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**IMPACT OF EXCHANGE RATE AND INFLATION ON FOREIGN DIRECT
INVESTMENT**



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ABSTRACT

A Main objective of the studied is to find out the impact on FDI due to change in the exchange rate. And main focus is that how impact of inflation causes effect on exchange rate which further leads towards fluctuation in flow of FDI .FDI is dependent on multiple factors but Exchange rate is the most important factor. These days exchange rate is very volatile due to open excess of the businesses and investors in both the domestic and international financial market. This volatility in the exchange is very considerable for foreign investors. For Analysis purpose time series data is taken for independent variables Inflation and Exchange rate and dependent variable FDI. After collecting Data variables are tested through regression analysis, correlation analysis and NOVA test.

CHAPTER 1: INTRODUCTION

Background

FDI has changed the world, it was time that investments were bound to the boundaries of domestic countries but with the concept of globalization and increased exposure of business world FDI has change the world. Countries are investing in foreign regions and especially in developing countries because of cheap labor and low capital investments, Restrictions are less in the developing countries, Laws are not very strict and openness to the business is void. Exchange are difference is also a big factor. For Strong economy countries it is there is high favorability to invest in developing countries and earn huge profits due to exchange rate difference.

In developing countries FDI is very attractive. For the last three decades FDI has changed the shape of financial world. Investments have floated throughout the world. This large amount of money circulation has change the picture of variability in exchange rates, Exchange rates have become volatile, and rates react to every single activity of FDI around the Globe. For developing countries dilemma is the shortage of capital which bounds them to remain in a restricted circle. For those countries FDI plays a vital role to break that circle and move forward. Through FDI these developing countries can improve their infrastructure, technology, Industry, productivity, businesses. These changes altogether give rise to economical position of the country, improves poverty, employment, income, inflation, sully and demand change, exports, overall trade.

With these economic changes there comes a large impact on exchange rate as volatility as well. These foreign funds can be used for growth by these developing countries. For the developed countries it is beneficial to invest in developing countries because the marginal productivity in developing countries due to shortage of capital investments and those investors can earn high profit margins.

Zafar Mueen Nasir and Arshad Hassan (2011) Double side interests from both the developed and developing countries escalates gains from the large amount of capital movements internationally. FDI has tremendously increased from 1090s onward throughout the whole world and specially in developing countries.in 2010 developing countries received \$561 billion as direct investment

from the developed countries. Start of this FDI was from 1990 which gradually reached the trough in 2002, than from 2003 to 2007 FDI reached the peak. Foreign investment boom which started in 2004 was tremendous. In these years Maximum amount of capital floated in the form of FDI, this investment boom showed Capital flow of \$1.9 trillion in 2007. In 2007 financial crises caused decline in FDI by 11.5% and decline moved on and caused further decrease in FDI of 32% in 2008 and 2009. In 2010 there was a mild recovery in FDI by 4.9%. Right now Pakistan stands 66th in 117 countries. Averaged inflow of Pakistan is 0.19% of the total FDI of the world. Before 1995 FDI percentage to the total GDP was only 1% which started to increase in 2003 and reached to maximum of 5% in 2008 and now increment has reached to 10% by 2008 in 2015.

Main causes of decline in FDI are the security problem, political instability and other gloomy investment opportunities around the world. Exchange rates have significant and extensive importance for the economy and its critical significance in deciding the competitiveness of the economy is unquestionable. Regardless, trade rates have turned out to be exceptionally reactive to small changes in domestic and international financial situation and show considerable changes. Particularly in the short run, Exchange rates are seen to overshoot their long run balance level as speculators reallocate their money related resources to accomplish another balanced portfolio because of any adjustment in financing costs, interests and financial worth etc. This supply of capital is huge as collected over a long of time so the alteration in money related stocks is shockingly greater and fast than the changes in flow of trade. The reaction rate of real sectors is not as quick as that of the financial sector. So in the short run, exchange rates will probably mirror the impact of changes in financial assets. Caporal ETai. (2009) recommended that external, real and financial assets are the main cause of volatility in exchange rate. Since 1973, from the fall of Breton woods framework, Exchange rates of different nations have been fluctuating frequently. These wayward developments of FDI creates instability which puts the financial investors in problem of how to interpret these rapid changes. Investors in a hesitant mood it may cause their decision for investment in delay which brings which causes decrease in FDI, so this is important to know about the relationship and existence of exchange Rate volatility in Pakistan. Froot and Stein in 1991 studied the relative wealth impact theory of Exchange rates. With the increase in exchange rate the wealth of investor which accordingly gives boom to more inflow of FDI. Inflation is a macroeconomic factor which is more of

reflection of the management so it has a negative impact on exchange Rate. Swelling is utilized as a marker of the nature of macroeconomic administration so the possible relationship amongst FDI and expansion is negative. While; FDI is relied upon to be decidedly connected with exchange openness which is usually utilized intermediary of the level of openness of the economy in the experimental research. We expected FDI to be positively related with the trade openness.

Inflation has a direct impact on the value of currency within the country and foreign exchange rates with the other countries. Inflation is one of the major factors which effect the exchange rate of a countries.

Inflation has negative effect on the exchange rate, it is negatively related to Exchange rate. Its effect is not very volatile, a minor change in inflation does not affect Exchange rate. Low inflation rate in any economy does not give good results to the foreign exchange of the country but if the inflation is at high level than it gives favorable impact to the country's exchange rate with the other country in negative direction.

Inflation has close relation to interest rates and these interest rates can influence exchange rate. Countries are always trying to keep inflation and interest rates in balance but both of these factors have very complex relation so it is very difficult to manage them and keep them in balance all the time.

