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## **Exploring the effect of financial variables on the net inflow of foreign direct investment in emerging economies of the BRICS Treaty and Iran**

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## Abstract

The main objective of this research is to investigate the effect of financial variables on the net inflow of foreign direct investment in the emerging economies of the BRICS and Iran during the period from 2009 to 2016. So, in the first step, after presenting theoretical studies and research background, the econometric model of the research is introduced. Accordingly, the true net direct investment variable is considered as a function of the real exchange rate, inflation rate as well as the ratio of net exports to the actual GDP, and we estimate by the fixed effect method. The estimated results show that the real exchange rate variables and ratio of net exports to gross domestic product have a positive and significant effect on the true net direct investment variable. On the other hand, in this research, the negative and significant impact of the inflation rate on the net direct investment has also been achieved. In the end, research suggestions and suggestions for future studies are presented.

**Key words:** Net foreign direct investment, inflation rate, net exports to GDP, emerging economies, BRICS contract, Iran.

## Explorando o efeito de variáveis financeiras sobre a entrada líquida de investimento estrangeiro direto nas economias emergentes do BRICS Treaty and Iran

### Resumo

O principal objetivo desta pesquisa é investigar o efeito de variáveis financeiras sobre a entrada líquida de investimento estrangeiro direto nas economias emergentes dos BRICS e Irã durante o período de 2009 a 2016. Assim, na primeira etapa, após apresentar estudos teóricos e fundo de pesquisa, o modelo econométrico da pesquisa é introduzido. Assim, a variável investimento direto líquido real é considerada em função da taxa de câmbio real, da taxa de inflação, bem como da razão entre as exportações líquidas e o PIB real, e estimamos pelo método do efeito fixo. Os resultados estimados mostram que as variáveis da taxa de câmbio real e a proporção das exportações líquidas em relação ao produto interno bruto têm um efeito positivo e significativo sobre a variável do investimento direto líquido real. Por outro lado, nesta pesquisa, o impacto negativo e significativo da taxa de inflação sobre o investimento direto líquido também foi alcançado. No final, sugestões de pesquisa e sugestões para estudos futuros são apresentadas.

**Palavras-chave:** Investimento direto estrangeiro líquido, taxa de inflação, exportações líquidas ao PIB, economias emergentes, contrato do BRICS, Irã.

## Explorando el efecto de las variables financieras en la entrada neta de inversión extranjera directa en economías emergentes del Tratado BRICS e Irán

### Resumen

El objetivo principal de esta investigación es investigar el efecto de las variables financieras en la entrada neta de inversión extranjera directa en las economías emergentes de los BRICS e Irán durante el período de 2009 a 2016. Entonces, en el primer paso, después de presentar estudios teóricos. y antecedentes de investigación, se introduce el modelo econométrico de la

investigación. En consecuencia, la verdadera variable de inversión directa neta se considera como una función del tipo de cambio real, la tasa de inflación y la relación entre las exportaciones netas y el PIB real, y estimamos por el método de efecto fijo. Los resultados estimados muestran que las variables del tipo de cambio real y la relación entre las exportaciones netas y el producto interno bruto tienen un efecto positivo y significativo en la verdadera variable de inversión directa neta. Por otro lado, en esta investigación, también se ha logrado el impacto negativo y significativo de la tasa de inflación en la inversión directa neta. Al final, se presentan sugerencias de investigación y sugerencias para futuros estudios.

**Palabras clave:** Inversión extranjera directa neta, tasa de inflación, exportaciones netas al PIB, economías emergentes, contrato BRICS, Irán.

