The Impact of FDI on Economic Growth in the case of Tajikistan: Evidence from an ARDL model

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ABSTRACT

This thesis investigates the relationship between aid, foreign direct investment (FDI) and economic growth for the case of Tajikistani economy over the period of 1988-2013. ARDL Bounds testing approach is conducted for analyzing a proposed growth model for the case. The results suggest that FDI and aid are important drivers for economic growth of Tajikistani economy. The findings show that FDI and aid have positive influence on economic growth in both long- and short-term periods in the case of Tajikistan.

Keywords: Economic Growth, AID, FDI, ARDL, Tajikistani Economy.

ÖZ

Bu tez ampirik olarak Tajikistan ekonomisindeki ekonomik büyüme ile uluslararası direk sermaye ve uluslararası ekonomik yardımlar arasındaki uzun ve kısa dönemli ilşkiyi otoregresif dağıtılmış gecikme testi ile ölçer (ARDL). Otoregresif dağıtılmış gecikme testi kullanılarak 1988 ile 2013 yılları arasında Tajikistan'nın ekonomik büyümesi incelenmiştir. Sonuçlar bu ülke'nin ekonomik büyümesinde direk sermaye yatırımlarının ve uluslararası ekonomik yardımların lokomotif faktörler olarak görülmüştür. Ampirik bulgular uluslararası direk sermaye yatırımlarının ve uluslararası ekonomik yardımlar hem uzun hemde kısa dönemli ekonomik büyüme üzerinde etkili olduğu belirlenmiştir.

Anahtar kelimeler: Ekonomik büyüme; otoregresif dağıtılmış gecikme testi (ARDL); uluslararası ekonomik yardımlar Tajikistan ekonomisi, dognudan yabanci serwaye, yabanci yardumlar.

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Chapter 1

INTRODUCTION

1.1 Introduction

Each and every nation's desire is to have prosperity in their economy. Governments, governmental institutions and economists pursue the goal of economic stability and economic growth. Limited resources lead every economy to become vulnerable in terms of fair distribution. Throughout the time, there has been many different economic structures that countries adopted in order to achieve their economic goals. To indicate the most important elements of a healthy economy are: employment of citizens, price stability, business cycle swings and finally economic growth in domestic and global terms. There are lots of theories how to achieve these goals but nevertheless it is vey difficult to do it in practice. Including political, cultural and geographical factors that economists have to deal with, some countries struggle even more than the others.

Countries in Central Asia are considered as one of the poorest and underdeveloped economies in the world and Tajikistan is not an exception. Tajikistan's recent break up from the Union of Soviet Socialists Republics (USSR), geographical difficulties in the region and transition of one economic system to another one made even more challenging to sustain the economic wellbeing. Short time after USSR broke up in

1991 Tajikistan's economy progressed but unfortunately those improvements were far from being stable. Obviously, economic growth is the one of the crucial indicators showing if everything is running in a desirable direction. Gross domestic product (GDP) and gross national product (GNP) can be linked to a plenty of other variables in the economic system.

1.2 Aim of the Study

This thesis investigates the relationship between aid, foreign direct investment (FDI) and economic growth for the case of the economy of Tajikistan in the period 1988–2013. ARDL Bounds testing approach is conducted for analyzing a proposed growth model for the case.

1.3 Methodology and Data

In order to examine the long-run correlation between the variables used in this study, the bounds test within ARDL (the autoregressive distributed lag) modeling approach was taken. This approach was introduced by Pesaran et al. (2001) and can be used irrespective of the order of integration of the variables (irrespective of whether regressors are purely I (0), purely I (1) or mutually co-integrated).

1.4 Findings of the Thesis

The results suggest that FDI and AID are the most important drivers of economic growth in both long- and short-terms of the Tajikistani economy. Error-correction modeling was used to confirm the existence of a stable long-term relationship and to approve a deviation from the long-term equilibrium following a short-term shock, which is corrected by 11 percent each year.

1.5 Structure of the Study

General information about the case is presented in the introduction chapter. Literature review in the second chapter shows how previous studies examine the selected topic. Chapter three is written in order to demonstrate the conditions Tajikistan went in through in its economic history. In chapter four, the data and the methodology are presented. Chapter five interprets the estimated results. Finally, in chapter six, some suggestions and implications are presented for further studies.

