

Determinants of Foreign Direct Investment in Pakistan: A Comparative Analysis in Democratic and Non-Democratic Eras

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Abstract

The chief objective of this research is to investigate empirically the determinants which affect Foreign Direct Investment (FDI) inflow in Democratic and non-Democratic eras of Pakistan by using yearly data from 1980 -2014. In this research, six independent variables have been taken along with Dummy which are Gross Domestic Product, Interest Rate, Trade Openness, Inflation Rate, Exchange rate, Dummy variable and one dependant variable which is Foreign Direct Investment. For econometric analysis, annual time series data were collected from the Pakistan Bureau of Statistics, UNCTAD, World Development Indicator (various issues), International Financial Statistics, Global Economy and Economic Survey of Pakistan. This thesis applied advanced econometric methodology which comprises unit root testing and Johansen co-integration analysis. The Vector Error Correction Model (VECM) was employed to identify both the long-run and short run relationship between FDI and its determinants. The dummy variable captured the difference as there is a significant difference between the determinants of Foreign direct investment in Democratic and Non-Democratic eras of Pakistan.

Keywords: *Foreign Direct Investment, Democratic and Non Democratic, Interest rate, Inflation rate*

1. Introduction

We are living in a global village; the distance has been compressed because of high speed transportation and efficient communication system. A person can move from a country to another country just in few hours and can deliver his message from a corner to another corner of the world just in few seconds. In the same way, business can move from one area to another area without any delay of time. The one of the best example of business movements is foreign direct investment (FDI). According to Gilpin R (2002), FDI is defined as when a country wants to set up economic enterprises within the jurisdiction of other countries and or want to expand the existing business in the

jurisdiction of another nation. Since long time, a significant shift has been felt in the attitude towards Foreign Direct Investment which is flowing to developing nations. Specially, the discussion among academics and policy makers has shifted from whether foreign direct investment should be encouraged to how developing nations can attract Foreign direct investment. Definitely, various world-wide development organizations like World Bank, ponder FDI to be one of the most active instruments in the world which is a source to eradicate poverty, and consequently which promote poor nations to make rules with a view to improve FDI flows. But, several of these countries having weak democracies or nondemocratic governments that want to promote FDI. Thus it is important to know the influence of democracy and non-democracy on FDI. Like, if democracy discourages FDI, then countries face a trade-off between increased democratization and promoting more FDI. Although there is not available any evidence of clear theory regarding the impact of democracy on FDI, but FDI may be influenced by democratic institutions positively influence because there are strong checks and balances of democratic government on elected officials, and this leads to decrease arbitrary government interference and becomes stronger the property right protection (Norht & Weingast, 1989; Li, 2009).

According to Li and Resnick (2003) also, the multinational firms may give preference to invest in a non-democratic country rather than in democratic countries. The fact is that non-democratic regimes are not answerable to their electorates like non-democratic eras. Consequently, non-democratic regime may be in a well position to give larger incentive packages and also give protection from labour unions. As military governments have a small electorate, the executive branch gives less preference to the large public's concern like welfare, wages and working conditions in their economic decision-making without facing any electoral costs as long as it benefits the elites making up their winning coalition (Linz, 2000; Bueno de Mesquita et al, 2002; 2005). Democratic governments prevailing in a country are domestically answerable for policy outcomes and may consequently be liable to local, populist pressure of both voters and local companies that may result to policy instability and investor uncertainty (De Mesquita and Root, 2000; Jensen, 2012). Therefore, dictatorships may be preferred by certain overseas investors as they provide high level of future certainty regarding drivers which gives benefits in investigating the returns of investment decisions (Donnell, 1988). Thus, numerous researchers recommend that non-democratic governments provide better incentives for investment than democratic ones (Bornschier & Chase-Dunn, 1985; Oneal & Oneal, 1988; Haggard, 1990; Oneal, 1994; Greider, 1998).

1.2 Problem Statement

Pakistani economy faces low foreign and domestic investment due to low domestic savings, high non-productive consumption and slow economic growth. Foreign direct investment determined through many economic variables in the economy. These variables are of micro and macro level in their effect. The GDP, interest rate, Exchange rate, inflation and trade openness are main economic variables which determined foreign direct investment in Pakistan. It was examined that in Pakistan, Foreign direct investment was maximum in the previous periods but after 2008, decrease in the Foreign direct investment of Pakistan has been examined. This study is conducted to investigate the

Determinants of Foreign Direct Investment in Pakistan, a comparative analysis in Democratic and Non-democratic eras. This study has investigated the determinants which affect the FDI inflows and its positive or negative influence on FDI. With a view to boost the future amount of investment in Pakistan by foreign countries, this study is examined to measure foreign exchange rate, inflation, market size or GDP, interest rate, and trade openness in the stated two distinct period of rules. Understanding the amount of FDI inflow during Democratic and non-democratic eras is always a challenge for the economists, managers and researchers.

