# **Factors Determining Foreign Direct Investment in China**

Muhammad Waqas Balooch

Department of Business Administration Bzu University Bahaduar Sub Campus Layyah Waqaskhan8477@yahoo.com

Kaleem Abbas Department of Business Administration Bzu University Bahaduar Sub Campus Layyah kaleemabbas@gmail.com

Muhammad Ibrahim Department of Business Administration Bzu University Bahaduar Sub Campus Layyah ibrahimkhanleghari@yahoo.com

Sadique Hussain Department of Business Administration Bzu University Bahaduar Sub Campus Layyah sadiqhance@yahoo.com

Sayed Fayaz Ahmed Department of Engieneering Management, Center for Emerging Sciences Engineering and Technology, Islamabad, Pakistan fayazafghani@gmail.com

## Abstract

The study investigates the factors determining FDI (Foreign Direct Investment) in China. The independent variables are Exchange rate, Export of goods and services, gross domestic product, Infrastructure, wage rate. The FDI (Foreign Direct Investment) is taken as the dependent variable in this study/research. The secondary data is collected from the World Development Indicator (WDI) covering the 21 years period (1990 to 2010). To analyze the data the regression model is used for data analysis. The software SPSS (Statistical Package for Social Sciences) is used to calculate and analyze the results. The present study shows that there is statistically significance in overall model. At this stage, it is concluded that Exchange rate, Export of goods and services, gross domestic product, Infrastructure have positive impact on Foreign Direct Investment (FDI) growth of the country and wage rate have negative impact on Foreign Direct Investment (FDI).

Keywords: Foreign Direct Investment, Exchange rate, Export of goods and services, gross domestic product, Infrastructure, wage rate

# Introduction

China has practiced significant changes over the recent 30 years since the proclamation of the 'Opening-up and Reform' policy in 1978. Since then, the Chinese Government has opened the markets progressively to overseas investment and achieved surprising achievement in attracting foreign direct investment (FDI) over the past 30 years. FDI in China has evolved from an almost insignificant level in 1978 to about USD 95 billion in 2008. Until 2008, there are 434,937 foreign enterprises registered in China. Foreign firms, either solely-owned or as cooperative ventures with Chinese firms, have established a ubiquitous presence in China. In 1990, the first MacDonald's was just established in Shenzhen, and in the next twenty years, MacDonald's has expanded to over 1,000 restaurants in China. Other prominent examples of the impact of foreign products on the Chinese market include the dominant position of Coca-Cola and Pepsi in China's soft drink market, the oligopoly by Nokia, Ericsson, and Motorola (and of course, Apple in the latest few years) in China's cellular phone market, and the fact that the largest three supermarkets in China are all foreign: Wal-mart, Carrefour and Metro. Those phenomena suggest that Chinese people's traditional life style has been gradually changed by increasing FDI inflows Dunning (2003). The rapid growth of FDI in many economies in the last three decades has attracted scholars' interest in both theoretical and empirical areas. Many studies have focused on multinational enterprises MNEs or FDI inflows to investigate FDI investment decisions and the relationship between FDI and the host country's economy (Slemrod, 1990; Coughlin et al., 1991). Dunning (2003) additionally counsel that empirical studies on FDI and its determinants ought to be explored over time, particularly in rising countries like China. From a quest perspective, China is particularly vital owing to its nice success in attracting FDI with the amendment of FDI incentive policies since the Nineties. Moreover, the dynamic Chinese market offers wealthy analysis opportunities for empirical tests of environmental, structural, and structure determinants of investment decisions. The role of FDI within the international economy is turning into progressively vital, resulting in ever larger target the drivers of FDI within the recent twenty years. China's nice success in attracting FDI beneath a series of policies since 1978 particularly the institution of twin capital revenue enhancement system, which provides larger concessionary tax advantages to foreign invested with enterprises (from 1992 to 2008), makes it an honest example for FDI analysis.

#### The Development of Foreign Direct Investment in China

China has experienced high FDI inflows for the past twenty years since it opened the door to foreign investors especially after the early 1990s. Attracting FDI is an important part of the economic reform process which has been included into the basic state policies since 1978. In the last 30 years, FDI inflows in China have expanded from almost nil in the late 1970s to USD95 billion in the year of 20083. Most of the FDI inflows occurred after 1992 which account for about 95% of the total FDI volume between 1979 and 2008. As a result, China has become the second largest recipient of FDI in the world and the largest FDI recipient among developing countries for many years in the 1990s4. With more and more foreign invested enterprises (FIEs) in China, China has also experienced dramatic changes in its economy and society. Consequently, China has transformed from a 'planned economy' to 'market-oriented economy' gradually and at the same time, its real GDP has grown at an average speed of 9.5% annually from 1978 to 2000. There are three major forms of foreign capital utilized by China: foreign loans, foreign direct investment and other foreign investment. Foreign loans include loans from foreign governments, international financial organizations, foreign banks, bonds issued by foreign countries and so on. As pointed out by Huang (2003), foreign investment is defined as 'direct' when the investment gives rise to 'foreign control' of domestic assets. In China, "foreign capital inflows (are) classified as FDI only if they lead to a foreign equity stake at or above 25%", which is a more strict definition than other countries for FDI and for corporate controls (for example, the US only requires more than 10% for foreign equity stake). Other foreign investment involve international leasing, compensation trade and processing, shares issued to foreigners and so on. Here, we shall mainly discuss foreign direct investment in China due to its crucial position and significant impacts on China's society.

