Impact of Democracy on Foreign Direct Investment: An Empirical Study of Pakistan Economy

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Abstract

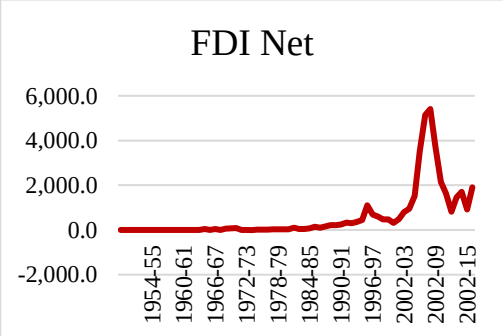
This study empirically examines the effect of Democracy on Foreign Direct Investment in Pakistan using annual time series data from 1978 to 2015. Democracy, Gross Domestic Product (GDP), Inflation and the Trade Openness taken as independent variables and the Foreign Direct Investment (FDI) as a dependent Variable. Cointegration, rolling window test, and error correction model indicate the existence of positive significant long run and short run relationship of FDI & Democracy. Result also indicates that all the variable is significantly impact on the FDI in Pakistan context. In contrast, Uni-causality exists in the model that FDI effect on Democracy. In light of the findings, it is suggested that the government should focus on the stability of the law & order situation in Pakistan that we can gain more FDI from the other countries and government should focus more on monetary policy in order to ensure economic growth in the country. It is also recommended that further research should be conducted to find out such different variables which can impact on the Foreign Direct Investment of the country and economic growth in Pakistan.

Keywords: FDI, Democracy, Cointegration

1. Introduction

A country that is on developing phase always need Savings, inflows or foreign investment for the development. Foreign direct investment (FDI) is an investment that is occur by an individual or a company in a country that has business benefits in another country, either by beginning business or attaining commercial assets in another country, such as the ownership or control of a foreign company. FDI always plays a positive role in the economy and the development of the company. In case of Pakistan, FDI plays a vital role in the development of Pakistan. Figure 1 shows increasing trend in foreign direct investment due to better political situation in Pakistan, that is also impact on the Pakistan's economic situation. Through the different researches and literature, it has been noted that political redeem significantly impact on the foreign direct investment of any country. My research topic is also based on the "Impact of Democracy on FDI". Pakistan has to face four times Martial law in Pakistan's history. The first Martial law was held in, Field Marshal Ayub Khan (1958). Second was held in the era of General Yahya Khan (1968 to 69). Third was in the era of General Muhammad Zia-ul-Haq (1977 to 79). And the last Martial law was held in the era of General Pervez Musharraf (1999 to 2001). These democratic governances have a strong and the negative impact on the FDI inflows in Pakistan.

Figure 1 its represent the declining trend after 2000, and we know that the foreign direct investment is increasing year by year due to better infrastructure, and better law and order situation in Pakistan as we compare it to the past. The main reason of declining the FDI after 2000 because inflows is increasing year by year, but outflows is also increasing day by day. So there is a larger amount of FDI outflows to FDI inflows that's the reason accumulated FDI shows declining trend in the graph.



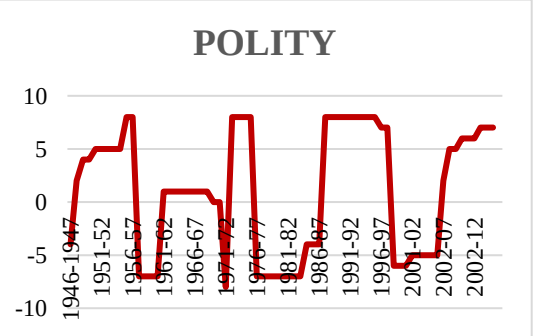


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Figure 1: Trend of Variables

Polity scores can be measured by with the help of above table. Foreign direct investment increases when the country face political stability and good infrastructure, that's the reason that in democratic era Pakistan face less or minimum foreign direct investment from the other counties. It has been noted through the researches and different literatures that political redeem, inflation, trade openness, GDP, Exchange rate, Political instability, growth rate, and population has significantly impact on the FDI. There is a vast empirical literature on the determinants of FDI, however, only a few of the studies include democracy as an explanatory variable.

