European Integration and FDI Inflows into Central and Eastern Europe

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Introduction

We examined the ability of the Central and Eastern European (CEE) countries to attract foreign direct investment (FDI) between 1992 and 2013. We test for both a threshold effect of the European integration and traditional factors.

Related Works and Limitations

A considerable body of literature has been devoted to understanding the attraction factors of FDI in CEE (see: References). However, the literature dealing in particular with the role of the European Union in the mobilization of FDI is rather scarce.

Our paper brings two innovations:

- Nine stages of EU integration to study a structural shift caused from the announcement date until the end of the time horizon.
- A broadened sample of countries that includes among others the Western Balkans and three members of the CIS, namely Georgia, Moldova and the Ukraine, that are newly associated with the EU countries.

Model Setup

We will construct an empirical model for the CEE countries to estimate the determinants of FDI inflows. The basic model is:

$$y_{it}=\beta_0+\beta x_{it}+v_{it},\ i=1,\dots N, t=1,\dots T$$

where:

$$v_{it}=u_i+\varepsilon_{it}$$

represents the vector of the error components.

The determinants included in x_{it} are GDP, real interest rate, GDP per capita, the degree of openness with respect to trade, school enrollment rate, labor costs, gross capital formation, and a set of dummy variables capturing the European integration (the membership in CEFTA or BAFTA, the signing of the Association Agreement, entry into force of the Association Agreement, application for a membership, granting of the candidate status, start of the negotiations, signing of the Accession Treaty with the EU, membership in the EU, and Euro area membership).

In view of these considerations, the estimated long-run model becomes:

$$LNFDI_{it}=\beta_0+\beta_1 LNGDP_{it}+\beta_2 RIR_{it}+\beta_3 GDPPC_{it}+\beta_4 OPEN_{it}+\beta_5 SER_{it}+\beta_6 LNWAGE_{it}+\beta_7 GCF_{it}+\beta_8 FTA_{it}+\beta_9 Aasig_{it}+\beta_{10} Aafor_{it}+\beta_{11} Poten_{it}+\beta_{12} Candid_{it}+\beta_{13} Acces_{it}+\beta_{14} Acced_{it}+\beta_{15} EU_{it}+\beta_{16} EURO_{it}+v_{it}$$

Results

General Sample

	FE			2SLS			3SLS		
LNGDP	1,1796	*(5,4303)*	***	3,0121	*(5,2411)*	***	2,4722	*(5,1813)*	***
GDPPC	-0,0001	*(-1,8336)*	.	-0,0002	*(-3,6119)*	***	-0,0001	*(-2,6899)*	**
OPEN	0,0090	*(3,1291)*	**	0,0097	*(3,0825)*	**	0,0089	*(3,2050)*	**
LNRER	0,3484	*(6,6512)*	***	0,4530	*(7,0140)*	***	0,2782	*(5,1468)*	***
RIR	-0,0092	*(-2,6705)*	**	-0,0066	*(-1,7171)*	.	-0,0042	*(-1,3152)*	
LNWAGE	0,5530	*(5,5842)*	***	0,0488	*(0,2707)*		0,0141	*(0,0931)*	
SER	-0,0045	*(-0,5926)*		-0,0206	*(-2,1793)*	*	-0,0125	*(-1,5968)*	
GCF	0,0283	*(3,4584)*	***	0,0147	*(1,5021)*		0,0088	*(1,0969)*	
FTA	-0,3969	*(-2,019)*	*	-0,9170	*(-3,5102)*	***	-0,5647	*(-2,6178)*	**
Aasig	0,3723	*(1,5872)*		0,5339	*(2,0495)*	*	0,3297	*(1,5368)*	
Aafor	0,6595	*(1,8991)*	.	0,9455	*(2,4351)*	*	0,5793	*(1,8098)*	.
Poten	-0,1180	*(-0,4519)*		-0,0836	*(-0,2927)*		-0,0489	*(-0,2082)*	
Candid	-0,0591	*(-0,2617)*		-0,1017	*(-0,4111)*		-0,0613	*(-0,3015)*	
Acces	0,0402	*(0,1788)*		0,1178	*(0,4777)*		0,0677	*(0,3328)*	
Acced	-0,3032	*(-1,1068)*		-0,2928	*(-0,9778)*		-0,1832	*(-0,7434)*	
EU	-0,3973	*(-0,8661)*		-0,5379	*(-1,0691)*		-0,3442	*(-0,8283)*	
Euro	-0,8355	*(-1,3537)*		-0,4566	*(-0,6682)*		-0,2943	*(-0,5224)*	

