5. GLOBALISATION, ECONOMIC GROWTH AND COVID-19. INSIGHTS FROM INTERNATIONAL FINANCE[1]

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Abstract

This paper examine whether the globalisation positive and negative side effects on economic growth significantly differ across the European Union's Member States, by focusing on a set of indicators from the area of international finance. The empirical results derived from a set of Eurostat panel data guide us to formulate a set of policy recommendations intended to overcome and ease the adverse shocks that may prevail in the EU economies during and after global crises, such as the Covid-19 pandemic. The paper finds that the foreign controlled companies significantly influence the foreign direct investment inflows and economic growth, but their impact is different across the EU countries, with significant differences between the New and Old Member States. Although common EU initiatives and policies are needed to overcome the side effects of globalisation manifested through global crises, national reactions and measures are needed too, especially on short term.

Keywords: globalisation, Covid-19, economic growth

JEL Classification: F62, F65, C23

1. Introduction

The last decades have witnessed the deepening of the globalization process, as reflected by the increase in economic and financial interdependencies between the world countries, by the intensification of activities conducted by international economic organizations, as well as by the expansion of off-shore companies. The previous economic crises that have

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succeeded in the global economy[4], and which have affected numerous countries by the mechanisms of economic/ financial contagion, failed to reverse the globalization process. Nevertheless, the World Trade Organization (WTO, 2019) notes that the increase in protectionist measures adopted at international level starting with 2009 have affected 7.5% of the world imports[5].

In the context of the COVID-19 crisis, different situations can affect, on short, medium and long term, the dynamic of globalization, such as:

- The large use of protectionist policies all over the world, as well as the relocation of production facilities in the host country or region, aimed to reduce the dependency upon foreign providers;
- The deepening and speed-up of the regionalization process which would impose *inter alia* massive relocations from Asia to the Eastern Europe, to protect the economic sovereignty and security;
- In the case that the post-COVID19 economic recovery will be a V-shaped one, the multinational companies are expected to continue their growth and expansion to Asia.

The scenarios above are indicative for the uncertainty on the economic recovery after the COVID-19 crisis and the role played by multinational companies in the near future. However, the process of de-globalization is not new. In the context of the COVID-19 crisis it has only reactivated, as a consequence of the protectionist measures adopted by several governments at the initial moment of the crisis. In fact, the measures adopted by the EU countries to overcome the first signs of the crisis were taken in a national framework, and this has proven the fragility of international institutions, as well as the lack of stringent and coordinated measures at the EU level. The results were different across the EU, so that Germany ended in successfully managing the first wave of the sanitary COVID-19 crisis (March-June 2020), while Italy failed in this regard, which has resulted in much more deaths and new daily infections. In this context, globalization has been seen as the invisible cause and propagation engine of the crisis, but from a panoramic view it rather seems to be an irreversible process feeding the contemporary world economy.

The paper analyze the effects of a set of globalization indicators on economic growth, and to also underline the differences in the impact across the EU countries and the New and Old Member States. The main focus is on the foreign direct investment and foreign controlled enterprises. The message of this paper is that in the context of globalization which will continue to shape all economies in the future as well, Romania should be always prepared to manage at its best the globalization spillovers by quick and effective national policies, as to avoid the very short term lack of EU coordinated response and policies. The paper is structured into five sections. The introduction is followed by a section relying globalization to the COVID-19 crisis and economic growth. The empirical analysis is developed in the third and fourth sections, while the last one formulates policy recommendations and concludes.

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[4] Ex. The 2002-2004 SARS crisis, the 2007-2008 economic and financial crisis, and 2009-2010 H1N1 crisis.

[5] From 2018 to 2019, the World Health Organisation identifies a number of 102 restrictive commercial measures totally accounting for 746.9 billion USD.

2. Prospects for Globalisation *Ante* and *Post* the COVID-19 Outbreak

In the global economy, the distance between Romania and other countries in Europe and on other continents tends to be considerably reduced over time, this process being also emphasized by the process of European integration, which in itself is a model of globalization. The multinational companies and ICT (Information and Communication Technologies) are considered to be the main vectors and drivers of globalisation. Over time, they have facilitated access to resources, strategic partnerships, knowledge, advanced technologies and increased business opportunities on the international markets. The advantages of participating into the process of economic and financial globalisation have been widely discussed in the literature so far, but the recent pandemic of coronavirus (COVID-19) and the 2007-2008 global economic crisis have brought into discussion the costs and risks of globalisation which might have dramatic consequences for all participating countries. These costs and risks emerging from the negative side effects of globalisation are easily transmitted across countries through the economic, financial and political channels.

