

**FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH:  
COMPARISON OF MILITARY VS DEMOCRATIC RULES IN  
PAKISTAN**



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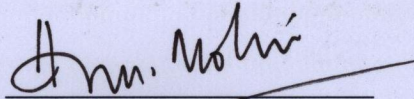
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DEDICATION

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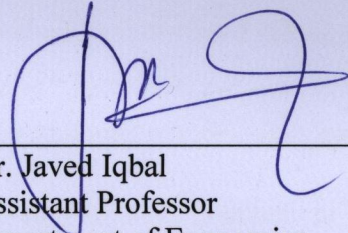
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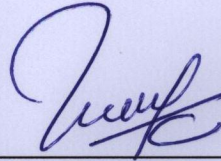
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## **DEDICATION**

My this effort is dedicated to my parents, who provided me with an opportunity to study in this prestigious institution with devoted teachers & supporting class fellows, without their support my this effort would have never been worth viewing.

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*“Trust in Allah with all your heart and lean not on your own understanding; in all your ways acknowledged him, and he will make your path straight.”*

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*“ONE GOOD MENTOR COULD BE MORE INFORMATIVE THAN A COLLEGE EDUCATION AND MORE VALUABLE THAN A DECADES INCOME.”*

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## ABSTRACT

*Foreign direct investment is one of the basic sources of funds and investment to the developing economies like Pakistan. It plays principal role in the economic growth of the countries. Unfortunately FDI inflows are lower in the Pakistan as compared to the neighboring countries. Different countries have huge contribution of investment to the economy of Pakistan. Inflow of FDI is considered as a credit entry in the financial balance of payment (BOP) and this have direct positive impact on the BOP. The present study has been devised to explore the determinants of foreign direct investment as which factors explain the variation in FDI in case of Pakistan. The study also compares the flow of FDI in democratic vs. military period. The study spans over a period from 1980-2015. The existing literature in the study used traditional variables, while the present study focuses on the some new macro variables which affect the growth of the country both positively and negatively. Due to the endogeneity problem two stages least square model is used to determine the association between growth and FDI. Results show both positive and negative relation between them.*

**KEY WORDS:** *Determinants of FDI, inflows of FDI, and economic growth, 2SLS*

# CHAPTER I

## INTRODUCTION

Foreign Direct Investment is one of the largest financial inflows to the developing countries. It plays a major role in the economies of the many other countries and also there is the sizeable contribution of the FDI for the GDP growth for the developing countries. Foreign Direct Investment is contemplated to be a very important source for the buildup of new buildings, physical capital, creates many employment opportunities for the people, productive capacity will be increased, and increase or further improve the expertise of local labor and managers through the transfer of technology and economic findings all over the rest of the world. Inflow of FDI is considered as a credit entry in the financial balance of payment (BOP) and this has a positive impact on the BOP.

However, with the spread of FDI, the volume of exports and profit increases in the economies. In the case of Pakistan, a large number of studies have been conducted to estimate the relationship for the inflows of FDI with growth rate of GDP, poverty, domestic investment, exports and other macro-economic variables. The FDI is to provide the primary benefit and opportunities to accelerate the economic growth. (Collins et. al, 1999). According to the World Bank report more than sixty percent foreign direct investment is contemplated for the private capital flows to developing countries (World Bank, 2006). In this regard even after the liberalization and incentives for the investor to attract FDI performance was lackluster in that form, (Khan and Kim, 1999).

The association of FDI with different factors like economic, social, financial and political factors makes them significant determinants of the flow of FDI to the host



country (Hanif, 2001). In the Asian countries like Pakistan is also a chief economic power but sometime investment in the country and economic growth effected and cause threat in the economic growth due to political instability in the country. Pakistan has faced military rules over the years and sublime law and order situation and assassinations of the leaders as well as. At national level growth level of Pakistan is linked with the government stability in the country according to the institute of peace and conflict studies (Rehman et al, 2006).

Inflows of FDI from the private sectors includes technology, capital, organizational and managerial skills, trade and training which are related together and help in the promotion of growth of the economy. It is considered that FDI have played great role in the introduction of newly products and other process. However, the significance of the FDI for the fruitful investment cannot be neglected in the domestic economies. While the private investment is considers as a constant and definitive channel to boost the level of investment in the public sectors, productive capacity are supposed to be dominant in the training, research and development and infrastructure. Public sector and private investment are highly ineffective the resource management and also sector expenditure has negative side. According to the study per-capita income in the host country increases by FDI on the permanent basis under the institutional arrangements where foreign investors agree to reinvest a small portion of their profits in the host economy (Irum and Nishat 2009).

In 1947, 45% foreign resource flows to the developing countries are accounted. However, 36 % of the total FDI flow has been received to the developing countries in 1997 according to the World Bank (2002). According to the current situations, growth level of the Pakistan economy has grown up and regarding this Pakistan has adopted

different policies which concern with the different sectors of the economy. And performance of services and manufacturing sectors have great share in GDP of the country, considerably improved over the period of last ten years.

Foreign Direct Investment conduct most wanted capital funds, Snobbish managerial skills, advanced production technique, marketing expertise and advertisement, global linkage and disputable phenomenon of the transfer pricing. Pakistan with 220 million peoples is the world 7<sup>th</sup> populated country with relatively significant high GDP growth rate (averaging around 6 percent), and the variation in the investment provision and stock of natural resources has remain unattractive for inflows of FDI. The foreign direct investment normally has different effects on the economy like increase in the employment level, increase in the amplified pace of transfer of technology and exports. The main benefits of the foreign direct investment on the host country are that it became easy to use of raw material, introduce the advanced techniques of marketing and management, make easy to access the modern technologies, also inflows of foreign investments can be used for the financing of current account deficits (Falki, 2009).

### **1.1 Research Gap**

The present study finds association between the foreign direct investments, financial development, trade openness, natural resources, infrastructure, and growth rate of GDP, investment, Interest rate, human development index, political rights and remittances. FDI is one of the major sources of GDP growth in the countries especially the developing one. It has positive impacts on the growth of an economy of Pakistan.

In case of Pakistan the study fills the gap and tries to make the valuable addition that, to find the determinants of FDI as which factors explain the variation in FDI in the case of Pakistan. And also finds the relationship between FDI and growth. Whether, FDI

increase more in democratic period or military period, and there is no study which has tried to discuss the comparison of military vs. Democratic regimes.

## **1.2 Objectives of the Study**

In the light of preceding discussion the specific objectives of the study are:

1. To find the determinants of FDI as which factors explain variations in FDI in the case of the Pakistan.
2. To find the association between growth and FDI.
3. To find the relationship between growth and types of government i-e Democracy vs. military rules and FDI.

## **1.3 Significance of the Study**

Foreign Direct Investment and economic growth have great importance in the country especially in the developing one. So the investors invest their resources in the developing countries and gain profit. By the investment of foreign countries the growth of economy will be increased. There are many studies which explain the impact of FDI on the economic growth. These studies show the mix results about the impact of FDI on economic growth but most of the studies identify the positive link between economic growth and FDI. However, there are many factors like institutions, inflation, etc. that also affect economic growth. Several studies are conducted about impact of the foreign direct investment on the economic growth by including the institutional factors in their studies. This study is an attempt to address the FDI and economic growth in Pakistan and comparison of military vs. democratic regimes. The study is at the top of the solicitations and helpful for the investors in the country.

## CHAPTER II

### REVIEW OF LITERATURE

This chapter is concerned with the literature related to the association among FDI and economic progress in different regimes and which include the literature from national, international and global studies. A wide range of literature is available on Foreign Direct Investment and economic growth. Mostly studies determine the determinants of FDI in the literature, and also impact of FDI on the economic growth.

#### **2.1 Foreign Direct Investment and Economic Growth in Pakistan**

In 1947, Pakistan was undeveloped, predominantly agrarian, with little industry, no infrastructure, few services and newly independent nation. After independence, the main concern of Pakistan was survival where there are many adverse conditions are present which are faced by the Pakistan. In the first ten years of economic policy and planning witnessed the make an efforts by bureaucratic rules to keep Pakistan on its feet. If examine the best performance of Pakistan economic growth that was 1960 decade which stands as a best performance.

Growth rates in the agriculture sectors significantly grow high in both first -half and second- half of the 60's. Development process will increase in the different regimes. Development increases 19.9 % in the manufacturing sectors from the year 1960-1965. The growth rates of 1950 and 1960 were impressive. The annual growth rate in all services was remains above 10%. The economic boom of 1972 to 1973 and 1973 to 1974 seemed to be short lived.

Growth in the different sectors of the economy has not been translated in the social sectors including health, education, population welfare and family planning, and

urbanization and housing. Preceding entries of FDI in Pakistan remained meager, considers only 0.2% of worlds total and less than one percent's of the Asian subtotals each year in 1990s. Amongst the major impediments there are urban ferocity, changeable economic strategies and the government bureaucracy. One more key difficulty is the attention of FDI is the power sector, a household sector, which outcomes in huge distant exchange prices and payments.

