

The Limitation of Investment Development Path Theory. European Union Case

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Abstract

The analysis presented in this paper emphasize the applicability and the limitation of Investment Development Path (IDP) theory, taking into account the results of empirical studies that underlined the differences between the “narrow” and the “broad” version of the IDP framework. We analyse both in a static and dynamic manner, the specific indicators, respectively Gross Domestic Product per capita at PPP and Net Outward Investment /capita for the years 2005 and 2011, in the case of EU countries. The results of the analysis carried out for 27 Member States of the European Union demonstrate that the “narrow” version of the IDP is rather indicative, as the net outward investment position is not always accurately related to the level of economic development. Consequently, as some of the IDP theorists revealed, in order to analyse the relationship between foreign direct investment and economic development it is important to measure the quality of FDI received by a country.

Keywords: *Investment Development Path, Foreign Direct Investment, Net Outward Investment, Gross Domestic Product, European Union*

JEL Classification: *F21, F23, O52*

Introduction

The growing competitive pressures at international level requires technological innovation and the transition from the “industrial approach” of the economy to the “informational approach” as imperative, in order to increase competitiveness and maintain a solid economy in a global and dynamic system. Given the intensive informational nature of globalization, to maintain their competitive advantages, firms must make significant investments in research and development activities, at the same time with the integration of advanced IT techniques and communication in the production process, their knowledge and creativity representing the life-force of the economy¹.

¹ Smick, D.M., *The World is Curved. Hidden Dangers to the Global Economy*, Publica Publishing House, Bucharest, 2009, p.106

Foreign direct investments (FDI) have the potential to sustain this process, if we take into account that the majority of theories concerning FDI reveal, in one form or another, the two-way relation between the volume and the structure of FDI flows generated and received by a country and its level of economic development. As a country is passing through a developing phase, some changes in the conditions offered to local and foreign firms take place, with direct implications on the foreign direct investment inflows² which, in turn, influence the economic structure and its development, acting upon competition and the benefits of local firms³.

Theoretical Aspects

Trying to explain the change in the level and structure of foreign direct investment received and generated by a country, depending on the level of economic development, John Dunning (1993) launched the concept of the Investment Development Path (IDP) based on the assumption that, alongside with the economic development a country changes its net outward investment position given by the level of net outward investment (NOI) per capita⁴.

According to this theory, the investment development path varies from country to country, depending on the level of economic development, the dynamic interaction between the ownership advantages of domestic and foreign firms and the location advantages of countries, being categorized in five stages. Thus, in stage one, specifically mostly to the least developed countries, both inward and outward FDI are very small, while in stage two, FDI inflows, directed mainly to industries based on resources or on a low/medium level of knowledge, grow significantly. However, in both stages the NOI position is negative as the FDI outflows are insignificant because the ownership advantages of local firms are weak. In stage three, even if outward FDI may surpass inward FDI flows, as domestic companies become more competitive, the inward FDI stock remains higher and hence the NOI position remains negative. In stage four, characteristic to developed countries, the NOI position turns to positive, as outward FDI stock becomes higher based on increasingly FDI outflows, while the foreign direct investment received moves into industries intensive in high-technology and knowledge. At stage five, specific of the most developed countries, the NOI position is “an unstable equilibrium around zero” (negative values alternate with positive ones, depending on the evolution of exchange rates and the business cycle phases) and the competitiveness is no longer accurately reflected by the absolute GDP value, but by the net outward investment position⁵.

Subsequently, the proponents of this concept, but also the results of a study conducted by UNCTAD on a number of 135 countries in various phases of economic development⁶ have emphasized some discrepancies between theory and practice. This research has sought to highlight the relationship between the level of development, measured by the level of Gross Domestic Product (GDP) per capita at purchasing power parity (PPP)⁷, and the net outward investment position given by the level of NOI per capita. First of all, the obtained results have

²Durán, J., Ubeda, F., The investment development path: a new empirical approach, *Transnational Corporations*, Vol. 10, No. 2, 2001, p. 1-34

³Dunning, J., Towards a new paradigm of development: implications for the determinants of international business, *Transnational Corporations*, Vol. 15, No. 1, 2006, p.173-227

⁴Buckley, P.J., Castro, F.B, The investment development path: the case of Portugal, *Transnational Corporations*, vol. 7, no. 1, 1998, p.1-15