## 1. Introduction

Today, one of the great challenges of the world is the overwhelming dominance of powerful countries on developing and less developed countries, so that with the implementation of some economic policies by these countries, all of the financial systems of the weaker countries will fluctuate. With these hostile policies, strong countries are getting stronger and weaker countries are getting weaker. And such problems have caused a number of countries to form a group called BRICS, to deal with the crisis which consists of Brazil, Russia, India, China and South Africa. Originally, the name of this group was called BRIC, but after joining South Africa, it was renamed BRICS. Although members of the BRICS group, apart from Russia, are in the category of emerging economies or emerging economies, they are generally distinguished by the emerging and widespread growth and influence on global and regional affairs from other countries.

The following are some of the main goals of the BRICS Treaty:

1. Promoting the status of the developing countries and, at the same time, a force for maintaining world peace and security;
2. Improving the economic situation and reforming the global financial system;
3. Establishing close monetary and commercial relations;
4. Controlling the exchange rate fluctuations, in particular, reducing the global dollar value;
5. Increasing trade exchanges with each other;
6. Currency co-operation (changing);
7. Reducing dependency on the European Union and the United States;
8. The initiative of the establishment of the South-South Development Bank

## 2. Theoretical foundation

## 2. 1. BRICS Treaty

The idea of the formation of a group called BRIC was introduced by the Goldman Sachs Investment Institution in 2001 to predict the global economic situation and its supreme powers over the next half century. For the first time, Jim O'Neal used the abbreviation of this group at the head of an economic newspaper. At the sixty-second summit of the United Nations General Assembly, the foreign ministers of Brazil, Russia, India and China began initial talks. After this summit, senior BRIC leaders participated in four other diplomatic meetings (Yekaterinburg, Sao Paulo, Japan and London) to strengthen the foundations for the formation of this group.

The first meeting of the Brix Group was held on June 26, 2009 in Yekaterinburg, Russia, with the presence of Luis Inacio Lula da Silva, Dmitry Medvedev, Man Mohan Singh and Hu Jintao as representatives of Brazil, Russia, India and China. At the summit, the BRICS countries focused on issues such as how to improve the economic situation and reform the world financial system. Also, these countries have been discussing closer monetary and trade relations and playing a more effective role in world economic affairs. Following the Yekaterinburg Summit, BRICS leaders warned that reforms should be made in the world financial system in order to become an efficient, reliable and stable system. Although these countries do not criticize the domination of the American dollar in the common currency system (something formerly criticized by Russia), they expressed concern at the dollar depreciation. On March 21, 2011, the fourth BRICS meeting was held in New Delhi. Increasing trade exchanges, currency co-operation, reducing dependency on Europe and the United States, and the initiative of the establishment a South-South Development Bank were from the issues raised at the meeting.

South Africa showed great efforts in 2010 to become a member of the BRIC group. The Foreign Ministers of the member states agreed to the South African membership in a meeting held on September 21, 2010 in New York. BRIC was renamed BRICS after the accession of South Africa. For the first time, South African President, Jacob Zuma, participated in the 3rd Brix Summit on April 14, 2011, as the representative of the country. The member states are composed of Brazil, India, China and South Africa (Tayyebi et al., 2006).

## 2. 2. The flow of foreign direct investment

In spite of the growing importance of foreign direct investment, there are some confusion about how to define it normally. In the opinion of the International Development Cooperation Organization and the International Monetary Fund, foreign direct investment represents the goal of gaining sustainability benefits as one of the units of an economy in a unit

of another economy that is not a single-investor economy. Sustainable interests refers to the existence of a long-term relationship between the direct investor and the firm in which the investment takes place and the significant influence of the investor on the management of that firm, which usually holds at least 10% of its shares. Foreign direct investment flows are recorded in the balance of payments, including the trade-in of partners, reinvested earnings, and other flows of capital that are associated with a variety of inter corporate transactions between affiliated companies.

