

Mapping flows and patterns of foreign direct investment in central and eastern Europe, Greece and Portugal during the crisis

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1. Introduction

Economic growth in Europe took a downturn in 2008/2009 due to the financial crisis. Since then, recurring setbacks and modest short-term recoveries have occurred, with significant national variations. Foreign direct investment (FDI) was one of the driving factors of the pre-crisis boom period, when large capital inflows – especially in the banking and real estate sectors – contributed to economic overheating in several countries. In response to the new macroeconomic environment and financing conditions that set in from 2008 – such as contracting demand for products and increased perceptions of investment risk – FDI flows suffered a harsh Europe-wide decline. Data indicate some recovery of cross-border investment activities in some countries already in 2010 and more robustly in 2011. But the euro crisis brought about a new setback in 2012 and 2013 when EU27 FDI flows plummeted below the 2009 level. Preliminary 2014 data and prospects for 2015 signal some recovery, but not beyond the 2011 level. FDI has lost its growth-engine function, while economic growth has become sluggish and new EU members' efforts to catch up with the EU15 have slowed down. Meanwhile, some characteristics and the structure of FDI have also changed, making a new review necessary.

This chapter looks at the changing characteristics of FDI in the 11 new EU member states (NMS11), as well as in two southern European EU members – Greece and Portugal – in the years 2008 through 2012/2013. The countries have several characteristics in common. All are less developed than the EU average in terms of per capita GDP and they are net FDI importers, which means that inflows mostly outpace outflows. Most of them relied on FDI in the pre-crisis period to underpin economic growth and to obtain access to markets and the technology necessary to catch up with the more developed parts of the EU. A lasting setback in FDI flows may be one of the factors that has curtailed catch-up in recent

years. An analysis of available statistical information will help us to identify the relationship between FDI and economic growth and to describe the growth-enhancing effects of FDI during and since the crisis.

The method used in this chapter is descriptive, as is often the case for discussing short-term changes. It relies on standard datasets and compares cross-country changes, but without going into a general explanation of causal relationships. Scrutiny of data and resources is perhaps a novelty compared with most econometric studies.

FDI is defined by IMF and OECD conventions (Balance of Payments Manual, 5th edition (IMF 2007), and its statistical reporting as part of the balance of payments is followed by Eurostat and the national banks of all EU member countries. Recently, one has been able to observe mounting problems in interpreting data as the delimitation of FDI from other cross-border financial transaction has become blurred. This chapter indicates this problem and corrects some of the fallacies of reporting, but only if official sources are available for the purpose. Another way of overcoming incoherencies in FDI statistics is to use different sources with indicators of different content describing complementary aspects of the FDI activity. We do this to reveal trends in greenfield investment and to present the role of the foreign sector in the economies under survey.

First, we look at FDI flow and stock trends based on FDI statistics of the balance of payments (wiiw FDI database incorporating national statistics and Eurostat). As for FDI inflow and outflow data we make some adjustments in the time series published by Eurostat. Based on the reporting of the national banks of Poland and Hungary we exclude the investments of special purpose entities (SPEs) and in the case of Hungary also capital in transit. Data for 2014 are not yet available for all countries; those that are are based on the Balance of Payments Manual, 6th edition (IMF 2013). We estimated the flow data relying on available information.

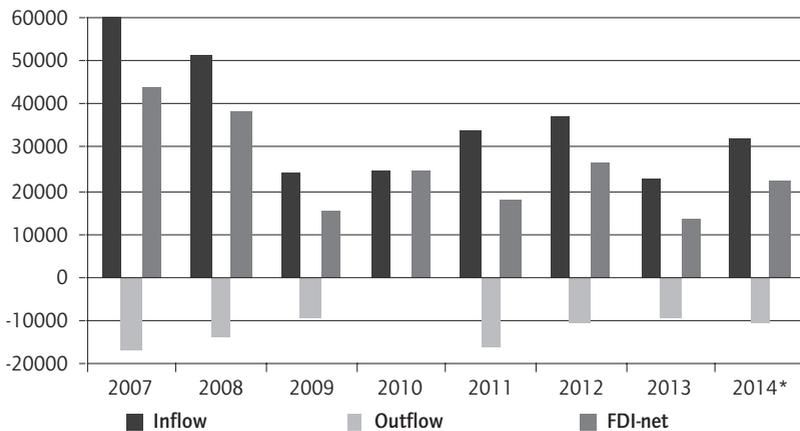
Next we analyse the change in the number of announced greenfield investment projects, based on www.fdimarkets.com, a database that reports on new cross-border investment projects in detail. Thirdly, Eurostat's foreign affiliates statistics (FATS), which comprise data on majority foreign owned enterprises, indicate the importance of the foreign sector for the relevant economies. Finally, conclusions are drawn concerning the new characteristics and structure of FDI and on the FDI-based catching-up of new member states and southern European countries.

2. The relationship between FDI inflow, outflow and net FDI

The balance of payments concept of FDI registers a country's inflows and outflows, as both investments and disinvestments. As usual in the FDI-related literature, we do not track the highly volatile flows of investments and disinvestments separately, but consider both inflows and outflows in net terms.

FDI in- and outflows in the 13 selected countries roughly followed the European trend. They reported record high flows in 2006–2007, sharp declines in subsequent years and modest recovery in 2011 and 2012, followed by a renewed setback. Changes went in the same direction regarding both the direct investments of foreigners in the host countries (FDI inflow having a positive sign in the balance of payments) and the investments of domestic companies abroad (FDI outflow having a negative sign in the balance of payments). As a result, the amount of net FDI diminished in the years 2009–2013 to about one half of the level attained in 2007–2008 (Figure 1). The lowest level of both net FDI and FDI inflow was recorded in 2013, which points to a lasting phenomenon of low FDI in the region.

Figure 1 FDI inflow, outflow and net FDI in the NMS11, Greece and Portugal



Note: Balance of Payments Manual (IMF 2013); 2014 estimated. Hungary and Poland: excluding SPEs, Hungary excluding capital in transit.

Source: National statistics and Eurostat

Net FDI is one of the financing resources of the current account deficit. Since the outset of the financial crisis, capital inflows of all kinds have diminished and current account deficits were cut back. Rebalancing was steepest in countries that had previously relied on external financing to a large extent, such as Bulgaria, Greece and Romania. But FDI was usually less curtailed than portfolio and other investments and thus the role of FDI increased in the financing of current account deficits. (Other relatively stable inflows were the transfer of EU funds and in some countries' IMF loans.) Although FDI did mitigate the need for current account rebalancing, it was far from enough. Rebalancing took place mainly by the contraction of domestic demand, which triggered a further fall in domestic market-oriented FDI. Demand contracted also in the main trading partners, thus curtailing FDI in export-oriented capacities. Still, net exports were able to mitigate the GDP decline and in general exports recovered more rapidly in the wake of the financial crisis than domestic demand. Foreign subsidiaries played a leading role in export recovery to the extent that they have dominated the export sectors of a particular country.

The negative balance of payments effect of FDI is that it is an important item in the current account. The income earned by the foreign investor is booked as income outflow from the host country. (Incomes accrued by outward investments are booked with a positive sign.) While rebalancing in the wake of the crisis affected mostly the balance of goods and services, the income account continued to show large deficits of the host country. In fact, most of the foreigners' income was repatriated. Positive overall FDI-related balance of payments effects could be achieved only if the FDI had produced trade surpluses, compensating for repatriated incomes. In general, high exposure to FDI triggers high profit repatriation, but also creates large export capacities and a positive trade balance. This has been the case in Czechia, Hungary and Slovakia, where foreign affiliates account for about 70–80 per cent of exports (OECD 2010).

The importance of FDI goes well beyond its role in the balance of payments. FDI inflows may finance new investments and allow access to technology and markets. FDI outflows, on the other hand, indicate the competitiveness of domestic companies in penetrating foreign markets based on their own superior technology and specialised knowledge. Thus while from a balance of payments viewpoint outward FDI is a capital loss to the country, it may play a positive role from a developmental viewpoint. It allows domestic companies to improve competitiveness by

sourcing cheap inputs and to penetrate new markets, which in turn can have positive production and employment effects.