#### The purpose of attracting FDI

Attracting foreign investment is one of the fundamental objectives of China's opening up policy and is also an important component of market-oriented economic reform. In the late 1970s, the pattern of international relationships had undergone great changes, when FDI increased rapidly with international market integration and the trends of globalization became more and more apparent. At this time, international investment was featured by capital outflows from developed countries into developing countries especially after the end of Huang (2003) the cold war. Consequently, many developing countries have taken this opportunity to utilize FDI to develop their own economy. Specifically, there are four reasons for Chinese government's interest in FDI. The first reason is to make up the capital shortage for economic construction. In 1978, GDP per capita in China is only RMB381 (about USD226) and the total savings in the bank are only RMB21.06 billion (about USD12.8 billion). The low bank deposit limited the level of domestic investment and as a result, local enterprises' growth was highly constrained because of the lack of capital inflows. This situation seriously restricted the development of China's economy. Therefore, attracting foreign investment became necessary and essential to support China's economic development at that time.

Second, the introduction of advanced foreign technologies and older skilled management is another purpose of China's FDI policies. The technology outcome of foreign investment may be a great way to push native technology innovations that has been enjoyed by several alternative countries. Foreign investment will improve the technologies in host country through many ways that, for instance, competition by corporations inside an equivalent business, coaching of workers, info exchange between management, and vertical linkages with the suppliers and consumers in up and down stream industries. Third, FDI is crucial in reducing the state of the host country. With additional and additional foreign enterprises coming into China, there's little doubt that they're going to offer important employment opportunities for native residents. Finally, attracting FDI is additionally a vital part of the market-oriented economic reform in China. The inflows of FDI are doubtless to accelerate the progress of China's reform of financial set-up, still because the upgrading of law and company social control system in China. Those effects can promote China's transferring from a planned economy to a market-oriented economy.

#### Aims and objectives

The aim is to by trial and error examine the determinants of FDI distribution in China and evaluate the impact of FDI on Chinese domestic investment. These aims are researched by the subsequent objectives:

1. To research what factors considerably have an effect on foreign direct investment in China?

2. To research the factors that determines FDI sector investment alternative within the Chinese market.

#### **Research Questions:**

- 1) What are the determinant factors of FDI in China?
- 2) What is the effect of China's Exchange rate, infrastructure, total trade amount, Wage rate, GDP on FDI?

#### Literature Review

Caves (1974) conducted econometric assessments intended for efficiency spillovers applying cross-sectional Australian production data intended for 1966, as well as he discovered how the existence foreign firms acquired a positive effect on manual work efficiency in the web host land. Dees (1998) learnt the determinants as well as side effects associated with FDI in china and Taiwan. He utilized panel data associated with 11 nations by 1983 to 1995. Specifics were being marketplace measurement; labor income; change pace; share associated with patents. A general regression model has been officially used on these types of specifics. They concluded that inward FDI has been encouraged through the big Chinese market; the lower price associated with manual work force, authentic trade pace, as well as level of innovation. Cheng and kwan, (2000) estimated the effects from the determinants associated with foreign direct investment (FDI) in 28 Chinese areas by 1985 to 1995, that they discovered of which big local market, excellent structure, as well as preferential plan acquired having a positive influence but wage rate acquired a negative effect on FDI. The result associated with education has been beneficial although not statistically important. Independent variable was being big local market, excellent structure, as well as preferential plan. Dependant has been FDI. A general regression model has been officially used on these types of specifics.

Clausing (2000) studied the relationship related to FDI in addition to exports. Instead of making use of fast techniques linked to FDI with their regressions, Clausing utilized independent variable Wage costs as well as dependant variable is actually FDI. Nearly all of individual's stories declaration using a beneficial collaboration related to FDI in addition to exports. Fung et al., (2000) learnt determinants associated with FDI from U.S and Japan in China .They utilized provincial files associated with FDI from U.S and Japan in China by 1991 to 1997. Specifics were being GDP associated with provinces; time income; km's associated with roadways; km's associated with railways. A general regression model has been officially used on these types of specifics. These people concluded that GDP as well as wage rate have an effect on the influx associated with FDI; SEZS as well as available coast locations possess good advantages in appealing to FDI; FDI from U.S and Japan in China tend to be motivated simply by excellent labor quality.. Bende-nabende et al. (2000) provide remarked that FDI can be influenced by means of some kinds of elements: cost-related elements; the actual expenditure natural environment increasing elements; macro-economic elements; as well as the advancement method with the sponsor state. As you will find international variations inside output methods along with current market blemishes of 1 form or even one more, businesses precede along the borders along with create inside higherreturn international locations. Solar et's., (2002) examined the spatial and temporal variation in foreign direct investment (FDI) among china's 25 provinces by 1986 to 1998 significance about FDI determinants through time period. They had taken data by Chinese economic book. They discover that the actual cumulative FDI in accordance with cumulative home-based expenditure features a unfavorable impact on the revolutionary FDI. Since GDP, retail store sales, home-based expenditure, R &D expenditures, along with income ended up selfsufficient varying. FDI was thought to be dependent variable. A general pooled regression model was used for these kinds of issues.