Chapter 2

LITERATURE REVIEW

FDI and its impact on economic growth is a popular topic in today's economy. Many studies have been made on this topic and different results pointed out. Here there will be mentioned only some of the most relevant ones for our research. Batten and Vo (2009) conducted an analysis in order to see how FDI and economic growth are related. They examined 79 countries and took longer period of time (from 1980 to 2003) compared to other studies to come up with more relevant results. The study revealed that with a less GDP per capita, the countries are growing faster than other developed countries. Country risk was found to be another factor that explains economic growth. As they linked the FDI and economic growth they found that there is a positive relationship between FDI and economic growth. From the given results they concluded that FDI is higher in developing countries and at the same time that lower risk countries are attracting more investment than risky countries. FDI is contributing to overall economic growth of countries.

The general idea throughout the literature is that FDI has a positive impact on economic growth. Enderwik (2005) noted that FDI doesn't contribute to all countries at the same level. Different areas with different country profiles have mixed effects on GDP growth. He also stated that quantity of investments coming into a country is not a valid indicator for growth but the quality of those investments is what matters

the most. The reason for this is that as the export oriented FDI comes in a host country as well as technology and opportunity to have a better workforce.

The host country's development in terms of growth and export by having FDI is accepted as a crucial condition so empirical analysis of this factor is also important. It was found that FDI improves the economy by increasing local capital exports, aiding technology that contributes to more manufacturing available for exports what results in making the host able to reach foreign markets easily and helping the domestic workforce to improve themselves (Caves 1996; UNCTAD 2003).

Dash and Sharma (2011) measured how FDI and Indian economy were related between the years of 1991 to 2006. They have done an empirical analysis and found that exports and FDI are interrelated with each other. However, this relationship is not two way relationship as literature suggests. They found out that in Indian economy (as a developing country) exports are leading more FDI activity and not the other way around. Since that study has been made for only India, this result may not be generalized. It is important to mention that India is not an export seeking countries but a local market seeking country.

Wang (2009) investigated the relationship between FDI and economic growth among Asian countries. 12 Asian countries were chosen as a sample and the time period of the study was 1987 - 1997. He pointed out that domestic investments and FDI should be analyzed separately. Wang (2009) divided FDI into different categories in terms of homogenous sectors. Assumption behind this was that each industry may have different effects on economic growth of a country. Therefore, impact of FDI on GDP

was studied in production sectors such as construction, food and agriculture industry, and also non-production sectors such as network, mining and other service industries. The results showed that production industry FDIs are making 60% of the total inflows brought to the Asian countries while other sectors brought consistently less than this amount. Furthermore, regression results prove that manufacturing based investments are having a significant positive impact on Asian countries economic growth while service based FDI regression results showed that even though the relationship is positive it is not statistically significant.

One of the attractive countries to study on in the literature is China. It has been experiencing a fast and stable economic growth over the last decades. Therefore many researchers have been interested to figure out the reasons of such tremendous growth rates in the country's GDP in last decades. Yao (2006) tried to measure the impact of FDI and export in the case of China. The study contained the biggest data set available for China and it lasted 23 years. Since the country is composed of provinces he examined the variables by separating the country into 28 regions. The period taken into account in his study was from 1978 to 2000. Results indicated that the growth of China is highly dependent on exports and FDI. Foreign policy changes of China began with the devaluation of its currency and the government started to apply export substitution instead of import. Therefore, the country started to become more and more self-sufficient. Eventually, as the FDI comes into the country (FDI inflow), they adopted technological improvements. Together with foreign trade policy liberalization process high GDP and growth prevailed. Statistical regression results seemed to confirm these theoretical ideas.

