



## **Determining of Optimal Taxation on Foreign Direct Investment in a Small Open Economy for Iran Compared to Selected Countries**

*Mohsen Karimi*

*PhD student, Faculty of Economics, Management and Social Sciences, Shiraz University, Iran  
karimimohsen80@yahoo.com*

*Reza Akbarian*

*Associate professor, Faculty of Economics, Management and Social Sciences, Shiraz University, Iran  
rakbarian@rose.shirazu.ac.ir*

*Ruhollah Shahnazi*

*Associate professor, Faculty of Economics, Management and Social Sciences, Shiraz University, Iran  
rshahnazi@shirazu.ac.ir*

*Ahmad Sadraei Javaheri*

*Associate professor, Faculty of Economics, Management and Social Sciences, Shiraz University, Iran  
sadraei@shirazu.ac.ir*

### **Extended Abstract**

doi: 10.22080/iejm.2020.19124.1770

### **Introduction**

Each country for economic growth and development requires creating capital for financing and basic infrastructure. For Countries that there is not sufficient capital to develop internally are trying to attract foreign capital and transfer funds and resources to establish economic enterprises with higher returns than other countries. In order to achieve this, governments enter a competitive game and try to attract these funds with their policies. One of the most important of these policies is determining the optimal taxation on foreign direct investments. Although most studies in this field refer to the factors affecting foreign direct investment, in this study, special emphasis is placed on determining the optimal tax on foreign direct investment. The efficiency of a tax system is optimal in determining a tax, and given that there are many differences between the characteristics of different societies, it is not possible to recommend the same tax model for all of them. In addition, since taxes are today the most extensive source of revenue for governments in most countries of the world, the importance of an efficient tax system is even

greater. One of the tax bases considered by governments is capital. The question that is answered in this study is whether a tax rate higher than zero or a negative tax rate (subsidy) in a country is able to attract foreign direct investment.

### **Objective**

There are two main objectives in this study that are evaluated in stages. These goals are:

- 1) what is the optimal taxation rate on foreign direct investment in a small open economy for Iran and selected countries?
- 2) Does the optimal tax on foreign direct investment for Iran and selected countries have an effect on the international competition of countries to attract capital and which country has the ability to raise more capital through tax policies?

### **Data/Methodology**

In this study, using a dynamic optimization control model and by developing a Ramsey model has been determined the optimal taxation on foreign direct investment in a small open economy for Iran and selected countries. The research model is designed with the assumption of a small open economy consisting of households, commodity-producing firms (including domestic and foreign-owned firms that intend to invest with capital inflows) and the government. The household, as a representative factor in the given price level, maximizes its utility to the infinite horizon.

The enterprise also maximize profits based on its production and cost function. To find the optimal taxation rate, Lagrange optimization method and Matlab software have been used. This model includes both domestic and foreign economies, and the influence of the domestic economy from the outside is absorbed only through foreign capital and taxes are imposed on them. The variables used in this study are final consumption expenditure, foreign direct investment, real interest rate, global interest rate, employed population, net foreign assets, wages, government expenditures, net domestic capital assets, tax on wage (Income).

### **Results/Findings**

The results of this study show that tax incentives are needed to attract foreign direct investment. While this rate is negative for some of the countries. For Iran it is 0.16%. However, it was expected that this rate would be negative for Iran in order to increase the incentive for foreign investors to invest in order to provide tax subsidies. Assuming a 25 percent subsidy for Iran between 2007 and 2010, foreign direct investment has increased by more than \$ 2.5 billion. If the direction of the subsidy bullet is clear and targeted, it can be reason for more economic growth in the long time. This is an investment that is supported by subsidies and in the long run can create a competitive open economy in an international environment by producing high quality goods. On the other hand, if a fiscal policy is implemented in the form of subsidies and even in line with other goals, although it can be effective in the short term, it can have devastating effects in the long run. For example, the performance of the country's foreign trade after targeting subsidies, according to Iran's customs statistics in 2010 with a growth of 29 percent to 43.8 billion dollars in the export of non-oil goods in 2011. Although one of the main goals of this targeting was to improve consumption patterns and equitable distribution of income, but it has also helped foreign trade. However, this policy did not last long in this regard, and in the following years, again in countries within the framework of a tax competition, by reducing this rate as much as possible, it will be possible to attract more capital.

## **Implications**

Considering the Iranian economy and the emphasis on non-oil revenues in the public sector, determining the optimal tax in a small open economy in the first place and the share of these taxes along with other factors affecting foreign direct investment can be reality existing economy in front of the policy makers. Introducing tax and non-tax incentives in Iran for multinational companies and foreign legal and real investors through diplomatic relations and developing economic, political and security indicators according to global interests can contribute to Iran's economic development.

**Keywords:** *Dynamic optimization control model, Tax on Foreign Direct Investment, Small open economy, Iran.*