Nabende et 's., (2000) provides remarked that FDI can be influenced by means of some kinds of elements: cost-related elements; the investment environment improving factors; macro-economic factors; and the development strategy of the host country are independent variables and FDI is dependent variable. He had taken files 18 years by 1980 to 1997 by way of various websites. He concluded that there are international variations inside production resources along with current market blemishes of 1 form or even one more, businesses precede along the borders along with create inside higher-return international locations. They utilized time sequence data from 1979 to 1997 for U.S. direct investment and 1977 to 1997 for Hong Kong direct investment. Factors had been current market dimension; time expenses; business hindrances; Insurance policy connected with that contains political security. A general regression model has been suited for these kinds of issues. U.S. direct investment in China has been generally motivated by marketplace gain access to in addition to Hong Kong direct investment decision has been export driven. Zhang, (2001) studied Determinants of China's FDI boom. They used data for direct investment from Hong Kong and Taiwan form 1977 to 1997. Independent variables were Market size (GDP); Economic growth; Labour costs; Trade barriers; FDI incentives, Political instability. and dependent variables is export. he found that China's FDI in the past two decades has been substantially determined by its market size, rapid economic growth, and liberalized FDI regimes. China's FDI previously two full decades continues to be considerably dependent on its marketplace dimension, rapid economic expansion, in addition to liberalized FDI regimes. Tung (2001) studied Tax rates and tax incentives and FDI into certain designated areas in China. they used Panel data from 1988 to 1994 of 43 zones and cities Agglomeration economics (population); Independent variables are Unemployment rate; Wage rate; Infrastructure; Percentage of tax rate and exports used as dependent variable.. A general regression model was used on these variables. They concluded that Zones and cities with lower tax and greater tax incentives attract more FDI Razin, (2002) has provided a comprehensive review on the theories of determinants of FDI. He used 25 years data from 1975 1995, Independent variables are cost advantages, advanced technology, marketing, and product distribution and

dependent variables are imports and exports. He used regression model for finding relationship between these variables. He fined out that FDI focus in the positive effects of exchange rates, as a depreciated exchange rate lowers the cost of production and investment in the host countries. Fung *et al* (2002) studied Location choice of HK and U.S. direct investment in China they used data of Investments into each region of China from HK and the U.S. for the period 1990 to 1999.variables were GDP; Average wage; Number of student higher education; Kilometres of roads and railway; Number of SEZs; Number of OCCs; A general regression model was used on these variables. They concluded that U.S. investments are more sensitive to local demand and HK investment is more sensitive to local labour cost; U.S. investments in China tend to be more capital- and skilled.

Campos and Kinoshita (2003) investigated the determinants of FDI inflows into 25 transition economies by using panel data for the period 1990-1998. Their findings suggest that the main determinants of FDI in transition are institutions, agglomeration and trade openness. Ng and Tuan (2003) studied Location decision of manufacturing FDI in China. They used Cross-section data of firm (micro) level data of a total of 37,724 samples in 1998.variables were Transaction costs; Firm size; Trade constraints. A general regression model was used on these variables. they concluded that a Transaction costs, firm size and quota were all significant effects to firm location choice, especially in firm size factor. Shan (2002) studied Interrelationships between FDI and economic variables. He used Quarterly time series data over the period 1986-1998 from China. Variables were Output; Labour supply; Labour cost; Energy consumption; Exports; Exchange rate; Regional income difference. A general regression model was used on these variables. He concluded that FDI and output growth affect each other's, a two way-causality was found between FDI and output growth; FDI is influenced by regional income differences; FDI in China was found to be sensitive to the changes of a number of economic variables. Owen (2004) examined the determinants of foreign direct investment at the sector level in the Chinese economy. They took data of 13 sectors for China and 9 sectors for Guangdong province over the period from 1997 to 2002. Independent variables are market size, wage rate and FDI is dependent variable. He applies regression analysis for results. He conclude that market size, wage rate, degree of economic reform and innovation activities are important determinants of sector FDI in China China, but have no effect in Guangdong province and (iv) the elasticity of market size and labour wage in Guangdong province is greater than that in China as a whole.

