

Modeling the growth of regional investment in the Islamic Republic of Iran

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Abstract

The present study aims to model the growth of regional investment in Iran. The dependent variable is foreign direct investment (FDI) and the independent variable is the gross domestic product (GDP), domestic investment, the rate of investment risk, and human investment. It is a type of descriptive study aiming to describe the relationship the variables (dependent and independent) using the statistical tests. The study is applied in nature and adopts a correlational procedure. The descriptive and inferential statistics were utilized and the ordinary least squares (OLS) used to examine the relationship between the variables. The results indicate that by increase of one unit of the GDP, the foreign investment increases up to 46.25%. So, there is a direct relationship with them. By increase of one unit in investment risk, the foreign direct investment reduces up to 0.14%. There is an inverse meaningful relationship between the investment risk and the FDI. Also, by one unit increase in human capital, the foreign direct investment increases 12.50%. So, a meaningful and direct relationship exists between the FDI and the human capital. After one unit increase in rate of economic opening, the FDI rises 0.02%. Therefore, a meaningful and direct association presents between the FDI and the economic opening. The R² shows that 89% of the dependent variable (the FI) variations could be explained by the model, which indicates the research model high level of prediction.

Keywords: investment growth, foreign direct investment, human capital, investment risk, GDP

I. Introduction

Capital is the driver of economic growth and development has been considered in all theories and models of economic growth (Farzin, 2012). Investment is the most volatile part of total cost is discussing about in the macro economy issues (Akhavi, 1997). Investing is a process within which goods are to be used for production of other goods and services (Tafazoli, 1994). Investment in fact has to do with increase of reserves and capital and production possibilities of a society. For investment, a community usually needs to mobilize the savings and not

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consuming some part of its current period so that supply more consumption facilities for establishing production facilities in the future periods (Tabibian, 2000).

Due to the dual role investment has in economy has been regarded a critical issue. This in one place includes a large body of total expenditures and as a result of any change in investment, some considerable effects will be left on the demand rate. On the other hand, investment plays a substantial role in supply and demand as investment indicates increased reservoir of capital (Kord Bacheh, 2006). In the aggregate demand model, investment is a dependent and endogenous variable the value of the variable is defined within the model (Golihi, 1987).

The FDI and regional direct investment are important factors in economic growth and development, resolving investment savings gap, transfer of technology, technical knowledge, and new management methods (Petri, 2011). The key role of regional investment is in entrance to the international capital mainstream and access to global marketplaces, access to modern technologies, as well as increase of productivity, exploitation capacity and directing the society towards welfare also with reduction of unemployment rate causing intense competition to absorb more investment (Alfero et al, 2008).

But, it should be mentioned here that to use whole possible advantages of entering the capital mainstream and appropriate reaction in line to proper economic growth and development, the status of financial enterprises and domestic policies of the host country is significantly important (Razin & Sedka, 2007). While, regional investment acts as a means to access technology, knowledge, management skills, and other required entrances into sustainable development. The regional investment results in linking different countries to global markets and production-distribution networks. Through this, international competitive feature of companies increases and the national economy would perform well. In fact, the regional investment is road to chief technology access and using extra technologies (Kalantari, 2004).

Mousa Ahmad (2012) using the OLS method showed that FDI inflow and used inflow have negative impact on productivity of all manufacturing factors.

Kayle et al (2011) investigated growth and inflow FDI and the role of institutional environment and macro economy.

Yoktom et al (2011) state that transfer from the manufacturing FDI to service FDI most probably will lead to anti-industrialization in some parts of regions and a verity of economy if this transfer is transferred with non-financial FDI.

Beugelsdijk et al (2008) worked on the effect of horizontal and vertical FDI on economic growth of host country. The results indicate that the horizontal and vertical FDI have meaningfully positive impact on economic growth of developing countries.

Ahmadi et al (2011) analyzed the effect of economic growth and the FDI in the developing countries based on panel data.

Mahdavi and colleagues (2010) worked on the effect of expansion of financial markets on effectiveness of the FDI on economic growth of host countries using the panel data method.

