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By Noor Rahman Tahiri

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I. INTRODUCTION

Trade is a simple economic conception involving the purchasing and retailing of goods and services, with recompense paid by a buyer to a seller, or the conversation of goods or services between parties. In other words, International trade is the exchange of goods and services across international borders or territories (Ben-Porath, Y, 1980).

The determinants of FDI according to the empirical studies are categorized into two sides; demand side and supply side. The demand side contains variables linked to the Afghanistan (country-specific). The source side comprises variables connected to the investing corporation itself (company-specific). Country exact variables maybe will comprise market scope, economic development, equilibrium of expenditures, inflation rates, tax levels, political constancy, and government policies re foreign investments. Afghanistan can possess location exact benefits, such as his national markets, natural properties, and labor power that assist to invite investments by external investors. This study will usually

highpoint the second category (i.e., the country exacts variables). Thus, the data and discussions will completely be emphasized on this type of determinants of FDI. This study, thus, aims to examine the dynamics that affect foreign direct investment (FDI) in Afghanistan. Empirical analyses of the factors determining foreign direct investment (FDI) in Afghanistan have employed a variety of econometric specifications. Many previous studies of Afghanistan FDI activity have used a gravity equation, which controls mainly for thee conomic size of Afghanistan,

Foreign direct investment (FDI) is a straight investment into manufacture or commercial in a country by a separate or corporation of a different country, also by purchasing a corporation in the board country or by increasing processes of a current business in that country. Foreign direct investment is in difference to collection investment which is a submissive investment in the safeties of additional country such as stocks and bonds. (Kunle, 2014).

Foreign direct investment is supposed to make significant assistances to growth and economic improvement of host (recipient) countries. Foreign direct investment feeds receiver countries through the capital inflows, technical involvement, human capital improvement and managerial proficiency compulsory for supportable economic development. According to Abdoulaye et al., (2015)

Foreign direct investment concerned with fundamental factors such as stable macroeconomic and political situation as well as credibility of policy reforms. A stable and maintainable macroeconomic situation improvements the sureness of private investors. Decrease in debt load is also dangerous not only for behind both external and financial equilibrium but also for producing confidence to inspire private subdivision investment (Dunning,1993).

The financial limit, mostly cruel for the intensely grateful countries, rapidly explained into a quick discount in investment and development rates in these severely obligated economies. Such weakening in investment and growth rate occasioned in the increasing significance of foreign direct investment as a moderately dependable foundation of capital.

There are mainly two types of FDI horizontal and vertical that serve a different purpose to the investor. If a multinational enterprise wants to expand their business horizontally, they may duplicate the home production of

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goods or services and allocate it in multiple countries (host country). This type of FDI is called horizontal FDI. Vertical FDI on the other hand, serves to allocate fragments of the different production stages of a multinational firm, with the aim of lowering costs. (Aizenman & Marion, 2003; Braconier, Norbäck & Dieter, 2004).

FDI is to utilize raw materials in the host country, or to establish a closer contact to the consumers via distribution outlets (Moosa, 2002).

FDI is defined according to residency the investors purpose being an effective voice in the management of earning either long term capital or short term capital as shown in the nations balance of payments account statement (Macaulay, 2012). Broadly, foreign direct investment includes mergers and acquisitions, building new facilities, reinvesting profits earned from overseas operations and intra company loans. In a narrow sense, foreign direct investment refers just to building new facilities. He believed that FDI encourages the inflow of technology and skills and fills the gap between domestically available supplies of savings, foreign exchange and government revenue. It also encourages the inflow of technology and skills. (Onu, 2012).

Engman, M. (2005). Mentioned in his research paper Foreign direct investment (FDI) has long been known as an important source of financing for development in host (recipient) countries. UNCTAD (2012b) finds that FDI positively contributes to host economies, including through higher employment and wages, tax revenue increase, export generation and capital formation. Identifying factors that make a host country more attractive to FDI therefore remains an important policy issue.

Foreign direct investment encouragement the multitude country economy in frequent ways by increasing domestic investment, transmission of technology and human capital founding. Developing countries together with Pakistan necessity huge quantity of capital to stand-in their economy competently. But the funding and credits has a negative impress on country balance of compensation. So, the FDI is preferred for accelerating capital formation that it enforces no financial responsibility on host country at all. Foreign direct investment has a great number of profits that are generation of more profession, increase transmission, enhance managerial and technical skills, refining equilibrium of compensation and normal of current (Falki, 2010). A lot of structures made Pakistan a more attractive location for foreign investments that are the behind: Economy of Pakistan demonstrated approachability and potential capability, Huge Pakistan residents and has an incomparable bodily arrangement (Yousaf, Hussain, & Ahmad, 2008).

Foreign Direct Investment is a component of a country's national financial accounts. Foreign direct investment is investment of foreign assets into domestic structures, equipment, and organizations. FDI occurs with the purchase of the "physical assets or a significant amount of ownership (stock) of a company in another country in order to gain a measure of management control. Afghanistan today is the land of countless business opportune (Rosen et al 2009).

Afghanistan's economy is recovering from decades of conflict. The economy has improved significantly since the fall of the Taliban regime in 2001 largely because of the infusion of international assistance, the recovery of the agricultural sector, and service sector growth. (mafhoum, 2016).

