

Pawel Folfas

Warsaw School of Economics, Warsaw, Poland

FOREIGN DIRECT INVESTMENTS IN THE TIME OF CRISIS: FDI INFLOWS TO THE NEW EU MEMBER STATES

1. Background studies on correlation between FDI and economic performance

The first group of studies describes various aspects (positive and negative) of FDI impact on host economies (e.g. [Barrel, Pain 1997; Borensztein et al. 1998; Lim 2001; Moran et al. (eds.) 2005; Oziewicz 2003, pp. 155-178; Zorska 2007, pp. 280-315]). The crucial question is whether and how FDI inflows make influence on economic growth. On the contrary, another group of studies focus on FDI vulnerability to general economic performance (e.g. [Zorska 2007, pp. 33-36]) or to shocks in the world economy such as financial crisis in Asia (e.g. [*The Financial Crisis...* 1998]) or September 11 events (e.g. [*World Investment Report...* 2002, p. 5]).

Moreover, there are analyses treating FDI as a channel for international transmission of disturbances (e.g. [*Foreign Direct Investments...* 2004]). Finally, there are studies analyzing both growth-driven FDI and FDI-led growth in selected countries (e.g. [Seabra, Flach 2005; Magnus, Fosu 2008]).

2. Impact of economic performance on FDI inflows

Data for 1980-2007 show that a bulge in global FDI accompanies high economic growth and a trough accompanies low growth (see Figure 1). There were years when the same tendency or trend reverse referred simultaneously to FDI inflows and real GDP growth (e.g. 1986-1988, 1991, 1994-1997, 1998-2000, 2001, 2006).

On the contrary there were periods in which changes in FDI inflows were lagged regarding changes in real GDP growth (e.g. 1988-1990, 2003-2005).

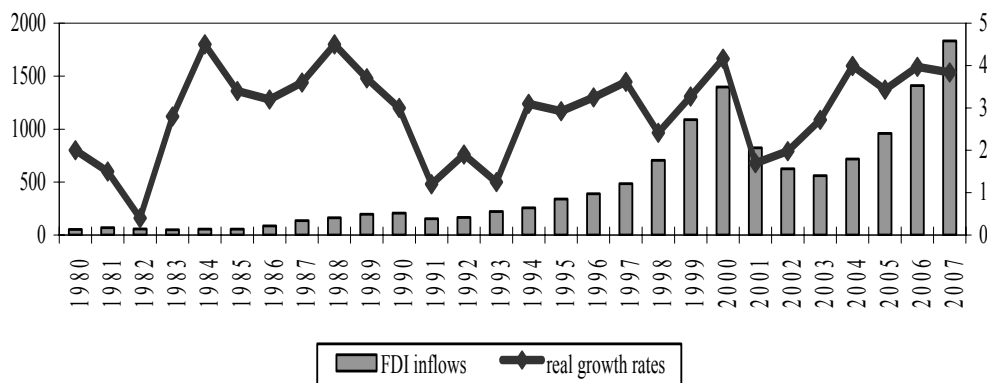


Figure 1. FDI inflows (billions of dollars) and real growth rates of GDP (%) in the world, 1980-2007

Source: based on UNCTAD FDI database.

Moreover, the relationship between GDP growth and FDI inflows is not uniform across the groups of economies. They go together in developed (see Figure 2) but not in developing countries (see Figure 3). Different patterns of FDI inflows can be explained by the higher degree of integration among developed economies. Namely business cycles spread much faster across developed countries than others.

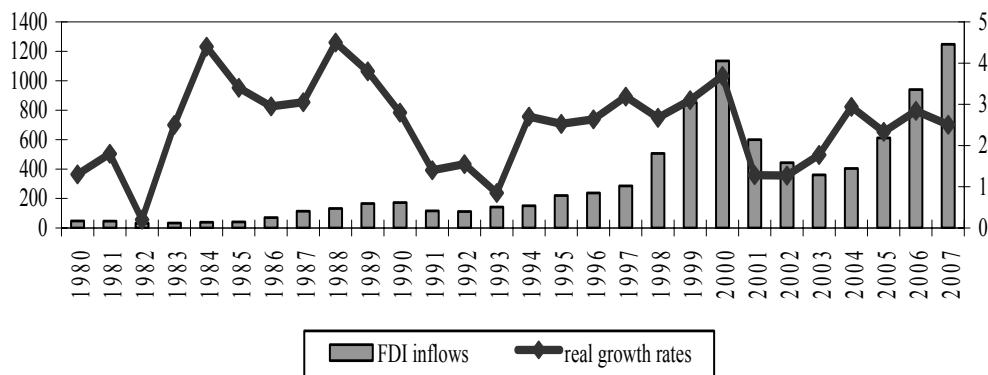


Figure 2. FDI inflows (billions of dollars) and real growth rates of GDP (%) in developed countries, 1980-2007

Source: based on UNCTAD FDI database.