Polity Score ranges from -10 to +10	Max. Value	Min. Value
Autocracies	-10	-6
Anocracies	-5	5
Democracies	6	10

The aim of this paper is to investigate the relationship between democracy and FDI. We estimate a time series data where we relate the measure of democracy with the foreign direct investment, Inflation, Gross domestic product (GDP), and trade openness. The analyses are based on the data of Pakistan over the period 1978-2015. This paper will be based on the democracy and its determinates and their impact on the foreign direct investment on Pakistan Economy.

2. Literature Review

This section is basically emphases on the study the effect of the Democracy, Trade Openness, GDP, and Inflation on the Foreign Direct Investment in Pakistan context. The main objective of this section is to discuss a background of previous research done by different researchers in different countries who have done research on this topic. This will help to find out the relation between Democracy and the FDI, that how strongly democracy or political situation can be impact on the foreign direct investment in Pakistan. There is not very large body of research literature, on Impact of Democracy on FDI. In Pakistan, there are very few papers on this topic. Many of the studies just focusing on the determinants of the FDI or determinants of the Democracy. In this chapter first we are focusing on the empirical literature review, then theoretical literature review related to the topic that is under consideration, Impact of Democracy on FDI.

Akenbor & Tennyson (2014), investigated the relationship between foreign direct investment (FDI) and its various determinants in a democratic society. They use panel data, and the data was taken from the World Development Indicators of the World Bank Group Central Bank. Regression analysis was used to test the data. The result of this study shows that natural assets, infrastructure, size of the market, domestic credit, exchange rate, legal system and population health of the country have a positive impact on the FDI; on the other hand corruption, human capital development, political risk and trade openness have a negative correlation or impact on FDI. They recommended that the Nigerian government should provide the necessary incentives for investment and production activities to strive as well as creating an enabling environment for substantial growth in GDP.

Mathur & Singh (2013), determine the relationship between the foreign direct investment, corruption and democracy. They find out through their study that making decisions about where to locate capital, foreign investors upkeep about economic freedoms, rather than the political freedoms. They mentioned in their research paper that if economic independences are not definite, then more democratic countries might receive less Foreign Direct Investment (FDI) flows. The panel were used in their research paper and examine the data of 29 countries, over the time period of 1980-2000. They conclude their research as CP plays a significant role in investors' decision that where to invest. The less flows of FDI to that country who is perceived to be more corrupt a country.

Asiedu & Lien (2010), They examine either natural resources change the relationship between FDI and democracy. They use linear panel-data model using data, time period they used is 1982-2007, 112 developing countries, and they find that there is some critical value of the share of minerals and oil in total exports below which democracy enhances FDI, and above which democracy reduces FDI. They conclude

that as per their research there are 90 countries where an development of democracy may boost FDI (means positive impact), and 22 countries where an upsurge in democratization can diminish FDI (means negative impact). It means the effect of democracy on FDI depends on the importance of natural resources in the host country's exports. Etten (2008), investigate the relationship between the level of democracy and the amount of FDI inflows. He used gravity analysis to examined the tests. Democracy is used as a proxy for investment climate in their paper. For the measurement of democracy, the Kaufmann indices were used. The gravity analysis results show that, as not all of the Kaufmann indices show the anticipated optimistic sign. But the significance levels of all the democracy indices were high. General, the positive effects compensate the negative effects, resulting in the conclusion that a democratic country certainly might collect more FDI.

