The relationship between the education system and the inflows of FDI for the Central and East European EU new member states

Vasile Alecsandru STRAT*

Abstract: *The relationship between the inflows of FDI received by a country and its educational system is still a topic under debate. The present work analyzes the linkages created between the inflows of FDI received by a host country and some major aspects related to the educational system using a methodology based on the T-Y procedure. The study uses cross-national yearly data, for the period 1990–2012 for a sample of five new EU member states from Eastern Europe. The study provides evidences that there are important relationships between the educational system and the inflows of FDI (for the analyzed sample).*

Keywords: *Foreign Direct Investments, school enrolment, human capital, causality relation, Toda-Yamamoto procedure.*

JEL Classification: *C01, C32, F62, I23, F21, O11*

I. Introduction

All aspects related to the subject of foreign direct investments are of an increasing importance in nowadays reality, when the globalization is crossing every economical border. The foreign direct investments are described by the scientific literature as having a significant importance for any economy, but mostly they are presented as an important source of benefits to developing

* *PhD Lecturer, University of Economic Studies, Bucharest, Romania, e-mail: vasile.strat@csie.ase.ro, strat_vasile@yahoo.com, +40722161327*

economies. Therefore, this subject of foreign direct investments needs to be carefully considered by the ex-communist countries from the east of Europe, which are today members of the European Union.

The importance of this type of investments grew significantly starting from the '80s when the governments and the foreign investors adopted a more collaborative approach. Moreover, it has become obvious that since the phenomenon of globalization has intensified, a competition for attracting foreign investments has emerged among governments.

Their importance has grown significantly due to the fact that they are regarded as one of the most important sources of capital that can fuel the development of an economy with insufficient domestic financing sources. As the literature has shown, this type of investments is considered the source of an important amount of benefits which could be very difficult to acquire for an economy in any different way. The foreign direct investments bring high management skills into an economy and are also considered responsible for creating new and better paid jobs. They are also viewed as a very easy method for acquiring new high technologies and know-how. Another benefit identified by the researchers is the improved quality of products and services created by the foreign companies. These new improved products and services could be destined both to the internal market of the host country and to the exports, increasing in this way the export capacity of an economy. Last, but not least, these foreign direct investments are considered to be a very accurate indicator of the stability of an economy.

Even though lately researchers are starting to provide evidence that the benefits brought in an economy by foreign direct investments depend heavily on the type of investment (Moldovanu, 2008) and, also, on the development level of the host economy, the importance that they have been granted with has not diminished at all. Also we should note another direction followed by the literature, where the phenomena of FDI (located in European countries) is studied at regional or local level, following therefore the direction which describes the European Union as a union of regions (Strat, 2014a, Danciu, 2012).

Taking into consideration all the aspects mentioned above it is obvious why the greatest concern of the researchers is the analysis of the main determinants of these foreign direct investments. Among the main determinants identified by the literature is the human capital, which is, besides others, presented through different aspects related to the educational system of a country (Strat, 2014b).

In this paper I try to push this approach a little bit further and study the potential causal relations between the inflows of foreign direct investments and the gross

primary, secondary and tertiary school enrolment for the cases of: Romania, Hungary, Bulgaria, Poland and the Czech Republic.

Important to mention in this introductory part is the fact that the paper is organized in three main parts, namely: literature review, methodology and data issues and empirical results, followed by the concluding remarks.

II. Literature review and general framework

Foreign direct investments have become a very important topic in nowadays economical scientific literature dealing with the capital movement. Moreover, the foreign direct investments have been regarded, during the last decades, by governments of the developing countries as one of the most important tools which can drive the economic growth (Borensztein, DeGregorio, *et al*., 1988, Wang, 2009).