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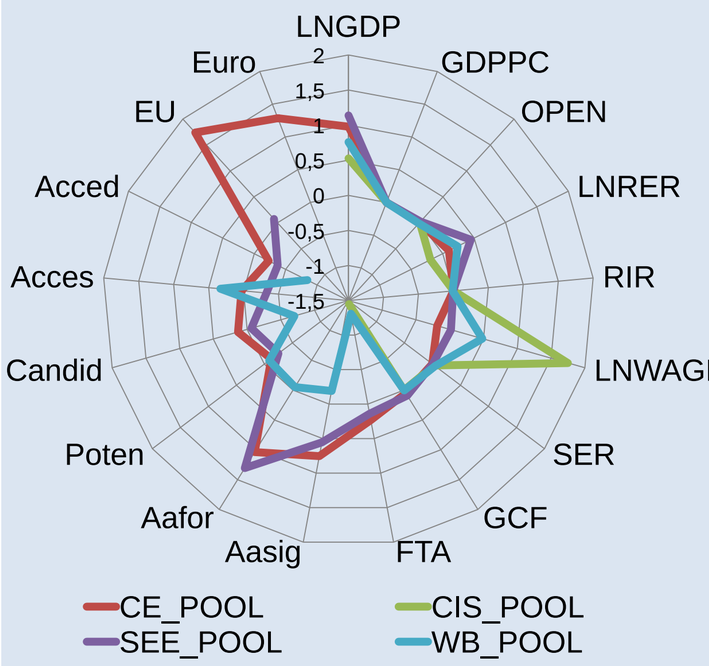
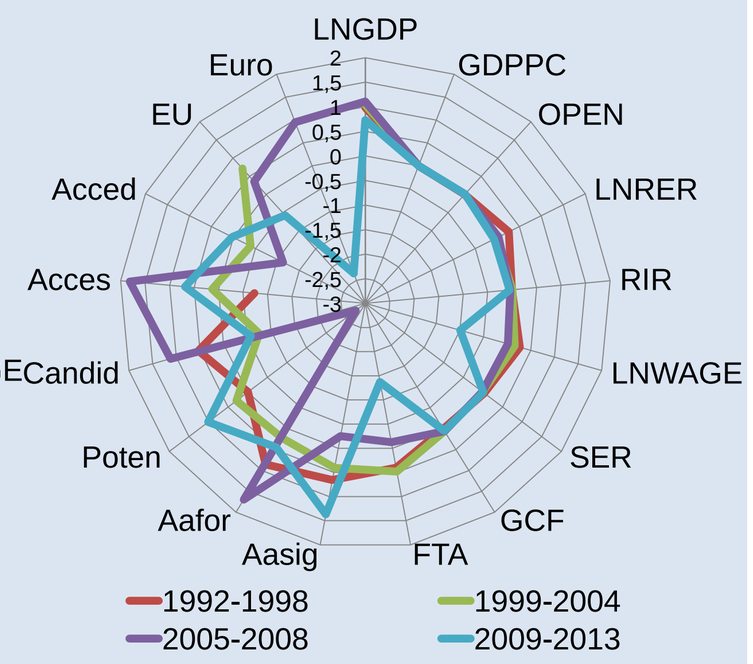
Decomposition

Decomposition by region



Decomposition by time period



Conclusions

Traditional factors were found to be statistically stronger. Thus, the localization of such investments responds to the market size, trade openness and currency devaluation.

The results of the estimations show also a robust significant relationship between FDI and the regional integration: FTAs have a negative effect on FDI inflows; AAs bring greater investments in the region.

Decomposing the results by subregions reveals a positive and significant AAs-FDI relationship in the CE and SEE subregions. While the accession stages towards the membership in the EU and the membership itself were positive and significant only in the CE subregion. The negative influence of FTAs was also confirmed the findings for the whole region in the CIS and West Balkans.

Decomposition by time periods shows that while the empirical link between integration and FDI inflows was insignificant during the 1990s, the relationship was highly significant during the early 2000s.

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