In 2001, after 23 years of war and domestic war, Afghanistan was unsuccessful state, the manufacturing production was closed to zero and the country was one of the poorest and most underdeveloped in the world. By no means, the new Government of Afghanistan was starting at point zero. It was aastonishment for most of the western consultants how deep the recently connected government was entrenched in old arrangements. But as new ideas, new methodologies for the regulatory charter and also new characters (in government and business) are toward the inside of the scene, different arrangements and realities are overlapping. (fas, 2016).

Gross domestic products is to the whole market importance of goods and services manufactured within country by anybody who lives confidential the country in given historical of time. It shows the country economy and is used as comparison tools to see how well a country is doing in economic terms. For example, the Gross domestic products of US was 13 trillion Dollars in second quarter of 2011 (Cunningham, 2012). There are three ways to calculate the Gross domestic products of country but all the three approaches are given the same result. The common and direct approaches which are used to calculate the Gross domestic products is summing the total outputs of every economic sector, which is known as product approach. The expenses approaches are calculated as all merchandises must be accepted by people and then the value of total produces must be equivalent to the total expenditures which is completed by the people which leads to zero advantage. The income approaches are on the principle that incomes of productive factors may be equal to the value of their products, by adding all the income of producer, the Gross domestic products will be derived (Kimel, 2010).

In a post-conflict environment, it is a top priority for the central government commences mobilizing revenue so it can quickly provide essential services from its own resources. Revenues in Afghanistan are from two principal sources customs from the international movement of goods, and domestic taxation. This plan is concerned with the second of these sources. It provides

an outline of the key activities over the next 12 months to mobilize domestic taxation in Afghanistan. (Mof, 2016) Doing business in Afghanistan can be very rewarding. Even smaller investments may generate high profits in a short period of time. And yet, at least for the time being Afghanistan remains a challenging environment even to the most experienced professionals. Access to local know-how and to informal networks is decisive. Careful analysis of market potentials and best strategies for business development are strongly recommended before setting up operations, and sufficient time should be spent on networking to understand local business practices and to find the right partners. (asia., 2016)

Afghanistan has a total of 652864 Km², about 12 per cent of the country total land is arable 3 per cent is under forest cover, 46 per cent is under permanent pastures, and the remaining 39 per cent is mountains and has estimated population of about 30 million including nomadic and returnees. The annual growth rate of population is about 2.03 per cent while the GDP is estimated about US\$10 billion and per capita income about US\$ 415. Currently there is change in the structure of national domestic products; about 37 per cent was the share of services in GDP while the share of agriculture was about 36 per cent and the segment of manufacturing was around 24 per cent. Due to the lack of skills, the national product is taken by the merchants to Pakistan and sometime Pakistani traders earnings the afghan products to external world.

As compare to the pre transitional government, fiscal, monetary, external sector and real sector are improved despite potential growth of the economy is challenged by security, corruption, and other obstacles. Afghanistan has great potential for further growth similar to the most developed nation of the world as it has the vast number of resources with high volume. To give a hint on the available opportunities, there is need to discuss some sample. (afgair, 2016).

Afghanistan is a fast growing emerging market of strategic importance close to some of the largest and fastest-growing markets in the world. Afghanistan is strategically located between the energy-rich republics of Central Asia and the major seaports in South Asia providing a key transit route for central Asian oil and gas to markets in South Asia as well as overseas. Also Afghanistan has natural access to markets of neighboring countries including important fast-growing markets such as China, India and Pakistan.

Afghanistan offers a pro-business minded environment with legislation Favorable to private investments. The principles of a free market economy are incorporated in the new Constitution just as the growth of the private sector is a cornerstone of the National Development Strategy. Consequently, the President as well as the Government has focused intensely on removing obstacles to private sector development.

Afghanistan is rich in natural resources Afghanistan is remarkably rich in mineral resources. There are currently more than 1,400 identified mineral deposits. These include energy minerals such as oil, gas and coal as well as iron and copper deposits of world quality. Furthermore, known precious and semiprecious stones in Afghanistan include emerald, jade, amethyst, alabaster, beryl, lapis lazuli, tourmaline, ruby, quartz, and sapphire. Finally, great opportunities for investments exist within the hydrocarbons industry.

The Government of the Islamic Republic of Afghanistan (GIROA) recognizes that the development of a vibrant private sector is crucial to the reconstruction of an economy ravaged by decades of conflict and mismanagement. As such, it has taken significant steps toward fostering a business-friendly environment for both foreign and domestic investment. Security threats sometimes limit investors' opportunities to develop businesses in some regions, and certain sectors (such as mining and hydrocarbons) still lack a regulatory environment that fully supports investment. In the face of these challenges, Afghanistan's investment climate has shown surprising levels of dynamism in recent years. (afgair, 2016).

The government wants to achieve a (legal) GDP/capital of 500 USD/year by 2015. This leads to an envisaged annual growth rate of app. 90 per cent. The growth rate in the last years was about 20 per cent but this will slow down as a first "peace dividend" is paid, the agricultural growth will slow down and donor's contributions will stay at the best at current levels. Therefore, the government and the international community have put in their joint strategic paper securing Afghanistan's Future broad based economic growth at the center of the policy. The secretive sector is in all papers called "the locomotive of growth. (afghan chamber, 2016)

The objective of this research is to describe the main Foreign direct investment determinants that show capital flow in Afghanistan, to explore impact of Foreign direct investment determinants on economy of Afghanistan and suggest some policies through which Foreign direct investment can be improved in Afghanistan.

