

# **Foreign investment in eastern and southern Europe after 2008**

**Still a lever of growth?**

—

Edited by

**Béla Galgóczi, Jan Drahokoupil and Magdalena Bernaciak**

**etui.**

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## Foreword

This book is the result of an ETUI research project on trends and patterns in foreign direct investment (FDI) in central-eastern and southern Europe in the period that followed the economic crisis starting in 2008. Within the framework of the project, in February 2015 we organised a symposium together with the Government Office of the Czech Republic, at which project participants discussed their findings also with Czech government officials and social partners. The symposium was addressed by leading political representatives of the country, including Prime Minister **Bohuslav Sobotka**, Minister of Trade and Industry **Jan Mládek** and President of the Czech-Moravian Confederation of Trade Unions (ČMKOS) **Josef Středula**. The reflections of these leaders of a middle-income country with one of the highest levels of foreign investment in Europe on their experiences and expectations regarding FDI will be a good starting point for this publication. They touched upon some of the key questions that motivated this project. Why are foreign direct investments important? What policies can governments apply to attract foreign capital and can incentives be tailored to national priorities? What are the risks and the limits of FDI? How are workers affected?





## **Statements by policy makers**

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## **Bohuslav Sobotka, Prime Minister of the Czech Republic**

I will present a few brief notes about the Czech government's objectives in supporting foreign investments in Czechia. I believe there is no need to emphasise that foreign investments are important for the economies of individual countries, but are also of global significance. It is clear that they contribute to economic growth and employment, and they bring in capital necessary for economic development, capital that cannot be provided from domestic sources.

This symposium focused not only on discussing the state of foreign investments in the global economy – which is still dealing with some of the effects of the financial crisis – but also on debating the specific situation in Central and Eastern Europe, that is, the geographical region in which Czechia is located. As the prime minister of the Government of the Czech Republic, I would like to address the current situation in our country.

Successfully and actively attracting foreign investments is one of the key priorities of the Czech government. In our party platform we promised to support, among other things, job creation, economic development and the creation of good and stable conditions for doing business in Czechia. I am convinced that in our government's first year, we have accomplished a great deal. For example, the Investment Incentive Act has been amended in response to changes in the European Union's investment incentive rules. I would also like to mention changes to the Agricultural Land Protection Act amending set-aside payments. I also hope that last year's efforts to overhaul CzechInvest, an agency that focuses on providing services to potential investors in Czechia, will continue.

In 2014 we supported a total of 149 investment projects, which will bring more than 78 billion Czech crowns to the Czech economy and will create nearly 15,000 new jobs. I would like to mention projects that are nearing their final stage of development and for which investment incentive

agreements have already been signed, such as investments made by Nexen, Hyundai, and Lego. I should also mention the expansion of production facilities at Škoda Auto in Kvasiny and Amazon's investment in Dobruška. In accordance with government policy, a majority of these investments have been made in regions affected by high unemployment and that require economic development support. The government also endeavours to attract foreign investments through active economic diplomacy. Last year we made great progress in this regard as well.

I would also like to mention activities related to current discussions about establishing the European Fund for Strategic Investments. The government is also planning changes related to Czechia's transportation infrastructure. Transportation infrastructure does not only mean motorways and rail corridors but also the development of high-speed rail; we need finally to prepare concrete high-speed rail projects. During my term in office, expenditures on transportation infrastructure should approach roughly 2 per cent of GDP.

Creating conditions for foreign investments is also a question of utilising funds from the European Union. It is not just an issue of using all the resources available from existing programmes but above all a matter of beginning to draw from new programmes in 2015. I hope that we succeed and that the first operating programme to be approved by the European Commission and from which funds can be drawn will be the Ministry of Industry and Trade's Operational Programme Enterprise and Innovations for Competitiveness.

To conclude, I hope that the government will push for the creation of stable, transparent business conditions in our country so that we can support economic growth and guarantee stability.

## **Jan Mládek, Minister of Industry and Trade of the Czech Republic**

Let me begin by thanking the Office of the Government for preparing and organizing the international symposium on foreign direct investments, and for inviting state officials, representatives of employers and employees as well as academic researchers and experts from abroad. It is therefore a great honor for me to open the today's symposium.

The issue was chosen appropriately. Our government strongly supports an inflow of foreign direct investments as one of its key priorities for their multiple positive impacts on our economy that consists in speeding up the industrial development and increasing production capacities in various sectors while creating new jobs and improving the level of living standard in various Czech regions. Foreign direct investments can be seen as the driving force for enhancing our economic cooperation with other countries, sharing cutting edge technologies and thus increasing our foreign trade and labor productivity. From a macroeconomic perspective, the foreign companies and their businesses and export activities in our country account for positive trends in the balance of payments, and of course, for the growth rate of the gross domestic product.

I am convinced that now it is the right time to discuss the new strategy for foreign direct investment promotion in the Czech Republic. It should be noted that the economic crisis came to its end and turned into the rise of the European economies that is reflected by a record boost in the volume of investments implemented in Europe. This is a convincing evidence of the renewed confidence of global investors in the Central European region.

Another reason for recent changes is represented by the new concept of state aid in the European Union, implemented by European regulations that came into effect on July 1, 2014. For the Czech Republic, it means in particular the reduction of the total volume of aid from the former 40 per cent to the 25 per cent of eligible costs and a new systematic approach to

block exemptions. Here it should be mentioned that the smaller volume of allowed state aid in the Czech Republic in comparison with neighboring countries should be seen as a positive evidence of the greater effectiveness of our economy.

Our goal is to enhance all the more the attractiveness of the Czech Republic for foreign investors, and we are pleased that our country is constantly ranked among the top 15 in Europe. In the number of investment projects related to the automotive sector, our country is in the third place.

Our government continues to strive for improving the business environment for investors and offering them a clear and transparent system of investment incentives. The amendment to the Investment Incentives Law elaborated by our Ministry and being currently in the legislative process is a response to both of the above mentioned requirements, which contains for example more support for job creation and for acquisition of tangible and intangible fixed assets. In addition, it newly introduces the so called strategic industrial zones and improves the calculation of income tax exemptions for investors. All these are made in order to make the system of foreign direct investment promotion in our country more attractive for strategic investors. The transparency and responsiveness of investment incentives is actually a decisive factor in the international competition.

In conclusion, I wish all of us a fruitful today's session, bringing also an informative and inspiring view on foreign direct investments in other countries.

## **Josef Středula, President of the Czech-Moravian Confederation of Trade Unions**

I am very grateful to have had the opportunity to address the European Trade Union Institute and the Czech government, to have represented the Czech-Moravian Confederation of Trade Unions and to have said something about the topic of foreign direct investment. In the past, participating in such a symposium would have been absolutely impossible; ideological differences would have prevented it. I feel that Czech social partners were put in a novel situation at the symposium: they were able to take part in discussions about many important topics with experts from various countries. For us it is very important to discuss these issues together, to achieve progress together and above all to sit together at the same table.

In Czechia a great deal has occurred as far as foreign direct investments are concerned. However, not everything has been good. Czechia has long focused on quantity: the prevailing idea is that the more foreign investments, the better things will be in our country. I am fundamentally opposed to this kind of thinking. Czechia has favoured attracting investments 'at any cost'. This is unfortunate. Take, for example, Flextronics, a company whose name has gone down in history as an example of what a bad foreign investment looks like. Perhaps some readers will be familiar with this story. This company spent one year in Czechia and hired 1,000 employees, all of whom were laid off within the year. Flextronics was subject to virtually no accountability. There were no measures in place to make this company behave in accordance with the law or in a socially responsible manner. No one in authority negotiated such points, nor did anyone have such ambitions. Therefore, we cannot be surprised that it ended badly.

Siemens is another example. Siemens used to have a production facility in Prague with about 1,000 employees. They produced subway and tram cars. In July 2008, during the summer holidays, the company informed its employees that it would be closing the plant because it was unprofitable.



However, while the decision to close down the facility and to move production elsewhere had indeed been made, it was not true that this was being done for economic reasons. They announced the closure in July because they assumed that people would not protest. Production was not moved to the east, to countries with cheaper labour and better investment incentives, but to Austria and Germany, that is, to a completely different region from the one that people tend to talk about when discussing the loss of foreign investments. Unfortunately, there are many such cases.

Such experience illustrates that there are a number of important questions that we should ask about foreign investment. Do we only want manufacturing jobs, or do we want long-term investors dedicated to developing research activities? At the symposium, Prime Minister Sobotka mentioned Hyundai and Nexen. Hyundai, however, is a company that treats its employees in an unacceptable way. They have done everything they can to eliminate trade unions, social dialogue and anything else that stands in the way of generating enormous profits. Investor behaviour – how investors behave towards their surroundings, how they behave towards their employees and how they behave towards the future – is another aspect of foreign investment.

Another question is whether such investments in Czechia are profitable. From my perspective as a trade unionist, the answer is a resounding ‘yes’. If annual profits amounting to 6 per cent of GDP are repatriated, this must be heaven on earth. It is not my wish for our country to become a manufacturing location for other countries. What we need is true, long-term security, security that a given investor is serious and has not come merely to take advantage of investment incentives.

I would like to turn to the issue of the euro. Right now, the thought of Czechia joining the euro zone frightens me. The reason is the price of Czech labour. The devaluation of 2013 reduced Czech earnings to a point lower than they have ever been. Such a scenario is unacceptable. The median monthly income in Czechia is roughly 750 euros. The average Czech pension, according to current exchange rates, is around 350 euros. At the same time, Czechia and Germany – where the situation is very different – share a common border.

Thus far I have dealt mainly with criticisms, although I must add that there are investors whose behaviour is above average. Good examples include Škoda Auto, Bosch, Diesel Jihlava and, from time to time, also Siemens. Nonetheless, I think that in Czechia there is a lack of basic discussion about why we want foreign investments, what kind of investment we want and under what conditions, and how we can assess whether these investments meet our demands. I would like to believe that we already know what we do *not* want as far as foreign investments are concerned, but the case of Amazon seems to indicate that I may be wrong. Was no one capable of analysing how this company behaves in Germany and elsewhere?

More generally, there are so many strategic documents available in Czechia that no one has time to actually read them. I strongly recommend them to insomniacs. They are available on the internet and are well worth looking at. Currently, there are about 120 such documents available at [www.verejne-strategie.cz](http://www.verejne-strategie.cz). But because we Czechs can never get enough, because quantity is so important to us, we have added another 20 connected to the new programme period. Sometimes I joke with my colleagues in the government that one day I'll test them out on their knowledge of these documents. But joking aside, I'd like to say as a trade union representative that we're prepared to talk to anyone who has a vision of where Czechia should go.