This has severe set of scales of expenses consequences. An issue in the Pakistan's economy by S. Akbar Zaidi provides comprehensive information about the Pakistan's economy since independence. The study found that the sectors in which Pakistan has progress and those sectors that had left behind and can't reach to the progress. Growth rates in the agriculture sectors significantly remains high in the both first half and second half sixties. Development process will increase in the different regimes. The development increases 19.9 % in the manufacturing sectors from the year 1960-1965. The growth rates of 1950 and 1960 were impressive. The annual growth rate in all services was remains above 10%. The economic boom of 1972 to 1973 and 1973 to 1974 seemed to be short lived.

Essentially bureaucrats in Pakistan were dominated for limited time period with the pool of land owned, and sardar involving the essential political equality. Merchantile capitalists rapidly appeared as a profitable group and later production extraordinary gains from Korean War bonanza merged their financial position. Civilian bureaucracy and industrialization from the year 1947 to 1958 was run by the small bureaucrats for the, existence of state at a time when supremacy remained in contradiction of the state. While in the political systems a huge numbers of landlords, mediaeval and equivalent

no. of ancestral commander through the bureaucracy who plays the starring role in starting the manufacturing elements in the state.

The growth rates in agriculture were dismal in the first decade. Civil and military bureaucratic capitalism 1958 to 1971 was emerged as the stabilizing shell under the industrialization with the help of bureaucracy and emerging Green revolution is helpful in the Bhutto regimes in manufacturing sector. Development started on the small scale level. Between the 1947 and 1977 there are different development process take place in the economy. In both rural and urban areas large scale economic development had taken place, while on the other hand in the first twenty five years industrialists have extraordinary economic gains and great inroads.

After Zulfiqar Ali Bhutto the military state and the middle classes from the year 1977 to 1988 takeovers by General Zia ul-Haq change the dominance or leadership of the military and bureaucracy in all the prospects like in the distribution of economic resource and wealth and on the political map of the Pakistan. In the early 1970, the nationalization of banks and the occurrence of lesser scales services and manufacturing sectors ruined the grasp of giant entrepreneurs in addition to they allowed fresh class of trivial manufacturers to appear.

Economy dominated as a middle class which also consolidate its hold over political power by becoming part of Pakistan nexus of power. The growth rate of the country on industrial level between 1949 and 1958 was very rapid amongst the countries of the world. On large scale manufacturing sector growth was 23.6% between 1949 and 1954. And investment rate was double during the 1950. The growth rate was rapid in the manufacturing and agriculture sector. The 1958-1968 decade is the development. In 1960 agriculture sector have marked improvement as compared to 1950.

The reason of the growth is that recognition in the late 1950 that the excessive pro-industrial bias was affecting agriculture very negatively. In 1965 Pakistan manufactured export was greater than the combined manufactured export of turkey, South Korea, Indonesia and Thailand. The study of the Asian development bank Indicates large scale industrial growth improved from 8 % per anum from 1955-1960 and 17 percent from 1960-1965 in the 2nd five year plan. While on the other hand foreign aid contributed in the growth of the country significantly.

In the late 1950 without this it is not possible to grow rapidly in the development process of the country. Keith felt that in the mid 1960 the entire social and economic system that had been built up that is supported by foreign aid. The labor input variable capture all the influences that increases either quality or Quantity of the labor used in manufacturing procedure. These comprise progress of population, increasing Contribution rates, increase in services and in the level of schooling and skills. Capital input reveals variations in stock of physical wealth which are recycled in manufacturing and accounted by disbursements on plant equipment's, roads and telecommunication and so on. This approaches from enhancements in organization and work organization and inventions in machinery. So it's too much difficult to calculate the TFP directly, empirically it's consequential as an outstanding in growth equation.

In the first decade exchange rate and trade regimes plays a significant character in determing the direction of industrial development in Pakistan. Economic growth in the Period 1947 to 1958 was impressive. It became even more amazing in the decade of development under Ayub khan between 1958 and 1968. The green revolution in 1960 brought about an equally impressive transformation, complementing industrial growth. Overall economic development was quiet phenomenal in this period. During the 1977-

1988 industrial development regained the momentum that was lost between 1972 and 1977 and growth rate of the industry was returned to the historically high level of the pre Bhutto era. Zia repeat many rewards that resulted from the initiative of his procedures and fortunes circumstances helps in maintaining and establishing the growth rate in the economy with very high growth.

And autonomous evolution was accorded through a new profitable instruction and Pakistan come in world's adjustment programmes under the World Bank and IMF. The eleven years of great progress underneath Zia are untied and the extraordinary potentials of the basic amendment programme were not contented in 1988-1999 while democratic governments resumed to Pakistan. It was only 9/11 under Pakistan 3rd military dictator that the growth rate in the industrial sector, investment and in the economy was picked up. Large sums of studies that discover financial growth have contended that FDI stimulates host nations' economic growth unswervingly or under definite situations. When western depositors, are extracting their funds from Pakistan, Chinese depositors are hammering money mostly over the CPEC schemes. China shows the list of different countries driving speculation in Pakistan in first nine months (Jul-Mar) of 2016-17 with \$595 million associated to \$591 million in the same era last year. In March 2017, Pakistan received an FDI of \$263 million from China.

Foreign Direct Investment plays very important role in the economic growth of a country's. There are several studies on the impact of FDI on economic growth; also there are different macro-economic impacts of FDI on the economic growth. For example, Bhavan, (2011) determine the effects of FDI on the growth level of the Asian countries. Study used the gravity model to explore the possible elements of FDI in the developing countries and also growth equation for the determination of FDI effect on



the economic growth. Time span of the study is 1995-2008 and 1975-95 pooled and cross sectional data is used. By using the gravity model study finds the effects of different variables on FDI which are included in the study are labor force, foreign aid, corporate tax and tariff rates, GDP, degree of openness to transnational capital flows, exchange rate alterations, contract execution, bureaucratic interruption and exploitation. The outcomes recommend that reserve and both home and host country characteristics considerably play important role in determining the FDI flows into the South Asian state. Considering the growth effect of FDI in these countries, FDI is set up substantial at 5% level means that the outcome of FDI on growth rate is average.

Loksha and Leelavathy (2012) studied Foreign Direct Investment with the prospective of macro level. As determinants of FDI study encompassed degree of openness and corporate taxes. Study also included GDP and magnitude of market, infrastructure, and interest rate. On the other hand economic constancy and Political factors used a push factor which determines the inflows of FDI also included in the study. The noteworthy strategies are liberalized and industrialized rule, trade rule, tax strategy, intellectual shelter government, transnational trade covenants of a nation etc. Over a period of time specific and general FDI policies have become less limiting to inward FDI strategies in India with fewer policy obstacles. But, other factors have developed as an important contributing factor of FDI. A study by Shahbaz (2009) tried to examine the elements of economic progress in Pakistan. Permanent increase in the economic growth also depends upon the constant increasing returns to capital and that model of endogenous growth is developed by Lucas (1988) and Romer (1986). Economic management of Pakistan almost totally depends upon the Structural Adjustment Programme since 1988. In unindustrialised Nations, for the economic development, investment both in labour force, human capital, low inflation and open trade are very necessary. Fischer (1993)'s

point of view is that long-term economic growth has negative relationship with inflation and has positive correlation with factual foreign exchange markets and good fiscal performance. The variables used in this research are GDP, FD, TR and annual inflation. Almost these variables are correlated positively with the economic growth in Pakistan. The study concludes that domestic investment creates employment opportunities and also improves the economic growth of the country.

Foreign Direct Investment and economic growth has positive relationship between them. FDI promotes the growth level of the economy. On the global level simultaneous equation models of economic growth examine the policies of government of china. The outcomes recommend that all administrative strategies are advantageous or useful to the development of the economy. Whereas, fluctuations in governmental expenses on education and trade liberalizations are supreme effective purposes for speeding up the growth rate of output in the long-run period. For example, using time series analysis, Tan et al (2004) identified a direct connection between GDP and FDI and found that the effect is lesser but significant Ford et al. (2010).

Singh et al. (2008) tried to determine the factors of FDI in less emerging states. By using cross-sectional data study find the aspects of inflows of FDI in the developing countries. The variables used in the study are tourism; infrastructure, economic growth and openness that attract FDI in the countries. By using techniques of linear cross-sectional model, results revealed that many of the outdated variables, i.e., economic growth, infrastructure and openness to trade stimulate the flow of FDI to slight developing nation states. The neo-classical financial theory has been failed to appropriately clarify the occurrence of FDI in the countries. The eclectic frame work recognized three comprehensive set of aspects, internalization benefits, possession

advantages and position rewards that would affect the choice of firm to involve in multinationalization actions.

## **2.2 Literature from Developing Countries and from Pakistan**

Ruxanda and Muraru (2010) tried to study the economic growth through the simultaneous model from 2000-2009. The association among variables is estimated through the simultaneous equation model. The variables used in the study are GDP, FDI, gross fixed capital formation and export and import determinants. The main objective of this study was to explore whether, FDI has positive affect or not on the economic growth of Romania. The correlation between domestic investment and FDI is mostly characteristic of developing economies that offer greater marginal capital gains than the global interest rate which is attractive for FDI which therefore favours domestic investment (Mody and Murshid (2004).