In the last two decades, the speed of globalisation has risen hot debates about the economic impact of globalisation, but rigorous studies on this topic are conditioned upon the availability of complex cross-country or cross-region datasets, as well as upon the existence of a consensus on the indicators of multidimensional globalisation. Important steps in this direction have been done by international institutions (*e.g.*, the Kof index of globalisation, the OECD indicators of globalisation, etc.).

The expansion of international trade and the worldwide financial transfers represent the core of economic globalisation, but in contrast with economic internationalisation, globalisation is characterized by the supranational integration, the decline in the state control, and the increase in the interdependencies between countries (Mesjasz, 2003). The results of economic globalisation go therefore beyond the intensification of international trade, foreign direct investment and financial flows. They also reflect the expansion of multinational companies and their activities, as suggested by the increase in foreign capital inflows, as well as by the growing rates of employment in these companies. ICT and migration have been acknowledged as globalisation factors or facilitators (Renzaho, 2016).

Financial globalisation is strongly related to economic globalisation, being defined a long time ago as “the infrastructure of the infrastructure” (Cerny, 1993). In a modern perspective, financial globalisation is associated with the increase in capital mobility, intensification of the activity of international financial institutions, development of new financial products incorporating high levels of risk, the gradual elimination of restrictions on capital inflows, and the increasing preference for using floating exchange rate regimes all over the world.

According to the literature, the most important costs and risks of globalisation are: the increase of consumerism, the increase of competition for natural resources which can ultimately induce negative environmental effects, the labour exodus, the growth of multinationals, the increase in carbon emissions, etc. In the area of social effects, the increase in social inequality is the most important negative side effect of globalisation, being often responsible for conflicts and civil wars (Staples, 2000).

At present, for most developed countries in the world, the COVID-19 crisis is considered to be the start of the most severe economic crisis after the Second World War. This is due to the long term effects that are expected to last for many years, and also to the uncertainty about the duration of the COVID-19 pandemic, about the costs incurred by the economic

recovery, and about the post-pandemic development prospects. The first semester of the 2020 has shown the lack of the EU level coordination with regard to the limitation of the COVID-19 propagation and the sanitary crisis that hit at different intensities all the EU countries. This malfunctioning underlines the current problematic management at the EU level, which was supposed to adequately and quickly react to any EU crisis situation. However, in late April 2020 the EU adopted a common position toward the COVID-19 crisis spreading within the EU, by setting up a recovery plan for Europe, aimed at mitigating the effects of the pandemic. In July 2020, the EU leaders agreed on the overall budget for the period 2021-2027, with a strong focus on the economic recovery in the aftermath of the COVID-19 pandemic, and also on the investment in green and digital transitions. This initiative occurred right at the moment when a series of nationalist and disintegration tendencies, which surfaced during previous crises, were threatening the EU stability and integration process.

3. The Foreign Controlled Enterprises and Their Role in the EU Economic Growth

According to Eurostat[6], the indicators of economic globalization can be classified in the following categories: (1) International trade (imports and exports), (2) Foreign direct investments including inward/outward FDI stocks in % of GDP, (3) FDI flow intensity and market integration, (4) Employment in foreign controlled enterprises and in foreign affiliates of domestic enterprises (abr. here as Employment FCE), (5) Research and development (Intra-mural Business Enterprise R&D Expenditures in Foreign Controlled Enterprises), and (6) Value added in foreign controlled enterprises (abr. here as Value added FCE).

In this section, we provide a descriptive analysis of the relationship between economic growth on one side, and the key globalization indicators discussed in this study – employment in FCE and value added in FCE, on another side. A special attention is given to the peculiarities of the relationship economic growth- employment and value added in FCE in New Member States (UE-11)[7].

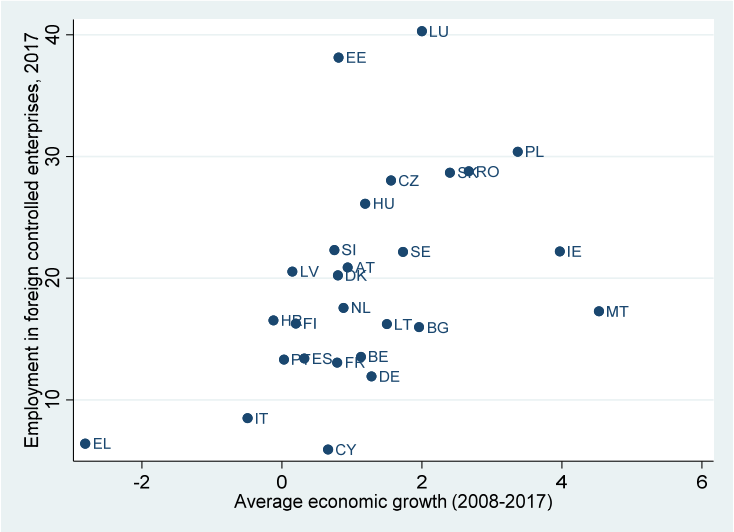
Figures 1 and 2 indicate a direct relationship between the average economic growth over the period 2008-2017, and the expansion of the foreign controlled enterprises in the EU countries. It is interesting to note at this point that the EU-11 New Member States have a higher concentration of both the employment and value added in foreign controlled enterprises, being rather located in the upper area of both figures. Luxembourg and Ireland can be considered here as outliers, and this is partially due to their characteristic of tax havens.