Following this trend, the subject of foreign direct investments is particularly important for the ex-communist states from the east of Europe (Popovici *et al*. 2014, Radulescu and Druica, 2011, Zaman *et al*. 2011). Until these countries became European Union (2004-2007) members and started receiving European non-refundable funds, the foreign direct investments were the main source of foreign capital attracted in the economy. The benefits brought by foreign direct investments into these economies were very important in transforming them from centralized and planned communist systems into competitive market systems. The infusion of managerial skills should be listed as one of the main important benefits related to foreign direct investments. Also, other significant benefits are represented by: the new and better paid job opportunities, the increased quality and competitiveness of the locally produced goods and services and new and more advanced technologies

In these conditions, studies focus mainly on identifying and studying the most important determinants (Dunning and Lundan, 2008) which are responsible for attracting foreign direct investments into a country or region (Danciu and Strat, 2012). Even though the literature on these topics is abundant, the linkages between foreign direct investments and the identified determinants have not been fully clarified. One of the main reasons for this reality is the fact that these interdependencies are highly correlated with the country or group of countries under study (all aspects related to investments depend heavily on the development level of an economy and on the relationship between the official and unofficial economy of a country, as suggested by Alexandru, 2014), on the type of foreign direct investments investigated, on the economic branch where

the foreign direct investments were attracted and also on the analysed time period.

The works dealing with the study of the determinants of FDI have identified, by different approaches, a large variety of phenomena which can be regarded as significant characteristics of a country for foreign investors when deciding where to locate a future investment abroad. Some of the main important ones are: the size of a market (Cleeve, 2008, Schneider and Frey, 1985, Mohamed and Sidiropoulos, 2010), the growth potential of a market (Cleeve, 2008, Schneider and Frey, 1985, Mohamed and Sidiropoulos, 2010), the openness of a an economy (Cleeve, 2008, Botric and Skuflic, 2006, Vijayakumar *et al.*, 2010), the existence of natural resources (Asiedu, 2006, Mohamed and Sidiropoulos, 2010, Ledyaeva, 2009, Kumar and Chadha, 2009), the infrastructure (Cleeve, 2008, Biswas, 2002, Asiedu, 2006, Mohamed and Sidiropoulos, 2010), the economic stability (Mhlanga *et al.*, 2010, Schneider and Frey, 1985, Mohamed and Sidiropoulos, 2010), the labor costs (Botric and Skuflic, 2006, Schneider and Frey, 1985, Vijayakumar *et al.*, 2010), the political stability and the institutional quality (Cleeve, 2008, Asiedu, 2006, Biswas, 2002, Schneider and Frey, 1985), the corruption (Cleeve, 2008, Mohamed and Sidiropoulos, 2010), the tax and other financial incentives (Cleeve, 2008, Bellak and Leibrecht, 2009) and the human capital (Cleeve, 2008, Schneider and Frey, 1985, Asiedu, 2006). For studying the linkages between each of these factors and the foreign direct investments, the researchers used different proxies, depending on the availability of appropriate data series and this aspect should be regarded as another potential cause for obtaining results which were not always consistent.

As far as the human capital is concerned, the studies have followed two main directions, analysing the relationship between aspects related to the education system of a country and the inflow of foreign direct investments and the relationship between other formal learning activities (not related to the education system; e.g., trainings provided my MNCs) and the foreign direct investments (Chen, 1983). Bearing in mind the topic of this paper, our description will focus on those studies which assess the linkage between foreign direct investments and aspects related to the educational system of a country.

Regarding the interdependencies among the foreign direct investments and the human capital (mainly aspects related to the educational system) researchers have been trying to find the following:

1. Does the enrolment of the population (or other similar aspects) in the education system influences the level of attracted foreign direct investments?

2. Do foreign direct investments have an influence on increasing the enrolment of the population in the education system (or other similar aspects)?

The research studies conducted until now provided significant evidence that the answer is "yes" for both questions listed above. Thus, it is reasonable to believe that foreign investors try to locate their future investments in areas where the well trained human capital exists in larger numbers. In this direction point the results obtained by Noorbakhsh *et al*., in a study published in 2001, where they find that the accumulated years of secondary and tertiary education are a significant determinant for the inflows of foreign direct investments. According to the results obtained by Florida (1997) we can argue that the importance of the well-trained and educated labour force has been increasing as an effect of the globalization.