There has been also many studies conducted to understand the link between exports and economic growth of a country. A country's ability to trade is strongly connected to its development and improvement as literature reveals. When we examine previous studies we can note that economic expansion is seemed to be linked by two main paths in terms of trade and particularly exporting; first export oriented countries proved to be more effective and efficient in allocation of their resources and second those countries can increase their productive potential resources by more capital allocation (Bardhan and Lewis, 1970). Edwards (1993) did numerous empirical tests and in his model proved that exports and economic growth are positively correlated with each other. He applied cross country regression analysis but afterwards his study was faced with some critics since statistical methodology is not convincing enough. As a result, subsequent studies started to apply causality tests in order to examine connection between exports and economic expansion (Jung and Marshall, 1985; Chow, 1987; Bahmani et al., 1991). On the other hand, when the causality is applied the result can not be specified accurately. In an effort to avoid the miss-specified results acquired variables have to be co-integrated. It has been discovered that there is a positive link between economic growth and trade. Moreover, researchers eager to investigate how exactly exports make an influence on economic growth. As it has been mentioned before, in the general literature the theory states that there must be two paths to achieve that; production efficiency and increased capital allocation. (Levine and Renelt, 1992).

Ghirmay et al (2001) studied developed economies and 19 countries were selected for the investigation of export and GDP relationship. Johansen's co-integration test

and afterwards Granger causality analysis have been executed. Results indicated that trading efforts of countries (exports) have significant impact on increase of GDP of 15 out of 19 countries experienced a statistically significant GDP increase as exports increase. It's been showed that 12 countries in the sample can relate to both paths of trade-economy phenomen.

As mentioned before, Tajikistan has big amount of young workforce. Together with the low employment rate, people tend to work in some other countries and send remittances to their families. As a result remittances are composing an important source of revenue of the country. Wu (2003) investigated persistence regional unemployment in China. Even though the study was made for regional unemployment, it can still give general insight about the persistency of unemployment. After conducting a panel data method Wu found out that as China's growth is very high state capacity became insufficient to employ growing labor in the country. Also he revealed that private sector is the key and most preferred one for the people searching for a job.

We know that some countries tend to trade more due to their regional agreements such as NAFTA or European Union. Even though if there is not a regional agreement, there are usually mutual trade agreements between some particular countries. These countries are politically close to each other. Apart from relationships between countries, Choi (2004) investigated convergence factor of the FDI. His study was focused on income and growth rate convergence of countries. His hypothesis suggested that if one country has an income lower than other country and

at the same time FDI keeps flowing then eventually the income and growth rate gap between countries will be closed in a favorable manner for the host country. His results showed that this is the case. According the regression results he found out that income per capital gap as well as economic growth rate gap are closing as FDIs are coming to the host country. He also noted that if trading countries are sharing the same language, labor spillover is significantly higher, which means that mobility of the workers can be achieved much easier and this helps countries to use human capital.

Growth is the key element of developing economies. Ability to export their products and commodities bring them a solid advantage. However, the literature has proved that the countries with limited products to offer to other nations usually struggle from fluctuations in commodity prices and they are exposed to market risk in international markets. In order to overcome this problem a country should diversify its exports as much as possible. Wide variety of products can easily bring a solid growth opportunity. Tadesse and Shukralla (2013) investigated the impact of FDI on export diversification. Their study included 131 countries from different regions, underdeveloped and developed countries, between 1994 and 2004. Their overall result proved that FDI has an influence on export diversification. When they investigated the cross country regressions it was found that even though FDI has an overall impact, each country's assigned diversification level plays an important role on the degree in which FDI contributes. They also found out that FDI has a significant impact in terms of export diversification in developing countries rather than developed ones.

Another study where FDI was investigated observing economic contributions to the economy was done by Pavlinek (1998). The study was made first in a normative form - interviews with CEOs of big manufacturing firms were done. After that survey method was applied in order to capture both micro- and macro-economic effects of the investments. The study took place in Czech Republic since the collapse of socialism in Central and Eastern Europe (CEE) was considered as a great factor influencing the country's both trading and foreign investments. In the article, two different kinds of FDIs were taken into account: cross border exports oriented foreign direct investments and market capture FDIs. The main reason for that was contribution of these two types of investment to overall FDI. In the cross border export oriented model, it was argued that recipient countries were exploited because of their cheap labor and is unlikely to experience some important improvements neither in their technology nor in their trading networks. On the other hand, the market capture model was considered as a beneficial tool for creating marketing networks as well as improved local economy in Czech Republic. The country's low FDI amount after 1989 (because of the collapse of the state system) provided an opportunity for the study to examine if FDI actually improved the economy of the Czech Republic. Rresults indicate that Czech Republic became the most successful of all CEE countries in terms of FDI attraction. Geographical advantage of the country compared to other CEE countries as well as political stability accelerated this process. However, when the economic sustainability and stable growth was examined, it didn’t seem that FDI was helping as much as was expected. The reason for that mainly came from the investor country’s unwillingness to embrace market capture approach.