Azerbaijani et al (2009) examined the relationship between FDI, transaction and growth in form of a self-explanatory model with extended lags. There exist several different factors affecting investment and its growth according to different theories. one of such theories is finance.

Growth investing is a style of investment strategy focused on capital appreciation. Those who follow this style, known as growth investors, invest in companies that exhibit signs of above-average growth, even if the share price appears expensive in terms of metrics such as price-to-earnings or price-to-book ratios. In typical usage, the term "growth investing" contrasts with the strategy known as value investing. However, some notable investors such as Warren Buffett have stated that there is no theoretical difference between the concepts of value and growth ("Growth and Value Investing are joined at the hip"), as growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive. Buffett has recognized the influence of his business partner Charlie Munger on this view, which is best expressed by the famous Buffett saying "It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price".

Thomas Rowe Price, Jr. has been called "the father of growth investing" because of his work defining and promoting growth investing through his company T. Rowe Price, which he founded in 1937 and is now a publicly traded multinational investment firm.

Also influential in shaping this investment style was Phil Fisher, whose 1958 book "Common Stocks and Uncommon Profits" is still today a reference for identifying growth companies.

In contrast to value investing, growth investing is when the investor chooses a company that has yet to reach its full potential to invest in. This type of investing requires the investor to do a lot of research to find companies that have the potential to grow rapidly and compete with other, often larger companies within its given field. Instead of investing in an already established company, the investor takes a higher risk in hopes that the company grows and makes them money. Growth companies are companies that have the potential to grow at a rate that is higher than the market average. Larger companies typically pay dividends to their stockholders, but growth companies will often reinvest their earnings in effort to grow the company. These companies are becoming more popular to invest in because they show great potential. This potential typically roots from the company offering a unique or advanced product that is ahead of their competitor's products

Growth at a reasonable price" is a strategy that blends aspects of growth and value investing. Investors seeking growth at a reasonable price look for stocks that they believe will deliver above-average growth, but that are not too expensive. After the bursting of the dotcom bubble, "growth at any price" has fallen from favor. Attaching a high price to a security in the hope of high growth may be risky, since if the growth rate fails to live up to expectations, the price of the security can plummet. It is often more fashionable now to seek out stocks with high growth rates that are trading at reasonable valuations.

Therefore, in the present study, the financial aspect of growth of regional investment in Iran will be evaluated. Here, by regional investment we refer to that type of investment takes place outside Iranian borders (e.g. Azarbaijan) which is also known as FDI.

II. Literature review

Foreign investment is usually done in two ways: the share investment (indirect) and foreign direct investment. Purchase of bonds and shares of companies in exchange trading and deposited bills in foreign banks are stock investments in which the foreign investor has no direct role in production unit and the financial responsibility is not his. The most important feature of stock investments is its volatility. In other words, the foreign investor is able to transfer his assets or properties to his country or another country. But foreign direct investment is an investment type that is used in order to gain a permanent profit in an institution in a country other than the investor's country and the result is effective vote right in managing the country. Foreign investment in any form can have a significant effect on the macro-economic variables and can change economic systems. The following effects can take place on the foreign capital flow. These effects include interest rate reduction, exchange rate reduction, positive balance of payments, economic growth, an increase in tax revenue, debt, an improvement in income distribution, technology transfer, an increase in employment, an improvement in exports and a reduction in imports.

A variety of theories have been presented for foreign investment reasons or factors affecting on them. Among these theories, we can name return rates of different investment, variation in properties, production and market size, the reaction of multilateral monopoly, product cycle, internalize, business performance management, Cash, currency risk and currency realm, the international division of labor, to avoid tariff barriers, Daning structure. He expressed three general requirements for foreign investors which are the ownership, the place and the inner royalties.

According to studies above, affecting variables and parameters on foreign investment can be divided into nine groups that are listed in Table 1.

