GOVERNMENT INCENTIVES DIRECTED TOWARDS FOREIGN DIRECT INVESTMENT: A CASE OF CENTRAL AND EASTERN EUROPE

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Abstract. This article examines the government incentives towards foreign direct investments (further – FDI) of Central and Eastern Europe countries by evaluating the external influencing factors of foreign investment. It is argued that the major incentive affecting FDI inflows involves more fiscal than financial incentives. Tax deduction is considered to be the most significant influencing factor on attracting FDI. Hence, the empirical analysis is based on exogenous variables. The empirical model was used to determine causal relationship between macroeconomic variables and FDI intensity in Central and Eastern European countries. The article introduces some policy recommendation for the increase of FDI intensity in Central and Eastern Europe.

Keywords: government incentives, foreign direct investment, determinants of FDI, Irish model, TKC model.

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1. Introduction

The rapid growth of foreign direct investment (FDI) in many developing and transition countries suggests that inward FDI has come to play a more significant role than it did some decades ago. This economic evolution has been accompanied by a political shift in the perception of FDI: an overwhelming part of the developing countries and countries in transition have abandoned the Marxian and post–Marxian paradigm, which demonised FDI, and adopted friendly political behaviour towards foreign investors (Pradham 2008). Most countries have introduced FDI attraction incentives. The primary aim of these incentives is to create a friendly business environment where foreign investors feel comfortable with the legal and financial framework of the country and have the potential to reap profit from economically viable businesses. The gradual increase in foreign investment values since the 1980s has encouraged governments to take measures

to attract FDI. In many cases, governments compete to attract foreign investors. The attraction of foreign direct investments is often underlined as a precondition for a successful economic venue by most governments of less developed countries (Žilinskė 2010). Therefore, as the number of developing countries increases, competition for FDI tends to spread as well. The incentive measures make it possible for international companies to integrate into the local market, to expand production by using local labour, land and capital. However, foreign direct investment is becoming a "battleground" for new markets even in some developed countries. Developed countries are also seeking to attract more FDI. This is particularly visible in the capital-intensive industries. Incentives increase the flow of incoming FDI and maximize their return on a host country and foreign investors. To meet the operational needs of investors, the government often seeks to improve internal infrastructure of the country.

Before making a decision on foreign investment, investors compare countries among themselves. Foreign investors seek a predictable business environment in which they can make rapid decisions. A favourable business environment usually includes a sufficiently stable economy and a stable political system. Although scientists believe that FDI inflows usually depend on fiscal stimulus the retrospective empirical analysis has shown that fiscal incentives increase corporate profits and inward FDI (Goolsbee 1997; Peters, Fisher 2004; Rosenboim *et al.* 2008; Miyagiwa, Ohno 2008; Havranek, Iršova 2010). A properly selected investment measure promotes the injection of FDI and stimulates the growth of a host country's economy.

At present, information development agencies (further – IDA) become more and more popular. The main objectives of IDAs are to create an attractive image of the country's global market by providing information to investors about the country. A positive image of a country created by IDA is usually directed towards a sensitive public sector, which requires the injection of investment. However, the efficiency is only visible in attraction of FDI in supported business sectors (Wells, Wint 2000). In different regions governments have different promotion mechanisms because incentives are often defined in multi-lateral or bilateral agreements. On the other hand, these agreements usually restrict access to the local intensification measures. Economic zones like the EU, NAFTA, and ASEAN affect FDI intensity promotion among its member countries. However, not all countries comply with international agreements and the intensification of measures (Mah, Tamulaitis 2000). After joining the EU zone, Central and Eastern European countries became more attractive to the investors from the EU (Tamošiūnienė *et al.* 2007).

The aim of the article is to determine the major factors of FDI which are the most influenced by government incentives in Central and Eastern Europe. The article answers the question what direction governments choose to take to increase the FDI intensity. For methodological purposes, the paper is divided into three parts. The first part explores scientific literature on FDI incentives. The second characterizes the main determinants of the inflows of FDI. Finally, the last part describes the empirical analysis of FDI intensity.