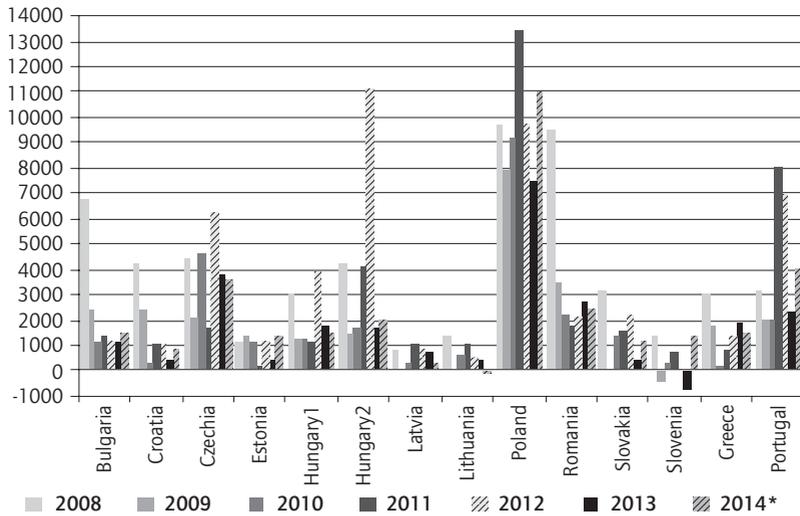
Developed countries usually export more FDI than they import or the two items are similar to each other at a high level. Catching-up countries, such as those under survey, have far more FDI inflow than outflow, although their outward FDI has increased with time. Some of the more developed countries among those we are looking at register significant amounts of FDI outflows, including Czechia, Estonia, Hungary, Poland, Greece and Portugal. The FDI outflow of the other countries is marginal and thus FDI inflow and net FDI are similar in their case. A negative net-FDI position, when outflows are higher than inflows, rarely occurs among the countries under survey, but it did in two years in Greece and one year in Portugal, Latvia, Slovakia and Slovenia. In the latter three countries this happened in 2009 when inflows were negative. Negative FDI inflow occurs when the capital withdrawal of foreign investors in the host country is larger than their new direct investments. Such deleveraging can be a sign of an acute crisis either in the home or the host economies or signal a change in international capital flows away from emerging markets, as was the case in 2013.

Companies from the countries hardest hit by the crisis curtailed their foreign investment activity the most (Greece, Slovenia). Poland was in much better shape and boosted outward FDI. Also Hungary and Czechia have domestic multinationals that are penetrating less advanced countries of the region. Unexpected high fluctuation in FDI outflows may occur, as in the case of inflows, for example, in Portugal in 2010–2011, when disinvestments of one year were compensated by even higher investments in the next. In fact, the small overall FDI outflow figure for 2010 and its sudden increase in 2011 (Figure 1) can be attributed mainly to this one country.

3. FDI inflow trends

Because inward FDI is of overwhelming importance for catching-up economies we look into it in more detail, explaining trends over years and across countries. We try to identify lasting effects and distinguish them from transitory phenomena. It must also be kept in mind that, beyond the general and policy framework conditions, FDI inflows may also fluctuate due to single large deals or for statistical reasons.

Figure 2 FDI inflows (EUR million)



Note: Hungary1 and Poland excluding SPEs; Hungary2 excluding SPEs and capital in transit; 2014 estimated.
Sources: National statistics and Eurostat

Let's first summarise the main trends (Figure 2). FDI inflows were at a high level in most of the countries in 2008 with the remarkable exception of the Baltic states, which fell into recession and whose receipt of FDI had been declining already the previous year. Due to the financial crisis 2009 inflows were only a fraction of 2008 in most countries, but declines registered in Poland as well as in Greece and in Portugal were more modest than elsewhere. In some of the countries – including Bulgaria, Croatia and Greece – inflows fell to even lower levels in 2010. The year 2011 brought some modest recovery almost throughout the region, with the exception of Estonia, Romania and Czechia. In 2012 the recovery reversed in Latvia and Lithuania, whereas it continued in Slovakia, Bulgaria, and Greece. Only Poland recorded almost uninterrupted high inflows throughout the five years. One country suffering constant decline throughout these years is Romania. Some data can be considered outliers, namely very high figures in 2012 for Czechia (matched by a very low figure in 2011), Hungary and Portugal (also 2011). Except for these countries and Poland, the 2012 inflow figures were significantly below the 2008 level. The year 2013 brought a renewed setback – with the exception of Romania and Greece – in line with the deleveraging in emerging markets. This was corrected in 2014, especially in Poland, while one can observe no significant change in most of the other countries.

It is worth looking at the annual data in more detail. In 2009 *FDI inflows plummeted to less than half* compared with the previous year in almost all of the 13 countries, reaching a level nearly as low as in 2002–2003 when the decline was due to the ‘dotcom’ crisis. Two countries, Slovakia and Slovenia, booked negative FDI inflows, implying that accumulated capital reserves were being repatriated. In some countries – including Czechia, Hungary, Latvia and Lithuania – the setback was more than 50 per cent. Less hard hit were Poland, which showed the strongest economic performance in terms of real GDP growth, and Estonia, which consolidated its economic position after severe GDP and FDI declines in the previous year.

The crisis of core European countries was directly transferred to the less developed regions via foreign subsidiaries. Countries with a strong presence of export-oriented subsidiaries suffered immediate drawbacks when demand in western Europe shrank. In addition, foreign owned banks holding the wide majority of banking assets in most countries also curtailed their activities. In addition, capital repatriation escalated to mitigate losses of the parent companies.

It is important to note that equity investments were positive throughout the region in 2009 and comprised a much higher share of FDI than earlier. The resilience of equity FDI meant that ongoing new projects and restructuring investments were not halted due to the impact of the crisis. Continuous high equity inflows of 2 billion euros or more to Bulgaria, Hungary, Poland and Romania indicated that these countries had maintained their attractiveness for new investments and also that ongoing projects were not being stopped but perhaps downsized. In addition, parent banks were forced to increase capital in subsidiaries to improve the equity ratios of their balance sheets.

Another component of FDI, reinvested earnings, fell strongly in most new member states as investors’ overall income, too, declined. But investors repatriated less income than earlier; only Hungary suffered a record amount of repatriated income. This kind of capital flight of the more liquid parts of FDI can be associated with the record high sovereign risk in this country. In more stable countries – especially Poland and also Czechia – reinvestments recovered in 2009 and were even larger than equity FDI. The main form of the FDI decline was in the form of ‘other capital’, which comprises mainly loans from parent companies to subsidiaries. Under the pressure of the financial crisis inter-company

credits dried up and it was often the subsidiaries that credited the parent. As a result, the FDI inflow in the form of ‘other capital’ became negative in Czechia, Estonia, Hungary, Slovakia and Slovenia. In the two latter countries, the withdrawal of ‘other capital’ was even higher than the inflow of equity and reinvested earnings, which led to the mentioned negative figure for FDI inflow.

The above processes either continued in 2010 or gave way to a modest recovery, but in general, *FDI regained momentum only in 2011* (Hunya 2012). The recovery in that year was strongest in Slovakia, Latvia and Slovenia; it was weaker in Poland and Hungary; while setbacks were registered in Czechia, Estonia and Romania. None of the changes was especially positive or alarmingly negative. Countries with recovering inflows could overcome the setback suffered in 2009–2010, but still received much less FDI than in 2008. There may be two reasons for the continued inflow declines in Bulgaria and Romania: earlier high inflows were to a large extent fed into real estate investments and this bubble burst.

It is worth noting that the inflows to manufacturing recovered more robustly than in other sectors. Export-oriented foreign subsidiaries expanded, as European imports regained momentum and the new member states were able to maintain their cost-competitive edge. The new member states proved economically more stable than the southern EU members and continued to enjoy a cost advantage over them. Some large export-oriented projects significantly raised the level of FDI, for example, in Hungary, with the automotive sector projects of Daimler-Benz, Audi and Opel under construction. In Romania, Ford kept investing, although less than had been envisaged earlier, and started its car and engine production belatedly in 2012. In other countries, such as Slovakia, foreign investment enterprises restarted production shifts that had been idle during the deepest crisis years.