Khaliq and Noy (2007) tried to study the FDI and economic growth and examine the empirical evidence from the sectoral data from Indonesia from 1997-2006. According to the former studies, FDI has significant effect on the economic growth of a country but with a positive number of nonconforming estimations. Study found that FDI has positive and major effect on the economic growth of a country at aggregate level. However, the effects of FDI on economic growth differ through sectors, and no aggregate affects are perceived at sectoral level. FDI ensures certainly seem to require an encouraging consequence on economic growth. On the other hand, the sound effects of FDI on the growth of an economy at the sectoral level fluctuate across sectors, and no comprehensive marks are perceived. Endogenous determinants of economic growth and FDI from OECD countries are determined by Yetkiner H. (2005). FDI has positive

contribution in the host economy, which increases the growth level of the economy and also attracts the inflow of FDI in the country.

A study by Younus et al. (2014) examines the effects of FDI on economic growth of Pakistan. Domestic investment, political stability and exports size were found to be very appropriate in the location choice of FDI in the Pakistan. The study shows that there is a positive relationship between economic growth (GDP) and Foreign Direct Investment in Pakistan. The role of foreign direct investment has been considered generally as a growth increasing factor in the developing countries (Khan (2007)). FDI is measured as main structure of manufacture in part of unemployment reduction, technological progress, market competition, talent improvement, and great outflow of exports. It is very necessary for the Government that should also be concentrating on those policies which attract the FDI and improve foreign trade so that the country could benefit. There are various studies which examine the relationship between Foreign Direct Investment and economic growth. Mostly FDI and economic growth have significant relationship between them but some time has insignificant relationship. On the other hand role of the FDI has been broadly acknowledged as a growth-improving factor in the emerging countries (Khan, 2007), (Almfraji and Almsafir (2013), (Yasin and Ramzan (2013)).

Mohiuddin and Salam (2011) tried to examine the determinants of FDI in Pakistan from 1979-80 to 2007-08. Study uses the error-correction and Co-integration techniques to recognise the variables in explaining the FDI in Pakistan. Variables included in the study are Real GDP, Interest Rate, Exchange Rate, Infrastructure, Openness and Price. During 1990, Pakistan has received highest FDI of US\$ 1 billion in financial year 1995-96. Many foreign companies functions in Pakistan in different sectors. Finally the result shows positive connection between FDI, Real GDP and exchange rate. A rise in

Exchange Rate increases the comparative buying power of home country in the host country. The study recommends that for better and comprehensive results we need large sample size.

Hakro and Ghumro (2011) studied determinants of FDI inflows to Pakistan. The study used the techniques of VEC, VAR, Granger causality, generalized response functions, forecasting, and three stages least square technique for the empirical analysis. In the short run results are emerged and are related to cost, risk index variables, and macroeconomic factors. Study also showed the long-run relationship among FDI, Openness, and macro-economic elements. The associations among variables are assessed in terms of unit of causality. Evidence advises that variables that show short run changes may also reveal long-run changing aspects and vice versa. The long run situation is also related with level of skilled procedure of capital development. Further, the country can definitely realize the welfares from present aspects in keeping FDI friendly atmosphere. Economic determinants of FDI in the services sector finds the impact of different variables such as market price, Gross Domestic Product, growth rate of real GDP and different exchange reserves by using data from 1996 to 2008 (Awan et al. 2011).

A study by Khan. A. M. (2011) developed a connection among international political relations and FDI for Pakistan by using ARDL model and variables are infrastructure, REER, FDI, Investment, interest rate, political rights and civil liberty among others. The main objective of the study is to perceive that how was the political associations of Pakistan with international powers especially with the United States which affects the inflows of FDI to the Pakistan. The study additionally advises that in Pakistan economic growth that include good infrastructure, national investment, natural reserve grants and real effective exchange rate exert significant impact on FDI. Though, in the short run, negative effects are seen on the private capital. Different factors play very important

role like economic and policy related factors, while institutional factors on FDI exert no significant impact in the Pakistan.

Azam and Lukman (2010) determined the factors of Foreign Direct Investment in Pakistan, Indonesia and India. This also affects the inflows from the foreign countries. Results shows that trade openness, external debt, market size, infrastructure, state investment are the key economic factors of FDI. Inflows of FDI in these countries, loans, subsidies, grants, and the removal of restrictions and limitations increased with globalisation. The prime objective of the foreign investors is to earn maximum profit. The empirical result exposed that the most significant economic variable found were market size that indicates that a country's growth levels permit the manipulation of economies of scale which is likely to raise the attraction of FDI vis-à-vis alternative forms of internalization. The external debt burden is like a hindrance for FDI as found with undesirable relationship between this variable and FDI inflow.

Iram and Nishat (2009) examine the sector level analysis of growth nexus in Pakistan from 1972-2008. The study examines that long-run Services Sector Foreign Direct Investment (SFDI) and Manufacturing Sector Foreign Direct Investment (MFDI) distress the economic development. The service sectors have large volumes of FDI than manufacturing sectors in Pakistan. While manufacturing sector is real factor of economy it should be provided proper attention. Study checks the impact of variables on manufacturing and services sector by using Autoregressive Distributed Lag Model (ARDL) and Augmented Dickey Fuller test (ADF). The variables used in the study are GDP, Income(Y), Manufacturing FDI (MFDI), Services FDI, investment (INV) and macro-economic instability (INS) and privatization. However, the variable of macroeconomic instability meaningfully affects economic growth both in long run as well as short run period.

Mughal M. (2008) studied the Boon or bane role of FDI in the economic development of Pakistan from 1961-2005. Local or domestic investment plays important role as compared to the FDI. The relationship between FDI and financial sector seems to be undesirable, although somewhat so. Significant association among national economy and FDI recommends that government should carry on its investment strategies, and eliminate the blockages hindering larger flows of FDI. It has significant relation between the development of the economic growth (Xiaoying and Xiaming, 2005).

Yousaf et al. (2008) examines the economic evaluation of FDI in Pakistan. It is an essential feature of economy in the nations of the world. The country that has FDI they have more rapidly growing rate of the GDP and attracts supplementary FDI. It is helpful to fulfill the gap between the savings and investment. Some potential variables are used in the study like GDP deflator, Volume of FDI, unit value of imports and exports etc. For military and democratic period dummy variable is used. Johansen-Juselius test is used to test the time series data from the year 1977-2004. The study recommended some suggestions on the basis of long run time period economic profits of the Pakistan. It is necessary for the policy makers to attract FDI that they must offers favorable and welcoming situation to foreign investors.

Malik and Pentecost (2007) tried to study the elements of inward FDI in Pakistan through time series model from 1970-2007. The real GDP is the principal driving factor that attracts the inward stock of FDI, with a long-run elasticity greater than unity. These empirical findings suggest that an augmented accelerator-type model of investment behaviour is able to explain much the inflow of FDI into Pakistan over the sample period. Political risk, real stock of FDI, Real GDP and Real interest rate are used in the study as variable. Time series data from the years 1970 -2004 and ARDL model is used for the estimation of study. Study suggested policy implications that further economic

development and growth are essential for further FDI inflows, but that political stability is also important in the short run.

Naveed and shabbir (2006) tried to investigate trade openness, economic growth and FDI from 1971-2000. Findings of study showed that in the short run there is an insignificant association between dependent and explanatory variables. And on the other hand trade openness has a great role in the development process. The long-run relationship between the variables is more significant. There are some dependent and independent variables which are also included in the study are GDP, inflation, human capital and ratio of export plus imports to GDP.

A study by Aqeel and Nishat (2004) explored the elements of FDI in Pakistan. The key objective of the study is that how inflows of FDI are attracted by Pakistan and how different indicators contemplate trade, financial and fiscal sectors liberalization. It is clearly emphasized the strategies of attracting inflows of FDI in the long run period. Due to acquisitions of fixed capital assets and the importations of machineries and foreign exchange for the other commerce dealings (Shah and Ahmed, 2003) examines that steadiness relatively than the consensus was set up more significant in the prime of speculation choices. And result of the regression shows the positive relationship between GDP and FDI in the country growth by Rehman et al. (1997).

Ahmed et al. (2004) tried to examine exports, FDI and domestic outcome in Pakistan. In the most developing countries there is great reforms are take place in trade and to the export oriented strategy, And Pakistan also follows these strategies. On the other hand Pakistan trade policies and patterns are moving towards control the tariffs rates which are slow down. FDI has significant impact on the employment and factor cost and on trade. Different empirical evidence indicates that FDI is core catalyst for the development of developing countries. There is a very long time association among the



domestic growth and foreign export. In Short ways, development progress in the country attracts the foreign capital flows and also includes the strategies for the export promotion.

Atique et al. (2004) tried to study the influence of foreign direct investment on the economic growth in the case of Pakistan from 1970-2001. Foreign direct investment is considered forty five percent in the year 1997 of net foreign resource flows. Conferring to the World Bank report (2002) unindustrialized nations in 1997 received 36 percent of the total FDI flows. Mostly studies show that FDI has great part in the growth of the economies. The study includes different variables labour force, gdp, education expenses and gross capital formation as a percentage of GDP. Study concludes and suggests that Pakistan development depends upon the performance in the country that attracts FDI.

Jensen M. N. (2003) examines the democratic government and multinational corporations and also inflows of FDI and political regimes. The study shows different democratic political institutions which are connected with the higher inflows of FDI. Democratic governments attract more FDI in the country. Although the previous work shows that democracy has significant influence on growth of economy.

