Socio – Economic Factors Affecting Foreign Direct Investment in Pakistan

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A B S T R A C T

Most of the developing countries facing the problem of capital shortage, one of the important reasons of it is low productivity or growth. These nations are intense need of capital inflow to reduce the mismatch is capital flow. FDI is one of the sources to over it or reduce it. Pakistan is one of the developing countries having lake of capital. Therefore, this aimed to investigate Socio-economic factors affecting FDI inflows to Pakistan. For this purpose, annual time series data is put into ARDL estimation technique. Stationarity tests are also used to know about the order of Stationarity. The results of estimation technique show that the cheap labors force significantly affect the inflow of FDI. Political instability and growth of GDP have also positive association with FDI inflow. Other important variables which are put into investigation and founded significant are related to nature of government and role of and quality of institutions. This study suggests on the bases of the findings that policy makers may give proper attention towards the quality of labor force which to be improved with education and skill. Institutional role and quality should be improved to attract more FDI to reduce or overcome capital shortage.

INTRODUCTION

Disequilibrium in saving and investment is one of the common problems of developing countries; therefore, they are in constant need of foreign capital inflow to finance their deficit. Not only in developing economies, developed economies also finance their deficits due to shortage in domestic saving. These deficits may be recover or reduce by capital inflow to home economies in the form of capital inflow of Foreign Direct Investment (FDI) and Remittances. However, for capital starved developing country like Pakistan, FDI is important to cover the existing gap. During pre-liberalization era, flow of FDI to developing was virtually negligible. However, the post-liberalization period witnessed strong FDI flow to developing economies. In the decade of 1980s, most of the developing countries change their policies about restrictions on foreign investment and facilitate investors in order to increase the volume of foreign investment (Aitken & Harrison, 1999). Among the researchers, the most influencing determining factors of FDI inflow to developing countries are natural resources and easy access to the potential labour market. Lager labour market contributes positively to attract foreign investors to invest in the developing countries (Awan et al., 2011; Hussain & Kimuli, 2012; Erdal, 2002). Foreign investment plays a strategic role in the process of growth and development. Because, FDI can

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be used as transmission belt to reduce the gaps between saving & investment, to get managerial skills, to adopt advanced technology and to utilized the unemployed and underemployed labour force for production purpose. It can be used to moderniz the domestic economy through technological changes in the production process. It also a link between the low resources and high resources oriented economies. It is obvious that FDI is an instrument and a dominant factor in influencing the development process of the world economy. The flow of FDI needs a suitable environment for a country. Its flow to any country is affected directly or indirectly by the investment policies, political environment, law and order situation and the long-term policies for the foreign investors.

Until 2008 the inflows of FDI to Pakistan shown continues increase. Afterward, this trend begins to decline. Factors responsible for this slump of FDI are the Global financial crisis, slow economic growth, instability & terrorism. The successful growth experience in the Far Eastern countries due to FDI which insured the flow of capital toward the region, many developing countries including Pakistan are seeking the role of FDI in enhancing the growth performance. The experience of Far Eastern countries shows that FDI not only affects growth but it also depends on the growth performance of the host country. Akbar & Akbar (2015), Attaullh et al. (2004) and Mehmood & Farid (2013) demonstrated that political and economic political instability and terrorism are the key factors affecting FDI inflows to Pakistan. They also showed that economic growth; barriers on trade and Regime are also the main determinates of FDI. The importance of growth is overstated; It is because they can feat scale economies only after the threshold that a certain market attains. Market size is extensively represented by gross domestic product, its growth, & GDP/capita.

