

THE STUDY OF THE RELATIONSHIP BETWEEN GOOD GOVERNANCE AND FOREIGN DIRECT INVESTMENT IN COUNTRIES WITH MIDDLE-INCOME

MOJTABA KARIMI^{a1} AND HAMID HOSSEIN ZADEH GOHARI^b

^aDepartment of Economics, Buinzahra Baranch, Islamic Azad University, Qazvin, Iran

^bSenior Administrative of RIPI

ABSTRACT

The impact of FDI on employment, technology transfer to the host country, increased ease of access to foreign markets and financial resources has significant effects on economic performance. Good governance in recent years as one of the most important factors affecting foreign direct investment has been paid attention by the economic and political decision-makers. In this study, we apply the combining data (panel), new developed indicators to estimate the impact of good governance on foreign direct investment over 15 middle-income countries (including Iran) between 1996 and 2005. Estimation results show that good governance indicators, GDP per capita and infrastructure have positive and significant effects and Inflation has negative and significant effect on FDI. Finally, the good governance index has been separated to its components which are opining right, political stability, and effectiveness, and regulation quality, rule of law and control of corruption. The model results indicate that each of these components have a significant positive effect on foreign direct investment. Among these elements, the corruption is the major deterrent for foreign investment.

KEYWORDS: Foreign direct investment, good governance, combined data (panel)

Foreign Direct Investment or FDI brings many benefits. Job creation and technology transfer to the host country is the most important factor. Other benefits of it is to access to foreign markets and resources that are essential for countries. Although in global level, the measurement of foreign direct investment has grown considerably since the 1980s, the shares of many countries including Iran of this process has not been remarkable.

In response to the inability of some countries to attract FDI, so far economists has enumerated several factors as the main reasons for the performance differences to attract FDI among countries: Factors such as market size, exchange rate, inflation rate, openness of trade, wage rates, the ratio of external debt to GDP ratio of domestic investment to GDP.... In turn, each part explains the differences among countries in attracting FDI. But surely, there are numerous factors which either has been neglected by economist's mind yet or it gets difficult or impossible to use quantitative approach to measure and assess their impact on the quality of FDI absorption. Certainly adding these factors to the finding of our economists cause us to explain the empirical facts in attracting FDI better.

Among the factors that have so far paid little attention to is the Government's role as a social institution builder in appropriate performance of the markets and the most major one is for establishing right conditions for investment and sustainable allocation of physical capital. This study I tries to examine some of these noneconomic factors such as the enjoyment of the

right to opining and monitoring of the actions of rulers, political stability, and corruption in administration, government efficiency and ... which are known under the name of governing components in direct foreign investment. The second part of the paper is allocated to description of the theoretical relationship between the mentioned variables with foreign direct investment. . In the third section, we will review the empirical literature. In fourth section, the process of direct foreign investment in examined countries will be investigated. In the fifth section, the specified econometric model and its variables are introduced. Section six is devoted to the presentation of experimental results. The last section includes conclusions from the discussion above.

THEORETICAL BASICS

In this section, firstly, the concepts and theories associated with the formation of theory of good governance theory have been presented briefly and then we explain the theatrical basics regarding the relationship between a good governor and foreign direct investment.

The formation of good governor theory

In the mid-1990s, the economic adjustment policies and institutional economists headed by Joseph Stiglitz (1998) have been criticized widely. He put forward his critical comments in the model of post-Washington Consensus policies in 1998. Stiglitz believes that the originator interaction of government-the market can help in the success of the processes of economic reforms in developing countries. In this way,

¹Corresponding author

what is essential is to perform extensive reforms in the state domain in addition to empower the private sector. In the post-Washington consensus, both state and market are complementary institutions rather than competing ones. So instead of arguing the intervening or non-intervening of government, it should be stipulated the efficiency and effectiveness of government intervention. In fact, the government as a builder social institution should prepare an appropriate environment to regulate economic relations between individuals as low cost, simple and far way of wasting time by establishing efficient and capable institutions and thereby as a helping hand, it provides the economic growth of market. Successful provision of these institutions is often considered as good governance. Global Bank defines governance as the traditions and institutions by which authority in a country is exercised for the common good consists of three components as follows:

- 1- Process by which those in power, have been selected, monitored and replaced.
- 2- Government capacity to manage resources efficiently and to run the right policies,
- 3- Respect of citizens and government to the institutions which managed the economic and social interactions among them.