This study is consisting of five sections. In Section 1 Introduction; Section 2 literature review; Section 3 data methodology; Section 4 results and discussion; Section 5 provides concluding remarks; Section 6 Limitations and references.

II. LITERATURE REVIEW

In this section, we provide brief literature reviews which investigate the determinants of foreign direct investment FDI inflows across various economies. Najaf, K., & Najaf, R. (2016). Analyzed that the impact of foreign direct investment on the economic

development of central Asia, Afghanistan and A country particular. For this research we have collected the data from the secondary source. The study was showing that the inflows of FDI are increasing in some countries. In 1992 the inflows of FDI of A country was 258.43 US dollar, at that time the inflows of Afghanistan was nothing. In the year 2007 it was concluded that inflows of A country was us \$4374 million. During the 2007 the inflows level in Afghanistan was US\$ 289. In this paper it has concluded that the most profitable area are power sector, telecom, education and information technology. thus, our paper is trying to prove that FDI has main role for the development of welfare with the way of providing the welfare society. therefore, the study is trying to suggest that for the enhancement of FDI government of A country and Afghanistan need to remove the political instability and terrorism and should focus on the physical infrastructure.

Agarwal, M., & Atri, P. (2016). Argued that capital account liberalization would immensely benefit developing economies because once capital controls are lifted capital would flow from the capital abundant rich countries to the capital scarce developing countries. This free movement of capital could possibly increase growth thereby lifting millions out of poverty. India has been gradually liberalizing since the 1980s and throughout more capital inflows were observed compared to outflows. Also, the composition of capital flows has been changing since the 1980s – with foreign direct investment (FDI) inflows rising steadily post 1991 compared to portfolio and debt flows. However, since 2000, FDI outflows from India have also been witnessed. In this discussion paper, we empirically test the impact of FDI flows on poverty in India for the period 1980-2011. To provide a perspective to India's performance we also analyze the link between FDI flows and poverty for SAARC countries. For a better understanding of how FDI flows impact poverty, we analyze the outflows and inflows separately. Interestingly, we find that in India FDI inflows contribute to increases in poverty whereas for other SAARC countries they significantly reduce poverty. The impact of FDI outflows in India too is in complete contrast with other SAARC countries. While FDI outflows significantly reduce poverty in India, they turn out to be insignificant for other regional countries.

Hällås, K., & Nielsen, C. (2015) Argued that the effect of country specific characteristics on foreign direct investment (FDI) outflows of ten European countries. The macroeconomic determinants included in the study are income, technology, the current account balance, openness of economy and exchange rate. Previous studies and theories implies that the relationship between these variables and FDI outflows should be positive. This is therefore our expected results. In order to test this hypothesis, we use time series analysis, with an annual frequency of the data.

We have a total of 34 observations from 1980-2013. Openness of economy was found to be the most important determinant, since it was statistically significant for several countries. It was also the variable which corresponded the most with our expectations. However, the overall results are inconclusive, and suggests that macroeconomic characteristics may not be good determinants of FDI outflows.

Sauvant, K. P., & Mallampally, P. (2015). Argued that foreign direct investment (FDI) plays an important role in the world economy and has the potential to contribute towards accelerating the process of economic growth and sustainable development in the least developed countries (LDCs). The paper provides a brief overview of recent trends and patterns in FDI flows to the LDCs, and then takes stock of the policies, program and measures pursued by host and home countries and by international organizations to stimulate FDI flows to LDCs and increase their benefits for these countries. It then lays out a number of policy proposals on how flows to LDCs, and the benefits associated with them, can be enhanced. Finally, it outlines some options for international action to strengthen such efforts – proposals and options that are also relevant to other developing countries.

Sikwila. M (2015) mentioned that Foreign direct investment (FDI) is the way of transferring - skills, knowledge, technology and other many intangible benefits of the organization to the host country for production and determination therefore Foreign direct investment can take place for two causes: first, the FDI can be a outcome of home country keeping resources such as diamonds, gold and platinum which can be attractive for foreign companies which finally invest in the home country. Meanwhile the country has natural resources like diamonds, platinum, gold, chrome, coal, between other natural resources such as many countries have the above mineral resources, which is expected to attract foreign direct investment. Second, foreign business would have several benefits in the form of technology and investment at home businesses which do not possess, and this can lead an investment in the homeland which will cases foreign businesses involved in research and development and forward it in revolution and technology which will help some countries. Additionally, without research and development benefits describes the concepts of foreign direct investment which are involved in foreign direct investment at the perspective of markets and its concept with the result of market flaw concept and it emphasizes on market uncertainty, suggestion, deliveries and an incentive to capitalize beside the country.

Yin, F., Ye, M., & Xu, L. (2014). analyzed the location determinants of foreign direct investment in services, both theoretically and empirically. It hypothesizes four sets of factors as the location determinants of FDI in services based on the standard theory of FDI. The generalized investment theory on

China's foreign direct investment is tested empirically utilizing panel data for 17 provinces and cities from 2000 to 2010. The estimation results provide considerable support for the importance of these factors in determining flows of foreign direct investment within a country. It compares the determinants of inward FDI in services to those of the manufacturing within one framework, and concludes that FDI in services tends to be motivated by market-seeking and client-following purposes, and no particularly new theory for explaining service FDI is required, only an adaptation will do.