From the investigation of the time series data consists of different periods by different researchers indicated that growth rate of GDP is decisive for the fdi inflows to Pakistan. Domestic investment is also another factor which has positive influence on the overseas investors behavior to invest in the home nation (Shah & Ahmed, 2003; Khan & Nawaz, 2010). Government of Pakistan should adopt sound policies to overcome the problem of corruption, because it is the major hindering the FDI inflows to Pakistan. A large market is the most important factor which attracts FDI and provides the opportunity for exploitation of the economies of scales (Mehmood & Hassan, 2015). In order to attract more FDI, the management authorities should provide economically, politically stable and secure ground to the foreign investors, encourage domestic investors and need to give equal importance to monetary and fiscal policies (Azam & Lukman, 2008; Javed, 2103; Rashid, 2013; Afza, & Anwar, 2014; Akhtar and Yaseen, 2015). Human capital can use to enhance the opportunity to produce with low cost, might ensure investment in the safe and sound environment, therefore it is needed to provide cheap and skilled labor force in the sectors where FDI is expected to emerge (Azam & Khattak, 2009). Various factors are discussed in the former section about the determinants of FDI which have been tested in literature, in most of these studies different economic, political and social aspects are examined in different fashions. Political and social aspects are presented in index which is multidimentional in nature, i.e. numreous factors are defined in a single index which make the situation indecisive about a single aspect of the index. To avoid such situation and to make clear the impact of individual aspect, present study take into account different aspects of instituional quality in individual i.e. Voice and accountability, stability in politcal situation and abbsence of violance, controlle of corroption, regulatroy quality, Rule of law and government effectiveness.

1. **Materials and Methods**

To inspect the influence of the desire varialbe on investment behaviour of the foreign investors, time series secondary data covers the period of 1984-2016 has been utilized. Expression-1 is based on the basis of the past studies i.e. Mohsin et al., (2017) and Muhammad, et al., (2017).

$$\ln FDI = \alpha + \beta_1 PS_t + \beta_2 VC_t + \beta_3 \ln LF_t + \beta_4 CC_t + \beta_5 RL_t + \beta_6 RQ_t + \beta_7 GE_t + \beta_8 GDPG_t + \beta_9 Polity_t + \mu_t$$

Different regressions are run with different variables some of the variable are found statistically insignificant. Insignificant variables are removed from the final model. The final model of the study is as.

$$\ln FDI = \alpha + \beta_2 VC_t + \beta_3 \ln LF_t + \beta_5 RL_t + \beta_6 RQ_t + \beta_8 GDPG_t + \beta_9 Polity_t + \mu_t$$

Where

ln= Natural log

FDI=Foreign Direct Investment inflow.

PS = Political stability and absence of violence (the average value of four components (government stability, internal and external conflicts and ethnic conflicts).

VC = voice and accountability is the composite measure of two indicators (Military and politics and Democratic accountability).

LF = Total labor force.

GDPG = Growth rate of Gross domestic product.

Polity = Regime (Dictatorship or Democracy)

CC= Control of Corruption

RL= Rule of Law

RQ= A calculation of frequently change or unsound policies.

GE= Government Effectiveness in providing civil services.

u = the error term

Data Sources

Annual time series for FDI and labour force, growth rate is collected from the Handbook of statistic (SBP), while the data for polity is collected from WGI$_S$ and for the institutional quality the data has been collected ICRG.

The present study investigated FDI, total labor force, and institutional quality to investigate the specific regression equation (2). Sine all the variables are time series hence, in advance the co-integration unit root of the data set is essential. To check the stationarity of the given series this study utilized Augmented Dickey Fuller (ADF) test introduced by Dickey, D. & Fuller, W. (1979). Based on the stationarity checks we have investigated the data series through ARDL presented by Pesaran and shin (1999) one the well-known technique for long and short run co-integration results, this study have employed Error Correction technique (ECT). ARDL is based on the F statistic values (upper and lower bound) copulated by Pesaran (2001).