Various debates have been made on the motives for foreign direct investment and the reasons for its rapid increase. Traditional trade theory considers foreign direct investment as a response to the difference in the efficiency of the factors of production. For example, it may be cheaper owing to shortages of labor abroad. Such a difference in the efficiency of the factors of production (when human trade and movement are not free) makes it possible to transfer capital from one country to another in order to exploit these differences until the return of the factors approaches the same level. But some have argued that this theory cannot explain the obvious north-south investment in the capital-intensive industry. According to a new theory, foreign direct investment is due to the existence of specific assets of companies that cannot be exploited in other ways, such as exports. These theories predict that foreign direct investment is taking place in the knowledge and capital-intensive industries. Another important force that has increased foreign direct investment is the prevalence of the liberalization policy at both national and international levels.

Across the globe, countries have begun to liberalize the regime to attract their own direct investment. Some Asian neo-industrial countries, such as Singapore, were actively pursuing foreign direct investment, and Hong Kong, which had a more monitor-avoiding approach, opened their doors to foreign capital in the 1980s (Azerbaijani et al., 2001).

The international policy on foreign direct investment has also shifted towards more securing investors' rights and increasing their access to the market. Currently, the rights of foreign investors in the more than 2200 investment treaties have been founded bilateral. Regional arrangements (such as NAFTA or the North American Free Trade Agreement) are more include the rules on investors that abandon the restrictive approaches of the 1970s.

At the multilateral level (multilateralism), an agreement on trade-related investment measures in the World Trade Organization contains provisions that protect the rights of investors in the industrial sector, while members of the organization can voluntarily agree to

open their certain sections of their economy in the framework of The General Letter of The Commerce of Services (Komijani et al., (2004).

While the discussion of investment incentives has coincided with the increase in foreign direct investment, the discussion of the effects and outcomes of this type of investment have warmed slowly and with the boom of these investments, from the middle decade of 1990. In the 1970's, foreign direct investment has been accompanied by the non-competitive behavior with and exploitation of developing countries through returning investment profit to the homeland of investment. Since the 1980's and 1990's, foreign direct investment has been a more positive force. Not only was FDI recognized as one of relatively stable financial sources which was of the flow of official assistance to petty developing countries, but also was more and more as one of the main engines of economic growth and economic efficiency, because it makes possible access to new technology, management techniques and workers' skills. It is now widely believed that foreign direct investment and economic growth are linked. It is not clear, however, whether direct foreign investment is the cause of growth, or it follows economic growth, or both. It has been revealed that the economic effects and outcomes of foreign direct investment depend on many factors, including the strategies of multinational corporations, the nature of specific sectors, and the conditions and policies of the host countries. This implies that it is unlikely that foreign direct investment everywhere has the same (or even positive) effect.

Financial development is an integral part of the process of developing an economy. According to Beck, Demirgug- Kant and Levin (2000), the indicators of financial development measures size, activity and efficiency of intermediaries and financial markets. The crucial role of the financial system has been accepted by economists such as Schumpeter (1912), Hick (1969) and Mc Kinon (1973). According to Schumpeter, "the banker is not basically intermediary equal to the producer of the goods in the" purchasing power "of the goods ... He is among those who want to create new combinations and the owners of productive tools. He is fundamentally a phenomenon for development, though only when no central management directs the social process. He allows new combinations to be made possible (under the title of the community, as it has been) empowering individuals to form them. He is the observer (supervisor) of exchange economics (Komijani et al., 2004).

A look Agreed for financial development tasks, identifies the following tasks: efficient resource channeling, savings mobilization, reducing the problem of information asymmetry, facilitating trade, hedging, dividing and diversifying risk, facilitating the exchange of goods

and services and supervising managers using corporate control. We review the relationship between financial development and foreign direct investment. Previous literature has already examined this relationship about growth. The other line of literature has attributed the uneven distribution of financial development to the political stability of the recipient countries (Roe and Siegel, 2001). They argue that political stability for the country is important because it helps to build institutions such as investor protection institutions, which in turn helps the financial sector. Hess (2004) states that firms are willing to invest in countries that experience political stability. However, there is no literature reviewing the link between political risks, FDI and FD. The main contribution of this paper is to examine the role that political stability plays in improving the divided relationship of FDI and FD (Manaf Nezhad et al, 2003).