Table 1. Affecting variables and parameters on foreign investment

Independent variable	Index	Effect
Market size	Population, GDP	+
economic development degree	Per capita income	+
Economic growth	Changes in GDP	+
Labor costs	Wage per efficiency unit	-

Geographical distance	relative distance	-
level of FDI store	Accumulation of FDI entry	+
Degree of economic openness	Trade volume ratio to GDP	+
Human Capital	Higher Education	+
Business environment	overall risk	-
	Political Risk	-
	Financial risk	-
	Economic risk	-

Source : affecting factors on development of foreign investment: lessons for Iran's economy

With a glance at the countries in the world, we can come to this conclusion that some countries have positive economic growth and some have steady economic growth and some are faced with negative economic growth. Regarding the economic growth theory, foreign direct investment is considered to be as one of the main tools of transferring modern technology in developed countries to developing countries as far as technology is concerned. Lack of necessary infrastructure is like an educated population, free markets, economic and social stability. Other beneficial effects of foreign direct investment can be exporting raw materials in the host country which improves transportation and communication networks and the rise of human capital and improve the quality of technical and managerial skills. Further, De Mello (1999) has seen positive effects of the host country's economic growth based on his studies. There are some benefits for host countries to meet certain needs that can be human capital, economic and political stability, the liberalization of markets and adequate infrastructure.(Abramovitz-1986). Benhabib and Spiegel believe that the ability of a developing country in the uptake and correct use of foreign capital flows is influenced by the level of human capital growth rate. There are some determining factors in attracting foreign direct investment, which Marr in 1997 divided them as the host country' market size and its economic policy. These factors include taxes, macroeconomic stability, openness of the economy to attract foreign direct investment, economic conditions, degree of economic freedom and lack of rules in markets. In addition, the amount of investment in the host country and an effective human investment can lead to attract more foreign investment and the role of these two factors can be positive (Noorbakhsh-2001). Generally the key factors and the key determinants of foreign direct investment can include market size, economic conditions and investment amount in the host country, stability and economic freedom.

2-1- The necessity of doing research

One of the important principles of the economic development in countries is economic freedom. Adam Smith, father of economics, believed that free markets with protecting private property rights and minimal government presence, leads to an economic development and growth and eventually development in those countries. The Smith thought, still dominates the world economy and moving towards a freer economy is a step toward the development. Annually authoritative institutions in the world measure the index of economic freedom states. One of the most experienced and reputable institution in this regard is Heritage Foundation. Heritage Foundation has started its activities since 1973 and with data collection and its analysis, has had a significant impact on countries public policies. This foundation has published the economic freedom index annually since 1995. According to statistics published in 2010, Iran's economic freedom ranking index of economic freedom among 179 countries is ranking 168. UNCTAD's 2005 report shows that Iran's ranking in attracting foreign direct investment among 130 countries is 140 which uncertainty and instability in politics and economy of Iran can be one of the main reasons of failure in absorbing investment. Thus, research on the affecting factors on meaningful relationship in increasing the foreign investment can solve the basic problem of lack of attracted investment to markets in economic sector

III. Research Methods

In the current study the effective factors on the FDI under the strength of the regression model of least squares will be measured and analyzed. The major research variables are as follows:

The dependent variable: foreign direct investment (FDI)

The independent variable:

1. Gross domestic product (GDP)
2. Domestic investment: the domestic investment rate reflects peoples' preference to business and their trust to the future economic progress. This variable gives also some information about the investment environment in the country. Thus, domestic investment as an independent variable is used to clarify fluctuation of the FDI levels.
3. Rate of investment risk: the international enterprises which investment in a country are also facing with a few political, financial and economic risks. in terms of country risk, it could be as a result of political, economic and financial risks , in which fluctuation is included in the economic risk.
4. Human capital: the human capital is computed as a percentage of average high school years.
5. Degree of economic openness to global economic (transactions value): to obtain the economic openness to the global economy the ratio of total exports plus imports divided over the GDP is used.

IV. Results

4-1- Econometrics model of least squares

To predict the linear bivariate and multivariate regression models the least ordinary squares procedure is mostly used, as this method shows the lowest possible variance for a linear unbiasedness. But, to solve problems of autocorrelation, residue statements and heteroscedasticity, the generalized least square method will be utilized. In the current study, the ordinary least squares (OLS) will be used as a hybrid model to estimate the major research models. But prior to estimation of the model and interpretation of the coefficients, reliability and validity must be checked out.