2. Theoretical review of FDI incentives

2.1. Role of government incentives on FDI flows

It is difficult to establish the definitions of investment incentives and disincentives as these concepts vary according to the context in which they are used. Economists Peter and Fisher (2004) highlight that the boundaries of business incentives are not always clear. Thus, the disincentive in one region can be regarded as an incentive in a different area of a business or a branch. In literature, investment incentives are defined as, for example, "support" (Morisset, Andrews-Johnson 2008; Well, Wint 2000), "incentives," "initiative" as well as "promotion". However, these concepts can only partially be used as synonyms. Promotion is understood as an indirect factor in determining the attraction of investments into one country. According to Wells and Wint (2000), promotion is activity spreading information about an investment-friendly climate or attempting to create a positive image of the country and provide investment services to potential investors, which can be defined as non-financial investment incentives. A more flexible concept allows more insight into the various investment incentives. This approach includes measures, which can at least indirectly determine the future profitability of investments and the potential risks that may affect investors' plans. In addition, indirect incentive measures benefit to economic factors, such as market size, competitive advantage, relative price stability, and socio-political factors. In general, an incentive is understood as any government measure designed to influence an investment decision, or have the effect of increasing the profit, even if these measures do not make direct influence. The measures of investment cover investment incentives as well as disincentives. According to academic literature, incentives can be classified into fiscal (such as accelerated depreciation, preferential tax rates, and tax exemption and tax credits, including the measures relating to social security contributions and investment reserves); financial measures (such as grants, preferential loans and loan guarantees); non-financial measures (such as promotion, information providing agencies, infrastructure-related assistance, preferential government contracts the provision of certain services, and the establishment of free-trade, enterprise and technology zones). Disincentives include trade-related investment measures, which have disincentive effects, and other disincentives and conditions linked to incentive awards. At the same time foreign investment incentives are ambiguous. In addition, some scientists believe that business incentives should be banned (Burstein, Rolnick 1995)**.** Many scientists pay major attention to fiscal measures, which are estimated controversially (Goolsbee 1997; Head *et al.* 1999; Morisset, Pirnia 2000; Hubert, Pain 2002; Peters, Fisher 2004; Adomonienė, Trifonova 2007; Rosenboim *et al.* 2008). Specific changes in tax system are based on the broader incentives, reduced tax rates or eliminating certain cases, as well as the settlement of debts. Generally, fiscal measures are designed to encourage investment in various business sectors. Fiscal incentives include narrower policy goals: promotion of regional development, R&D, development, investment, the business sector problem. Pirnia and Morisset (2001) note that the fiscal measures may have both: positive and negative impacts on a country. However, these researchers doubt about the effectiveness of such measures to attract FDI. Even if the application of fiscal incentives attracts FDI, the reduced tax rate of multinational com-

panies (further – MNCs) may bring exceptional losses to the state budget. Therefore, according to Peters and Fisher (2004) it can be argued that fiscal measures would encourage economic growth. Rosenboim (2008), in contrast to some scientists (Pirnia, Morisset 2001; Peters, Fisher 2004), believes that the most significant incentives are grants because they have the long–term affect on MNCs decisions to make investments. Fiscal and financial incentives offered to foreign investors may do more harm than good by giving rise to costly "bidding wars" (Ruane 2008). Thus, fiscal and financial measures may cause only short–term positive effect in attracting FDI as MNCs tend to "move" their capital and select business–friendly environment. Saggi (1999) notes that MNCs invest in a country, which provides various forms of incentives: (for example, tax incentives, such as lower taxes on foreign investors, financial incentives, such as grants and confessional loans to multinational corporations, as well as other incentives, such as market needs and monopoly rights). It can not be said that the subsidy has a positive influence on the development of economy. In some countries, the subsidies of MNCs distort the competitiveness of country's business. Nevertheless, future revenues depend on the productivity in a host country and the efficiency of the FDI inflows. Information on the level of productivity may be available either to a host country or the MNCs. Symmetric information plays a major role in the process of choosing an optimal set of incentives. When there is complete information on the reliability of a foreign company as well as on the efficiency of a host country, the specific type of incentive (grant or a tax relief) is of little importance to both the country and the MNCs. However, the lack of information on productivity, the mix of grant and tax relief are important and has the major impact on the MNCs' and the country's decision. In that case, a government fears that a foreign company will exploit a one-time grant, will terminate its investment and leave a country within a short time span. On the other hand, a government may fear that a substantial tax relief will lead to exaggerated benefits for the MNCs when profits are high. Hence, a foreign company that invests in a project may worry that a host country will not fulfil future commitments for a tax relief (Ginevičius, Tvaronavičienė 2004). In this case, a foreign company is already 'bound' to a country by the sunk costs, and switching to another site is not relevant (Rutkauskas *et al*. 2008). Therefore, under risk aversion and increasing risk, the MNCs prefer a one-time grant, whereas countries prefer tax relief to subsidy.