Busse & Hefeker (2005), explores the linkages between political risk, institutions and foreign direct investment inflows. They used many econometric techniques to test the results and a sample size they were considering was 83 developing countries over the time period of 1984 to 2003. They used 12 different indicators for political risk and institutions were in the empirical analysis. Independent variables that they have taken in their study are Gross national income per capita, real Growth rate, ration of import and export (GDP Trade), Inflation, and political instability, and the results shows that government stability, the absence of internal conflict and ethnic tensions, basic democratic rights and guaranteeing law & order are highly significant determinants of foreign investment inflows of any country.

Ahmed Mushfiq Mobarak in their research suggested that political stability has greater impact on the FDI of any country and its belongs to the countries development and long run growth. Because dictatorship makes uncertainty which inactive economic growth. Roberto Rigobon and Dani Rodrik research paper estimates that democracy and rule of law have positive and significant effect on economic growth that cause increase in FDI in the country or that cause development of the country. Timothy Besley and Robin Burgess examine the degree to which capital is circulated equally among members of society, it can be measured as the element of economic growth that effects in the long run. So, it is observing that pro-poor taxation, distribution of land, existing of new markets and institution in civil society, in democratic policies are more suitable towards the society related policies. Jose Tavares and Romain Wacziarg explore that circulation of income or money is not as good as in dictatorship due to personal favourites than in democracy. They originate that income inequality can be minimize, if democracy continues for long run in the country. Huntington (1968) anticipated a negative or non-linear relationship between democracy and economic growth that is due to government obliged to enhance the expenditures by people's need in the democratic developing countries. That's the reason, due to reducing of surplus, this situation might reduce the chance for investments that may cause of sluggish the economic growth.

Pfeffermann & Madarassy, (1992) stated that there are few critical variables have been acknowledged as main elements of FDI (foreign direct investment) that are; domestic market size consumer price index, exchange rate, interest rate and macroeconomic policies. Their conclusions show that the domestic market size of the country & capacity utilization is significant and positively correlated to FDI, on the other hand inflation rate and exchange rates are negatively correlate to FDI and increase in inflation rates might cause of increase in costs of imported capital goods and inputs, whereas an unbalanced exchange rate also produces foreign exchange risk and indeterminate investment environment.

Tavares and Wacziarg (2001), recognised the concept that rate of growth of physical capital decline, when the government enforced to increase the expenditure for supporting the democracy, which is useful for long term growth of any country. Polterovich and Popov established the concept that democracy is not significantly important factor of long run economic growth in countries like Pakistan, Brazil, Honduras, Panama, Peru and Tahiti. Kisangani in 2006, also indicates with the help of different statistical tests that there is not any significant connection between democracy and economic growth. Nelson &Singh developed that because of appropriate government involvement in the market, the high economic growth has happened. Over the past few years declining of political rights and civil liberties shows the intensive economic growth rate.

Head & Ries (2008), Eicher, Helfman, & Lenkoski (2010) are focused on the set of potential FDI determinants flows, they were focused on the cross-country FDI patterns, that indicates that there is a

positive and the significant relationship between the democracy and the economic growth of the country. According to Koreem, Kari, Alam, Chukwu, David & Oke (2012), indicates that FDI (foreign direct investment) is relevant or appropriate for improving a country's economy. It causes improves the current capital to indorse economic growth. They conclude that, with the help of attaining new technologies and skills opportunities as well as method of production, It might encourage sustainable economic development. Asiedu & Lien (2011) indicated that various international development agencies, such as the World Bank consider FDI as one of the most effective tools in the global fight against poverty and the economic growth. They mentioned that if counties law & order situation is stable in the country so there are many chances to increase in the foreign direct investment in the country.