Higher interest rates attract the FDI which causes increase in the demand for the currency. These higher interest rates will cause more money to circulate and will cause increase in the inflation rates. This increase in inflation will put negative impact on the country's currency value. On the other hand low inflation rate increases the spending in the market, increases the money circulation which leads towards economic growth of the country but it does not attract the foreign investor. In low inflation economy there is less scope for marginal profitability so foreign investors are less interested in investing while they have other opportunities to invest in higher profit regions. Stability of currency value and exchange rate is very desirable for the country, all the countries try their best to hold these factor stable. Stability is important for the stability of country's government and economy.

Whenever any investor is interested in investing in any country, his most concerned factor will be stability of exchange rate of that country because no matter if he earns profits or not he would try his best to keep its capital in safe from drastic damage which can be caused by currency exchange rates. For the countries like Pakistan where we have political instability, security threats and risk of sudden moves in the currency value, investors are reluctant to hold their investments for long time. So large investments in volatile exchange rate countries are held for shorter period of time. This is because of risk of devaluation of capital investment.

Other than the value of currency of a country there are a number of other factors which effect exchange rate for any currency. Such factors as growth rate of the country, interest rate, balance between imports and export (trade surplus, trade deficit), and Demand and supply fluctuation, Productivity, Debt level of the country, Policies of government and currency related factors. Investors while analyzing for the purpose of investment they look for the leading economic indicators which determine the exchange rate. These economic indicators can effect exchange rate at different levels, sometimes interest rate influences the rate of exchanging currency and some other time inflation plays the major role in fluctuating the rates.

These days' exchange rates are relative because there currencies are virtual and they don't have any intrinsic value, there is no value of these currencies but only relative to each other. This relative effect puts influences on currency rates same as like inflation and other factors. For example if we have higher rate of inflation the country but that rate is still less than the rates of inflation in any other country than value of our currency can be relatively higher than the other country's currency.

Long term and short term interest rate tend to increment over their normal levels in times of deflation, and during the times of inflation. Yet, both short and long term rates have derived the inflation rate essentially, and by bigger sums at higher inflation rates. In the long time since 1790 when the inflation rate increased from 9%, the normal rate on long bonds was only 6%. After 28 years from 1970s inflation reached to .5% and 1.4%. It remained in these limits.

Aim of the Study

World has become a global village. All the businesses of the countries are now integrated with each other. The world has become a trade machine. For this machine all the countries are the parts of its business. Now businesses are being operated globally. Single business has its multiple units all around the world. One country is good in technology so it will be supplying its products throughout the world. Different countries have different specialties or we can call that specialty its competitiveness. Some countries are good in technology so it's their competitive edge but may be they do not have enough human capital to enhance their productivity and still if they even get that man power from some countries than may be there is need for natural resource for the production as a raw material, so now that country will need to interact with some third country for that resource. There could be possibility that multiple resources are required so it has potential for multiple countries to interact with each other and share their competencies to get the job done.

As there is huge interaction of all these countries and there is need to work together. All this process can cause huge cost and delays of in meeting supply and demand functions in time. FDI is the source to make these processes simpler. Through FDI investors can come to the host country where the availability of maximum resource is possible in least cost.

Pakistan is a developing country and our land is also very rich in resources. In Pakistan we have cheap labor and favorable conditions to attract the foreign investors. Although we are facing many problems regarding security and law and order situations still Pakistan is attractive for the foreign investors because of less cost they will bear through investing here and then they can earn large marginal profits.

We see in Pakistan that most of the big clothing brands have their factories in Pakistan and they do not invest directly they outsource Pakistani industries for production, all because of least expenses.

These days many food brands, Clothing brands, Production units, IT companies and many other foreign businesses have invested in Pakistan. They have their offices and plants and outlets. This trend has increased the economic growth of Pakistan.

So FDI has obviously contributed in the economic growth of Pakistan. In Pakistan there are multiple factors which are not in favor of FDI inflows like political instability, slow growth in

economy, law and order situation, random move of currency value, unstable economy, and debt position of Pakistan. In this study my focus is on the exchange rate and inflation rate, that how these two independent variables effect FDI.

Inflation rate has an impact on Exchange rate as well so with the fluctuation of currency value these is impact on exchange rate and that exchange rate is directly related to FDI flow.

Academic Motivation

A lot of studies and researches are done on this topic. I studied different studies regarding this topic and some other related studies as well I found a lot on the openness of economy, freedom of economy, exchange rate. All these factors were found closely related to FDI. Some of the studies showed there relation as very significant and some showed insignificance. In every study there was well defined explanation how these factors are effecting each other. There impacts clearly showed that these factors are important for the overall growth of the country. In these studies inflation was a factor which was being described as a determined of FDI have a significant effect on FDI but its relation was always in the form of devaluation or increase in the value of currency and then it's in impact on trade. We see that whenever there is inflation or deflation there comes an impact on the exchange rate of the country. In the literature relation of inflation on exchange rate and then the impact of that change on exchange rate becomes a determinant of FDI flow. Through the literature I was not able to understand this combined effect of inflation and exchange rate. So I decided to base my study on combined effect of inflation and exchange rate on FDI. That how these two factors combine together to and determines the flow of FDI.

Limitation

In this study I have taken the combined effect of Inflation and exchange rate on FDI in Pakistan. Pakistan is an attractive country for the investment purpose. Many countries have their interests in Pakistan due to this reason as well there are some instabilities. These instabilities are created by the external forces which have their personal interests to keep Pakistan in slow growth. Their motives are not the generation of profits or to keep Pakistan in the list of underdeveloped country

but their main motives are to prevent themselves from the disasters which can be caused with the developments in Pakistan.

In Pakistan there are many other factors that keep creating unexpected events which cause disturbance in business transaction and economy of the country. These other factors like political instability, law and order situation and many more also keep affecting FDI flow in Pakistan. This study will examine the data that how FDI has been affected over the years in Pakistan due to change in inflation and exchange rate. But the collected data will obviously have effect of other factors on it. Even the independent variables (inflation and exchange rate) have effect of multiple other factors. So there would be the chances that Pakistan is sometimes very much affected by some uncertain reason so results can be slightly different due to impact of those other factors.