1.2 Research Questions

- What are the Determinants which are considered most important for fall and rise of FDI in Democratic and Non-democratic eras of Pakistan?
- What is the impact of these factors on FDI in Democratic and Non-democratic eras of Pakistan?

1.3 Research objectives

The goal of this study is to explore factors of FDI which are considered most important for fall and rise of FDI inflow in Democratic and Non-Democratic eras of Pakistan.

- To Examine and investigate the impact of different factors on FDI inflow in Pakistan.
- To compare the effects of the factors which affect FDI inflow towards Pakistan during Democratic and Non-Democratic eras.
- To suggest measure to improve these factors to encourage FDI inflow towards Pakistan

1.4 Significance of the Study

Pakistan is a large investor of local and foreign capital. Pakistan is receiving a large quantity of foreign direct investment from all over the globe. These foreign direct investments affect individual, households as well as the entire economy. This research enhances the knowledge of users like economists, Policy maker etc. on the determinants of Foreign Direct Investment (FDI), thus the research gives highlight on the determinants on FDI in both Democratic and Non-democratic eras of Pakistan.

1. Literature Review

1.1 Foreign Direct Investment

Foreign Direct Investment is a significant component in international economic integration. FDI produces constant and long ending connections amongst different economies and leads to the dispersion of technology and sustainable development. The firms have an excellent spot for the development of their products at international level (Glass, 2002). FDI can be defined in many ways. FDI is defined by OECD (2014) as the investment which is made by a foreign investor in one economy with a view to get the lasting interest in a company resident in another nation. The final benefit becomes later a long term relation amongst the direct investor and the company and direct investor has the strong impact on the management of the enterprise. Besides, according to the standard of company rules, it will be important for direct investor to have 10 % ordinary or voting. Foreign direct investment is affected by many factors in a host nation. Numerous researches have examined the factors of inbound FDI related to multiple economies.

A brief review of the literature will be discussed as follow which is related to the choice of variables involved in this research. The availability of huge literature on FDI presents an evidence that with the increase in globalization raise the significance of Foreign direct investment in economic growth and development.

2.2 Impact of FDI on Economic Growth

A study employed by Li and Liu (2005) on the impact of Foreign direct investment on economic growth and examined that the Foreign Direct Investment plays a huge part in improving of economic growth. They presented that Foreign Direct Investment has a positive and significant association with economic growth. Another research was performed by De Meelo (1999) and examined that there is a positive relation between Foreign Direct Investment and economic growth in both developing and developed nations. Der *et al* (2004) examined that there is a causality association running from Foreign Direct Investment to economic growth.

2.3 Determinants of FDI

The multiple factors which affect FDI were explored, in the initial research it was recommended the investor companies should select the countries with the low cost, high labor force and developing nations were chosen for the investment but after the study conducted by the Mundell (1957) tends to elaborate that different determinants like trade barriers, rich and poor nations at capital base and geographical distribution of investment recommend that the countries with low gross domestic product, wage etc. are not only the targeted nations. With the lapse of period, the researchers found different determinants which encourage and affect the investors they want to do investment in the host nation. The determinants which were identified are market size, economic stability, labour market, geographical and cultural indicators and found that these are the variables which used to study the FDI.

2.4 Exchange Rate and FDI

Exchange rate is a key factor of Foreign direct investment. A research was employed by Cavallari and Addona (2013) on determinant of US Foreign direct investment in 46 economies. They executed regression analysis using the period of 1982-2009 and concluded two main results that US FDI has positive association with host country. The association between Foreign direct investment and exchange rate is more robust in boom as compared to recession and the second result was a Positive association of FDI with exchange rate volatility.

2.5 Inflation and FDI

Inflation is considered a significant sign of economic stability. This is investigated by numerous researchers like Demirhan and Masca (2008) that lower inflation showed the stable economy and it provides a room for the growth of the economy. The country having stable economy can attract the many investors from abroad because there exists a stable economy and have room for the expansion of the business and to extend their activities. These arguments were extracted from results of regression models which indicates that inflation has negative and significant association with FDI. A research was employed by Demirhan and Massca (2008) in thirty-eight developing countries by using panel data ranging from 2000 to 2004 and found that the inflation

having negative sign was statistically a significant driver of Foreign direct investment.