[6] *https://ec.europa.eu/eurostat/data/database.*

[7] *Poland, Czech Republic, Hungary, Slovenia, Slovakia, Romania, Bulgaria, Estonia, Latvia, Lithuania, and Croatia form together the group of EU-11.*

Figure 1

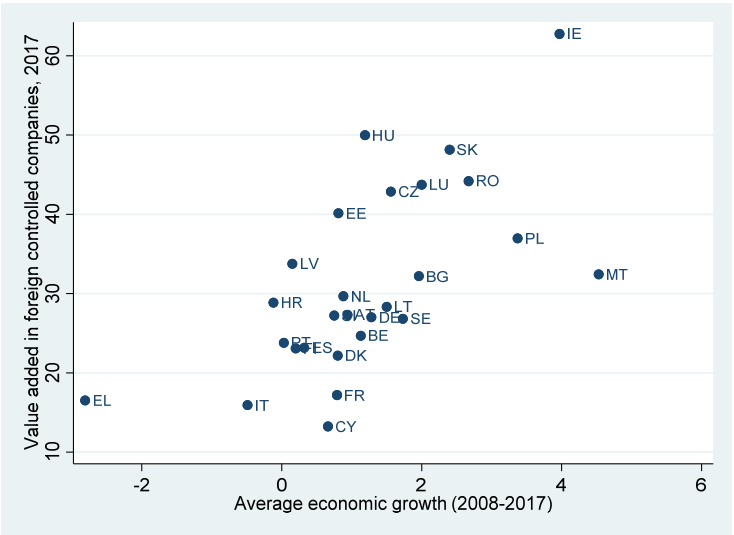
Relationship between the EU Economic Growth and Employment in Foreign Controlled Enterprises



Note: Eurostat data.

Figure 2

Relationship between the EU Economic Growth and Value Added in Foreign Controlled Enterprises



Note: Eurostat data.

In both Figures 1 and 2 Romania belongs to the groups of countries having high average growth rates, as well as high levels of value added and employment in foreign controlled enterprises. However, this tool of descriptive analysis cannot tell us whether the location and growth of foreign enterprises in the EU countries are driven by economic conditions/ economic growth, and to what extent they are generating forward economic growth in the host countries, when also taking into account all related opportunity costs.

4. Empirical Analysis

4.1. Data and Previous Findings

The empirical analysis conducted in this section examine the economic impact of the EU country participation to the globalisation process, by a set of fixed and variable coefficients regression models, on Eurostat data running from 2008 to 2019. The variables of our analysis are the following: economic growth, GDP per capita, employment and value added in foreign controlled enterprises, governmental consumption (absolute value and growth rate), formation of gross capital, emigration rate, immigration rate, foreign direct investment (FDI) growth (% GDP), number of graduates from higher education (abbr. Higher education), the consumer price index, population growth, imports and exports, as well as high-technology imports and exports.

The main focus of our study is the analysis of cross-country differences in the impact of globalisation on economic growth and FDI, to add new empirical evidence over the existing body of literature. The choice of the migration flows and employment/ value added in foreign controlled enterprises as key indicators of globalisation is based on previous papers on this topic that will be shortly presented below.

By the effects of labour mobility, globalisation creates a favourable environment for the acceleration of migration flows (especially of the skilled labour) all over the world, but at a higher intensity from developing and underdeveloped countries toward the developed ones. Cameron (2011) synthesizes the main drivers of the need for skilled labour in the developed countries, underlying a series of problems that may occur, such as the lack of technical abilities or their insufficient use, the lack of abilities and competencies asked by employers, and the difficulties encountered in the recruitment process.