FDI inflows in 2011 were also influenced by some major changes in investors’ strategies in response to the financial crisis:

- Swedbank reorganised its activity in the Baltic states by transferring headquarters functions from Estonia to Sweden. In terms of FDI flows this meant that Estonia repatriated outward FDI from the other two Baltic states and Sweden repatriated this capital from Estonia, resulting in a high negative FDI inflow figure in the

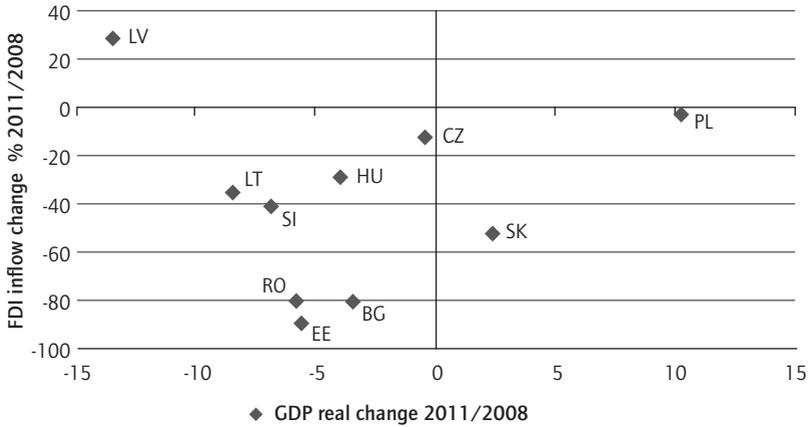
latter country. At the same time, Swedbank increased its capital in the subsidiaries in Latvia and Lithuania, which boosted financial sector FDI in these countries.

- The Hungarian government purchased from the Russian investor Surgutneftegas the shares that it held in the Hungarian oil company MOL. This disinvestment by the foreign investor reduced FDI inflow to Hungary by 1.88 billion euros.
- The multinational electronics company Nokia underwent major restructuring worldwide. It closed production facilities in Hungary and Romania, resulting in disinvestment in both countries. Nokia's subcontractor Elcoteq filed for bankruptcy and ceased most of its activities in Hungary and Estonia, while another contract manufacturer, Huawei, shrank its related production. In most cases, production facilities were sold to other foreign investors that started production later.

The *2012 upsurge of FDI inflows* in most countries cannot be attributed to economic factors as economic growth declined, and five out of the 13 countries – Hungary, Czechia, Slovenia, Greece and Portugal – registered real GDP contraction. The most robust growth of FDI inflows in 2012 compared with the previous year was reported by Hungary (almost three times) and Czechia (almost five times), while the earlier front-runner Poland recorded an amount 40 per cent down from the previous year. Among the smaller countries Estonia received six times more than in the previous year, while Slovenia got 85 per cent less. Estonia's recovery followed the exceptional low of the previous year. In the case of Slovenia the political and economic crisis aggravated and deterred investors and thus both FDI and GDP subsided. This was not the case in some other countries in recession, Czechia and Hungary (GDP down by 1.3 per cent and 1.7 per cent, respectively) where FDI boomed. Thus the changes of FDI and GDP were not synchronised in that year.

The correlation between FDI inflow and real GDP growth is fairly robust if we take several years, such as 2008–2011 (Figure 3). Demand contraction and the financial crisis in Europe curtailed investments, including FDI. Even if economic growth was, on the whole, positive in some countries, FDI inflow became lower due to investors' deleveraging. The positive relationship between FDI and GDP hardly existed in individual years as one-off effects took on overwhelming importance in shaping FDI.

Figure 3 FDI and GDP change in 2008–2011



Source: wiiw database relying on national statistics; author's own calculations

Returning to 2012, the structure of the record inflow to Czechia did not show many peculiar features: almost one-quarter was in the financial sector, exceptionally high amounts in the automotive sector and almost 40 per cent of FDI came from the Netherlands. Because outward Czech FDI is only around 1 billion euros, high inflows cannot be considered transitory, such as in Hungary. But Hungary and Portugal were in a true outlier position in 2012, Portugal already in 2011, for which we can find some methodological explanation (Box 1).

Even after correcting the methodology (Box 1, Figure 2) Hungary's FDI inflow was significantly higher in 2012 than in previous years or what the economic situation in the country would have led one to assume. One can find further explanation by examining the components of FDI: almost half of the inflow was in the temporary form of 'other capital', which underwent subsequent rebalancing. The structure was specific: half of the equity FDI in 2012 and also in subsequent years went to the banking sector. A large part of it was triggered by the special tax on turnover to be paid also by loss-making financial institutions and the simultaneous obligation to increase the capital adequacy ratio and compensation for losses. Had the involuntary FDI in the financial sector not taken place, FDI inflows to Hungary would have been mediocre in most years since 2011.

Inward FDI to Greece remained marginal but saw a rise in 2012, mostly explained by injections of capital by parent companies to cover losses of

Box 1

Outlier 1: Hungary – the case of capital in transit

FDI inflows and outflows had similar dynamics in Hungary in 2008–2013. The difference between the flows in the two directions, net FDI, was positive in each year, especially in 2008 and then again in 2012. The latter year had especially high inflows and outflows due to the presence of significant amounts of capital in transit and restructuring of corporate assets. Corrected numbers for 2012 still reveal a one-off peak in FDI inflows.

Table 1 Inflow and outflow of FDI including and excluding capital in transit and restructuring of assets in Hungary, EUR million

Year	2008	2009	2010	2011	2012	2013
Outflow in balance of payments	1,514.1	1,347.9	887.6	3,140.7	8,799.9	1,701.1
Outflow balance of payments less transit and asset restructuring	433.3	1,159.8	374.2	453.6	1,490.7	1,167.9
Inflow in balance of payments	4,190.7	1,476.1	1,674.7	4,131.1	10,850.9	2,316.5
Inflow balance of payments less transit and asset restructuring	3,109.9	1,288.0	1,265.6	1,517.9	3,916.1	1,783.3

Source and explanation: Hungarian National Bank; updated December 2014 (HNB 2014)

Outlier 2: Portugal

The Bank of Portugal does not give an official explanation for the sudden rise of FDI in the years 2011 and 2012. Standard explanations related to economic conditions do not work either. UNCTAD explains that in 2012 inflow remained at a relatively high level, helped by Chinese acquisitions of state assets in the energy sector (UNCTAD 2013). Despite this operation, FDI inflows from non-OECD countries were negative in both 2011 and 2012 (Bank de Portugal 2013). The bulk of inflows in both years were investments from the Netherlands in the financial sector. FDI outflow was at a record high in 2011, amounting to 9 billion euros and going also to the Netherlands and to the financial sector. These data indicated similar processes to those in Hungary and point to capital in transit operations.

their affiliates, a phenomenon also present in some new member states (UNCTAD 2013a). World Investment Report 2013 attributes the increase in foreign direct investment to multinationals' pumping in capital to cover the losses at their Greek subsidiaries. An example was Emporiki

Bank, which ran losses of 6 billion euros from 2008 to 2012. ‘In response, the parent company, Crédit Agricole, injected capital worth \$2.85 billion, as required by the Greek regulator, before it sold off the unit’, UNCTAD (2013b) states. In Greece, as in Italy, Portugal and Spain, the crisis has also been marked by the foreign acquisition of distressed assets and the exit and relocation of firms from the crisis-hit countries, the report added.

Caring for the methodological problem of 2012 outlined above, we are left with rather low amounts of economic growth supporting FDI in Hungary, Greece and Portugal. We incline to conclude that the overall recovery of FDI in the 13 countries in 2012 was rather modest and no return to the high inflows of the pre-crisis era took place.

As for more recent years, FDI recovery seems even farther away than in the core years of the financial and euro crisis (Hunya 2014). Another negative global event – the deleveraging of emerging markets investments in 2013 – took its toll. FDI inflow to the 13 countries plummeted to its lowest level since 2008. The intra-company loan component of FDI was highly negative in many countries, meaning that a large part of FDI was made liquid and repatriated. This was possible because it had not been invested in physical assets but kept on the accounts of the foreign subsidiaries. This development challenged the general belief concerning the lasting character of FDI; a part of the capital classified as FDI behaved in fact like portfolio investment.

4. FDI inward stock position

The size of the accumulated FDI stock indicates the importance of a country for international investors. It is not a simple addition of annual inflows but a separately measured indicator that depends on the length and size of inflows, the exchange rate at the end of the reporting year and valuation of the assets of foreign investment enterprises.

In 2012 the stock of FDI was highest in the largest new member state, Poland, followed by Portugal, Czechia and Hungary (Table 2). The second largest country, Romania, comes only fifth as inflows started belatedly compared with most other countries in the group. Poland takes almost one-third of the foreign capital invested in the NMS region and Czechia almost 20 per cent. These two countries, together with Hungary, Romania

and Slovakia, form the core of the new member states which have received most of the large investment projects. Here the concentration of capital and population produce agglomeration advantages that attract further investments. Small countries necessarily have smaller FDI stocks in nominal terms and do not host very large investment projects. Greece is among the countries with low FDI stocks, similar to much smaller countries in the Baltics, Slovenia and Croatia.