Blonigen, B. A., & Piger, J. (2014). Mentioned that the empirical studies of two-sided foreign direct investment (FDI) movement show considerable changes in specifications with slight arrangement on the usual of comprised covariates. We use Bayesian statistical methods that permit one to choose from a large set of applicants those variables maximum probable to be determinants of FDI activity. The variables with reliably high presence probabilities contain old-style seriousness variables, social distance issues, relative labor donation and trade agreements. There is slight provision for many-sided trade openness, most host-country business costs, host-country infrastructure and host-country organizations. Our consequences propose that numerous covariates originate significant by preceding studies are not vigorous.

Rahman. Z (2014) found out in his research paper that the role of government is very significant regarding policy formation and implementation for giving motivation or making a place to influence the foreign investor and make for having long life contract. And that role will prepare business approachable environment to fulfill the investment, FDI in making capital to develop their services, bring new technology, bring money and used for technological improvement. Foreign Direct investment is a cash movement of funds from one country to another. This technique plays a very significant role to improve a development in the country, positively put impact on the GDP and improve the capitals throughout the country which can totally develop the natural resources as well as human capitals.

Nahidi. M (2014) mentioned in his research paper that FDI is directly related to the globalization of wealth inflows that delivers the chances to participate the national economy with the world economy. Development literatures express that FDI is completely related to economic development in the beneficiary countries. However, there are arguments as some practical studies reasons to the connection among FDI and growth in non-linear. These answers make the connection among FDI and Direct Investment (DI) and growth of complex issue. Multi-National Companies MNCs capitalize in general across the world with the purpose of to get full advantage from their incomes. Therefore, economies are presenting the most proper investment location to (MNCs) to attract their investment.

The suggestions include programs improvement, political permanence, domestic growth interrelated issues, increased national business skills, all issues that will cause growth in FDI in host countries. Financial theory delivers and explains the role played by FDI increase speed in economic development at Present economic growth and established theories meanwhile FDI plays a central role in transferring technological improvement and generating new ideas for explaining economic growth rate.

Abala. D (2014) expressed in her article that Foreign direct investment (FDI) is defined as investment in foreign currency, such as foreign currency, credits, rights, welfares or assets which accepted by a foreign national for the commitments of manufacture of goods and services which are to be sold either locally or exported externally. FDI commonly refers to an investment made to acquire a lasting management in a business enterprise in a country other than of the investors defined. According to placement financial encouragements such as tax payments and grants in aid among other policies to attract FDI into their economies due to the perceived welfares connected with FDI cash inflows. It has been recommended in numerous papers that foreign businesses are capable to positively affects the levels of output and growth rates in the productions they enter to develop skill improvement, increased occupation and innovation.

III. DATA VARIABLES & METHODOLOGY

One of the important and key reasons of motivation for the study was to determinants of foreign direct investment on GDP in Afghanistan. As FDI is attracted properly, it direct or indirect affects GDP. It permits us to Empirically Analyze the determents of FDI in Afghanistan.

The data of FDI and GDP is taken from the World Data Bank WDB website. This study empirically analyzes the determinants of FDI of Afghanistan. Data is used on annual basis of time series secondary data and covered the period of (2005_2015).

We have used two methods for analyze of the data first simple regression analyze through OLS model that is ordinary least square or least square errors regression or just least squares is one of the most basic and most commonly used prediction techniques among people and researchers in statistics, finance, medicine, economics, and psychology. It measures the accuracy which differentiates it from other forms of regression.

It was invented by the world's well known mathematician in 1795 and rediscovered by Adrien Marie Legendre in 1805. It is easy to implement and apply to problems. It can be easily analyzed mathematically and interpreted. When the distributions of random variables have same variance and zero mean

then the least squares method is the best unbiased linear estimator of the model coefficients (Gauss-Markov Theorem).

This study applied log to normalize the data and analyzes the impact of Foreign Direct Investment (FDI) on Gross Domestic Product (GDP) in Afghanistan. This study has applied simple regression through OLS model for the equation to determine the impact of Foreign Direct Investment (FDI) on Gross Domestic Product (GDP) in Afghanistan. The literature review supports the selection of ordinary least square model. (Olowe, S 2014). For the purpose of empirical analysis through OLS methodology the following equation is estimated; Equation:

$$\text{LOG}(GDPT) = \beta_0 + \beta_1 \log(FDIt) + e$$

and second in multiple regression those variables that we have selected in our research are based on previous FDI theories and literature.

$$\begin{aligned} GDFI = & \beta_0 + \text{LOGEBGS}\beta_1 + \text{LOGEXDEBT}\beta_2 \\ & + \text{TDSGDP}\beta_3 - \text{INFLATION}\beta_4 \\ & + \text{GFCF}\beta_5 \end{aligned}$$

Where:

GDFI indicates Gross Foreign Direct Investment: Foreign direct investment is described as investment so as to be prepared to obtain a lasting management interest (usually of 10 percent of voting stock) in a venture working in a country other than that of the investor (Host). Source: World Bank (WDI, 2011). Then the determinants of Foreign direct investment is measured by behind variables: External balance on goods and services (percentage of GDP) is indicated as LOGEBGS this variable can be measured by production, and data is taken from World Bank, (WDI, 2011). Total external debt, total (DOD, current US\$) is indicated as LOGEXDEBT and defined at world bank website as Total external debt is debt allocated to nonresidents repayable in foreign currency, goods, or services. Source: World Bank, (WDI, 2011). Total debt service (per cent of Gross domestic products) is specified as TDSGDP and explained on WD as Total debt service is the addition of principal repayments and interest in fact compensated in foreign currency, goods, or services on long period debt, interest paid on short period debt, and repayments to the IMF. Source: World Bank (WDI, 2011). Expected sign of determinants is

positive except inflation. Gross domestic products deflator (annual percent) is indicated as INFLATION and it is calculated by the annual growth rate of the Gross domestic products implicit deflator demonstrates the rate of price alter in the economy as an entire. Source: World Bank (WDI, 2011). Domestic gross fixed capital formation (as a percentage of Gross domestic products) is used in paper as GFCF Indicates capital stock in the host country and the availability of infrastructure. Source: World Bank (WDI, 2011).

IV. RESULTS AND DISCUSSION

The results are outcomes of variable and applied simple regression through OLS model. Simple regression is used to check relationship the impact of Foreign Direct Investment (FDI) on Gross Domestic Product (GDP) in Afghanistan.

This section explains the tests which are necessary for the reliability of the data. For this purpose, T-test is used to check the significance of a variable and P-value is used to show acceptance of hypothesis on economic theory. F-test is used to check the overall significance of the model. The result is shown in the following table.

The P value is 0.006 which is less than 5% level. So, variable is significant. T-test is 11.88 which is more than 2 theoretical value so variable is significant. F-test is 0.024 which is less than 5% level. So, overall model is significant at 5% level.

Regression analysis represents a statistic method examining relations of dependencies among dependent and independent variables with the aim to determine the impact of independent variable changes on dependent variable. In general, it can be in the form of time series, cross-sectional or panel data analysis. It occurs very often that the data necessary for modeling are not sufficient, as in the different time (time series) and also in the different space (cross-sectional data). In this case, appropriate solution seems to be the utilization of panel data which represent data set including time series for each space unit.

Although statistical significance and the direction of impact between the dependent variable and independent variable are important with a similar analysis, the variables were transformed into log form because to avoid outlier/fluctuation in data.

Table. A

R Square	Adjusted R square	Coefficients	T-test	P-value	F-test
59.22%	54.7%	5.520904098	11.88	0.006	0.024

Model summary R square (R^2) is 0.5922 It means that 59.22% variation is explained by independent variable (foreign direct investment) in the dependent variable (gross domestic product), which shows weak relationship between the variables.

Co-efficient is 5.52 which mean 1% increase in FDI and GDP is increased by 5.52 units, F-test value is 0.024 which is less than 5%. So, the overall model is significant. T-test value is 11.88 which is more than 2 theoretical value so variable is significant.

As the methodology discussed above we applied that on variables OLS model to get the results. The result got from the methodology is supported by our literature review in which various researchers also supporting these results. By applying multiple regressions, we get the following equation:

$$\text{GDFI} = -8.021745 + 0.00168\beta_1 + (-4.33)\beta_2 + 0.024\beta_3 - 0.00128\beta_4 + 0.0000\beta_5 - 6.38\beta_6$$

As this multiple regression can be interpreted as if there is one-unit increase in LOGEBGS then GDFI increases by 0.00168 and so on. As the Empirical results are shown that all variables are showing positive coefficient with GDFI except INFLATION as shown in Table A. R-squared is an explanatory power of the model that how our points are matching to the original points of data. Our r-squared from the empirical results is 0.5922 which is above .50 means R-squared is good and

results are perfectly predicted. HSK is errors are randomly distributed with constant variance. HSK's value 0.537 the value is more than 0.1 so there is no HSK present in data. So, errors are not randomly distributed with constant variance. Multi collinearity is the pair or more independent variables are co related. VIF value in the results is 2.1584 which is less than 10 so there is no Multi collinearity in data exists. Then to check Auto correlation which is correlation with in errors, if dw-stat is range of between 1.50-2.50 according to liberal researchers and 1.75-2.25 according conservative researcher there is no auto correlation. Our results value is 1.284157 which is even less than liberal researchers value so there is positive auto correlation exists in data so we have to solve it. We solve it through the following command:

Table. B

GDFI	Coef.	Std.Err.	t	P> t	[95% Conf.interval]
External balance on goods and services (% of GDP)	0.00168	37.36	-10.85	2.56	(-43.87, -35.25)
External debt stocks, total (DOD, current US\$)	-4.33	1.71E+18	11.84	-2.42	(1930480461, 2668188739)
GDP per capita (current US\$)	0.0000	11022	13.07	-2.35	(397.6, 607.1)
Gross capital formation (% of GDP)	-6.38	1.764	15.84	2.01	(17.506, 20.319)
Gross capital formation (current US\$)	0.024	5.00E+17	6.38	2.17	(2076243428, 3254352988)
Inflation, GDP deflator (annual %)	0.00128	46.17	0.51	-1.24	(2.60, 11.51)
Manufacturing, value added (% of GDP)	-8.021745	5.37	2.29	2.21	(12.874, 16.182)

V. CONTUSION & RECOMMENDATION

The purpose of this research is to describe the main FDI determinants that show capital flow in Afghanistan and to discover impact of FDI determinants on economy of Afghanistan in specific. In this we see significance on gross domestic foreign investment by the, Total external debt total (DOD, current US\$), Total debt service (per cent of GDP), Inflation GDP deflator (annual percent), Domestic grossfixed capital formation (as a percentage of GDP). OLS has applied to data collected from WDI. It is concluded, Total external debt, Total debt service and Domestic gross fixed capital formation have positive impact on Gross domestic foreign investment. Inflation has negative impact on Gross domestic foreign investment. We have conducted this study for the reason that after 2005 no study has been conducted by conducting this research we fill this gap.