Finally, in Czechia we are used to watching our borders. It's as if nothing outside the country exists. However, we need to think about Europe-wide development with an emphasis on the region in which we live. One day, foreign investors may leave for somewhere else. We will not have created the infrastructure necessary for a normal life without these investments; we might even experience relatively rapid collapse. If we are wise and think regionally – preferably thinking about the EU as a region – our future development will be far more secure.

I hope that the issues I have touched upon are just as important for you, the readers, as they are for us, the Czech-Moravian Confederation of Trade Unions. We need to understand what people want because the future of Czechia is a question for today, not tomorrow. If we have a good foundation, I think that Czechia will be better than ever before.



# **Introduction**

## **Foreign direct investment in eastern and southern European countries: still an engine of growth?**

Jan Drahokoupil and Béla Galgóczi

### **1. Introduction**

Foreign direct investment (FDI) has been driving economic growth in many countries of eastern and southern Europe. Eastern enlargement of the European Union was accompanied by an expansion of industrial capacities on the part of multinational corporations in the new member states, particularly in the ‘Visegrád Four’ countries (Czechia, Hungary, Slovakia and Poland). Capital inflows in banking and finance contributed to unsustainable growth patterns in some parts of the region, in particular in the Baltic states and southern Europe. These bubbles eventually burst in the economic crisis that hit in 2008. On aggregate, cross-border investments fell even more than domestic investment in 2009–2010. At the same time, however, foreign investors played a stabilising role in many sectors and central and eastern European exports, due mainly to foreign affiliates, bounced back. At the same time, the lack of competitive export potential had been exposed as one of the core problems in the economic structure of some southern European countries particularly hard hit by the crisis (Greece and Portugal).

This book investigates the role that foreign direct investment has played in the post-crisis period, comparing patterns across countries and sectors. An overarching objective of this publication is to assess the extent to which FDI can still be seen as a key driver of economic development, modernisation and convergence for Europe’s low- and middle-income economies, taking into account also the risks and limiting factors associated with FDI. The book also maps the measures aimed at enhancing competitiveness pursued at both the EU and the national level. The main questions include the following. What role has foreign investment played in the period since 2008? Have we seen a qualitative change in the patterns that characterised the pre-crisis economic expansion? What have been the differences between countries and across sectors? What explains these differences?

FDI has apparently lost the growth-driving role that it had before the crisis. Apart from the forms of FDI that contributed to housing and asset bubbles – which have clearly proved to be unsustainable – also non-financial FDI has lost its dynamics and countries with high FDI penetration – such as the ‘Visegrád countries’, but also Spain – were equally affected. In these countries, multinationals are no longer rapidly expanding their production capacities, but have entered a consolidation stage of expanding profitable operations through reinvestment. The main challenge at this stage is to upgrade the ways in which affiliates are integrated in European and global production networks and also to increase local income and investment from participation in these value chains.

In this publication we look at both country- and sector- specific FDI patterns. We focus on southern Europe (Spain, Portugal and Greece) and on a number of central and eastern European countries. Chapters with a sectoral focus examine the automobile, ICT manufacturing, business services, clothing and steel sectors. The former two are the leading manufacturing sectors with high FDI concentration in CEE and Spain, while the latter three feature important foreign capital-driven sectors with opposite dynamics (business services are expanding, while clothing and steel are on the decline). In order to provide a full picture the sectoral aspect also compares recent FDI trends with those in the pre-crisis boom period.

## **2. FDI and economic development**

The strong reliance on FDI in central and eastern Europe and, to a lesser extent, in Spain appeared to represent a risk factor during the downturn in 2008 and 2009, having raised doubts about the sustainability of these countries’ export-based and FDI-driven growth model. At the time, the political narrative in these countries was dominated by concerns about ‘FDI dependence’ and ‘export dependence’. However, exports in nearly all central and eastern European countries began to surge from early 2010, in particular because the German economy, with which the central and eastern European countries are closely interlinked through subcontracting chains, started to exert a strong pull effect. At the same time, a number of the economic problems of the southern European countries during the intensifying euro-zone crisis proved to be linked to low levels of export potential and productive FDI penetration (in particular in Greece and to a smaller extent in Portugal). As a result, high

FDI penetration in central and eastern Europe again was seen more as a strength than a weakness, but concerns about its longer term sustainability remained.

Our approach to FDI in this publication synthesises macroeconomic analysis based on a balance of payments perspective with a sectoral view based on investor strategies and the branch-specific business models by multinational companies. In bridging the two perspectives we refer to the theoretical model of FDI and the multinational companies (Helpman 1984; Markusen 2004). One key element, as regards type of FDI, is to distinguish between horizontal and vertical FDI. In the case of horizontal FDI, the strategic aim of the investment is to explore new markets. In manufacturing, multinational companies replicate the same production process in a foreign country in order to explore its markets; they may also use their new production platform to explore the markets of neighbouring countries.

In the case of vertical FDI, multinationals organise a vertical division of labour between the domestic and host country locations in order to exploit differences of factor endowments and to increase efficiency by optimising value chains. Specific stages of production – often ancillary business services, such as accounting, but also labour-intensive elements of the manufacturing value chain – are relocated to foreign-based companies or subsidiaries to increase the competitiveness of the production chain as a whole.

Even if the distinction between purely ‘horizontal’ and ‘vertical’ FDI is more blurred in practice, it remains a useful basic discussion framework. Productive FDI in manufacturing industry creates export potential and can be considered an advantage and an economic driving force, although the spillover effects that strengthen the role of domestic firms remain fairly weak in most central and eastern European countries. In contrast, FDI that targets exploitation of the domestic market (finance, retail chains, real estate) is more controversial and may well be regarded as a risk factor.

An overview of the potential impact of FDI on host economies is provided in Table 1. These impacts can be analysed on the balance-of-payments, enterprise and whole-economy levels. We discuss them together with the experience of, in particular, the central and eastern European countries (see also Myant and Drahekoupil 2011).

**Table 1 Potential effects of FDI**

Positive	Negative
<b>Balance of payments level</b>	
Financial inflows as FDI comes in	Repatriated profits
Higher exports from multinational companies	Higher imports from market-seeking investors
<b>Enterprise level</b> <i>Privatisation specific</i>	
Survival; access to capital, technology, know how, distribution networks	Closure of privatised enterprises to eliminate competitors; labour shedding, reduced production
Increased R&D	Centralisation of functions in centres
<i>Greenfield/General</i>	
High-tech activities, higher skill levels, higher productivity, wages	Concentration on low-skilled, labour intensive, activities
Benefits from multinational company network	External control, dependence on decisions made abroad
<b>Whole-economy level</b>	
Spillovers to local firms of higher productivity, wages, management methods	Attraction of skilled workers away from local companies
Development of new activities, leading to higher competitiveness	Local firms unable to compete with multinational companies (+ multinational companies enjoy government incentives)
	Subordination of economic development to strategies of multinational companies
	Multinational companies may favour home base when difficulties arise

Source: Adapted from Myant and Drahokoupil (2011), Table 15.3

The effect on the balance of payments should immediately be positive due to the inflow registered on the financial account. The long-term effect depends on the activities undertaken by the foreign company and has sometimes been associated with a worsening rather than an improvement in current account performance (for example, Mencinger 2007). In central and eastern Europe, the initial capital inflow was gradually balanced by an outflow of repatriated profits, meaning that, over time, the effect on the balance of payments could be increasingly negative unless balanced by a continuing inflow of new capital or by a strong trade surplus from export-oriented manufacturing.

Profit repatriation associated with high FDI stock indeed proved an important phenomenon as the investment cycles matured. A study by the Czech Office of Government revealed that it achieved a particularly high

level in Czechia, where it exceeded 6 per cent of GDP in 2013 (Chmelař 2014). The biggest repatriators were the infrastructure sectors (electricity, gas, heating), financial services and telecoms. These sectors also generate low export earnings and foreign involvement may also have led to higher imports in 2013. Manufacturing investors were also substantial repatriators, but these sectors also generated high export earnings.

On the enterprise level, a concern specific to privatisation to foreign investors in central and eastern Europe was that foreign companies might want to buy firms to eliminate a potentially troublesome rival, but this was not confirmed by experience. The worry reflected an exaggerated belief in the strength of the inherited technological base. However, there were more persuasive arguments that privatisation sale prices, particularly for some raw material producers, were very low and that domestic producers could have done just as well as foreign-controlled firms by continuing to produce products that were relatively easy to sell.

This was less of an issue for major export-oriented manufacturing enterprises, which had no future without a foreign partner. Foreign ownership met clear strategic objectives and, where major multinational companies were involved, prevented asset stripping. It brought financial strength and the resources to overcome difficulties arising from inherited debt. These firms were able to invest in new technology and modernisation. It also brought access to outside markets through international networks and brand names; the probing or dependence on the outward processing trade of domestically owned firms was therefore unnecessary. Foreign-owned firms could focus more on their long-term strategy (see Myant and Drahekoupil 2011).

A general concern at the enterprise level is related to the extent to which foreign ownership leads to an increase or decrease in activities that require higher skill levels – which contribute most to value added – and the extent to which it brings, or destroys, the higher-level activities that are typically concentrated in companies' home bases. Acquisition by foreigners could be followed by a general deskilling as enterprises are 'hollowed out', leaving only the lowest-level activities. However, evidence from the motor-vehicle sector points rather to an increase in research and development (R&D) activity, albeit much of it relatively routine and transferred to central and eastern Europe because of the lower wages for skilled labour there (Myant and Drahekoupil 2011). Much R&D has also been concentrated in a few larger establishments. Greenfield investment



was less likely to be associated with significant R&D and that was particularly true of smaller-scale production activities, especially with small plants set up in industrial zones in later years, which required only basic skill levels. These were also more footloose and could easily be moved to a country with even lower labour costs once that appeared favourable. This provided employment and exports, but not a general upgrading of technology levels. The evidence in the chapters that follow points out to an uneven pattern of selective upgrading, with dynamics specific to individual sectors.

Finally, the whole-economy level covers impacts beyond the individual foreign-owned company. Media reports of poaching skilled labour and squeezing domestic firms were relatively frequent in central and eastern Europe, but its impact has not been quantified. Another possibility is that inward investment may have little impact on the wider economy, creating only what have been described as ‘cathedrals in the desert’ (Grabher 1992; cf. Hardy 1998). Studies have looked in many countries for spillovers to domestically owned firms in terms of better technology and management practices, but came up with only a very modest impact (Knell 2000: 200; Pavlínek 2004, 2008). However, seeking spillovers alone misses the extent to which FDI brought revival and development across whole sectors (see Pavlínek 2008; Myant and Drahokoupil 2011).