3. Methodology

This section describes the research design used for this study. Basically, this chapter describes the research instrument used that is used in this study, the method which are used to gather the data, and statistical techniques used to analyze the data being collected. The nature of research is quantitative because time series data of Pakistan is used in this study. This research is designed to explore the relationship between the FDI with the Democracy, inflation, Trade Openness and the gross domestic product (GDP) of the Pakistan. This paper is based on the time series data and the 39 years' data has been taken to conduct the measures and result. There is 1 dependent variable that is FDI (Foreign direct investment) and four independent variables that are democracy, Inflation Rate, Trade Openness and the GDP. This research mainly depends upon the secondary data because data is conduct through the different authentic web sites and the literature is taken from the different research papers and the research articles. The quantitative data taken from the authentic web site that is World Bank Economic Data. The data was run on the Eviews software and the different research techniques and the instrument are used to test the result. Regration analysis is used to test the impact of independent variables on dependent variables. And in the following regression equation is given;

$$FDI = c + b1(Demo) + b2(INF) + b3(GDP) + b4(OPE) + e$$

FDI = Foreign Direct Investment (Gross)
Demo= Democracy.
INF = Inflation rate
GDP= Gross domestic product.
OPE = Trade Openness (measured as % of trade to GDP)

The statistical program used for the analyses and presentation of data in this research is the EViews (Econometric Views). Different test has been applied to test the data. In the next chapter, we have applied different tests that are, Stationarity Test (to check the stability or consistency of the data), Cointegration Test (to check the trend and series of the data, or to check the long run relationship of the data), then OLS has been run, in which the regression analysis applied to test the impact of independent variables on the dependent variables. Then variance inflation factor test (VIF), Stability test, Auto-Correlation test have been applied in this study and result will be show in the next chapter. Than in the end the Causality Test has been applied (to check the cause of dependent variable on the independent variable), and Error Correction Model has been applied to check the trend of the model, short run or long run).

4. Analysis of Data

In this chapter, the results of the empirical analysis are reported and presented. To facilitate ease in conducting the empirical analyses, the results of the descriptive analyses are presented first, followed by the inferential statistical analysis. After data gathering, through the World Bank, data analysed by the software EVIEWS (Econometric Views) version 07. The package is chosen because of its convenience in analyzing and interpreting data. (Barry, 1998; Brace, Kemp & Snelgar, 2000; Bryman & Cramer, 1999; George & Mallery, 2003; Salkind, 2000). This chapter mainly consists of many parts; in which different test has been applied to test or analysed the data. The test that I have been used in this chapter is Stationary test, Cointegration test, OLS (VIF, autocorrelation Test, Stability Test) these all test has been applied to test the hypothesis that either there is significant impact of the independent variables (GDP, Inflation, trade openness, and democracy) on the Dependent variable (Foreign Direct Investment).

Table No: 1 Stationary Test

Variables	ADF Test Statistics			
	LEVEL		LEVEL 1	
	I (0)	I (1)	I (0)	I (1)
TRADE	0.0429	0.1732	0.0000	0.0000
CPI	0.0002	0.0015	0.0000	0.0000
GDP	1.000	0.9975	0.0002	0.0002
FDI	0.0468	0.0289	0.0009	0.0057
POLITY	0.1344	0.3571	0.000	0.000
*Just Probability Value have been taken in this table.				

A stationary time series help to identify the statistical properties such as mean, variance, autocorrelation, etc. are all constant over time or not. Stationarity tests check that either data is stationary or Non-Stationary. There are two different approaches are used for this purpose that are: stationarity tests such as the KPSS test that consider as null hypothesis that shows that series or data is not stationary. There are basically 2 models that describe the stationarity of the series or data, that are Dickey Filler Test and the Phillips Perron Test. The augmented Dickey-Fuller test (ADF), or the Phillips-Perron test (PP), for which the null hypothesis is on the opposing that the series possesses a unit root and hence is not stationary. While these two concepts of the trend-stationary and difference-stationary series, both "trending" over the time, but correct approach needs to be used in each case for the efficient results.

Table 1 shows that all the variables are stationarity at 1st difference, means there is a standard variation or distribution in the values of data over the time period or the data or series are stable or consistent over the time period. The above table shows that Null Hypothesis has been rejected that Series is not Stationarity, because the probability value of the Phillips-Perron test shows that series is Stationarity. So, result has shown that series or data is constant over the time period. This test also shows that trend exist in the data.