2.2. Determinants of FDI and Models of Incentives

FDI, its determinants and its effects have been extensively studied. FDI can be beneficial to a host country. For example, it includes knowledge and technology transfer to domestic firms, labour force, productivity spillovers, enhanced competition and improved access for exports, notably to the source country, as well as provides a significant non debt–creating source of foreign financing. Two channels by which FDIs lead to a higher productivity of a host country have been clearly identified in literature: the competition channel and the knowledge and technology spillovers channel (Ruane 2008). Hence, large foreign companies can—and often do—abuse their dominant market positions, sometimes coax concessions from country governments in return for locating investment there, and aggressively use transfer pricing in order to minimize their tax obliga-

tions (Demekas *et al.* 2007). Usually, MNCs select a country for more favourable tax incentives on business creation and market openness. For example, Vernon used the H-O (Heckscher-Ohlin) model as a base in order to develop his model of a product cycle, which explains the foreign activities of MNCs. According to the widely known OLI (ownership, location, internalisation) framework, firm-specific factors concern competitive advantages in a multinational corporation and commercial benefits in an intra-firm relationship (as against an arm's–length relationship, e.g., between an exporting company and an importing counterpart). Singh and Jun (1995) conclude that a broad consensus on the major determinants of FDI has been elusive. Lately, Dunning (2008) has identified four types of motives behind the FDI activities of MNCs. These motives are resource-seeking, market-seeking and efficiency-seeking (Table 1). Hence, whether a country has higher wages or other advantages – lower productivity, competitive wage rates that prevail in a country ensure that every country will specialize in the good having a comparative advantage (Bernatonyte, Normantiene 2007).

Table 1. Selected Host Country Determinants of FDI (*Source:* Nunnemkamp 2003)

Selected Host Country Determinants of FDI		
Overall policy framework: • Economic and political stability; • Rules regarding entry and operations of MNCs; • Bi- and multilateral agreements on FDI; • Privatisation policy.		
Business Facilitation: • Administrative procedures; • FDI promotion (e.g. facilitation services); • FDI incentives (subsidies).		
Economic determinants		
Relating to Resource seeking – FDI	*Relating to Market-seeking FDI*	*Relating to Efficiency-seeking FDI*
Raw materials	Market size	Productivity-adjusted labour costs
Complementary factors of production (labour)	Market growth	Sufficiently skilled labour
Physical infrastructure	Regional integration	Business-related services Trade policy

The asset-seeking FDI is the most recent motive for FDI to be identified. It refers to a strategy that aims to access and exploit technological assets in overseas countries. The assets – seeking MNCs focus on the availability of a skilled labour, research institutes, and a large supply of a graduated labour (Čegytė, Miečinskienė 2009; Dumludag 2009).

Later academic literature states that MNCs are being attracted by newly introduced liberal FDI regimes in a host country. As a result, the liberalisation of FDI regulations may be characterised by diminishing returns. However, developing countries, which are not taking part in market liberalization process, are likely to suffer the negative effects of restric-
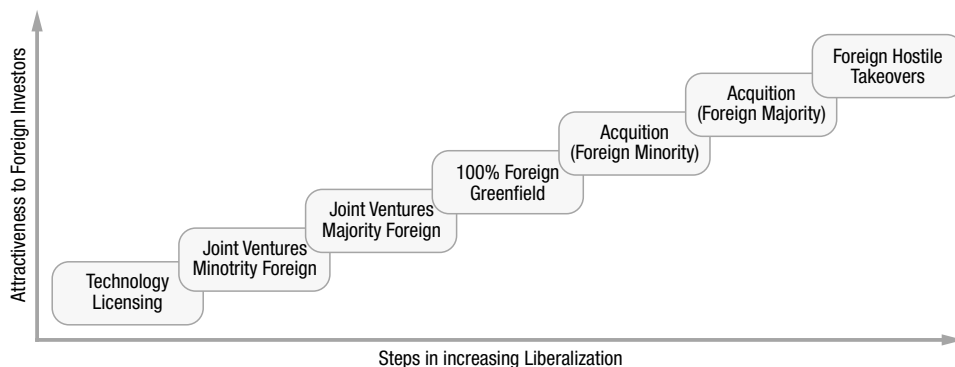
Fig. 1. Increasing Government Allowance of Foreign Equity Participation
(*Source:* Stoever 2005)

tive policies on FDI inflows. Hence, a liberal FDI regime does little more than enabling MNCs to invest in a host country. It is a completely different question whether FDI will actually be forthcoming as a result of FDI liberalisation (Fig. 1). In addition, privatisation goes along with trade liberalisation and competition policies (Demekas *et al.* 2007).