4-2- Test of Validity and Reliability

In order to evaluate the common parametric tests, first the data normality must be checked. also, if it is aimed to estimate the econometrics tests, the validity and reliability of the research variables have to be checked, otherwise the research variables will become validated and if not they must be removed from the model. In this section, using the Dickey-Fuller unit root test method, the validity of research variables will be examined.

If some variable is invalid at 5%, it has to be examined in the first order-subtraction and if it was invalid in the first order subtraction, it should be assessed in the second order subtraction. In case a variable is not valid in three mentioned levels, it must become validated using some techniques to validate it or to remove the variable from the model avoiding any negative impact.

4-2-1- Test of the GDP reliability

Table 2. static test of GDP

Null Hypothesis: GDP has a unit root				
Exogenous: Constant				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-9.600672	0.000
Test critical values:	1% level		-3.808546	
	5% level		-3.020686	
	10% level		-2.650413	
*MacKinnon (1996) one-sided p-values.				

As it can be seen the computed statistic is -9.60 is smaller than the estimated critical value (in all levels). So, it is concluded that this variable is reliable. Test of the domestic investment reliability

Table 3. static test of domestic investment

Null Hypothesis: X has a unit root				
Exogenous: Constant				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-8.329238	0.000
Test critical values:	1% level		-3.808546	
	5% level		-3.020686	
	10% level		-2.650413	
*MacKinnon (1996) one-sided p-values.				

As it can be seen the computed statistic is -8.33 is smaller than the estimated critical value (in all levels). So, it is concluded that this variable is reliable.

Test of reliability using the Dickey-Fuller unit root 4:

Several studies indicate that for most economic-time series , the variables are unreliable. Therefore, according to the co-integration theory in modern econometrics, it is essential to test their reliability. The Dickey-Fuller unit root test is one means to this end. Dickey and Fuller in terms of the null hypothesis $p=1$ which means time series has unit root and is unreliable assuming that the actual process of data generation is without intercept.

Now, if the computed value exceeds the suggested critical value by Dickey –Fuller (MacKinnon quantity) , the null hypothesis will be rejected and we will have an unreliable time series . if the obtained t value is smaller than the critical value, we conclude that the variable is reliable. Due to lengthy results, and to get more familiar with the test, the Eviews software was used .

Table 4. results of Dickey-Fuller test for time-series data

Variable	Dickey-Fuller statistic	Highest critical value McKinnon	result	value
Foreign investment	-10.61877	-2.650413	Reliable	I(0)

Domestic investment	-8.329238	-2.650413	Reliable	I(0)
Investment risk	-9.209027	-2.650413	Reliable	I(0)
Human capital	-9.312793	-2.650413	Reliable	I(0)
GDP	-9.600672	-2.650413	Reliable	I(0)
Economic openness	-9.999474	-2.650413	Reliable	I(0)

Therefore, the test of reliability shows that the variables are static. So, after determination of degree of reliability it is possible to fit the models. After estimation of the model in any mode of reliability, they were operated on the regression residues (autocorrelation test).

Estimation of the model using the OLS model and interpretation of coefficients: After the reliability of all variables were estimated in order to determine the effective factors in the FDI, the research model including the dependent and independent variables were examined. The results of model using the OLS model are as follows:

$$\text{FDI} = 0.387176 + 0.4625102 \text{ GDP} - 0.001474 \text{ Risk} + 0.125068 \text{ Human} + 0.000217 \text{ Openness} + 0.681210 \text{ D.I}$$

$$R^2 = 0.89$$

$$F\text{-statistic} = 65.25$$

$$D.W = 1.99$$

Other results of estimation of the above model are presented in table 5.

