IS TAXATION AFFECTING THE ATTRACTIVENESS OF CENTRAL AND EASTERN EUROPE COUNTRIES FOR FDI?

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Abstract: *The target of this paper is to determine whether taxation affects the attractiveness of Central and Eastern Europe (CEE) countries for foreign investors. In this scope, the paper analyzes the impact of taxation for the location decision of foreign direct investment (FDI) in CEE countries both in 2007 and 2010. A taxation index investing the effect of multiple host country taxes is developed in order to draw the attractiveness matrix for the countries taken into account. The taxation level comprises the corporate income tax rate, representing direct taxation, the value-added tax (VAT) and the social security contributions expressing indirect taxation and finally the ease of paying taxes, as provided in Doing Business report. The results indicate that relieving the burden of paying taxes by tackling the taxation issue is a mean for improving the FDI attractiveness of a country. Still, there are other factors that have higher influence on FDI inflows. The main finding is that there is no perfect correspondence between the shifts in taxation rankings and the FDI inflows performance.*

Keywords*: foreign direct investment, corporate income tax rate, indirect taxation, Central and Eastern Europe*

1. Introduction

There is a wide literature on the positive and substantial economic impact of foreign direct investment (FDI) on the development of the host and the home country. It is already clear that the „battle" for FDI is not new. Moreover, the crisis tested the strength of the traditional determinants of FDI, such as the economic growth rate or the dimensions of the markets and pointed the importance of other determinants. In times when the economic stability is endangered and growth remains under pressure, new opportunities were found.

The traditional determinants of FDI in CEE countries are the low wages or, more specifically, the difference in prices of factors of production, and the size of the national market (Botirc and Skuflic, 2006). Still, all the CEE countries assist today at a loss of the competitive advantage provided by the low level of wages. This problem affects even the economies with the lowest level of wages in this group of countries, namely Romania and Bulgaria. It becomes certain that they cannot compete with the huge advantage of the Asian countries, for example. The case of the Finnish Nokia company that announced to close its factory in Romania due to a strategy of cost reducing and to relocate in Asia is eloquent. The actual degree of globalization points that each country must learn to manage the risks of delocalization. Other papers at the beginning of this decade revealed that the factors influencing the attractiveness of a region, particularly for the Eastern Europe countries, are no longer the natural resource endowments, but the created resources.

FDI flows in the world were strongly influenced by the negative effects of the crisis and experienced their major shrank after years of growth when in the United States and the EU. After reducing with 11.5% in 2008, the FDI flows fell sharply with 32% in 2009. In 2010 the global FDI flows are hardly growing again, but this is not also true for the EU. The most important decrease in FDI flows, of almost 43%, was felt in 2008. But after the peak of 850 billion dollars in 2007, the FDI felt sharply in 2010 with more than 63%, reaching almost 305 billion dollars. Unfortunately, Romania followed the same trend in FDI evolution. Still, a first sight minor differentiation can be seen: in Romania, the FDI peak of almost 14 billion dollars was reached in 2008, with one year delay as compared with the EU. The next year witnessed a total collapse: a reduction of 65% in FDI. No loss was recovered in 2010, as FDI are continuously decreasing.

Consequently, there is a permanent struggle for improving a location' attractiveness for FDI.

In attempting to determine the decisive factors for attracting FDI, a number of studies illustrated the growing importance of taxation and in particular, of direct taxation expressed as corporate income taxes. There is strong evidence that high corporate income tax rates are associated with low levels of FDI. To the same extent, indirect tax burden affects the investment decision, as all of these taxes are imposed simultaneously. Coupled with the time spent for solving the taxes problem, the taxation issue hangs heavy on the attractiveness of a country for FDI location.

The goal of this paper is to analyze the attractiveness of CEE countries as regards taxation and to determine the impact of tackling taxation issues in order to improve location attractiveness for FDI. For this purpose, we develop a taxation attractiveness matrix. We test the matrix accuracy with the CEE rankings provided by the inward FDI performance index in order to assess the impact of taxation over FDI. The study employs an aggregate taxation index, based on direct and indirect taxation and the ease of paying taxes.