In the paper we recognized the major determinants of FDI .by seeing at the major determinants of FDI countries can also able to generate FDI policies according to their own economic arrangement. The function of FDI in country enlargement can be stated by the consequences of every of the

determinants or by the consequences of every one determinants jointly. In this mode, the function of FDI at the country enlargement can be utilizes efficiently.

Model summary R square (R^2) is 0.5922 It means that 59.22 per cent variation is explained by independent variable (foreign direct investment) in the dependent variable (gross domestic product), which shows weak relationship between the variables. Coefficient is 5.52 which mean 1per cent increase in FDI and GDP is increase 5.52 units, F-test value is 0.024 which is less than 5 per cent. So, the overall model is significant. T-test value is 11.88 which is more than 2 theoretical value so variable is significant.

Afghanistan had very small amount \$ 120 of the per capita income in 2005, it has been gradually increased with coming of the new government through direct support of the international community and throwing billions of dollar in forms of aid, in addition of that foreign direct investment (FDI) further support the overall economic situation of the country, which resulted with further increase of per capita income. The FDI has been increased gradually since 2005 from \$ 0.68 million and it reach to the maximum amount of \$271 million in 2007 and the big investment was in the telecom sector. Afterward it has been gradually decreased, while the per

capita income increased and reached to the maximum amount of \$ 691 in 2012 and afterward it has been decreased due to the withdrawal of NATO/ISAF and very lengthy election process with the transition of the political power to the new administration.

Role of government is very significant regarding policy formation and implementation for giving motivation or making a place to influence the foreign investor and make for having long life contract. And that role will prepare business approachable environment to fulfill the investment, FDI in making capital to develop their services, bring new technology, bring money and used for technological improvement. Foreign Direct investment is a cash movement of funds from one country to another. This technique plays a very significant role to improve a development in the country, positively put impact on the GDP and improve the capitals throughout the country which can totally develop the natural resources as well as human capitals (Rahman Z, 2014). Based on the literature review the results indicated that there is positive significance relationship between foreign direct investment and gross domestic product of Afghanistan.

Based on the observations and conclusions made during this study, it is recommended that policy makers should focus on the improvement of knowledge and capacity of the human capital. From my point of view, countries with low level of human capital will have low level of FDI effect relatively to countries with high level of human capacity, although it might be inconsequential in some instances.

The reasoning behind the improvement of the level of human capital is that, countries with improved human capital will be in better position to utilize the hi-tech spillover of FDI. Policy makers would allocate 20 per cent of the national budget for improvement in the human capacity development in Afghanistan. Most multinational investors are attracted to countries that foster the protection of property and investment. In my view, lack of adequate contract and property rights enforcement can limit the interaction between foreign and local firms who will invest in an economy.

Following such development, it is recommended that the Afghanistan legal system should be strengthened to protect investors so as create room for economic growth. Other branches of Government interference with the judiciary operations undermine the fair ruling and at such, individual investors, institutional investors and other multinational investors would prefer countries with high judiciary credibility for investment.

VI. LIMITATIONS

Prior empirical studies results are unclear that try recognize the impact of individual policies factors on FDI. Labor cost, trade policies and tax rules are not significant in many cases. There are a enormous quantity of empirical studies conducted in which lack of agreement over the

conclusions and no descriptive variable that can be extensively accepted. Additionally, not any of these studies significantly manage all the variables examined by early researchers as potential candidate of enlightening FDI. the relation among FDI and numerous controversial variables are extremely responsive to little modifications in information. These studies are based on cross country analysis and our study is based on time series analysis. By using Extreme bond analysis to some extent this problem vague consent over FDI can be resolved but in this research paper this problem is not addressed directly.

The study used secondary data sourced from the World Bank data bank for period (2005-2015). This study was limited to the degree of accuracy though the data was sourced from reliable sources. There was lack of uniformity in how the various organizations capture and maintain their data hence the research could not analyze all the variables in details.

There was lack of sufficient data on some foreign direct investment. Therefore, the researcher was unable to accurately analyze all the foreign direct investment. There are so many other factors that affect GDP growth rate some which are quantifiable and others not. This study only focused on one variable (foreign direct investment on services) which had been identified for analysis.

This research has focused empirically on determinants of foreign direct investment of Afghanistan and gross domestic production of Afghanistan from 2005 to 2015. Therefore, further researcher can take the period from the beginning of the foreign direct investment in Afghanistan up to the current period for the analysis which study can bring the final findings on the topic of the research as well as researcher may consider other economic indicators of the country for the improvement of the country.

As much interest researcher in the field of foreign direct investment and economy of the country, there are very few research studies in the field of foreign direct investment in Afghanistan which related study much needed for the country especially for under developed country due to that the further researcher can do their study in the field of foreign direct investment to contribute to the country. The future researches they may consider the same research topic with similar country as comparative study. The future researches can do the research in the same heading in other countries to improve the knowledge in the field.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdulla, S. (2010). An empirical analysis of Libyan business environment and foreign direct investment (*Doctoral dissertation, Durham University*).