After paying attention to disparities between two groups, namely developed and developing countries, scrutinizing differences within group appears to be worth taking into consideration. This paper focuses on “New EU Member States” (new EU-12) compared with other developed countries.

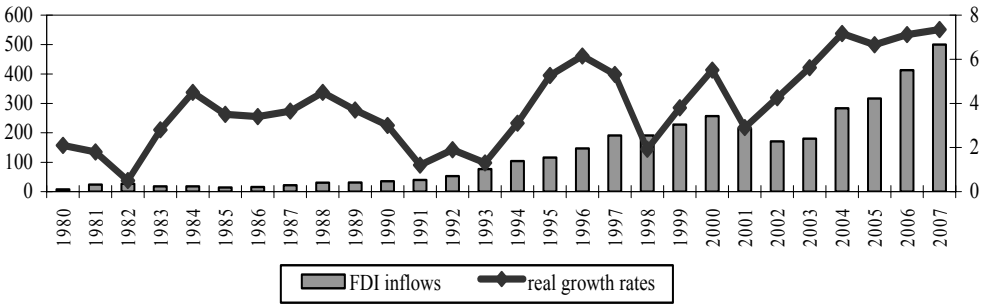


Figure 3. FDI inflows (billions of dollars) and real growth rates of GDP (%) in developing countries, 1980-2007

Source: based on UNCTAD FDI database.

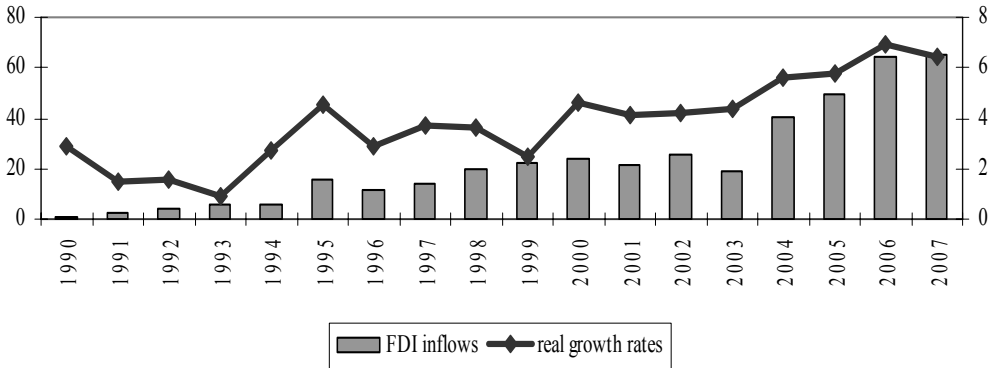


Figure 4. FDI inflows (billions of dollars) and real growth rates of GDP (%) in new EU-12 countries, 1990-2007

Source: based on UNCTAD FDI database.

Data for 1990-2007 reveal difference between new EU-12 countries and other developed economies (see Figure 4). Economic slowdown in the early 1990s did not affect attractiveness of the new EU-12 countries. These countries had been cut off from substantial FDI inflows for so long that they had a lot of “catching up” to do. Even more interesting seems to be the situation in these countries during sharp decline of global FDI inflows (2001-2003).

3. FDI inflows to the new EU Member States during 2001-2003 downturns

In 2001 FDI inflows to new EU-12 member countries declined by almost 10%, while global FDI inflows fell definitely more sharply (by more than 40%)

and in developed countries even more. Therefore, FDI inflows grew in 7 new EU member countries (see Table 1). FDI inflows were highly concentrated, namely Poland, the Czech Republic, Hungary and Slovakia accounted for more than three-quarters of total region's inflows. FDI inflows' increase in a number of countries was helped by stability and above-average GDP growth rates in the region, as well as ongoing privatization in some latecomer industries (e.g. telecommunications, banks). Poland, the region's leading recipient since 1996, suffered a decline in 2001. The reason lay in the Polish economy: privatization was coming to an end and macroeconomic problems were surfaced. The majority of EU-12 countries kept their position as high-potential and high-performance recipients of FDI [*World Investment Report...* 2002, pp. 68-71].