The extent of foreign ownership also brought dangers if the investors had only limited commitment to the national economy or if there was an over-reliance on a few sectors (notably automotive) should that sector face a general decline in demand. In such a case multinational companies would evaluate where to cut capacity and more peripheral operations would be likely to suffer first. The experience after 2008 discussed in this book represents a test case in this respect. It provides examples of relocations from the region and also of sectors that struggled (textiles) or experienced a prolonged decline (steel), but the overall pattern is that of a high level of commitment on the part of (non-financial) foreign investors to countries in which they are active. An overview of the main findings is provided in the next section, first from a macroeconomic perspective, then from the standpoint of sectoral patterns.

### **3. FDI after the crisis – a macro-perspective**

The changing characteristics of FDI in the 11 new EU member states, as well as in two southern European member states Greece and Portugal in the years 2008 through 2014 are investigated in the chapter by Gábor Hunya. Data presented in the chapter show that FDI was one of the driving factors of the pre-crisis economic boom in the east and the south of the European Union 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 after 2008, FDI flows suffered a sharp decline. The partial recovery of cross-border investment in 2011 and 2012 was followed by an even deeper setback in 2013. FDI has lost its growth-engine function, while economic growth has become sluggish and new EU members' catching up to the EU15 slowed down.

There was no clear link between FDI stock and changes in GDP during the crisis. On one hand, Poland experienced soaring FDI and good growth performance; Lithuania, Slovakia, Estonia and Bulgaria also witnessed FDI expansion and growth during the four years of the crisis (see also Hunya 2014). In a number of countries – including Portugal, Hungary, Croatia and Slovenia – FDI growth was not sufficient to prevent economic contraction and thus GDP decreased even as FDI rose. Greece, on the other hand, has experienced an enormous drop in FDI and a significant decrease in GDP. The chapter comes to the conclusion that countries with high FDI penetration survived the crisis better than those with little inward FDI, but sees little chance that FDI will resume its growth-driving role in the near future.

In the second chapter, Gergő Medve-Bálint compares pre- and post-crisis FDI trends in the Visegrád countries at the regional and sectoral levels. While the general impact of FDI on regional development was positive, it also cemented or even sharpened regional disparities as a result of regions' asymmetrical integration into world markets. Regional distribution of FDI over time did not show any major shift in the locational preferences of foreign investors when comparing pre- and post-crisis periods; territorial concentration of foreign companies and their revenues even grew further. The author also underlines that capital cities were responsible for most of the revenues and the regions that had been preferred before the crisis retained valuable investments also after the downturn. As regards the sectoral composition of FDI, data indicate

a decline in the share of capital-intensive manufacturing investments in the post-crisis period. On the other hand, an increase in the share of the services sector (especially wholesale and retail and in professional, scientific and business services) can be observed and the average size of newly established firms got smaller.

The chapter concludes that the crisis did not entail significant disinvestment in the Visegrád Four region and post-crisis regional economic performance shows a strong correlation with FDI penetration. Data indicate no shift in the locational preferences of foreign investors in the post-crisis period, which means that regional disparities are here to stay. A sectoral shift towards services seems to be a clear trend in all the examined countries. Data also showed that neither pre-crisis manufacturing nor post-crisis service FDI seem to be knowledge-intensive or high value-added; foreign firms still seem inclined rather to take advantage of the region's cheap, skilled workforce.

The relationship between FDI flows and competitiveness enhancing measures is addressed in the chapter by Tibor Meszmann. By way of a content and discourse analysis of the collected empirical material, it seeks to answer the question of how competitiveness enhancing measures in the southern and eastern EU peripheries in the adjustment period targeted FDI increases. Hungary, Latvia, Portugal, Spain and Greece are examined in detail, as these were also the countries where the EU launched a special financial assistance programme to remedy economic imbalances.

The author finds that approaches to competitiveness are fragmentary and change over time, especially in the adjustment period, compared with 2008. The notion of 'national competitiveness' is strongly linked with issues of external market shares (often also referred to as 'external competitiveness'), trade at various levels, costs and productivity (cf. Delgado et al. 2012: 6), but it is also closely associated with presence in strategic industries, investment or endowments in economies of scale. 'National competitiveness' thus includes both cost and non-cost competitiveness and although 'external competitiveness (of nations)' was initially used as a synonym, its use became narrowed to 'cost competitiveness' over time.

There is also a major difference in measures proposed and associated definitions of competitiveness between the European Commission, on one hand, and the IMF and the OECD, on the other. The IMF and – to a lesser extent – the OECD documents stress 'external competitiveness'

(meaning ‘cost competitiveness’); European Commission documents and recommendations were originally more concerned about R&D and innovation in a context of non-cost competitiveness (for example, the Lisbon Strategy), but during the adjustment period EC recommendations also shifted their focus to ‘external competitiveness’ in the sense used by the IMF and the OECD. As regards types of measure, the heaviest stress – especially in the adjustment period – was on improving the cost-competitiveness of business through decreasing labour costs and other administrative costs, improving the general business environment and by increasing price competitiveness by liberalisation and privatisation in sheltered sectors.

The recommendations for central and eastern European countries (Latvia and Hungary), on one hand, and two southern European countries (Portugal and Spain), on the other hand, differed. In particular, improving cost-competitiveness featured higher on the agenda in the south, especially in the form of wage cuts or moderation, whereas in the east the stress was more on structural measures, such as ‘regaining investors’ trust’ in Hungary, or on improving the business environment in Latvia. The other difference is the complete lack of involvement of the social partners in the east. Social dialogue is judged as an important mechanism in the south for implementing competitiveness enhancing measures, but its significance fades in the adjustment period. The most radical case is that of Greece, as it combines extremes of both. Similar to Spain and Portugal, recommendations focused on cutting labour costs.

The exercise shows that targeting an increase of FDI or private investment within the broad category of competitiveness-enhancing measures (cost or non-cost based competitiveness alike) appeared only sporadically and in an indirect way. Supporting private investment by government measures only appeared now and then in a number of countries. The findings indicate also that the main structural reforms in all five cases, with varying intensities, addressed the ‘institutional environment’ for investors (including also foreign investors), but also institutions of industrial relations and public governance.

The author concludes that although structural reforms during the adjustment period produced significant changes, they did not necessarily increase national competitiveness in a qualitative and sustainable manner. While the balance of trade in goods and services improved and with the exception of Greece export shares in GDP also grew, ‘structural

reforms' did not produce the anticipated positive effect on growth and investment in any of the examined countries. The impact of competitiveness enhancing measures on private investment and more particularly FDI is inconclusive. Competitiveness enhancing measures specifically targeting FDI varied substantially in the five cases analysed: from general FDI (Greece), export-driven FDI (Latvia) to sector-specific 'good FDI' (Hungary, perhaps Portugal) or no FDI in the case of Spain. As the contributions to this volume show, the record varies greatly, but overall FDI stagnated or fell below its 2008 level.

The link between competitiveness enhancing measures and FDI inflow is addressed also in two other chapters. The chapter by Ricardo Aláez-Aller, Carlos Gil-Canaleta and Miren Ullibarri-Arce on auto assembly in Spain and its role in the respective value chain observes that recent decisions by MNCs to allocate production in Spanish plants may be linked to adjustment measures that resulted in labour cost reductions and greater flexibility of work. This apparent increase in the advantages of locating assembly operations in Spain was cited in the context of decisions made by Ford and GM to restructure their operations in Europe. The chapter shows that Spanish plants have benefited in terms of workload and quality of car models as firms sought to restore profitability in their European operations. As other major European assemblers have not made such radical changes in the location of their operations, it remains to be seen whether greater pressure on profit margins will result in a similar relocation of high-end models from previous core areas towards the old periphery. Only then will it be possible to state that the Great Recession has brought about a structural change in the geography of the value chain in the EU and that the place occupied by Spain in particular in that value chain has improved.

The chapter by Joaquim Ramos Silva on FDI in Portugal argues that the attraction of FDI to this country – with its low foreign investment penetration – after 2008 was driven mainly by short-term objectives such as the privatisation programme (prescribed to tackle the public deficit and debt problems) and other measures such as the fast-tracking of 'golden visas' to rich non-EU residents investing in real estate. Whatever the measures, FDI inflows have not been significant by international standards. As far as FDI outflows are concerned, it is a negative indication of the institutional environment that Portuguese firms intensified their relocation to other countries, mainly to the Netherlands, where conditions for conducting international operations are more favourable.

The author concludes that a strategic approach continues to be lacking in all dimensions of Portuguese policy towards (inward) FDI. What is effectively missing is an approach that is articulated with the necessary structural transformation of the economy towards increased international competitiveness and improved productivity, both based on advanced factors (such as technology and the use of better qualified employees). Clearly, this was not the path that was followed and short-term objectives – relatively easy to implement given the circumstances – largely prevailed over any other policy consideration.

#### **4. Developments in key sectors**

The second part of the book looks at FDI developments in some key sectors – automotive, ICT manufacturing, business services, clothing and steel – in more detail and compares them with the patterns observed before 2008. The automotive sector in Europe, at the time of economic expansion in the period up to the crisis, was characterised by a division of labour that benefitted both source and target countries, with an expansion of employment in target countries and stabilising employment in the source countries. In ICT manufacturing, a volatile market with footloose contract manufacturers was in search of new market opportunities. As the market was expanding, tensions were only local, but the overall trend was employment growth (a win-win situation of a kind, but in an insecure environment). FDI in business services in central and eastern Europe was in its initial phase during the early 2000s and started to gain momentum when the crisis came and brought a temporary setback, then expansion continued. In contrast, the clothing industry was leaving Europe and represented a negative sum game even in boom times. Similarly, in the steel sector, downscaling and reorganisation had been the major processes in the early and mid-2000s. This was linked in central and eastern Europe to the commitments associated with EU accession. In that phase, however, FDI still played a crucial role in the form of takeovers and reorganisation.

The *automotive* sector is characterised by vertically integrated production networks organised by original equipment manufacturers (OEMs) that work closely with first-tier suppliers.<sup>1</sup> Petr Pavlínek's analysis of developments in this sector argues that the 2008–2009 global economic crisis

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1. First-tier suppliers are direct suppliers to OEMs.

coincided with the end of the period of rapid expansion of the central and eastern European automotive industry related to the opening up of the central and eastern European region to foreign trade and FDI in the 1990s and the European Union membership in the 2000s. Development is no longer based predominantly on building new greenfield factories, but increasingly on consolidating the existing spatial structure of the automotive industry in the form of expanding profitable investments through reinvestment. This consolidation phase is typified by continuing process and product upgrading and by the much more selective and uneven functional upgrading of the central and eastern European automotive industry. Although this upgrading is crucial for maintaining the competitiveness of the CEE automotive industry, it is unlikely to alter its peripheral position in the European automotive industry division of labour, which will continue to be based largely on low labour costs compared with the western European automotive industry core. The pressure to control rising wages in the central and eastern European automotive industry is likely to intensify through inter-plant competition, the intensification of the labour process in the form of process upgrading and also through the selective devaluation of national currencies. This chapter also argues that large inflows of FDI led to the restructuring and rapid development of the automotive industry in central and eastern European countries at the expense of excessive foreign domination and control, possibly limiting the industry's potential for future economic development and for closing the gap between central and eastern European and western European economies.