The ARDL model is based on three steps. The Error Correction Representation. The second step is long-run coefficients calculation and the final step is Error correction term. The procedure of ARDL model are as under.

$$\Delta \ln fdi = C + \sum \alpha_i \Delta \ln fdi_{t-i} + \sum \beta_i \Delta \ln X_{t-i} + \delta_1 \Delta \ln fdi_{t-1} + \delta_2 \Delta \ln X_{t-1} + \qquad \mu_t \text{-----------------(2)}$$

Where,

X_t represents explanatory variables vector i.e (PS, VC, CC, GE, RL, RQ, regime of dictatorship, Growth rate and labour force). A wall test will be applied to the coefficients of the level lagged variables after running the model in equation no 2. The null and alternate hypothesis of Wall test is as follow.

$$H_0 = \delta_1 = \delta_2 = 0 \qquad \text{(no co-integration)}$$
$$H_1 = \delta_1 = \delta_2 \neq 0 \qquad \text{(Co-integration)}$$

The rejection and acceptance of the null and alternative hypothesis depend on the value of F statistics and the critical values calculated by Pesaran et al., (2001). The null hypothesis will be accepted in case of F test value falls below than the lower bound, and we accept the alternative hypothesis if the F test value is greater than the upper bound. After confirming of the co-integration we can proceed to the long run coefficient estimation and in the third stage the error correction term of the ARDL model. The general model of the ARDL approach and error correction is given below.

$$\ln FDI = \sum \alpha \ln FDI_{t-1} + \sum \beta_1 \ln LF_{t-i} + \sum \beta_2 PS_{t-i} + \sum \beta VC_{t-i} + \sum \beta_4 RRQ_{t-i} + \sum \beta_5 RL_{t-i} + \sum \beta_6 GE_{t-i} + \sum \beta_7 CC_{t-i} + \mu_t$$

$$\ln \Delta FDI = \sum \alpha \ln \Delta FDI_{t-1} + \sum \beta_1 \ln \Delta LF_{t-i} + \sum \beta_2 PS_{t-i} + \sum \beta_3 \Delta VC_{t-i} + \sum \beta_4 \Delta RRQ_{t-i} + \sum \beta_5 \Delta RL_{t-i} + \sum \beta_6 \Delta GE_{t-i} + \sum \beta_7 \Delta CC_{t-i} + ECT_{t-1} + \mu_t$$

The error corrections term in represented by Ect_{t-1} in equation-6 represent speed of adjustment.

4. RESULTS

Prior to co-integration, it is essential to test the order of Stationarity. To know about the status of the data series, whether it is stationary or non-stationary, for this purpose we have used ADF test. The test null and alternate hypothesis assumes unit root and no unit root respectively. The results of ADF test are shown in the table below.

Table-1: ADF Test Results

Variable	At level		At first difference	
	Test-statistic	P-values	Test-statistic	P-values
lnFDI	-0.77	0.803	-4.04*	0.006*
PS	-2.181	0.216	-3.74	0.008*
lnLF	-1.74	0.394	-3.61**	0.016**
GE	-2.976	0.048*		
RL	-1.353	0.592	-4.913	0.000*
RQ	-1.869	0.342	-4.825	0.000*
VC	-1.137	0.688	-4.710	0.000*
CC	-2.569	0.109	-5.865	0.000*
GDPG	-2.980	0.050**		
POLITY	-1.47	0.525	-4.12*	0.002

Note: * and ** represents the level of significance at 1 and 5 percent respectively. The series regression equation includes only for intercept

Table-1 reports the results of ADF test. It is clear from the results that the variables GE & GDGP are stationary at level while the remaining variables are non-stationary. Mix order of stationerity is reported, therefore, Autoregressive Distributed Lag Model is adopted for estimation. The first step in ARDL methodology is the investigation of long run relationship existence. The results of bound F-test are given in the following table.

Table-2 Bound Test

Estimated Equation	$E\int$ (LF, INQ, PIN…)

	F-Statistic		3.22	

The value of calculated F-Statistic is greater than the upper bound critical value at 5% level which confirms the existence of Co-integration.