Table 5. estimation of the model based on OLS

Dependent Variable: FDI				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	0.4625102	0.037215	4.482579	0.0002
Risk	-0.001474	5.29E-05	-2.093169	0.0004
Human	0.125068	0.005527	3.965596	0.0069
Openess	0.000217	0.011988	2.122970	0.0021
Domestic.I	0.681210	0.044405	2.387170	0.0000

C	0.387176	0.203075	1.906507	0.0011
R-squared	0.890214	Mean dependent var		0.000189
Adjusted R-squared	0.880450	S.D. dependent var		0.000171
S.E. of regression	1.64E-05	Akaike info criterion		-19.02194
Sum squared resid	6.15E-09	Schwarz criterion		-18.73905
Log likelihood	281.8181	F-statistic		65.2465
Durbin-Watson stat	1.990211	Prob(F-statistic)		0.00012

The results of model estimation indicate that:

1. all coefficients of the explanatory variables are meaningful in 99% level of confidence. At Sig=0.01 since the absolute value for all parameters t of the model is greater than 1.96, so the null hypothesis of the parameters is rejected at 99% level of confidence.

2. The R² value shows that 89% of variance in the dependent variable (the foreign investment) is explained by the explanatory variables .

3. Higher F value(65.25) indicates meaningfulness of whole regression.

4. The Durbin-Watson statistic rejects the autocorrelation assumption by 1.99.

5. the coefficients of the explanatory variables indicate that:

The GDP coefficient shows that by one unit of increase in the GDP, the FDI increases up to 46.25% . so, there is a direct and meaningful relationship between the variables.

The investment risk coefficient indicates that by one unit of increase in the investment risk, the FDI reduces by 14%. That is , there is a reversed meaningful relationship.

The human capital coefficient illustrates that by one unit of increase in the human capital, the FDI increases up to 12.50%. so, a meaningful direct relationship exists between the variables.

The coefficient of the economic openness shows that by one unit of increase, the FDI rises by 0.02%. So there is a meaningfully direct relationship among them.

The coefficient of domestic investment variable indicates that by one unit of increase in this variable, the FDI increases up to 68.12%. so, there is a meaningfully direct relationship between the variables.

4-3- Evaluation of the reliability tests and the model validity

After estimation of the model, the results of evaluation must be accredited using the econometrics and regression tests. In order to get ensured about the regression results, the autocorrelation has to be validated. This is done by the reliability test of the residue statement. in following, the tests for validation of regression and the reliability test of the residue statement along with other relevant tests were performed.

4-4- Test of the regression validity:

This test is a two-path test as : reliability test of the residue statement and the Durbin –Watson correlation regression test (CRDW) (D.Begg,2003).

A. reliability test of the residue statement

The results are shown in Table 6.

Table 6. results of Dickey-Fuller test for residues statement

Variable	Dickey-Fuller statistic	Highest McKinnon critical value	Result
Regression residues statement	-8.55	-3.65	rejected

Other data relevant to the test are presented in Table 6.

Table 7. results of Dickey-Fuller test of residues statement

Null Hypothesis: D(RESID) has a unit root				
Exogenous: Constant				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-8.557631	0.0000
Test critical values:	1% level		-3.653730	
	5% level		-2.957110	
	10% level		-2.617434	

Since the Dickey-Fuller statistic of the residue statement is smaller than the critical value, so it is concluded that the residue statement or the model error remain reliable in all levels and the co- integration of regression is real.

B. Co- integration Regression Durbin-Watson test (CRDW):

The other method to examine the presence of absence of a long term relation between the fitted variables is to use the Cointegration Regression Durbin-Watson test. simply, the test compares the Durbin-Watson's statistic achieved from the primary regression using the critical values by Sargan and Bhargava. If the statistic value of DW of the co- integration regression is less than the critical value, the null hypothesis is accepted. The test is performed as the CRDW value for this test where $d=0$ is used. the null hypothesis is written as follows:

$$H_0 : d = 0$$

$$H_1 : d > 0$$

The critical values for this test is computed by Sargan and Bhargava. (No Feresti, 1999).

Table 8. critical value of CRDW test

Sig	Critical value
1%	0.511
5%	0.386
10%	0.323

Comparison of this statistic with the DW value is as follows:

Table 9. Durbin-Watson and critical value CRDW

Durbin-Watson value obtained by regression	Critical value at 5%	Critical value at 10%	Result
1.96	0.386	0.323	rejected

According to the results, it could be concluded that autocorrelation (long term relationship) exists between the variables. Therefore, the regression operation shows a balanced long term relationship among the variables.