A particular group pf migrants is represented by the overqualified graduates who have great difficulties in finding a job matching their qualifications due to languages barriers, problems related to the international equivalence of studies in higher education, or even discrimination. These migrants will therefore accept jobs for which they are overqualified. However, as Renzaho (2016) underlines, both the origin and destination countries benefit from migration flows by four main channels: emigration, salaries and economic adjustment; (2) the labour exodus and the effects of remittances in economy; (3) diaspora networks and labour markets, and (4) the migrants return and employment in the origin country.

The expansion of multinational companies is another product of globalisation. The foreign direct investment and multinational companies are not perceived anymore as synonyms because in present the multinational companies exert a powerful control over the value chains without imposing a significant presence into the ownership structure. The real impact of multinationals in economy is very hard to be estimated since their activities have increased in their complexity over time, and their influence channels have become very diverse and sophisticated (Narula și Pineli, 2017). Jäger și Springler (2019) found that the evaluation of

the impact of multinationals born in emergent economies on the EU economy requires a multidimensional and comprehensive analysis performed in the framework of the centre-periphery model of the international economic development.

In spite of all positive effects that multinationals directly and indirectly can have on national economies, they could also carry a set of negative social side-effects, such as: increase in social insecurity and social inequalities between and within countries and regions, deepening of poverty, and decrease in well-being. Some countries in the world have acquired more benefits from globalization in comparison with others, but nevertheless, global crises such as the 2007-2008 global economic crisis and the COVID-19 pandemic have amplified the dark side of globalization.

4.2. Empirical Findings from Fixed Coefficient Models

In the first step, the influence of a set of globalisation indicators on economic growth is analysed by a panel regression model estimated by the generalized least squares (GLS) model with heteroskedastic and uncorrelated errors. Three different groups of countries are separately analysed by Models (1)-(3)[8]. Overall, the regression coefficients look almost similar across models (1)-(3), which suggests the closeness of economic conditions in the EU-11 and EU-17, as a result of their economic convergence.

The determinants of economic growth are studied here by a *beta* convergence regression model, in its conditional form. In models (1) and (2), the negative sign that the coefficient of the initial level of GDP per capita, as well as its high significance, suggests the existence of a process of real economic convergence from 2008 to 2019. Conditional on the variables of our study, the empirical results indicate the existence of a process of real conditional economic convergence within the EU-17 Old Member States, but no convergence within the EU-11 New Member States. At the EU-28 level, the convergence is significant, but weaker as that within the EU-17.

According to our expectations, the increase in governmental consumption is detrimental to economic growth, while the formation of gross capital, the price increases, as well as the increase in the number of graduates from higher education, have all positive effects on economic growth. The positive impact of human capital on growth, especially of highly skilled labor, has been highlighted in numerous recent studies. (e.g. Diebold and Hippe, 2019; Hanushek and Woessmann, 2012; Răileanu Szeles, M. *et al.,* 2018; Pelinescu *et al*., 2019; etc.). Also it is expected that there will be significant effects of migration flows, which consist mainly of skilled labor, on growth.

In the case of the EU-28 and EU-17, our estimates suggest that population growth harms economic growth, while in EU-11 this effect is not significant. The difference between the EU-11 and EU-17 in this regard could be partially explained by the fact that the EU-11 economies follow different demographic and economic patterns resulted from different post-communist economic systems.

[8] *UE-11 includes the last former communist New Members States, UE-17 includes the oldest 17 Member States, while UE-28 refers to all EU Member States.*

Table 1

Determinants of Economic Growth, EU 2008-2019

Variables	EU-28 Model 1	EU-17 Model 2	EU-11 Model 3
Initial GDP (log)	-1.90***(0.77)	-2.52*** (1.11)	0.81
Governmental consumption	-0.12*(0.07)	-0.09 (0.08)	-0.41*(0.23)
Gross capital formation	0.09** (0.05)	0.12** (0.06)	-0.18* (0.10)
Higher education	0.10***(0.03)	0.09***(0.03)	0.07 (0.06)
Consumer price index	0.22***(0.04)	0.16***(0.05)	0.12* (0.06)
Population growth	-95.04*** (37.06)	-136***(43)	-7.02 (80)
Globalisation indicators			
Employment FCE	0.12***(0.02)	0.08*** (0.02)	0.37***(0.04)
Value added FCE	-0.07***(0.02)	-0.02 (0.02)	-0.35***(0.04)
Emigration	-1.87***(0.53)	-2.36***(0.64)	2.15** (0.94)
Immigration	2.24***(0.47)	2.79***(0.51)	-0.47 (1.30)
High-Tech exports	-0.08*(0.04)	-0.05 (0.05)	-0.26* (0.14)
High-tech imports	0.23*** (0.06)	0.21***(0.08)	0.63*** (0.16)

*Notes: *** p<0.01, ** p<0.05, * p<0.1; Standard errors are reported in brackets.*

The globalisation indicators are distinctly grouped in Table 1. They show several differences between the three groups of countries. First, the positive effect of employment in FCE on economic growth is stronger for the EU-11 countries than for the EU-17 countries, while the negative effect of the value added in FCE is significant only in EU-11 and EU-28 as well. On short, our results show that a higher employment rate in FCE does not hinder growth, but in turn a higher value added obtained in these enterprises is associated with the economic decline, and only in the Newest 11 Member States. One explanation supporting this finding could be that, as compared to EU-17 countries, the labour force is cheaper in the EU-11, and in addition the privatisation process has facilitated the relocation of many multinationals to the post-communist economies.