Table-3: Long Run Results

| Variable	Coefficient	Std. Error	T-Statistic	Prob.
lnLF	2.861	1.529	1.872***	0.088
GDPG	0.230	0.031	7.489*	0.000
VC	-0.752	0.400	-1.879***	0.087
POLITY	0.063	0.016	4.057**	0.001
RQ	1.027	0.294	3.488***	0.005
RL	3.573	1.185	3.016**	0.011
C	12.701	7.701	1.649	0.127

Note; *, **,***the level of significance at 1%, 5% & 10% respectively.

Table-3 shows the results of long run coefficient and their corresponding statistics (t-values, p-values and standard error). The impact of variables economic growth, polity, regulatory quality and rule of law are statistically significant at 5% level. While the variables voice and accountability and labour force are significant at 10% level. Some of the variables are statistically insignificant which are dropped. These variables are political stability and absence of violence, government effectiveness and corruption.
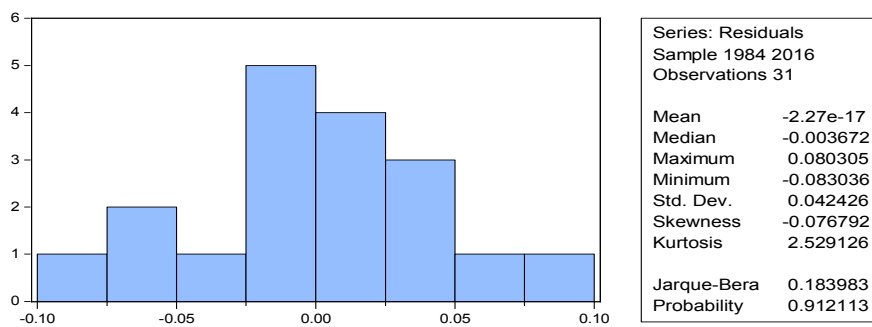
Table-4: Error Correction Representation

Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNFDI(-1))	0.578	0.088	6.521	0.000
D(LNFL)	0.824	0.207	3.967	0.002
D(POLITY)	0.034	0.005	6.734	0.002
D(POLITY(-1))	-0.031	0.004	-6.908	0.002
D(VC)	-0.621	0.105	-5.903	0.000
D(VC(-1))	-0.305	0.053	-5.707	0.000
D(GDPG)	0.012	0.015	0.797	0.470
D(GDPG(-1))	-0.095	0.016	-5.739	0.004
D(RQ)	0.133	0.031	4.238	0.001
D(RQ(-1))	0.095	0.030	3.151	0.009
D(RL)	-0.504	0.279	-1.799	0.115
Ect$_{(-1)}$	-0.831	0.060	-13.793	0.000

Table-4 shows the results of short run estimates and speed of adjustment towards equilibrium. It is obvious from the table that all variables are significant expect D(GDPG). The coefficient of ECT is -0.83 and probability value is 0.000 which is significant. The error correction term coefficient indicates that the foreign direct investment after short run deviation return to its long-run equilibrium with a speed of 83% in one year. Stability tests are also checked. The results of QUSUM & QUSUMQ confirmed stability in the model.