Cleeve (2008) determined the determinants of foreign direct investment of 16 developing countries. Independent variables are used as market size, skilled labour, good infrastructure and exports or FDI as dependent variables. He took secondary data of 20 years from 1984 to 2004. Hefound that large market size, good infrastructural development, high skills level and labor costs are significant determinants of FDI inflows. Author also emphasized that political and macroeconomic stability, property rights protection and other investment-supporting regulations are important factors for attracting FDI in SSA countries. Demirhan and Masca (2008) investigated the determinant of FDI in 38 developing countries using cross-sectional data for the period 2000-2004. They used independent variables as natural resources, market size inflation, and tax rates. And dependent variable is FDI. Their findings suggest that GDP per capita, degree of openness, inflation and tax rates are important factors for FDI inflows. However, the factors, such as natural resources, market size and economic stability (in terms of inflation) are generally suggested to be one of the main determinants of FDI inflows in developing and transition economies. According to the Vural et al (2011) studied that Export growth in Turkey has been much faster than GDP growth over the past few decades. T0 investigate that they took data of 27 years from 1982 to 2009. They use domestic products, and prices as independent variables and exports and as for s dependent variables. They took all information from World Bank indicators and IMF for their findings. At the end they conclude that Export supply is positively related to the domestic relative price of exports while the higher domestic demand reduces export supply. Khachatryan et all 2011 studied the determinants of foreign direct investment in U.S real estate. They examined that foreign investor location presences had a major role in effecting FDI. they took panel data of the year 2002 to 2006.they used pooled regression model to test variables GDP,GDP growth, National investment level, exchange rate, interest rate(independent variable). They concluded that economic growth of a country increased by domestic investment and depreciation of currency value attracts FDI.

#### Different forms of FDI in China

Before discussing the policies and rules on FDI, it's necessary to know the essential kinds of FDI in China. There are 5 completely different kinds of FDI in China, as well as equity joint ventures, written agreement joint ventures, whole foreign-owned enterprises, joint exploitations, and foreign-funded share-holding enterprises. Equity joint ventures (EJVs) also are called share-holding firms. They need been established in China with joint capital by foreign investors and domestic partners. EJVs commonly take the shape of liability corporations wherever the joint partners invest and operate along, and share profits and losses on a pro-rata base. Significantly in China, the investment from foreign participation mustn't be not up to twenty fifth that may be a higher threshold than several alternative countries. EJV is that the earliest sort of FDI in China and has competed an awfully vital role in attracting foreign investment. From 1979 to 1982, EJVs accounted for concerning eight.4%

of total FDI inflows in China. This figure raised speedily that reached concerning hour at the top of Nineteen Eighties. They need fully fledged continuous decrease since 1990 as solely foreign-owned enterprises began to grow quickly. At present, they're still a very important part of FDI inflows and conjure around a 3rd of the accumulative accomplished FDI in China. Contractual joint ventures (CJVs), additionally referred to as get together businesses, are established conjointly by foreign investors and domestic participations. CJVs might or might not be fashioned as legal entities, and therefore the investment will be contributed within the sort of capital, land, technologies and then on. in contrast to EJVs wherever profits and losses are shared proportionately, investors in an exceedingly CJV share the profits and losses consistent with the terms and conditions within the contract. A typical CJV situation in China is that the foreign party provides capital or technologies while the domestic party provides land, labour, materials, manufactory buildings, etc.

CJV has been the foremost vital sort of FDI inflows throughout the first years of gap up as a result of its low risk and versatile kinds of cooperation. CJVs accounted for concerning five hundredth of all FDI inflows at the beginning of Nineteen Eighties, weakened bit by bit once then, however still occupied concerning 12-tone system of total FDI till 2007. Wholly foreign-owned enterprises (WFEs) are companies only invested with by foreign investors like foreign corporations, enterprises, organizations, establishments or people. The foreign investors establish the businesses in accordance with the laws of China, and "have to trust a minimum of one in all the subsequent criteria: the enterprises should adopt the international advanced technology and facility; all or most of the merchandise should be exported-oriented". WFEs weren't allowed within the early years of 'opening-up' till 1986.

#### Key Characteristics and Dynamic of FDI Inflows in China

FDI inflows to China have veteran dramatic development since the beginning of China's economic reform particularly when 1992. Throughout 1979 and 2002, FDI inflows in China have enlarged from virtually zero at the beginning of the reform to USD53 billion (actual utilized foreign investment) and thirty four, 171 foreign-invested enterprises were new established in 2002. so as to draw in FDI inflows, China has applied a twin company legal system from 1992-2008 that grants a lower rate to foreign endowed enterprises at concerning 15%-24% and a better rate of thirty third to Chinese domestic enterprises. However, this twin legal system was replaced by a unified legal system (25% for each foreign and domestic enterprises) when 2008.

#### The impacts of FDI on China's economy

Due to the 'reform and gap up' policy and also the development of FDI, China's economy has modified lots. China has with success reworked from a planned economy to a market-oriented economy and has achieved economic process at whole number for several years. With the inflows of FDI, advanced management and technologies have conjointly been introduced to mainland China. This section can discuss the profound impacts of FDI on China's economy in several aspects. First, FDI contributes greatly to China's economic development. China's GDP has had a formidable growth at regarding nine.5% annually since 'opening up' in 1978. there's no doubt that FDI may be a important consider promoting China's reform and economic development. The foreign reserves in China were extraordinarily low within the Eighties to support its economic process and this example was persistent till the middle Nineteen Nineties once FDI inflows in China have speedily grownup.