*The information communication technology (ICT) manufacturing sector* can be regarded as a forerunner in international production-sharing. In ICT manufacturing vertical specialisation of original equipment manufacturers resulted in the disintegration of the production chain as contract manufacturers took over different stages of manufacturing. They then reintegrated the manufacturing process and emerged as electronics manufacturing service providers with a global footprint. The chapter by Magdolna Sass shows that central and eastern European countries became important locations for electronics manufacturing. The foreign-owned operators were even able to gain in terms of their relative shares of production, employment, value added or R&D during the crisis, while domestically-owned companies proved vulnerable in the crisis. Overall, the five CEE countries were able during the crisis to increase their shares in European electronics FDI, production and, to a lesser extent, value added, and probably were able to slightly reduce their dependence on

imported inputs. At the same time, the Mediterranean countries basically stagnated in all areas, due less to the increase in the CEE shares and more to larger shares of certain 'old' EU member states – especially Germany – in European production and value added.

Thus the restructuring of European electronics production progressed further during the crisis years and changed direction to some extent, reflecting the changes in the competitiveness of individual EU member states and their differing specialisation in the various, heterogeneous segments of the electronics industry. Overall, if we assume the continuation of these trends, a further increase in the importance of the CEE countries can be expected in the European electronics industry.

The chapter by Grzegorz Micek examines recent FDI trends in *knowledge-intensive business services (KIBS)* in central and eastern Europe, focusing on Poland. In statistical terminology the KIBS sector includes IT services, legal services and accounting, activities of head offices, architectural and engineering activities, scientific R&D, advertising and market research. The author emphasises that knowledge-intensive business services may vary significantly in terms of the type of knowledge and skills used and these operations may be standardised and easily offshored. It is not a uniform sector, either, in view of the wide variety of occupations represented. While FDI in the sector is on the decline globally, in the CEE region both FDI stock and employment have been growing continuously during the crisis. Poland has become an emerging core of the sector in the region as the crisis brought more investments from the United States and developing countries. Trends of spatial de-concentration – away from Warsaw, towards cities with 300,000 inhabitants – were observed, with locational factors of lower wages and targeted government incentives as a key factors. Availability of skilled labour was an important but not a decisive factor for investors, given that most business services FDI is not knowledge-intensive. As regards the sustainability of FDI-based growth in the sector, the author finds a high likelihood of further growth in the short term. At the same time, long-term threats can be identified, such as the relocation to countries outside Europe as a result of growing wage and labour costs in Poland. A related risk factor appears to be lock-in in the less attractive, less knowledge-intensive FDI segment of the sector.

The chapter by Smith and Pickles explores the ways in which regional concentrations of export-oriented *clothing production* sustained employment in often peripheral regional economies when, particularly during the



1990s, de-industrialisation was occurring in other branches. It examines how increasing competitive pressures started to unravel these regional production systems, leading to a much more differentiated landscape of firm-level strategies and uneven upgrading capacities among enterprises. Within the context of further economic crisis-induced restructuring over the past five years, the chapter highlights the ways in which proximity to key western buyers – often through joint ventures and foreign direct investment – has been one way in which production has been sustained in some peripheral regional economies. The chapter highlights the role of foreign ownership in firm responses to these increasing competitive pressures, especially the role of proximity to buyers, foreign investors and consequent connections to primary markets in sustaining production of particular products during times of liberalisation and crisis.

Finally, the chapter by Vera Trappmann addresses the evolution of the central and eastern European *steel sector* in a European context. Although crisis in the European steel sector is not a new phenomenon, the current downturn has amplified some earlier negative trends. In western Europe steel was the first sector to be subject to supranational regulation, but national intervention continues due to overcapacities and the threat of site relocation. CEE countries were forced to reduce capacities in the EU accession process, while subsequent restructuring-related modernisation made them more resistant to closures in the post-2008 period. Shrinking overall demand was due to the downturn in the auto industry and the more long-lasting collapse of the construction sector and led to persisting overcapacities in the steel sector. The European steel sector lost 66,000 jobs between 2008 and 2014: western European steel producers suffered five plant closures, while in central and eastern Europe the biggest job losses due to bankruptcies and restructuring were seen in Poland and Czechia.

As for FDI trends, the author argues that because the energy-intensive sector has gradually reduced its capital stock since 2009 German metal producers have been cutting their investments in central and eastern Europe. As further consolidation and mergers continue to take place, investment is targeting non-European locations due mainly to cheaper energy, access to raw materials and large-scale auto industries. In terms of international competition, Chinese steel exports to Europe remain the biggest challenge due to lower costs, subsidies and cheap credit (hence the ongoing anti-dumping lawsuit). The chapter also identifies firm strategies that result in fierce downward competition, adversely affecting

labour and social standards and giving rise to large-scale social dumping. Growing pressure for flexibility is associated with potential or actual relocation and an illustrative case demonstrates how benchmarking of site performance is used by multinational companies to play off individual sites against each other. Finally, the author calls for policy intervention at the EU level. Employment standards need to be modernised and stabilised in order to halt the downward spiral.

## **5. Limits of the FDI-driven growth model**

The crisis has marked a breaking point in the growth and development model of European middle income economies in eastern and southern Europe. The period of high growth fuelled by external financing of different kinds – cross-border bank loans, leveraged financial investments, horizontal and vertical FDI – has apparently come to an end since the onset of the crisis in 2008. Financial and asset bubbles were burst and the structural weaknesses and vulnerabilities of these economies, masked earlier by high growth, were fully exposed. These structural weaknesses also called into question the role of productive FDI as a driver of modernisation and sustainable growth. At the same time, the crisis coincided with the end of a longer cycle that was marked by FDI expansion in central and eastern Europe linked to the opening up of the region and its subsequent EU accession.

All this suggests that the golden era of FDI is over, as, on one hand, FDI flows from 2008 onwards suffered a substantial setback that seems to be more than just a cyclical effect. With the single exception of business services, all sector-specific chapters in the present publication describe an FDI downturn. FDI has lost its growth-engine function, while economic growth has become sluggish and the catching up of new EU members to the EU15 has slowed down. Moreover, as is evident from both the macroeconomic and sectoral chapters, there is also a deeper-rooted qualitative issue that limits the development effect of FDI in the longer run. Apart from scattered anecdotal evidence, spillover effects of foreign affiliates to the domestic economy are scarce (even in ICT manufacturing and the business-services sector, as chapter authors emphasise); upgrading of value added content by foreign affiliates is at best selective and uneven; and the specialisation of central and eastern European economies in international value chains largely remains linked to the comparative advantage of low labour costs.

The value-capture problem thus appears to be a factor limiting the benefits of FDI: although upgrading in multinational company subsidiaries can improve employment quality and wages, it does not automatically allow affiliates to capture a higher share of the total value added (cf. Szalavetz 2015). Even more depressing is the fact – reflected in a number of chapters in this publication – that the targeted policy interventions to attract and upgrade FDI in terms of quality or to broaden its regional dimension seem to have had only a limited effect. Government declarations and policy objectives were clearly aimed at attracting more productive, manufacturing FDI, but evidence shows lower FDI and a shrinking share of manufacturing.

The overview of competitiveness enhancing measures at both national and European level found no link between these measures and FDI flows. The author also concludes that although structural reforms during the adjustment period produced significant changes, they did not necessarily increase national competitiveness in a qualitative and sustainable manner. The chapters on Spain and Portugal also show that, apart from ad hoc effects, the competitiveness of these countries did not improve and concepts and policies for qualitative development in raising non-price competitiveness were entirely missing. The focus of European adjustment policies on price and cost competitiveness can be regarded as counter-productive also for CEE countries. While one of the major challenges these economies are facing is how to abandon the low-wage specialisation trap, crisis adjustment policies further strengthened this profile. The sectoral and regional overview underlines that, despite policy efforts to broaden the regional scope of FDI towards less developed regions a concentration of FDI intensified further during the crisis and thus contributed to growing regional inequalities.

The overall picture thus seems to confirm a view that middle income economies on the southern and eastern periphery of the EU need to rely on other growth engines than FDI to continue the process of convergence with the high-income countries. The reliance on FDI seemed to work as a convenient policy shortcut. It has thus been argued that FDI can compensate for a weakness of domestic institutions, such as those providing companies access to skills and capital (Nölke and Vliegenthart 2009). However, future development may need to combine utilisation of capabilities developed in the foreign-controlled sector with reliance on domestic sources of innovation and growth.

## References

- Chmelař A. (2014) Odliv zisků jako symptom vyčerpaného hospodářského modelu, Prague, Office of the Government of the Czech Republic.
- Delgado M., Ketels C., Porter M. and Stern S. (2012) The determinants of national competitiveness, NBER Working Paper 18249, Cambridge MA, National Bureau of Economic Research. <http://www.nber.org/papers/w18249>
- Grabher G. (1992) Eastern conquest, in *Regional development and the contemporary industrial restructuring*, London, Belhaven Press.
- Hardy J. (1998) Cathedrals in the desert? Transnationals, corporate strategy and locality in Wrocław, *Regional Studies*, 32, 639–652.
- Helpman E. (1984) A Simple Theory of International Trade with Multinational Corporations, *Journal of Political Economy*, 92 (3), 451–471.
- Knell M. (2000) FIEs and productivity convergence in Central Europe. In: *Integration through foreign direct investment: Making Central European industries competitive*, Cheltenham, UK and Northampton, MA, Edward Elgar, 178–96.
- Markusen J.R. (2004) *Multinational Firms and the Theory of International Trade*. Cambridge, MA, MIT Press.
- Mencinger J. (2007) Addiction to FDI and current account balance, in *Dollarization, Euroization and financial instability: Central and Eastern European countries between stagnation and financial crisis?*, Marburg, Metropolis Verlag, 109–128.
- Myant M. and Drahoukoupil J. (2011) *Transition economies: Political economy in Russia, Eastern Europe, and Central Asia*, Hoboken, NJ, Wiley-Blackwell.
- Nölke A. and Vliegenthart A. (2009) Enlarging the varieties of capitalism: The emergence of dependent market economies in East Central Europe, *World Politics*, 61, 670–702.
- Pavlínek P. (2004) Transformation of the Central and East European passenger car industry: selective peripheral integration through foreign direct investment, in *Foreign direct investment and regional development in east central Europe and the former Soviet Union: A collection of essays in memory of Professor Francis 'Frank' Carter*, Aldershot, Ashgate, 71–102.
- Pavlínek P. (2008) *A Successful Transformation?: Restructuring of the Czech Automobile Industry*, Heidelberg, Springer Verlag.
- Szalavetz A. (2015) Upgrading and value capture in global value chains – more complex than what the smile-curve suggests, in Szent-Iványi B. (ed.) *FDI to Central and Eastern Europe in the New Millennium*, Vienna, Wiener Verlag für Sozialforschung.