Alfaro et. al. (2001) investigated the role of the FDIs in both - economy and financial markets. They examined a cross country analysis for years from 1970 to 1995. The model they developed was based on the idea that there are two kinds of intermediaries in the economies. Firs type of intermediary wish to work for a firm that belongs to the FDI sector and the other type can choose to establish his own business and have to take the risk as an entrepreneur and paying the initial cost of his business. In this point second type of intermediaries require a financial system that can provide the necessary fundings for the new firm. A possible obstacle that can emerge due to undeveloped financial system is that the borrowing rate can be much higher than the lending rate as well as it can be more difficult to acquire the funding in the less developed financial systems. The study intended to reveal if more developed financial market countries are superior in terms of FDI attraction and in terms of economic growth opportunities in their countries. The study was supported with an empirical analysis. The findings showed that multinational companies were eager to invest in other countries and expand their operations in order to achieve greater growth and reach foreign markets. Their basic motivation was to use cheap labor and advantageous tax systems that highly developed countries didn't offer. On the other hand, the benefits that the host countries were receiving from FDI investments were much larger and significant. Host countries were able to enjoy improvements in their local markets, easily established their own business structures by learning from the investing companies and also they could enjoy variety of technology. This study most of all pointed out the importance of necessity to have a solid financial system. The economies with a reliable financial system can realize these improvements and benefits that FDIs can carry in short and long run. But the

ones with a poor financial system don’t seem to improve economically in the anticipated scale. They will still experience higher employment but in terms of economic growth, in both short run and in the long run FDIs don't make a significant impact.

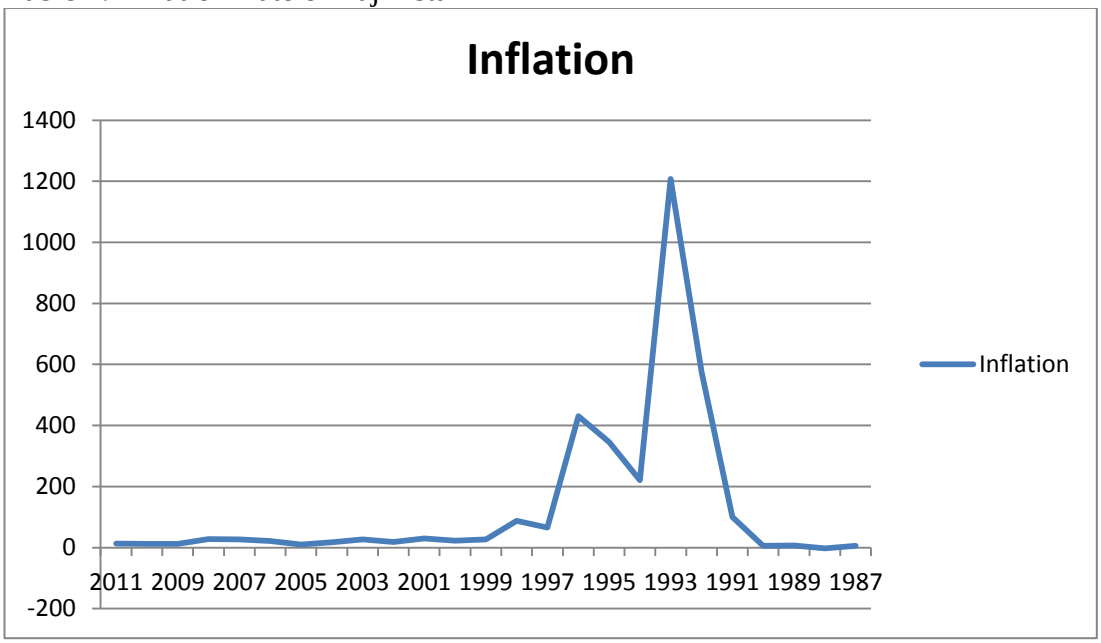
In another study done by Konings (2001), it is examined if FDI has any impact on domestic production level. The idea was that FDI leads a major competition between foreign firms and domestic firms which already exist in the local economy. Three of countries from Eastern Europe were tested in this study: Bulgaria, Romania and Poland. The study answered two questions: if is possible that foreign firms are more successful than domestic companies of the host country and if foreign direct investment is able to create a spillover affect that will influence the local firms. The findings of this study showed that foreign firms were not dominating local firms in terms of performance and productivity except in the case of Poland. Furthermore, the author couldn’t identify positive spillover effect from foreign firms to the local firms. The spillover effect seemed to be negative. The explanation for this could be competition among these firms. The study suggests that local firms will underperform in the short term after FDIs come into, but as the technology and new business structure develop, domestic firms are expected to take the lead compare to foreign ones.