Table No.2: Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.1 Critical Value	Prob.**
None *	0.500895	61.87398	56.28504	0.0349
At most 1	0.334834	32.68651	37.03536	0.2304
At most 2	0.200073	15.56231	21.77716	0.4120
At most 3	0.096447	6.186422	10.47457	0.4136
At most 4	0.044839	1.926766	2.976163	0.1944

Cointegration Analysis is basically used to test the trend of the relationship of the data, that can be short run relationship or the long run relationship of the data. There are mainly two types of the test that use to check the relationship of the data that are Johansen Test and the ARDL. Johansen test mainly used for the large number of data and the ARDL use for the small sample size. Cointegration Analysis just tell us the trend of the relationship, but not the nature of the relationship. Johansen Test has been used to test the cointegration of the variables or to check the trend of the data. Table 2 shows the results of the cointegration. We take 10% critical value to estimate the cointegration analysis, and the results show presence of two cointegration vectors. These results also show the existence of long-term relationship for the volatilities of focus variables. The Null Hypothesis H0 of the cointegration analysis is, there is No Integration. The probability value is less than 0.1 or 10% so it indicates that long run relationship exists in the data, and the Null Hypothesis has been rejected because long run relationship exists in the data.

Table No. 3: Regression & Variance Inflation Factor

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	-6927.088	3025.001	-2.289946	0.0286	NA
POLITY	-58.68158	28.83422	-2.035137	0.0499	4.502164
TRADE	159.1390	78.01099	2.039956	0.0494	4.841370
GDP	3.142800	1.114420	2.820121	0.0081	1.865036
INFLATION	66.56989	28.81920	2.309914	0.0273	1.325514
R-squared	0.515666	Durbin-Watson stat		0.693738	
Adjusted R-squared	0.456959	F-statistic		8.783698	
Prob(F-statistic)	0.000061				

Regression Analysis is basically use to test the relationship of the dependent variable with the independent variables. The above table 3 shows that all the independent variables (Democracy, Trade openness, GDP, and the Inflation) show the positively & significant impact on the dependent variables (FDI, Foreign direct investment), because result shows the probability value is less than 10% or 0.1.

FDI= -6927 + -57(Demo) + 67(INF) + 3.14(GDP) + 159(OPE) + e

The above equation shows that with increase in 1% FDI will decrease the -57% of democracy, and with increase 1% of FDI will 67% positive impact on inflation, and if FDI increase 1% than it will increase the GDP by 3.14%, and with increase 1% in the FDI will increase 159% trade openness of the country. In the above table value of the R-Square shows that 51.5% variation has been captured by this model. And the value of the Adjusted R-Square shows that 45.6% fitness of the model, that is the desired property of a goodness-of-fit statistic. The value of the F-Statistics shows the combine impact of the independent variables on the dependent variable, and the results shows the positive and the significant impact of these variable on the dependent variable because the probability value of the F-Statistics is less than 10% or 0.1. but the value of the Durbin-Watson states indicated that there is auto-correlation exists in the model, because its value is greater than the 10%.

Error term should be random, it should not be systematic. Auto-Correlation is mainly used to check that either Error Term Correlate each other or not. When error term autocorrelated its dangerous. Basically Durban-Watson Statistics and Serial Correlation Test used to check the Autocorrelation in the model, and the Null Hypothesis of Autocorrelation is No Auto Correlation. Table 4 shows that probability value of F-Statistics is less than 10% that also shows the existence of Autocorrelation in the Model. In this research paper, we used HAC tactics to minimize the impact of the Autocorrelation in the model. So further, autocorrelation would not impact on the significant of the Model.