Thesis structure

Thesis is divided in five chapters. Chapter 1 is Introduction of the study, introduction is further divided into background information, Aim of this study, what were the main academic motivations to choose this study than limitations of the studies and last is the structure of thesis. Chapter 2 of the study represents the literature review of the previous studies. Chapter 3 is about the theoretical framework. Chapter 4 describes the Data Analysis. Chapter five gives conclusion and recommendations of the study.

Research Question

What is the relation Between Inflation, Exchange rate and Foreign Direct Investment in Pakistan?

Hypothesis

Exchange rate fluctuation is positively related with Foreign Direct Investment

Inflation Is negatively related with Foreign Direct Investments

Objective of the Study

Objective of the study is to understand the combined effect of Inflation and Exchange Rate on FDI that how fluctuation in these independent variables effects inflow of FDI.

CHAPTER 2: LITERATURE REVIEW

Mr. Ahmed Nawaz Hakro and Ikhtiar Ali Ghumro. (2011) studied determinants of FDI flows to Pakistan. They took secondary data for their research and used time series analysis method over the performance of country over the period of times. Determinants that effect the FDI econometrics model with in Pakistan since 1970 to 2007 through VAR, VEC, general response functions, GRANGER causality , forecasting, they used three stage least square econometrics for the empirical analysis there results suggested that cost related, macroeconomic factors of risk index variables are the main factors which merged in the short run analysis. In the long run analysis openness which is a macroeconomic factor, merges as dominant factor effecting FDI. Their analysis showed that country need to stabilize e the macroeconomic factors on both log run and short run basis for positive movement in FDI of the country. In the last 20 years country has maintained this stability over the years and the country should maintain it stable further. For this long period country has stabilized the wages rate, prices, macroeconomic policies, cost advantages, stable policies and friendly environment for businesses. Country have to keep improving macroeconomic policies and developing business environment. All these will improve the likelihood of investments and will attract the FDI. They concluded that cost related macro-economic factors of a country and its political position over the years is highly considerable for the short run analysis. Cost related factors merge with other factors and determine the favorability of Investments scenarios in the country in the short run analysis. These short run factors than lead to the macro economic factors in the long run and impacts on long term and huge investments giving positive of negative picture for investment favorability in the long run. Openness also emerges as a main factor of determinant of FDI in the long run. Their study also showed that both the short run and log run dynamics effect each other in both ways. According to them in general view macro-economic factors seems to be playing major role as determinant of the activities of FDI in the long and short run. They tested the relationship of variables in the

degree of Causality. Results indicated the lag of relationship among the variables. The study also indicated the facts that FDI is important in the economic growth through increase in the economic activities.

Nabamitadutta and sanjuktaRoy worked on the topic of FDI, financial development and political risks in 2011. They took secondary data for their research and used time series analysis method over the performance of country over the period of times. They used panel of 97 countries. Financial development and political risk were in dependent variables and FDI was the dependent variable. They worked on these factors and concluded different results. Financial development is an important determinant of FDI. These developments are mainly due to the financial situation of a country. Country with stable political situation will have better development. Stable political situations will attract the foreign investor for investment for the longer period of time. The main purpose of study was to study the role of political association with financial development and FDI. Study showed nonlinear relation. Impact of FD was found negative on the FDI and the political risk was effecting Financial development variously over the times. FDI was not proved very effective in FD in the study. So the focus of study was turned towards the political risk that how political risk is associated with FD and FDI. Further studying revealed that relation between the two sides was still not in one direction. There comes a point in FD beyond which relation between FD and FDI becomes negative and the political stability also moves along but in slightly different way. First its effect decrease to a level and then starts growing making a concave type of curve shape. At a very stable political situation FD can get more benefits from FDI inflow increase. So the results at last indicated that at more stable political situation each level of FD will create higher level of FDI inflows to the country. Along with the political stability some other factors like stability of government investment portfolios, effective investment and business environment, better infrastructure but with instability in the political situation of the country. These factors will be contributing less.

Zafarmueenñasir and ArshadHassan worked on economic freedom, exchange rates stability and FDI in south Asia in 2011. Their study was regarding stability on exchange rates in South Asia. They used freedom of doing business, Favorable investment environment, openness to trade, monetary and fiscal environment in their index for analysis as well. They studied resources which attracts FDI (Market size of a country, legislative, economic structure, excess of human

capital, how efficient and reliable is the financial system of the country, Minerals, natural resource, macroeconomic environment, situation of law and order and security issues and the physical infrastructure of a country). All these factors attracts FDI. These impact on economic growth is the main factor which attracts the foreign investors to invest in the country. All these are the macro economic factors, studies have showed that macroeconomic factors are the main drive for the foreign investor to invest in the country and the results of the study showed that there impact on creating FDI inflow seemed positive in the study. Study also indicated the influence of economic and fiscal environment are some of the factors of attracting FDI when they are combined with good business opportunity and favorable business environment. The added indexes are the widely used tools of the investors for deciding where to put their money. Study showed the impact of economic freedom as well. When there is full freedom of moving the labor and goods and freedom of a person to protect itself and Gwartney in 1996 said that freedom is that a person can acquire property without the undesirable power, any fraud or theft and is also able to protect it from other. This economic freedom gives an owner right to keep the property as long as he wants, gives the right to trade it or use it for business purpose. Economic freedom is dependent on the government regulation and its stability. A good controlled government mechanism can provide good Economic freedom to the citizens of a country. Economic freedom gives rise to entrepreneurship and decentralized power and decision making process which in long run are favorable for the economy growth. Study showed that overall trend of FDI in south Asia is lower than other regions although in south Asia macro-economic factors are more favorable for FDI and even Political situations are also stable than other regions of the world and if we talk about the contribution of south east Asia in GDP and FDI on average than its almost neglect able. According to Zafar Mueen Nasir and Arshad Hassan there are many reason for this but they considered the economic freedom as the most important of these all. In south Asian countries economic freedom is very low which is positively related to the FDI. Economic freedom is important for attracting FDI so if south Asian countries device their policies accordingly by giving economic freedom through openness for business, freedom of trade though the region, and freedom of business and investment than a favorable environment for the investment and business can be created which will eventually attract the FDI to South Asian Countries. This FDI will lead towards economic growth in south Asian countries. Governance is also a big part of government, improvement in governance will corrupt systems will lead to