Chapter 3

ECONOMIC OVERVIEW: TAJIKISTAN

In 1991, after Tajikistan broke up from the USSR, the country got into a dramatic recession period as the other Commonwealth of Independent States (CIS). After this decline the recovery phase started in the second half of the 1990s. The government announced huge numbers of fiscal deficit in the second half of 1990s. Those deficits were financed mostly by credits taken from the Central bank of Tajikistan. Since the Central bank was providing so many credits, eventually hyper-inflation prevailed. Economic turnaround was effective after reforms taken by Central bank and the government in the third quarter of 1990s. Since 1995 fiscal deficit decreased from 11% in that year to nearly 3% during the last years of 1990s. Fiscal deficit financed by government of the country shrank. Deficit dropped to only 1% of total GDP in the beginning of this century.

Table 1: Inflation Rate of Tajikistan



Source: Worldbank.

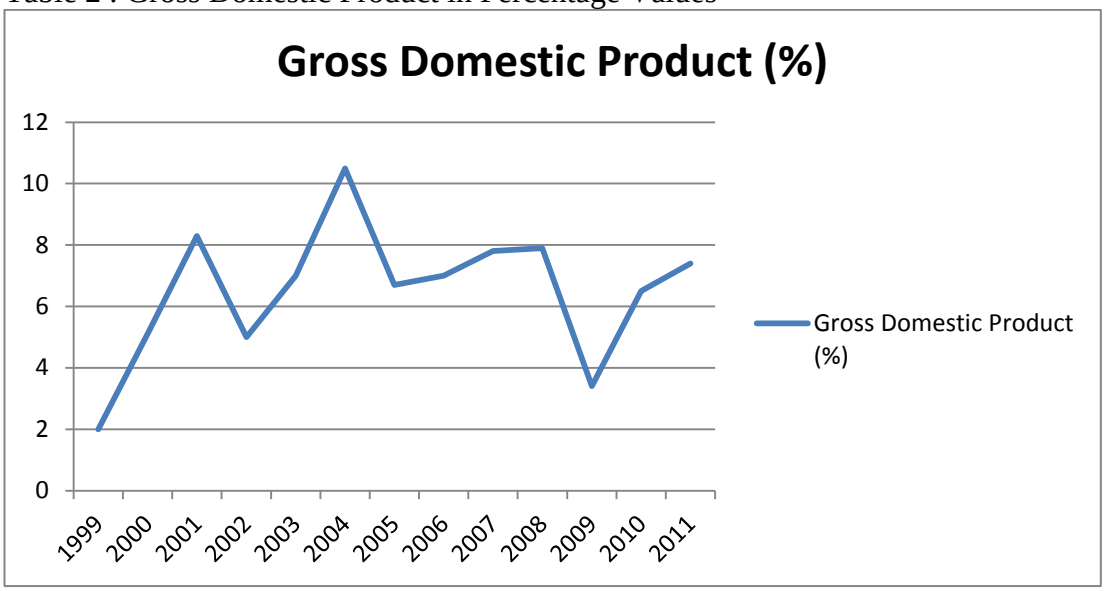
Inflation rate of Tajikistan can be seen from the graph above. The hyper-inflation in pre- and post-Soviet Union period can be clearly seen. Inflation was very high between 1990 and 1996, reaching the peak (1207%) in 1993. After 2000 it became stable.