Figure 1: Plot of QUSUM Test

Figure 2: Plot of QUSUN Q Test
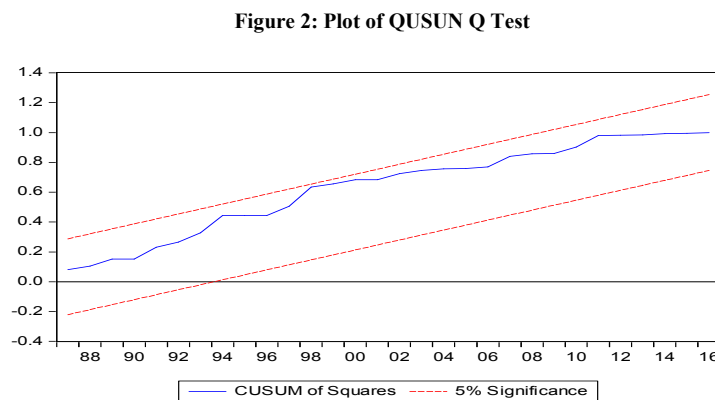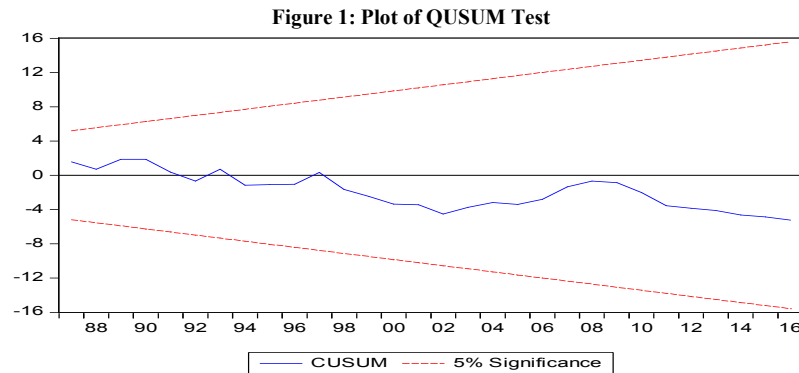
The residual of the model are also morally distributed as in Figure 3. The value of Jurque- Bera test is 0.183983 with probability 0.912113, which greater than 5%. The residual will be normally distributed if the value of Jurque- Bera test is insignificant, means the probability greater than 5 percent.

FIGURE-3: Residual Normality Test

Series: Residuals	
Sample 1984 2016	
Observations 31	
Mean	-2.27e-17
Median	-0.003672
Maximum	0.080305
Minimum	-0.083036
Std. Dev.	0.042426
Skewness	-0.076792
Kurtosis	2.529126
Jarque-Bera	0.183983
Probability	0.912113

DISCUSSION AND POLICY RECOMMENDATIONS

Factors affecting FDI inflow in case of Pakistan are empirically investigated in this study. Time series data covering the time period of 1984 – 2016 have been utilized. ADF test is used for stationarity, mix order is reported, therefore, ARDL technique used for estimation of parameters. The empirical finding of study conducted by Attaullah et al., (2004) showed that FDI and economic growth are related with each other, and FDI helps in job creation. The findings of our study, about positive association between labour force and FDI inflow are parallel with the findings of Mehmood and Farid (2013). Cheap labor force, labour participation rate, lower wage rate and competitiveness encourage FDI. Some researchers examined political and social aspects which are closely related to the flow of FDI in their studies. Recent research are of the view that peace determining factors like law and order, violence, ethical conflicts, internal and external conflicts are the factors affecting FDI.

Stability and absence of violence/ no terrorism has positive impact on FDI inflows to the host country while others contradict to the idea. Jeffrey, et.al.(2012), Bellos, (2013), Meier, (2006), stated political stability is a key factors hindering in the way of FDI inflow to host country, furthermore, they indicated statistically positive link between FDI inflow and political stability. Since FDI in the fixed investment in capital goods, so political risk in host country can results in collective damage of the investment opportunities. Furthermore, high political risk can cause ward off foreign investment and move to free risk investment environment. Abdmoulah (2009) & Omezzine (2011), found negative correlation between FDI and political stability in the MENA region. In case of Pakistan the political stability and absence of violence has no role to be played. This present study concluded that political stability does not matter for FDI inflows to Pakistan as it carried negative but insignificant coefficient value. It makes sense in case of Pakistan because during 2000's the country was not political stable yet received a significant proportion of FDI. Corruption can be considered as a type of Taxation, it not only affects FDI inflows to the host country but also change the magnitude of the inward flows dunning, (1993). Furthermore, deterioration of market and less protection of investment environment occur due to the corruption in bureaucracy, it also creates ambiguity and put an end to long term policies Smith (2006). The implementation of policies and the commitment of government to ensure quality of public services, especially civil services is another important factor in attracting FDI, foreign investor may prefer countries having an effective government Jeffrey, (2012), in case of Pakistan control of corruption and government effectiveness is insignificant. Pluralism such Voice and accountability can cause to decrease the host nation's imports in goods and leads to compile FDI inflow, Jeffrey, (2012). Same the coefficient value of the variable is -0.751 which is significant at 10 percent level. Our results are coincide with results of Abdmoulah (2009) , Omezzine (2011), & sedik, (2012). Another important factor is regularity quality of the government. It is mainly concern with the government formulation of policies, to