Table 2 FDI stock (EUR million) and change (%)

	2008	2012	Change
Bulgaria	31,658	37,320	118
Croatia	22,199	24,068	108
Czechia	81,302	103,456	127
Estonia	11,775	14,667	125
Hungary	62,455	78,488	126
Latvia	8,126	10,258	126
Lithuania	9,191	12,101	132
Poland	110,419	170,599	155
Romania	48,797	59,125	121
Slovakia	36,226	42,304	117
Slovenia	11,326	11,724	104
Greece	27,390	19,770	72
Portugal	71,833	90,783	126

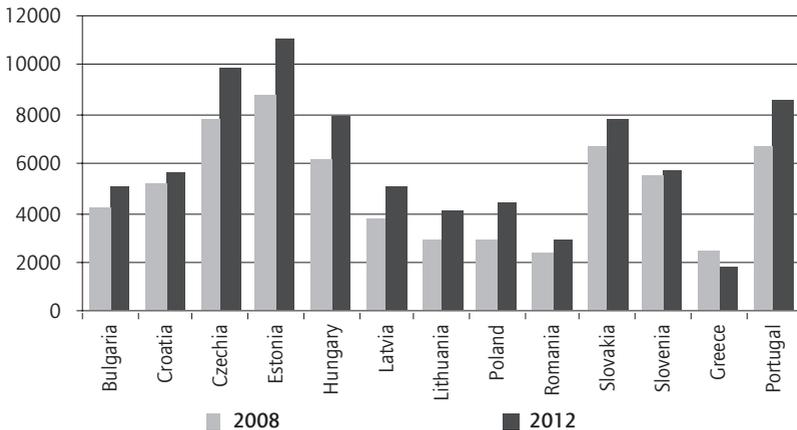
Sources: Eurostat and national statistics

The amount of FDI stock in a country changes due to inflows of new FDI, exchange rate fluctuations and the revaluation of foreign assets. Over a longer period of time, stock changes may reflect shifts in countries' relative attractiveness. In the 2008–2012 period FDI stocks increased at the highest rate, by 55 per cent in Poland reflecting the continuously robust inflows to the country and the overall good economic performance underpinning the value of firms. The Baltic countries, Czechia, Hungary and Portugal obtained 25–32 per cent and form the mid-range. The relatively good position of Hungary (and probably also of Portugal) is, however, the result of including transit capital in the statistics, in the absence of which the change would be only in the range of 15 per cent, putting the country into the third group, alongside Bulgaria, Romania and Slovakia. The worst performers were Croatia, Slovenia and, especially, Greece. These countries received meagre inflows and probably the value of FDI capital also diminished. Greece is the only country in the

group in which the value of FDI stock became smaller despite positive inflows indicating a radical devaluation of the existing FDI stock.

FDI stock compared with population reveals the intensity of FDI penetration and thus the importance of FDI for the host country.¹ In terms of per capita FDI small countries may come to prominence (Figure 4); the countries under survey show striking differences in this respect. Countries with relatively weak FDI penetration include both large countries – Poland and Romania – and some small ones, such as Greece, Lithuania and Latvia. The latter two may be put into a mid-range group together with Bulgaria, Croatia and Slovenia. The group of countries with high FDI penetration comprises the core new member states: Czechia, Hungary and Slovakia. But the highest indicator is achieved by Estonia, indicating that early and radical opening up to FDI can lead to large accumulated stocks. Portugal is similar to the central European new member states with a high rate of FDI penetration. Figure 4 also shows that the relative position of the countries did not change in the wake of the financial crisis. The list of countries with high or low FDI penetration was the same already before the slowdown of inflows; it reflects longer historical processes and structural differences in and among the countries.

Figure 4 Inward FDI stock per capita (euros)



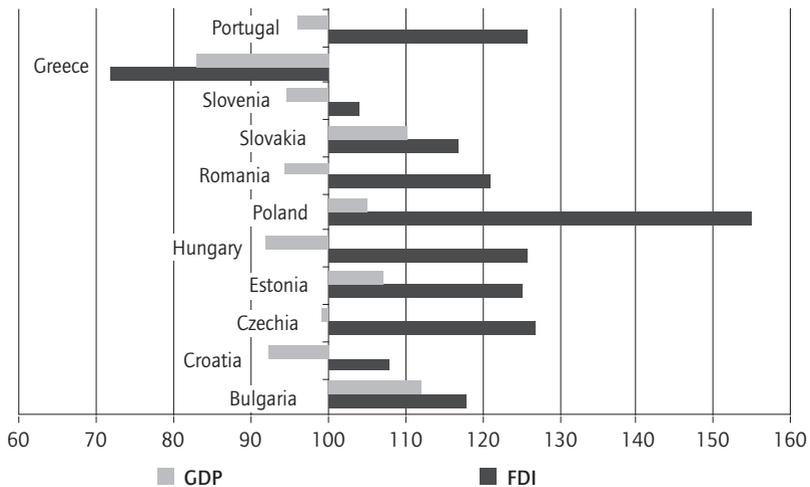
Sources: Eurostat and national statistics

1. The relative size of FDI stock can be calculated either per capita or per GDP. We use per capita stock in the first instance as population was fairly stable over 2008-2012 while GDP fluctuated a lot.

The level of economic development is one of the factors that attracts FDI and countries with higher GDP generally receive more FDI, too. On the other hand, some of the less developed countries in the group fare better in terms of FDI stock per GDP than in per capita terms. Relative to GDP, the FDI penetration of Bulgaria, Romania, Latvia and Lithuania would be upgraded relative to the other countries in the group and that of Czechia, Slovenia and Croatia would be scaled down in relative terms. The weak position of Greece would be even more striking.

During 2008–2012 FDI (measured in stock change) was more resilient than the overall performance of the economy (measured in nominal GDP). GDP was lower in 2012 than at the outset of the crisis in eight out of the thirteen countries, but the FDI stock fell in only one of them (Figure 5).

Figure 5 FDI stock change and GDP change (nominal euro based), 2012/2008 (%)



Sources: Eurostat and national statistics

Greece suffered the biggest fall in GDP – 17 per cent – which coincided with an even larger decline in FDI (28 per cent), thus demonstrating the extremity of the country’s crisis. Countries with a 5–8 per cent fall in GDP, but a positive change in FDI included Hungary, Croatia, Romania and Slovenia, closely followed by Portugal and Latvia. FDI growth ran counter to GDP decline in these countries, and FDI grew more in countries with higher FDI stocks at the outset of the crisis (Hungary or

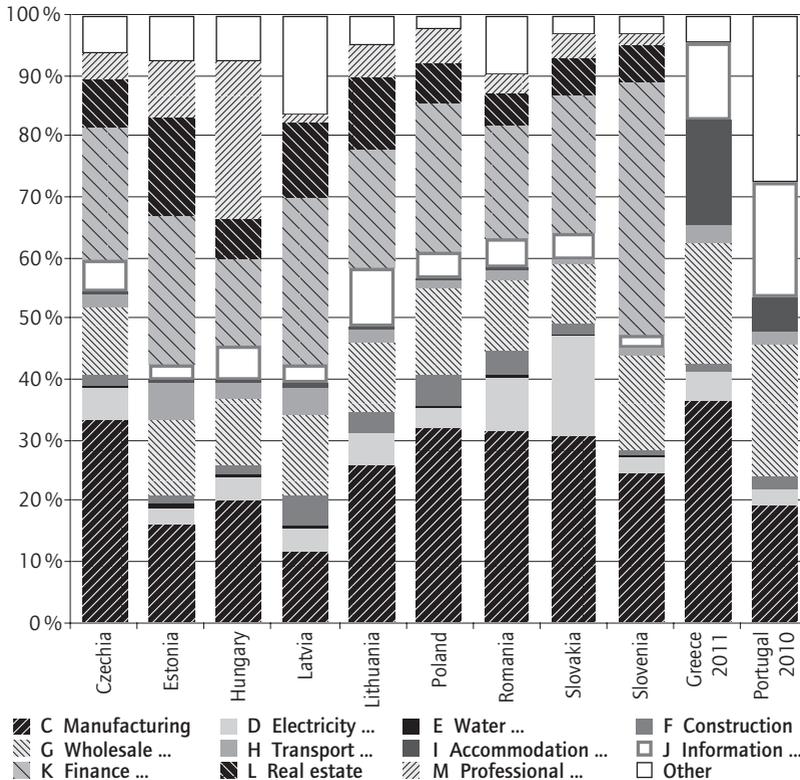
Portugal) than in those that did not have a strong FDI sector (Croatia and Slovenia). A fast and thorough economic adjustment in Latvia triggered some GDP decline but also attracted FDI. The case was similar in the other two Baltic countries, which suffered severe GDP declines ahead of the global financial crisis and also until 2010 but received high FDI. Rather robust post-crisis economic recovery in Bulgaria and Slovakia, on the other hand, coincided with relatively modest FDI growth; more modest recovery in Poland and Lithuania triggered the highest rates of FDI stock growth. The difference between these two pairs of countries in terms of GDP is only in nominal, but not in real terms as the former had a fixed exchange rate regime, the latter a flexible one, with stable and depreciating currencies. Poland was the only country in the group that did not experience real GDP decline in any of the years (national currency based), although its nominal euro GDP fell strongly in 2009. Investors reacted positively to the increasing cost competitiveness of production in Poland made possible by devaluation.