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

Gábor Hunya

## 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, 5<sup>th</sup> 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, 6<sup>th</sup> edition (IMF 2013). We estimated the flow data relying on available information.

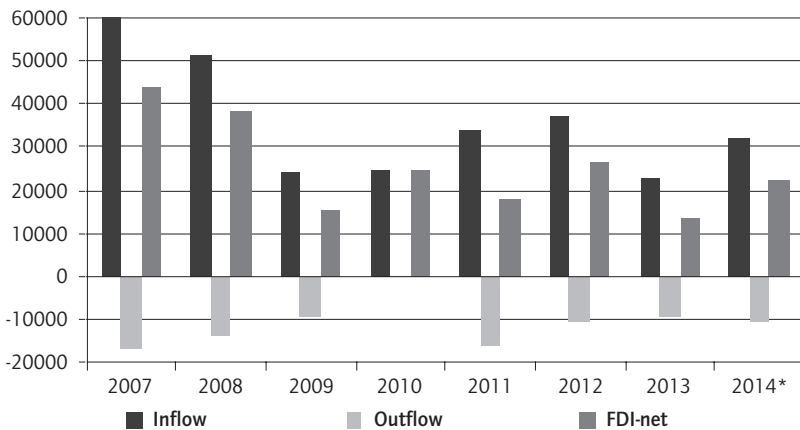
Next we analyse the change in the number of announced greenfield investment projects, based on [www.fdimarkets.com](http://www.fdimarkets.com), a database that reports on new cross-border investment projects in detail. Thirdly, Eurostat's foreign affiliates statistics (FATS), which comprise data on majority 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.

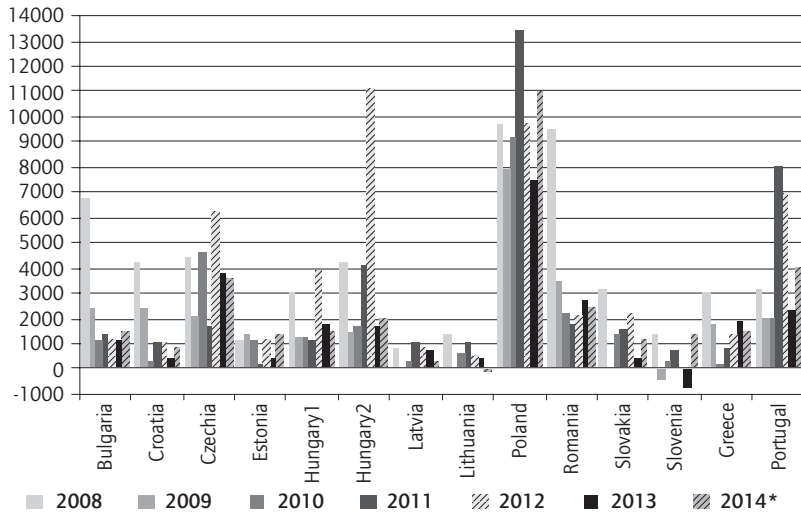
Developed countries usually export more FDI than they import or the two items are similar to each other at a high level. Catching-up countries, such as those under survey, have far more FDI inflow than outflow, although their outward FDI has increased with time. Some of the more developed countries among 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 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

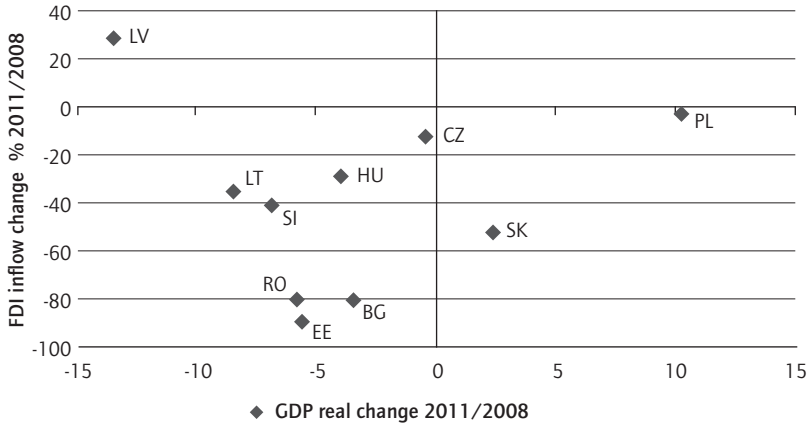
latter country. At the same time, Swedbank increased its capital in the subsidiaries in Latvia and Lithuania, which boosted financial sector FDI in these countries.

- 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

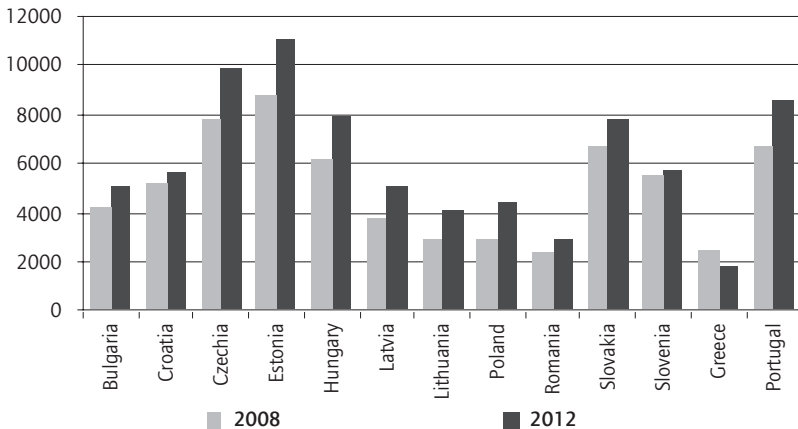
Sources: Eurostat and national statistics

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.<sup>1</sup> 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)



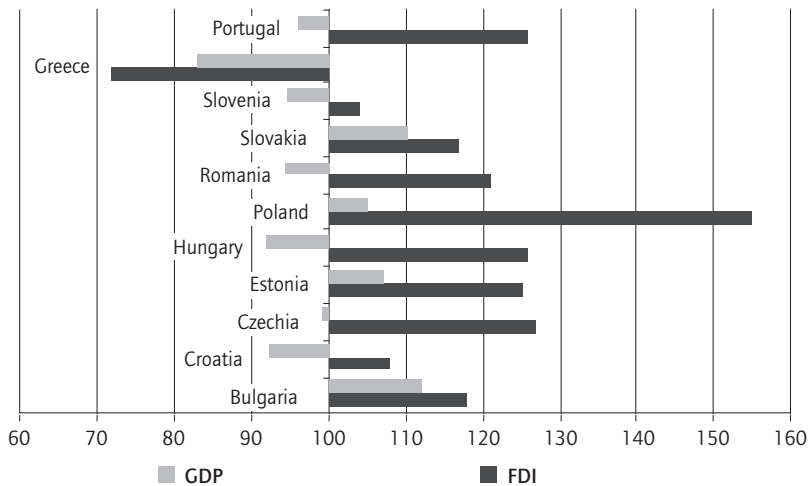
Sources: Eurostat and national statistics

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

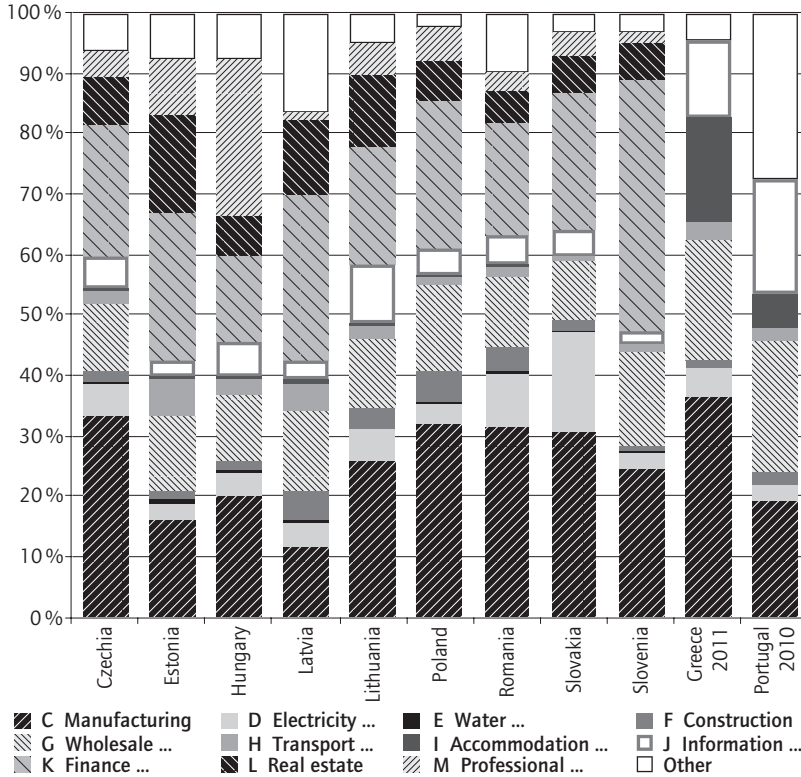
Portugal) than in those that did not have a strong FDI sector (Croatia and Slovenia). A fast and thorough economic adjustment in Latvia triggered some GDP decline but also attracted FDI. The case was similar in the other two Baltic countries, which suffered severe GDP declines ahead of the global financial 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