encourage private investment. In contrast to the government effectiveness, the impact of quality is positive. Sound and unchanged policies always results in high inflow of FDI. The results of this variable are supported by Jeffrey, et.al. (2012). The most effective factor in case of Pakistan is Rule of law, statistically significant and positive sign is confirmed during the study period. Our results are supported by study Bassoon, (2012)

Numerous studies are carried out by researchers to find out for the exact relationship between political instability and inflows of FDI, some studies indicated that there exists positive connection while others shown negative link among the variables so the results are ambiguous. As Minhas, A., and Ahsan, A., (2015) indicated that political instability is positively associated with FDI, on the other hand, negative relationship has been found by Rehman, M., et al., (2008) in case of Pakistan, both of the studies used political instability index rather than to use Dummy variable. In this study, we have also used instability index in this study to measure political situation. For Pakistan, our results indicate that political instability is positively related to FDI, it is because foreign investors need long-term policies and in Pakistan, policies are long-term in the regime of dictatorship. Another reason is that in Pakistan political parties and political elites are usually busy in enhancing their own business rather give proper attention to motivate FDI. Furthermore, history of Pakistan indicates that most of the era incarnated with dictatorship, therefore, more attention were given to basic needs in the regime of dictatorship rather establish their own business. The historical trend of FDI also tells us the positive relationship of FDI with political instability as the share of FDI to GDP increased to 3.37 percent in the regime of dictatorship. Along with these facts, the impact of political instability is significant on the FDI inflow to Pakistan.

Market size plays an important role in attracting foreign investors, and hence mort will be FDI inflows to an economy having wide market size. GDPG and FDI are associated positively explored by Tsia, (1994), Mahiudin and Salman, (2011). The results of our study are well justified in exploring the positive relationship between the two variables.

Economic Growth is found an important factor affecting FDI inflow to Pakistan. Therefore, the government should adopt certain policies to ensure growth to attract FDI. The government of Pakistan should take positive steps to increase growth rate. The government of Pakistan may enhance growth by adopting expansionary fiscal policy. An expansionary fiscal policy is useful when there is unemployment, surplus saving or falling real output. The injection of government spending, or tax cuts stimulate aggregate economic activities, increases consumption and hence aggregate demand will increase and this should lead to higher economic growth.

Labour force also contributing positively to FDI inflow. The population of Pakistan is already very high. There is no need to increase the number of the labor force because the economy of Pakistan already facing huge unemployment rate. The increase in a number of the labor force will worsen the situation more. The government should pay attention to the employee the idle labor force and to equip the labor force with high technical and vocational education to increase the productivity of labor to attract more and more FDI by providing more opportunities of profit to MNCs, and make sure FDI more profitable. As mention above through increase in government spending, developing countries like Pakistan could stimulate economic activities and get the unemployed resources back into productive resources. The unemployed labor force would be adjusted through the adoption of expansionary fiscal policy.

Based on the findings of the present study it is suggested that, the democratic government of Pakistan should recognize the importance of foreign investment in promoting growth rate. They should adopt sound and long term policies for foreign investors, the elite class should give opportunity of investment to foreigners rather to develop their own business.

REFERENCES

Afzal, T., & Anwar, Z., (2014), Impact of terrorism, gas shortage and political instability of FDI inflows in Pakistan. *Sci.Int(Lahooor),* 26(1), 507-511.

Aitken, B. J., Harrison, A. E. (1999), Do domestic firms benefit from foreign investment? Evidence from Venezuela, *American Economic Review* 89(3), 605-618.