2. Abala, D. O. (2014). Foreign Direct Investment And Economic Growth: An Empirical Analysis Of Kenyan Data.
3. Adeleke Kunle, M., Olowe, S. O., & Oluwafolakemi, F. O. (2014). Impact of Foreign Direct Investment on Nigeria Economic Growth. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 234-242.
4. Agarwal, M., & Atri, P. (2016). Foreign Direct Investment and Poverty Reduction: India in Regional Context (No. id: 8694).
5. Alfaro, L. (2003). Foreign direct investment and growth: Does the sector matter. *Harvard Business School*, 2003, 1-31.
6. Andersen, M., Bjørnskov, C., & Count, C. (2013). Foreign Aid and Foreign Direct Investments.
7. Anyanwu, J. C. (2011). Determinants of foreign direct investment inflows to Africa, 1980-2007. *African Development Bank Group*.
8. Artige, L., & Nicolini, R. (2005). Evidence on the determinants of foreign direct investment: the case of three European regions.
9. Ashley, E. A., Dhorda, M., Fairhurst, R. M., Amaratunga, C., Lim, P., Suon, S., ... & Sopha, C. (2013). Spread of artemisinin resistance in *Plasmodium falciparum* malaria. *New England Journal of Medicine*, 371(5), 411-423.
10. Azam, M. (2010). Economic determinants of foreign direct investment in Armenia, Kyrgyz Republic and Turkmenistan: theory and evidence. *Eurasian Journal of Business and Economics*, 3(6), 27-40.
11. Black, D., Clemmensen, N. J., & Skov, M. B. (2010). Pervasive Computing in the Supermarket: Designing a Context-Aware Shopping Trolley. *International Journal of Mobile Human Computer Interaction (IJMHCI)*, 2(3), 31-43.
12. Blonigen, B. A. (2005). A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33(4), 383-403.
13. Ben-Porath, Y. (1980). The F-connection: Families, friends, and firms and the organization of exchange. *Population and development Review*, 1-30.
14. Blonigen, B. A., & Piger, J. (2014). Determinants of foreign direct investment. *Canadian Journal of Economics/Revue canadienne d'économique*, 47(3), 775-812.
15. Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of international economics*, 51(2), 379-400.
16. Casi, L., & Resmini, L. (2010). Evidence on the determinants of foreign direct investment: the case of EU regions. *Eastern Journal of European Studies*, 1(2), 93-118.
17. Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of international economics*, 51(2), 379-400.
18. Crespo, N., & Fontoura, M. P. (2007). Determinant factors of FDI spillovers—what do we really know?. *World development*, 35(3), 410-425.
19. Chandrachud, S., & Gajalakshmi, N. (2013). The Economic Impact of FDI in India. *International Journal of Humanities and Social Science Invention*, ISSN (online), 2319-7722.
20. Dür, A., Baccini, L., & Elsig, M. (2014). The design of international trade agreements: Introducing a new dataset. *The Review of International Organizations*, 9(3), 353-375.
21. Danish, R. Q., & Akram, A. (2014). Determinants of FDI in a country: An Empirical Analysis. *Journal of International Business and Economics*, 2(2), 61-70.
22. Gharaibeh, A. M. O. (2016). The Determinants of Foreign Direct Investment—Empirical Evidence from Bahrain.
23. Gould, D., Tan, C., & Emamgholi, A. S. S. (2013). Attracting foreign direct investment: what can South Asia's lack of success teach other developing countries?. *World Bank Policy Research Working Paper*, (6696).
24. Hooda, M. S. (2011). A study of FDI and Indian Economy (Doctoral dissertation, *National Institute of Technology*).
25. Haider, Z., Ahmad, N., Anwar, S., & Iqbal, N. (2013). Impact of foreign direct investment (FDI) on GDP: A Case study from Pakistan. *International Letters of Social and Humanistic Sciences*, (05), 73-80.
26. Hällås, K., & Nielsen, C. (2015). Macroeconomic Determinants of European FDI Outflows—An Empirical Approach.
27. Khan, M. A. (2011). Foreign direct investment in A country: The role of international political relations. *University of Oxford, Department of International Development*, ISSN, 2045-5119.
28. Kholbadalov, U. (2012). The relationship of corporate tax avoidance, cost of debt and institutional ownership: evidence from Malaysia. *Atlantic Review of Economics: Revista Atlántica de Economía*, 2(1), 7-36.
29. Khakan, N., & Rabia, N. (2016). Significance of foreign direct investment in the economic development of Pakistan and Afghanistan. *Journal of Accounting & Marketing*, 1-4.
30. Louzi, B., & Abadi, A. (2011). The impact of foreign direct investment on economic growth in Jordan. *IJRRAS*, 8(2), 253-258.
31. Mottaleb, K. A., & Kalirajan, K. (2010). Determinants of foreign direct investment in developing countries a comparative analysis. *Margin: The Journal of Applied Economic Research*, 4(4), 369-404.
32. Mofrad, M. A. (2012). The Relationships Between Gdp, Export And Investment: Case Study Iran. *Business Intelligence Journal*, 5(2), 16-23.

