

SPECIAL ISSUE:

**FOREIGN DIRECT INVESTMENT IN THE EUROPEAN UNION AFTER
THE GLOBAL FINANCIAL AND ECONOMIC CRISIS**

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The (reinvigorating) role of foreign direct investment after the crisis

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This issue of the Journal of East-West Business contains a collection of three papers that responded to the call for papers on “Foreign direct investment (FDI) in the European Union after the global financial and economic crisis” and completed successfully the standard peer review process.

The initiation point of the call for papers was based on the fact that several countries did not fully recover from the devastating consequences of the recent multifaceted global crisis, which emerged as a subprime mortgage – and an energy (oil shock of 2007-2008) – crisis that was triggered in 2007 and gradually developed into a financial, sovereign debt and eventually, an economic crisis without precedent in post-war economic history. Under the consideration of macroeconomic data until 2015 (2014 for FDI) the call stressed that economic recovery in the West was fragile. While the United States (where the crisis commenced) and most European countries (where the crisis impacted the most) had recovered in terms of GDP and inward FDI, only two countries from the European Union (EU) had recovered in terms of employment and similarly, only seven EU countries had surpassed the amount of fixed investment (gross fixed capital formation) that was reported before they were hit by the crisis. The United States had also not recovered in terms of employment and fixed investment.

This picture has not changed two years later from the data the call was referring to. Although the global financial and economic crisis which was triggered in 2007 (subprime and energy crises) has admittedly ended in the first half of the 2010s, full recovery is still in question. The impact of the crisis is still visible across the euro area as data from Eurostat (available at <http://ec.europa.eu/eurostat/data/database>, accessed on March 21, 2018) reveal that several members have not yet fully recovered in terms of GDP, fixed capital formation and employment. By the end of 2017, six EU

members (namely Croatia, Cyprus, Finland, Greece, Italy and Portugal) did not fully recover (i.e. surpassing the amount reported in 2008, before they were hit by the crisis in 2009) in terms of GDP (chain linked volumes, index 2010 = 100). Fourteen EU members (namely Bulgaria, Croatia, Denmark, Estonia, Cyprus, Finland, Greece, Italy, Lithuania, Romania, Slovenia, Spain and Portugal) did not fully recover (six countries were hit by the crisis in 2008 and seven in 2009) in terms of gross fixed capital formation (chain linked volumes, index 2010 = 100). By the end of 2016, eleven EU members (namely Austria, Belgium, Czech Republic, Germany, Hungary, Luxembourg, Malta, Poland, Slovakia, Sweden and the United Kingdom) fully recovered in terms of total employment (Labour Force Survey Data, 15 to 64 years old).

The call referred to the experience of economic adjustment in the EU (with regard to the limited potential for public investment expenditure and the emphasis on improving competitiveness) in order to indicate the critical role of inward FDI. For example, in countries such as Greece, which experience rapid economic adjustment amid economic recession, policy imperatives should improve the conditions favouring the factors that determine inward FDI and the reinvestment rate. The purpose should be on keeping as much of the rents as possible on FDI in the domestic economy and improve the absorptive capacity in order to improve competitiveness, innovation and productivity. Within this context, the call for papers described the focus of this special issue on the factors attracting FDI and its impact on the host and home EU countries in the aftermath of the global financial and economic crisis.

FDI-led-growth in selected euro area countries

The vast literature on the effects of FDI on the host economies links in numerous cases FDI with the economic growth of host economies, indicating that the positive spillover effects may prevail. For example, an increase of inward FDI may increase productivity in the host economy through the transfer of more productive technology, if the host economy is able to absorb this higher level of technology through an adequate level of human capital (i.e. the host economy has the required level of absorptive capacity). However, the difficulty of detecting positive spillover effects of FDI in the host economy is not a simple process and this is why researchers have not yet reached a consensus regarding the impact of inward FDI on the host economy. For

example, in their survey of empirical evidence on knowledge spillovers from FDI, Rojec and Knell (2017) highlight that in several cases multinational enterprises are efficient in preventing leakages and thus spillovers. In that case, productivity growth is not always the result of technological externalities, and several issues have to be considered for successfully identifying spillover effects, such as firm heterogeneity, differentiation between vertical (inter-industry) and horizontal (intra-industry) spillovers, and host country absorptive capacity for knowledge spillovers.

The difficulty of detecting the presence of FDI spillovers is not only associated with the practices of multinational subsidiaries' but also with the level of development and the quality of the institutions in the host economy, as implied by the Investment Development Path (IDP) framework, which relates the international investment position of a given country to its level of development (Dunning and Narula, 1996).

Following Boudier-Bensebaa (2008) who discusses the characteristics and limitations of the IDP framework (data clustering, estimation issues, etc.) and adopts the original quadratic equation, an economy's position on the path is given by:

$$\text{NOIP}_{pc} = \alpha + \beta_1 \text{GDP}_{pc} + \beta_2 \text{GDP}_{pc}^2 + \mu \quad (1)$$

where NOIP_{pc} is net outward investment position per capita, GDP_{pc} is real GDP per capita, α , β_1 , β_2 , are regression coefficients, and μ is a regression error term.

The brief discussion above on the difficulty of detecting the impact of FDI indicates the requirement for the treatment of aggregation bias. Therefore an analysis of the IDP of EU and euro area economies should be based on data samples per industry and from groups of homogeneous countries.