2.6 Interest Rate and FDI

Shehzad and Zahid (2011) employed study in Pakistan in order to examine economic indicators which influence Foreign direct investment. The time period of the research was from 1991 to 2010. They indicated that there was positive association between Foreign direct investment and interest rate which has been supported by New trade theory which explain that those firms which enter into the market as new comers becomes a leading company because of the advantage of economies of scale that declines the prices and in turn rises the interest rate.

2.7 Trade Openness and FDI

Numerous researches were employed by Charkrabati (2001), Blonigen and Piger (2011) and examined that there is a positive trading relation between domestic and foreign countries with Foreign direct investment. Those nations having open trade can bring more Foreign direct investment. It was examined by (Blonigen & Piger, 2011). The trade openness as factor of Foreign direct investment. They investigated from the findings of the study that trade openness is significantly related to FDI. The research employed a Bayesian model averaging approach which and in order to attract FDI, the minimal support for the government policies is revealed.

2.8 Market size (GDP) and FDI

Ibrahim and Hassan (2013) employed a study in which they examined that GDP, inflation rate, exchange rate, indirect taxes and trade openness are factors of foreign direct investment in Sudan. They used the time span ranging from 1970-2010. They employed co-integration approach to inspect the long run relation..They implemented Dickey Fuller test for the stationarity while co-integration test and error correction model were executed for finding of the long run and short run association.

2.9 Foreign Investment inflows in Pakistan

Presently, in Pakistan Net FDI for the period of FY 2016-17 is \$US112.6 Million which is according to the Pakistan Board of Investment. With a view to analyse the FDI conditions in Pakistan across the years and in form of percentage of GDP, the table below presents the picture. The table presents a brief view of the FDI flowing to Pakistan, their composition, the major participants of FDI in Pakistan. This table indicates the net inflow of FDI into Pakistan between the time span from 2007 to 2016.

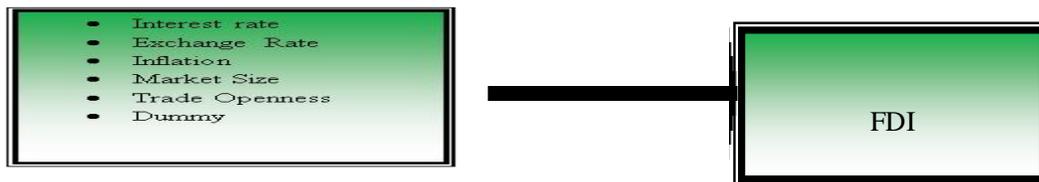


Figure 1: Conceptual Framework

2.10 Hypotheses

H_0 : There is no significant difference between the Determinants of FDI in Democratic and non-Democratic eras.

H_1 : There is significant difference between the Determinants of FDI in Democratic and non-

Democratic eras.

3. Data and Methodology

This study performed a quantitative research method, as it is mostly based on gathering and analyzing quantitative data (Bryman, 2001) with well-defined model to explore the relationship between quantitative properties and phenomena. For such type of study, there are two main types which are often performed are quantitative method and qualitative approach. The researchers employ both or one or both together according to their research to achieve the desired objective. This study has used quantitative research methods to perform this research (Flick, 2006).

3.1 Population and Sampling

The sample size is 32 years starting from 1980 to 2014.

Total population is 69 years, starting from 1947 to 2016

3.2 Data Collection and Methods

This study inspect the determinants of Foreign Direct Investment in two Democratic and Non-democratic eras means 1980 to 1988 with 1989 to 1997 and 2001 to 2007 with 2008 to 2014. Time series data can be defined as a group of observations on the values where a variable takes different times which is in chronological sequence. Data were taken from the International Financial Statistics, Economic Survey of Pakistan (various issues), Global Economy, Pakistan Bureau of Statistics, UNCTAD, World Investment Report (various issues), World Development Indicator (various issues) and Pakistan Board of Investment. The data for variables as GDP, Inflation, Trade Openness, Exchange rate and FDI are obtained from the World Development Indicators of the World Bank while data of Interest rate was gathered from International Financial Statistics (IFS).

3.3 Statistical tools, Techniques and Models

The Vector Error Correction Model (VECM) was executed to analyze various factors in short and long run which have influence on FDI inflows into Pakistan during Democratic and Non-Democratic eras.