Table No.4: Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	27.55712	Prob. F (1,32)		0.0000
Obs*R-squared	17.58263	Prob. Chi-Square (1)		0.0000
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1561.835	2087.897	0.748042	0.4599
POLITY	10.64117	25.42373	0.418553	0.6783
TRADE	-30.89494	56.21677	-0.549568	0.5864
GDP	-0.201701	0.467453	-0.431490	0.6690
INFLATION	-44.43236	26.41456	-1.682116	0.1023
RESID (-1)	0.733503	0.139729	5.249488	0.0000

Figure 2: CUMULATIVE SUM

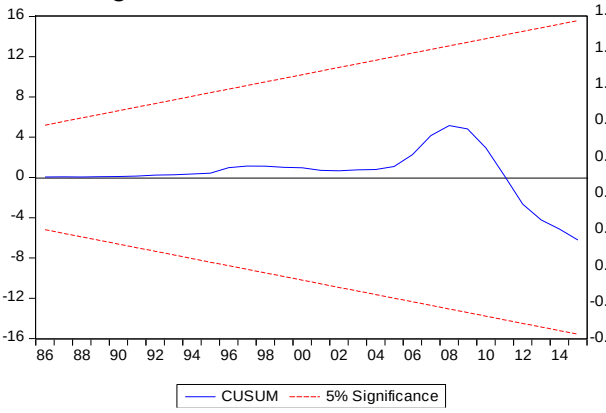
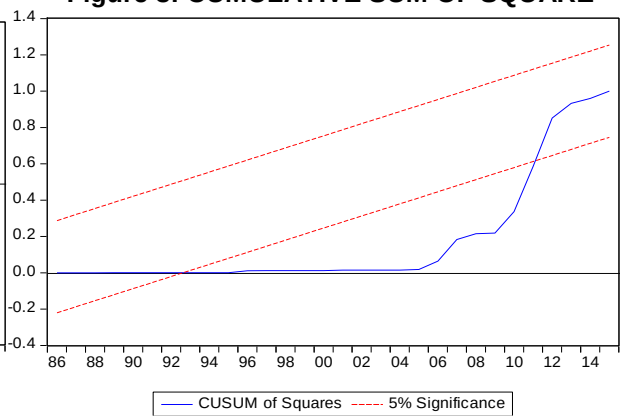


Figure 3: CUMULATIVE SUM OF SQUARE



Stability Analysis is basically used to measure either data is stable or not. It's also indicates the deviation in the model. Deviation in the model should be less than 5%, and for this purpose, Cumulative Sum and Cumulative Sum Square has been used to check either data is stable or not. The above Figure: 2 shows the test of Cumulative Sum, that shows the stability if the Coefficient and Cumulative Sum Square is mainly used to check the stability of the Intercept. The above figure:4.1 shows that the in the model Coefficient is stable, because the figure 2 shows that significant value of Cumulative Sum is placed in between the 5% significant value, that's shows coefficient is stable. Figure: 3, that's basically shows the results of Cumulative Sum of Square indicates that model intercept value is insignificant. Because its significant value is less than 5% that's show intercept value in the model is not stable. In the model, if Coefficient value is stable and the Intercept value is insignificant so we apply Chow Break Point Test to verify the stability of the data. But in the model Chow Break Point Test also shows the insignificant values through 1885 to 2000.

The main reason behind the instability of the data is Law and Order situation in the Country. In 23-March-1985 sworn General Zia as President, and in 31-December-1985 the Martial Law is lifted, amended 1973 Constitution revived, in 29-May-1988 President General Zia dissolves National Assembly and Junejo cabinet, in 17-July-1991 Pakistan unveils first battle tank Al-Khalid manufactured jointly by Pakistan and China, Lahore-Islamabad Motorway project was launched in 12-Januarey 1992, in 28-May-1998 Pakistan launched nuclear tests in Chagai hills in Balochistan & State Bank bans opening of new foreign currency accounts and suspends withdrawals, 26-July-1999 Kargil War ends between Pakistan and India, and in 14-August-2000 President Musharraf introduces Local Government Ordinance. These were basically the main issue that were occur in between the 1985 to 2000 era, and these reasons impacted strongly on the country's political and the economic situation. These were mainly the cause of instability in the foreign direct investment in Pakistan, GDP, Inflation Rate, and the Trade Openness of the Pakistan fluctuate in that era.