### 3. Background research

Banga (2003) in his paper explores the impact of the US and Japan's foreign direct investment on Indian exports for the period 1994-2000, based on the panel data method. The results indicate that the investment made by US companies both directly and indirectly, with increasing export diversification, has led to an increase in exports of domestic firms in the non-traditional sector, while investment made by Japanese companies has not had a significant impact on the country's exports.

- Johnson (2006) reviewed the relationship between foreign investment and export in 8 Southeast Asian countries, Hong Kong, Singapore, Malaysia, Taiwan, Indonesia, Korea, Thailand, and China. For each country, he used two methods of time series regression and panel data in the period of 1983- 2003. They show a positive effect on the host country's exports (Also, the Granger causality test shows a causal relationship between foreign direct investment and export.

- Zheng & Fleming ham, (2007) based on China's monthly statistical data for the period 1986-99 and with the co-integration method and the Error Correction Method (ECM) examines the causal relationship between the inflow of foreign direct investment and exports in that country. Their results indicate that the relationship between direct foreign investment and exports is a two-way communication. They also examine the relationship between these variables by using panel data methods for different cities and regions. The results show that in areas with high inflow of foreign investment (coastal areas) and low inflow of foreign investment (coastal

regions) there is a two-way causal relationship between foreign direct investment and exports, while the rest of the Chinese regions do not have such a relationship.

- Chong et al. (2070), in a paper entitled "Private Sector Capital Flows, Stock Market and Economic Growth in Developing and Developed Countries: Comparative Analysis" have explored the effect of foreign direct investment and portfolio investment on economic growth in developing and developed countries over the years (1988,2000) by applying the GGM method, and have concluded that foreign direct investment has a positive effect on growth while foreign debt and portfolio investment have a negative effect on growth in all studied countries. Although the results of this study indicate that stock markets may be an important channel or the prominent institutional agent through which the flow of capital affects economic growth.

Mahdavi Adeli et al. (2011), in an article examined the effect of foreign direct investment on exports in Iran, using the co-integration method, at a time of 1352 1387. The results indicate a positive short-term relationship between foreign direct investment and non-oil exports, while the relation between foreign direct investment and total exports as well as non-oil exports is negative. In the long run, the relationship between foreign direct investment and total exports as well as oil exports is positive.

Booly (2013) in a study entitled "The impact of Research and Development Index on the Economic Growth of Member States in BRICS," believes that today, scientific and industrial societies have come to the conclusion that organizations relying on research and development and innovative activities within themselves can achieve higher economic growth along with other variables that affect the economic growth rate (such as foreign direct investment, net exports, government expenditures and energy consumption, etc.) .The results of this study showed that the variable R & D, along with the positive impact of other mentioned variables, has a positive and significant effect on the economic growth rate of members of the BRICS.

- Beijing Law (2014): This article analyzes the phenomenon of the BRICS group and its transformation into BRICS. From the first summit meeting whose final declarations focused mainly on economic, financial and commercial issues, the group's focus has widened its horizons, including health, agriculture, the environment, and international relations. It seems that the BRICS methodology represents a new inter-state relationship model based on cooperation, transfer of experiences and "soft" policy. Given the difficult classification of this "institution", the author suggests that it be considered more as a network, where the power of hegemony is not unique, but in that the communications of different countries according to the topic discussed at the summit is all different.



- San S (2017): This paper examines the factors determining the value of exports in relation to FDI in the BRICS countries, taking into account the factors affecting it. The goals of announcing positive results amount to 1.45%. The recipients are a bit lost, which uses a comprehensive set of explanatory variables and their reliability test. The results indicate the positive effect of the FDI of the member states of BRICS on their exports.