One of the key successes to a healthy economic environment are stable gross domestic and national product rates. In order to achieve such goal wealth should be distributed equally. As mentioned before the country had transition period after its separation from USSR but nevertheless Tajikistan was able to achieve high growth rate. The key challenge is to distribute increased wealth equally because this is the only way that labor and intensive manufacturing can be flourished. Tajikistan is heavily dependent on its labor force therefore creating more employment can favor

the economy significantly. Tajikistan managed to have a relatively high growth rate after the year 2000.

Tajikistan is one of the former CIS countries and Tajik economy is a capital intensive economy. The biggest problem of the country is that most of the capital stock is piled up in public sector what makes difficult for private sector to adjust and improve itself since there are bad conditions for it. Tajikistan requires more investment into the country which should be mostly private oriented and based on non-conventional exportable goods and services for the domestic economy. Amount of private investment is very low, far from what is expected from a developing low income country. Private market investments were only about 6% of the country's gross domestic product (GDP) between 2003 and 2006.

Table 2 : Gross Domestic Product in Percentage Values

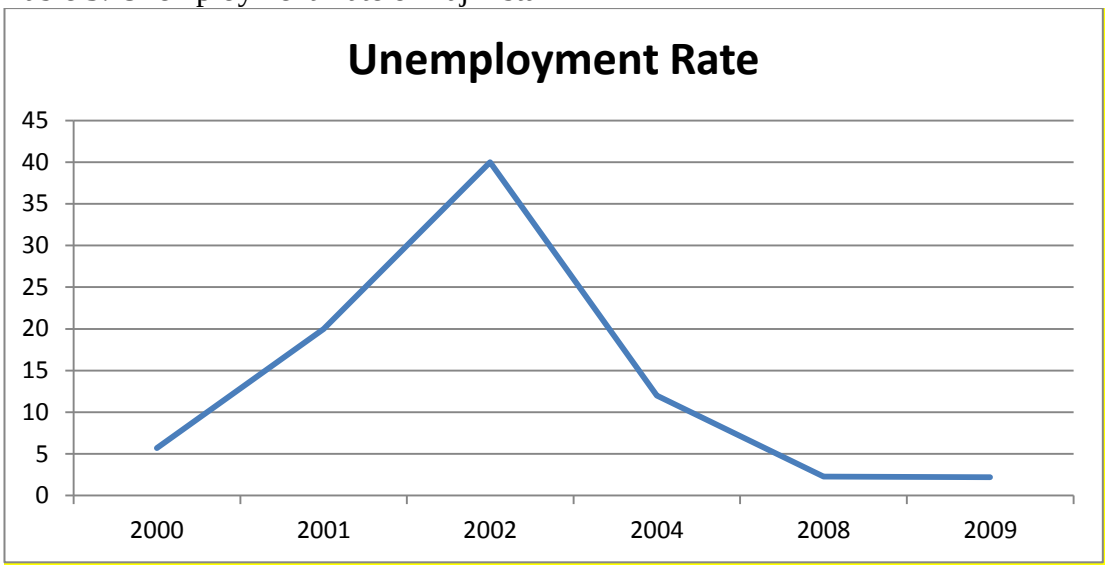


Source: Worldbank.

Table 2 shows GDP growth rates for economy of Tajikistan. After separation from USSR the country entered to recovery in terms of domestic growth. However, we can see that such growth couldn't be kept under control over the years. High swings in the graph indicate that country is having stability struggles.

In 2005 total estimated workforce in Tajikistan was about 3.6 million people. Among them almost 70 percent were included in agriculture industry since the sector is the most important source of living for Tajik people. 17 percent of the total workforce was employed in service sector and the rest mostly in construction sector and manufacturing. Tajik labor faced decrease of their minimum wage in 2000. The main reason behind this decrease was high amount of demand for new entrance to the market. As the economic growth rates increased over time, in 2004 wages of employees raised. Most of the farms belonged to the government and it was very difficult for people to get the job.

Table 3: Unemployment Rate of Tajikistan



Source: Worldbank.

Between 1999 and 2004 Tajikistan's unemployment rate was extremely high. As a result of this Tajik citizens moved to Russia and other neighbor countries to work either permanently or seasonally. It should be mentioned in this place that a big amount of inflows is composed of remittances. In the year 2005 there was around 15% households dependent on remittances.

As a low income economy Tajikistan needs more reforms and new markets to get into. Both - FDI and AID can help the economy to restore it in terms of unemployment, economic growth and inflation.