Obviously, before discussing about the theoretical frameworks concerning the relationship between good governance and foreign direct investment, we should be able to measure the quality of governance by a method. So the main issue is to achieve an appropriate indicators and quantitative criteria to measure the quality of governance in a way by using them, we can examine the quality of impact of governance component on foreign direct investment. In this study, we focus our attention on 6 indicators of good governance which have been compiled by global bank. These indicators are the result of three researchers' research from the Global Bank, Daniel Kaufmann, AartKraay, Pablo Zoido Lobaton which integrated the findings of various international institutions such as the EIU, ICRG, Heritage Foundation, and Freedom House about the Economic, political and social conditions of countries and introduced new and general indexes under the name of governance index.

These indexes are as follows: The right of giving comments and being responsive, political stability, government effectiveness, the quality rules, the rule of law, control of corruption.

Good governance and foreign direct investment

Factors affecting foreign direct investment can be divided into two categories: First group are the factors affecting the profitability of foreign direct investment including the GDP (per capita or its growth), inflation, human capital, trade, etc. Second group are the factors affecting the safety of the investment. Some of these elements are deeply rooted in the culture or political structure of the country and other are related to economic approach of government, performance of cross- border factors of economic agents. Research conducted in recent years by relying primarily on the concept of institutions has demonstrated the relationship between security and investment. Among the factors that affect the security of the investment, the role of the state as a social builder institution is the subject of current research in the amount of attraction of foreign direct investment. In recent years, good governance as one of the most important factors affecting the FDI has been attracted the attention of political and economic decision-makers. Potential relationship between governance and FDI flows between countries was considered by Lucas (1990) at first time. By asking this question, "why capital flows from rich to poor countries in the global economy has not been done until the ratio of capital to labor and the rate of capital return and the wage have been equal?" Lucas challenged one of the predictions of a simple neoclassical model based on per capita income convergence between countries and geographic areas (Paradox Lucas). He argued the existence of some non-economic relations, including political risks, colonial relationships, unstable and unreliable rules and regulations, the bribery and corruption have been caused the high risk of investment in poor countries so the final capital return in these countries is not high in the comparison with investment in rich countries. Accordingly, it cannot be expected the capital flow flooded from rich to poor countries.

Theory institutionalism well managed found out and justified paradox Lucas. Institutional economists such as Knack and Keefer (1995 and 1997), Mauro (1995), Barro (1999), Hall and Jones (1999) emphasize on this idea that institutional changes is the most significant determining factor in economic development and investment growth. Knack and Keefer (1997) found that poor countries are not able to attract capital due to inefficient institutions. Hall and Jones also concluded that the governance and institutions ' criteria as factors that have an impact on labor productivity are important determinants factor of growth. Acemoglu and others (2002) in their research

concluded that the changes in income level of countries in Europe were due to Institutional changes in these countries. Acemoglu and Johnson also (2005) found that Property rights institutions have a significant effect on long-term economic growth.

Alfaro, Kalemli-Ozcan and Volosovych (2005) have been identified low quality of institutions as a key factor in explaining the reason for not capital flowing to poor countries. The above research shows that good governance has provided a suitable environment for growth-oriented activities such as investment. Good governance as a prerequisite is very important for well-functioning markets and thus creating attractive conditions for investment and sustainable allocation of the physical investments and it can have positive and significant effects on FDI by impressing on economical, political, social policies and economical, political and social structures.

But by the development of endogenous growth models researchers focus on "non-economic factors" that affect investment and growth. The attention to non economic factors as another source of diverse countries raised the question that what the relationship is between institutions in general and political and social institutions specifically with investment and growth. In this area, extensive researches have been conducted by economists and significant results have been obtained. Some subjects such as the measure of representative of the government from people, political stability (the measure of stability of regimes and leaders, probability of continuing current policies in the condition of death or replacement of leaders and governments), the limits of rule of law and order, the risk of disregarding to the contract by the government, corruption in government, risk of expropriation of assets and private investments, people have the right of giving their comments and monitoring government performances, the effectiveness of government and such topics were new variables which have been inserted in the literature of investment and economic growth in this stage.

REVIEW OF EMPIRICAL STUDIES

Abdel-Rahman (2002), in an article titled "The determinants of foreign direct investment in Saudi Arabia" identifies the factors affecting on foreign direct investment in Saudi Arabia during the period 1980-2000. The results indicate that the determinants of FDI flows in Saudi are economic, political and social factors. In particular, the level of economic activity, the variables associated with the structure of returning of investment, the degree of openness of economic and

economical environment are considered as factors affecting FDI. The GDP level is effective on foreign direct investment positively and significantly and exports and imports have significant and reverse effects on it. Moreover, the internal investment has a negative and significant effect on foreign direct investment. The effects of political-social risk are essentially significant and negative which are expected, as by the increase of risk, FDI flows have been decreased.