5. Inward FDI by economic activity

We rely first of all on FDI stock data in the NACE Rev. 2 classification, although this is not available for all countries and years. Reclassification of activities does not allow comparison of these data with NACE Rev. 1, although the difference in some main activities, such as manufacturing, is marginal. More and more countries provide stock data in the new classification and two (Bulgaria and Croatia) only in the old.

About 30 per cent of the FDI stock has been invested in manufacturing sector 'C' in most of the countries for which NACE Rev. 2 data are available (Figure 6). In the relatively small Greek FDI stock manufacturing plays the primary role, while there is relatively little foreign capital in the financial sector, but more in the transport and telecommunications sector. Notable exceptions are Estonia and Latvia, with shares below 20 per cent. Another exception is Hungary, where a number of large investors have been reorganised into holdings, making sector 'M' the overwhelming economic activity. The financial sector 'K' has attracted more FDI than manufacturing in Estonia, Latvia and Slovenia and is in second place in other countries. The third investment target is generally wholesale and retail trade 'G'. The size of some other sectors depends on national privatisation policy, which resulted in a high share for electricity 'D' in Slovakia or the transport sector in Estonia.

Figure 6 FDI stock by economic activity, NACE Rev. 2, 2012 or latest



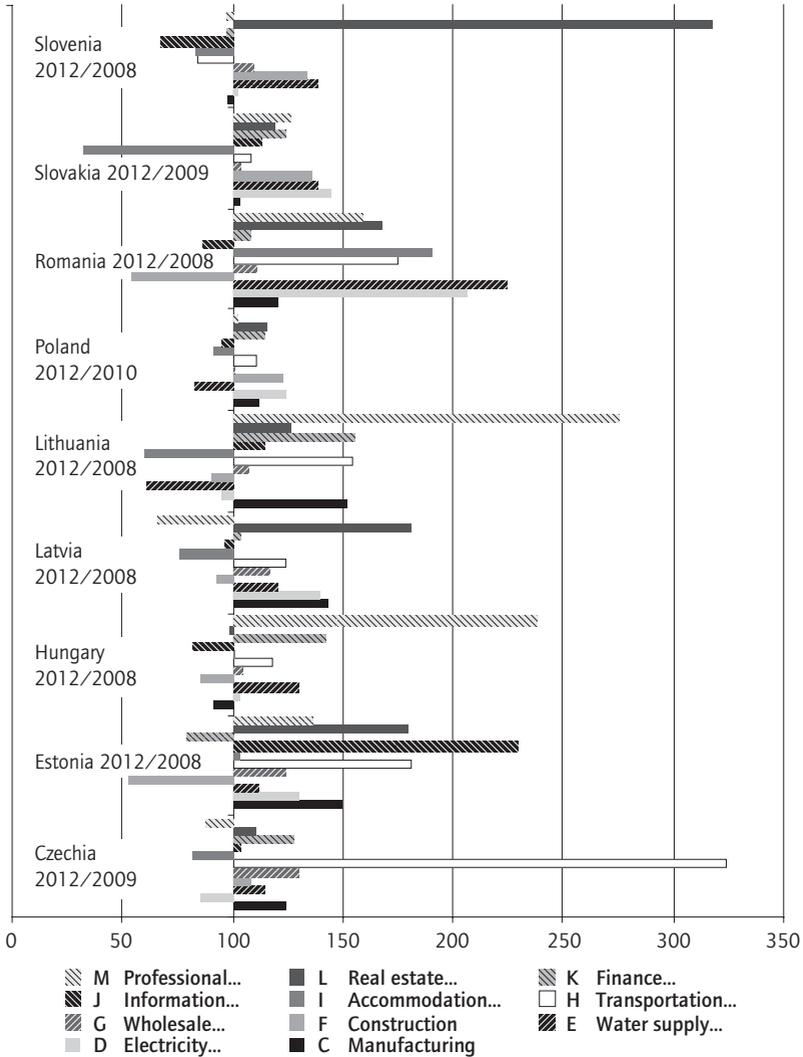
Sources: wiiw FDI database and OECD FDI statistics

Among the countries with only NACE Rev. 1 statistics Bulgaria has a small manufacturing sector, but a very large real estate and other business services sector, while Croatia has more industry and a much larger financial sector.

Changes in the sectoral distribution of the FDI stock for NACE Rev. 2 countries (Figure 7) show an increase in the weight of manufacturing 'C' in Czechia, Estonia, Latvia, Lithuania, Poland and Romania, while especially in Hungary this sector's share declined (shifted to 'M'), as it did in Slovakia and Slovenia. The financial sector 'K' gained weight in Czechia, Lithuania, Poland and Slovakia; while declining in the other countries. Information and communications 'J' increased a lot in Estonia, but declined in all other countries. In Greece the share of manufacturing

increased, while that of financial intermediation declined between 2008 and 2011. FDI in Portugal is predominantly and increasingly in the real estate and other services sector, probably in the form of holdings.

Figure 7 Change of FDI stock between the first and last year of observation, NACE Rev. 2 (%)



Source: national statistics

There were some major changes in the weight of one or the other industry during the period 2008–2012. The transport sector ‘H’ gained large shares in Czechia, Estonia and Romania. Professional, scientific and technical activities ‘M’, which may include holdings with mixed activities, more than doubled their share in Hungary and Lithuania.

Diverging changes in individual countries may be the result of one or another larger transaction mainly related to the foreign or domestic takeover of larger companies. In general, one may conclude that manufacturing and some services in the real estate and professional services category were less hit by the crisis than other activities.

6. Inward FDI by country of origin

In the 13 countries, EU member home countries owned 80 per cent of FDI stocks as of 2012. This indicates strong regional integration in Europe. Investors from other continents are not very common: the US provides just 4 per cent of the foreign direct capital. The exception is Greece where the US held 10 per cent. Neither China nor Hong Kong appears among the 25 most important investors in most of the countries, and if they do, then with less than 0.5 per cent of the stock. Higher shares are achieved by those operating through Caribbean tax havens, as well as Cyprus, which was at least until 2012 the hub of Russian capital exports.

The Netherlands is identified as the home country with the largest share of FDI stocks in the five largest new member states, as well as in Portugal. Germany is in second place in the new member states generally, but first in Hungary and Lithuania and second in five other central and eastern and southern European countries. Austria ranks first in Slovenia and second in Bulgaria, Romania and Slovakia. Here geographic proximity plays a role. The situation is similar in Portugal, where Spain is the second largest investor.

The statistics paint neither a complete nor a totally realistic picture, as the host countries record only immediate investors and fail to identify the ultimate owner. Therefore, it is natural that home and host country statistics differ regarding bilateral FDI flows and stocks. The discrepancy between the two sets of data is especially large in the case of the Netherlands. The host countries report FDI stocks several times larger than the Dutch statistics, as illustrated in Table 3.

Table 3 FDI stocks of the Netherlands and Austria by home and host country statistics, 2010 (EUR million)

Host country	Netherlands outward	Host inward	Austria outward	Host inward
Bulgaria	129	7,327	4,116	5,553
Czechia	4,318	28,465	10,615	12,443
Estonia	210	1,098	159	140
Hungary	4,451	11,638	7,621	8,731
Latvia	31	551	146	163
Lithuania	116	904	26	61
Poland	8,164	26,817	3,910	5,562
Romania	1,306	10,903	7,107	9,346
Slovakia	486	9,770	5,175	6,010
Slovenia	94	553	2,344	5,163
Greece	1,482	4,384	330	746
Portugal	2,779	17,152	215	609

Sources: Eurostat and national statistics

Investing via a holding company in the Netherlands can be of advantage to investors from third countries, and not only in the form of SPEs:

In the current international fiscal environment, the Dutch holding company regime is still the most popular holding regime in the world. The primary reason for this popularity is its tax efficiency (mostly 0% tax), the flexibility of Dutch corporate and tax law and its relatively low cost of incorporation and annual maintenance. (Tax Consultants International²)

Overseas investors in particular often enter the EU via subsidiary holdings in the Netherlands, which thus hides a lot of US and other third country FDI in the new member states and Portugal. Austrian FDI, too, is reported as higher in new member states statistics than by the Austrian National Bank (OeNB), but the discrepancy is relatively modest. Drawing on home country statistics, one could conclude that Dutch FDI is lower than Austrian FDI.

