

2. Učinci izravnih stranih ulaganja na zemlje primatelje u Središnjoj i Istočnoj Europi

Katarina Bačić*
Domagoj Račić**
Amina Ahec-Šonje***

Sažetak

U literaturi o gospodarskom rastu i izravnim stranim ulaganjima, izravna strana ulaganja mogu potaknuti gospodarski rast zemlje primatelja neposredno, kroz kanal kapitalne formacije i posredno, uz pomoć pozitivnih učinaka «prelijevanja» i uključivanjem u međunarodne proizvodne i inovativne mreže. U ovome se radu ispituje značenje izravnih stranih ulaganja za rast u dva kvantitativna koraka. U prvom se koraku uz pomoć Grangerovog testa uzročnosti testira uzrokuju li izravna strana ulaganja rast, robni uvoz i izvoz prema Grangeru. U drugom se koraku ocjenjuje jednadžba rasta s izravnim stranim ulaganjima kao objašnjavajućom varijablom u regresijskom modelu na osnovi podataka vremenskoga presjeka za 11 zemalja za razdoblje 1994.-2002. Krajnji rezultati analize impliciraju da izravna strana ulaganja nisu statistički značajna u objašnjavanju varijacija u rastu između promatranih zemalja. Taj se rezultat može objasniti činjenicom da izravna strana ulaganja nisu značajno pridonijela domaćim ulaganjima, jer su u priljevima dominirala «brownfield» ulaganja, i to u uslužni sektor.

Ključne riječi: izravna strana ulaganja, gospodarski rast, Grangerov test uzročnosti, panel regresijska analiza, Središnja i Istočna Europa

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* Katarina Bačić, asistent, Ekonomski institut, Zagreb.

** Domagoj Račić, asistent, Ekonomski institut, Zagreb i doktorski kandidat, University of Cambridge.

*** Amina Ahec-Šonje, znanstveni suradnik i nastavnik, Zagrebačka škola ekonomije i managementa.

percentage terms), and rEU rate of economic growth of EU-15 (in percentage terms). Data is taken from the Transition Report (EBRD, 2003). The difference between Mencinger's model and the one used in this paper is that there are no country dummy variables in the outlined model. The method used to test the equation is a pool regression with cross-section weights (CSW). A fixed effects model does report on standard errors for the fixed effects coefficients (in each cross-section), except when there is the constant term as a cross-section regressor. CSW are used when data problems may appear. If data problems with some cross sections exist, then their standard errors should be higher. Cross-section weighting, in comparison with the regular fixed effects regression, improves the fit of the pool regression because it uses standard errors in each cross section. That allows weighting the cross sections according to the size of their standard error.

Table 6: Results of regression of growth equation for the 1994-2002 period

	Basic model	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6*
Const.	1.8 (3.17)	0.9 (1.05)	1.79 (3.21)	0.93 (1.14)	1.79 (3.34)	0.71 (0.90)	3.77 (3.37)
pcGDP	6.64E-05 (0.85)	9.17E-05 (1.05)	6.89E-05 (0.87)	8.71E-05 (1.12)	-3.58E-06 (-0.05)	2.25E-05 (0.31)	-0.0001 (-1.54)
rINV	0.16 (8.83)	0.16 (8.94)	0.16 (8.81)	0.16 (8.85)	0.14 (7.2)	0.13 (7.27)	0.09 (3.87)
rEMP	0.25 (2.64)	0.25 (2.77)	0.25 (2.67)	0.26 (2.81)	0.21 (2.29)	0.22 (2.40)	0.34 (2.67)
EU growth	-	0.33 (1.49)	-	0.32 (1.45)	-	0.37 (1.80)	0.32 (1.32)
FDI (-1)	0.0001 (1.22)	0.0001 (1.3')	-	-	3.02E-05 (0.39)	1.19E-05 (0.09)	-0.0005 (-2.34)
FDI	-	-	0.0001 (1.37)	0.0001 (1.45)	-	3.73E-05 (0.31)	-
rGDP(-1)	-	-	-	-	0.22 (3.27)	0.22 (3.34)	-
R²	0.72	0.74	0.73	0.74	0.77	0.79	0.82
R², adj.	0.71	0.72	0.71	0.73	0.76	0.77	0.87

* Sample composed of the countries in which «FDI Granger cause GDP or merchandise exports»: Lithuania, the Slovak Republic, Slovenia, Estonia and Hungary.
Remark: T-statistics are within brackets.

In the basic model, the constant equals a long-term average growth rate of 11 economies in the sample – and is significant in the specifications with the value above 1. The main result of the analysis is that changes growth can be explained by a rise in domestic investments and employment, and these variables are robust in all specifications of the equation. Lagged FDI, initial conditions and growth in EU-15 turn out to be insignificant. When the sample is reduced to the economies identified as those where FDI has Granger caused either growth or exports or both (Model 6*), lagged FDI becomes significant and has a negative impact on growth but its strength is negligible (because its coefficient is close to zero). Although the sample is too small for the results to be reliable, they are consistent with the results of the basic model – with the constant, domestic investments and employment, remaining the significant explanatory variables.

5 Conclusion

An overview of recent empirical evidence, together with pool regression results, strongly suggests that the role of FDI in stimulating growth directly through complementing capital formation was negligible. Had FDI complemented host countries' fixed investments more strongly, the results would have been reflected in a higher rate of economic growth (see regression models 2, 3 and 5). That finding supports the fact that most FDI has flown into the region in the form of brownfield investments. If those FDI inflows had come in the form of greenfield investments, the results on the economy would have automatically been visible in a higher growth rate. More importantly, the presence of positive indirect effects of FDI after the initial year of investment is not confirmed for the whole sample (see basic model and models 4 and 5). However, the results of the Granger causality test, which enable individual approach to economies, imply that the growth rates of three open and small economies – the Slovak Republic, Slovenia and Lithuania – have been positively influenced by FDI. Perhaps the explanation to this influence lies in their economic structures that are probably less complex and less diversified than those in the large economies, simultaneously more receptive to spillovers. When the sample is restricted to five economies in which the presence of FDI

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