⁵Narula, R., Dunning, J.H., Multinational enterprises, development and globalisation: Some clarifications and a research agenda, *Oxford Development Studies*, Vol. 38, No. 3, 2010, p. 263-287

⁶ UNCTAD, World Investment Report, *FDI from developing and transition economies: Implication for development*, New York and Geneva, 2006, p.144-145

⁷For the delimitation of the IDP stages the following values of GDP/capita at PPP have been selected: stage 1 (under 2,500\$); stage 2 (2,500-10,000 \$); stage 3 (10,000-25,000 \$); stage 4 (25,000-36,000 \$) and stage 5 (over 36,000 \$).

proved that countries with similar levels of economic development have presented diverse investment positions, mainly due to the different degrees of industrialization and to the governmental policies applied. Secondly, many countries of origin for some large transnational corporations (such as China, India, Brazil, Mexico, South Africa and Turkey) were in the initial stages of investment development (stage 1 or 2). Therefore, these FDI outflows were generated sooner than it should have according to the investment development path theory, records that suggest the occurrence of some alterations in the relation between the development level and the internationalization of production, due to the globalization impact on the economies and companies, especially by increasing competitiveness and business opportunities. Moreover, countries with a limited industrial tradition (such as Kuwait and United Arab Emirates) found themselves in stage three of the investment development path, suggesting that competitive advantages could be derived from other sources than those specific to the company⁸.

Illustrating the error of using only the two indicators mentioned above (GDP/capita at PPP and NOI/capita) and comparing across countries, an empirical study conducted by Boudier (2008) on Central and Eastern European Countries (CEECs) has indicated that most CEECs are at stage 1 or stage 2 of IDP despite the relatively high GDP per capita levels, confirming “the idiosyncratic nature of the IDP” and “the difficulty of testing econometrically its applicability on a large group of economies”⁹.

A similar conclusion is underlined by Narula and Guimón who analysed Czech Republic, Hungary, Bulgaria and Romania as compared with the average for developed and developing countries, as well as with the three largest EU economies and with a sample of three Southern EU member states. The researchers showed that, from 1990 to 2009, the growth of inward FDI was much higher as compared to outward FDI, “leading to increasingly negative NOI positions, a trend which characterizes countries at stage 2 of IDP”¹⁰.

Consequently, some of IDP theorists revised and “updated” IDP framework, underling distinguishes between the “narrow” and the “broad” version. According to them, “each country follows its own particular IDP which reflects exogenously determined characteristics” (such as size, population, economic and political structure, natural resource endowments, and so forth) and therefore the empirical analyses focused on the relationship between NOI position and GDP per capita (narrow version) for any given country “need to be complemented with a deeper qualitative assessment of the interactions between FDI and development”¹¹.

Methodology

In order to verify the applicability and the limitation of the “narrow” IDP framework for the 27 Member States of the European Union (EU), we analyse both in a static and dynamic manner, the specific indicators underlined above, respectively GDP per capita at PPP and NOI/capita. Net outward investment is calculated as the difference between outward FDI stock and inward FDI stock as the theory presented above underline.

We have used empirical data for the years 2005 and 2011 provided by UNCTAD, outward FDI stock and inward FDI, as well as World Bank, population and GDP per capita at PPP. All the current Member States of the EU were grouped by stages of investment development path,

⁸Iacovoiu, V. B., *Foreign direct investments between theory and economic practice. Comparative analysis*, ASE Publishing House, Bucharest, 2009, p.47-48

⁹Boudier-Bensebaa, F., FDI-assisted development in the light of the investment development path paradigm: Evidence from Central and Eastern European countries, *Transnational Corporations*, Vol. 17, No. 1, 2008, p. 37-67

¹⁰Narula, R., Guimón, J., The investment development path in a globalised world: implications for Eastern Europe, *Eastern Journal of European Studies*, Volume 1, Issue 2, 2010, p.5-19

¹¹ *Ibidem*

through the levels of GDP/capita established by UNCTAD (see footnote 7). The centralised statistical data for the years 2005 and 2011 are presented in the Appendix.

Empirical Evidence

For 2005 (chart.no.1), although the graphical distribution of the two analysed indicators corresponds to the standard graphical representation of the IDP (Narula and Dunning, 2010), the empirical data reveals accentuated differences not only at European Union level, but also between the Central and Eastern European (CEE) States. Thus, most of the CEE countries are in the second stage of the investment development path, except for Estonia, the Czech Republic, Hungary and Slovenia, states that reached, at the level of year 2005, the third stage.