economic freedom in the countries of south Asia. So according to study South Asia should be concentrated on the policy making for increasing attraction for FDI. Authors also studies impact of volatility of exchange rate, they indicated that exchange rate is negatively related with the FDI so for South Asian countries it is essential for these countries to stabilize their exchange rate. Stable exchange rate will attract FDI due to picture of its stable economy situation. Study showed positive relation between FDI and Market size in the country. Larger markets are more attractive for FDI so larger market will have more potential to observe more FDI and attraction will be more for new foreign investors who are looking for new potential parkers around the world. At the end of their study the study concluded that if a country provides stable, smooth and consistent and good governance which effective regulatory framework with supportive macroeconomic situations Asian countries can attract significant amount of FDI inflows. These countries should not only focus on polices to attract FDI but they should also work on these economic structure and stability if there economic situations and financial development.

Rajesh Chakrabarti and Barry Scholnick. (2004) gave a research on Exchange Rate Expectations and FDI They have taken freerance of frankle and foot in 1987 to 1989 and Dominguez 1886 and MacDonald's 2000. Takagi in 1991 gave survey of the researches done by all of these mentioned above. They used the data of central Banks, commercial banks, government treasury and economists to predict the spot rates on currency exchange and with respect to current rates. When an investor's follows exchange rate of stocks, an issue comes that agents does not update their expectations according to the current level of expected future rate changes. Author concluded that forward rates always reflect to the expected changes in future and the premium which is charged foot future rates gives effect on exchange rate volatility.

David Greenaway, Richard Kneller, Xufeizhang. (2012) studies the effect of exchange rates on firm exports and the role of FDI. Their study was done on UK economy, behavior of trade was studied due to change in exchange rates. Data of different British manufacturing industries was collected and results showed that Chan in exchange rate causes less effect on participation of the firm in trade but its impact is significant on export shares. Multinational companies have huge backups to deal with exchange rate variability, these backups can be used on different purposes as well armoring to the major objective of the company. Exchange rate volatility differ around different regions. Study found that companies outside the region were less effected by the

exchange rate variability than the companies inside the region. So this leads to the conclusion that foreign investors are effected more by the change in exchange rate of the company than the domestic companies. Their main factors were Export shares and multinational firms.

Anastasia Angelopoulos and Panayiotisliargovas (2014) studied FDI and growth. They focused on how FDI improves economic growth. They conducted their research through panel data analysis technique, they took data for 20 years from 1989 to 2008. This test was on three different types of groups. These groups were set of different countries. One group was European Union member countries, other was European monetary union countries and the third was countries in transition. These groups have different thoughts. One of them says that FDI inflow is positively related with the economic growth. They say that FDI and economic growth does not seem to have robust relation. They move in same direction in all type of economic situations. This the era of globalization and in these times FDI has huge impact on the businesses around the world. FDI is very significant in defining the business position of any country. A common perception is that FDI helps in improvement of macroeconomic situations of country which leads the economic growth on the country in the long run. Study showed the significant importance of FDI for less developed countries in the transition group. FDI can not only help the countries in transition with the direct availability of capitals but it will also help in transferring technology and knowledge from the developed countries to the transition countries. These changes can take place only if multinational take interest in doing business with local business man. They communicate and reach to good investing options for the both parties. These multinational companies can help, can imitate and give tannings to the locals for the purpose of knowledge so that these locals become the best workers for them. By taking these steps transition countries can increase productivity and can enhance their capabilities which will lead them towards openness to the global economy. These changes will help these countries to integrate with the other developed countries. In this globally connected world countries are more connected to each other and they are integrating with each other, participating in trade unions and making their positions strong. These unions are always getting additional benefits which help the countries to trade with same level with respect to other countries. These member countries make favorable polices and drive markets in positive direction for the favorable increase in FDI, these countries generate new and better opportunities, economic and political stability. All these factors are

favorable of FDI. We believe that increase in FDI in last decades were mostly due to these mutual integration of countries through unions.

Ramkishen S. Rajan (2004) studied those measures which attract FDI investment increment due by giving incentives to investors and through better policies. He described multiple reasons due to which FDI can be attracted by the countries. Author said that to for the countries to attract more FDI it is important for them to reduce the hassle cost. Through reduction of this hassle cost investors will get attracted to wards investing in the country. He describe these costs as the administrative costs. According to assumptions in non-distorted domestic policy FDI can contribute more to the needed capita, technological improvements, better organizational structures, better production around the globe, thus increasing the economic growth of the company. Author gave reference of UNCTAD 1999 which says that FDI can be helpful for local development through 1: increase in the financial resources of the country, 2: increasing the capability of export competitiveness, 3: increase in employment rate and skill and knowledge level, 4: working on better and stable environment in the country and 5: developing better technological capabilities of the country. Author described four channels which helps in transfer of technology from one country to other. 1: vertical integration which deals with the relation between the company and its suppliers and wholesalers. 2: Horizontal integration concept which talks about the relation of a company with its competitors and others in the same industry. 3: transfer of skilled labor from one place to other, 4: globalized research and development. FDI itself is seeking some resources like human resources, natural resources, better and larger markets, efficiency, better economy, stability and many more. Generally for a country to attract FDI it is important to create its cost effective environment which attracts the investors. A study described in the case states that if other factors are controlled than there exists a negative relation between administrative cost and FDI to GDP ratios.

Udomkergmogkol and Morrisey (2009) studied on the nexus rates and FDI. The study results described that deflation attracts while domestic currency depresses FDI. They used H-P filter approach to check Increase in exchange rate.