Khan and Kim (1999) tried to study the issues of strategies and functioning measures of FDI in Pakistan. Primarily Pakistan contains three key factors, which are capital equipment, cash and re-invested incomes. Over time considerable fluctuations of the FDI components are exhibit. And on the other hand in case of chronic inflation, the production cost increases significantly, with surplus of duties owing to the economic contemplation returns of the overseas companies has been depreciated after taxes. Consequently those rewards which are reinvested and that originate savings from the investment have decreased. .

Shabbir et al. (1992) examined the effects of foreign investment on the economic growth of Pakistan. There are different form of inflows of foreign capital which are viewed and have very important role and also main source of capital inflows to domestic investment. The variables used in the study are GR, S, FPI and REM and simultaneous equation model is used for the estimation of the variables. The results show that external private investment, external loans and distribution of donations have significant impression on growth rate of Pakistan. However disbursement variable is not significant according to the coefficient estimates. Finally the favorable polices encourage the foreign private investment in the country economic growth.

### 2.3 Share of FDI Net Inflows to the Pakistan by Different Countries

The success of polices can be seen in the inflows of FDI in the Pakistan. Pakistan has made great efforts to attract the FDI in the country and such efforts have been increased by the privatization, liberalization polices and advent of deregulation which are started at the end of the 1980 (Khan and Kim 1999). Investments are the flows on net basis during the month. It also includes investment in terms of capital equipment and reinvested earnings. The table 1 and 2 shows the Net inflows of FDI by different countries in Pakistan. A comparison of different countries inflows is highlighted in the tables. The large flow of FDI is take place in Pakistan through the USA, UK and Japan and on the other hand others countries flow is also are in large amount. The total amount of FDI through Canada comes in the year 1985-2015 in Pakistan is \$114.8 million. Similarly in others countries like France, japan, Saudi Arabia, Italy, USA, UK, and Germany have shown the inflows from the year 1985-2015 in the table 1 and 2.

**Table 1: Share of Net Inflows of FDI from Different countries to Pakistan in US Millions \$ (%age)**

Years	Can- ada	%	Fra- nce	%	Japan	%	Germ- any	%	U.S.A	%
-------	-------------	---	-------------	---	-------	---	--------------	---	-------	---

<b>1985</b>	0.5	0.436	1.2	1.432	6.7	0.750	6.4	0.759	19.9	0.166
<b>1986</b>	-		0.8	0.955	6.3	0.705	4.9	0.581	34.9	0.290
<b>1987</b>	1.8	1.568	1.5	1.790	29.7	3.325	5.7	0.676	42.2	0.351
<b>1988</b>	1	0.871	5	5.967	16.4	1.836	18.6	2.207	46.8	0.390
<b>1989</b>	0.9	0.784	7.4	8.831	11.8	1.321	11.6	1.376	96.1	0.800
<b>1990</b>	1	0.871	6	7.160	11.9	1.332	11.2	1.329	91.9	0.765
<b>1991</b>	2.1	1.829	7.1	8.473	20.9	2.340	14.8	1.756	135	1.124
<b>1992</b>	3	2.613	8.5	10.143	17.7	1.981	21.9	2.598	246	2.047
<b>1993</b>	4.3	3.746	5.7	6.802	28.3	3.168	36.2	4.295	162.6	1.353
<b>1994</b>	10	8.711	11.1	13.246	30.5	3.414	12.4	1.471	148.5	1.236
<b>1995</b>	-16.8	-14.634	50.6	60.382	20.9	2.340	28.8	3.417	546.6	4.549
<b>1996</b>	0.8	0.697	14	16.706	29	3.246	0.5	0.059	358.1	2.981
<b>1997</b>	2.5	2.178	10.2	12.172	44	4.926	37.3	4.425	357.5	2.976
<b>1998</b>	41.3	35.976	5.3	6.325	2.5	0.280	231.7	27.488	320.8	2.670
<b>1999</b>	32.3	28.136	10	11.933	22.8	2.552	10.3		226	1.881
<b>2000</b>	30.9	26.916	1.8	2.148	22.7	2.541	10.5	1.246	1	0.008
<b>2001</b>	0.6	0.523	0.7	0.835	9.1	1.019	15.5	1.839	54.9	0.457
<b>2002</b>	6.2	5.401	-6.6	-7.876	6.6	0.739	11.2	1.329	324.7	2.703
<b>2003</b>	0.5	0.436	2.6	3.103	14.1	1.578	3.8	0.451	226.6	1.886
<b>2004</b>	0.5	0.436	-5.6	-6.683	11.6	1.299	4	0.475	259.8	2.162
<b>2005</b>	2	1.742	-3.5	-4.177	41.7	4.668	15.2	1.803	373	3.105
<b>2006</b>	5	4.355	3.2	3.819	48.2	5.396	25.1	2.978	820.5	6.829
<b>2007</b>	10.9	9.495	1.5	1.790	68.4	7.657	85.9	10.191	1766.8	14.705
<b>2008</b>	13.7	11.934	7.6	9.069	141.1	15.795	69.1	8.198	1748.8	14.556
<b>2009</b>	2.6	2.265	6.5	7.757	68.2	7.635	77	9.135	427.4	3.557
<b>2010</b>	1.2	1.045	7.2	8.592	38.2	4.276	53.7	6.371	940.6	7.829
<b>2011</b>	4.1	3.571	17.8	21.241	8.4	0.940	19.7	2.337	499.7	4.159
<b>2012</b>	9.4	8.188	-0.9	-1.074	31	3.470	28.1	3.334	269.7	2.245
<b>2013</b>	-13	-11.324	25.2	30.072	34.5	3.862	17.7	2.100	299.7	2.494
<b>2014</b>	-18.8	-16.376	96.2	114.79	47.2	5.284	-25.7	-3.049	360.3	2.999
<b>2015</b>	-25.7	-22.387	-214.3	-255.72	2.9	0.325	-20.2	-2.396	808.3	6.728
<b>Total</b>	<b>114.8</b>	<b>100.000</b>	<b>83.8</b>	<b>100.00</b>	<b>893.3</b>	<b>100.00</b>	<b>842.9</b>	<b>100.00</b>	<b>12014.7</b>	<b>100.00</b>

SOURCE: state Bank of Pakistan

FDI net inflows are the value of inward direct investment minus outward direct investment made by resident of said country abroad.

**Table 2: Share of Net Inflows of FDI from Different countries to Pakistan in US Millions \$ (%age)**

Years	U.K	%	Saudi Arabia	%	Italy	%	China	%	others	%
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<b>1985</b>	12.2	0.186	-7.3	-2.278	0.1	0.014	-		28.3	0.478
<b>1986</b>	13.8	0.210	-3.4	-1.061	0.4	0.055	-		26.6	0.449
<b>1987</b>	1.1	0.017	3	0.936	0.4	0.055	-		9	0.152
<b>1988</b>	26.6	0.406	2	0.624	1.1	0.150	-		21	0.354
<b>1989</b>	27	0.412	1.5	0.468	1.2	0.164	-		36.9	0.623
<b>1990</b>	22	0.335	1.7	0.531	3.8	0.518	-		41.4	0.699
<b>1991</b>	33.5	0.511	0.7	0.218	2.9	0.396	-		3.7	0.062
<b>1992</b>	19.6	0.299	1.2	0.375	2.3	0.314	-		71.2	1.202
<b>1993</b>	45.4	0.692	8.6	2.684	0.6	0.082	-		69	1.165
<b>1994</b>	82	1.250	1.9	0.593	0.3	0.041	-		261.3	4.411
<b>1995</b>	282.6	4.308	2.1	0.655	9	1.228	-		294.7	4.975
<b>1996</b>	399.8	6.095	26	8.115	0.5	0.068	-		279.6	4.720
<b>1997</b>	318	4.848	-17	-5.306	1.8	0.246	-		139.8	2.360
<b>1998</b>	86.5	1.319	2	0.624	16.6	2.264	24.3	1.263	5.9	0.100
<b>1999</b>	21.4	0.326	9.9	3.090	59	8.048	19.8	1.029	4.6	0.078
<b>2000</b>	44.9	0.684	-2.8	-0.874	17.9	2.442	10.5	0.546	9.3	0.157
<b>2001</b>	56.7	0.864	54.9	17.135	1.3	0.177	0.1	0.005	26.3	0.444
<b>2002</b>	-2.1	-0.032	1.4	0.437	0.1	0.014	0.3	0.016	79.8	1.347
<b>2003</b>	184.8	2.817	43.6	13.608	0.4	0.055	3.0	0.156	214.7	3.624
<b>2004</b>	41.9	0.639	5.3	1.654	-		14.3	0.743	222.3	3.753
<b>2005</b>	199.1	3.035	0.4	0.125	0.4	0.055	0.4	0.021	350.5	5.917
<b>2006</b>	224.5	3.422	278.5	86.923	-		1.7	0.088	177.6	2.998
<b>2007</b>	1820.1	27.746	105	32.772	-		712.1	37.023	546.2	9.220
<b>2008</b>	360	5.488	44.7	13.951	-		13.7	0.712	532.7	8.992
<b>2009</b>	185.7	2.831	-89.9	-28.059	-		101.4	5.272	927.7	15.660
<b>2010</b>	295.8	4.509	-133.7	-41.729	-		-3.6	-0.187	663	11.192
<b>2011</b>	232.1	3.538	6.6	2.060	-		47.4	2.464	398.3	6.724
<b>2012</b>	177.8	2.710	-79.8	-24.906	200.5	27.350	126.1	6.556	78.3	1.322
<b>2013</b>	567	8.644	3.3	1.030	199.4	27.200	90.6	4.710	240.5	4.060
<b>2014</b>	380.9	5.807	-40.1	-12.516	97.7	13.327	696.0	36.186	136.3	2.301
<b>2015</b>	399.1	6.084	-64.4	-20.100	115.4	15.741	268.1	13.939	27.4	0.463
<b>Total</b>	<b>6559.8</b>	<b>100.000</b>	<b>320.4</b>	<b>100.000</b>	<b>733.1</b>	<b>100.000</b>	<b>1923.4</b>	<b>100.000</b>	<b>5923.9</b>	<b>100.000</b>

