The determinants of foreign direct investment in Saudi Arabia: a multiple regression analysis. *International Journal of Arts & Sciences*, 7(6), 351-377.
- Mughal, M. M., & Akram, M. (2011). Does market size affect FDI? The case of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2(9), 237-247.

- Nagaraj, R. (2003). Foreign direct investment in India in the 1990s: Trends and issues. *Economic and Political Weekly*, 1701-1712.
- Nayak, D., & Choudhury, R. N. (2014). A selective review of foreign direct investment theories (No. 143). *ARTNeT Working Paper Series*.
- Nouri, B. A., & Soltani, M. (2016). Determinants of foreign direct investment in Cyprus. *Journal of Advanced Research in Law and Economics*, 7(2 (16)), 341-352.
- Offiong, I. A., & Atsu, I. A. (2014). Determinants of foreign direct investment in Nigeria. *International Review of Management and Business Research*, 3(3), 1538-1550.
- Panigrahi, T. R., Patra, R. N., & Satpathy, S. K. (2015). Determinants of foreign direct investment in Indian regions: an empirical observation. *Asia-Pacific Finance and Accounting Review*, 3(1), 69-88.
- Petrakou, M. (2013). The determinants of foreign direct investment in the Greek regions. *Journal of Urban and Regional Analysis*, 5(1), 45.
- Polat, B., & Payaslıoğlu, C. (2015). Determinants of Foreign Direct Investment to Turkey. *Topics in Middle Eastern and North African Economies, Electronic Journal*, 17.

- Pradhan, A. K., & Kelkar, S. (2014). Macroeconomic Determinants of Foreign Direct Investment in India: An Empirical Investigation (1991-2012). *Journal of Commerce and Management Thought*, 5(4), 530-544.
- Ravinthirakumaran, K., Selvanathan, E. A., Selvanathan, S., & Singh, T. (2015). Determinants of foreign direct investment in Sri Lanka. *South Asia Economic Journal*, 16(2), 233-256.
- Rodriguez, X. A., & Pallas, J. (2008). Determinants of foreign direct investment in Spain. *Applied Economics*, 40(19), 2443-2450.
- Sarawagi, M. K., Sarawagi, V., Mishra, A., & Poddar, A. K. (2014). Foreign direct investment in India: an analysis of pre & post 1990 reforms in India. *International Journal of Research in Management & Social Science*, 39
- Shah, V., & Parikh, A. (2012). Trends, changing composition and impact of foreign direct investment in India. *International Journal of Economic Research*, 134-144.
- Sharma, A. K. (2015). Trends and determinants of foreign direct investment in india: a study of the Post-Liberalization Period. *South Asian Journal of Management*, 22(3), 96-121.
- Singhania, M., & Gupta, A. (2011). Determinants of foreign direct investment in India. *Journal of International Trade Law and Policy*, 10(1), 64-82.

Sun, Q., Tong, W., & Yu, Q. (2002). Determinants of foreign direct investment across China. *Journal of International Money and Finance*, 21(1), 79-113.

Vivoda, V. (2011). Determinants of foreign direct investment in the mining sector in Asia: A comparison between China and India. *Resources Policy*, 36(1), 49-59.