33. Misra, S. (2012). Study of Implications of FDI on Indian Economy. *Postmodern Openings*, (12), 153-170.
34. Malhotra, B. (2014). Foreign Direct Investment: Impact on Indian Economy. *Global Journal of Business Management and Information Technology*, 4(1), 17-23.
35. Moosa, I. A. (2009). The determinants of foreign direct investment in MENA countries: an extreme bounds analysis. *Applied Economics Letters*, 16(15), 1559-1563.
36. Nunnenkamp, P., & Spatz, J. (2002). Determinants of FDI in developing countries: has globalization changed the rules of the game? (Vol. 1122). Germany: *Kiel Institute for World Economics*.
37. Neaime, S., & Marktanner, M. (2009). The role of Foreign Direct Investment for economic development in the MENA Region.
38. Nahidi, M. M., & Badri, A. K. The Effect of Foreign Direct Investment on Economic Growth.
39. Najaf, K., & Najaf, R. (2016). Importance of FDI on the Growth of Pakistan and Afghanistan. *Middle-East Journal of Scientific Research*, 24(5), 1738-1742.
40. Niedziółka, I. (2010). The impact of foreign direct investment on economic development in Poland. *Human Resources: The Main Factor of Regional Development*, (3).
41. Palit, A., & Nawani, S. (2007). Technological capability as a determinant of FDI inflows: Evidence from developing Asia & India. New Delhi: *Indian Council for Research on International Economic Relations*.
42. Poelhekke, S., & Van der Ploeg, R. (2010). Do Natural Resources Attract FDI? Evidence from non-stationary sector level data.
43. Patel, M. K., & Patel, R. J. (2012). A Study on FDI & Economic Growth in Selected Associations: Evidence from Granger Causality Test. *Int. J. Eco. Res*, 3, 119-128.
44. Qaiser Abbas, S. A., Nasir, A. S., Ullah, H. A., & Muhammad, A. N. (2011). Impact of Foreign Direct Investment on Gross Domestic Product (A Case of SAARC Countries). *Global Journal of Management And Business Research*, 11(8).
45. Rahman, Z. U. (2014). Impact of Foreign Direct Investment on Economic Growth in Pakistan. *Journal of Economics and Sustainable Development*, 5(27), 251-255.
46. Sheibani, G. N. E. T. (2008). How to attract foreign direct investment to invest in housing in Libya (*Doctoral dissertation, University of Salford*).
47. Sauvart, K. P., & Mallampally, P. (2015). Policy Options for Promoting Foreign Direct Investment in the Least Developed Countries. *Transnational Corporations Review*, 7(3), 237-268.
48. Sikwila, M. N. (2015). Foreign direct investment: does it matter? A case for Zimbabwe.
49. Shahadan, F., Sarmidi, T., & Faizi, F. J. (2016) Relationships between Doing Business Indexes and FDI Net Inflows: Empirical Evidence from Six Asian Countries (Afghanistan, Bangladesh, India, Iran, Pakistan and Sri Lanka).
50. Syed, S. Haider, Z. Azim, P. (2012) Impact of exchange rate volatility on foreign direct investment. *Pakistan Economic and Social Review*, 50(2), 121-138.
51. Sharifi-Renani, H., & Mirfatah, M. (2012). The Impact of Exchange Rate Volatility on Foreign Direct Investment in Iran. *Procedia Economics and Finance*, 1, 365-373.
52. Totakhail, M. L. (2011). Foreign Aid and Economic Development in Afghanistan (Doctoral dissertation, *University of Erfurt*).
53. Teulon, F., & Guesmi, K. (2013). Determinants of foreign direct investments in the South Asian Association for regional Cooperation. *Journal of Applied Business Research*, 29(6), 1791.
54. Teulon, F., & Guesmi, K. (2013). Determinants of foreign direct investments in the South Asian Association for regional Cooperation. *Journal of Applied Business Research*, 29(6), 1791.
55. Tsikata, G. K., Asante, Y. O., & Gyasi, E. M. (2000). Determinants of foreign direct investment in Pakistan. *Overseas Development Institute*.
56. Ugochukwu, U. S., Okore, O. A., & Onoh, J. O. (2013). The Impact of Foreign Direct Investment on the Nigerian Economy. *European Journal of Business and Management*, 5(2), 25-33.
57. Voorpijl, R. (2011). Foreign Direct Investments in Kenya: The gains and losses of foreign involvement. *Research Paper*.
58. Voss, H. (2007). The foreign direct investment behaviour of Chinese firms: does the 'new institutional theory' approach offer explanatory power? (*Doctoral dissertation, University of Leeds*).
59. Yin, F., Ye, M., & Xu, L. (2014). Location Determinants of Foreign Direct Investment in Services Evidence from Chinese Provincial-Level Data. *LSE Asia Research Center Working Papers*, 64.
60. Yu, J., & Walsh, M. J. P. (2010). Determinants of foreign direct investment: a sectoral and institutional approach (No. 10-187). *International Monetary Fund*.
61. Zafeer, S. (2015). The political economy of foreign direct investment during internal armed conflict (*Doctoral dissertation, University of Birmingham*).
62. Zamani, A., Shahi, V. S. M., Mogharabi, V., & Kariznoee, A. (2014). Weighting and prioritizing the effective factors on attraction of Afghan investors in chamber of commerce points of view using Multi-Criteria Decision Making.