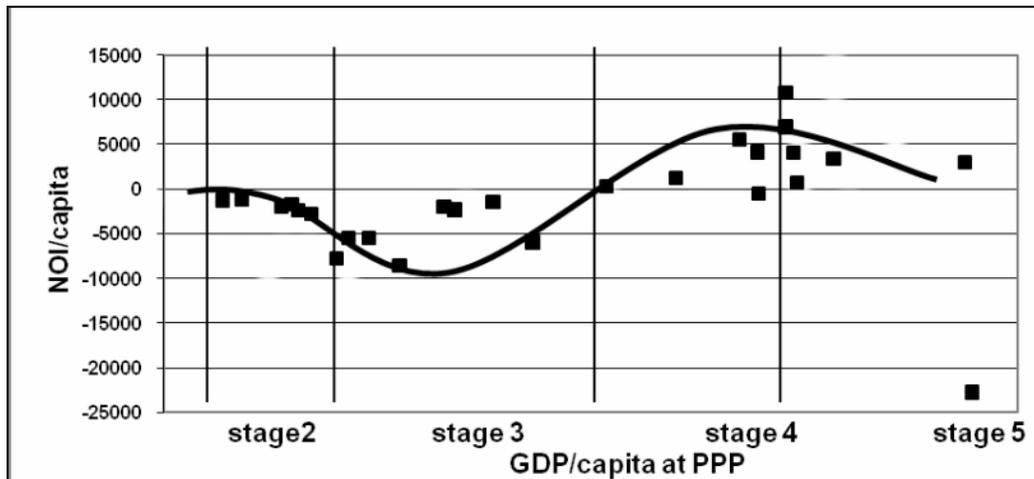


Chart no.1. IDP stages for EU member states (2005)

Note: Luxembourg (-46437) is not represented

Source: empirical data in the Appendix

According to the studies above (Boudier, 2008; Narula and Guimón, 2010), regardless of the relatively high GDP per capita levels, the countries of Central and Eastern Europe, including Czech Republic and Hungary, are at stage 2 of IDP, characterized by increasingly FDI inflows oriented mainly towards traditional branches of the processing industry and intensive branches in terms of labour force. Another research¹² has shown that foreign direct investment attracted by CEE countries have been represented by the market-seeking investments, namely investors interested in gaining access to the regional market, and efficiency-seeking investments, respectively investors interested by the relatively low cost of the labour. Moreover, FDI attracted by most of the Central and Eastern European countries have been targeted mainly towards the privatization of state-owned companies. Consequently, because of these main characteristics, the inward FDI flows had a relatively low impact upon the technological knowledge transfer dynamic and, implicitly, upon the improvement of the quality of the existing production factors¹³.

Regarding the most developed countries in the EU that are found in stage 4 or 5 of the Investment Development Path, a few discrepancies are noted. Firstly, Belgium, situated in stage 4 of the IDP, characterized by positive values of net outward investment position, is net receiver, recording negative value of NOI/capita (-431 USD). Secondly, countries with similar levels of development (the differences recorded by GDP/capita at PPP are insignificant) show

¹² Manea, J., Pearce, R. (2004), Industrial restructuring in economies in transition and TNCs' investment motivations, *Transnational Corporations*, Vol.13, No.2, p.7-27

¹³ Iacovoiu, V. B., op. cit., p.53-54

very different values of NOI position, such as France (4,155 USD/capita) and Belgium (NOI/capita negative) in stage 4 of the investment development path or Denmark (3,040 USD/capita) and Ireland (-22,751 USD/capita) located in stage 5. Finally, states in stage five of the investment development path have deeply negative values of net outward investment position, such as Luxembourg (-46,437 USD/capita), the country with the highest level of economic development in the EU (73,918 USD/capita) and Ireland (GDP/capita is 47,322 USD), which proves according to the theories presented above a decline in the competitiveness.

Compared to 2005, in the year 2011 (chart no.2), the graphical distribution of the two analysed indicators, namely GDP/capita measured at PPP and NOI/capita, does not correspond to the standard graphical representation of the IDP, because the number of the countries located in stage four of the investment development path that show negative NOI positions has increased significantly, from one (Belgium) to four (Czech Republic, Greece, Malta, Slovenia), as well as the number of EU economies in stage 5 of IDP that have negative values of NOI/capita (Belgium, Ireland, Luxembourg).