A.Baniak and his colleagues (2002), in their studies entitled "Factors affecting foreign direct investment in developing countries," said foreign direct investment have caused the attraction of investments from the other countries, facilitation of production, technology transfer and the creation of jobs and new specialists to some extent in the management issue of host country. The results show that firstly, increasing of economic fluctuations lead to reduction of flows of foreign direct investment. Second, continuous changes in business and financial regulations have played a fundamental role in investors' decisions and it slows foreign direct investment flows.

Adeoye (2004) in his article has investigated the impact of corporate governance on foreign direct investment in 33 countries within a consolidated model during the period 1997 to 2002. The results showed that GDP as a variable successor index size of market, trade (exports + imports) as a percentage of GDP and indicators of corporate governance has positive effects and inflation as a variable alternative indicators of economic instability, phone lines and expenses for household have negative effects on foreign direct investment flows.

Busse, M., Hefeker (2005), in an article titled "Political Risk, Institutions and Foreign Direct Investment" took the test of the impact of political risk indicators on FDI flows in 83 developing countries over the period 1984 to 2003. The results showed that three variables GNI per capita (to control the size of the market), the actual rate of growth of production (for controlling the growth and market potential power) and the ratio of exports and imports to GDP (to control trade openness) has positive relation with FDI flow and political risk and inflation have a negative relationship with it.

In his research, Baptiste, Bonny J (2004) examined the effects of bad governance on FDI in Haiti by using OLS method. The results show that alternative political instability variable (number of elected and unelected presidents from 1970 to 2002), inflation, lack of political rights and civil liberties (as surrogate

variable of bad political governance indicators) and sanction have significant and negative impact on FDI in Haiti and the effect of other variables is meaningless. He believes for promotion FDI in Haiti, it is necessary to make some stronger plans for security development and Haiti development by the attention to: help to establish justice, to create a safe environment for investment, economic growth guarantees, distribution of income and wealth improvement, poverty reduction and creating an organization to attract FDI and exports.

Miderry and benevolent people (1383), in the collection under the name of "good governance, development foundation" have explained good governance, genesis theory, administrative policies, and the requirement for the movement towards to good governance. This collection is composed of three parts: The first part deals with the theory of the development. In this section those theoretical discussions and empirical evidence which lead to mental evolution in economics' opinions and their focus on governance theory have been presented. The second section deals with the theory of good governance and the implementation of policies and ultimately in third section, the various aspects of this theory are described.

Dr. Parviz Davoudi and Akbar Shahmoradi (1383), in an article entitled "Recognition of factors affecting on the attracting foreign direct investment in Iran economy and 46 countries within the framework of an integrated model" have investigated the effective factors on attracting FDI in 47 countries during the period 1990-2002. The mentioned analysis has been done in the framework of a consistent pattern in order to separate the special differences of each country. They show that the attention to legal infrastructure, encouragement and strengthen of the domestic private sector investment, effectiveness and efficiency of investment which has been done in infrastructure, research and development, labor productivity and the activities to increase and political stability of country can lead to attract more foreign direct investment in Iran.

Abolfazl Shahabadi and abdollah Mahmoudi (1384), in an article entitled "The determinants of foreign direct investment in Iran" have investigated the effective factors on attracting foreign direct investment in Iran during the period 1382-1388. According to studies, foreign direct investment is under the function of the factors such as rate of return on capital, economic openness, infrastructure, economic development, inward investment, natural resources, human capital, inflation, exchange rates, external debt, government

finances, taxes, market size, political rights, and the ratio of government expenditure to GDP. The results show: A: Natural existing resources, human capital and infrastructure influence on foreign direct investment attracting in Iran directly and significantly. B: Political Rights variable and illusory Islamic Revolution variable influence on attracting foreign direct investment reversely and significantly. C: The factor of economic openness has a positive and meaningless effect, and the ratio of government expenditure to GDP also has a negative and meaningless effect on attracting FDI in Iran.

Hosseinzadeh Bahreini (1383), in his article entitled "factors affecting on investment security in Iran" said that the measure of investment in each country in under the function of variables collection which the security investment is one of the most important variable among them. He initially stated the causes of insecurity Iran investment environment based on picture provided by international organizations which estimated the risk such as: he Heritage Foundation, Freedom House and the Global Bank and then by combining the above reports, he introduces the factors which insecure the investment environment and job and business in Iran in 6 below areas: economic issues, political issues, legal issues, juridical issues, the performance of the government, internal and international security issue.