On the other hand, other researchers insist on the fact that, in order to attract foreign direct investments, a country needs to achieve a minimum threshold of skills. In other words, multinational companies are more unlikely to go in countries where the development level is very low. Also, by having a low development level, a country will not be able to absorb the foreign technology as Xu (2000) points. Grossman and Helpman argue in a study published in 1991 that countries at a lower development level might be targets for low tech foreign direct investments which offer limited opportunities for spill-overs or for internalizing other benefits.

Walkirch (2010) argues that foreign direct investments are more inclined to locate in countries where the labour force is highly skilled. The same results are reached by Miyamoto in a study published in 2003, where he states that Japanese companies interested in locating abroad consider as having significant importance, the existence of highly trained workers. Raziny *et al*. (2004) suggest that a country will increase its propensity for becoming a target for foreign direct investments as it is improving its educational level. On the other hand, in a study conducted at a regional level by Cheng and Kwan (2000), they show that even though the effect of education in attracting foreign direct investments is positive it is not statistically significant.

However, it is important to mention that different types of foreign direct investments attach different importance to the existence of available well educated and trained human capital in a potential host country. Thus, the results obtained by scholars indicate that human capital is an important determinant, mainly for the efficiency-seeking companies and not so important for the market or resource seeking multinational companies (Miyamoto, 2003, Asiedu, 2002).

Beugelsdijk *et al*. show, in a 2008 study, that different types of foreign direct investments have different impacts on human capital accumulation and education. Vertical investments search for efficiency and therefore they are more inclined to locate in countries where they find cheap labour force. Moreover, in order to preserve their efficiency, this type of companies tend to offer low wages and, as a consequence, low motivation for the inhabitants of the host country to pursue tertiary education (and to increase in this way the education level of the population). On the contrary, the horizontal foreign direct investments pursue potential markets and therefore they tend to support the development of the host country's market. Thus, this kind of foreign direct investment encourages the development of the R&D sector of the host country and also encourages the population to pursue tertiary education. Slaughter (2002) argues that multinational companies increase the demand for skilled workers, being therefore an important factor for the development of the human capital of the host country. Following the same approach, Gittens provides evidence, in a study published in 2006, that foreign direct investments have a positive impact on the human capital quantified by the enrolment in the primary education level. Important to mention is also the fact that Ram and Zhang show, in a study published in 2002, that the foreign direct investments do not have a significant impact on the development of the human capital.

Therefore we can summarize the review of the literature by stating that there are enough evidence provided by the literature to support the two hypothesis presented at the beginning of the section. Although, before ending the section and bearing in mind the findings presented in the literature of the field, we need to state clearly that the interdependencies which exist between the inflows of foreign direct investments and the aspects related to the human capital as an expression of the education system, depend heavily on the studied country (group of countries), on the studied time period and also on the variables used as proxies.

III. Research goal, methodology and data issues

3.1. Research goal

The central goal of this research paper is to analyse the short run causal relationship between the net inflows of foreign direct investments and the human capital proxied by three variables concerning the school enrolment for five Central and East European countries. The five countries included in the study are: Romania, Bulgaria, Poland, Hungary and the Czech Republic.

The findings of this study could prove to be valuable information for the policy makers in the process of improving the policies destined to increase the attractiveness of their country in the eyes of foreign investors.

In the final part of this section, the main limitations of the present study will be displayed. Probably the main weakness is represented by the short time series available. Even though we are aware that using longer time series would have brought more consistency to our findings, our choice relies on two main reasons. First of all, the studied countries have been, until 1990, communist countries and the foreign direct investments were not a real option due to the political system. Therefore, trustworthy data could only be gathered for the years following 1990. Noteworthy regarding this aspect is the fact that this shortcoming (short time series) is common to a large variety of studies which deal with the subject of foreign direct investments in the ex-communist countries. Secondly, even though we are aware that using quarterly data would have given us the possibility to work with longer time series it is obvious that the studied phenomena are not appropriate for such an approach.