3.4 Model Specification

Foreign investors do investment in foreign countries in order to receive maximum return. Based on the time series data, the impact of the five explanatory variables (gross domestic product, exchange rate, inflation, interest rate and trade openness) on the dependent variable foreign direct investment in democratic and non-democratic eras is investigated and a research or equation model is constructed, which is based on the time series data analysis model. The research or equation model for this study is as follows:

$$Y(\text{FDI}) = \alpha + \beta_1(\text{ER}) + \beta_2(\text{CPI}) + \beta_3(\text{IR}) + \beta_4(\text{TO}) + \beta_5(\text{GDP}) + \beta_6(\text{Dummy}) + \varepsilon$$

Where

FDI= Foreign Direct Investment

ER = Exchange Rate

CPI=Consumer Price Index

IR= Interest Rate

TO= Trade Openness

GDP=Gross Domestic Product

Dummy= 1 for non-democratic era or 0 otherwise

3.5 Vector Error Correction Model (VECM)

3.5.1 Error Correction Model (VECM) Results

Despite that the long-run equilibrium that has been verified using the Johansen Co-Integration Test, there could still be short-run disequilibrium among economic relationships as the case of most variables which theorized to be dependent of each other's behaviour. The VECM is used and is employed to obtain the short run as well as long period relationship amongst variables, it has the features that if the current state is deviate from its long run position than such deviation will fed into short run periods. With the Vector Error Correction Model (VECM) the disequilibrium of one period is adjusted in the next period, hence it is a way to settle the long run and short run dynamics for given time span.

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Vec FDI REER TO CPI GDP IR , trend(constant) rank(4) lags(3)
si (DM)
Vector error-correction model

Sample: 1983 - 2013                      No. of obs   =
                                         31
                                         AIC          = 22.68565
Log likelihood = -235.6276                HQIC         =
                                         24.4348
Det(Sigma_ml) = .16114                    SBIC         =
                                         28.05154

Equation      Parns    RMSE      R-sq      chi2      P>chi2
-----
D_FDI         18       .241178   0.9035    112.342   0.0000
D_REER        18       5.88454   0.7915    45.55982  0.0003
D_TO          18       1.95971   0.6868    26.31595  0.0928
D_CPI         18       2.79415   0.6873    26.38023  0.0914
D_GDP         18       1.40611   0.7949    46.51968  0.0002
D_IR          18       2.76199   0.6309    20.51081  0.3048
    
```

3.5.2 Diagnostic Checks

The following are the diagnostic tests.

LM Test

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Lagrange-multiplier test
+-----+
| lag |      chi2   df   Prob> chi2 |
+-----+-----+
|  1  |   42.8120   36   0.20197  |
|  2  |   35.3731   36   0.49822  |
+-----+-----+
H0: no autocorrelation at lag order
    
```

3.6 Test for Autocorrelations in residual of the model

The null hypothesis in Lagrange-multiplier test states that there is no autocorrelation in the error terms of the equations. In the above table 4.5, the p-values obtained in the LM test for Autocorrelation are 0.20197 and 0.49822 which means that the said hypothesis is accepted. The Lagrange multiplier test reported no problem of heteroscedasticity or autocorrelation.

4. Findings

The Vector Error Correction Model clearly indicates that there is a significant positive correlation between real effective exchange rate and foreign direct investment. So, the research examined that Exchange rate has positive significant association with Foreign direct investment as the sign of exchange rate is positive suggesting that as the rupee increases, Foreign direct investment also raises as investors consider that it shows a good sign for the economy and assume more returns.

5. Conclusion

Pakistan is a well-known country of the world on account of its geographical location. Over thousand kilometer of coastline with Arabian Sea made it a gate way to trade with Central Asia, Middle East and other markets of the world. Being close to Afghanistan, Iran, China and India which increase its strategic value. Investing abroad is a big decision because it is riskier to do investment in a foreign country without analyzing the environment of that country. So, where the Investors decide to make investment see whether which type of government is being governed there. Democracy and Non-Democracy are two well-known types of government being practiced in Pakistan. Rotterdam (2008), Democracy gives rise to a stable policy environment. A stable policy atmosphere is very important for foreign investors in the FDI-decision. The research investigated the FDI determinants i.e. exchange rate, inflation, interest rate, trade openness and Gross Domestic Product as explanatory variables and Foreign direct investment as dependent variable. The data was collected for the period 1980 to 2014.

5.1 Recommendations

Government should take care of political instability, law and order situation and the increased violence a part from these better investment policies and friendly environment is also important to win the investors' confidence. Improving the macroeconomic environment in the country is important to catch the attention of investors; there is a great need of healthy economy and stable exchange rate, reduce inflation and provide hospitable environment to investors.

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