#### **4. The methodology of research**

##### **4. 1. Research purpose and hypotheses**

The purpose of this research is to examine the effect of financial variables on the net inflow of foreign direct investment in emerging economies of the BRICS Treaty and Iran. Based on the test, the following hypotheses will be considered:

**First hypothesis:** The real exchange rate variable has a positive and significant effect on the net inflow of foreign direct investment of the member states of the BRICS and Iran.

**Second hypothesis:** The variable of net export to gross domestic product has a positive and significant effect on the net inflow of foreign direct investment of the member states of the BRICS and Iran.

**Third hypothesis:** Inflation rate variable has a negative and significant effect on the net inflow of foreign direct investment of the member states of the BRICS and Iran.

##### **4. 2. The type of research method and data source:**

This research is applied in terms of categorization of research based on purpose. In terms of data, this research is either descriptive or non-experimental, and of course, in terms of implementation, is Ex-Post Facto type and also correlational. Ex-Post Facto research is also called a comparative-causal study. In Ex-Post Facto research, the researcher examines the probable cause of the dependent variable. Since independent and dependent variables have occurred in the past (the quantitative values of the above mentioned variables during the years 2009-2016), so this kind of exploratory research is called Ex-Post Facto research. On the one hand, in correlational research (bivariate correlation, regression analysis, and variance analysis) the relationship between variables is analyzed based on the purpose of the research. It can be said that, due to the regression analysis with the nature of the panel (panel data) and the fit of the above models, the research is also a type of correlation.

On the other hand, data on the trend of financial variables for the sections (6 countries reviewed) were taken from the database section of the World Bank site, and, of course, the model's estimation and hypothesis testing were done by Eviews.10.

### 4. 3. Research model and variables

Based on the purpose and hypotheses of the research, the following variables are considered for the econometric model based on panel data approach:

Dependent variable: Net inflow of foreign direct investment (NINFDI<sub>it</sub>) of i th country in t year.

Independent variables are:

1 -The ratio of net exports to real GDP - it (NX / GDPR) of ith country in year t as the degree of openness of the economy and we will show it with NEIT (No.2).

2 - Inflation Rate (INFit) i th country in year t, which is shown in the summarized model with ICit.

3 Real Interest Rate - (RIR)<sub>it</sub> of i th country in year t

Based on the above variables the following econometric model is considered based on the panel data approach:

$$NINFDI_{it} = C + \beta_1 (nx / GDPR)_{it} + \beta_2 inf_{it} + \beta_3 RIR_{it} + \epsilon_{it} \quad (1)$$
 and if the first independent variable is shown with NE<sub>it</sub> and the second with IC<sub>it</sub> we will have:

$$NINFDI_{it} = C + \beta_1 NE_{it} + \beta_2 IC_{it} + \beta_3 RIR_{it} + \epsilon_{it} \quad (2)$$

## 5. Model estimation and the test of research hypotheses

In this section, model estimation and testing of research hypotheses are done in the following steps.

### 5. 1. Durability test (reliability or unit root) in panel data

Before estimating the model in the first step, in order to avoid false regression, we examine the durability of the variables of the research model. For doing this test, the unit root method has been used in panel data, namely, Levine, Lane and Chu (LLC) test. The H<sub>0</sub> hypothesis in this test represents the existence of a unit root and in-durability. The results of this test are shown in Table (1).

**Table 1**

## Results

Variable	The amount of test statistic	Probability	State
NINFDI	-11.332	0	Durable
IC	-12.811	0	Durable
NE	-12214	0	Durable
RIR	-14.2142	0	Durable

Source: Research findings

Given the above table, for the R, RE, P, and SIZE variables, the LLC test of unit root performed at the level (The level is the same time series without differencing) given prob. zero (smaller than 5%) are significant and durable. So, no false regression is confirmed. It should be noted that since variables are at durable level, there is no need to the co-integration test 1 for them.