TRENDS IN FOREIGN DIRECT INVESTMENT

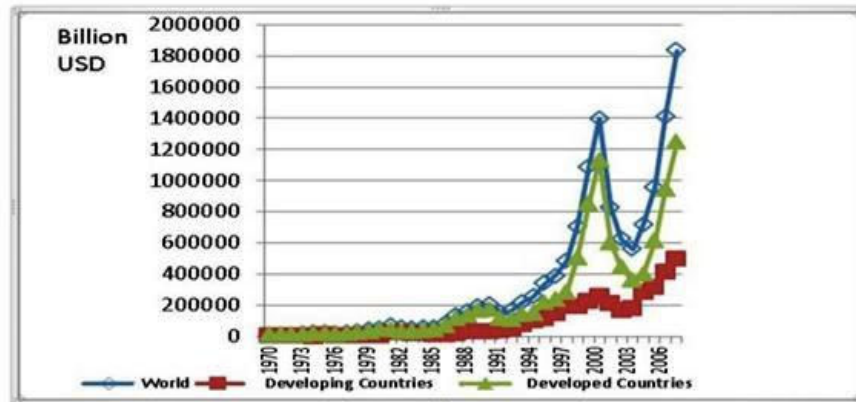
Foreign direct investment in the world and in developing countries

Figure (1) shows the trends in foreign direct investment in the world, developed and developing countries from 1970 to 2007. Accordingly, foreign direct investment in the mid-80s has been rising at a slow pace. The bulk of the international trade has been made in goods and services in this period. The process of foreign direct investment began to grow rapidly by starting the processes of privatization and liberalization policies in America and England, and consequently in other countries and disappearance of many existing barriers against international capital movement and Internationalization financial markets in the world. The amount of foreign direct investment has been reached from about \$ 200 billion in 1992 to more than 1,400 billion in 2000 and even some issues such as crises in Southeast Asia could not reduce the growth rate. But this process took a downward trend since 2001. The most important influencing factors are September

eleven attacks, reduction of America and Europe Union economic growth, and the reduction of USD value. Flows of foreign direct investment in 2003 reached \$ 570 billion, about 60 percent less than the amount in 2000. We have seen a further increase of FDI flows in the world by subsidence of the psychological impact of September eleven attacks and returning peace to the

international capital market. In fact, foreign investment worldwide began its boom cycle since 2003 and the flow of investment in the world shows a growing trend with 91,205 billion dollars during the years 2004 to 2006. Inflow of foreign direct investment in all economic regions of the world has been reached to 1833 billion dollars in 2007.

Figure 1: Trends in foreign direct investment in the world, developed and developing countries during 1970-2007



Source: www.unctad.org

Figure 1 can be seen in the mid 80's, there was not a big difference between developed and developing countries in attracting foreign investment. In fact, the volume of foreign direct investment has not been very significant. Since 1985 onwards, the developed countries of the world had better performance in attracting foreign direct investment which can be attributed to the early onset of the liberalization in these countries. Entry of foreign investment in developing countries began to grow significantly in the early '90s and gradually the distance between these countries with the developed countries has been less. But the crisis in South East Asia between 97 and 98 caused the entry of FDI to developing countries declined slightly. From the other hand, the process of entrance of foreign direct investment to developing countries grew and it reached to more than five times in 2000 in the comparison of developing countries. In 2000, FDI inflows to developed countries reached to about 1,200 billion dollars which includes around 85% of whole global direct investment. The interesting point is that after the events of September 11th, the entrance of FDI to develop has been decreased as the same as the time in had been increased and it felled from 1,200 billion in 2000 to less than \$ 400 billion in 2003. While the developing countries saw a relatively quiet growth of entrance of FDI into their economies and they reached their share of global FDI from 14 percent in 2000 to 35 percent in 2005. In 2007, inflows of foreign direct

investment in developed countries with the growth of 33 percent has been reached to 1,247 billion dollars, which included 59% of inflows of world foreign capital. While inflows of foreign direct investment in developing countries with a growth rate of 21% has been reached to amount of \$ 500 billion. In total, the developed countries have a more role and volume of capital transmission and this role in developing countries was less.