Brzozowski (2003) used Fixed Effects OLS and GMM Arellano-model and determined the impact of exchange rate uncertainty model to check the exchange rate of the countries with high uncertainty. He used GARCH 1, 1 method and measured the volatile countries around the globe

Arch resulted in stating that volatility is negatively related with FDI. Barrell explored the volatility of exchange rate effects US FDI in Europe by implementing generalized method of moments (GMM) on European industries from 1982 to 1998. Strong negative relation was shown by the results between exchange rate volatility and UK and US DFI.

Furceri and Borelli (2008) said that FDI is more effected by the openness of the country. According to them FDI has to do nothing with Exchange rate volatility and similarly in 2005 Bouoiyour and Rey took annual data of morocco and though standard deviations the resulted that exchange rate volatility did not effected the DFI of morocco.

Tokunbo and Lloyd (2009) worked on exchange rate volatility in Nigeria he used cointegration error technique for this. They found negative relation between FDI and exchange rate but according to the volatility does not affect FDI. Jie Qin in 2000 did a theoretical examination gave results in the favor of exchange rate volatility and FDI effect

Goldberg and Kolstad (1994) found out the Impact that with the increase in exchange rate there was increase in FDI 125 with the increase in volatility in exchange rate without any decrease in domestic investment in US, UK, Canada and Japan.

Hines (1995) worked on dynamics of FDI in the foreign countries FDI of US has declined over the times in the countries where corruption is high. Study gave insignificant relation between corruption and FDI. Okeahalam and Bah In 1998 explained the relation of corruption and FDI flows. Ayal and Georgios (1998) studied the impact of economic components on the rate of economic growth, productivity and volume of investment by using OLS method. The results were in favor on economic freedom, that economic growth is led by the economic freedom which creates speedy capital investments domestically and in the form of FDI as well. These factors increase the productivity which again leads to better economic situation.

Naggar (1990) and Collier and Gunning in 1999 focused on the study of role of institutions. Study was focused on the facts that if efficient taxation, proper rights of property, laws according to favorable business conditions are very likely to the domestic and foreign investments.

Wheeler and Mody (1992) explained the relationship of the host counter risk and its impacts on FDI. Results showed no significant relationship between these two factors. Chakrabarti in 2001

stated that market , input cost , trading and non-trading barriers , openness to trade, rate of growth in the counter, stability of foreign exchange are the major determinants of inflow of FDI

Janicki and Wunnava (2004) explained the significant impact of economic growth, political instability and risks, openness to the trade and labor cost on FDI in central and eastern European countries.

Kyrkilis and Pantelidis (2003) worked on the determinants of FDI in recent developing and developed countries. He found out that real GNP, effective exchange rate and human resource capital are the significant determinants of FDI inflows and outflows as well. According to him Openness is not significantly related with FDI flows.

Bengoia, Marta, and Sanchez-Robles (2003) studied the relationship between economic freedom and its impact on FDI. His search was based on the data of 18 Latin-American countries from the period of 1970-1999. He used Panel data analysis technique to find results. His results showed that Economic freedom is positively related to inflow of FDI His study explained that human capital , economic stability and openness of the market helps in attracting inflows of FDI .

Cole (2003) compared different theories regarding economic growth and freedom and their relationship at different stages. He found robust relationship when he tested them through different theoretical frameworks. Another author Scully in (2002) studied the contribution of economic freedom in economic growth and the money distribution in market through structural models. Role of government policies were also analyzed through their role in advancing economic progress and its effect through distribution of market income. Results showed that economic freedom helps in promoting growth in economy. He also found a significant positive relationship between economic growth and inequality of income. Impact of this tradeoff was found very little.

Gordillo, Manuel, and Alvarez (2003) studied the relationship of economic growth, political freedom, democracy and economic growth. Results showed that economic freedom was positively related with economic growth but political freedom and economic growth showed insignificant relation. Democracy seems to be accelerating the economic growth and economic freedom as well. Chan and Gemayel (2004) stated that political instability, political risk, and financial risk are the main determinants of FDI in Middle East Countries.

Sekkat and Veganzones-Varoudakis (2007) explained the relation of openness of trade and FDI. They saw significant relation between the factors. He also showed the insignificant effect of GDP and GDP growth on FDI inflows of developing countries.

Doucouliaagos and Ulubasoglu (2006) examined the relationship of economic freedom and economic growth through the study of 45 different literature reviews. His study resulted that there exists a strong significant relation between economic freedom and economic growth and also that if any study is done on economic growth by neglecting the effect of economic freedom that study would not give realistic results. Study also said that if there is physical investment than it will give power to the economic freedom.

PolpatKotrajaras, BangornTubtimtong, and PaitoonWiboonchutikula (2004) studied that FDI in East Asian countries has increased in the past decades. Studies indicated that this growth is linked with the economic growth. In this study he took a group of 15 East Asian countries ranked according to their economical level. He used panel data analysis along with cointegration method. Study showed that economic growth of each of the country was related with financial market situations, institutional development in the country, governance level and better macroeconomic policies. Study further described that these East Asian countries should emphasize on the fundamental structure development, human capital development and improvement in the facilities for enhancing the trade and creating favorable trade climate. Key factors used by the author international trade and its impact on economic growth. According to study there was huge capital inflow in East Asian countries because of the attractive business environment of East Asian countries. During the last decade from 2004 East Asian countries have developed good environment for investments for the foreign investors.in that era growth rates of all these countries were very high and the potential for gain was very high for the foreign investors...Literature says that investment inflows should offer huge benefits to the hosting countries by increasing allocating resources, facilitating in crossborder transformation skills knowledge and technology, by improving risk diversification, and creation favorable market structure. Short term capital inflows will make the economy unstable. For east Asian countries it seems that FDI is one of the most important factor for economic growth and these FDI should be for the longer period of time and it is common in financial sector that FDI is supposed to be more stable and long term investment for any economy. This long term stability and long run