In 2002 FDI inflows to new EU-12 member countries reached a peak since 1990, rising in 8 and falling in 4 countries. FDI inflows in the region grew by more than 17%, on the contrary global FDI inflows decreased by more than 24%. Average decline in all developed countries was even higher (see Table 1). Firms tended to shed activities based on unskilled labour and to expand higher value-added activities, taking advantage of the educated local labour force. The growth in countries such as the Czech Republic, Slovenia and Slovakia was particularly strong due to the peak privatization and investments in automobile industry. The harmonization of regulations, lowering corporate taxes, maximizing the benefits from EU instruments and bilateral and regional agreements appear to be significant roots of FDI inflows' growth in this region. However, Poland (the leader of the region) suffered again for FDI inflows decline [*World Investment Report...* 2003, pp. 59-62, 64-66].

In 2003 FDI inflows to EU-12 declined by almost 26% and that time the decrease was stronger than in global inflows. However, 6 countries reported significant growth and the decline in the whole region was almost entirely due to the end of privatization in the Czech Republic and Slovakia. Poland, the Czech Republic and Hungary were three top locations for inward FDI. Highly skilled workforce, free access to the EU market and favourable business climate due to EU accession made again this region an attractive location for FDI. The leader of the region reported growth, mainly due to new systems of incentives for investors implemented in May 2002 [*World Investment Report...* 2004, pp. 69-72, 75-79; *World Investment Report...* 2002, p. 69].

The year 2004 was the first year of post-2003 global FDI recovery. FDI inflows into the 10 EU-accession countries, Bulgaria and Romania rose by 113.25% with Poland, the Czech Republic and Hungary, in that order, receiving the largest FDI inflows. On the contrary, in the EU-15 total FDI driven by the low economic growth declined [*World Investment Report...* 2005, pp. 81-85].

Table 1. FDI inflows into new EU-12 member countries, 2000–2004

Item	FDI value in million USD					FDI change in %			
	2000	2001	2002	2003	2004	2001/2000	2002/2001	2003/2002	2004/2003
World	1398182.817	824444.7811	625167.8814	561056.2921	717695.4978	-41.0346	-24.1710	-10.2551	27.9186
Developed economies	1134563.952	600291.2478	442927.5836	361050.0838	403711.0314	-47.0906	-26.2146	-18.4855	11.8158
EU-15	674.283	362.413	284.064	240.576	174.153	-46.2521	-21.6187	-15.3092	-27.6100
EU-12	23864.84972	21531.92932	25322.46879	18845.3641	40188.59555	-9.7756	17.6043	-25.5785	113.2545
Bulgaria	1001.6	813	904.6	2096.947989	3452.339504	-18.8299	11.2669	131.8094	64.6364
Cyprus	854.8751705	944.4447036	1057.682843	893.3880466	1090.397532	10.4775	11.9899	-15.5335	22.0520
Czech Republic	4986.4	5641.4	8482.7	2101.4	4974.3	13.1357	50.3652	-75.2272	136.7136
Estonia	386.9	542.4	284.3	918.84	971.35	40.1913	-47.5848	223.1938	5.7148
Hungary	2764.061819	3936.045586	2993.565399	2137.401419	4505.625265	42.4008	-23.9448	-28.6001	110.7992
Latvia	412.6	132	253.7	303.5	637	-68.0078	92.1970	19.6295	109.8847
Lithuania	378.8725	445.8125	732	179.2	773.1	17.6682	64.1946	-75.5191	331.4174
Malta	618.472068	250.7586215	440.4331217	967.7772919	396.1191077	-59.4551	275.6403	319.7331	-59.0692
Poland	9343	5714	4131	4589	13091	-38.8419	-27.7039	11.0869	185.2691
Romania	1056.753271	1157.931473	1140.652205	2196.303979	6435.591316	9.5744	-1.4923	92.5481	193.0192
Slovakia	1925.4	1584.1	4123.4	2159.97	3030.64	-17.7262	160.2992	-47.6168	40.3094
Slovenia	135.914894	370.036437	1659.301461	301.635377	831.132826	172.2560	348.4157	-81.8215	175.5422

Source: based on UNCTAD FDI database.

Table 2. FDI confidence index in new EU-12 member countries which belong to the top 25 economies with the highest confidence, 2001-2005 (ranking position in the brackets)

Country	2001	2002	2003	2004	2005
Czech Republic	1.20 (16)	1.07 (14)	0.88 (13)	0.93 (14)	1.363 (12)
Hungary	–	1.02 (16)	0.82 (17)	0.88 (19)	1.157 (11)
Poland	1.26 (11)	1.15 (11)	1.06 (4)	0.96 (12)	1.363 (5)

Source: based on At Kearney's data.