#### Methodology FDIs pattern in china:

China has opened its market for more than twenty years since the start of economic reforms in 1979, and has become one of the world's fastest-growing economies. China has experienced real GDP growth at an average annual rate of 9.5% over the past two decades and has become the largest recipient of FDI among developing countries.

In order to attract FDI, the Chinese Government has introduced a dual corporate income tax system that gives foreign invested enterprises more favorable tax rates than domestic enterprises. As a result, FDI has become a major part in the opening up of China's industry and economic development. Low labor cost is the most important factor that accounts for the high FDI inflows in China. Besides labor cost, other factors such as economic growth, improved infrastructures, market potential and government's favorable policies also play crucial roles for FDI inflows

#### **Objective of research:**

The aim is to empirically examine the determinants of FDI distribution in China and evaluate the impact of FDI on Chinese domestic investment. This aim will be researched by the following objectives:

- 1. To investigate what factors significantly affect foreign direct investment in China?
- 2. To study the impact of FDI on economy of China

#### **Research approach:**

The approach I use in my work is top-down approach which is also called DEDUCTIVE reasoning. In this approach I start from the very general information and that comes to an end with more specific reasoning in a broader way. Firstly the information is designed in a framework and then develops the questions for it. Secondly

the analysis tells the specific conclusions of the collected information or samples.

#### **Theoretical framework**:

The dependent variable are growth, tax, exchange rate, natural resources FDI policies, which are the variable of primary interest. I try to attempt to explain the variance in this dependent variable by the other independent variable which is Foreign Direct Investment The foreign direct investment is an investment made by one company into the company of other country. It differs from other indirect investment which is often made in the money market of the country. Foreign Direct Investment is rather involved in the direct investment by expanding the business and by opening the new subsidiary by using the infrastructure of the country.





# Figure No.1

# **Research questions:**

What are the determinant factors of FDI in China?

How China Attracts investors?

How much China economy favorable for foreign investor?

#### **Collection of data:**

Collecting the data is the crucial part of research methodology and consists of gathering the data from various sources. I clearly mention the sources from where I collected the data for analysis. The data will be analyzed in the analysis section of the research. It is very important and necessary to collect the information.

#### Data types:

Data is of two types: Primary and Secondary data.Secondary data is one that becomes the part of the research methodology through which we collect information for the project.

### Sample size:

Last 21 years foreign direct investment data has been drawn as a sample for analysis.

#### Sample area (majority of the data collected):

Data is collected from the World Development Indicators China. (Different indicators of the Government) **Methodology:** 

Methodology: Most of the ovisti

Most of the existing studies trying to examine that how foreign direct investment impacts on exports of India by using the simple linear regression analysis in which two variables are involved. Keeping in view the situation I am going to apply the multiple linear regression analysis model which is used to measure the impact of foreign direct investment on exports performance of India. While FDI is the dependent variable and GDP, Exchange rate, Wage Rate, Infrastructure, Export of goods and services, exchange rate, are the independent variable. The regression coefficient enables us to measure the power of relationship between a dependent variable and one or more independent variable. The regression equation is:

### $Y = \alpha + \tilde{\Sigma}\beta Xi \quad (1)$

Where Y is the value of FDI, X is are factors determining the level of FDI,  $\alpha$  is the individual effect which is assumed to be constant. The ordinary least square method can provide consistent and efficient estimates of  $\alpha$  and  $\beta$ . The determinants of FDI, X, include market size, labor cost, exchange rate, GDP, GDP per Capita % of roads PER Km<sup>2</sup>. The empirical form of equation (1) for this study is presented as follows:

 $FDI = \alpha + \beta_1 GDP + \beta_2 WR + \beta_3 INF + \beta_4 ER + \beta_5 EGAS(2)$ 

Where  $\alpha$  is the intercept. The  $\beta$ s are the regression parameters to be estimated

The dependent variable is FDI. The explanatory variables are gross domestic product (GDP); GDP per capita (GDPC) ;wage rate (WR);exchange rate(ER); Roads Highway per km2 (Highway)(R)

#### Tools:

The software SPSS (Statistical Package for Social Sciences) version 20.0 is used for the data analysis from which the results are obtained.

#### Analysis And Discussion

Before I move for the analysis in the Statistical Package for Social Sciences (SPSS), the data has been checked

in the assumptions in SPSS in order to calculate the Multiple Linear Regression between variables. The variable is measured on the ratio scale (continuous variable). The linear relationship exists between these variables checked in the scatted plot diagram in SPSS. No outlier is found in the analysis that affects negatively to the relationship. The data shows the HOMOSCEDASTICITY (a linear relationship). **Descriptive statistics** 

#### Table No.1 Descriptive statistics **Descriptive Statistics** Mean Std. Deviation Ν FDI 21 3.5857 1.14118 GDP 10.1810 2.52737 21 ER 21 7.1881 .95877 WR 21 2.7800 .76458 21 EGAS 25.0238 7.92842 INF 41.6095 8.46805 21

This table gives us the information about the descriptive statistics in which we can see MEAN of the GDP is 10.1810, MEAN of the ER is 7.1881, WR(wage rate) MEAN is 2.7800, EGAS MEAN is 25.0238, INF(Infrastructure) MEAN is 41.6095 and MEAN of Foreign Direct Investment is 3.5857.Similarly the variability between the these variables which is the standard deviation that tells us how much mean is deviated from it, although mean and standard deviation write together in the form of we can say:

MEAN of the GDP is  $10.1810 \pm 2.52737$ 

MEAN of the ER is 7.1881±.95877

MEAN of WR is 2.7800±.76458

MEAN of EGAS MEAN is 25.0238 ±7.92842

MEAN of INF is 41.6095 ±8.46805

MEAN of Foreign Direct Investment is 3.5857 ±1.14118

N indicates the number of samples which is 21 in our analysis. The table simply figures out the predictors in the analysis which is Foreign Direct Investment in my case which I have entered into the equation, and this is the multiple regression that's why we have only five predictors.

#### Model summary

	Table No.2 model summary								
	Model Summary								
	Model	R	R Square	Adjusted R Square	Std. Error of the				
					Estimate				
	1	.876 <sup>a</sup>	.757	.321	.94057				
a.	. Predictors: (Constant), : GDP, INF, ER, EGAS, WR								
b.	Dependent Variable : FDI								

So far, this is the most important table in our analysis which tells us the measure how well the overall analysis or model fits.

R-square varies between 0 and 1. In this case, 0.876 or 87.6% variability is explained by the GDP, Infrastructure, ER, EGAS,WR (But this does not imply causality). In other words we can say that the 87.6% variability in annual GDP, INF, ER, EGAS, and WR can be accounted for by the use of Foreign Direct Investment.

The next column gives the standard error of the estimate. That is the measure of how much R is predicted to vary from one sample to the next. The amount of standard error is which is the .94057error associated with the regression analysis in terms of the predicting the particular value .It simply expresses how much the results deviate from the actual mean to the estimated mean. **ANOVA** 

Table No.3 ANOVA									
ANOVA <sup>a</sup>									
Model		Sum of Squares	df	Mean Square	F	Sig.			
	Regression	11.891	4	2.973	38.360		.003 <sup>b</sup>		
1	Residual	14.155	16	.885					
	Total	26.046	20						
P	1	EDI							

a. Dependent Variable: FDI

b. Predictors: (Constant), GDP, Infrastructure, ER, EGAS, wage

This F test outcome here is important which is highly significant whose value is less than 0.05 in the last column. Therefore, this model certainly fits the data. A straight line depicting the LINEAR RELATIONSHIP, describe the relationship between these variables.

Table No.4 coefficient table								
Coefficients <sup>a</sup>								
Model		Unstand	ardized Standardized		Т	Sig.	95.0% Confidence Interval	
		Coefficients		Coefficients			for B	
		В	Std.	Beta			Lower	Upper Bound
			Error				Bound	
	(Constant)	.401	2.238		.179	.002	-4.369	5.171
	GDP	.209	.087	.463	2.389	.003	.022	.395
1	ER	015	.263	013	059	.000	577	.546
1	Wage	-2.947	1.145	-1.974	-2.575	.002	507	5.386
	EGAS	.117	.062	.813	1.894	.000	.249	.015
	infrastructure	.098	.064	.730	1.536	.000	.235	.038
a. Dej	pendent Variable:	FDI						

This table is also very important from the analysis point of view. The column named "Unstandardized coefficients" give the value of constant "a" which is the intercept of the predicted value X, if Y = 0. Additionally, we can say that Foreign Direct Investment which is Y (dependent variable). This also gives us B-coefficient (the independent Variable), the value of Y would change if X changes by one unit. It can be seen that ER (Exchange rate) and WR (wage rate) have negative impact on FDI.

There comes the statistical significance of the relationship between the independent and dependent variable. Moreover, we can say that the how well it is that we have a strong relationship in our example. It is observed that in our analysis in the above table the relationship is statistically significant at the 0.000 level.

#### **Discussion of the Results**

The results of the study confirm that the variables that we have considered in the theoretical framework are important. We focus only on the variables which are Foreign Direct Investment and GDP, Infrastructure, ER, EGAS, wage. The former is dependent variable and the latter are independent variables and check the impact that how much GDP, Infrastructure, ER, EGAS, wage impacts the foreign direct investment and finally reached the results of strongly aftermath.

After determining the sample of the variables which we put on the ratio scale and analyze in the SPSS for multiple linear regression, we come to the answers to those questions that we stated in the methodology/proposal of the research.

Each question was then tested. The first states that the how much GDP, Infrastructure, ER, EGAS, wage on Foreign Direct Investment impacts. Essentially, in my methodology section, I suggest the multiple linear equation which is  $Y=a+bX_i$ . This is the multiple linear equation having many variables involved in it.

Y = Dependent variable, which is FDA in our analysis

a = constant (which is the intercept of the predicted value X , If Y = 0 )

b = gradient or slope of the regression line

X = Independent variable, which are GDP, Infrastructure, ER, EGAS, WR (wage rate) in my case

Re-Arranged the equation with respect to my topic, I get:

 $FDA = \alpha + \beta_1 GDP + \beta_2 WR + \beta_3 INF + \beta_4 ER + \beta_5 EGAS$ 

Putting the above calculated values, we get

FDA = 0.401 + (-0.209) + 2.497 + 0.98+(- 0.15) +0.117

This equation represents that e Foreign Direct Investment can be determined by factors such as are GDP, Infrastructure, ER, EGAS, WR (wage rate).