We are also aware that during the 1990s the economies of some of the five studied countries were characterized by some important macroeconomic disequilibria and instability.

Summarizing, we suggest that the findings of this research paper need to be regarded with great caution. Moreover they need to be regarded as a starting point for future research.

3.2. Methodology

The methodological approach proposed in this paper uses the Toda Yamamoto procedure. Therefore, it is obvious that we are only able to test the short-run causality relation between the studied phenomena.

One of the main advantages brought by the Toda-Yamamoto procedure is that it can be applied on level VARs to all type of variables: stationary, integrated or even co-integrated. Thus, the Toda-Yamamoto procedure requires estimating an augmented VAR model. The augmented VAR model involves a $(k+d_{max})$ lag order where k represents the optimal lag length in the original VAR system and (d_{max}) represents the maximal order of integration of the studied variables (those included in the same system).

The procedure can be described as a two-step methodology. Also noteworthy is the fact by T-Y procedure, causality relations can be identified both ways (causality running from X to Y and causality running from Y to X).

During the first step of the procedure, the maximum integration order (d_{max}) is identified after analysing the stationarity of all the involved variables. The unit root tests that we propose to be used in this stage are the ADF test and the PP test. Following the identification of d_{max}, during the first stage, the optimum lag order (k) is also identified. This optimum lag order is identified with the help of the following criteria (SC, AIC, FPE, etc.).

Going further, during the second step a MWald test is used in order to test the VAR (p) model for causality. The lag order p is afterwards simply obtained by just adding the optimal lag (k), and the maximum integration order (d_{max}). Afterwards, the Wald test is applied only to the first (k) coefficients of the augmented VAR model. Thus, if the coefficients of the lagged values of X in the Y's model are statistically significant we can reject the null hypothesis of Granger non-causality. By analysing the other model, the X model we decided on the other potential causal relation.

The two directions of potential causality relations involve the following null hypotheses:

Hypothesis 1: The X variable does not granger cause Y variable.

**Hypothesis 2**: The Y variable does not granger cause X variable.

3.3. Data issues

The time series used in the research cover the period from 1990 to 2012, for three of the five analysed countries: Hungary, Poland and Bulgaria. Special situations are found for Romania where the time series is not available for the last year and also for the Czech Republic where the available data cover the period from 1993 to 2012 (the data set which is used for the Czech Republic starts after the former Republic of Czechoslovakia was divided).

For all five countries, all the time series were downloaded from the web site of the World Bank: primary school enrolment (gross, expressed in %), secondary school enrolment (gross, expressed in %), tertiary school enrolment (gross, expressed in %) and the net inflow of foreign direct investments. For each country the gross school enrolment (for all levels of education) was expressed in percentages.

For comparability reasons the net inflows of foreign direct investments are displayed as percentage of the GDP of the country. By choosing such an approach, we do not need to pay special attention to the size difference between these five economies and also to other comparability issues.