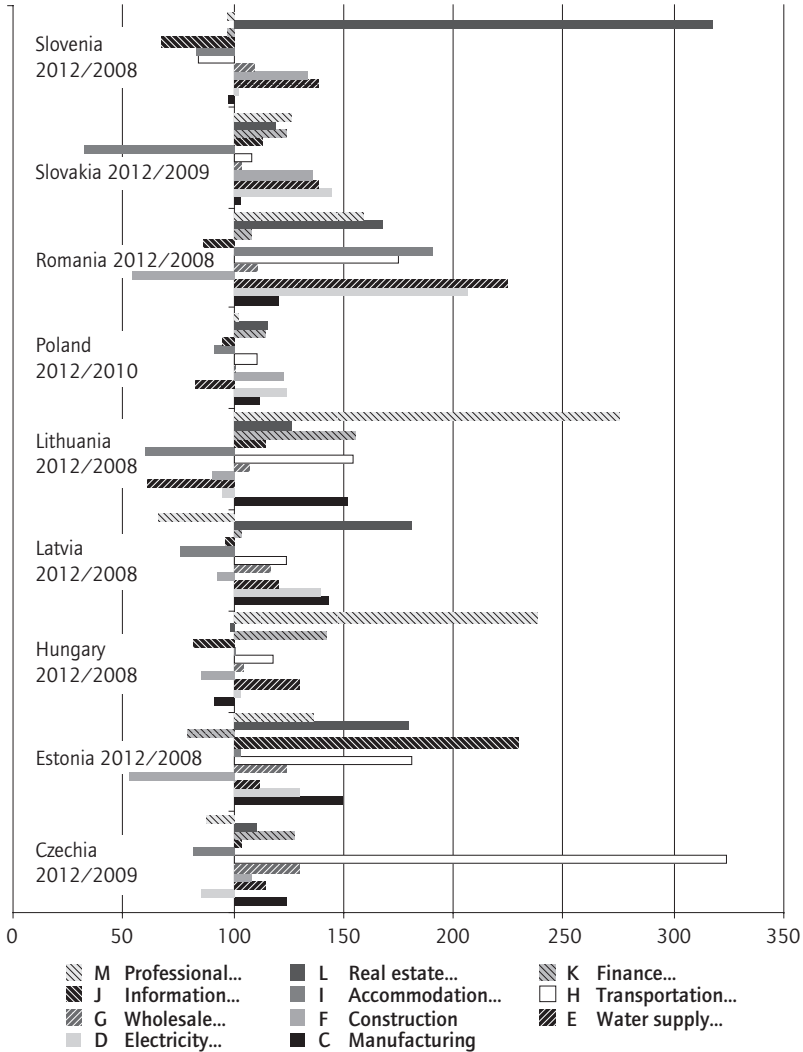
Sources: wiiw FDI database and OECD FDI statistics

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 International<sup>2</sup>)

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](http://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](http://fdimarkets.com)).<sup>3</sup> 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](http://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

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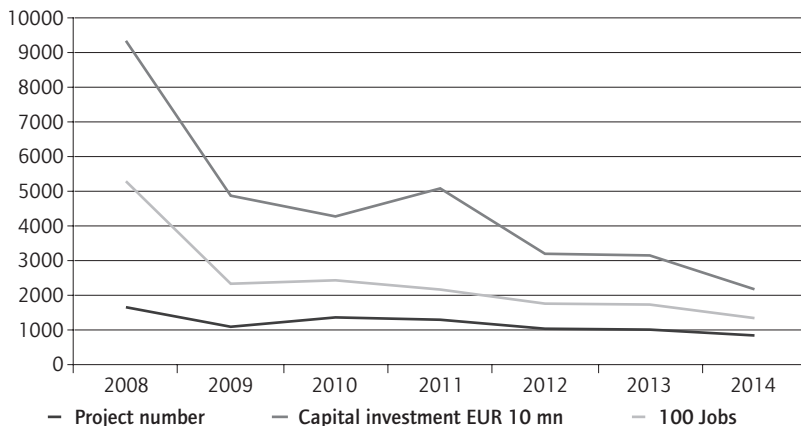
3. For comparison, UNCTAD reported FDI inflows to the 13 countries in the value of USD 78 billion in 2008 and some 35 billion in 2010.

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

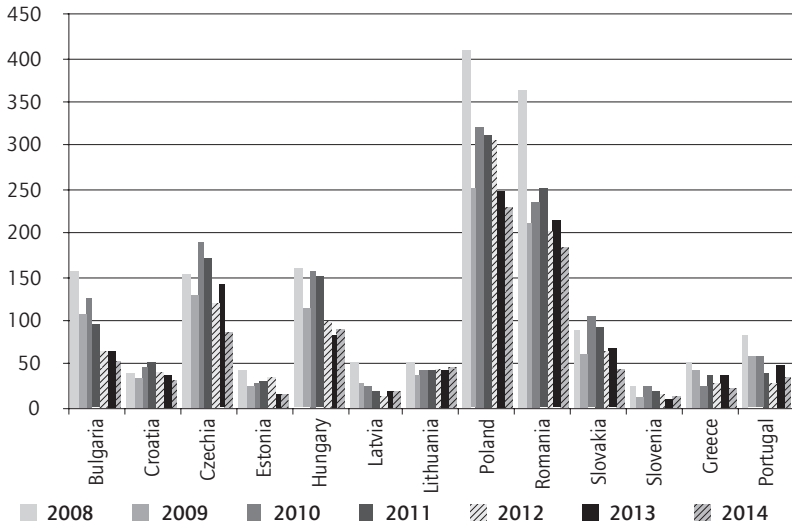
The data from fDi Markets a division of Financial Times Ltd ([www.fdimarkets.com](http://www.fdimarkets.com)) used in this paper are based on media reports referring to individual investment projects. The database includes the number of registered projects and (often estimated) data on the amount of 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](http://fdimarkets.com)

Figure 9 Number of greenfield projects by year and country

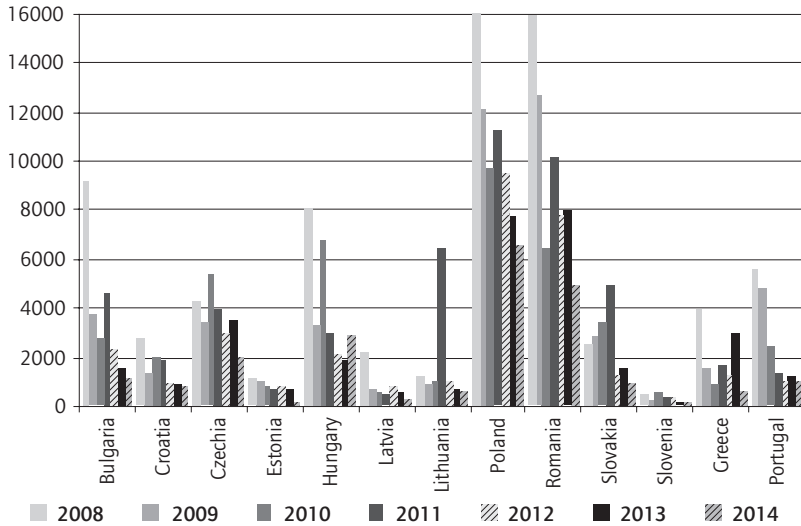


Source: fdimarkets.com

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

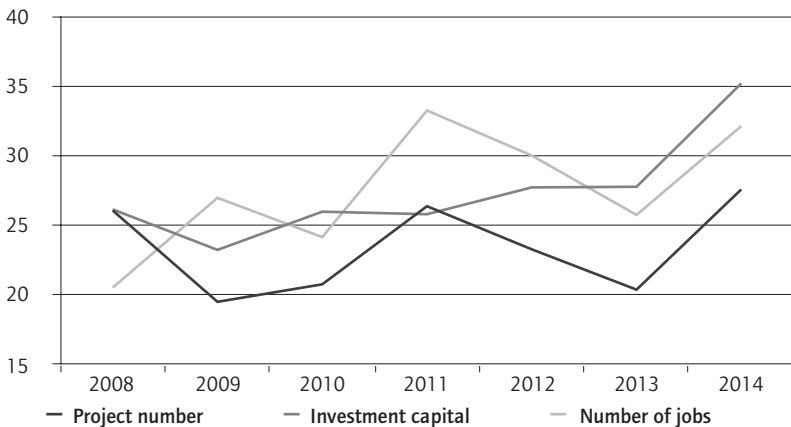
slight recovery in the number of new projects in eight countries and in terms of investment commitment in six countries. In 2014, a slightly higher number of projects than in the previous year was registered in Hungary, Lithuania and Slovenia, and a lower number in all other countries. The value of investment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

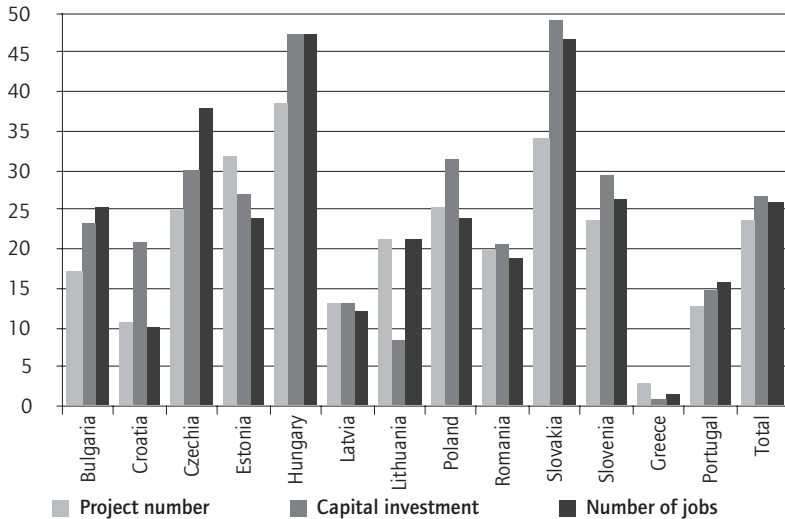


Source: fdimarkets.com

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.<sup>4</sup>

The number of foreign affiliates (majority foreign-owned firms in non-financial business corporations<sup>5</sup>) 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

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.

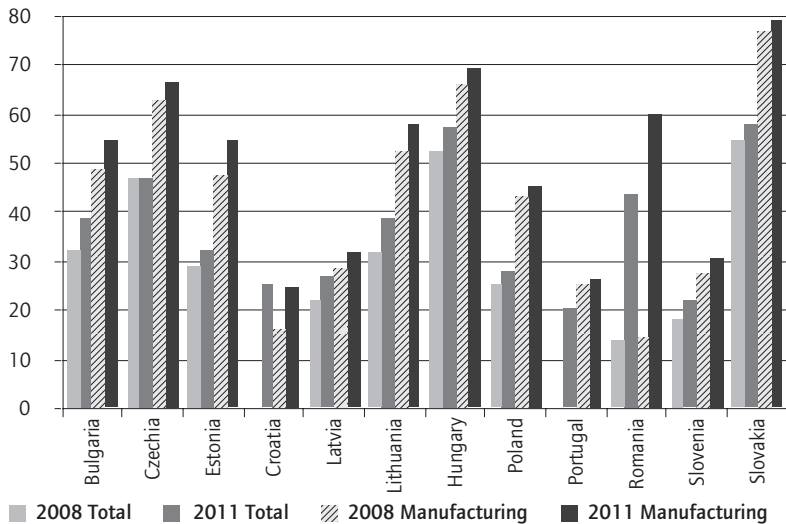
5. Defined as: total business economy; repair of computers, personal and household goods; except financial and insurance activities.



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.