SOURCE: State Bank of Pakistan

Net inflows = inflows-outflows

When Outflows > inflows = -ive

**Table 3: Sectors-Wise Net Inflows of Foreign Direct Investment in Pakistan  
(Millions \$ US)**

Years	Food, Beverage & Tobacco	Fertilizers	Transport, Storage & Communica tion	Mining & Quarryin g--Oil & Gas	Trade	Petro Chemicals and	Social Servic es	constr uction	Financial Business	others
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	<b>Petroleum Refining</b>									
<b>1997</b>	51.5	51.7	6.4	37.7	0.0	1.5	-	14.5	106.5	90.9
<b>1998</b>	19.1	72.1	7.5	99.1	12.6	1.6	-	21.5	20.4	51.2
<b>1999</b>	7.4	54.1	33.3	112.8	5.5	38.8	-	13.9	24.4	31.2
<b>2000</b>	49.9	119.9	31.0	79.7	7.6	12.0	-	21.1	29.6	32.2
<b>2001</b>	45.1	26.3	81.5	84.7	13.2	8.7	5.4	12.5	-34.9	11
<b>2002</b>	-5.1	-	21.4	274.8	34.2	5	2.0	12.8	3.5	12.6
<b>2003</b>	7.0	-	87.4	188.2	39.1	3	0.3	17.6	207.5	28.8
<b>2004</b>	4.5	-	8.8	203.5	35.6	72.4	0.9	32	242.1	33.2
<b>2005</b>	22.9	3.5	10.6	194.3	52.1	24.8	1.1	42.7	269.4	78.8
<b>2006</b>	62	-107.6	18.4	319.8	118	31.2	3.1	89.5	329.2	65.5
<b>2007</b>	515.8	3.9	18.8	568.8	173.4	155.2	4.3	157.1	930.1	76.9
<b>2008</b>	57.1	-	75.6	677.3	175.9	74.5	14.3	89	1865.0	101.9
<b>2009</b>	180.7	-	93.2	788.6	166.5	132.1	1.5	93.4	707.4	87.1
<b>2010</b>	103.1	6.5	132.0	752.1	117	104.5	0.8	101.6	163.0	127.6
<b>2011</b>	58.4	0.3	104.6	527.6	52.7	-18.2	0.4	61.1	310.1	185.0
<b>2012</b>	40.1	0.3	17.4	636.7	25.3	31.2	3.6	72.1	64.4	97.7
<b>2013</b>	552.7	0.2	44.2	561.8	5.1	114.9	7.3	47.7	314.0	62.4
<b>2014</b>	140.5	-	2.7	478.8	-3.2	2.2	0.1	28.8	192.8	6.9
<b>2015</b>	105.8	-	6.2	297	50.0	-14.8	0.3	53.5	256.4	-18.1
<b>Total</b>	2,018.5	231.2	801	6883.3	1080.6	780.6	45.4	982.4	6000.8	1162.8

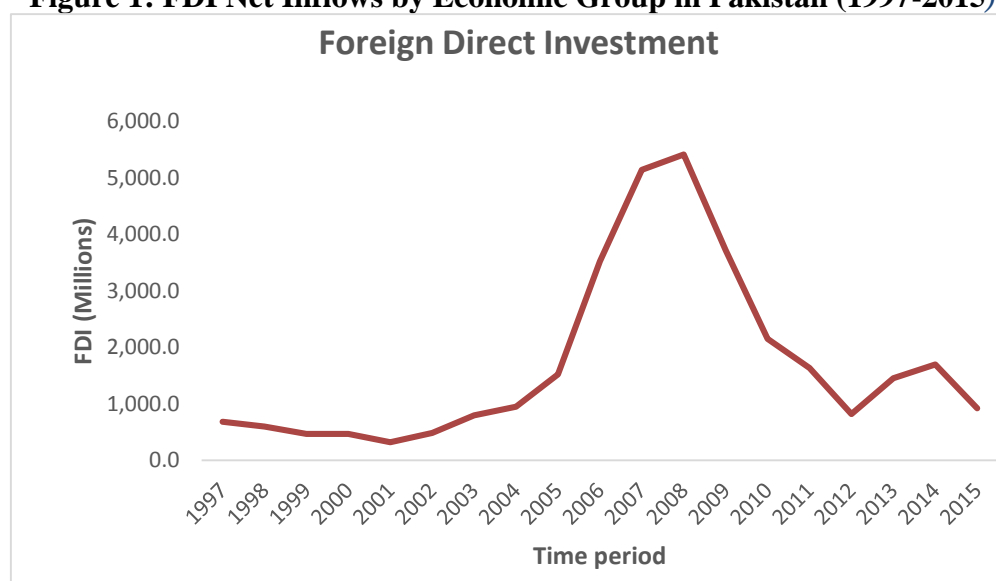
SOURCE: State Bank of Pakistan.

Foreign Direct Investment Inflows/Outflows include cash received for investment in equity, Intercompany Loan; Capital Equipment brought in/out and reinvested earnings (SBP).

Negative values in the table 1 and 2 shows that when outflows are greater than inflows in the country it will be negative. Like share of FDI in Pakistan by different countries, similarly just an over view of the sectoral inflows of FDI in different sectors of economy is shown in the table 3 from the year 1997-2015. In social services sectors from the year 1997-2000 FDI could not be attracted by Pakistan. While onward 2001-2015 FDI is come in to the social services sector. While on the other hand in many different sectors of the economy FDI is take place. The study shows only some sectors in the table. On the broader level foreign direct investment in different sectors is traditionally dominated by the foreign investors mostly in the manufacturing industries, mining and quarrying oil and gas and in the services sectors (khan and Kim 1999). The total inflows of FDI in the economic sector mining and quarrying is \$362.27% millions and financial business has \$315.83% millions from the year 1997-2015. In fertilizer sectors 64.82% FDI come from 1997-2001, and then -33.4% in 2005-2007 year take place.

## 2.4 Graphical Representation of FDI Inflows to Pakistan

**Figure 1: FDI Net Inflows by Economic Group in Pakistan (1997-2015)**

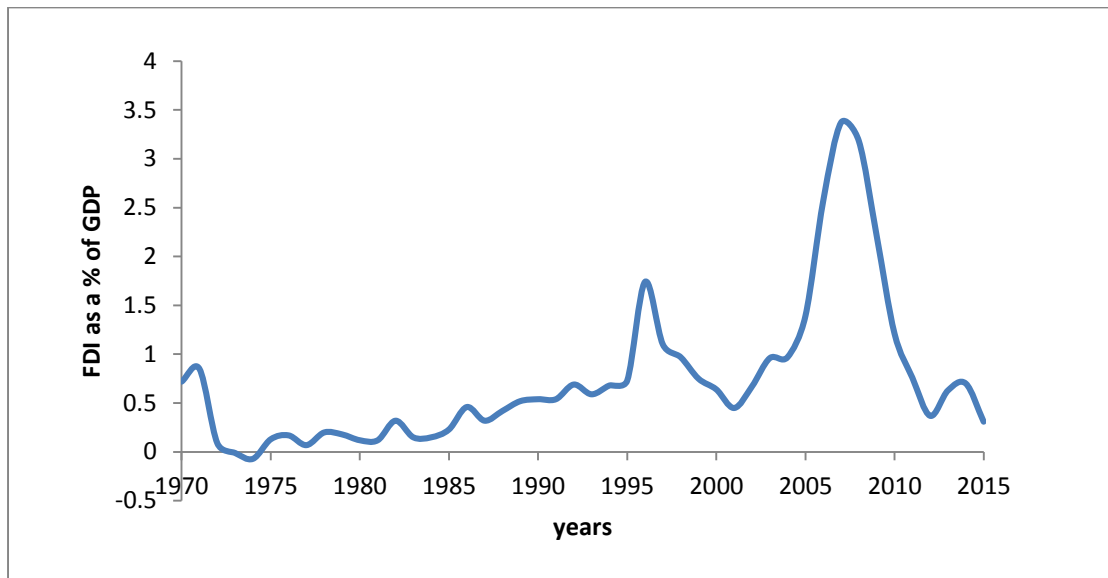


*SOURCE: State Bank of Pakistan*

The Figure 1 shows the inflow of FDI in Pakistan by economic group. It shows that from 1997-2001 there is a still low level of FDI flow to the country. And then there is

a slow but certain increase in the inflows of FDI from the year 2002 to 2005 is take place. Since, 2008 there is significant increase take place in the FDI inflows to Pakistan. On other hand after 2008 inflows of FDI is decreasing very rapidly till 2012 and then steadily increases. This fall in inflows of FDI is mainly due to financial crises and also with the low capacity of foreign investors due to the fear of low profits and very low access to the financial and natural resources (SBP 2009). Furthermore, the unfavorable impacts of the global financial crises on the FDI mostly reduce or weaken the deteriorating law and order situations and macroeconomic fundamentals in country (Khan, 2011). The net inflows of FDI as a percentage of GDP are shown in figure 2.