#### Conclusion

The most important task of this research is to check the Determinants of Foreign Direct Investment across China. In other words, how much Foreign Direct Investment are increased or decreased by the factors such as GDP, (INF) Infrastructure, exchange rate (ER) , Exchange of goods and services (EGAS), wage rate (WR). Foreign Direct Investment is the outcome and GDP, (INF) Infrastructure, exchange rate (ER) , Exchange of goods and services (EGAS), wage rate (WR) are the predictor which are used for the outcome. The previous empirical studies also show the impact of GDP, (INF) Infrastructure, exchange rate (ER) , Exchange of goods and services (EGAS), wage rate (WR) on Foreign Direct Investment. This study is also a contribution in those former empirical studies. However, with respect to my research question I have to check the impact, the undertaken regression analysis and also diversify the previous studies, I come up with the more information about the factors which is World Development Indicators (World Bank). The data is then inserted in the SPSS tool that shows the strongly positive relationship of the GDP, (INF) Infrastructure, exchange rate (ER) , Exchange of goods and services (EGAS), wage rate (WR) and Foreign Direct Investment Exports of the Chinese economy. The data is taken as a percentage of GDP, percentage of (INF) Infrastructure, percentage of exchange rate (ER) , percentage

of Exchange of goods and services (EGAS), percentage of wage rate (WR). The former studies also show the positive relationship and the significant impact of GDP, (INF) Infrastructure , Exchange of goods and services (EGAS), and negative impact of wage rate (WR) on Foreign Direct Investment.

China's financial growth provides immersed world-wide interest. We all identify each of our analyze via additional related studies on China's FDI by looking at possible improvements inside significance about finding out factors by means of moment. As a result, the research developments each of our being familiar with inside the factors influencing the level of FDI around The Far East. The analyzed really does provide facts the significance about the FDI determinants. Salary fee provides bad partnership with FDI means increase inside wage fee dissuade overseas strong investment Also, GROSS DOMESTIC PRODUCT provides considerable partnership with GROSS DOMESTIC PRODUCT as well as becomes hugely positive. Infrastructure is usually crucial determinants in the FDI. Excessive work quality as well as beneficial infrastructure appeals to overseas people.

The analysis provides various limitations that deserve even more deliberate or not. 1st, we have certainly not separated the nature in the FDI. There are numerous additional factors that ascertain FDI including development amount of state, quality regarding manual work, political security and visibility to the overseas world For instance, place a burden on guidelines, investigation as well as growth and so there exists should do an extensive work towards the idea.

#### Further Recommendation

The research work and analysis carried out so far on the subject of Foreign Direct Investment and also study the variable that impacts significantly on it. This research work will hopefully lead the readers to formulate their own way and needs to do other work that relates to it. This is quantitative analysis, and further work can also be done by using other variables such as innovation level of country, quality of labor, political stability and its openness to the foreign world For instance, tax rules, research and development etc.

Corruption along with red tape troubles are essential deterring factors that leave China under-achiever as being a coordinator regarding FDI. They are quite intriguing elements which should be additional brought on.

#### References

- Anwar, S., & Nguyen, L. P. (2010). Foreign direct investment and economic growth in Vietnam. Asia Pacific business review, 16(1-2), 183-202.
- Campos, N. F., & Kinoshita, Y. (2003). Why does FDI go where it goes. New Evidence from the.
- Caves, R. E. (1974). Multinational firms, competition, and productivity in host-country markets. *Economica*, 176-193.
- Chan, A. T. Y., Cleeve, V., & Daymond, T. J. (2002). Necrotising fasciitis in a patient receiving infliximab for rheumatoid arthritis. *Postgraduate medical journal*, *78*(915), 47-48.
- Cheng, L. K. and Kwan, Y. K., (1999). Foreign capital stock and its determinants, In *Foreign Direct Investment* and *Economic Growth in China*. Wu, Y. GreatBritain, MPG Books.
- Cheng, L. K. and Kwan, Y. K., (2000). "What are the determinants of the location offoreign direct investment? The Chinese experience", *Journal of InternationalEconomics*, 51: 379-400.
- Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of international economics*, *51*(2), 379-400.
- Clausing, K. A. (2000). The impact of transfer pricing on intrafirm trade. In*International taxation and multinational activity* (pp. 173-200). University of Chicago Press.
- Coughlin, C., and E. Segev., (2000), Foreign direct investment in China: A spatial econometricstudy, *The World Economy* 23(1), 1-23.
- Coughlin, C.C., J.V. Terza, and V. Arromdee, (1991), State characteristics and location of foreigndirect investment within the united states, *Review of Economics and Statistics* 73(4),675-83.
- Dees, S., (1998). "Foreign direct investment in China: Determinants and Effects", *Economics of Planning*, 31: 175-194.
- Dunning, J.H., (2003), Making globalization good, (Oxford University Press, Oxford).
- Enu P, Dodzi E .K. Havi, Obeng P .D , (2013)Impact of macroeconomic factors on foreign direct investment in ghana: a cointegration analysis European Scientific Journal edition vol.9, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431 331
- Fung, K. C., Iizaka, H., Lin, C. and Siu, A., (2002). An econometric estimation of
- Gjebrea .E ,Zoto.O Factors Determining Foreign Direct Investments in Albania European academic research, VOL. I, ISSUE ISSN 2286-4822, Hara.m and Ivohasina f. Fimahefa.r (2005) The determinants of foreign direct investments into japan, Kobe University Economic Review 51 21
- Huang, Y., ed., (2003) Selling China: Foreign direct investment during the reform era(Cambridge University Press, New York).
- Khachatryan, V., Sirunyan, A. M., Tumasyan, A., Adam, W., Bergauer, T., Dragicevic, M., ... & Van Remortel,