2.3. Models of FDI incentives

In addition, a number of models have been developed for examining FDI incentives and their efficiencies. Barros and Cabral (2000) examined the influence of the size of a country and its unemployment rate on the incentives given to MNCs. According to their model, subsidy competition may lead to an optimal FDI location, whereas a policy of no subsidy may distort it. Two reasons can support this proposition. First, the competition among countries compels them to commit to improving their respective infrastructure and macroeconomic system. Secondly, competition can bring an optimal allocation of FDI to those countries, which benefit more from FDI incentives (Ruane 2008). Kaplan *et al.* (2003) studied the influence of information on the optimal mix of a fixed grant and a tax relief that is offered to MNCs. They showed that in equilibrium, competing countries tend to use grants as the main tool to attract FDI. Many studies directed to FDI incentives analyze fiscal incentives. Pirnia and Morisset (2001) examined the costs of fiscal incentives. They found that even if tax incentives were quite effective in increasing investment flows, the costs would outweigh the benefits. Hubert and Pain (2002) make a point that fiscal incentives may also be used as strategic instruments if agglomeration economies mean that the entry of individual forms is subsequently matched to other countries. Thus, the temporary advantages gained by the first mover may have a permanent impact on further investment. Equally, unilateral abolition of incentives can result in significant costs (Head *et al.* 1999). Peters and Fisher (2004) emphasized the main reasons that cause difficulties for a state in gaining revenue through a typical incentive package. According to their studies, incentives are more likely to influence the location of investment among closely matched local areas (such as neighbouring cities) than among states. For that reason, it is obvious that the cities, which use incen-

tives, may benefit fiscally from beggaring their neighbours, but states will often end up paying the costs.

Thus, only two different government incentive policies towards FDI have been success-fully established. The first one is the Irish model which is based on the export strategy. Ireland is unusual in the extent to which it has consistently promoted export-platform inward investment into the manufacturing sector for over four decades. Irish policy makers adopted a sophisticated system of selectivity for influencing the pattern of MNC investment. Hence, Ireland has benefited from the increased scale of a global FDI by introducing a more fiscally- and financially-welcoming environment than other countries in Europe. Ireland has benefited from Vernon's product cycle in becoming a low-cost manufacturing base within Europe for maturing US enterprises, which were already ex-porting new products to the growing European market. In such an environment Ireland has been an attractive base with its original tax-holiday incentives designed to make it an export platform (Rugraff 2008).

The second FDI model has been successfully established by the following countries: Taiwan, Korea and China (TKC model). The TKC and the Irish models promote an export-led strategy by opening a country for FDI. The Irish model has created friend-lier environment than the TKC model. The TKC model involves more constraints for MNCs. In conformity with cultural differences, TKC model was directed to promote na-tional priorities and the emergence of competitive indigenous firms. China has become an attractive location for FDI because of its rapidly growing domestic market and as a low–cost export platform. Capital market liberalisation and extension into China are likely to raise exports of domestic firms and to reduce FDI in favour of inward licensing. Contrary to TKC, India has introduced more flexible FDI incentives. Following Ireland, India has switched from a protectionist regime to a more open one. Indian patterns of inward FDI reflect this diversity (Balasubramanyam, Mahambare 2003).

Central European countries have been successful in attracting FDI since the middle of the 1990s, but they have failed to create spillovers' effects from MNCs' activity. The lack of spillovers effects can be attributed, to a large extent, to the adoption of the Irish model to Central and Eastern European countries. In Central Europe this model has had numerous positive effects, such as the creation of foreign-owned firms in the high-technology industries, the integration of the countries into the world trade, and the creation of a new comparative advantage. The transfer of technology can trigger and speed up economic development. Newly introduced technologies facilitate the produc-tion of goods, increase the volume of export and improve efficiency of manufacturing. MNCs possess the bulk of patents worldwide (Šečkutė, Tvaronavičius 2007). Most of the world's R&D takes place within MNCs. Moreover, MNCs possess many of the tech-nologies that are pivotal to an economic and industrial development (Buckley, Ruane 2006). The state's absence in the guidance of FDI in Central Europe has given MNCs a total freedom in the organisation of their activity. MNCs have taken various advantages that they were offered, such as the opportunity to buy the best privatised firms or to de-velop the intensity of intra–MNC trade–without being obliged to develop the interaction with a local environment in order to contribute to the creation of competitive indigenous

firms. According to Bernatonyte and Normantiene (2007), trade in differentiated products is most likely to take place between countries with similar markets.