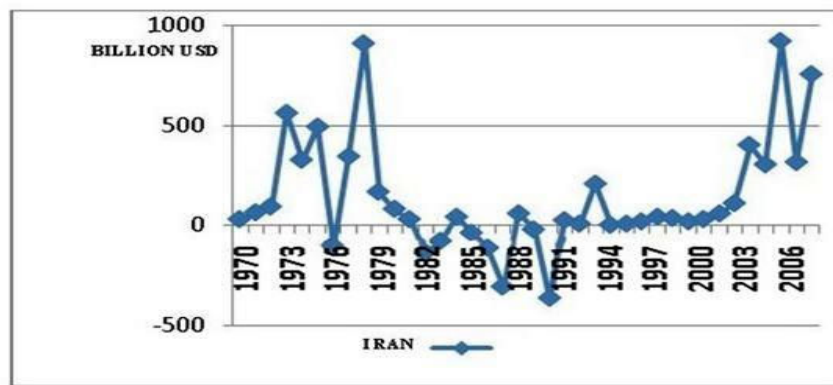
Foreign Direct Investment in Iran

Graph (2) FDI shows the inflows to Iran during 1970 and 2007. As you can see from the chart, FDI inflow to Iran has been a lot of fluctuations and the trend is not stable. This issue has a close relationship with Iran economic structure in this period and the tension on that time. With rising oil revenues and significant investments in economic infrastructure in the early 70s, we saw a dramatic increase in foreign direct investment in the economy which has been reached to 562 million dollars in 1973. Between 1973 and 1975, around 5/1 billion foreign direct investment has been made in Iran which coincides with the period of increasing oil prices and foreign exchange earnings in that period. In 1978, we saw the most entry of foreign direct investment in Iran history with the figure about 9/9 million dollars. In total, between 1970 and 1978, about \$ 3 billion in foreign direct investment entered into Iran. By occurrence Iran Revolution and social and

political unrest and afterward the occurrence of imposed war, FDI inflow to Iran began a descending trend. And in the period of 1981 and 1990, the economy of Iran has been witness of withdrawal of foreign investment had been made. In this period, only in the years of 88 and 84, about 100 million U.S. dollars of foreign investment has been entered into Iran economy. While, only in 1990, about 360 million dollars of foreign capital has been withdrawn from Iran. By the end of the war and the Reconstruction era and from the early '90s, and by restoring peace to the society and economy, we have been witness of re-entering of foreign direct investment in Iran. But the amount and volume of this investment is very slight and are mainly related to one or more of the projects which have been formed by the government support. In 1994, only two million dollars in foreign

direct investment has been made which this figure has been reached to \$ 61 million in 2001. In the years 2003 and 2002, we witnessed of a massive boom in foreign direct investment, so around a billion dollars of foreign investment has been made in Iran. This event has been occurred after reforming of Attraction and Protection of Foreign Investment by Iran Parliament. Unfortunately, in later years this trend was not continued due to reasons such as the Iraq crisis, Iran's nuclear issue, reinforcing sanctions from America and etc. Again, we see a reduction in the volume of foreign direct investment in Iran economy. According to UNCTAD data, the inflow of foreign direct investment in Iran has been 282 million in 2004, \$ 360 million in 2005, and \$ 317 million in 2006 and this figure has been reached to 754 million dollars with 140% growth in 2007.

Figure 2: Trends in foreign direct investment during the years 1970-2005



Source: www.unctad.org

THE RESEARCH MODEL

In this section, we have investigated the effective factors on foreign direct investment in countries with middle-income based on combined date econometric method or panel in the period of 1996 to 2005. In this stipulation, variables such as trade, household expenses, telephone lines per 1,000 people, GDP, inflation and indicators of good governance as determinants of foreign direct investment are considered. The pattern of foreign direct investment has been stipulated as follows by the inspiration of Theoretical Foundations empirical literature:

$$\text{Log FDI}_{it} = \alpha_0 + \alpha_1 \text{GG}_{it} + \beta X_{it} + \varepsilon_{it}$$

Which log FDI_{it} is the logarithm of foreign direct investment in it and GG_{it} is the average of governance indexes, X is the Vector of variables

affecting foreign direct investment, and ε stipulates errors components?

Different variables in the literature are used as control variables in the X vector. Some of these factors include: Business, household expenses, telephone lines per 1,000 people, GDP per capita, human capital, exchange rates, inflation rate and etc. Due to the limited sample size in this study, the availability of data and diagnostic tests, we have used from the variables log of household expenditure log (HCEXP), trade or the Total export and import to GDP (TRADE), Logarithm of GDP per capita to real prices (log (GDP)), telephone lines per 1,000 people (TELE), inflation rate (INF) as control variable in X vector.

Definitions and Sources of Variables

Data sources and the definition of each date of the models are summarized in Table 1.