Figure 1 - The evolution of the net inflows of foreign direct investments in the five analysed countries
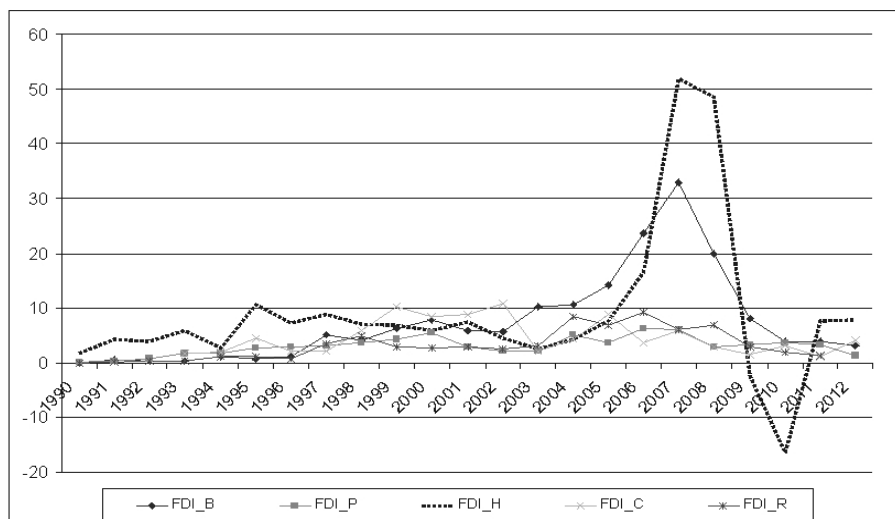
In the first half of the period the inflows of foreign direct investments, expressed in percentage of the GDP, present an increasing trend for all the studied countries. In 2000 the inflows start to decline for all the countries except for the Czech Republic where the decline starts one year later. Afterwards Bulgaria and Hungary show a significant increase in the inflows of FDI followed by a severe decrease in 2007. The phenomenon is similar in the other economies but with a significantly lower magnitude.

IV. Empirical results

Using the steps described in the methodological approach, the analysis is conducted for all the studied countries and for each combination between the inflows of foreign direct investments and the gross enrolment in primary/ secondary and tertiary education system. During the first step of the study, the stationarity of all involved time series is analysed. For this purpose, the unit root Augmented Dickey Fuller test and the unit root Phillips-Perron test were used. In Table 1, the results obtained for all the variables are displayed. For each variable the absence of unit roots (therefore the stationarity) is marked for one of the two employed significance levels: 1%, 5%. For each of the 15 VAR models, the maximum integration order of the two involved variables (the FDI and the one of the three variables representing the school enrolment) represents the d_{max} which

will be used for the next step of the analysis. Because we are working with extremely short time series and the unit root test reveals contradictory results, we have decided, for each variable, to select the smaller integration order (for estimating fewer parameters in the VAR models). We need to state clearly that the results of the unit root tests need to be regarded with great caution due to the fact that, when analysing very short time series, these tests might be biased towards non rejection of unit roots. Based on this assumption we have established the d_{max} value for all the fifteen VAR models. The d_{max} value is listed for each model in Table 1 (last column). For the third model, in the case of Hungary, we have selected the d_{max} to be equal with one due to the fact that we relied on the results provided by the ADF test.

Table 1 - The unit root ADF and PP tests results'

Unit root test		Augmented Dickey-Fuller		
Country		ADF	PP	dmax
Romania	FDI	I(1)***	I(1)***	
	SEP	I(1)**	I(1)**	1
	SES	I(1)***	I(0)***	1
	SET	I(2)***	I(2)***	2
Bulgaria	FDI	I(1)***	I(1)***	
	SEP	I(1)**	I(1)***	1
	SES	I(0)**	I(0)**	1
	SET	I(1)**	I(1)**	1
Poland	FDI	I(1)***	I(1)***	
	SEP	I(2)***	I(1)**	1
	SES	I(1)***	I(1)***	1
	SET	I(1)**	I(1)**	1
Hungary	FDI	I(1)***	I(0)**	
	SEP	I(0)***	I(0)***	1
	SES	I(1)***	I(1)***	1
	SET	I(0)**	I(2)***	1
Czech Rep.	FDI	I(1)***	I(1)**	
	SEP	I(0)**	I(1)**	1
	SES	I(0)**	I(1)***	1
	SET	I(2)***	I(1)***	1

Source: Author's computation.