In conclusion, the new EU-12 member countries managed to resist the negative trends in global FDI and FDI into developed economies. National and regional factors (especially pre-accession reforms) lessened the vulnerability of the region to worldwide economic downturn. However, the EU-12 was not a uniform group and some countries were affected more by global crisis in FDI. Therefore, analyzing FDI confidence index (see Table 2) brings also equivocal results. On the

one hand, the value of index during FDI downturn decreased, on the other, the relative confidence of some economies temporarily grew. A fundamental question is whether the FDI inflows into the new EU-12 member countries can resist the current economic crisis and whether the accession enhanced the vulnerability to global trends.

4. FDI inflows in the time of current economic crisis

The global financial crisis had a limited impact on FD flows in 2007, but began to strike in 2008. The sub-prime mortgage crisis that erupted in the United States in 2007 has affected financial markets and created liquidity problems, leading to higher costs of credit in many countries. However, both micro- and macroeconomic impacts affecting the capacity of firms to invest abroad were relatively limited in 2007. The global economy was also affected by the significant depreciation of dollar. The slowdown in the world economy and the financial turmoil has led to a liquidity crisis in money and debt markets in many developed countries. As a result, M&A activity has begun to slow down markedly. In the first half of 2008 the value of such transactions was 29% lower than in the second half of 2007. Corporate profits and syndicated bank loans were also declining. FDI flows in 2008 might have decreased even by 10% [*World Investment Report...* 2008].

However, the forecasts about FDI flows are definitely less gloomy than the forecast about worldwide, especially European economic performance. Companies still appear to be positive, however they underline the climate of increased uncertainty. Almost 70% companies still intend to increase their foreign investments during the period of 2008–2010, but the proportion of those which only plan a moderate increase accounts for about half of all companies. TNCs report that financial instability due to mortgage crisis has had a significantly negative impact on their investments plans during the period of 2008-2010. Companies are very sensitive to the risk of a further deterioration of the global economic situation [*World Investment Prospect...* 2008].

The regions with the most promising outlook are South and Southeast Asia, the new EU-12 and Southeast Europe and CIS (see Figure 5). TNCs evince a stronger interest in new EU-12 member countries than other developed economies. The main advantages of this region are: access to the EU regional market, strong market growth and the availability of cheap labour. Growth prospects remain good for 2008-2010, around 5% *per annum*. Integration into the EU and the availability of low-cost and skilled labour force has turned the region into a hot spot for the location of new production facilities and for the relocation of manufacturing sites from Western Europe. Poland, the Czech Republic, Bulgaria and Romania, in that order, belonged in 2008 to 30 preferred locations [*World Investment Prospect...* 2008; *Global Economic Prospects...* 2008].

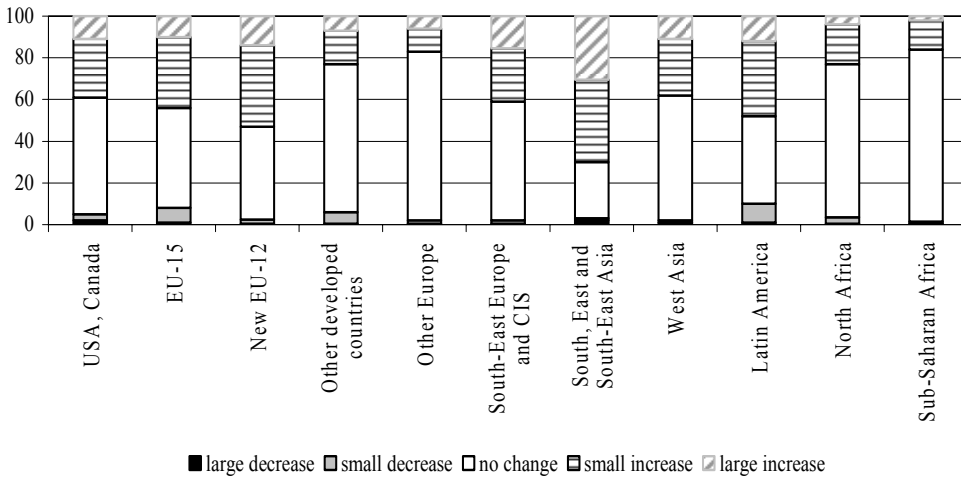


Figure 5. FDI growth prospects, by host region, 2008-2010 (% of responses to the UNCTAD survey of 226 companies)

Source: [World Investment Prospect... 2008, p. 24].