### 5. 2 Collinearity test (Correlation between independent variables)

In econometrics, it is always the case that collinearity is in the nature of regression models. But what's important is that collinearity should not be perfect, and of course, there should not be desirable diagnostic conditions (as mentioned above) for it. It's also worth noting that incremental sample size can modify this problem. So, given that the panel data includes the combination of time and section simultaneously, the number of observations (sample size) increases significantly, thus reducing the collinearity problem.

### Choosing the appropriate estimation method for research models:

In order to test the hypotheses, we estimate the research model under different states and conditions, and in each state, by performing related tests, we select the optimal model and perform all analyzes and tests based on the selected model. Choosing the approach (method) in the econometric study of panel data, of the three combinational effects (common effects), fixed effects or random effects, depends on the related and mentioned tests in the third chapter.

#### 5. 3. 1. F- Limer (combinational method or fixed effects) for the research model

The F- limer test was used to investigate the existence of individual effects or the difference between cross-sectional characteristics in the intercept. In the F- Limer test, the null hypothesis is defined as the same intercepts of all sections (the absence of individual effects), which, if rejected, a fixed effect model and, if accepted, by the conventional least squares (hybrid)

method should be used for estimating model. In this study, according to Table 2, F-Limer's results show the individual effects and the necessity of using panel data for the research model.

**Table 2**

The summary of the F- Limer test method - Redundant Fixed Effects Tests

Prob.	d.f.	Statistic Effects Test	
0.0000	(5.39)	62.546215	Cross-section F

Source: Research findings

As Table 2 shows, prob. <0.05 and the calculated value of the F- Limer statistic is significant. Therefore, the null hypothesis that the data are combined is rejected, and in fact the assumption that shows the suitability of the FE method for estimating the model is acceptable.

5. 3. 2. Housman test (fixed effects or random effects) for the research model.

After the F- Limer test determines that the intercept is not the same for the different sections, in the next step, it is necessary to perform Housman test to diagnostic between the two alternative models, namely, the fixed effects and the random effects. In the Housman test, the null hypothesis is that independence of the explanatory variables is an error term, and if it is rejected, then the method of fixed effects is consistent and the method of random effects and the random effects method is incompatible, and the constant effect pattern must necessarily be used. The results of this test are presented in the table below.

**Table 3.** The summary of the method of Housman test - Correlated Random Effects-Hausman Test - Test cross-section random effects

Prob.	Chi-Sq.d.f.	Chi-Sq. Statistic Test Summary	
0.0147	3	8.066096	Cross-section random

Source: Research findings

As shown in Table 3, prob. <.05. Therefore, the null hypothesis is rejected and the fixed effect approach is considered as an appropriate method for estimating the research model.

#### 5. 4. The estimation of the research model based on the fixed effects method for testing the research hypotheses

In this section, according to the previous discussion on the choice of the above method, the model estimation is performed. Table 4 shows the estimation results of the first model of research during the years 2009- 2016.

$$NINFDI_{it} = C + \beta_1 NE_{it} + \beta_2 IC_{it} + \beta_3 RIR_{it} + \epsilon_{it} \quad (1)$$

Based on the results of the estimation of the research model, it can be seen that according to the positive sign for the coefficients of the variables of real exchange rate (RIR), the ratio of net exports to real gross domestic product (NE) and inflation rate (IC) as well as prob. less than 0.05, it can be said that the variables have a positive and significant effect on the net inflow of foreign direct investment (NINFDI).

**Table 4.** The results of estimating the research model to test the main hypothesis

Variable	Coefficients	t-statistic	Prob.
C	8.76	5.32	0.0000
RIR	4.530	-2.47	0.0482
NE	7.25	-3.11	0.0004
IC	-2.51	-2.86	0.0329
Regression statistics	Adjusted R <sup>2</sup> =0.90	DW-1.79	Total regression significance

Resource: research findings

\*Significance level 5%

In a more comprehensive interpretation of how to influence and test the significance of the variables of the research model (with the aim of testing the main hypothesis), we can analyze and interpret individual variables as follows.