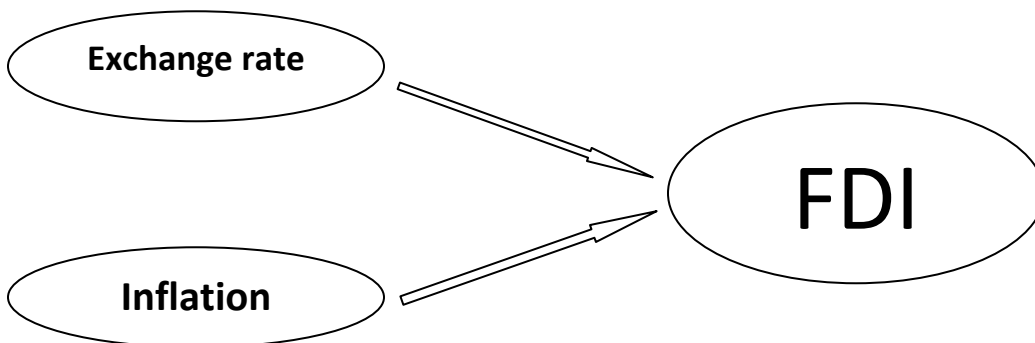
impact is beneficial for both of the investor and the domestic economy of the country where investment is done this was told by Sarno and ASEAN in August 2011 and Wiboonchutikula et al in (2001). FDI is also improving the economic growth of the host country. It creates stability in the economic condition of the host country in the form of in the form of earnings from the foreign countries.

Brems (1970) explained that increased FDI will create capital stock and thus will create growth in the host country. According to neoclassical model impact of FDI on any economy is same as to the impact of its domestic investment so there should be an additional benefit for the host country offered by FDI rather than creating growth instability in the host country. Some models have shown that FDI is more important factor for economic growth than domestic Investment. The logic is that FDI encourages the transfer of new technologies and production techniques in the host economy. So according to these factors FDI contributes in positive direction instead of creating instability in the economy of host country. This leads to the long run growth path. Study also explained this long term growth as a result of skill building, technological developments, infrastructural development, and human capital building.

Eatzaz Ahmad and Saima Ahmed Ali (1999) worked on inflation rate and interest rate. In their paper they studies determinants on inflation rate and exchange rate side by side over the years in Pakistan. Their study indicated that adjustment of inflation and exchange rate was not very active. Change in any of these factor was not showing rapid change on the other in the era of 1990s. Different policies were being made at that time and those policies were showing slow impact on the factors. There was need of effective system to implement the policies rapidly to control the delayed impact of the government policies on the monetary authorities. Since 1982 after floating the money, rupee has taken a lot many folds over the years and has showed significant variability. Rupee has been very instable over the years there was good growth times as well but rupee has also seen some bad times. There was a devaluation effect in near 1999 but it was due to some economic problems but for a normal citizen persistent devaluation of rupee is more concern able. In Pakistan we think that main factor of inflation is devaluation of money (rupee). While the main issue is not the devaluation of money in Pakistan it is more of the increase in the prices which causes the money to decrease its purchasing power. So most of other studies have shown that main reason of inflation is increase in the prices of imports which could

be the reason of inflation level in the other country as well from where we are importing or the difference of economic conditions in the other country. Possibility of devaluation of money could be also the increasing prices in the world. So these issues can cause our money seem to devaluate. All these factors were also discussed by Ahmad, Ram (1991), Hassan and Khan (1994) and Khan and Qasim (1996).

THEORETICAL FRAMEWORK



FDI

FDI is an investment which is done by any individual or any company in any other country through establishing a new business structure in that country or by acquisitions of any business in the other country. So both the ownership and having the controlling power through acquisition all are considered as foreign direct investment. FDI is different from FPI. In FPI only a small portion of shares or bonds or any other security is purchased for short term in any foreign based company. We call any investment an FDI when the investor has full ownership, power of controlling it fully or power of making decisions of the foreign business. Some regulations say that 10% of ownership gives a significant power of influencing any decision so this will be also considered as FDI

FDI'S ADVANTAGES

Advantages and disadvantages of FDI are subject to the matter of perspective that how you see that investment. FDI can be beneficial for the originated country but possibilities are that it could

be disadvantageous for the host country and sometimes FDI becomes a better deal for the host country due to any changed factor. It always depends on the changes in the economic situations.

Market excess

FDI is one of the best way to explore the foreign potential market. In some countries there are strong restrictions or barriers for the foreign companies to enter. In those areas there is larger potential of accruing larger market.

Resources

FDI can also be proved as an effective way of getting to natural resources. Countries where rare resources are present they attract huge FDI inflows. Companies invest billions on oil fields, gold and diamond mines etc.

Cheap production

FDI is very effective means of reducing cost of production. These days all the companies have shifted their production plants in the areas where cheap labor and cheap resources are available. Some countries have low taxation or trading costs, this is also attractive for the FDI.

FDI also offers advantages to the host country in different Ways

Technological Benefits

When any company establishes its production plant in any country it brings new technology to the host country which contributes in economic growth of the country.

SKILL Development

New technology, trainings and high tech facilities will increase the skill level of the individuals of the country.

Increased Revenue

Where will be growth in the revenue of the country?

Employment

With the new businesses and expansions there comes growth in the employment level of the country.

If we take an example of a large company being established in the developing country then it will obviously need labor, machinery, material and other equipment for structure building this will bring foreign investment in the country, create new jobs. After Completion Company will need employees to run that plant so will obviously hire local labor they may be they need local suppliers to supply the raw material, they will need all kinds of services from different service providers. This will create employment and new business with the new opportunities to work with a large multinational. This will increase income level of the people and spending will increase, money circulation will start.