To sum up, FDI inflows into the new EU-12 countries again appear to be less vulnerable to global economic crisis than inflows to other developed countries. Therefore, disparities between EU-12 countries can also be expected.

5. FDI inflows to Poland

Poland is the biggest country and the biggest FDI recipient among the new EU-12 member countries. Below is presented a study of casual link based on Granger causality between FDI and real growth rate of GDP in Poland during the last decade. A time series *X* is said to Granger-cause *Y* if it can be shown, usually through a series of F-tests on lagged values of *X* (and with lagged values of *Y* also known), that those *X* values provide statistically significant information about future values of *Y* [Granger 1969]. The results presented in Table 3 allow to state that during the last decade real GDP growth did not cause, in Granger sense, FDI inflows to Poland.

These results prove that vulnerability of FDI inflows to Poland to economic performance during the last decade was rather limited. Therefore, the prospects for Poland also confirm limited vulnerability to current economic crisis.

In next years Poland seems to be the most attractive business location among the new EU-12 member countries [World Investment Prospect... 2008, p. 3]. According to the data of the Polish Information and Foreign Investments Agency

FDI inflows prospects are optimistic. Firstly, in the current downturn Poland stands a good chance to attract efficiency-oriented businesses. The weakening zloty makes investment costs in Poland lower and thus attracts investors from sectors like the BPO or food industry who opt for transferring enterprises to Poland. The country is still attractive for investors on a cost-cutting drive considering lower production costs vital to go through the crisis. Secondly, in 2008 the Polish Information and Foreign Investment Agency realised 56 investment projects from 17 countries. The projects were jointly worth 1.5 billion EUR. The greatest number of projects was realised in the BPO sector (21) and the automotive industry (13). By comparison in 2007 the agency closed 57 projects of a joint value of 1.3 billion EUR. There is no sign of slump in investors' interest in greenfield investment [PAIIZ News 2009]. Thirdly, changes in the Polish tax system introduced in 2008 will improve Poland's investment attractiveness [Take Our 2009 Tax Trip, 2009].

Table 3. Granger causality test (Poland, GDP growth \Rightarrow FDI inflows, quarterly time series 1999Q1 – 2008 Q4)

<p>Model</p> $\ln \text{FDI}_t = \alpha + \sum_{i=1}^4 \beta_i \ln \text{FDI}_{t-i} + \sum_{j=0}^4 \gamma_j \ln \text{GDPGROWTH}_{t-j} + \varepsilon_t$ <p>FDI – value of FDI inflows to Poland in million USD, GDPGROWTH – real growth rate of GDP in Poland (%), Optimal number of lags based on Akaike's criterion</p>
<p>Granger causality test</p> <p>$H_0: \gamma_0 = \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = 0$ (GDPGROWTH does not cause, in Granger sense, FDI) against $H_1: \gamma_j \neq 0; j \leq 4$ (GDPGROWTH cause, in Granger sense, FDI)</p>
<p>F-test (possible due to stationarity of time series; stationarity checked by Dickey-Fuller test; also non-stationarity caused by seasonal fluctuations was excluded)</p> <p>$F = 1,59$ $F_{\alpha=0,0001} = 5,59$ $F \leq F_{\alpha=0,0001}$: the null hypothesis not rejected</p>

Source: based on data of National Bank of Poland and computations made in STATA and SPSS.

Therefore, according to the report *Onshore, Nearshore, Offshore: Unsure?* [2009], Poland is one of the most attractive BPO investment destinations. The report clearly indicates that, first of all, the pace of the Polish economy development outstrips other EU economies. The 2009 economic forecasts for Poland show GDP in the country may rise by 2% as opposed to the majority of the rest of European countries

where the economy is expected to shrink. Secondly, the country may be proud of a substantial young and talented pool of specialists, with 400 000 university graduates enriching the available qualified cadres every year. The quality of provided services and creativity of Polish employees has always been highly appreciated by foreign concerns and thus was crucial in attracting further investment projects, also those involving advanced processes.

On the contrary, a dynamic economic situation makes it difficult to produce viable economic forecasts of FDI inflows to Poland in 2009. Moreover, in 2008 FDI inflows fell by 20% compared to 2007. However, the first data for 2009 are definitely positive. In January 2009 FDI inflows reached a result by 35% better than in January of 2008.

To sum up, Poland as a host economy has a great opportunity to become the “winner” of the current crisis.

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