The effect of emigration and immigration on economic growth is different across the EU-11 and EU-17. Emigration is indirectly associated with economic growth in the EU-17, and this influence remains significant when moving at the EU-28 level as well. This finding is according to a growing strand of literature emphasizing the negative effects for donor countries, induced by the loss of human capital resulted from international migration (*e.g.* Čekanavičius and Kasnauskienė, 2009). However, in the post-communist EU-11 economies this effect is different, as a higher level of immigration contributes to the economic growth in the host country. This could be explained by the new employment opportunities created by the job vacancies resulting from emigration (Katseli, Lucas, and Xenogiani, 2006). Immigration does not carry significant effects of growth in the EU-11, as it is not a matter of concern here, but in turn it supports economic growth in the EU-17, this positive influence being also significant in the EU-28. The positive effects of immigration have been widely underlined in the literature (*e.g.* Borjas, 1999; Boubtane, Dumont and Rault, 2016), but a restrained set of papers reveals that the effects depend upon the type of immigrants and country of destination (Kang and Kim, 2012). Nevertheless, the differences between the EU-11 and EU-17 with regard to the impact of migration flows on economic growth also suggest the need for different migration policies across the EU.

Although the imports and exports are both key-indicators of the economic openness and participation to the globalization process, we analyze here only the economic impact of high-tech exports and imports. The high-tech exports in the EU-11 are negatively associated with economic growth, without having any impact on the EU-17 growth, while the high-tech imports are found to stimulate economic growth in the EU-11, EU-17, as well as in the EU-28. This finding partially relies on the mixed results revealed by the empirical literature on export-led growth (Parida and Sahoo, 2007; Cuaresma and Wörz, 2005).

4.3. Empirical Findings from Varying Coefficient Models

In the second part of empirical analysis we apply varying coefficient models on the same set of data, to test the differences in the economic impact of globalization across the EU-28. Beside the variables reported in a previous section, the varying coefficient models use two indicators calculated by us, based on Eurostat data:

- Trade, calculated as the proportion of imports + exports in the GDP;
- High-tech trade, calculated as the proportion of high-tech imports + high-tech exports in the GDP.

The first varying coefficient model explains economic growth in year *j,* country *i* according to a set of variable effects-predictors set for each country *i* x_k ($Employment\_FCE_{ij}$, *Guvernmental_consumption*$_{ij}$, *FDI*$_{ij}$, *Immigration*$_{ij}$, *Emigration*$_{ij}$). The model includes fixed (β_k), as well as variable coefficients (u_{ki}) for each country *i*, and a variable error term for each country (v_{1i}):

$$\begin{aligned} Economic\_growth_{ij} &= \alpha_0 + \beta_2 Guvernmental\_consumption_{ij} + u_{1i} Employment\_FCE_{ij} \\ &+ u_{2i} Guvernmental\_consumption_{ij} + u_{3j} FDI_{ij} + u_{4j} Immigration_{ij} \\ &+ u_{5j} Emigration_{ij} + v_{1i} + \varepsilon_{ij} \end{aligned} \quad (1.\text{a})$$

Constant terms are introduced for each country to reveal the differences in the business conditions, when assuming the same conditions across countries.

In Tables 2.1 and 2.2 we present the fixed and variable coefficients for the countries of our analysis. In the fixed coefficients model, the effect of increasing the governmental consumption on economic growth is found to be significant and negative, but the varying coefficients model brings additional insights by identifying Romania as the only country for which this effect is positive.

A higher participation of FCE to the national economy, as indicated by the higher level of employment in FCE results into a higher level of economic growth in most EU-11, *i.e.* Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Estonia (EE), Spain (ES), Croatia (HR), Hungary (HU), Lithuania (LT), Malta (MT), Poland (PL), Romania (RO) and Slovakia (SI), but not in Latvia (LV) as well. This result is in line with that reported in Table 1, which is also suggestive for their robustness. Basically, in all these countries, economic growth was positively influenced by the employment in FCE. In addition, in these countries the effect of immigration and emigration was a positive one, which is in contrast with the effects reported for most of the other countries. We can therefore conclude at this point that the Eastern and Central European countries (identified here as EU-11) are economically heterogeneous and successfully integrated into the international division of labor.