2. Tax Consultants International:
www.tax-consultants-international.com/read/_dutch_holding_Company

7. Greenfield investment projects

Apart from a country's balance of payments and international investment position, one can obtain FDI-related information from project announcements and press reports. These refer to two types of project: mergers and acquisitions and greenfield investments. The distinction of the two major investment forms provides additional insight into the behaviour of foreign investors during the crisis.

The development in the deal value of cross-border mergers and acquisitions (based on UNCTAD 2013b, Annex tables) showed a substantial decline, from USD 15.7 billion in 2008 to USD 6.9 billion in 2009 and USD 3.4 billion in 2010 – the fall was thus much more rapid than that of FDI. Meanwhile, value of greenfield investments fell only half, from USD 117 billion in 2008 to some USD 60 billion in 2009 and 2010 (UNCTAD data, based on fdimarkets.com).³ It must be noted, however, that the two entry modes of FDI cannot be taken as parts of the amount of inflows registered in the balance of payments due to significant methodological differences. The conclusions from the different datasets can rather give complementary insights.

After the first years of the crisis, the mergers and acquisitions value recovered and in 2011 reached the same amount as in 2008, due mainly to foreign takeovers in Poland. In the absence of such a deal in Poland in 2012 the value of transactions was still USD 10 billion for the 13 countries – this time it was Portugal that stood out with a record transaction level. Disregarding these two outliers, the value of transactions was much lower in 2012 than in 2008 in all other countries. At the same time, the value of greenfield investment projects recovered less than that of mergers and acquisitions transactions in 2011, to USD 63 billion and fell to its lowest level, USD 38 billion in 2012.

In what follows we concentrate on the trends in greenfield investments based on downloads from the fdimarkets.com database (Financial Times). (See Box 2 for the methodological explanation of the database.)

The two main victims of the crisis were capital investment and employment; the number of projects fell much less (Figure 8). The size of projects

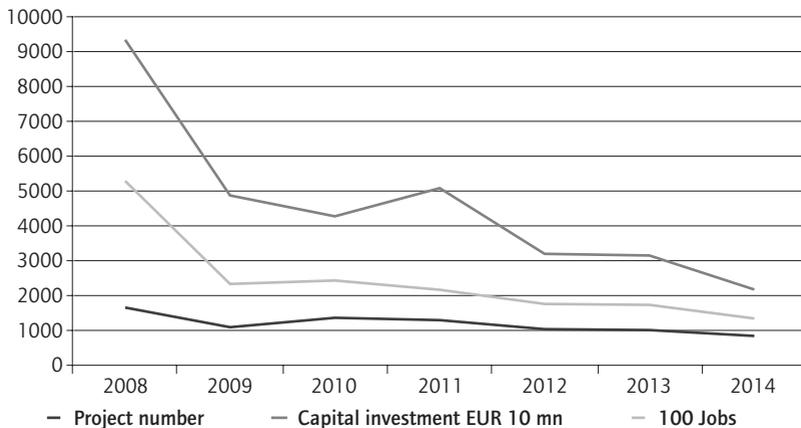
3. For comparison, UNCTAD reported FDI inflows to the 13 countries in the value of USD 78 billion in 2008 and some 35 billion in 2010.

did decrease, however, and shifts between industries took place. It seems that investors did not cancel their plans for good, but rather scaled them down to match the new market conditions. After some recovery in 2010, the number of projects fell again, as did employment, while in 2012 the amount of invested capital also declined. The decline continued and 2014 was the worst of the seven years by all three indicators, which indicates investors' lasting uncertainty about the region's economic prospects. This is a more negative conclusion than what we obtained from the FDI inflow data. The 2013 decline was, in turn, less severe than indicated by FDI inflow data, but the preliminary result for 2014 was much worse.

Box 2 Database on greenfield FDI projects

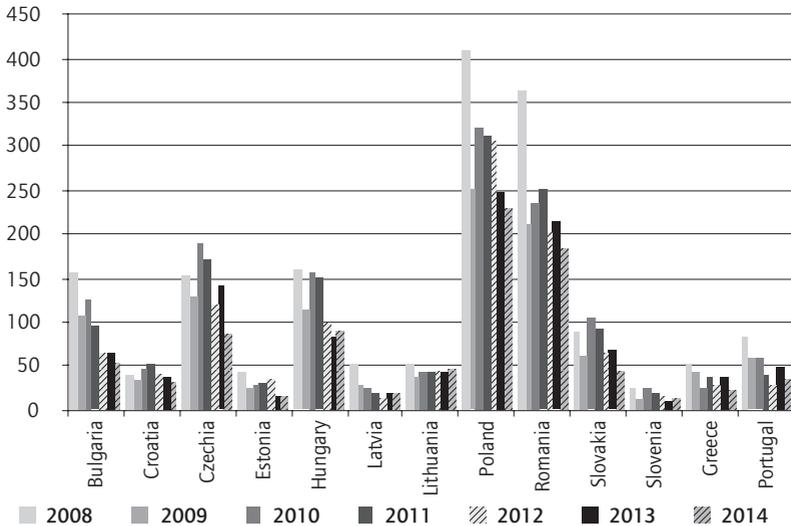
The data from fDi Markets a division of Financial Times Ltd (www.fdimarkets.com) used in this paper are based on media reports referring to individual investment projects. The database includes the number of registered projects and (often estimated) data on the amount of investment commitments and the announced number of jobs. Compared with the balance of payments, which records financial flows in a given period of time, fDi Markets data refer to new investment projects, to be realised over a longer period of time. Data exclude retail project which are often single shops.

Figure 8 Number of projects, capital investment, number of jobs in NMS11, Greece and Portugal



Source: fdimarkets.com

Figure 9 Number of greenfield projects by year and country

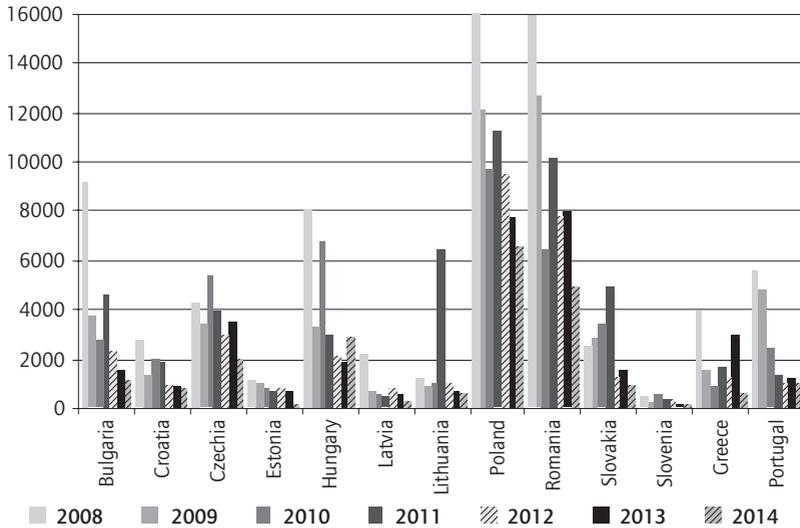


Source: fdimarkets.com

The large new member states – Poland and Romania – received the highest number of projects and also the largest level of investment commitment and number of jobs (Figures 9 and 10). In terms of the number of projects per inhabitant, Czechia, Hungary and Slovakia were the main beneficiaries, but all with declining numbers of new projects over time. The strong increase in FDI activity suggested by balance of payments data in 2012 for Czechia, Hungary and Portugal cannot be underpinned by greenfield project statistics. The number of projects in 2012 declined by 30–35 per cent in these countries and there were similar declines in terms of capital investments. These data confirm our reluctance to accept the large FDI recovery indicated by inflow data for 2012.