## References

- Bank de Portugal (2013) Statistical Bulletin, 12/2013. <https://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/BolEstatistico/BEAnteriores/Lists/LinksLitsItemFolder/Attachments/159/BE Dez13.pdf>
- Eurostat (all years) FDI statistics. [http://ec.europa.eu/eurostat/statistics-explained/index.php/Foreign\\_direct\\_investment\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Foreign_direct_investment_statistics)
- Eurostat (all years) Inward FATS. [http://ec.europa.eu/eurostat/statistics-explained/index.php/Foreign\\_affiliates\\_statistics\\_-\\_FATS](http://ec.europa.eu/eurostat/statistics-explained/index.php/Foreign_affiliates_statistics_-_FATS)
- Financial Times (all years) fDi Markets. [www.fdimarkets.com](http://www.fdimarkets.com)
- HNB (2014) Foreign direct investment: statistics, Budapest, Hungarian National Bank. [http://www.mnb.hu/Root/ENMNB/Statiztika/data-and-information/mnben\\_statiztikai\\_idosorok/mnben\\_elv\\_external\\_trade/mnben\\_kozetlen\\_tokebef](http://www.mnb.hu/Root/ENMNB/Statiztika/data-and-information/mnben_statiztikai_idosorok/mnben_elv_external_trade/mnben_kozetlen_tokebef)
- Hunya G. (2012) wiiw database on foreign direct investment in Central, East and Southeast Europe - 2012: short-lived recovery, Vienna, Vienna Institute for International Economic Studies. <http://wiiw.ac.at/short-lived-recovery-p-2572.html>
- Hunya G. (2014) wiiw database on foreign direct investment in Central, East and Southeast Europe - 2014: hit by deleveraging, Vienna, Vienna Institute for International Economic Studies. <http://wiiw.ac.at/hit-by-deleveraging-p-3261.html>
- IMF (2007) Balance of payments manual, 5<sup>th</sup> ed., Washington, DC, International Monetary Fund. <https://www.imf.org/external/np/sta/bop/bopman5.htm>
- IMF (2013) Balance of payments and international investment position manual, 6<sup>th</sup> ed., Washington, DC, International Monetary Fund. <http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>

OECD (2010) Measuring globalisation: OECD economic globalisation indicators 2010, Paris, Organisation for Economic Co-operation and Development. <http://www.oecd.org/sti/ind/oecdhandbookoneconomicglobalisationindicators.htm>

UNCTAD (2013a) Global Investment Monitor, No. 11, 23 January 2013. [http://unctad.org/en/PublicationsLibrary/webdiaeia2013d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/webdiaeia2013d1_en.pdf)

UNCTAD (2013b) World investment report 2013 - Global value chains: investment and trade for development, Geneva, United Nations Conference on Trade and Development.

Vienna Institute for International Economic Studies (all years) wiiw Databases Central, East and Southeast Europe and FDI Database. <http://data.wiiw.ac.at>

All links were checked on 15 June 2015.



# Changes below the still surface? Regional patterns of foreign direct investment in post-crisis central and eastern Europe

Gergő Medve-Bálint

## 1. Introduction

In the past two decades foreign direct investment (FDI) has played a transformative role in central and eastern Europe (CEE).<sup>1</sup> The massive inflow of FDI, especially since the late 1990s, has turned these former communist countries into highly internationalised economies that are now deeply embedded into global markets and value chains. Four central and eastern European states – Czechia, Hungary, Poland and Slovakia (also commonly referred to as the ‘Visegrad group’) – stand out from central and eastern Europe in that, on the one hand, they have garnered the bulk of foreign investment and, on the other hand, they have introduced the most generous investment incentive schemes. In this vein, these countries’ development strategies have been based mainly on attracting FDI. Foreign-owned enterprises are now responsible for a large part of domestic output and exports and economic growth has also to a great extent become dependent on sustained foreign capital inflows.

Although foreign investments have contributed to the restructuring and modernisation of domestic economies, they have also involved some less favourable consequences. For instance, excessive reliance on FDI has rendered central and eastern European economies vulnerable to external economic shocks, such as the global financial and economic crisis in 2007–2008, which caused a sudden and lasting decline in inward FDI. Furthermore, the spatially divisive character of FDI inflows has led to a steep rise in internal regional disparities: foreign investors have consistently preferred to set up their businesses in the most developed regions of Czechia, Hungary, Poland and Slovakia, while the backward areas were left without any significant foreign investment activity. From

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1. In the present chapter ‘central and eastern Europe’ is understood to include the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia.



a territorial point of view, this has also resulted in asymmetrical regional integration into global markets. The prosperous areas, which are well-endowed with FDI, have established multiple ties to external markets, whereas the underprivileged ones have remained fairly isolated in this respect.

In light of the above, the economic crisis offers a compelling context for studying the regional and sectoral distribution of FDI in central and eastern Europe. This is because any crisis-related changes in investors' location preferences or in their sectoral composition have far-reaching implications for the long-term feasibility of domestic economic strategies relying on foreign capital inflows. First, it has not yet been examined in the literature whether the decline in FDI has also involved a shift in foreign investors' location preferences. In other words, it remains to be determined whether the same regions remained the preferred target of foreign investors after the crisis as before or whether previously neglected areas began to attract more FDI. Second, although several scholars have analysed the sectoral aspects of recent FDI inflows, the post-crisis regional distribution of foreign investments by economic activity has remained relatively unexplored. By comparing the pre- and post-crisis trends in foreign investments, this chapter aims to investigate the regional and sectoral aspects of FDI in the four central and eastern European countries mentioned above. More specifically, it seeks to identify the post-crisis location patterns and sectoral attributes of foreign capital inflows and to draw inferences concerning their potential territorial and economic consequences. Given the predominantly exploratory nature of the analysis, it is mainly descriptive and does not seek to establish causal relationships. Nevertheless, it does aim to find a link between the crisis and the regional and sectoral patterns of inward FDI in central and eastern Europe.

The structure of the chapter is as follows. Section 2 formulates the research questions and briefly reviews the relevant literature on the determinants of the location choices of foreign investors and the consequences for regional development and territorial disparities in central and eastern Europe. The text then goes on to introduce the data along with a detailed discussion of methodological issues and concerns. The empirical analysis is on two parts. The first compares the pre- and the post-crisis location preferences of foreign investors, while the second discusses the sectoral aspects. The final section draws conclusions and formulates some further implications of the empirical findings.

## 2. The role of FDI in central and eastern Europe and its spatial consequences

In the 1990s, most foreign investors were motivated by market-seeking considerations and entered central and eastern Europe by purchasing existing facilities through privatisation. Nevertheless, FDI inflows remained fairly low in this period (Sinn and Weichenrieder 1997) because in the early years of the transition from a command to a market economy only Hungary opened up to FDI, while the governments of Czechia, Poland and Slovakia proved reluctant to allow substantial foreign involvement in their domestic economies and restricted the participation of foreigners in the privatisation process (Sass 2003; Vachudova 2005). However, the strategy of building national capitalism soon collapsed, most conspicuous in the Czech financial and economic crisis in 1997. Pressure from the European Union and international financial institutions to involve FDI in the process of economic transformation (Medve-Bálint 2014), and the frequent interaction of domestic leaders with 'liberal'-minded EU officials (Bandelj 2010) eventually triggered a shift in economic strategies: by the end of the decade all the central and eastern European governments had changed their attitudes toward FDI.

As a consequence, since the early 2000s these countries have uniformly sought to attract foreign investors (Drahokoupil 2009a). These attempts proved highly successful. By 2013, the four countries held 63.8 per cent of the total central and eastern European inward FDI stock<sup>2</sup> and their per capita FDI stock was nearly five times the 2000 level.<sup>3</sup> This is notable even from a global perspective because other emerging markets – such as Mexico, Russia or Brazil – which have recently also been preferred targets of foreign investors, have not matched this performance.<sup>4</sup> Foreign-controlled enterprises therefore enjoy a dominant position in the central and eastern European economies: their share in total production value ranges between 40 and 60 per cent.<sup>5</sup>

2. At the same time, the Visegrad 4's share of FDI stock from total CEE FDI stock is proportional to their share in total CEE GDP (61.2 per cent in 2013, expressed in PPP; author's own calculation based on World Bank data).
3. In 2000, FDI stock per capita in the Visegrad countries was 1,830 USD (in 2005 prices), whereas this figure reached 8,868 USD in 2013 (in 2005 prices; author's own calculation based on UNCTAD data).
4. In 2013, Brazil's FDI stock per capita stood at 3,110 USD, Mexico's was 2,735 USD, while Russia's figure reached 3,466 USD (in 2005 prices; author's own calculation based on UNCTAD data).
5. In 2012, the share of foreign-controlled affiliates in the total production value of the national economy (excluding the financial sector) was 38 per cent in Poland, 48 per cent in Czechia,

Such an influential position of FDI in national economies that are not tax havens is almost unprecedented globally. This is why the central and eastern European countries have recently gained growing attention especially among those scholars who share concerns about the massive presence of FDI in these states. For instance, Šćepanović (2013) argues that the remarkably strong and relatively rapidly established presence of foreign investors in the domestic economies represent a 'hyper-integrationist' development model, which is characterised by a central role of foreign capital that substitutes rather than promotes the development of domestic capabilities. Other scholars emphasise the excessive dependence on external resources by referring to the Visegrad countries as 'dependent market economies' (Nölke and Vliegenthart 2009) or FDI-based market economies (Myant and Drahoukupil 2011).

In order to assess the spatial consequences of the dependence on FDI, it is important to reflect on those key structural characteristics that have prevailed in central and eastern Europe since the late 1990s. First, most of the foreign capital entered after the shift in domestic FDI policies had taken place. While in the 1990s privatisation was the main channel of FDI, since the early 2000s greenfield foreign investment has played a decisive role, also because large-scale privatisation had come to an end by then (Antalóczy and Sass 2001; Jensen 2006). In contrast to privatisation FDI, greenfield investors are mobile in that they seek to locate in the most cost-efficient places with the highest expected return on the invested capital. It follows that they are flexible in choosing their location: they carefully screen several potential sites before making a decision on where to set up the new business. In these circumstances, incentive schemes, which decrease the costs of investment, may notably influence the greenfield investors' location choice. The domestic policy shifts that involved the promotion of FDI thus met the needs of foreign greenfield investors. In addition, because the central and eastern European countries have similar industrial profiles and offer similar advantages in terms of cheap, skilled labour they have been competing for the same foreign investments, predominantly in the complex manufacturing sector where their comparative advantages are greatest (Bohle and Greskovits 2012).

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58 per cent in Hungary and 60 per cent in Slovakia (author's own calculation based on Eurostat Structural Business Statistics).