Table 1: Variables used in the model, definitions and data sources

Variable	Definition	Source
FDI	The net amount of foreign direct investment attraction in current USD of United States	Global Bank (WDI 2006)
GDP	GDP per capita in constant prices, The year 2000	Global Bank (WDI 2006)
INF	Inflation based on the consumer price index	Global Bank (WDI 2006)
TRADE	Total exports and imports to GDP	Global Bank (WDI 2006)
HCEXP	Household consumption expenditure per capita in constant prices, The year 2000	Global Bank (WDI 2006)
TELE	Telephone lines per 1,000 people	Global Bank (WDI 2006)
GG	Arithmetic average of the six indicators of governance (CO,ST,QU,EF,RU,VO)	Obtained by the researcher
VO	Indicators: voice and accountability: reflecting different aspects of the political process, civil liberties and political rights.	Kauffman and the colleagues
ST	Political stability: Represents instability and the possibility of overthrowing the government by the violence means including terrorism, coups, assassinations, ethnic tensions	Kauffman and the colleagues
EF	Index of government effectiveness: What we meant by the effectiveness of the government is its ability to formulate and implement policies correctly.	Kauffman and the colleagues
QU	Quality Index Terms: This property refers to setting distorted rules at the market such as price controls, creating not practical barriers, and restrictive in export and import, redundant constraints in the stock market, Limits in the establishment of a new enterprise, Restrictive regulations for currency conversion	Kauffman and the colleagues
RU	Rule of law index: represents commitment to contracts, property rights, piracy and crime	Kauffman and the colleagues
CO	Control of corruption index: represents the corruption among public and private sector and amount of bribes	Kauffman and the colleagues

Selected countries, the reason of selection and the period of research

Selected countries in the study, comprising 15 countries that include: Argentina, Uruguay, Ukraine, Ecuador, Iran, Brazil, Bulgaria, Botswana, Bolivia, Peru, Thailand, Philippines, Malaysia, Egypt, Venezuela. These countries were selected based on two reasons.

1. All these countries are classified as middle-income countries (94 countries) according to the Global Bank in 2004.
2. What was the cause of selecting these 15 countries among 94 ones with middle- income was that the data related to research variables was more complete and they were similar to Iran relatively.

Selected time range also includes a 10-year period that covers 1996 and 2005.

THE EXPERIMENTAL RESULTS

In this section, we have investigated different stipulations; we have chosen the best pattern in terms of the meaningful coefficients with the highest amount of explanatory. Estimated model results have been presented in four different stipulations (Table 2). According to first and fourth stipulation, the coefficient of the variable of GDP per capita is positive and significant and has the expected mark. In none of the stipulations, the linear effects of inflation rate on FDI is significant; but based on the third and fourth stipulations, the effect of inflation on foreign direct investment is in non-linear and U-shaped curve so that the effect of inflation rate on foreign investment is negative in lower level of inflation but with rising inflation rate, deterrent effect on foreign direct investment becomes less and less. In all stipulations, however, the trade variable (as a percentage of GDP for

each country) has a positive relationship with foreign investment; it does not have a significant effect on attracting foreign direct investment. The coefficient of per capita household consumption expenditure variable (an indicator of labor costs) has positive association with foreign direct investment but it is not significant in any stipulations. Variable coefficient in phone lines in fourth stipulation has a positive and significant relationship with foreign direct investment. In other words, direct relationship of economic infrastructure has been approved by attracting foreign direct investment. In all of these stipulations, the average of good governance index (GG) has a positive and completely significant effect on foreign direct investment.

Among these estimated stipulations, according to significant criteria of coefficients, the fourth stipulations and R² has the best result. In this stipulation, the variable log GDP which is the index for market measurement is significant in level of 10% and its mark is accordance with theoretical expectations. With ten percent increase in GDP per capita, we have an increase in foreign direct investment equal to 12/51 percent. TELE variables that represent economic infrastructure have a positive and significant (at 10% level). It means that the development of infrastructure, including ports, roads and airports, communication infrastructure, (mail, phone, internet, etc), and transportation and etc. caused to reduce the costs of economic activities, the increase of the rate of return on capital and thus creating motivation for foreign investors to boost foreign direct investment.

INFLA inflation variable and its square have the expected relationship with foreign investment and have a high degree of statistical significance. The increase of inflation has a Deterrent nonlinear effect on foreign direct investment. As inflation has more deterrent effect on foreign direct investment at lower levels but it has a less deterrent effect on foreign direct investment at high levels of its increase. The average of good governance indexes (GG) has positive and completely significant effects on foreign direct investment. It means that whatever 6 creating components of GG have a better situation, GG will increase and foreign direct investment will be higher. In addition, the adjusted R² value (0.812673) indicates that the exiting variables in model explain 81% of the fluctuations of foreign direct investment. We use the Hausman test Limer to determine the estimation method. Limer test was performed for all models, in all of them, the hypothesis of H₀ which is based on the equivalent of intercept against the opposite hypothesis which is the non-equivalent of intercept and the necessity of usages of the method of panel data has been rejected by comparison of F resulted from Limer Test with F in the panel. Thus, using panel data for the estimation of models were selected. The Hausman test statistic for all of these models were significant, and indicating the necessity of using a fixed effects model. In other words, in all of them, the hypothesis of H₀ which is the independence of sectional units' effects from explanatory variables and the necessity of usage of the random effects method has been rejected.