4-5- Test of normality of errors distribution (residues):

To test this hypothesis, first the test of normality of the residue statements and normal table of standard errors must be determined. This test presents the residue statement histogram and the Jarque-Bare statistic presents some new simple descriptive statistic of the residue statements. For the research model, this test was performed and according to the Jarque-Bare value 1.40 and the probable value , it could be concluded that the H_0 is not rejected and distribution of errors (residues) have a normal distribution.

The results of the tests of normality

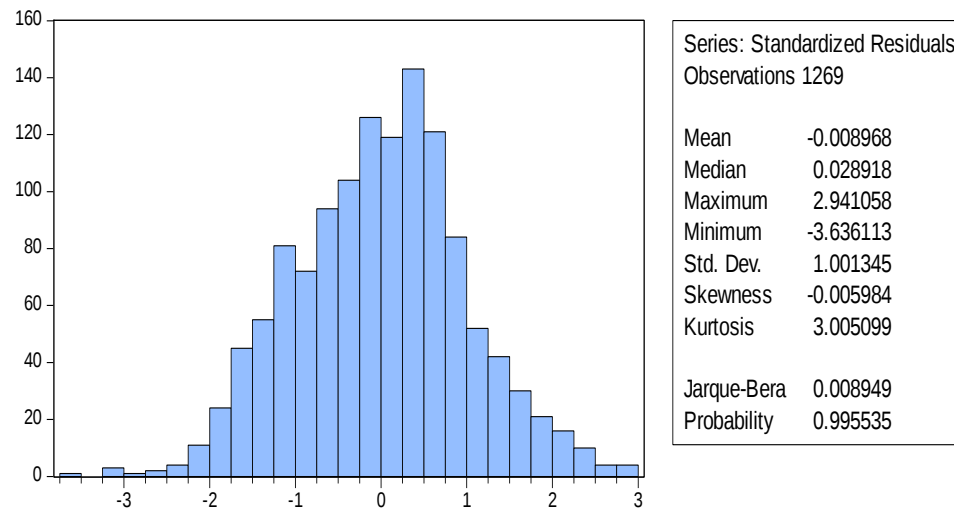


Fig 1. test of normality

Co- linearity hypothesis 8:

In Table 10 below, the co-linearity value is computed.

Table 10. test of variables colinearity with variance anisotropy factor

Model	Collinearity Statistics	
	Toler ance	VIF
(Constant)	.901	1.011
FDI	.899	1.143
GDP	.807	1.223
Risk	.801	1.584
Human	.912	1.081
Openess	.874	1.912
Domestic.I	.952	1.502

As it can be seen, variance inflation factor (VIF) for all variables is smaller than 2 , which the colinearity assumption among the variables is rejected.

4-6- The White Heteroskedasticity Test:

This test is used to recognize variance anisotropy of the residues statements. the output shows the F value and nR² as well as relevant possibilities. Here, using the test the H₀ , lack of any variance anisotropy was conducted by the Eviews software . the test static was computed in terms of an auxiliary regression in which the square root of the disturbing sentences for whole explanatory variables as well as their square root are regressed. The results show lack of variance anisotropy in the model. Table 10 presents the results.

Table 11. results of White test

White Heteroskedasticity Test:			
F-statistic	1.80310	Prob. F	0.038619
Obs*R-squared	8.38350	Prob. Chi-Square	0.036328

According to the F values (1.80) and Obs*R-squared value (8.38), besides probability of acceptance of H₀ for either statistics (0.03) and comparing the values of F and Obs*R-squared with the Chi-square value, it is concluded that the H₀ , lack of variance anisotropy is accepted . so , the model has no variance anisotropy .

Estimation of LM test for detection of serial correlation of residues:

The Longraj measure test (LM) which indicates existence of absence of consecutive correlation among the disturbance statement of the function, is computed by the Eviews software.