The paper is organized as follows: in section 2 we provide a brief review of the literature, in section 3 we present our data and methodology. Section 4 is dedicated for discussions of the results. Section 5 concludes.

2. Literature review

Starting with the eclectic paradigm of Dunning, also known as the OLI model (Prelipceanu, 2006), the advantages of the foreign host location are emphasized. The level of taxation is one of the localization factors, explaining where the company will conduct its business. Some FDI theories (Morgan and Katsikeas, 1997) point out the companies' behavior of searching attractive environments, where taxation plays an important role. For example, the market imperfections theory argues that firms are constantly seeking opportunities enabling them to obtain various types of competitive advantages. Kueh et. al (2009) remind that the theory of international production, as elaborated by Dunning in 1980 and Fayerweather in 1982 states that the decision of a firm to initiate foreign production depends on the specific attractions in the home country compared to resources and benefits of the host country. Consequently, the foreign government actions have a major importance in establishing the attractiveness of a country. Often, the interventions of the governments are mainly manifested through fiscal policy, which can prioritize certain sectors or encourage certain types of investments. More recently, Stefanović (2008) restore into discussion the extended model of Dunning eclectic paradigm, the OLMA. The internalization factor is replaced with two others: the mode of entry and the adaptation of the firm's operation to the international business environment. By extension, we can assume the last one indicates that not only the level of taxation is important, but also the way of doing business in a country: in our case, the disparity in paying taxes, in terms of number of procedures or time, for example. Moreover, investigating the econometric studies developed in the '90s, Gordon and Hines (2002) argue that both the level and location of FDI are highly sensitive to the treatment of taxes.

More specifically, in determining the importance of taxation on FDI attractiveness, most studies' results found a significant impact of corporate income taxes on the location decision. A comprehensive research of Madies and Dethier (2010) points out that the result of the most empirical studies indicates the sensitivity (in varying degrees) of FDI flows into developing countries to the corporate income taxation and fiscal incentives. For example, Bénassy-Quéré et al. (2003) indicate that high relative corporate taxation discourage FDI inflows and maintain a significant role in the attractiveness of a country. An interesting result obtained by Goodspeed et al. (2009) show that FDI stock is more sensitive to the host country taxation in developed countries and not in developing ones.

Desai, Foley and Hines (2004) study the impact of host country indirect taxes on FDI by American multinational firms. Their main finding is that a high level of taxation (including the whole range of taxes, both corporate income and indirect taxes) are associated with reduced FDI. Moreover, indirect tax rates are negatively correlated with investment levels roughly to the same degree as are corporate income tax rates.

In analyzing the impact of taxation in home and host countries, Hajkova et al. (2006) cautions that focusing only on taxation issue and omitting other type of policies (such as openness, labor costs and regulatory hurdles) can distort the results regarding location attractiveness for FDI. The effects of taxation on FDI are quantitatively much less relevant than the effects of other policies that contribute to make a location attractive to international investors.

The result is confirmed by the research of Bellack et al. (2007), which identifies that the location decisions made by multinational enterprises are influenced by both taxes and infrastructure. Moreover, tax-rate elasticity of FDI is a decreasing function of infrastructure endowment. Therefore, tax incentives are not sufficient to overcome the structural inefficiencies encountered in infrastructure or bureaucracy. Lower tax rates are not a panacea, especially for transition countries. Business friendly fiscal policy must be accompanied by investment in infrastructure and in the human resource. The main measure in the medium to the long run is to improve the infrastructure for putting FDI on a sustainable basis.

The ranking of FDI determinant factors built by Culahovic (2000) indicates that the economic and political stability is on top, followed by the market dimensions, low costs and the labor cost quality. Corporate income tax is on the last place. This result implies that tax incentives and low levels of taxation are not sufficient to overcome the structural inefficiencies encountered in infrastructure or bureaucracy. The result is particularly valid for the ex-communist countries.

In order to evaluate the business environment in a country, World Bank publishes annually, starting with 2004, the Ease of Doing Business reports. The report is often seen as a signaling framework for a country business environment. In a very recent study, Jayasuryia (2011) tests if the improvements in Doing Business rankings increase the FDI inflows. The author result is that this relationship is significant for attracting FDI, but not for developing countries.

