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Analysis of the threshold effect of market institutional quality on Iran's outflow of foreign direct investment*

Navvah, A.¹ | Ghobadi, S.² | Sharifi renani, H.³

Abstract

Outflow of foreign direct investment (OFDI), is one of the economic variables that can bring advantages and disadvantages to the economy of the country of origin. This type of investment will bring positive effects if it is accompanied by the return of its benefits or the transfer of technology to the country of origin, and if it leads to the outflow of capital without return of benefits and a decrease in domestic investment, it will bring negative effects to the economy of the country of origin. The quality of market institutions in the country of origin is one of the factors that can affect investors' decisions to invest abroad and domestically. The aim of this article is to analyze the threshold effect of market institutional quality on OFDI in Iran during the period of 2000:1-2022:1. For this purpose, the combined index of market institutions, including regulating, stabilizing, legitimizing and market creating institutions, was calculated using the principal component analysis (PCA) method. Then, the threshold effect of market institutional quality and control variables including economic growth, economic complexity, and tax burden on OFDI was estimated by smooth transition regression (STR) method. The results showed that the institutional quality of the market with two lags is the transfer function of OFDI, which has a threshold equal to 0.206% and two limit regimes. The transition speed from the first to the second regime is equal to 10.52. OFDI of the previous period had a positive effect on the current period in both regimes. Market institutional quality index and economic growth have a U-shaped effect on OFDI. Economic complexity has an inverted U-shaped effect on OFDI. On the other hand, tax burdens had a positive effect on OFDI in both regimes, but this effect decreased in the second regime.

Keywords: Market Institutional Quality, FDI Outflow, Composite Index, Soft Transfer Regression.

JEL Classification: C01, C43, E02, F21.

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^{*.} This article is extracted from the Ph.D. thesis of Atefeh navvah in the Department of Economics of Islamic Azad University of Isfahan (Khorasgan) Branch

^{1.} Ph.D. student in Economics, Department of Economics, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran. *Email:* atefe_navah@yahoo.com

Assistant Professor of Economics, Department of Economics, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran (Corresponding Author). Email: sghobadi@khuisf.ac.ir

^{3.} Associate Professor of Economics, Department of Economics, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran. *Email:* H.sharifi@khuisf.ac.ir



1. Introduction

Outflows Foreign direct investment (OFDI) is equal to the value of foreign investment created by residents of a country in other foreign countries and includes debt and assets transferred between resident investors and economic organizations abroad. This type of investment can have different positive and negative effects on the economy. In fact, when OFDI is accompanied by the effective pursuit of assets and benefits derived from it, it can be achieved through the transfer of certain types of technologies or the acquisition of financial benefits through access to specific markets and reducing the financial or technological limitations of the investing country to help its economic development. Meanwhile, OFDI can cause the loss of domestic investment through the OFDI for an unspecified period of time, while aggravating the lack of capital in low-income countries. The quality of the institutional environment is one of the most important factors that affect OFDI. When the institutional quality is not at a high level, it is possible for investors to look for investments in environments with more efficient and calm markets to get rid of cumbersome restrictions. In general, both institutional support and institutional restrictions have a significant impact on the investment strategy of companies in other countries of the world. Therefore, the institutional quality of a country can both increase OFDI and prevent the globalization of domestic companies. Considering the positive and negative effects of OFDI on the economies of countries, the vagueness of its relationship with the level of economic development and the important role of institutional quality in OFDI changes, the main goal of this research is to analyze the threshold effect of market institutional quality on Iranian OFDI in 2000:1-2022: 1.

2. Theoretical framework

Rodrick (2005) has divided institutions into four main groups including market creating, regulating, stabilizing and legitimizing institutions. Market creator entities are entities that, while protecting property rights, guarantee the obligation to execute contracts. The lack of market-creating institutions causes societies to face missing markets or, if there are markets, they have a very weak function. In general, these types of institutions refer to the rule of law, the quality of law and the risk of confiscation of property. Market regulatory institutions are institutions that regulate economic growth in the long term while preventing market failure. Market stabilizing institutions are a type of institutions that increase flexibility against shocks. These types of institutions prevent financial crises by reducing inflationary pressures and reducing instability at the macroeconomic level. Unfavorable institutional environment cause the inefficiency of capital inside the country, after which companies invest abroad in order to be in more efficient markets. In developing countries, institutions have a significant impact on the globalization of businesses through support or restrictions. Also, high institutional quality can lead



to the persuasion of domestic banks for foreign investment.

3. Methodology

To achieve the purpose of the article, first, the combined index of market institutions, including regulatory, stabilizing, legitimizing, and market creator institutions, is calculated by the principal component analysis (PCA) method. Then, a model is considered in which foreign investment outflow is the dependent variable and the index of market institutional quality, economic growth rate, economic complexity and tax burden are independent variables. Then the model is estimated using smooth transition regression (STR) method.

4. Finding

The results show that the second lags of the market institutional quality as a transfer variable of Iran's OFDI function has a threshold equal to 0.206 and two limit regimes. The transfer rate between the two regimes was equal to 10.52. Market institutional quality index has a U-shaped effect on OFDI. So, the improvement of market institutions has provided a suitable situation for investors to invest in the country. This is despite the fact that with the market institutional quality crossing the threshold, OFDI has increased. This issue can show the improvement of the conditions of domestic investors due to the previous investments, which resulted from the increase in the institutional quality of the market. In other words, the investors who invested more in the domestic market before the threshold limit and obtained good returns from their investments due to the improvement of market institutions, now with the market institutional quality reaching the threshold limit, they have also obtained the possibility that due to the profit of investments they should also make foreign investments. Economic growth has also had a U-shaped effect on OFDI. Tax burdens in both regimes have led to an increase in OFDI, but this effect has decreased in the second regime. Economic complexity has had an inverted U-shaped effect on OFDI.

5. Conclusion and Suggestion

In line with the goal of the research and the results obtained, increasing the monitoring of the observance of property rights and respect for the law and strengthening the spirit of lawfulness in government employees, quality assessment of labor market laws and credits and updating them according to the conditions of the country, creating an open space for Ease of commenting and requiring executive bodies to respond through various methods such as creating electronic systems and also targeting inflation according to the structure and economic conditions of the country in order to prevent severe inflationary fluctuations can lead to the improvement of the institutional quality of the market.



6. Ethical Considerations

6.1. Compliance with ethical guidelines

The present study has followed the scientific principles of research.

6.2. Funding

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6.3. Author's Contribution

According to the authors, this paper is an extract from a PhD thesis. As a result, the first author wrote the article with the guidance and supervision of the second author and the consultation of the third author.

6.4. Conflict of Interest

The authors declare no conflict of interest.

6.5. Acknowledgments

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