Notwithstanding the successful beginning of the attraction of FDI, Central and Eastern European countries (further CEEC) have not created successful FDI incentive mechanisms. On the whole, CEEC have opened their economies and attracted FDI through privatisation process. Privatization–related FDI inflows can be high in volume, but they are lumpy and time–bound (Tvaronavičienė, Kalašinskaitė 2005). It represented the bulk of FDI in Central and Eastern European economies in the early years of transition. Anyway, the privatization process is already essentially completed in many of these economies. Hence, the ability of these countries to attract a non–privatization–related FDI is increasingly becoming a focus of policymakers. Since CEEC sustain nationalism, these countries are more closely related to the TKC model than to the Irish one. However, many studies refer to economic fundamentals and political stability as the primary determinants of FDIs, with FDI incentives being a consideration only at the margin (Ruane 2008). Morisset and Pirnia (2001) conclude that "incentives will generally neither make up for serious deficiencies in the investment environment nor generate the desired externalities. The most serious investors are often unaware of the full range of incentives on offer when they invest". Of course, Central and Eastern European countries have managed to pass just two stages of an FDI incentive policy. The first stage – liberalizing trade and opening economies – has been successfully implemented in almost all countries. After the transition from the planned economy to the liberalized one, Central and Eastern European countries have attracted large amounts of FDI.

3. Research methodology and data

The survey covers the intensity of FDI among twelve countries during the period of 2000–2009. The study is based on the Eurostat's data. The countries of this study are the following: Bulgaria, Cyprus, Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, Lithuania, Estonia and Latvia. During the empirical study some difficulties and ambiguities of the intensity and determinants of FDI were discovered. For that reason, some data was also used from UNSTAD and OECD. In addition, seven main determinants were chosen for the examination of the structural relationship of the determinant and intensity of FDI. The host country's per–capita Gross Domestic Product (GDP) and GDP growth rate were chosen as the measures of a host market's attractiveness and size. The market size and growth of a host country are the most determinant factors governing inward FDI (Bennell 1997; Dunning 1977; Lim 2008; Tvaronavičienė *et al.* 2008). This statement is supported by many empirical studies (Jun, Singh 1996; Root, Ahmed 1979; Schneider, Frey 1985; Tvaronavičienė, Tvaronavičius 2006). Tvaronavičienė and Grybaitė (2007) found that GDP per–capita of a host country is an important factor determining FDI. The difference between the size of GDP and its growth rate is most commonly used in literature as a proxy of market attractiveness. Clegg (1995) argues that the former one is more likely to be associated with a new investment while the latter one is more relevant to expansionary FDI. The hypothesis of the growth of FDI maintains that a rapidly growing market provides relatively better

opportunities for making profits than the markets that grow slowly or do not grow at all. Although, Torrisi *et al.* (2008) identified that market size and growth are the critical determinants of FDI in CEEC, their analysis of empirical studies provided quite controversial results. Torrisi *et al.* (2008) highlighted that the market size was the most important factor in attracting FDI. In contrast to Torrisi *et al.* (2008), Holland and Pain (1998) did not find any importance of market size for attracting FDI. Other studies, however, have found a negative relationship between GDP growth and per capita FDI flows to developing countries (Wint, Williams 2002; Lim 2008; Tvaronavičienė, Kalašinskaitė 2005). Accordingly, these studies were agnostic in respect of expectations for change in GDP growth rate (Lim 2008). Not to mention that, foreign trade reflects openness on inward FDI (Degutis, Tvaronavičienė 2006).

According to the classical theories of FDI, labour costs are one the most important determinants of FDI. Some proving remarks are possible to discover in academic literature. As Torrisi *et al.* (2008) noticed, wages were a primary decisive factor for Lankes and Venables (1997) while Althzinger (1999) maintains that wages are only a secondary determinant. Some scholars focus on wage differences between the host and home countries, and claim that wage differences are the most significant determinants of FDI in CEEC. Even more, Benacek *et al*. (2000) states that higher labour costs have a negative effect on higher FDI inflows. However, Mervelede and Choors (2004) maintain that relative unit labour costs were significant only if their importance was allowed to increase over time (Torrisi *et al.* 2008). Another determining factor is emphasized in classical literature is market openness, which is expressed as export and import ratio in the host country. Thus, market openness as significant determinant emphasized by Torrisi *et al.* (2008) and Lim (2008). Degutis and Tvaronavičienė (2006) emphasize wage rate and labour productivity as determining factors of FDI. Another independent variable is inflation. It is defined as a risk factor which limits FDI flows into the host country. However, empirical literature provides even more risk factors. For example, such factors as government stability, internal and external conflict, corruption, ethnic tension and law and order, democratic accountability of government and quality of bureaucracy were highly significant determinants of FDI (Holland, Pain 1998; Torrisi *et al.* 2008). Anyway, risk factors are to be found as stimulating factors of FDI inflows (Brada *et al.* 2006). Previous FDI flows, as an independent variable, stand as a factor determining a friendly business environment (Demekas *et al.* 2007).