The number of new projects fell sharply also in Bulgaria and Slovakia in 2012. In the latter country it followed two fairly strong years. Greenfield activity in Poland almost reached the level of the previous year, which is against the general trend, thus confirming the country's favoured position as location for new investments. Portugal suffered a large setback in terms of invested capital, less so in terms of number of projects, but the decline was continuous with no recovery in 2010 or 2011. Greece has been a marginal recipient of greenfield projects since the outset of the crisis and even before, similar to Estonia, Croatia and Slovenia. In 2013 there was a

Figure 10 Amount of capital investment commitment (million EUR)



Note: 2008 for Poland – 24991; for Romania – 26911.

Source: fdimarkets.com

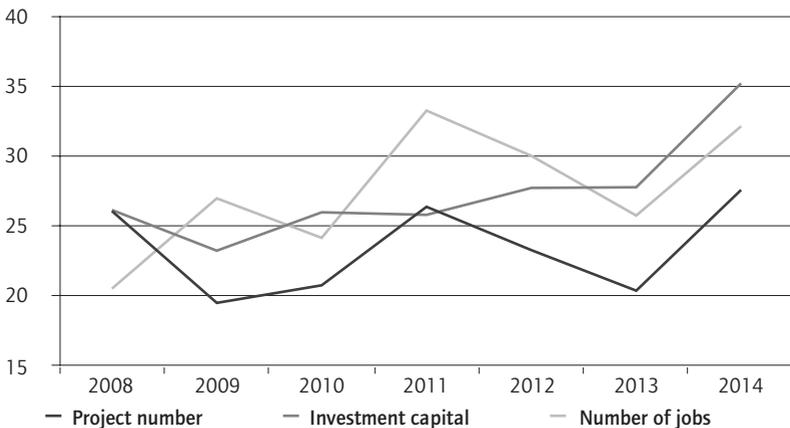
slight recovery in the number of new projects in eight countries and in terms of investment commitment in six countries. In 2014, a slightly higher number of projects than in the previous year was registered in Hungary, Lithuania and Slovenia, and a lower number in all other countries. The value of investment in all 13 countries was lower than in the previous year.

The main target of greenfield investments over the whole period was wholesale and retail trade, with much higher shares than in the FDI statistics. This is due to the content of the database in which shops and shopping centre projects are counted individually. The shift to projects in distribution and trade indicated that in crisis years there is a stronger desire to sell than to increase underutilised production capacity. The financial sector, on the other hand, is underrepresented in the greenfield statistics as banks do not establish new branches very often and in the period under discussion they tended rather to streamline their networks.

The second most significant activity for greenfield projects was manufacturing, whose share increased in the wake of the crisis by all three indicators (Figures 11 and 12). The temporary decline in terms of project numbers and investment value was marginal in 2009 and 2010. A recovery was

achieved in 2011 in terms of project number and jobs but was followed by a setback in 2012, while in terms of capital investment manufacturing continued to expand its share. The year 2013 brought a decline in the share of manufacturing projects and investment values in a declining overall number of projects, followed by recovery in 2014. In this latest year the share of manufacturing reached an all-time high, but the absolute number of manufacturing projects was lower than in four of the seven years since 2008.

Figure 11 Share of manufacturing in greenfield investments by number of projects, amount of capital investment (CAPEX) and number of jobs by year, 13 countries (%)

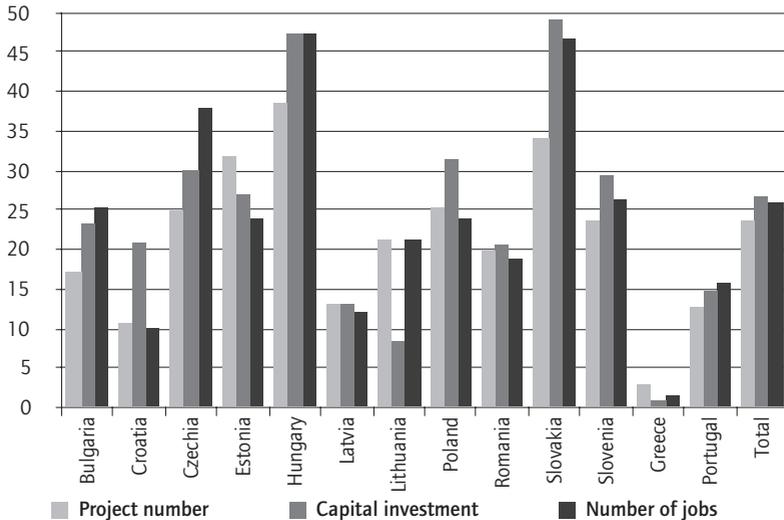


Source: fdimarkets.com

Among the 13 countries the share of manufacturing was highest in Hungary and Slovakia in all years. It was about average in Czechia, Estonia and Poland, while Greece, Croatia and Latvia received a relatively small share of the number and value of projects in manufacturing. The setback in 2012 was due mainly to the declines in Poland and Romania. The 2014 numbers were below those in 2012, except in Hungary and Romania. These indicators are useful for correcting the shortcomings of the FDI stock statistics, showing the relatively high significance of manufacturing FDI in Hungary.

Beyond the leading industries, there was an increase in shares in the number of projects and generally also in capital and employment in the following activities in 2011–2012 compared with 2008–2009: electricity, design, development and testing, ICT and internet infrastructure, shared

Figure 12 Share of manufacturing in greenfield investments by number of projects, amount of capital investment and number of jobs by country, 2008–2014 (%)



Source: fdimarkets.com

services centres, maintenance and servicing, and customer contact centres. Electricity sector investments were first of all wind parks in Romania and Bulgaria, which received high subsidies in the course of shifting to renewable energy. Beyond these countries, Lithuania, Latvia, Portugal and Greece received more capital in the energy sector than in manufacturing.

Projects in the area of design, development and testing were launched primarily in Poland and Romania, but Czechia and Hungary also benefited. Hungary was the most important location for ICT and R&D projects in terms of both project number and invested capital. Poland was the primary target for shared services and business services. The general shift to services also affected the smaller countries, especially Estonia.

Advanced services (design, development and testing, ICT and internet infrastructure, shared services centres, headquarters, customer contact centres) increased their combined share in the number of projects, from 6 per cent in 2008 to over 12 per cent in 2012 and there was also an increase in the number of projects in absolute terms. (fdimarkets.com)

uses its rather detailed classification for economic activities not in line with NACE.) The number of jobs in newly created activities of this kind fell somewhat, but their share increased from 4 per cent to 8 per cent. Most governments support the settling of services companies in their territory, which, together with manufacturing, are considered primary activities for future development.

8. Size and importance of the foreign sector

The descriptions given above highlight the changes in terms of FDI attraction and project location. Obvious, there are countries in the group in which the importance of foreign investment differs considerably. But balance of payments or greenfield investment data cannot really highlight the role of the foreign sector in production. This can be done based on the Eurostat foreign affiliates statistics (Eurostat inward FATS) which are available for the years 2008–2011 (for Croatia and Portugal not all years), although not for Greece.⁴

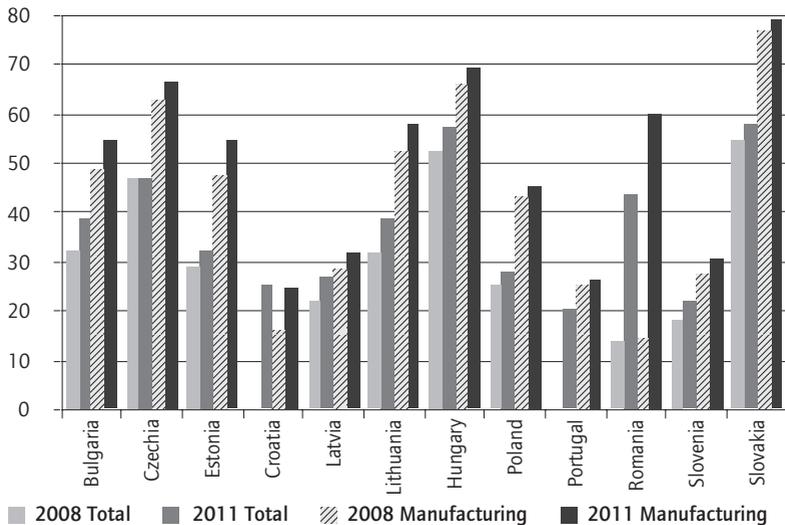
The number of foreign affiliates (majority foreign-owned firms in non-financial business corporations⁵) has been highest in Hungary (18,600 in 2011), followed by Czechia (15,400) and Bulgaria (12,800); it is extremely low in Poland (6,500) and mostly in line with size of country in other cases. Differences in the size thresholds for companies in