Table 2: Estimated models of foreign direct investment

Variable	Model 1	Model 2	Model 3	Model 4
C	4.24 (0.83)	4.88 (0.95)	7.54 (1.44)	10.79 (1.99)**
Log GDP	2.10 (3.08)**	0.76 (0.48)	1.04 (0.66)	1.25 (1.73)*
INF	8.55E-05 (0.12)	0.0001 (0.25)	-0.009 (-2.07)**	-0.009 (-2.07)
INF ²	-	-	9.03E-06 (2.14)**	8.72E-06 (2.12)**
TRADE	0.007 (1.04)	0.006 (0.95)	0.007 (1.10)	-
TELE	-	-	-	0.004 (1.64)*
Log HCEXP	-	1.35 (0.92)	0.68 (0.46)	-
GG	2.19 (4.76)**	2.22 (4.80)**	2.16 (4.73)**	2.05 (4.77)**
R ²	0.83	0.83	0.83	0.83
Adjusted R ²	0.80	0.80	0.81	0.81
Limer Test Statistics	(11.57)***	(9.93)**	(9.99)***	(11.55)***
Housman Test Statistics	(15.42)***	(14.19)***	(12.58)***	(11.14)***

Explanation: Values in parentheses indicate t-statistics. Symbols * and ** and * indicate statistical significance of coefficients at the 1%, 5% and 10% respectively.**

Estimation of patterns in separation of good governance indicators

In this section, the effect of each index of good governance is reviewed on foreign direct investment separately. For this purpose, separate models are estimated based on the best final stipulation (fourth) for each of the governance index. In other words, each of the governance index components is replaced instead of GG variable in fourth stipulation, and the stability of results is examined. Table 3 shows the results of estimation of models in separation of good governance components. As shown in Table 3, people voice and accountability variable (VO), political stability (ST), government effectiveness (EF), the quality rules (QU), the rule of law (RU) and control of corruption (CO), have a very significant and positive effect on foreign direct investment. It mean whatever these variable be in a better position, the foreign investment will be higher. So if citizens in a community have more power and tools for protest and giving comments rather than

the government, political stability is the higher, the regulation in labor market, business and trade and implement of regulation are more effective, (the less restrictive rules), more independent law structure, and the protection of property rights is more effective, and finally, national will and intention to fight with the corruption will be higher, FDI will be higher. Among the mentioned variables, corruption control index has the most importance in numerical amount among the other components for FDI evolution. It seems that the fight against corruption has the most priority to improve governance and increase foreign investment flows. Furthermore, the results of estimation clearly states that two explanatory variables of GDP per capita and inflation has a significant positive effect on foreign direct investment in all estimation except estimation No 6. Although the economic infrastructure variables have a positive effect on FDI, it is not significant in none of estimations. In all of the estimations, existing variables in the model 78 to 82 percent explain the fluctuations of foreign direct investment.

Table 3: The results of estimating the model in the breakdown of good governance indicators

Variable	Stepulation1	Stepulation2	Stepulation3	Stepulation4	Stepulation5	Stepulation6
Intercept	4.77 (0.84)	4.49 (0.79)				
Log GDP	2.04 (2.73)**	2.09 (2.81) **				
INF	-0.01 (-2.37)**	-0/008 (-1.85) *				
INF2	1/03E-05 (2.37)**					
TELE	0.001 (0.72)					
VO	1.12 (2.63)**	---	---	---	---	---
ST	---	0.78 (3.004) **	---	---	---	---
EF	---	---	0.73 (1.96) **	---	---	---
QU	---	---	---	0.80 (3.53) **	---	---
RU	---	---	---	---	1/71 (4.43) **	---
CO	---	---	---	---	---	2.19 (5.54) **
R2	0.81	0.82	0.81	0.82	0.82	0.84
Adjusted R2	0.78	0.79	0.78	0.79	0.80	0.82

Description: The values in parentheses indicate t-statistics. Symbols ** and * indicate that the statistical coefficient significance at the level of 5% & 10% respectively.