3.1. Model and variables

A model was designed according to the empirical literature. A dependent factor is the intensity of FDI, which is expressed in a relationship to a market growth, labour costs, market openness, inflation and friendly business environment. The survey examines twelve countries over the period of 2000–2009. Here is assumed that the dependable variable is the ratio of FDI intensity. FDI depends on market growth, labour costs, market openness, inflation and previous FDI flows.

$$y(\text{FDI}_{\text{intensity}}) = f(\text{Market growth; Labour costs; Market openness; Inflation; FDI flows}).$$

$$(1)$$

$$y(\text{FDI}_{\text{intensity, it}}) = x + \beta_1(\text{Market growth}_{it}) + \beta_2(\text{Labour costs}_{it}) +$$
$$\beta_2(\text{Market openness}_{it}) + \beta_2(\text{Inflation}_{it}) + \beta_2(\text{FDI flows}_{it}) + \varepsilon_{it}, \qquad (2)$$

where i – number of countries to be observed i = 1….12, t = 2000….2009.

Market growth is measured as a growth rate of GDP volume change in the previous year in percentage. Labour costs are marked as a labour cost index, which is expressed as the changes of total labour costs of previous year in percentage. Market openness is determined as average value of import and export divided by GDP (in percent). Inflation is characterized as an annual average rate of change in Harmonized Indices of Consumer Prices (HICPs). Previous FDI flows that determine friendly business environment are measured like FDI flows as a share of GDP (in percentage) during previous period. ε_{it} is an error, which occurred during the measurig period.

3.2. Results

Finally, the analysis provides interesting results (Table 2). As the determinant of FDI intensity, the market growth is negatively unimportant in almost all countries. A strong relationship between the market openness and the intensity of FDI is positively important in Bulgaria, Czech Republic, Cyprus, Lithuania, and Slovenia. Thus, a positive relationship between market openness and FDI intensity implies that the countries, which wish to attract more FDI, should increase their trade. However, labour costs as well as market openness have a strong positive impact on Cyprus, Latvia, Lithuania, Romania and Slovenia.

The strongest negative impact of labour costs can be found in Romania. Hence, FDI intensity increases because of a cheap labour force. Another reason is that countries

Table 2. The Estimation of Relationship between Independent Variables and FDI Intensity

Country	Market growth	Labour costs	Market openness	Inflation	FDI flows
Bulgaria	−0.1355	0.4699	0.5701	0.3776	0.5232
Czech Republic	0.0999	0.1452	0.5753	−0.0913	−0.4789
Estonia	−0.5414	0.4882	−0.4417	0.5089	0.6435
Cyprus	−0.6188	0.3229	0.7445	−0.4904	0.8986
Latvia	−0.0795	0.6844	0.3519	0.8212	0.5714
Poland	−0.0259	−0.0731	0.3199	0.1156	0.3288
Lithuania	−0.061	0.6959	0.6643	0.6039	0.1589
Malta	0.1112	−0.1384	0.2314	−0.081	−0.7065
Romania	−0.0904	−0.7311	0.6715	−0.7425	0.7204
Slovakia	0.3585	0.7143	0.4963	−0.041	0.3137
Slovenia	−0.2626	−0.5320	0.7418	−0.6624	0.3825
Hungary	**0.1786**	**−0.0112**	0.1362	−0.0650	0.4563

provide more unskilled than qualified and experienced labour force. Surprisingly, infla-tion has a strong positive impact in four of twelve countries only. However, this factor should not be taken as the least important one. For example, Latvia highly depends on inflation rate, which in this case stands for economic stability.

Hence, inflation has a strong negative impact on Romania, Slovenia. It also has a weak positive impact on Poland and Bulgaria. Inflation has weak negative impact on Hun-gary's FDI intensity. The previous FDI flows that stand as a friendly business environ-ment have strong positive impact on Bulgaria, Estonia, Latvia, Malta and, especially, on Cyprus. It is obvious that a strong positive impact of relationship between market openness and FDI intensity is natural in small economies. For that reason, CEEC that seek to improve FDI intensity level are supposed to increase the level of market liber-alization. Actually, market liberalization creates friendly business environment, which is proven by the empirical analysis. According to the results of Table 3, the relationship of FDI intensity between market openness and previous FDI flows has a strong positive impact all over Central and Eastern Europe.