On the side of government there would be increase in Tax revenues. People will earn and income tax revenues will go to government treasury. This all will happen through the new business developments. Government can use these tax revenues in building structures, roads, and educational institutions for people, hospitals and other basic facilities

Flow of FDI

Foreign direct investments are generally made in the open economies not in the closed or restricted economies Open economies provide better workforce, favorable business environment and better opportunity of growth. FDI is not only the flow of capital investment it is also about the flow of technology and knowledge.

Foreign Direct Investment Methods

FDI has different ways like opening a new business in any foreign country, opening a subsidiary of a parent company, acquiring any company in other country, controlling the interest of any foreign company or through mergers or acquisitions. FDI are generally categorized in three forms. Horizontal, vertical or conglomerate. Horizontal FDI is opening same kind of business in any foreign country. A vertical integration is if a company opens a different kind of business which is also related with the previous type of business than this is vertical integration of business. Third type conglomerate type of business is like opening a different business in the

foreign country and the investor has no previous experience in that final and nor is its previous business related with that new business. Mergers and joint ventures are this kind of businesses.

Exchange Rate

Exchange rate is the value of a country's currency with respect to the currency value of other country. It has two components:

Domestic currency and foreign currency. These currencies are converted on the basis of these respective values. Their rates of exchange are also known as quotations, Rate of foreign exchange and forex rate. Most of the currencies use US dollar as the base currency. In some countries euro, pounds, Australian Dollar or New Zealand dollar are also used as base currencies. These exchange rates are set in the foreign exchange market. This market is open to different buyers and sellers. Currencies are traded at large level and their trade continues 24 hours except on weekends.

Exchange rate fluctuation

In Market exchange rate will change when there is change in the value of either of the two component currencies. Value of currency is also dependent on the demand of the currency whenever there is more demand for any currency its value will increase and whenever demand decreases value of currency will also decrease.

Exchange rate change is dependent on the changes on both of the component currencies. If we talk about Pakistani rupee and US Dollar then change in currency rate will depend on both of these currencies. If there comes higher demand of Pakistani rupee in the foreign market than demand for Pakistani rupee will increase and this increase in demand will also increase the value of Pakistani rupee which will increase the exchange rate of Pakistani rupee, likely if the demand decreases for Pakistani rupee then value will also decrease and so will the exchange rate of Pakistani rupee.

Looking towards other side to the corresponding currency which is taken as US dollar. If there is higher demand of US dollar in the market then the value of US dollar will increase and this will give negative relation to Pakistani rupee and in the same way is that demand of USD

decreases than its value will decrease as will and the corresponding Pakistani currency will appreciate against it.

This demand of money is based on the business transactions or the speculative demand of money. Business or transaction demand is related with the increased business activity, employment, and increase in GDP.

State Bank is the regulatory authority in Pakistan it is always trying to stabilize the impact on exchange rate due to business transactions which is a complex task. To control and accommodate the effect of speculative activities is very difficult for state bank. Demand for foreign currency depends on the interest rates as well. When there is higher interest rate return than demand for the currency increases as more and more people are interested in investing more. Here big speculators can force the state bank to buy back the own currency. Depreciate the currency and then after deprecation these speculators buy back the money at low rates and get profits. For the shipping companies there could be larger impact on their costs so most of the carrier companies charge CAF to compensate the risk of fluctuation. Inflation rate of a country is highly associated with value of the currency and its exchange rate with the other countries. Inflation is one of the many factors which determines the change in the exchange rate of any country. Inflation have a negative effect on the exchange rate of the country and the value of currency. Inflation means that ability of the currency to buy something is decreasing and the rates are high in the market. Very low inflation rate is not much favorable for the exchange rate of the country but very high inflation rate will affect the exchange rate in negative way.

Inflation and Interest rate:

Inflation also have a close relation with the interest rates and impact on interest rate on inflation will again effect exchange rate. Countries always keep trying to keep interest rates and inflation in control but it is not that easy because ether relation is very complex and creates high difficulties in managing that balance. Higher interest rates attract FDI which will obviously create higher demand for the currency of the country which give positive impact to the exchange rate but at the same times these higher interest rates will increase the inflation rate of the country which is negatively related with the Exchange rate of the country. Low interest rates increase the spending pattern of the consumers which cause money circulation from one hand to other. This

trend is good for economic growth and this also influences the currency value of the country but this trend does not normally attracts FDI.

Value or exchange rate of a country can be assumed but the will of the people to hold the currency of that country for the longer Period of time. Investors are always looking for the stable growth and stable economy. These are factors are related with the safety of the investors capital to hold it in the form of that currency. Profits and revenues are the concerns which comes after the safety of invertor's capital. In politically and economically unstable country like Pakistan it investors are not very much willing to hold their investments for the longer period of time. Reason is that in an unstable environment there is risk of sudden devaluation of the currency which can cause the investor huge loss in capital. So investor will hesitate in investing in these economic conditions or to hold any previous investment for the longer period of time.

Other Factors effecting Exchange rate:

Inflation rate is not the only determinants of exchange rate of any country. There are multiple other factors which have significant effect on the exchange rate of a country like economic growth, trade balance, interest rates, debt level of the country and much more these all effect the exchange rate of the country. All the investors look upon all these economic indicators while investing in a country. For every country there are some major indicators which are most considerable for the investor. That dominant factor is most important for the investor and his decision is based on that major determinant of economic situation of the country.

At times the interest rates of the country are acting as the major economic indicator and at some other times inflations the major factors. So it depends on the present situation of a country that where its economic indicators are leading it.

Exchange rate are just the relative rate of these currency to buy and sell. These currencies have no intrinsic value. These inflation rates, interest rates and other may be in the most favorable conditions in a country but they can still be less than the other country so there will be relatively lower exchange rate of one to the other one.

Variables

Given Theoretical framework gives the relationship of independent variables inflation and exchange rate on the dependent variable FDI. Frame shows that Inflation do not have only direct impact on FDI but also an indirect effect through effecting Exchange which further effect FDI.

Research Methodology.