Table 12. results of IM test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.211681	Prob. F	0.010281
Obs*R-squared	0.491947	Prob. Chi-Square	0.081943

The results indicate that the H₀ assuming lack of serial autocorrelation is confirmed and so E(ui uj) standing as total value of i and j values, is still valid. In other words, according to the F value (0.21) and Obs*R-squared (0.49) and probability of confirming the H₀ (0.01 and 0.08) respectively as well as comparing the values of the F and Obs*R-squared values with the chi-square value, the H₀ hypothesizing lack of serial autocorrelation among the disturbance statement is accepted and the function has no autocorrelation problem.

Test Ramsey Reset 9: this test is one of the most valid tests of detecting structural stability of the model for examination of explanation error of regression pattern. The test output is two E value and Log likelihood ratio .

Table 13. results of Ramsey test

Ramsey RESET Test:			
F-statistic	4.637240	Prob. F	0.016565
Log likelihood ratio	9.648102	Prob. Chi-Square	0.008034

The results of test rest shows that according to the F and Log likelihood ratio values 4.64 and 9.65 respectively, besides probability of mentioned statistics 0.016 and 0.008, comparing the F and Log likelihood ration with the chi-square value in the table do not reject the H0. So, in terms of the test, the model is valid.

V. Conclusion

In the present research, the effective factors on the FDI under the regression model of the least squares are estimated and analyzed. The FDI as one of the important factors in economic growth and development has experienced an increasing trend in the last decades. Identifying the effective factors on absorption of foreign direct investment can play a significant role in policy making of countries have failed to use this factor properly. In the modern condition of global economy, foreign investment is remarkably substantial. The time for opposing foreign investment has been over as most disputes is on what type of investment could be useful for the host country and how the foreign investment can be achieved .

Foreign investors specially transnational enterprises have been interested in investment in potential regions as they aim to increase level of competition and obtaining higher profits . Transnational operations and foreign direct investment also can affect social, economic, and political development of the host countries in a wide range of direct aspects which is a great matter of concern for the host governors. The human capital meanwhile in one factor in promotion of foreign investment its increase causes increase of foreign direct investment.

Increased rate of human capital in the host country results in increased productivity and efficiency of production, ability to do more complicated works, as well as increased flexibility in human forces responsibility besides the employees ‘ flexibility in undertaking new jobs aligned with technological advances in the homeland. Moreover, rate of economic openness can stimulate foreign investors to invest in the host country for effective export. Countries with high rate of domestic investment can also preserve the process of absorbing foreign direct investment.

Easier comment of economic growth is a comparison between increased domestic produce in a determined year with its value in the base year. At macro level, quantitative change in Gross Domestic Product (GDP) in the discussed year to the value scale (GDP) in the base year is economic growth (Johnson et al, 2019).

Foreign Direct Investment will help the national economy in the absence or lack of domestic sources of investment and covers capital resources and national investment gap (Dargahi, 2019). This can affect economic growth and increases the pace of economic development. In this regard, countries will develop. On the hand hand, domestic investment funds are faced with leakage, more foreign direct investment will be used from the distant past of international economy and especially in recent years with the growing development of this type of investment resources and move the process of globalized economy, foreign direct investment role has taken a special form in the process of economic development and integration of national economies in the world and has become important and effective issues in international trade and has gained a special place among the countries in the world, especially developing countries. In other words, foreign investment in new world developed economy, the development of transnational companies to improve competitiveness, higher profits, access to cheaper labor markets and the broader consumer's market, inclined to participate in multiple areas which has the advantage, that the problem with the technology level progress can significantly increase the rapid transfer of capital and foreign trade development (Froot, Stien, 2020). Since 1970s till now, foreign direct investment growth has got more speed and has outstripped trade growth so that there is more than double growth in exports of goods and services (Korden, 2018).

Studies show that foreign direct investment due to the form that carries, has a significant effect on macroeconomic variables such as interest rates reduction, exchange rates reduction, economic growth, increase government tax revenue, government debt reduction, income distribution improvement, technology transfer, increased employment, exports expansion, reduce imports and positive effects on payments balance. According to foreign direct investment possibility in different countries, one or more utility variables' desirability will not be enough to encourage foreign direct investment, but surveying all variables as a set can lead to a foreign investment. Anyway, attracting foreign direct investment, without a change in attitude among politicians and experts and an appropriate context authorship is not possible and the new law does not do much (Bachler, 2017).