Chapter 4

DATA, MODEL AND METHODOLOGY

4.1 Data[1]

The information "data" are collected from measurable division of Ministry of Finance of Tajikistan, from World Bank and IMF Databases. The time measurement of variables is 25 years, from 1988 to 2012. It is focused on tree variables which are: CAP is GDP for every capita, AID is support and FDI remote immediate financing. These variables are utilized to measure the seriousness of FDI and how it has influenced the economy and the expectation for everyday life of Tajikistan. In this work we attempt to see how FDI influences monetary development, speculation and exclusively diminish cash implied for improvement. To know whether truly GDP supplements cash used on venture that is what was truly used to create the economy or was stolen by lawmakers/top open authorities for their self-centered premium or used on elephant and huge undertakings which are not advantageous to the masses of Tajikistan.

Thirdly, to know whether there is a real distinction between the GDP and FDI that existed in Tajikistan as respects the living guidelines of Tajikistan and the level of FDI.

[1] The result of the Time Series Analysis in the case of Tajikistan generated by Unit Root, Microfit 4,1 software.

4.2 Model

In this study, I will adopt the frameworks introduced by Balasubramanyam, Salisu and Sapsford (1996) and Hansen and Rand (2006) to investigate the role of FDI on economic growth in the following way:

$$LnCAP_t = a_0 + a_1 T + a_2 LnAID_t + a_3 LnFDI_t + u_t$$

Where,

CAP is GDP per capita, AID is AID, FDI foreign direct investment, a_0, a_1, a_2, *and* $a_3$are estimated parameters, u_t is serially uncorrelated random disturbance term; and *Ln* denotes the natural logarithm.

4.3 Methodology

Cointegration issue is an important concept in time series studies. This focuses on three important points as such the stationary point, the spurious results and the Error-correction model.

Time-Series are thought to be stationary; then again, if there is a non-stationary result (drift), a significant issue has upsurge and this pattern may cause genuine issues (i.e. spurious brings about relapse). It is integrated at the same order, the Residual-based Engle Granger test (1987), the Maximum-Likelihood based Johansen test (1988), the Johnson and Juselius tests are applied. However, it is integrated with mix-ordered regressors, either I (1) or I (0), The Bounds test is run under the Auto Regressive Distribution Lag (ARDL) model. Within this study, The Bounds test will be conducted. ARDL will also be used to find out short-run dynamics.

Chapter 5

DATA ANALYSIS AND RESULTS

5.1 Correlation Matrix

Table 1 shows correlation coefficients of the variables in inspection. The pairwise explains us the variables FDI, AID are reasonably high scores associated with GDP. This means that the variables suggested to use in the regression equation.

Table 5.1: Estimated Correlation Matrix of Variables

	LGDPC	LFDI	LAID
LGDPC	1.0000		
LFDI	.73511	1.0000	
LAID	.76029	.64189	1.0000

5.2 Unit Root Test

Table 5.2 shows the results of ADF tests in which reveal that LGDPC, LFDI and are integrated of order I (1) and LAID is integrated of order zero, I (0). The relevant critical values of the ADF test for 25 numbers of observations at the 5 percent significance levels are obtained from Mackinnon (2010) and by MFIT 4.1. It is worth noting that the intercept and trend terms are added to the ADF equations. I have

chosen the Schwarz Bayesian Criterion for optimum lags for the variables under inspection.

Table 5.2: Unit Root Tests

Variables	Test Statistics and Critical Values				Integration levels
	Levels		1st differences		
	ADF	C.V. (5%)	ADF	C.V. (5%)	
LGDPC	-.21639 (2)	-3.0186	-4.4536 (0)	-3.0186	I(1)
LFDI	-1.7148 (2)	-3.0186	-6.2573 (0)	-3.0186	I(1)
LAID	-3.915(2)	-3.65	-6.8319	-3.64	I(0)

Table 5.3 shows that F-statistics is greater than the upper bound of critical value band, so we cannot accept the null hypothesis of no long-term relationship between the variables in the model. The F-statistics illustrates that based on the model there exist an equilibrium relationship between GDP per capita and its elements.