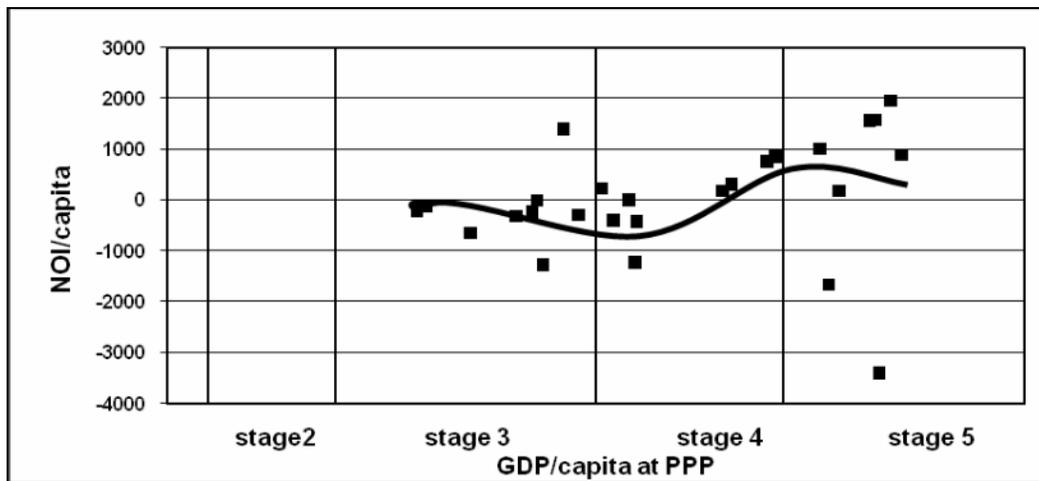


Chart no. 2. IDP stages for EU member states (2011)

Note: Luxembourg (-11198) is not represented

Source: empirical data in the Appendix

It has to be noted the fact that, unlike 2005, when NOI/capita values were highly dispersed in the interval (-46,437; 10,811), in 2011 net outward investment positions dispersion of the EU countries decreased significantly (-11,198; 1,939), suggesting a severe decline in international investment flows dynamic, which may be due, in large measure, to the significant reduction of appetite for investment of firms outside country borders as a result of the global economic crisis. Thus, the gap between EU Member States, both in terms of the level of development and the net outward investment position, are reduced, Central and Eastern European countries being found either in stage three of investment development path, either in stage four (Czech Republic and Slovenia) together with traditionally developed European States (Spain, Italy, France and the UK).

A comparative analysis of the two series of data, in the years 2011 and 2005, helped us notice a few evolutions which cannot be explained by the “narrow” version of the investment development path theory.

First of all, the Czech Republic, Greece, Malta and Slovenia have evolved to stage 4 of the investment development path registering significant increases in GDP/capita at PPP (over 8,000 \$), although they remain net receivers of foreign direct investment. Comparatively, Cyprus, the country whose NOI position has changed significantly, from (-5,907)USD/capita to 1,389

USD/capita, becoming in year 2011 net generator of FDI, is still positioned in stage 3, registering an increase of GDP/capita at PPP of 1,500 USD.

Secondly, Belgium, which was situated in 2005 in stage 4 of the investment development path that involves, according to theories, a certain degree of economic maturity that leads local firms to the internationalization of production, is a net receiver of FDI in 2011 as well, when it is to be found in stage 5 of development, on a position superior to that of Finland, which is a net generator of foreign direct investment.

Thirdly, the United Kingdom, whose level of competitiveness still remains high, demonstrated by the positive value of the indicator NOI/capita (848 USD), moves backwards from stage 5 (in 2005) to stage 4 (in 2011), standing on a net inferior position, with a GDP/capita of 35,494 USD, as compared to Belgium, Ireland and Luxembourg, net receivers of FDI both in 2005 and in 2011. Denmark is found in a similar situation, whose GDP/capita at PPP decreases with approximately 6,000 USD, although the level of competitiveness of the economy, given by the amount of NOI/capita, ranks 3rd among the 27 countries analysed.

The presented analyses demonstrate that, 10 of the 27 European countries have registered evolutions that do not fit into the narrow IDP framework, in the sense that, in essence, the economic development of some of them, namely the Czech Republic, Greece, Malta, Slovenia, Belgium, Luxembourg and Ireland has been based mostly on the entries of FDI and not on the benefits of ownership advantages of domestic firms, while countries that own significantly better net outward investment positions with positive values of NOI/capita, have either faced a decrease of the development level (United Kingdom and Denmark) or have registered positive evolutions, but significantly inferior, such as Cyprus.