**Figure 2: FDI Net Inflows as %age of GDP**



SOURCE: World development indicators (WDI)

Figure: 2 shows the net inflows of FDI as a percentage of GDP from the year 1970 - 2015. The Inflows of FDI in Pakistan is started after 1970s to onward. In 1970 to 1973 there is a slight increase take place in the economy. After 1985 Inflows of FDI is increases again and then decreasing process is started from 1997 to 2000. After this period inflow of FDI is starting increasing from the year 2003 to 2006 at higher level. The growth rate of the economy increases with the ratio of 3.5 percent. And then onward FDI will be decreases. Slight increases take place after the year 2010- 2015. The decrease in the FDI inflows to the country is due to financial crises, global economic slowdown, risky political environment and fear of the security conditions cause the war on terrorism (Khan, 2011). There are some major source of FDI inflows to the Pakistan is UK, USA, Japan, Saudi Arabia, china, Canada and UAE respectively.

## 2.5 Summary

This chapter has discussed the literature on global level, from developing countries and from the Pakistan, and studied the Foreign Direct Investment and economic growth in



Pakistan. The study has explained the relation between FDI and economic growth. Foreign direct investment has positive relationship between economic growths of the country. Study found that association of FDI with different factors like economic, social, financial and political makes those significant determinants to the inflow of FDI to the host economy. This chapter also provides the share of FDI inflows to the Pakistan by different countries also sector wise inflows of FDI in Pakistan from the year 1997-2015 are take place in the study which are explained by graphically.

## **CHAPTER III**

### **MODEL SPECIFICATION, DATA AND METHODOLOGY**

#### **3.1 Introduction**

This chapter illustrates the data and methodology to find the association between the different variables like foreign direct investment, infrastructure, and growth rate of GDP, natural resources, trade openness, financial development, and interest rate and also link between the regime dummy variable. Data description is discussed in section 3.2. The econometric methodology and model specification are discussed in the section 3.3

#### **3.2 Data Description**

The present study covers the time span from the year 1980-2015. According to the literature, the dependent variables are foreign direct investment as percentage of GDP (FDI), and gross total investment (I) is measured as a percentage of GDP. The infrastructure (INFRS) is proxied by number of roads and railways length in kilometers, data collected from the Handbook of Statistics of Pakistan's Economy and published by the State Bank of Pakistan (SBP). The data for the growth rate of GDP and trade openness is measured as a percentage of the sum imports of goods and services to GDP and exports of goods and services are taken by the economic survey and state bank of Pakistan.

The total natural resources (NRS) as a percentage of GDP is measured by the share of minerals and fuel in exports and the data for the interest rate is taken from the world development indicators and financial sector development (FD) as percentage of GDP.

Finally the data of these variables are taken from the World Development Indicator (WDI), World Bank, and hand book of statistics 2016.

### 3.3 Model Specification

In order to explain the relationship between foreign Direct Investment and economic growth most of the studies include Gross Domestic Product, Government expenditure, foreign capital, exports and imports in their analysis. But in our analysis we include only focused variable in our model. The objective of the current study is to examine the impact of Foreign Direct Investment on economic growth and comparison of democratic and military regimes that how much FDI inflows take place in Pakistan in that periods. We start our analysis by demonstrating the interaction between Foreign Direct Investment and economic growth that is arbitrated by Gross Domestic Product.

$$FDI_t = \alpha + \beta_1 I_t + \beta_2 FD_t + \beta_3 TOP_t + \beta_4 NRS_t + \beta_5 INFRS_t + \beta_6 Gr_t + \beta_7 D_t + \varepsilon_t \dots \dots \dots (1)$$

Where, in equation 1 **FDI** is used as an annual net inflows as a percent of GDP, domestic investment which is used as percentage of GDP (**I**), measure of financial development (**FD**), trade openness (**TOP**), infrastructure(**INFRS**), natural resource endowments(**NRS**), growth rate of GDP is(**Gr**) and **Dt** is the regime dummy for democratic and military period. While error term is ( $\varepsilon_t$ ).

$$Gr_t = \alpha + \alpha_1 HRD_t + \alpha_2 INFRS_t + \alpha_3 NRS_t + \alpha_4 TOP_t + \alpha_5 PR_t + \alpha_6 FDI_t + \alpha_7 D_t + \varepsilon_t \dots \dots \dots (2)$$

The political repression is another important factor which influences the FDI (Aharoni, 1966). Due to this factor negative or insignificant impact is take place on the FDI, because an adverse situation in the political environment also effects the decisions of transnational corporations to invest in abroad (Jun and Singh, 1995 and Mahmud and Quazi, 2004). Government stability used as a proxy of political rights to check the impact of political instability on FDI. And Human Development Index (**HDI**) is used

as a proxy of Human Resource Development (**HRD**), INFRS is infrastructure which used roads and railways total length in kilometers, political rights (**PR**) used as a proxy of government stability, **FDI** is foreign direct investment, **TOP** is trade openness, **NRS** is natural resources and **Dt** is the regime dummy variable.

$$I_t = \alpha + \delta_1(rt) + \delta_2 Rm_t + \delta_3 FD_t + \delta_4 Gg_t + \delta_5 D_t + \mu_t \dots \dots \dots (3)$$

For the democratic and military period to examine the impact of FDI, in equation 3 the variables which are used in the study are interest rate (rt), remittance (Rm), financial development(**FD**), growth rate of GDP (**Gg**), dummy variable is (**Dt**) and the error term is  $\mu$ . On the other hand economic growth and FDI are used in different econometrics techniques to find the impact of FDI.

### 3.4 Econometric Methodology

It is observed from the literature that Foreign Direct Investment has an impact on the economic growth of the country. This study will try to estimate the relationship between Foreign Direct Investment and economic growth by using simultaneous equation model as a regression analysis and two stage least square methods (2SLS).

### 3.5 Simultaneous Equation System a Short Description

A simultaneous equation system consists of a number of structural equations comprising several endogenous variables whose values are determined by lagged values of variables and exogenous variables, known as predetermined variables. Each of the endogenous variables is explained in terms of the predetermined and exogenous variables. Even though the consequences of simultaneity for econometric estimation were documented much before, e.g., working (1926), the first most important support to the area of estimating simultaneous equation system was made in 1943 by Haavelmo and Trygve. According to Haavelmo (1943), if one considers that the economic

variables measured simultaneously satisfy numerous stochastic relations, it is not generally an acceptable technique to attempt to define all of the equations separately from the data without seeing the limitations which the other equations enforce upon the similar variables. That this is consequently is nearly undisputable, for in order to propose a significant method of fitting an equation to the data, it is essential to explain the stochastic properties of all variables involved. Without this definition, the results found would be worthless. While on the other hand, the stochastic properties recognized to the variables in one of the equations should, naturally, not deny those understood by other equations. Finally, if the simultaneity is discounted and ordinary least squares are applied, the consequent forecasts and estimates will be biased and changeable. In addition, the tests of hypotheses will no longer be valid (Ramanathan, 1998).

### 3.6 Two Stage Least Square (2SLS) Method

If the instrument  $Z$  satisfies the conditions of instrument relevance and exogeneity, then the coefficient  $\beta_1$  can be estimated using an IV estimator called two stage least squares (2SLS). As the name suggests, the two stage least squares estimator is calculated in two stages. The first stage decomposes  $X$  into two components: a problematic component that may be correlated with the regression error: And an another! (problem free component that is uncorrelated with the error. The second stage uses the problem-free component to estimate  $\beta_1$ .

The first stage begins with a population regression linking  $X$  and  $Z$ :

$$X = \pi_0 + \pi_1 Z_1 + v_t \dots\dots\dots$$

Where  $\pi_0$  is the intercept?  $\pi_1$  Is the slope, and  $v_t$  is the error term. This regression Provides the needed decomposition of  $X_1$ .

## CHAPTER IV

### RESULTS AND DISCUSSION

This chapter describes the relationship between the different variables discussed in the above chapter which are analysed by using econometric methodology. By using simultaneous equation model and two stage least square method as an econometric technique. Due to simultaneity bias the estimation equation of simultaneous model is the case of proposed essential analysis. When variables are not stationary and expressed in levels then there is a chance occur of deceptive results.

In the first step of two stage least square method, through the OLS method the endogenous variables are regressed on the exogenous variables. Results show that a circular or bidirectional relation between the foreign direct investment and gross domestic product in the two equation system by 2SLS approach. The flows of FDI in the countries lead to increase the economic growth or activity in the host country.