However, in some countries, such as Latvia, market openness has a weakly positive impact on FDI intensity, while the most important factors are labour costs and inflation. Thus, it is possible to state that Latvia's FDI intensity depends on the most sensitive and unstable factors. Therefore, economic stability has the major impact on FDI inten-sity. However, Poland is not strongly affected by any of these independent variables that might be explained by the dependence of FDI intensity on indirect determinants of FDI. Another explanation for Poland's phenomenon is that the FDI intensity is not so sensitive to analysing factors because of highly liberalised market as well as a developed friendly business environment.

Hence, the rate of relationship between FDI intensity and market growth has a strong negative effect on Estonia and Cyprus only. Referring to the negative association be-tween the rate of market growth and FDI intensity, the study reveals that a decrease in market growth will lead to the increase of the FDI intensity. The market is growing very fast in Estonia and Cyprus, which means that a number of local companies are growing too. If competitiveness is high, labour costs will rise in a very short time. Thus, foreign investors would not be interested in Estonia and Cyprus if these countries were not competitive in labour costs market. Furthermore, Estonia has a possibility to improve its labour policies and increase FDI intensity. The changes of labour policies may attract more investors, which require a qualified and experienced labour force. In the case of Cyprus, the government should introduce liberalised trade policies since the rate of relationship between FDI intensity and market openness is strong positive. This fact leads to a conclusion that the increase in market openness influences the increase in FDI intensity. In some cases, for example, in the case of Malta, FDI intensity depends on previous FDI flows only. It suggests that the policies, which improve friendly busi-ness environment, are welcome. The FDI intensity of Romania highly depends on the following four factors: market openness, labour costs, inflation, and previous FDI flows. It suggests that a country has no incentive policy targeted at the increase of FDI flows.

According to this study, Romania has serious problems of economic stability. Moreover, some policies regarding the labour costs and inflation should be introduced. In Lithuania, the positive association is between independent factors and dependent factors. Hence, the increase of labour costs, market openness and inflation has a positive affect on the increase of FDI intensity. However, that should be taken as a requirement to liberalise market and to introduce policies regarding a qualified labour force and economic stability.

A strong positive connection between inflation and FDI intensity points to products the prices of which are very low while competitiveness in market is very high. For that reason, foreign investors tend to face some difficulties in entering the market. The alternative solution might be to decrease bureaucracy and to simplify the procedures in a starting business. Thus, market openness is still the most important determinant of FDI in Central and Eastern Europe. For that reason, all countries of this region should introduce more effective policies of trade stimulation.

The statistical data of this study is presented in Table 3. The standard deviation of FDI intensity is not large. For example, the standard deviation of FDI intensity is almost two times lower than its mean value. It can be concluded that the FDI intensity of every country varies over its specific characteristics.

The market growth also varies over the region according to country's characteristics. The mean value of market growth is close to that of FDI intensity, while the standard deviation is higher for market growth. The difference between mean and median of all variables is also not very significant. Labour costs show the highest standard deviation, while market openness shows the lowest standard deviation. According to the minimum and maximum values of independent variables, it is noticeable that inflation has the highest difference between values of minimum and maximum, which means that inflation, varies from country to country. The variables of market growth and market openness have similar mean and median values. However, the standard deviation of market growth and market openness is significantly different. The mean and median value is close to one another, but the standard deviation is relatively high in respect of the mean value. The maximum value of FDI intensity is three times higher than the minimum one, while the maximum of FDI flows is eight times higher than the minimum of FDI

Table 3. Summary of Descriptive Statistics

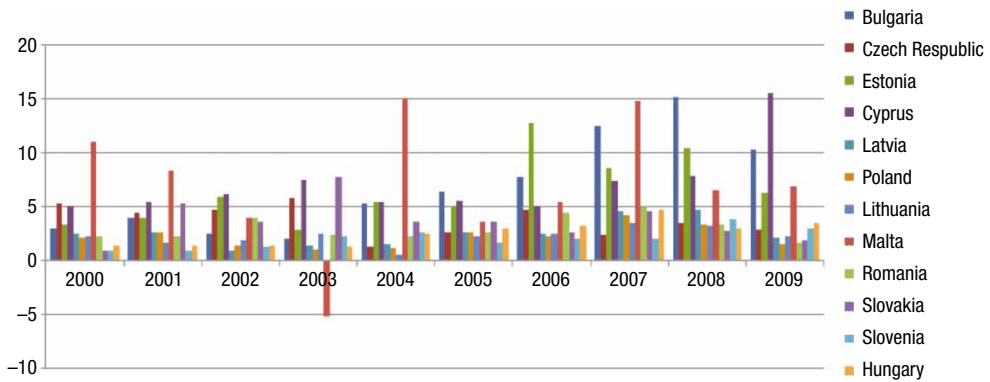|	Mean	Median	Std. Dev.	Min	Max	Correlation
Intensity	4.0	3.7	1.27	2.4	6.2	–
Market growth	4.6	4.6	1.6	1.1	6.44	−0.19597
Labour costs	10.2	10.5	2.3	7.2	13.4	0.19529
Market openness	13.4	13.3	0.77	12.5	14.8	0.6078
Inflation	5.3	4.8	2.25	2.35	9.2	−0.1613
FDI flows	1.6	1.5	0.89	0.55	3.15	0.7227