Therefore, equation (1) takes the form of equation (2) for producing estimates of homogeneous data samples per industry:

$$\text{NOIP}_{peI} = \alpha + \beta_1 \text{VA}_{peI} + \beta_2 \text{VA}_{peI}^2 + \mu \quad (2)$$

where NOIP_{peI} is net outward investment position per employee, VA_{peI} is value added per employee, and I is industry. Details about the data are presented on Table 1.

Insert Table 1 here

Table 2 presents the estimates of the IDP per industry for four euro area countries (two groups). Panel unit root testing has been performed beforehand for detecting the presence unit roots (not presented here). The Hausman specification test led to the rejection of the random effect model in favor of the fixed effects model (not presented

here). The results of the estimations on Table 2 are consistent with the IDP framework. Following Boudier-Bensebaa's (2008, p. 51) calculation of the turning point ($-\beta_1/2\beta_2$), the estimates indicate that the VA per employee (0.05 million) places the countries of group 1 beyond stage 3 of the IDP (Dunning and Narula, 1996, p. 2) across all industries (comparing the turning point with the VA per employee from own calculations). Accordingly, the VA per employee (3.84 million) places the countries of group 2 before stage 3 of the IDP across all industries, with the exception of Greece in the financial intermediation industry which is beyond stage 3. The findings are consistent with previous research (due to the lack of studies about Greece the reader may refer to Bitzenis and Vlachos, 2013). This small test of the IDP hypothesis indicates the value of FDI in increasing the recovery rate in the aftermath of the late economic crisis and thus, the importance of the topic of this special issue.

Insert Table 2 here

The papers of the special issue

The papers of this special issue deal with financial integration, the performance of multinational enterprises, and the effect of external inflows on economic growth.

The paper of Aleksandar Stojkov and Thierry Warin under the title "EU membership and FDI: is there an endogenous credibility effect?" focuses on intra-EU bilateral FDI flows. The authors explore whether EU bilateral FDI flows increase as the integration of EU economies deepens, and in particular, how important is the adoption of the euro for the investment decisions of multinational enterprises. When a country adopts the euro, market features of the euro area such as size, similarity and distance are altered and their magnitude dictates the presence of FDI premiums for member states. The authors develop a structural gravity approach and find evidence of a growing European financial integration that has been adversely affected by the global financial crisis. In particular, the authors estimate that the euro effect on intra-EU bilateral FDI is 23 percent (Luxembourg not included).

The paper of Dimitris Manolopoulos under the title "Entrepreneurship and multinational subsidiaries' performance in an era of financial crisis and economic uncertainty" focuses on the performance of multinational subsidiaries in Greece amidst financial recession and high economic uncertainty. The author aims to

investigate the impact of three firm-level characteristics – the extent of autonomy, in-house R&D activity, and strategic mandate (strategic factor) – on subsidiaries’ return on investment and instead of trying to operationalize entrepreneurship based on attitudinal data, the author measures it as manifested on aspects such as subsidiary role, extent of technology centralization, R&D development by in-house (subsidiary) activities, and subsidiary autonomy. The analysis of data from a questionnaire-based survey of 87 foreign firms operating in Greece indicates that a product mandate subsidiary with high levels of autonomy is positively associated with advanced performance, and that a subsidiary formed as a result of merger/acquisition positively impacts on performance.

The paper of Petros Golitsis, Kushtrim Avdiu and Leslie T. Szamosi under the title “Remittances and FDI effects on economic growth: a VECM and GIRFs for the case of Albania” focuses on the effect of external inflows on economic growth. The purpose is to investigate the relationship between FDI, GDP, gross fixed capital formation, and inflation in Albania, which was awarded candidate status by the EU in June 2014. The authors aim to answer 20 research questions in order to investigate the directions of Granger-causality and the presence of a long-run relationship among the variables, and to measure the effects of FDI on the Albanian economy. Their findings indicate that remittances positively affect economic growth and disinflate the Albanian economy, that inflation Granger-causes negatively FDI, and that there is no relationship between FDI, economic growth, and gross fixed capital formation.

References

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TABLES

Table 1 – Summary statistics

<u>Group 1: France and Germany</u>		
variable	NOIP	VApe
N	100	100
missing obs.	0	0
mean	43233	0.27426
st. dev.	77638	0.24095
<u>Group 2: Greece and Portugal</u>		
variable	NOIP	VApe
N	70	80
missing obs.	10	0
mean	-2585.3	0.621
st. dev.	9674.1	1.179

Notes: Data from OECD for the 2003-2012 period, available at <http://stats.oecd.org/> (accessed on March 26, 2018). All values in millions. Value added per employee by own calculations. Industries: agriculture and fishing (not for group 2), manufacturing, construction, financial intermediation, and real estate, renting and business activities.

Table 2 – Fixed effects estimates with robust standard errors

	<u>Group 1</u>		<u>Group 2</u>	
Constant	-34413.4	(49081.6)	5310.19	(24998)
VApe	-74500.9	(298375)	-20566.3	(65339.2)
VApe ²	743914***	(200824)	2677.43**	(1555.04)
LSDV R ²	0.827		0.585	
Within R ²	0.715		0.500	
Durbin-Watson	1.721		2.050	
Jarque-Bera norm. test	0.435		0.588	

Notes: Significant at *** 1 percent and ** 5 percent levels. Standard errors in brackets.