The effect of the increase in the volume of FDI (% in GDP) is not significantly different between the EU-17 and EU-11. In Bulgaria (BG), Croatia (HR), Hungary (HU), Lithuania (LT), Malta (MT), Poland (PL), Romania (RO) the effect of FDI is a negative one, while being positive for the Czech Republic (CZ), Estonia (EE) and Latvia (LV). This mixed effect is not surprising given that empirical evidence on the role of FDI in economic development has been mixed, differing by country. (Reisen and Soto, 2001; Alfaro et al., 2004; Batten and Vo 2009; Popovici, 2018).

Table 2.1

Fixed Coefficients from Model 1.a

Economic growth	Coefficient	Standard error	z	P>|z|	Confidence interval 95%	
Governmental consumption	-0.287507	0.121453	-2.37	0.018	-0.52555	-0.04946
Constant (α_0)	-0.063879	0.282362	-0.23	0.821	-0.617298	0.48954

Table 2.2

Variable Coefficients from Model 1.a

Country	Employment in FCE	Government consumption	FDI	Immigration	Emigration
AT	-0.02603	-0.22342	-0.00093	-0.24458	-0.14641
BE	-0.01759	-0.12461	0.00652	-0.23294	-0.13842
BG	0.03058	-0.36937	-0.00971	0.18716	0.21105
CY	0.01422	-0.08581	0.04768	1.05991	-0.45368
CZ	0.02357	-0.38848	0.01276	0.09641	0.05135
DE	-0.00039	-0.29552	-0.00776	-0.13547	0.02241
DK	-0.00038	-0.28540	-0.02174	-0.00765	0.01110
EE	0.02835	-0.55545	0.00850	-0.05196	-0.01004
EL	-0.01153	-0.19549	-0.06222	-0.29028	-0.30924
ES	0.00535	-0.37332	0.00465	0.06906	0.07346
FI	-0.01944	-0.19101	-0.02096	-0.16979	-0.08034
FR	-0.02918	-0.25743	-0.02468	-0.33472	-0.27823
HR	0.01156	-0.46878	-0.00237	0.06364	0.21341
HU	0.01398	-0.28278	-0.06606	0.09089	0.06073
IE	-0.01466	-1.11923	0.06549	-0.170746	-0.20984
IT	-0.00718	-0.08719	-0.02553	-0.08580	-0.03923
LT	0.03328	-0.56129	-0.01431	0.261706	0.37559
LU	-0.01502	-0.46254	0.02781	-0.07401	-0.13118
LV	0.04210	-0.13077	0.01844	0.25050	0.38642
MT	0.03162	-0.34099	-0.03637	0.53503	0.11950
NL	-0.03955	-0.18895	-0.02464	-0.43865	-0.30719
PL	0.01352	-0.37040	-0.01077	0.06826	0.06838
PT	-0.01291	-0.13751	-0.00772	-0.085859	-0.06249
RO	0.07455	0.29384	-0.00282	0.49545	0.64760
SE	-0.03100	-0.44204	0.00714	-0.39333	-0.10348
SI	0.01945	-0.20680	-0.01251	0.18901	0.15021
SK	-0.03810	-0.38998	-0.04855	-0.06463	-0.02119
UK	-0.01768	-0.14736	-0.01442	-0.17663	-0.10292

In Table 2.3 we present the variable coefficients from model 1.b, which replace in model 1.a FDI expressed as% of GDP with the increase of FDI (relative measure of FDI). Most coefficients of this variable are positive (except for Luxembourg and the Netherlands), which indicates the positive effect generated by the growth of FDI in the receiving economy. The model 1.b coefficients keep their initial sign in most cases. When putting together the findings from models 1.a and 1.b we get that the positive effect of FDI occurs when the FDI flows considerably grow, so that they reach a significant proportion in GDP.

We see below that in the case of Romania, higher level of employment in FCE, higher governmental consumption, higher FDI, as well as a higher immigration rate, stimulate economic growth.