Economic and political stability besides lower rate of inflation may be able to through increase of net return rate of capital encourages the foreign investor. Additionally, the incentive policies of governments in establishment of physical and human infrastructures can leave a positive effect on absorption of the FDI. Finally, the states policies to make more interaction with absorb as well as rising rate of economic openness can act as another effective factor in increase of the FDI.

References

1. Ahmadi, A., Dehnavi, J., & Haghnejad, A. (2011). Economic growth and FDI in the developing countries : a panel-based data analysis, *Journal of Economic Researches*, 11 (2).
2. Akhavi, A. (1997). *Applied macro economy*, Tehran: Bazargani publication.

3. Alfaro, L., Kalemli-Ozcan, S. & V. Volosovych. (2008). "Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation", *Review of Economics and Statistics*, Vol. 90, No. 2, PP. 347–368.
4. Alguacil M., Cuadros A. & V. Orts. (2011). "Inward FDI and Growth: The Role of Macroeconomic and Institutional Environment", *Journal of Policy Modeling*, Vol. 33, PP. 481–496, Access: <http://www.sciencedirect.com>
5. Azarbaijani, K., Shahidi, A., & Mohammadi, F. (2009). A study on the relationship between FDI, trade and growth in form of a self-explanatory pattern with extended lag, *Journal of Economic Studies*, 2, 1-17.
6. Bachler, J. (2017). *Capitalism origins*, Kamran Ramin, Alborz publishing, Tehran, first print, p. 115
7. Beugelsdijk S., Smeets R. & R. Zwinkels. (2008). "The Impact of Horizontal and Vertical FDI on Host's Country Economic Growth", *International Business Review*, Vol. 17, Issue 4, August, PP. 452–472, Access: <http://www.sciencedirect.com>.
8. Bryan Johnson, Kidd Holmes and Patrick Melani Kerk. (2019). Index of Economic Freedom. Tabloid: Mohammad Ebrahim Amin. *Planning and Budget Journal*. No.48, pp105-134.
9. Dargahi, H. (2019). Affecting factors on foreign investment development: Lessons for the Iranian economy, *Sharif Research and Noble Journal*, No.36, pp 57-73.
10. Farzin, M., Ashrafi, Y., & Fahimi Far, F. (2012). Study of the impact of FDI on economic growth: integration of dynamic and econometrics methods, *Journal of Economic Policies and Studies*, 20(61), 29-62.
11. Froot, K.A. and Stien J.C. (2020). "Exchange rate and Foreign Direct Investment", NBER Working Paper, (2914).
12. Galihi Far, H. (1987). *Macro economy policy and theory*, 1.
13. "Growth Input Driven?", *Economic Modelling*, Access: <http://www.sciencedirect.com>.
14. Kalantari, M. (2004). Identification of effective factors on foreign investment in Iran, *Economic Studies and Policies*, 29.
15. KordBacheh, H. (2006). *Macro Economy*, Hamadan.
16. Korden W.M and ShahRokni, A. (2018). *Support theory*, Allameh Tabatabai University, p.4.
17. Mahdavi, R., Esfandiar, J. & Khotaei, M. (2010). The impact of financial market development on effectiveness of FDI and economic growth of host countries using the panel data method, *Journal of Economic Modeling*, 2.
18. Musa Ahmed, E. (2012). "Are the FDI Inflow Spillover Effects on Malaysia's Economic
19. Petri, P. A. (2011), "The Determinants of Bilateral FDI: Is Asia Different?", *Journal of Asian Economics*
20. Razin, A. & E. Sadka. (2007). "Bookjacket Foreign Direct Investment", *World Wide Web*

21. Tabibian, M. (2000). Macro economy, Center for Planning and Development, Tehran.
22. Tafazoli, F. (1994). Macro economy of theories and economic policies, Tehran; Ney publication.