N. (2011). Measurements of inclusive W and Z cross sections in pp collisions at  $sqrt {s} = 7$  TeV. *Journal of High Energy Physics*, 2011(1), 1-40.

Lee G. Branstettera, c, Robert C. Feenstra(2002)Trade and foreign direct investment in China: a political economy approach, *Journal of International Economics* 58 335–358

Leonard K. Chenga, Yum K. Kwan(1998) What are the determinants of the location of foreign direct investment? The Chinese experience *Journal of International Economics* 51 379–400

- Li, X., & Liu, X. (2005). Foreign direct investment and economic growth: an increasingly endogenous relationship. *World development*, 33(3), 393-407.
- Liu.X ,Wang.C (2003) Does foreign direct investment facilitate technological progress? Evidence from Chinese industries *Research Policy* 32 945–953
- locational choices of foreign direct investment: Thecase of Hong Kong and U.S. firms in China. Asian Development Bank Institute.
- Ng, L. F. Y. and Tuan, C., (2003). "Location decision of manufacturing FDI in China:Implication of China;s WTO accession", *Journal of Asian Economics*, 14:51-72.
- Nguyen .N.A (2007) Foreign direct investment in vietnam: an overview and analysis the determinants of spatial distribution across provinces *Munich Personal RePEc Archive*Development and Policies Research Center, No. 216
- Nicolini R, Artige L ,(2005) Factors Determining Foreign Direct Investments in Albania, *European Academic Research*, VOL. I, ISSN 2286-4822,
- Owen C.H. Ho(2004) Determinants of Foreign Direct Investment inChina: A Sectoral Analysis School of Economics & Commerce
- Petrakou.M Suisse.C, Luxembourg (2000) The determinants of foreign direct investment in the greek regions Journal of Urban and Regional Analysis, vol. V, 1, 2013, p. 45 - 64
- Razin, A., (2002). FDI contribution to capital flows and investment in capacity.NBER wowrking paper.
- Selmord, H., (1990) Ax effects on foreign direct investment in the U.S.: Evidence from a crosscountrycomparison, in Assaf Razin and Joel Slemord (eds.), Taxation in the GlobalEconomy (University of Chicago Press, Chicago).
- Shan, J., (2002). "A VAR approach to the economics of FDI in China", AppliedEconomics, 34: 885-893.
- Shan, J., 92002), A macroeconomic model of income disparity in China, *International EconomicJournal* 16(2), 47-63.
- Shan, J., (2002), A VAR approach to the economics of FDI in China, Applied Economics 7(34),885-93.
- Sun, Q., Tong, W. and Yu, Q., (2002). "Determinants of foreign direct investmentacross China", *Journal of International Money and Finance*, 21: 79-113.
- Sun.Q, Tong.W, Yu,Q (2002)Determinants of foreign direct investmentacross China, *Journal of International* Money and Finance21 (2002) 79–113.
- Tung, S. and Cho, S., (2001). "Determinants of regional investment decision in China: An econometric model of incentive policy", *Review of Quantitative Financeand Accounting*, 17: 167-185.
- Vural, y \*, Zortuk.m (2011) Determinants of foreign direct investment in china: a sectoral analysis *Eurasian* Journal of Business and Economics 2011, 4 (7), 13-23.
- Yasmin .B, Hussain. A and Chaudhary M.A (2003) Analysis of factors affecting foreign direct investment in developing countries, *Pakistan Economic and Social Review*Volume XLI, No. 1&2 (2003), pp. 59-75
- Zhang, K. H. and Song, S., (2000). "Promoting exports: The role of inward FDI inChina", *China Economic Review*, 11(385-396).
- Zhang, K. H., (2000). "Why is direct investment in China so small?" *ContemporaryEconomic Policy*, 18(1): 82-94.
- Zhang, K. H., (2001). "China's inward FDI boom and the greater Chinese economy", *The Chinese Economy*, 34(1): 74-88.
- Zhang, X., (1999). Foreign investment polic, contribution and performance, InForeign direct investment and economic growth in China. Wu, Y. GreatBritain, MPG Books.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

# **CALL FOR JOURNAL PAPERS**

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

# MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

# **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