Conclusions

Empirical studies made after the development of the concept of Investment Development Path showed that a number of States located in the upper stages of the IDP, stages 4 or 5, presented deeply divergent investment positions, and countries in the initial stages (stage 1 or 2) generated flows of foreign direct investment, contrary to the theory. Consequently, revising and updating the IDP framework, some theorists have underlined the differences between the “narrow” version that focuses only on the quantitative aspects of the relationship between FDI and development and the “broad” version focused on the quality of foreign direct investment received by a country, in terms of attracting the kind of FDI that contributes to enhance location-specific assets and domestic technological strengths.

The presented analyses on the two-way relation between the level of economic development, given by GDP/capita at PPP, and net outward investment position (NOI/capita) for the 27 EU Member States in 2005 and 2011 demonstrate that the “narrow” version of the IDP is rather indicative, as the net outward investment position is not always accurately related with the level of economic development. Thus, there are countries (7 of the 27 states analysed) that move towards stage 4 or stage 5, achieving high levels of development, despite the fact that failed to progress towards becoming outward investors. Also, there is a country, namely Cyprus that become a significant outward investor, but failed to reach a higher level of development and move towards stage 4. Consequently, these results support and strengthen the conclusion that “measuring the *quality* of FDI is just as important as measuring its *quantity*” (Dunning, 2006; Narula and Dunning, 2010; Narula and Guimón, 2010) in order to analyse the relationship between foreign direct investment and development.

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Appendix

The IDP stages for EU member states, 2005 and 2011

2005			2011		
Countries	GDP/capita in PPS (USD)	NOI/capita (USD)	Countries	GDP/capita in PPS (USD)	NOI/capita (USD)
STAGE 1 (Below 2500)					
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
STAGE 2 (2500 – 10000)					
Bulgaria	3443	-1179	N.A.	N.A.	N.A.
Romania	4557	-1115	N.A.	N.A.	N.A.
Latvia	6857	-1969	N.A.	N.A.	N.A.
Lithuania	7477	-1692	N.A.	N.A.	N.A.
Poland	7839	-2327	N.A.	N.A.	N.A.
Slovakia	8616	-2748	N.A.	N.A.	N.A.

Appendix (cont.)

STAGE 3 (10000 – 25000)					
Estonia	10087	-7749	Bulgaria	14604	-224
Hungary	10818	-5440	Romania	15163	-123
Czech Republic	11995	-5408	Latvia	17692	-662
Malta	13786	-8553	Lithuania	20374	-329
Portugal	16406	-1903	Poland	21310	-243
Slovenia	17032	-2274	Hungary	21611	-17

Appendix (cont.)

Greece	19269	-1408	Estonia	21942	-1280
Cyprus	21600	-5907	Cyprus	23133	1389
-	-	-	Slovakia	24022	-304
STAGE 4 (25000 – 36000)					
Spain	25897	315	Portugal	25385	216
Italy	29982	1281	Czech Republic	26046	-403
Germany	33728	5630	Greece	26948	-3
France	34753	4155	Malta	27294	-1235
Belgium	34836	-431	Slovenia	27412	-432
-	-	-	Spain	32424	168
-	-	-	Italy	32928	299
-	-	-	France	34993	752
-	-	-	<i>United Kingdom</i>	35494	848
STAGE 5 (Over 36000)					
<i>United Kingdom</i>	36420	6980	Finland	38083	996
Netherlands	36421	10811	Belgium	38605	-1675
Finland	36865	4089	Germany	39212	171
Austria	37092	719	Denmark	40983	1551
Sweden	39241	3435	Sweden	41300	1561
Denmark	46937	3040	Ireland	41543	-3399
Ireland	47322	-22751	Austria	42225	1939
Luxembourg	73918	-46437	Netherlands	42834	883
-	-	-	Luxembourg	89992	-11198

Note: bold – evolution to the next following stage; italic – regress to the stage immediately below; bold&italic – GDP/capita decreasing inside the same stage.

Source: data for 2005 – Iacovoiu, 2009, p.48-49; data for 2011- own calculations based on statistical data from UNCTAD, www.unctad.org and World Bank, www.worldbank.org