**\*First hypothesis test:** This hypothesis states that the real exchange rate variable (RIR) has a positive and significant effect on the net inflow of foreign direct investment (NINFDI) of the member states of BRICS and Iran.

For the real exchange rate (RIR), due to the computational coefficient of this variable, the positive effect of this variable on the net inflow of foreign direct investment has been concluded. According to the estimation of the research model, it can be noted that one unit increase in the RIR variable has been able to increase the inflow of foreign direct investment by 4.53 units (that is, the first hypothesis can be accepted).

**\*Second hypothesis test:** This hypothesis states that the ratio of net exports to real GDP (NE) has a positive and significant effect on the net inflow of foreign direct investment (NINFDI) of the member states of BRICS and Iran. On the impact of the variable net exports to gross domestic product (NE), the estimation of the research model shows that the coefficient of this variable has a positive effect at the amount of 7.25 units on the variable of net inflow of foreign direct investment inflows which is significant with respect to prob.  $<0.05$  (that is, the second hypothesis can be accepted).

**\*Third hypothesis test:** This hypothesis states that the inflation rate (IC) has a positive and significant impact on the net inflow of foreign direct investment (NINFDI) of the member states of BRICS and Iran. The inflation rate (IC) is one of the other factors that has attracted the attention of experts. Since the inflation rate increases economic uncertainty and investment costs, we expect a negative effect on the dependent variable. The result of the estimation of the research model has also been consistent with this theoretical discussion. So, for the IC variable (inflation rate), it is also seen that the sign of coefficient related to it is also negative and quite significant (prob. = 0.0329), i.e., a unit increase leads to 2.51 decrease in net inflow of direct foreign investments (i.e., the third hypothesis can be accepted).

Therefore, in a general view, it can be said that the coefficients of the estimated research model, which were exactly in line with the theoretical expectations and based on the article on the basis and background of the research and had a positive and significant effect on the net inflow of foreign direct investment (dependent variable). Therefore, all three main hypotheses of the research can be accepted.

It is also worth noting that given the high F statistic and prob. = 0 for the significance of the total regression, it can be said that the model has 100% overall significance. The results of the estimation of the research model, as well as the 90% determination coefficient ( $R^2$ ), and the Durbin–Watson statistic (DW) equal to 1.79, respectively, indicate the fit goodness of the model and the absence of acute co-integration.

## 6. Conclusion and recommendations:

### 6. 1. The result of testing the main hypotheses of the research:

The results of the estimation of the research model for the countries in question showed that:

1. Given the positive sign for the coefficients of the variables of real exchange rate (RIR) and the ratio of net export to the real GDP (NE) in this model and prob. less than 0.05, it can be said

that the variables have a positive and significant effect on the variable of net inflow Foreign direct investment (NINFDI). These results are consistent with the results of the base paper and some of the studies reviewed in the research background, while suggesting that the first and second hypotheses can be accepted.

2. On the other hand, since inflation rate increases economic uncertainty and investment costs, we expect a negative effect on the dependent variable. The result of the estimation of the research model has also been consistent with this theoretical discussion and has been confirmed. So, for the IC variable (inflation rate), it is also seen that the sign of the corresponding coefficient is also negative and quite significant (prob. = 0.0329). That is, an increase unit in IC leads to 2.51 reduction in the net inflow of foreign direct (that is, the third hypothesis can be accepted).

## 6. 2. Research hypothesis:

1. Considering the positive and significant effects of the variables of RIR and also NE on the net foreign direct investment, it is recommended that the countries under study strengthen these two indicators, with the relevant economic policies, such as improving the competitiveness of Iranian goods to improve the net FDI index.

2. Regarding the negative and significant effect of the IC variable on the net foreign direct investment, it is suggested that the countries under investigation, by controlling the inflation rate, pursue the improvement of the index of net FDI through economic (contractionary monetary and financial) policies.

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