Table 2.3

Variable Coefficients from Model 1.b

Country	Employment in FCE	Government consumption	FDI	Immigration	*Emigration*
AT	-0.0061	-0.18887	0.00356	-6.58E-11	-0.75826
BE	-0.00291	-0.07658	0.00299	-6.25E-11	-0.539
BG	0.01464	-0.33601	0.00544	5.40E-11	1.27295
CY	0.00010	-0.40293	0.01064	1.18E-10	-5.29499
CZ	0.03300	-0.17208	0.00551	4.24E-11	0.76488
DE	0.00681	-0.13723	0.00410	-5.73E-11	0.15252
DK	-0.00086	-0.28437	0.00372	-2.27E-11	-0.02818
EE	0.04102	-0.45517	0.00579	-1.03E-10	-0.43423
EL	-0.00236	-0.0965	0.00368	-4.84E-11	-1.17475
ES	0.00249	-0.44997	0.00402	4.30E-11	-0.18516
FI	-0.01698	-0.27595	0.00303	-9.95E-11	-0.93874
FR	-0.00411	-0.13282	0.00355	-2.77E-11	-0.927
HR	-0.00886	-0.37609	0.00294	-1.90E-11	0.72431
HU	0.01156	-0.54966	0.00430	3.22E-11	0.41531
IE	-0.00587	-1.36904	0.00418	-6.17E-11	-1.49332
IT	-0.01085	-0.07585	0.00333	-1.14E-10	-0.89365
LT	0.00602	-0.60315	0.00413	6.56E-11	0.86650
LU	0.00808	-0.57068	-0.00029	1.52E-10	0.49160
LV	0.01079	-0.09927	0.0044	4.66E-11	1.67064
MT	0.00059	0.00145	0.00264	3.56E-11	-0.56468
NL	-0.00561	-0.28331	-0.00075	-7.69E-11	-0.74399
PL	0.00819	-0.38776	0.00404	2.46E-11	0.50608
PT	0.00434	0.23797	0.00423	-4.62E-12	1.06957
RO	0.01514	0.23926	0.00424	1.01E-10	2.68142
SE	-0.01512	-0.43928	0.00289	-1.99E-10	-1.00406
SI	0.00696	-0.09188	0.00402	5.09E-11	0.77574
SK	-0.02497	-0.26466	0.00330	-2.75E-11	-0.18007
UK	-0.0072	-0.23775	0.00327	-6.07E-11	-0.69651

The second model with variable coefficients examines the FDI (FDI_{ij}) in year *j,* country *i* upon a set of fixed effects explanatory variables ($Economic\_growth_{ij}$, $ln\_value\_added\_FCE_{ij}$, $hightech\_trade_{ij}$) and variable effects explanatory variables for each *i* x_k ($trade_{ij}$, $ln\_employment\_FCE_{ij}$). The model includes fixed coefficients (α_i) for fixed effects predictors, fixed coefficients (β_k) and variable coefficients (u_{ki}) for variable effects-predictors x_k , for each country *i* and variable error term for each country (v_{1i}):

$$ln\_FDI_{ij} = \alpha_0 + \alpha_1 Economic\_growth_{ij} + \alpha_2 ln\_value\_added\_FCE_{ij} + \alpha_3 hightech\_trade_{ij} + \beta_1 trade_{ij} + \beta_2 ln\_employment\_FCE_{ij} + u_{1i} trade_{ij} + u_{2i} ln\_employment\_FCE_{ij} + v_{1i} + \varepsilon_{ij} \quad (2)$$

Constant terms are introduced for each country to reveal the differences regarding the business conditions, when assuming the same conditions across countries.

In Tables 3.1 and 3.2 we present the fixed and variable coefficients. This time, the participation of FCE in the national economy is examined through the value added FCE (as % in total value added). According to our expectations, a higher value added obtained in FCE is likely to stimulate the FDI inflow in the guest country. In contrast, if we analyze the participation of FCE in the national economy as proportion of the FCE employment in total employment, we get that it generates a negative effect on the FDI inflows in most countries, except for Cyprus (CY), Greece (EL) and Luxembourg (LU). In Romania, the negative effect is even stronger than in the other countries, which could be explained by the lack of trust in the quality of local labor.

Table 3.1

Fixed Coefficients from the Model with Variable Coefficients

ln_FDI	Coefficient	Standard error	z	P>|z|	Confidence interval 95%	
Economic growth	0.00487	0.00246	1.98	0.048	4.12E-05	0.00970
Trade	0.00444	0.00145	3.06	0.002	0.001594	0.00728
Employment in FCE (ln)	-0.07353	0.13750	-0.53	0.593	-0.34302	0.19597
Value added in FCE (ln)	0.38255	0.14525	2.63	0.008	0.09787	0.66723
Hightech_trade	0.00416	0.00232	1.79	0.074	-0.0004	0.00870
Constant (α_0)	2.61979	0.40669	6.44	0	1.82269	3.41689