Study is based on secondary data which is collected over the series of time. Study chunks the long term impact of change in exchange rate due to inflation on FDI in Pakistan. Data of 5years was collected for this research from 2011 to 2015 for this research. Data was collected from website of State Bank Of Pakistan. Correlation and regression tests were applied through SPSS software to examine the relationship between the factors. This is a descriptive study because we already have reliable data from an authentic source. So that data is the right benchmark to check the relationship of dependent and independent variables. Type of investigation is relational study because here we are studying the relationship of different variables over the period of time that how these factors have reacted to the corresponding changes.

CHAPTER 3: Research Methodology

Data Collection and analysis:

Data Source:

Data was collected from the website on State Bank of Pakistan.

Data Type:

Secondary Data from reliable source of STATE BANK OF PAKISTAN.

Duration of Data:

Time series data was collected for 5 years (2011-2015) data was collected for exchange rates and FDI

Research Tools:

SPSS was used to analyze time series data for 5 (2011-2015) years to examine the relationship between Exchange Rate and Foreign Direct Investment

Results:

Results are analyzed through:

1. Correlation,
2. Regression
3. ANOVA techniques.

CHAPTER 4: DATA ANALYSIS

ANALYSIS

Data analysis techniques are used to test the relationship or impact of variables through various test including regression, correlation, and t-test etc.

4.1: Cronbach's Alpha

Case Processing Summary

		N	%
Cases	Valid	5	100.0
	Excluded ^a	0	.0
	Total	5	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.597	5

Cronbach's alpha is used to test the reliability of any scale used for research, and its value must be greater than 0.5. ($p > 0.5$)

The Cronbach's alpha for this particular research is 0.597 which is greater than 0.5. This indicates the reliability of scale used in this research.

4.2: Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.984	.969	1.01889

a. Predictors: (Constant), Exchange Rate, Inflation Rate

R-square, is a measure of the proportion of variability in a data set that is accounted for by a statistical model that how well our variables predict the outcome. The value of R square must lie between 0-to-1.

The value of "Adjusted R Square" is 0.969 which is greater than 0.5 and closer to 1, this means there is a strong fit between our predictors and outcomes

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.367	2	65.184	62.789	.016 ^b
	Residual	2.076	2	1.038		

Total	132.444	4			
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a. Dependent Variable: Foreign Direct Investment

b. Predictors: (Constant), Exchange Rate, Inflation Rate

Y: Dependent (FDI)

X: Independent (Exchange rate & Inflation rate)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
	B	Std. Error	Beta						
1	(Constant)	-42.122	7.760					-5.428	.032
	Inflation Rate	-3.991	1.333					-2.994	.096
	Exchange Rate	73.139	7.918					.865	.012

a. Dependent Variable: Foreign Direct Investment

Beta shows that how much Y will be changed (increased or decreased) if X is changed by 1 unit.

This table shows that if X (exchange rate) changes by 1 unit, Y (FDI) will increased by 0.865.

Whereas if X (inflation rate) changes by 1 unit, Y (FDI) will be decreased by 0.280.

4.3: Correlation

Correlations

	Inflation Rate	Exchange Rate	Foreign Direct Investment
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Inflation Rate	Pearson Correlation	1	-.325	-.562
	Sig. (2-tailed)		.593	.324
	N	5	5	5
Exchange Rate	Pearson Correlation	-.325	1	.956*
	Sig. (2-tailed)	.593		.011
	N	5	5	5
Foreign Direct Investment	Pearson Correlation	-.562	.956*	1
	Sig. (2-tailed)	.324	.011	
	N	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Correlation shows relationship between dependent and independent variables that how much dependent variable is varying due to increase or decrease in independent variables.

- Value +1 exhibits strong positive correlation between variables, which means that increase in one variable will cause increase in other variable with same value.
- Value -1 exhibits strong negative correlation between variables, which means that increase in one variable will cause decrease in other variable with same proportion.

Correlation table shows a negative correlation between Inflation rate and FDI with a value of -0.562. But it shows a positive correlation between Exchange rate and FDI with a value of +0.956.

Discussion:

This research was held to find the combined effect of inflation and exchange rate on FDI of Pakistan. Test results showed positive outcomes. In correlation there was positive impact on exchange rate on FD. So it shows that with the increase in Exchange rate there would be increase in FDI inflow in Pakistan and with the decrease in FDI investors will leave the boundaries of Pakistan. The Hypothesis of the research was proved that Exchange rate positive relation with FDI. Pakistan is rich in natural resources. It is also in developing stage. So Pakistan provide

opportunity of low costs of labor and openness for the .Foreign investors to invest in the Pakistan. All these factors are also favorable for attracting FDI. R.Square value was 68% in the regression test which shows that model is accurate and independent variable is influencing the dependent variable for more than 50%. In NOVA test significant F value in 0.033 which is less than 0.05. This shows that independent variable is highly influencing the dependent variable.

CHAPTER5: CONCLUSION & RECOMMENDATIONS

Conclusion

Pakistan is a developing is in developing stag, it have good fortune in natural resources. In Pakistan we have low cost human resource and a low cost business environment. All these factors attract FDI. Seeing to the Data collected for past 5 years it seems that there is very slow FDI growth in Pakistan during the period of 2011 to 2015. The main focus was to determine the effect of Exchange rate on FDI. This effect was based on the data of thirty years. Although there relation and dependency is positive but the rate of FDI inflow growth is not seem to be very good.

Recommendations

FDI is very important for the economic growth of a country in the present era. So this is important for the government to formulate the polices in order stabilize exchange rate at higher positions for increment in the inflow of FDI. Policy makers shod think of the better policies to which result in better output scenarios for the exchange rate. Other macro-economic factors which are determinants of Exchange rate should be controlled. Good governance and better business environment should be provided in order to increase FDI in Pakistan.

Further Research Direction:

Researchers can further study this aspect with the relation and impact of other variables which further effect the exchange rate and FDI through direct and indirect way. Microeconomic factors can be used along with Exchange rate to check the impact on FDI.

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