** Prob. lower than 5% *** Prob. lower than 1%

After having the d_{max} established for all fifteen VAR models which were analysed in this study we went further following the methodology displayed in a previous section. Therefore, we employed the following five criteria: the LR criterion, the

FPE criterion, the AIC criterion, the SC criterion and the HQ criterion, in order to establish the optimal lag for each model. For the majority of the models we have decided to use the lag order identified by the majority of the criteria. Therefore all the VAR models constructed for Romania, Bulgaria and Hungary have the optimal lag order (k) equal to 2 (the third model constructed for Hungary has the lag order (k) equal to 3 due to the fact that we needed to eliminate the serial correlation). The three models used for Poland have the (k) optimal lag order equal to 1. For the Czech Republic, two of the employed models (we have selected the lag 2 and not 3 because of the shortness of the time series) have the optimal lag equal to 2. For the third model, namely the one using the secondary school enrolment, the optimal lag selected is 1. When the lag order for the models constructed for the Czech Republic was selected, comparability aspects were also taken into consideration. Important to mention at this moment is the fact that the residuals of all the models passed the serial correlation test.

Table 2 - The results of the Lag Length Criteria

Country	VAR Model	Lag length Criteria				
		LR	FPE	AIC	SC	HQ
Romania	FDI & SEP	1	2	2*	1	2
	FDI & SES	2	2	2*	2	2
	FDI & SET	1	2	2*	1	2
Bulgaria	FDI & SEP	2	2	2*	2	2
	FDI & SES	2	2	2*	2	2
	FDI & SET	2	2	2*	2	2
Poland	FDI & SEP	1	1	1*	1	1
	FDI & SES	1	1	1*	1	1
	FDI & SET	1	1	1*	1	1
Hungary	FDI & SEP	2	2	2*	2	2
	FDI & SES	1	2	2*	1	2
	FDI & SET	2	2	2*	2	2
Czech Republic	FDI & SEP	2*	3	3	3	3
	FDI & SES	1	1	1*	1	1
	FDI & SET	1	3	3	2*	3

Source: Author's computation.

After having the optimal lag order (k) and the d_{max} established, for all the models, we have estimated the fifteen augmented models, in order to test for the existence of any potential causality relation. We have rejected the null hypothesis (which states that the primary school enrolment does not Granger causes the net inflow of foreign direct investments) for two of the five analysed models. Therefore, we found

evidence that the primary school enrolment might have an impact on the net inflows of foreign direct investments in the case of Romania and Bulgaria. In the case of the Czech Republic, the results support the hypothesis that the inflows of foreign direct investments have an impact on the primary school enrolment. These results need to be regarded with caution due to the limitations imposed by the usage of the short time series. However, these results might be considered as being in line with those obtained by other researchers who identify the human capital as an important determinant for the inflows of foreign direct investments. Also, the enrolment in the primary school might be regarded as an indicator for the economic stability of a country, especially for developing countries. Thus, for the developing countries, it is expected that the enrolment in the primary school to increase when the economic conditions improve and to decrease when the economic situation deteriorates. Consequently, when the primary school enrolment is regarded as being connected with the economic environment of a country or with the human capital available in an economy the relation identified in this study becomes more plausible.

Table 3 - The Granger Causality test Results

Country	VAR Model	Granger Causality		
		A - B	B - A	Significance level
	A B			
Romania	FDI & SEP	No	Yes	1%
	FDI & SES	No	No	
	FDI & SET	Yes	Yes	10% / 10%
Bulgaria	FDI & SEP	No	Yes	10%
	FDI & SES	No	No	
	FDI & SET	No	No	
Poland	FDI & SEP	No	No	
	FDI & SES	No	No	
	FDI & SET	Yes	No	5% 5.06%
Hungary	FDI & SEP	No	No	
	FDI & SES	No	No	
	FDI & SET	No	Yes	1%
Czech Republic	FDI & SEP	Yes	No	10%
	FDI & SES	No	Yes	1%
	FDI & SET	No	No	

Source: Author's computation.

Going further we need to mention that only one causal relation between the secondary school enrolment and the net inflow of FDI was found for the analysed

VAR models. For the case of the Czech Republic we found that the secondary school enrolment might have a causal influence on the net inflows of FDI. If the secondary school enrolment is regarded as being connected to the economic environment of a country or to the human capital available in an economy the relation identified in the case of the Czech Republic becomes more plausible

For the models including the tertiary school enrolment and the net inflows of foreign direct investments we have obtained evidence of causality relations running both ways. In the case of Romania we have evidence suggesting that there might be a causality relation running from tertiary school enrolment towards foreign direct investments and also in the reverse way. These results are in line with other research published for Romania, where other variables were used as proxy for the availability of the human capital/the tertiary education system. For the case of Hungary the relation runs only from tertiary school enrolment towards FDI and for Poland the causality relation runs in the opposite direction.