Table 3.2

Variable Coefficients from the Model with Variable Coefficients

Country	Trade	Employment in FCE (%)	Country constant
AT	0.0046285	-0.119695	1.008738
BE	0.0042747	-0.0754663	1.304999
BG	0.0044765	-0.0793804	1.090911
CY	0.0058651	0.0638426	3.297073
CZ	0.0038561	-0.0951387	0.6683444
DE	0.003876	-0.1215902	0.1941948
DK	0.0036908	-0.0917479	0.6603009
EE	0.0032855	-0.0714024	1.036692
EL	0.0035854	0.019812	-0.4309934
ES	0.0042243	-0.0940349	0.9333984

Country	Trade	Employment in FCE (%)	Country constant
FI	0.003888	-0.0859216	0.6068296
FR	0.0044677	-0.0411732	0.3458146
HR	0.0041742	-0.107165	0.9738808
HU	0.0044527	-0.0539479	1.33033
IE	0.006231	-0.2526859	1.468088
IT	0.0043523	-0.0804049	0.1219219
LT	0.0031189	-0.114493	0.4800679
LU	0.0066814	0.0845459	2.538548
LV	0.0039961	-0.0908248	0.7062826
MT	0.0067119	-0.0395266	2.503586
NL	0.0056491	0.0285153	2.272449
PL	0.0036528	-0.1253004	0.7286785
PT	0.0046473	-0.0527432	0.9554603
RO	0.0040425	-0.1208843	0.6108735
SE	0.0043236	-0.0743589	1.025062
SI	0.0040131	-0.0254897	-0.0616585
SK	0.0038567	-0.1625899	0.6603573
UK	0.0041888	-0.0794601	0.9697701

5. Implications for Romania

According to our empirical results, the effects of globalization on economic growth are mixed and different across the two groups of our analysis, the EU-11 and EU-17. Firstly, this suggests that a set of common EU policies cannot be effective in targeting the negative side-effects of globalization. The COVID-19 pandemic has shown that, beside the unstoppable process of globalization, the lack of short-term coordinated EU responses could even more worsen the negative implications of globalization in the aftermath of different types of crises. Romania's participation to the EU integration process can act in this case like an umbrella, ensuring protection against any crisis emerging from the global economy. Still, effective national policies overcoming the adverse effects of globalization should complement any package of EU common measures, as revealed by our paper.

The main findings of our paper can be summarized as follows: The dependency of national economy upon the foreign capital, which is in general managed in the framework of governmental policies encouraging the inward FDI, could lead to negative effects in the local economy unless being compensated by the strengthening of local capital. However, the positive effects induced by the FDI inflows in the host country is not doubted here, being one of our empirical findings. Increasing employment in foreign controlled enterprises could weaken the local capital because it basically deprives the local industry in terms of skilled labor, which can be seen as a prerequisite for economic growth and development. The EU statistics (Eurostat dataset) show that Romania has a level of employment in foreign controlled enterprises above the EU average, and this particularly justifies the increased attention toward this issue.

The effect of increasing the governmental consumption on economic growth is negative for most countries, except for Romania. To produce a positive effect, the governmental consumption should be oriented toward income/growth generating activities, and in this light Romania seems to be a good case. The positive effect of employment in foreign controlled enterprises on growth is stronger in EU-11 than in EU-17, while the negative effect of the value added in foreign controlled enterprises prevails only in EU-11.

The ultimate goal of this paper was to anticipate whether protectionist measures are really needed in the context of global crises (such as Covid-19), given that globalization differently hits countries. As higher value added obtained by foreign controlled enterprises catalyzes *inter alia* the FDI inflows but hinder economic growth, it is obvious that the national, regional and EU- level FDI policies should take a closer look at the foreign capital and the consequences of its expansion. In addition, higher employment in this kind of enterprises (measured as % in total employment) is found to stimulate economic growth, but not the FDI as well. These simple mechanisms explain a small part of economic growth, often resulting in different implications across the EU countries.

The main limitation of our study relies on data availability. At the moment of writing this paper, the economic effects of the COVID-19 pandemic cannot be measured or even accurately predicted yet, so that it is unclear to what extent those countries which are more involved in the globalization process, are more hit by this sanitary crisis or suffer more negative economic consequences. The years to come will shed light on this research issue.

Globalization is not riskless, and the benefits resulting from a deep participation to this process are often accompanied by negative side effects that tend to occur especially during crises. Given that emerging economies, such as the EU New Member States, suffer from higher economic vulnerability, they usually take advantage sooner of the globalization benefits, but equally are sooner hit by its negative side effects. National policies adopted in the EU area should therefore complement the EU common policies and actions, to overcome especially in the short term, the globalization negative effects.

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