The model uses the instrumental variable Z due to endogenous variable. Our endogenous variables in the model are growth rate of GDP and foreign direct investment.

**Sample: 1980 – 2015 Total No. of observation 36**

**Table 4: Results of FDI equation model by 2SLS**

Variables	Coefficient	Standard error	z-statistics	P-value
<b>GST.</b>	.0772	.063	(1.22)	0.221
<b>Invest.</b>	.1504	0392	(3.84)	0.000***
<b>FD</b>	-.0262	.0135	(-1.93 )	0.053*
<b>TOP</b>	1.4143	6955	(2.03)	0.042*
<b>TNRS</b>	.0272	.1359	(0.20 )	0.841
<b>INFST</b>	-2.531	1.520	(-1.66)	0.096*
<b>GDP</b>	5.959	1.715	(3.47 )	0.001**
<b>constant</b>	-73.924	8.064	(-9.17 )	0.000
<b>DIAGONSTIC</b>				
<b>R-squared</b>	Root MSE	Wald chi2(7)	Prob > chi2	
<b>0.9769</b>	.31186	1528.61	0.0000	

**Table 5: Results of FDI Equation with Dummy**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-value</b>
<b>GST.</b>	.143	.0875	(1.64)	0.101
<b>INVST.</b>	.1956	.0437	(4.47)	0.000***
<b>FD</b>	-.0232	.0134	(-1.73)	0.083*
<b>TOP</b>	.7258	.7780	(0.93)	0.351
<b>TNRS</b>	.3704	.2305	(1.61)	0.108
<b>INFRST</b>	-2.035	1.4704	(-1.38)	0.166
<b>GDP</b>	5.7663	1.7207	(3.35)	0.001**
<b>Dummy regime</b>	-.6233	.32548	(-1.92)	0.055*
<b>Constant</b>	-68.5029	8.2218	(-8.33)	0.000***

<b>R-squared</b>	Root MSE	Wald chi2(7)	Prob >chi2
0.9760	.31787	1473.65	0.0000

Note: significant level at 1%, 5% and 10% is shown by \*\*\*, \*\*, \* respectively

**Table 6: Results of GDP Equation Model by 2SLS**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-Value</b>
REER	-.0007	.0239	(-0.03)	0.976
HDI	1.258	.311	(4.04)	0.000***
INFRST	.457	.1293	(3.54)	0.000***
TNRS	-.0674	.0401	(-1.68)	0.093*
TOP	.6771	.1776	(3.81)	0.000***
GST.	-.0237	.0111	(-2.13)	0.034*
FDI	-.0001	.0329	(-0.01)	0.995
CONST.	-.0645	2.296	(-0.03)	0.978
R-squared	<b>Diagnostic</b>	Wald chi2(7)	Prob > chi2	
	Root MSE			
0.9780	.06769	1598.06	0.0000	

**Table 7: Results of GDP Equation Model with dummy**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>t-Statistics</b>	<b>P-value</b>
<b>REER</b>	-0.144	.071	(-2.01)	0.045*
<b>HDI</b>	1.245	.633	(1.96)	0.050*
<b>INFRS</b>	1.157	.405	(2.86)	0.004**
<b>TNRS</b>	.0359	.0841	(0.43)	0.669
<b>TOP</b>	-0.6561	.6754	(-0.97)	0.331
<b>GST</b>	-0.0259	.0189	(-1.37)	0.171
<b>FDI</b>	.0701	.0716	(0.98)	0.328
<b>Dummy regime</b>	-0.4498	.2029	(-2.22)	0.027*
<b>CONST.</b>	10.598	6.383	(1.66)*	0.097
<b>R-squared</b>	<b>Diagnostic</b>	Wald chi2(7)	Prob > chi2	
0.9087	Root MSE	390.56	0.0000	
	.13778			

**Table 8: Result of Investment Equation Model without Dummy Variable by 2SLS**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-value</b>
<b>Rem.</b>	-1.5895	.9256	(-1.72)	0.086*
<b>FD</b>	-0.0429	.0521	(-0.82)	0.410
<b>Inr.</b>	-0.2189	.1272	(-1.72)	0.085*
<b>GDP</b>	3.586	1.567	(2.29)	0.022*
<b>CONST.</b>	-20.592	32.240	(-0.64)	0.523
<b>Diagnostic</b>				
<b>R-squared</b>	Root MSE	Wald chi2(7)	Prob > chi2	
0.4487	1.4473	28.72	0.0000	

Note: 1%, 5% and 10% are \*\*\*, \*\*, \*.



**Table 9: Results of Investment Equation model With Dummy**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>Z-Statist.</b>	<b>P-value</b>
Rem.	-.2666	1.095	(-0.24)	0.808
FD	-.0719	.0510	(-1.41)	0.159
Inr.	.0587	.1752	(0.34)	0.737
GDP	2.953	1.449	(2.04)	0.042**
Dummy regime	2.0334	.9014	(2.26 )	0.024**
CONST.	-29.522	30.359	(-0.97)	0.331
<b>Diagnostic</b>				
R-squared	Root MSE	Wald chi2(7)	Prob > chi2	
0.5268	1.3409	39.94	0.0000	

NOTE: significant level is 1%, 5%, and 10% is \*\*\*, \*\*, \*.

In the model 5, 7 and 9 the study generate dummy by taking 1 for democratic and 0 for the military periods. Dummy variable is used for the democratic and military period that how much FDI is come in that periods in the country and the, effect appear to be positive and significant in table 8 in the democratic period.

Table 4 & 5 indicates that the most of the variables are in normal trends. When 1 percent increase in Govt Stability, Investment, trade openness, total natural resources and GDP then the FDI coefficient will be increased by .143, .1956, .7258, .3704 and 5.7663 percent which are significant respectively at 10, 5 and 1 percent level of significance. While on the other hand when there is 1 percent increase in the Financial Development and Infrastructure takes place then our dependent variable decreases by -.0232 and -2.035 percent of coefficient. The p-value shows insignificant relation between them. Because when infrastructure and financial Development increases in the country then the inflows of FDI will also increase. On the average democratic period have low FDI

with coefficient  $-.6233$  percent which is statistically significant. Because during that period Pakistan economic environment face lots of slashes based on political conversions and so on. The results in the regression analysis presented in the table shows that the explanatory variables explained total variation in the dependent variable FDI by its analysis. This indicates that FDI has positive impact on the growth of Pakistan.

Table 6 and 7 provides the descriptive statistics for the Gross Domestic Product in Pakistan. Moreover, exchange rate EXR has a positive relationship with economic growth GDP suggesting that a depreciation of the Rupees will increase economic growth GDP in Pakistan. But according to the result REER has negative coefficient which is insignificant. On the other hand when one percent increases in HDI, INFRS, TRNRS and FDI then GDP will be increased by coefficients  $1.245$ ,  $1.157$ ,  $.0359$  and  $.0701$  percent at 5 percent level of significance. While TOP and GST has negative coefficient values,  $-.6561$  and  $-.0259$  which are insignificant.

Trade openness has positive and significant relationship between economic growth and Foreign Direct investment. Because trade openness is to accelerates the growth. It is argued that FDI has positive and significant effect on the economic growth, but this effect depends on the stock of human capital accessible in the host economy (Naveed and Shabbir 2006). But the overall trade openness has positive and important relationship between FDI and economic growth (GDP). Countries with lower barriers to international trade experience faster economic growth, this view is generally been examined in the economic literature, for example Krueger (1998), judges that it is straight forward to determine empirically the higher progress of countries with "outer-oriented" trade strategies. Anyhow Trade openness is statistically noteworthy in all the

conditions, and related with higher growth. The reason is that when in the country Government stability is take place the growth (GDP) level of the country will be also increased.

In table 7 TOP has insignificant relation between GDP. The negative effect of trade openness could also be justified on the grounds that uncertainty and risk factor distresses the investor's decisions. Rehman (2003) discussed that lack of reliability concerning the constancy of trade liberalization policies is one of the main reasons that unfavorably distress the investor's decisions about the long-run investment. Therefore, due to the risk and uncertainty and lack of credibility about the liberalization policies, foreign investors save the cost by taking decisions not to invest in risky countries as compared to domestic investment costs in the host country (Lehman, 1999). Besides these reason, in Pakistan the undesirable or negative relationship between FDI and trade liberalization could be possible because the major portion of FDI goes to non-manufacturing and services sectors, while the exports sector predominantly textile sector has receiving a least share of FDI. The other reason could be the increase in imports due to decline in tariffs and eradication of other trade barriers specifically after signing the tariff agreement under WTO regimes which makes overall influence of trade on FDI undesirable which depresses the economic growth (GDP) in the country.

The democratic period have low FDI on average as the coefficient is -.4498% which is significant. Because in democratic regimes the overall FDI is low due to adverse political situations, global economic slowdown and due to the fear of the security conditions.

The overall our dependent variables that are Foreign Direct Investment, economic growth (GDP) and investment has positive relationship between them. In addition, FDI

can positively or significantly affect the host economy through a variety of externalities. For example, local firms may confidently learn advanced technologies by doing business with local affiliates, multinational firms' or by employing workers taught by them. The being there of multinational firms can upsurge local competition, pushing local firms to progress productivity. Furthermore, multinational firms may incidentally support local firms (Blomstrom and Kokko, 1998; UNCTAD, 2000).