Table No 5: Causality Test

Null Hypothesis	Obs.	F-Statistic	Prob.
DEMOCRACY does not Granger Cause FDI	20	1.06442	0.3979
FDI does not Granger Cause DEMOCRACY		4.47420	0.0229

Causality Analysis is basically used to measure relationship between the variables that the impact of change in one variable bring how much change in the other variable. There are two types of Causality's that are Unidirectional Causality and the Bidirectional Causality. Unidirectional means one side impact of the variable on the other variable, and bidirectional means both side impact of the variables on each other and is both not cause each other it's called No Causality. The Null Hypothesis of the Causality is, Independent variable does not cause on Dependant variable. The above table shows that Democracy does not cause in FDI but FDI cause in Democracy. So, the Null Hypothesis has been rejected.

Table No 6: Error Correction Model

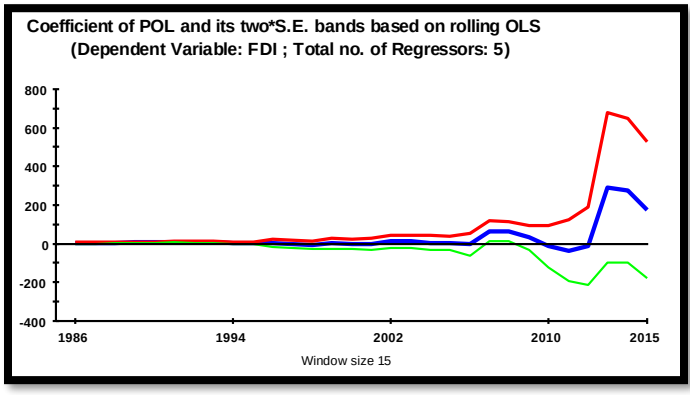
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-101.3584	54.54739	-1.858171	0.0745
D(FDI(-1))	0.728482	0.158043	4.609403	0.0001
D(POLITY)	2.989526	17.75711	0.168357	0.8676
D(POLITY(-1))	-8.718962	19.39613	-0.449521	0.6568
D(POLITY(-2))	-5.174163	10.46942	-0.494217	0.6253
D(POLITY(-3))	12.31607	11.84760	1.039542	0.3081
D(TRADE)	82.23181	33.97315	2.420494	0.0228
D(GDP)	3.255859	3.032060	1.073811	0.2928
D(INFLATION)	9.317290	18.99749	0.490448	0.6279
D(INFLATION(-1))	-16.64962	11.85947	-1.403910	0.1722
ERROR(-1)	-0.371861	0.070207	-5.296632	0.0000

An Error Correction Model basically relate to a type of multiple time series models and its theoretically-driven approach useful for estimating both short-term and long-term effects of one time series on another. The term error-correction relates to the fact that last-periods deviation from a long-run equilibrium, and the error, that influences its short-run dynamics. The above Table 6 shows the best fit results of the variables. This table shows that long run relationship exists in the model because the coefficient value of error is in -ve and the significant value of the Error is significant, that shows long run relationship exist in the model. The results also show that and variation in the table will be normalized 37.1% per year or we can say that the variation in the data will be normalized with in almost 3 years. In this table, we can see that focus variable is not significant although we have been applied 3 legs in this model. So, this table shows the best fit of the Error Correction Model.