Table 5.3: F-Statistic-ARDL Models

F-Statistic Variables	F-Stat	Column F		Column W	
		I(0)	I(1)	I(0)	I(1)
F(LGDPC, LFDI, LAID)	7.0287	2.85	4.05	14.2	20.2

Next, I obtained the coefficients of the long-term relationships and found their error-correction terms. Table 5.4 and 5.5 present long-run and short-run estimates as well as error-correction coefficients respectively. Table 5.5 shows that the error-correction terms (coefficients) are statistically significant for the model. Its coefficient is almost

–0.11. This means that the disequilibrium occurring due to a shock is totally corrected in one year period at the rates of 11 percent.

Table 5.4: Estimation for Autoregressive Distributed Lag Estimates

Autoregressive Distributed Lag Estimates				
ARDL(1,0,0) selected based on Schwarz Bayesian Criterion				
Regressor	Coefficient	Standard Error	T-Ratio [Prob]	
LGDPC(-1)	.88396	.057831	15.2852[.000]	
LFDI	.068376	.026887	2.5431[.020]	
LAID	.15263	.059381	2.5703[.019]	
C	-3.3681	.83576	-4.0300[.001]	
R-Squared	.95849	R-Bar-Squared	.95157	
Akaike Info. Criterion	11.6319	Schwarz Bayesian Criterion	9.4499	
DW-statistic	2.4344	Durbin's h-statistic	-1.0585[.290]	

Notes: t-statistics are in parentheses and all diagnostic pass at the 5 percent, or 1 percent level of significance. It is worth stressing that reported diagnostic suggests that the evident misspecification do exist at the 5 percent level of significance for some criteria.

In the long-run period FDI and AID are statistically significant at least 5% level. This means that FDI and AID have positive impact on economic growth of Tajikistan. In the short run period FDI and AID are also found significant.

Table 5.5: Error Correction by ARDL Model

ARDL (1, 0, 0) selected based on Schwarz Bayesian Criterion				
Regressor	Coefficient	Standard Error	T-Ratio[Prob]	
dLFDI	.068376	.026887	2.5431[.020]	
dLAID	.15263	.059381	2.5703[.019]	
dC	-3.3681	.83576	-4.0300[.001]	
ecm(-1)	-.11604	.057831	-2.0066[.060]	
R-Squared	.63637	R-Bar-Sq	.57576	
Akaike Info. Criterion	11.6319	Schwarz Bayesian Criterion	9.4499	
DW-statistic	2.4344			

Chapter 6

CONCLUSION SUGGESTIONS AND RECOMMENDATIONS

6.1 Conclusion

This thesis investigates the relationship between AID, FDI and the economic growth in the case of the Tajikistan's economy over the period 1988–2013. Due to the mixed-integration level of the variables (a mix of I (0) and I (1) found in the series) the ARDL approach has been chosen to carry out this research.

The topic of FDI is well researched and from the literature we notice that there can be found similar connection between variables studied at this point in other countries as well. Different researchers proved positive relationship between FDI, AID and GDP what shows that having FDI is one of the main indicators of growth in the economy of the country.

The results suggest that FDI and AID are important drivers and have positive influence on the economic growth in long and short terms of the Tajikistan's economy. Error-correction model was used to confirm the existence of a stable long-term relationship and approaching the long-term equilibrium following a short-term shock, which is corrected by almost 11 percent after each year.

Results of our research show that we can confirm our initial hypothesis and conclude that FDI and AID have positive impact on economic growth in the case of Tajikistan. This is not exception and isolated case since other researchers have found the similar relationship by using different approaches of analyzing these relationships in other countries as well.

6.2 Suggestions and recommendations

As we proved FDI and foreign AID are strongly connected to economic growth of Tajikistan. AID has positive effect on economic growth and foreign AID can be an excellent opportunity and helper to attract FDI to the country. This is what Tajikistan has to consider. The suggestion is that Tajikistan should focus on attracting more foreign AID as a main channel to attract more FDI and investment opportunities. The aim should be to create positive economic environment firstly and mainly trough better use of foreign AID.

Not only trough AID, there are other ways of attracting new investments from abroad (FDI) by creating positive economic environment for them (like give tax exemptions, create more free economic zones etc.) what Tajikistan in order to obtain stable high long run economic wealth should consider as well and make changes in this direction if wanting to be successful and economic developed country.

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