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4. 'Inward FATS describe the overall activity of foreign affiliates resident in the compiling economy. A foreign affiliate within the terms of inward FATS is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control. In simpler terms, inward FATS describe how many jobs, how much turnover, etc. are generated by foreign investors in a given EU host economy. While FDI statistics give an idea of the total amount of capital invested by foreigners in the EU economy, FATS add to that information by providing insight into the economic impact those investments have in the EU in terms of job creation, etc. FDI and (outward) FATS are closely related statistical domains. Their subject of interest is the same – businesses investing abroad in other business units, existing ones and/or newly founded ones. This similarity in substance is also expressed in compilation practice, as outward FDI stock and outward FATS data are often compiled with the help of the same survey. Yet, despite all these similarities, there are a number of important methodological differences between them. These differences limit the scope of comparability between the two datasets. FATS comprise all affiliates that are foreign-controlled (where foreign investors have more than 50 per cent of the voting rights), while FDI statistics include all foreign interests amounting to 10 per cent or more of the voting power. Broadly speaking, it could be said that the outward FATS population is a subgroup of foreign direct investments relevant for FDI statistics. FATS applies the principle of the Ultimate Controlling Institution (UCI) versus immediate counterparty country in the FDI statistics.' Eurostat.
 5. Defined as: total business economy; repair of computers, personal and household goods; except financial and insurance activities.

different countries may influence these data. Small companies are most numerous and, if not covered, the total number of companies in a country tends to be low. But small companies are less significant in terms of production value and thus their absence does not influence production data much. Therefore the production value of foreign affiliates is highest in Poland, closely followed by Czechia and, at some distance, by Hungary, Romania and Slovakia.

By comparing the foreign affiliate statistics with the structural business statistics of Eurostat one can derive the share of the foreign sector in the non-financial business economy. Results show the differences in the significance of the foreign sector between countries in 2011 (Figure 13).

Figure 13 Share of foreign affiliates' production value in the non-financial business sector, 2008 and 2011 (%)



Source: Eurostat inward FATS

The share of foreign affiliates in production is highest in Slovakia and Hungary, with over 57 per cent, followed by Czechia and Romania. Foreign shares in manufacturing production are even higher than in the economy as a whole, reaching almost 80 per cent in Slovakia, close to 70 per cent in Hungary, 67 per cent in Czechia and 60 per cent in Romania. More than half of manufacturing production is produced by foreign affiliates also in Bulgaria, Estonia and Lithuania. Another group of

countries has significantly lower foreign shares, namely Croatia, Portugal, Latvia and Slovenia (about 20 per cent for the whole corporate sector and about 30 per cent for manufacturing). These results are in line with those we obtain by comparing per capita or per GDP FDI stocks, but indicate more directly that some of the countries' industrial production does in fact depend on a few large foreign subsidiaries.

In what follows, data for 2011 are compared with 2008 to demonstrate the impact of the crisis (comparison is blurred by a break in data for Romania, Croatia and Portugal). The number of foreign affiliates was higher in 2011 than in 2008 in almost all countries except Bulgaria, Czechia, Estonia and Hungary. The production values of foreign affiliates were higher in 2011 than in 2008 in all countries despite temporary setbacks in the years in between (in current euro terms). In the whole non-financial sector production increases were registered only in Slovakia, Estonia, Czechia and Poland, while declines in the range of 8–10 per cent hit the other countries. No wonder that the share of foreign affiliates increased over the period under discussion; thus the foreign sector proved to be a stabilising factor in the economy and especially in industry.

Foreign affiliates in the manufacturing sector fared better than the total of non-financial corporations. The number of affiliates increased, beyond Romania, also in Croatia, Czechia, Latvia, Slovenia, Bulgaria and Poland. The most significant declines were recorded in Estonia, Lithuania, Portugal, Slovakia and Hungary. Contrary to this trend, the fdimarkets database indicated a significant number of newly established foreign subsidiaries in Hungarian manufacturing. Probably an even larger number of subsidiaries were closed down. The production value of manufacturing subsidiaries was higher in 2011 than in 2008 in all countries under survey, most notably in Romania and Croatia, with a shift of production to the foreign sector.

The overwhelming and growing significance of foreign subsidiaries in the new member states underlines these countries' dependence on international production networks and also reveals the weakness of domestic companies. Outliers to this rule are Greece, Portugal, Croatia and Slovenia, where mainly the domestic sector controls the economy, including manufacturing. Among these countries only Slovenia has an internationally integrated manufacturing sector, while industrial production and exports are relatively small in the other countries. Three out of the four outlier

countries in terms of foreign penetration were also those with the steepest GDP decline in Europe in the wake of the financial crisis. Slovenia only had the advantage of entering the downward spiral later than the others.

9. FDI hit by the crisis: conclusions

In this chapter we presented several aspects of the impact of the crisis on FDI in the period 2008–2012 or beyond. Some of them are of a technical nature, which may dampen enthusiasm for taking FDI inflow as an indicator of success.

The decline of FDI flows following 2008 has proved to be a lasting phenomenon. A boom of inflows in 2012 reported by some national banks could not be confirmed by other FDI-related data. The subsequent FDI decline in 2013 was deeper than the one in 2009. In the course of global deleveraging, FDI measured in balance of payments did not constitute a lasting commitment.

Financial flows recorded as FDI in the balance of payments but not constituting lasting investments has become more frequent than before. This is reflected in and explained by:

- transitory FDI flows and large-scale asset restructuring not tracked by all national banks;
- the rising share of financial centre home countries such as the Netherlands, Luxembourg and Caribbean tax havens in FDI;
- higher shares of FDI in the form of other capital than equity or reinvested earnings;
- increasing share of FDI inflows in financial services and in other business activities.

There is a general correlation between GDP growth and FDI for the period as a whole. The best performance in both terms was that of Poland and, after a temporary setback, Slovakia. Among the worst performers by both indicators we find both countries with high FDI penetration (Estonia) and others where the importance of FDI has been marginal (Greece). But economies with high FDI penetration, such as Estonia, were faster to experience a GDP decline but were also faster in recovery than countries with little FDI and a delayed outbreak of the crisis. Resumption of economic growth in the latter – including Slovenia and Greece – seems

to be more drawn out than what it was for Slovakia or Estonia. For the former two, attracting more FDI into the restructuring and privatisation of uncompetitive activities may be a useful policy, although not very promising in a risk-loaded environment.

The current slow economic growth in the 13 countries, but also in Europe as a whole, is linked to low investment activity, both domestic and foreign. Cross-border investments declined even more than domestic investments. The ratio of FDI to gross fixed capital formation was about 25 per cent in 2005–2007, declining to 10 per cent in 2009–2010 and, after some recovery, falling back to 6 per cent in 2013.

Many features of the drawn-out crisis or slow growth period are not related to FDI, such as high public debts in Hungary or excessive self-imposed fiscal austerity in Czechia. Such countries may enjoy robust performance on the part of foreign affiliates, but still have low economic growth. It is also possible that bad economic performance necessitates more FDI, such as equity, to improve the balance sheets of banks, which does not translate into real investments.

During the first years of the crisis, a number of foreign affiliates went out of business but there were also a number of new greenfield projects established, albeit fewer than earlier. The partial recovery in 2010/2011 over the previous year in terms of production in the non-financial sector was due mainly to the better performance of foreign affiliates.

The causes of the FDI setback during the recent crisis are manifold. The economic decline triggered a drop in FDI just as in fixed capital investments as a whole, due to falling global demand, excess capacities, difficulties in investment financing and the decline in subsidiary profits. Overcapacity has made new investments both in the home and host countries unnecessary. The export-oriented industries in particular cut output and left capacity idle. FDI in the oil, gas and metal industries declined also due to low commodity prices. Tight credit conditions have curtailed FDI as the bank-financing of investments became more costly. FDI projects were thus cancelled, delayed or scaled down due to the lack of affordable financing. Another important part of FDI, reinvested profits, contracted as foreign investors' profits shrank. In addition, profits were withdrawn by parent companies from more successful locations to finance losses in the home country. Still, the countries with high FDI penetration – especially in manufacturing and advanced services –

remained attractive to new investment projects, and those countries that did not have many projects in the past could not improve their position.

It seems unlikely that imported capital will jump-start economic growth in the new and southern EU members in the next future. Other sources of growth including domestic savings and EU transfers have increased in importance in recent years. No return to the pre-crisis role of FDI can be foreseen; even if gross capital formation recovers it is unlikely that investors' risk appetite will return to pre-crisis levels.

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