Table No 7: Rolling Window

YEAR	POLR	YEAR	POLR
1986	3.4522	2001	0.6906
1987	4.4900	2002	11.5032
1988	5.1179	2003	11.4971
1989	6.2226	2004	5.6945
1990	7.0525	2005	4.02956
1991	9.3484	2006	-3.1785
1992	9.5585	2007	65.7848
1993	7.2589	2008	62.5953
1994	4.9071	2009	31.4512
1995	5.2236	2010	-13.9874
1996	1.42025	2011	-35.6816
1997	-1.0083	2012	-9.9441
1998	-6.7037	2013	291.393
1999	3.0790	2014	275.153
2000	-1.0545	2015	174.220

Figure 4: Rolling Window outcome



The above table 7, and the above figure 4, indicates that long term relationship exists in the model and its shows the stability of the model over the time. The result of the rolling window tests shows that coefficients are constant over the period of time.

5. Conclusion

The main objective of this research paper is to investigate the impact of the Democracy, GDP, Inflation and the trade openness on the Foreign Direct Investment in Pakistan, and how strongly they can impact on the FDI inflows in Pakistan. We have applied different tests in this research paper to check the impact of democracy on the FDI, and mostly results and the literature shows that Democracy impact on the FDI in Pakistan, also inflation and trade openness also impact on the foreign Direct Investment in Pakistan. The findings of stationarity test show that all the variables are stationarity at 1st difference, means there is a

standard variation or distribution in the values of data over the time period or the data or series are stable or consistent over the time period. The above table shows that Null Hypothesis has been rejected that Series is not Stationarity, because the probability value of the Phillips-Perron test shows that series is Stationarity. So, result has shown that series or data is constant over the time period. This test also shows that trend exist in the data.

The results of cointegration tests shows that, we taken 10% critical value to estimate the cointegration analysis, and the results show presence of two cointegration vectors. These results also show the existence of long-term relationship for the volatilities of focus variables. The Null Hypothesis H0 of the cointegration analysis is, there is No Integration. The probability value is less than 0.1 or 10% so its indicates that long run relationship exists in the data, and the Null Hypothesis has been rejected because long run relationship exists in the data.

The findings of regression equation indicate that, all the independent variables (Democracy, Trade openness, GDP, and the Inflation) show the positively & significant impact on the dependent variables (FDI, Foreign direct investment), because result shows the probability value is less than 10% or 0.1 and 51.5% variation has been captured by this model also the value of the Adjusted R-Square shows that 45.6% fitness of the model, that is the desired property of a goodness-of-fit statistic. The value of the F-Statistics shows the combine impact of the independent variables on the dependent variable, and the results shows the positive and the significant impact of these variable on the dependent variable because the probability value of the F-Statistics is less than 10% or 0.1. But the value of the Durbin-Watson states indicated that there is auto-correlation exists in the model, because its value is greater than the 10%, but we have use HAC to minimize the impact of autocorrelation in the model. Multicollinearity is doesn't exists in the table, means independent variable is doesn't correlate with each other because results shows that shows that independent variables are not correlate with each other, and the results also shows the value of VIF is greater than the 10% means there is no chance of multicollinearity in the Model. Results of Stability tests indicates that significant value of Cumulative Sum is placed in between the 5% significant value, that's shows coefficient is stable. On the other hand, the results of Cumulative Sum of Square indicate that model intercept value is insignificant. Because its significant value is less than 5% that's show intercept value in the model is not stable. The main reason behind the instability of the data is Law and Order situation in the Country.

The findings of Causality Analysis show that the Null Hypothesis of the Causality is, Independent variable does not cause on dependent variable. The results show that Democracy does not cause in FDI but FDI cause in Democracy. So, the Null Hypothesis has been rejected. The results of the rolling window also indicates that long term exists in the model and the coefficients are constant over the time period. The last test of error Correction Model table shows that long run relationship exists in the model because the coefficient value of error is in negative (-ve) and the significant value of the Error is significant, that shows long run relationship exist in the model. The results also show that and variation in the table will be normalized 37.1% per year or we can say that the variation in the data will be normalized with in almost 3 years. The result of error correction model also indicates that short term is does not in this model. Short term relationship is not existing in the model.

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