In table 7 and 6 the infrastructure carries positive sign and statistically significant suggesting that infrastructure plays an important role in attracting FDI and raises the growth of the economy. However, in the table 4 and 5 infrastructure applies insignificant or negative influence on FDI as political repression is included in the analysis. This could be due to the high correlation between infrastructure and political repression indices (Khan 2011).

The Financial development and real effective exchange rate have insignificant or negative relation between GDP and investment. According to (Khan 2011) the international financial variable and real effective exchange rate affects FDI adversely in the long-run. This indicates that devaluation of local currency increases transactions and input costs and declines FDI in the host country. However, financial development exerts negative impact on FDI. One reason could be that the funds or assets are not being used to encourage investment activities. This is very true for the case of Pakistan because in the pre-reforms period commercial banks in Pakistan have been allotting funds to promoters of leading political parties and selective peoples. Thus credit distribution to private sector is usually based on political considerations rather than on economic considerations. As a result, the conferred group has accrued huge amount of non-performing loans. The other reason could be the possibility that financial

deepening means an increase in treasury or capital operation of financial or monetary institutions rather than increase in the loaning for investment activities (Khan, 2007). Furthermore, non-linearity may also make the relationship between FD and FDI negative but it does not change the results in terms of signs.

Another variable that might implies great impact on the inflows of FDI is the natural resource endowments. The positive relationship between natural resources and FDI suggests that in Pakistan FDI is partially resource seeking type.

The democracy related variables, such as civil liberties and political rights remains insignificant. This suggests that civil liberties and political freedom produces no positive or significant impact on the inflow of FDI to Pakistan. These results or outcomes are consistent with the earlier findings of Alesina and Dollar (2000). The hypothesized variable political rights or political repression is appeared to be insignificant. This means that political instability applies no effect on the inflows of FDI in Pakistan. These results or findings confirm the previous outcomes of Akhtar (2000) and Khattak et al. (2005). The reason could be the high level corruption, feebleness or weaker democratic institutions and weak concentration of capital and enforcement of labour laws, insecurity and inefficient bureaucracy of property rights (Quere, et al., 2007).

The table 8 and 9 indicates that Remittances and FD are insignificant predictors of Foreign Direct Investment, if by increasing one percent in Remittances and FD the coefficient value will be decreased by -.2666 and -.0719 percent which are insignificant. Chami et al. (2005) studies that remittances are compensatory allocations and these have negative effect on the economic growth. Another justification that Jawaid and Raza (2012) examine the relationship between remittances and economic growth by

using time series data of five South Asian countries like Pakistan, Bangladesh, India, Nepal and Sri Lanka from 1975 to 2009, finds that in India, Sri Lanka, Bangladesh and Nepal there is significant impact of remittances on the economic growth while in case of Pakistan there is significant or negative impact of remittances on the economic growth. Ali (2014) and Le (2008) examine the negative or insignificant effects of foreign capital inflows including remittances on the economic growth of country. While, on the other hand remittances and Financial Development increases investment will be also increase, the increase in Rem and FD increase the inflow of savings and capital and when these savings are invested in the country then there is an increase in the economic growth (GDP) [Iqbal et al. (2013)] and additionally remittances generate current account surplus which puts ascendant pressure on production function and as a result there is an increase in economic growth [(Qayyum and Nawaz, 2014)].

Interest rate is also showing insignificant and significant results. In table 8 when one percent increases in interest rate then the coefficient will be decreases by -.2189 percent which is significant at the p-value 0.085. While in table 9 when one percent increases in interest rate the coefficient will be increased by .0587 percent. Wuhan et al. (2015) examine the effects of interest rate on investment both in short run and long run. Interest rate has negative effect in the long run and positive effect in the short run on investment. Unlike from the traditional theory, some researchers determined that there was a significant or positive correlation between investment and interest rate. Based on the indication of 21 unindustrialized countries, 1971 to 1980, the analysis about the real financial assets revealed that there was a confident or significant relationship between the financial assets and growth of real interest rates. (Lanyi and saracoglu, 1983). Badar and Malawi (2010) finds that investment and interest rate has negative relationship between them. The economic theory and some other studies reveled that interest rate

has insignificant effect on investment. The GDP will be increased when investment increased in the country. GDP and investment has positive and significant relationship between them.

Results of the slope dummy are shown in the appendix table 1, 2 and 3.

## CHAPTER V

### CONCLUSION AND POLICY RECOMMENDATION

#### 5.1 Conclusion

The study concludes that economic growth and foreign direct investment have a positive and significant relation between them. It has positive impact on the growth of the countries. It is regarded as one of the major source of the foreign exchange and also is source of managerial skills and foreign advanced technology. By realizing the central importance of FDI in the economic development of countries, the developing countries liberalized the inflows of FDI regimes and are succeeded in attracting the huge amount of FDI in the country. In Pakistan a quite and handsome bulk of literature is available related to the foreign direct investment and its determinants. The important determinants of FDI used in the study are growth rate of GDP, Human development index, infrastructure, interest rate, trade openness, financial development, and political rights as government stability, investment, natural resources, and remittances. The aims of the current study is to check the relationship between determinants of FDI in the long-run as well as short-run, whether FDI increases with higher economic growth or not and to find the FDI flow increases more in democratic period or military period. The study covers the time period from 1980-2015. Two stage least square models are used as an econometric technique to get the results.

Firstly the model run without dummy variable and then with dummy variable to check the impact of democratic and military regimes. The results show that on average FDI remains low in democratic period as compared to military period. Results of 2SLS model find the impact of FDI on the growth rate of GDP and investment. And also on the others variables used in the study. The model shows the circular and bidirectional



relation between the foreign direct investment and gross domestic product. The instrumental variable  $Z$  is used in the model due to the endogenous variables. The instrument variable  $z$  is third variable used in the regression analysis when endogenous variable is present in the model. In others words it is used to account the unexpected behaviour between the variables.

The important findings of the study are that economic growth and foreign direct investment are positively correlated with each other's. The negative but significant impact of government stability is due to adverse political conditions in the country. Human development index, infrastructure and trade openness are highly positively significant correlated with the FDI. Remittances and interest rate are negatively significant correlated with the investment while GDP is +ively correlated with the investment in the country. The study shows the share of inflows of FDI by different countries to the Pakistan like USA, UK, Canada, Saudi Arabia, Italy, japan, France, Germany and others countries over the time period of 1985-2015. The major contribution of the FDI in the country is USA, UK and Germany according to the overview of the table. Similarly share of sectoral FDI in the country is take place in the study in different sectors of economy. Foreign direct investment is take place in different economic groups like manufacturing sectors, trade, financial business, mining and quarrying oil refining, social services, transport, petrochemicals and food beverages and others. It's very helpful for the development of the economy but Pakistan is not stand with the others countries in attracting FDI due to instability of government and also terrorism is the cause of unattractiveness of FDI to the country.

## **5.2 Policy Recommendation**

The study recommends some suggestions that proper utilization of resources and government stability should take place in the country which encourages the inflows of FDI. Investors should make correct and informed pronouncements according to the interest rate.

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## APPENDIX

**Table 1**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-value</b>
GSTB	.163	.0855	1.92	0.055
LGIN	.180	.0396	4.55	0.000
FD	-.021	.0143	-1.52	0.128
LTOP	.306	.8391	0.37	0.715
TNR	.392	.2006	1.95	0.051
LINFR	-1.529	1.6363	-0.93	0.350
LGDP	5.616	1.7464	3.22	0.001
DT	-11.50	19.2551	-0.60	0.550
DTGDP	.681	1.2238	0.56	0.577
CONT.	-66.343	8.6385	-7.68	0.000
<b>Diagnostic</b>				
R-squared	Root MSE	Wald chi2(7)	Prob > chi2	
0.9776	.30731	1579.72	0.0000	

**Table 2**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-value</b>
NDR	-.1265	.0601	-2.10	0.035
HDI	1.258	.5784	2.18	0.030
LINFR	1.156	.4692	2.46	0.014
TNR	.0190	.0699	0.27	0.785
LTOP	-.4027	.5681	-0.71	0.478
GSTB	-.0175	.0157	-1.11	0.265
LFDI	.0237	.0589	0.40	0.687
DT	-.171	.7597	-0.23	0.821
DTFDI	-.023	.0623	-0.38	0.701
_CONS.	7.285	4.630	1.57	0.116
<b>Diagnostic</b>				
R-squared	Root MSE	Wald chi2(7)	Prob > chi2	
.11652	0.9347	544.75	0.0000	

**Table 3**

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>z-Statistics</b>	<b>P-value</b>
LREM	-2.256766	1.460666	-1.55	0.122
FD	-.0002614	.0639864	-0.00	0.997
IR	-.0963447	.1930158	-0.50	0.618
LGDP	2.255044	1.572495	1.43	0.152
DT	-173.9143	222.145	-0.78	0.434
DTFDI	-.1898926	2.132417	-0.09	0.929
DTGDP	11.21729	15.51083	0.72	0.470
CONS.	6.306728	37.16663	0.17	0.865
<b>Diagnostic</b>				
R-squared	Root MSE	Wald chi2(7)	Prob > chi2	
0.5259	1.3422	39.69	0.0000	