When the tertiary school enrolment is considered a proxy for the highly educated labour force (or human capital) the obtained results are in line with those reported in other studies that bring evidences stating that foreign direct investments are attracted by economies where there is available highly educated work force. The reverse relation, identified for Romania and Poland, might be supported by the findings of the researchers who show that horizontal foreign direct investments located in a country help increase the wages and also increase the propensity of the population to pursue higher education.

V. Conclusion

The present research paper should be considered a part of the scientific literature concerned with the bidirectional interdependencies created between the inflows of foreign direct investment attracted by a country and its main socio-economic features. More precisely, the present study investigates the causal relations created between the inflows of foreign direct investments and the school enrolment for five east European EU member states.

Before summarizing the main findings of the study it is of major importance to provide a very short but clear description of the main limitations of the methodological approach employed in this study. The results need to be regarded with great caution because the analysis was conducted on very short time series. Even though this issue might be responsible for seriously diminishing the reliability of the findings it is a major weak point of a large variety of studies concerned with the subject of foreign direct investments for the ex-communist

Central and East European EU member states. Regarding comparability issue, another aspect that needs to be kept in mind is the fact that not all the VAR models included in the analysis had the same lag length. Another issue that needs to be stated when talking about comparability related aspects is the fact that not all the employed time series had the same length. Also noteworthy when listing the methodological limitations and the aspects who affect the reliability of the reported findings is the fact that the economies of the analysed countries were affected during the 1990s by important changes and also by instability.

The main findings of the present paper confirm the earlier findings reported by the literature, more exactly, the present research provides evidence that between the inflows of foreign direct investment and the aspects related with the educational system of a country there are causal relationships. I have obtained evidence suggesting the existence of such linkages in both directions, but for different economies. We have rejected the null hypothesis of no Granger causality for the relation running from the net inflows of foreign direct investments towards the tertiary school enrolment for the cases of Romania and Poland and towards the primary school enrolment for the case of the Czech Republic. We have also rejected the null hypothesis of no Granger causality for the relation running from the primary school enrolment towards the inflows of FDI for the case of Romania and Bulgaria. We also rejected the null for the relation running from the tertiary school enrolment towards the net inflow of FDI for the case of Hungary and from the secondary school enrolment towards the inflow of FDI for the Czech Republic.

The fact that school enrolment has an causal influence towards the inflow of foreign direct investments is in line with other findings reported by scholars and can easily be supported by the fact that foreign investors are more inclined to invest in a location where the education level is higher. Also, if the school enrolment is regarded as an indicator of the development level and of the stability of an economy the causal relationship is more facile to explain.

The causal relation between the inflows of foreign direct investments and the primary and the tertiary school enrolment reported by this study is also supported by other studies from the literature. As I have mentioned earlier during this paper, the foreign direct investments (especially horizontal foreign direct investments) bring many benefits into an economy. They support the increasing of wages and of the living standard of the inhabitants of the host country and also encourage the population to pursue higher education.

Summarizing, it is important for the policymakers to be aware that the inflows of foreign direct investments have a direct impact on the living conditions of the population of their countries and that education needs to be perceived as an investment that will increase, among others, the attractiveness of the country in the eyes of the foreign investors.

 Since the present study has important limitations, these findings need to be regarded with great caution and they need to be further validated by other studies.

As a direction for future research, I believe that the study needs to be replicated at sectoral level and also for different types of foreign direct investments in order to obtain more targeted information that can serve as starting point for the policymakers. Another interesting direction of research would be the replication of the study for the same sample of countries but at regional level.

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