3. Data and methodology

The present study assesses the influence of taxation across 10 European Union countries in CEE (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) both in 2007 and 2010, in order to establish their attractiveness as a location for FDI. The two years analysis allows to take into account the impact of the crisis and to evaluate the countries' evolution.

The attractiveness matrix is constructed based on the taxation attractiveness index, which aggregates the corporate income tax rate, the social security contributions and the VAT as variables for expressing indirect taxation and the ease of paying taxes.

We employ the data available from Doing Business report for estimating the ease of paying taxes. The statutory corporate income tax and the social security contributions expressed as share of total labor cost are provided by the Annual report of the Romanian Fiscal Council or by Eurostat database. For statutory VAT, we employ the data provided by the European Commission documents. We also use the inward FDI performance index, as constructed by UNCTAD.

The corporate income tax rate (CIT) directly affects the profits generated from conducting a business. The social security contributions indicate the total additional costs a firm has to bear after the wage level is set as payment to social security funds, insurance companies and autonomous pension funds to provide social benefits for their employees. In this case, we take into account the social security contributions related to employer. VAT is a cost incurred by all the economic agents, companies and individuals. It has the special feature of being enforced in the country where the product is consumed, not where it is produced. The reason for using the VAT is that it has not only a purely technical role for collecting budgetary revenue, but it is an important tool for economic and fiscal policy. Doing Business report provides the data for measuring the ease of paying taxes through three variables: number of payments per year, time needed and the owed total tax rate, expressed as share of the profit.

The first step is to establish a common basis for data evaluation, as at this moment they are differently expressed and quantified and therefore do not allow an accurate comparison. Consequently, for each variable is established the ratio of the value recorded by each country in the value of the best performing country. We will also develop a sub index expressing the ease of paying taxes (I_{DB}), according to Doing Business Report, and the indirect taxation (I_{IT}), as the weighted average of the chosen variables. Each variable has the same weight (0.33% for the Doing Business Index, respectively 50% for the indirect taxation index).

Finally, the taxation attractiveness index (I_A) is calculated also as weighted average, based on the rule:

$$I_A = CIT \times 0.33 + I_{IT} \times 0.33 + I_{DB} \times 0.33 \qquad (1)$$

In order to assess the attractiveness matrix accuracy, we compare the rankings with those provided by the inward FDI performance index. The index expresses the FDI inflow relative to one country's GDP. In this way, we capture the real level of FDI relative to economic size of a country.

4. Results

The matrix is created by ranking the countries according to the results obtained in the two years, from the most attractive (the country with the lowest score) to the least attractive (the country with the highest score).

Table 1. The attractiveness matrix

2007	**Latvia**	**Bulgaria**	**Lithuania**	**Slovenia**	**Poland**	**Estonia**	**Slovakia**	**Hungary**	**Romania**	**Czech Republic**
	0.58	0.60	0.681	0.683	0.70	0.71	0.72	0.73	0.74	0.85
2010	**Bulgaria**	**Latvia**	**Lithuania**	**Slovenia**	**Poland**	**Estonia**	**Slovakia**	**Czech Rep.**	**Romania**	**Hungary**
	0.54	0.62	0.65	0.67	0.71	0.74	0.76	0.77	0.78	0.83

Source: author work

The rankings are almost the same in the two years. During the crisis, most of the countries saw an increase in their taxation level, especially for VAT. Bulgaria is among the few countries in Europe that managed to maintain tax rates at low levels during the crisis. The result is obvious: Bulgaria is the best performing country in 2010 as regards the level of taxation, succeeding to improve it score. Lithuania, Slovenia and the Czech Republic also managed to have better taxation scores in 2010. The results are also due to the efforts in easing the payment of taxes. Companies were most charged in the Czech Republic in 2007 and in Hungary in 2010.