Akbar, M., and Akbar, A. (2015), An Empirical Analysis of Foreign Direct Investment in Pakistan. *Studies in Business and Economics,* 10 (1), 2015

Akhtar, Z., and Yaseen, M. H., (2015). Terrorism and political instability implication for FDI: A study of the south and South East Asian countries. *Pakistan Journal of Applied Economics*, 25 (1), 67-98. summer 2015.

Attaull, A. Cockerill, T. & Le, H, (2004). Financial liberalization and bank efficiency analysis of India and Pakistan. *Applied Economics*. 36(17), 1915-1924.

Azam, M., & Lukman, L. (2008). Determinants of Foreign direct investment in Pakistan, Indonesia, and India: A quantitative approach. *Journal of Managerial Sciences* 4(1), 2008.

Azam, M., and Akhatak, R. N. (2009). Social and political factors effects on foreign direct investment in Pakistan. *Gomal University Journal of Research*, 25(1), 46-50.

Dickey, D. A., & W. A. Fuller (1979), Distribution of the Estimators for Autoregressive Time series with Unit Root. Journal of the American statistical association 74, 427-431

Erdal, F., and Tatoglu, E. (2002), locational determinants Foreign direct investment in emerging market economy; Evidence from Turkey. *Multinational Business Review, 10(1). 1-7.*

Hussain, F., & Kimuli, K. C., (2012). Determinants of Foreign Direct Investment flows to Developing Countries. *SBP Research Bulletin* 8(1), 2012.

Javed, R. M., Azim, P., and Irshad, U., (2013). Determinants of Foreign Direct Investment; An Empirical Analysis of Pakistan. *J. Glob. & Sci*. 3(1), 2013.

Khan, A. E. R., and Nawaz, A. M., (2010). Economic Determinants of foreign direct investment in Pakistan. *J Economics*, 1(2), 99-104.

Mehmood, A. K., & Farid, M.Z. (2013). Factors of garnishing across the border investment. *Pakistan Journal of Commerce and Social Sciences*, 7 (3). 588-602.

Mehmood, A. K., and Hassan, S. (2015), Analysis of socioeconomic factors that dampen the follow of Foreign Direct Investment. *Mediterranean Journal of Social Sciences* 6(4), (2015).

Mehmood, K. A., & Hassan, S. (2015). A study on mapping our alliance between economic growth and foreign direct investment in Pakistan. *Asian social science*, 11(15), 113-123.

Minhas, A., and Ahsan, A., (2015*), an empirical analysis of foreign direct investment in Pakistan. Studies in Business and Economics. 10(1).*

Mohiudin, S. A., & Salam, M. A., (2011). Determinate of foreign direct investment in Pakistan. *Journal of Independent Studies and Research,* 9(1), 117-124.

Pesaran, M. H., & Shin, Y. (1995). An autoregressive distributed lag modeling approach to cointegration analysis. (*DAE Working paper no. 9514)*. Department of Economics, University of Cambridge.

Pesaran, M. H., Shin, Y., & Smith, R.J.(2001). Bound testing approaches to the analysis of the level relationship. *Journal of Applied Econometrics*, 16, 289-326.

Rehman, C. A., Ilyas, M., Mobeen, A. H., & Akrm, M. (2011). The impact of infrastructure on foreign direct investment: a case study of Pakistan. International Journal of Business and Management, 6(5), 268.

Rehman, M., et al., (2008), Determinants of foreign direct investment. *Proceedings of 2nd International Conference on Business Management (ISBN: 978-969-9368-06-6)*

Shah, Z., and Ahamad, Q. M., (2003). The determinants of foreign direct investment: An Empirical

investigation, *Pakistan Development Review*, 42; 697-714

Tsia, P. (1994). Determinates of foreign direct investment and its impact on economic growth. *Journal of Economic Development*, 19(1), 137-163.

Zaman, K., Shah, I.A Khan, M.M & Ahmad, M. (2012). Macroeconomic factors determining FDI impact on Pakistan's growth. *South Asian Journal of Global Business Research*, 1(1), 79-96.