Fig. 2. The variation of FDI intensity over 2000–2009, Central and Eastern Europe

flows. The standard deviation is slightly higher in the case of labour cost than that in the case of inflation. It leads to the assumption that labour costs and inflation are tightly related. However, the variation of independent variables is significant across the region.

According to Fig. 2, FDI intensity varies significantly over time in Central and Eastern Europe. The highest fluctuation is typical of Malta. Other countries of this study have a more stable FDI intensity. Thus, many of them have a very low FDI intensity. For example, Lithuania and Latvia have attracted the lowest volume of FDI over the last ten years. However, some countries, such as Bulgaria and Estonia, have increased FDI intensity over the past four years only. According to this survey, FDI intensity significantly depends on the policies adopted by the government.

4. Concluding remarks

This article explores government incentives towards FDI in two ways. First, scientific literature explores direct major incentives, which influence the determinants of FDI. Thus, according to academic literature, the major incentive affecting FDI inflows involves more fiscal than financial incentives. Tax deductions are the most significant influencing factor on attracting FDI. However, some scientists emphasize indirect incentives such as information agencies, infrastructure and country's marketing. Anyway, determinants of FDI affected by indirect incentives are difficult to measure. Due to the fact that measuring influence of indirect incentives is always doubtful and some ambiguities tend to rise, the article explores solely the influence of direct factors, which are affecting FDI flows.

The second direction to which the article expands the existing literature is the analysis of exogenous determinants of FDI (size, location, economic stability, inflation). Due to the fact that policymakers set policies in regard to competitors, two different models of FDI promotion were analysed. The first one, the Irish model, refers to market liberalization and welcoming environment for FDI. However, the second one is more conservative, because the TKC model has strict rules for foreign investment. The TKC model, as opposed to the Irish model, pays attention to cultural heritage and natural nature.

Due to the fact that Central and Eastern European countries behave conservatively and post-communist outlook is alive, the Taiwan-Korean-Chinese model is more suitable for introducing FDI promotional policies.

The third part covers the empirical analysis, which was based on exogenous variables. The major variables that affect the increase of FDI intensity are market openness and a friendly business environment. Thus, according to the empirical analysis, most countries of Central and Eastern Europe must introduce a more effective policy of market liberalisation. Still, Latvia and Lithuania strongly depend on labour costs, which mean that these two countries tend to attract investors that seek cheap and unskilled labour. To continue attracting sizable FDI inflows, countries that are closer to their "potential" should strive to go beyond the policy norms prevailing in the region.

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UŽSIENIO INVESTICIJŲ INTENSYVINIMO PRIEMONIŲ TAIKYMO RYTŲ IR CENTRINĖJE EUROPOJE ANALIZĖ

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Santrauka

Straipsnyje nagrinėjama, kaip užsienio investicijų priemonės taikomos Centrinės ir Rytų Europos šalyse. Vertinami išoriniai užsienio investicijas lemiantys veiksniai, teigiama, kad TUI įplaukas skatina daugiau mokesčių nei finansinės paskatos. Tačiau laikomasi nuomonės, kad mokesčių lengvatos – viena pagrindinių priežasčių, lemiančių TUI įplaukas. Empirinis modelis pagrįstas mažiausiųjų kvadratų metodu, kuriuo nustatomas priežastinis sąryšis tarp makroekonominių rodiklių ir TUI intensyvumo. Straipsnyje pateikiamos kai kurios politinės įžvalgos, kurių taikymas padidintų tiesioginių užsienio investicijų intensyvumą Centrinėje ir Rytų Europoje.

Reikšminiai žodžiai: iniciatyvos, tiesioginės užsienio investicijos, TUI apibrėžiantys veiksniai, Airijos modelis, TKC modelis.

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