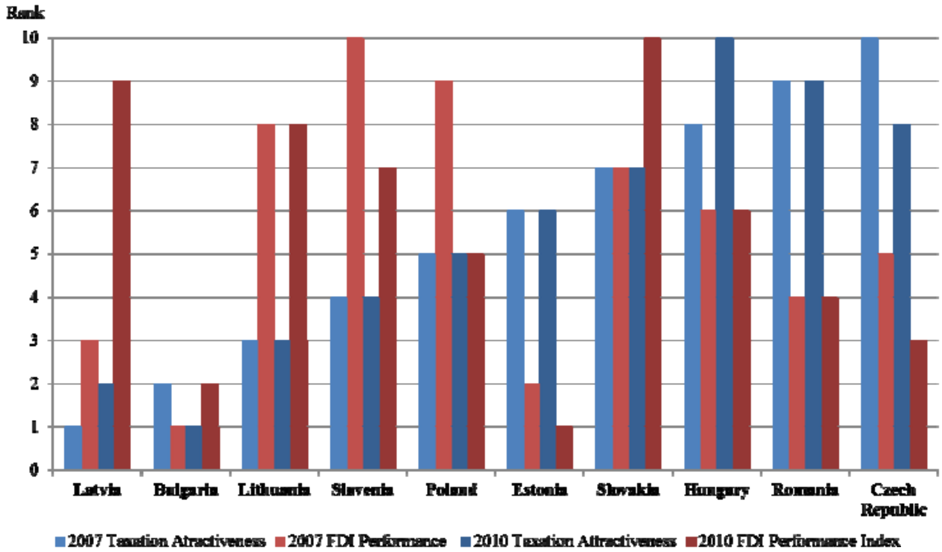
Table 2. Ranking according to inward FDI performance index

Rank/ Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2007	Bulgaria	Estonia	Latvia	Romania	Czech Republic	Hungary	Slovakia	Lithuania	Poland	Slovenia
2010	Estonia	Bulgaria	Czech Republic	Romania	Poland	Hungary	Slovenia	Lithuania	Latvia	Slovakia

Source: UNCTAD

The relation between the rankings obtained by the countries in both years in terms of taxation and FDI performance can be better seen on the chart below. On the vertical axis, the rankings are expressed so the decrease is evaluated as good performance.

Figure1. Evolution of taxation attractiveness and inward FDI performance rankings



Source: author analysis

Correspondence of positions is maintained in the case of Romania and Lithuania: in both years, it ranked 9th, respectively 3rd in terms of taxation attractiveness and is the 4th, respectively the 8th country in CEE as regards the FDI performance. We can identify here a first sign that there is another determinant factor of FDI responsible for the transposition of places.

Two of the four countries that improved their score, Slovenia and the Czech Republic, also experienced an increase of inward FDI performance. For Latvia, a worsened level of taxation determined a loss of 6 positions in FDI performance ranking, while for Hungary, which descends two positions and sees the higher increase of the taxation score, the FDI performance rank is not affected. Slovakia is also an exception: while keeping the rank in attractiveness matrix, it descends three positions in FDI performance. By contrast, Poland and Estonia increase their position in the FDI performance ranking, even if in both years they remain on the same place in terms of taxation level.

Except for Bulgaria, there is no country where the FDI performance ranking worsens if the taxation level improves. Bulgaria sees a minor shift in the FDI performance ranking, by losing only one place. We can assume in this case that investors were afraid of a worsening in other determinant factors for FDI (a high degree of macroeconomic instability, for example). There are two possible explanations for the diverted results: either the FDI does not react immediately at the modification in taxation level, or there are other factors that have a greater influence on attracting FDI. To this extent, the results obtained are in accordance with Hajkova et al. (2006) and Culahovic (2000) analysis: there are other important factors that contribute to create the attractiveness of a location.

5. Conclusion

There is not a perfect correspondence between the countries where the taxation level is the most attractive for a foreign investor and the main FDI recipients. Still, tackling the taxation issue and relieving the burden of paying taxes can improve the FDI attractiveness of a country. For the CEE countries, other FDI determinants, such as macroeconomic stability, infrastructure or institutional environment still remain more important than taxation.

It would be appropriate to extend the analysis for the remaining years, in order to identify a trend and to eliminate distortions, and to include the developed countries in the European Union, for better assessing the impact of taxation.

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