CONCLUSION AND POLICY RECOMMENDATIONS

This study aimed to investigate the effect of good governance on foreign direct investment for 15 middle-income countries (including Iran) between 1996 and 2005 by using a combination of data method or panel based on the fixed effects method. Certainly, the attention to the governance components can increase the ability of economist to explain the empirical facts in attracting foreign direct investment worldwide and planning the adoption of more realistic economic policies. The results can be summarized as follows:

- 1- Average indices of good governance, GG in all stipulations have positive and entirely significant effect on foreign direct investment.
- 2- Voice and accountability variables, political stability, government effectiveness, regulation quality, rule of law and control of corruption, each one alone has a positive and significant effect on foreign direct investment. So whatever the variables are in favorable conditions, foreign direct investment will be higher. So if in a community, the citizens have more power and tools for protesting and commenting about the government's actions, and if high political stability has been governed, and if the regulation of the labor market, tariffs, business and law enforcement are more effective (the less restrictive rules), with more independent judicial system and more effective defense of property rights and finally, if political will and national resolve to fight corruption is higher, FDI will be higher. Among the components of governance, the index of control of corruption variable will be considered the most important determinant factor on FDI numerically.
- 3- According to the survey results, the GDP per capita as an indicator of market size has had a positive impact on foreign direct investment. Based on it, per capita GDP growth and its growth leads to increase of the entrance of foreign investors to examined countries.
- 4- The index used for economic infrastructure has a significant effect on attracting foreign direct investment. In other words, development of infrastructure, including ports, roads and airports, communications infrastructure (mail, phone, internet, etc.), and transportation and ... cause to reduce the costs of economic activities, increase rate of return on capital and thus create the motivation for foreign investors to boost foreign direct investment in the country.

- 5- Inflation variable has a negative and significant effect on foreign direct investment. Inflation increase has an impediment non-linear effect on foreign direct investment. It means inflation increase especially in lower levels has more impediment effect on foreign direct investment.

On the basis of this research, corruption is the most important negative effective factor on foreign direct investment. High volume of governmental regulations and low quality of their implements are due to the limits which caused for economic activities and also additional costs which are imposed to firms and investors are the serious obstacles for production and investment. So it seems that revising in country economic law and regulation especially the regulation of monetary and financial market, labor market, taxation, foreign trade and facilitate the regulation related to starting economic activities are the most essential efforts for improvement of business environment and increasing foreign direct investment.

REFERENCES

- Ahmadi Hadid, Behrouz, "Survey Of effective factor on forign direct investment absorption; emphasizing on economic security", M.A thesis ,faculty of economics university oh Tehran,1386(2007).
- Shahabadi ,A and Mahmoodi,A;"Determinates of foreign direct investment in Iran",Economical inquiries magazine,No.5 , 1384(2005)
- Gujarati,D."Econometrics",1995,Tehran university Press.
- Malek o sadat,S."Effect of good govermence on growth",M.A Thesis ,faculty of economics,Allameh Tabatabaei University,Tehran,Iran,1386(2007).
- Baniak, A., Cukrowski, J., and Herezynski, J., (2002),"on Determinants of foreign direct investment in transition economies", CEU-Economics Working Papers.
- Abdel-Rahman, A-M.M, (2002), "the determinants of FDI in the Kingdom of Saudi Arabia", Department of economics, King Saudi university.
- Adeoye, A., (2004), "Macro- economic level corporate Governance and FDI inemerging markets: Is there a close relationship?", A Dissertation Thesis Presented to the Management

Department, School of Social Science and Public Policy, King's College London.

- Alfaro, L., Kalemli-ozcan, S., and Volosovych, V., (2005), "Why does not capital Flow from Rich to Poor countries? An Empirical Investigation," NBER Working paper 11901.
- Badi.H.Baltagi, (1995), "Econometric Analysis of Panel Data", New york, wiley & Sons.
- Baptiste, Bonny. J, (2004), "Bad Governance and low Foreign Direct Investment in Haiti", Antwerp University.
- Busse, M., Hefeker, C., (2005), "Political Risk, Institutions and Foreign Direct Investment", Hamburg Institute of International Economics, 1-24.
- Kaufmann, D., Kraay, A., and Massimo Mastruzzi, (2007), "The Worldwide Governance Indicators Project: Answering the Critics", World Bank Policy Research Working Paper 4149.
- Kaufmann, D., Kraay, A., and Pablo Zoido-Lobaton, (1999), "Aggregating Governance Indicators", Policy Research Department Working Paper 2195. Washington: World Bank.
- N.Gamber, Edward & K.S.Scott, Amy, (2007), "A Threshold Analysis Of The Relationship Between Governance And Growth", International Economic Journal, 21, 2, 255-278.
- Ögütçü1, M., (2002), "Good Governance and Best Practices for Investment Policy and Promotion", UNCTAD workshop on Efficient and Transparent Investment Promotion Practices: The Case of LDCs Geneva.
- Shepotylo, O., (2006), "Regional Governance Infrastructure: The Positive Externality on the Inflow of Foreign Direct Investment", University of Maryland.
- Suliman, O., (2005), "Quality of Governance, FDI, and Currency Black Markets: Evidence from MENA Countries", Economic Research Forum, 12th Annual Conference, Grand Hyatt Cairo, Egypt