The above features (domestic economic strategies relying on FDI, increasing role of greenfield investors and comparable cross-country location advantages in manufacturing) have generated fierce investment competition across central and eastern Europe. In fact, the outbreak of a 'bidding war' (Drahokoupil 2009b) was almost over-determined by the above conditions because, as Oman (2000) suggests, such an outcome most often occurs between countries with similar socio-economic backgrounds, which is the case with central and eastern Europe. As a consequence, the governments adopted increasingly generous incentive schemes in an attempt to compete away external investments from their regional rivals (Drahokoupil 2009a).

Although this practice violated the EU's competition law, which prohibits the provision of targeted aid to investors, incentives may still be compatible with EU regulations if they promote the development of an economically backward area.<sup>6</sup> By EU standards the entire territory of central and eastern Europe qualifies as backward and thus the European Commission approved most of the incentive schemes and also set regional state aid ceilings which determined the highest maximum level of state aid to be provided in a given region.<sup>7</sup> By doing so the EU limited but at the same time also legitimised investment competition.

From a territorial perspective, the quest for foreign investors involved an unintended side-effect. The externally set regional state aid ceilings did not differentiate among the central and eastern European regions according to their relative development positions within national economies. In other words, nearly the same level of state aid was applicable in the relatively more developed as in the less advanced regions. In the end, contrary to the intention of EU lawmakers, regional state aid ceilings have promoted investments in the more prosperous central and eastern European areas instead of attracting foreign capital to the backward ones (Medve-Bálint 2015). This is because in order not to lose prospective investments to neighbours, central and eastern European governments had to offer the best locations in the most developed areas and the maximum possible level of incentives to greenfield investors. External investors thus were able to cherry-pick the

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6. Article 107(2) and 108(3) of the Treaty on the Functioning of the European Union.

7. Regional aid maps and the corresponding legislation are available at the European Commission's dedicated webpage:  
[http://ec.europa.eu/competition/state\\_aid/regional\\_aid/regional\\_aid.html](http://ec.europa.eu/competition/state_aid/regional_aid/regional_aid.html)

most advantageous locations while also benefiting from tax allowances and other subsidies in return for their investments.

The territorial distribution of aided FDI has reinforced the spatially divisive flow of investments which, otherwise, is a natural phenomenon in capitalist economies. Various branches of location theories (Hirschman 1958; Marshall 1920; Myrdal 1957; Porter 1990) that take a firm-centred perspective commonly predict that economic activity will show uneven spatial distribution: geographical clustering accumulates knowledge and skills and it fosters innovation through spillover effects, which is beneficial for firms competing in global markets. Locating in central places is advantageous according to the theory of new economic geography (Krugman 1991, 1993) and endogenous growth theory (Lucas 1988; Romer 1986) as well. Both approaches refer to increasing returns and agglomeration effects that jointly produce concentration of capital, labour, technology and knowledge in certain preferred locations, which may lead to spatial structures with few well-developed, central places and several backward, peripheral ones.

It has been well-documented that in central and eastern Europe foreign investors matched the expectations derived from location theories: they have consistently preferred to establish their businesses in the metropolitan and industrial areas and in those closer to western European markets, whereas regions with peripheral locations and lower levels of urbanisation have been mostly avoided by FDI (Brown et al. 2007; Chidlow et al. 2009; Fink 2006; Pavlínek 2004; Petrakos et al. 2011; Smętkowski 2013). It is ironic that FDI promotion, which, according to European law, should have generated investments in backward areas, has reinforced the above mechanisms in central and eastern Europe.

It follows that leading regions with considerable FDI inflows and well-established linkages to global markets have experienced higher economic growth than the less attractive areas (Capello and Perucca 2015). At the same time, the growth performance of these countries have been determined mainly by the economic success of the few leading regions that have attracted the bulk of foreign capital. This also implies that, while reliance on FDI inflows has rendered Central and eastern Europe vulnerable to external shocks (Myant and Drahekoupil 2012; Smith and Swain 2010), precisely those regions were the most exposed to the crisis where the presence of foreign-owned enterprises was the strongest. However, as Capello and Perucca (2015) argue, these places may also

have been capable of a quick recovery because of their capacity to flexibly adjust their economic systems to changing external contexts. Against this background this chapter seeks to explore the consequences of the crisis for FDI inflows by comparing the post-crisis location and sectoral patterns of foreign investments with the pre-crisis period.

Based on the above considerations four expectations are formulated. First, the territorial distribution of foreign investments may show lower concentration in the post-crisis period because the anticipated cost savings associated with cheaper labour available in the backward areas may have obtained more significance for efficiency-seeking greenfield investors that needed to drive down their costs even more to match the lower overall demand in the global markets. Second, regarding the sectoral composition of FDI a decline can be expected in capital-intensive manufacturing investments that may have been postponed because of the unfavourable market conditions. Third, the post-crisis sectoral distribution of FDI across central and eastern European regions may either show similarity or difference to the pre-crisis years: it needs to be explored whether the crisis has brought a shift in this respect or whether most of the regions received FDI with a sectoral composition similar to the pre-crisis period. Finally, if leading regions have indeed been the most affected by the crisis, then growth differentials between advanced and less prosperous areas may have been lower in the post-crisis period. Backward areas may have benefited in that they might have experienced higher growth rates than regions with an abundance of FDI. If this holds, then the crisis may have lowered regional disparities in central and eastern Europe to a certain extent.

### **3. Data sources and data issues**

The following analysis relies on data drawn from the Amadeus database, which is a collection of comprehensive information about more than 21 million companies across Europe. This dataset is ideal for comparing the pre- and the post-crisis regional and sectoral patterns of foreign investors because it contains ownership information as well as data on location, year of incorporation, economic activity and total turnover. Thus it makes it possible to create a pre- and a post-crisis sample of foreign-owned companies classified according to their industrial segment and location. The analysis rests on the comparison of a pre- and a post-crisis sample of foreign enterprises in each of the four central and eastern European countries.

The samples consist exclusively of foreign-owned companies that satisfy one of the following conditions: the ultimate owner is located in another country or a foreign shareholder holds at least a 10 per cent stake. Only those firms were included in the samples whose foreign owner's resident country is identified in the Amadeus database. Furthermore, a threshold of 1 million euros in latest reported operating revenue (turnover) was applied in order to filter out both inactive and very small entities. Based on the year of incorporation, the companies were grouped into a pre-crisis and a post-crisis sample. The pre-crisis sample includes firms that were incorporated between 1999 and 2008, while the post-crisis sample includes those enterprises that were established between 2009 and 2014.

Furthermore, each firm was classified according to its economic activity and location. For every company the database contains a description of its primary activity based on national industry codes. This information was re-coded according to the main sections of the International Standard Industrial Classification (ISIC, rev. 4).<sup>8</sup> In this vein, 18 main groups of economic activities were created, ranging from agriculture through manufacturing to services. As for the location of the foreign-owned companies, the NUTS 3 territorial administrative regions in Czechia (districts or *kraj*), Hungary (counties or *megye*) and Slovakia (districts or *kraj*) and the NUTS 2 regions<sup>9</sup> in Poland (voivodships or *województwo*) served as the basic units for territorial groupings. Table 1 shows the final number of foreign-owned firms in each country sample.

Table 1 Number of foreign-owned firms in the country samples

	Number of regions	Firms in the pre-crisis sample (1999–2008)	Firms in the post-crisis sample (2009–2014)
Czechia	14	2,921	1,097
Hungary	20	551	107
Poland	16	4,487	708
Slovakia	8	2,422	1,143
<b>Central and eastern Europe</b>	<b>58</b>	<b>10,381</b>	<b>3,055</b>

8. For a full description of ISIC codes please consult the United Nations' dedicated webpage: <http://unstats.un.org/unsd/cr/registry/regdnld.asp?Lg=1>

9. The NUTS classification is the territorial statistical nomenclature of the European Union (Nomenclature of Territorial Units of Statistics). It was introduced in the early 1980s in order to obtain comparable regional statistical data across the EU.

Although the firm-level data are fully comparable, the low number of foreign enterprises in the Hungarian samples – which is due to the low availability of financial data for companies registered in Hungary – raises concerns about the coverage of the dataset. For this reason, the Hungarian data rather serve illustrative purposes and the comparison of the samples in the other three countries constitute the core of the analysis.

A fairly problematic aspect of the Amadeus dataset is that it only reveals the location of the headquarters of firms, which may not correspond to the actual site of production or business activity. In other words, headquarters and branch plants where the actual production takes place may not be in the same place. This represents a distortion for the regional disaggregation of the data because foreign companies may tend to register their headquarters in more developed metropolitan areas or in capital cities, while pursuing their business elsewhere. In this respect, the samples may underestimate the number of foreign companies in non-metropolitan regions. It would therefore be desirable to estimate the extent of discrepancy between the registered headquarters and the real site of business activity. However, it is not possible to account for this potential bias because relevant information is missing from the database. Furthermore, the business registers of the national statistical offices also indicate the headquarters of the enterprises instead of the site of the branch plants.<sup>10</sup> This implies that cross-checking the different official records would not solve the issue.

Nevertheless, the over-representation of foreign firms in capital cities may be an indicator of so-called ‘branch plant syndrome’, which refers to regions hosting manufacturing plants controlled from remote headquarters. In her seminal book, Massey (1984) argued that branch plants are responsible for maintaining regional disparities because they typically represent the lower end of value chains and are associated with the exploitation of investment incentives, low R&D, limited backward linkages and few spillover effects to the host regions. Although in the contemporary global economy the relationship between branch plants and headquarters is changing, a recent study (Sonn and Lee 2012) concluded that most of the negative consequences identified by Massey

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10. The only international firm-level database that offers information on the actual location of business activity is FDImarkets (<http://www.fdimarkets.com/>) maintained by the Financial Times. However, in many instances information on the location of firms is missing from this dataset and thus relying on this source would also raise concerns about data quality.



still hold. In this respect, the regional bias in the data seems to confirm concerns about FDI-based development in central and eastern Europe.

Despite the potential problems with data coverage, the Amadeus database is commonly used for regional comparisons. For instance, Casi and Resmini (2010) relied on this dataset to identify the determinants of foreign direct investment in the NUTS 2 regions of the European Union. In a more recent work, the same authors repeated their analysis (Casi and Resmini 2014) and sought to determine simultaneous country- and regional-level effects that shape the distribution of FDI in European regions. Another related study (Villaverde and Maza 2015) also drew on Amadeus data to explore the determinants of FDI in the NUTS 2 regions between 2000 and 2006. Country case studies have also taken advantage of this dataset: Jensen (2004) investigated the localised spillovers in the Polish food industry at the NUTS 2 level and, in a similar vein, Monastiriotis and Jordaan (2010) analysed local and regional productivity spillovers in Greece at the NUTS 3 level. Although most of these authors acknowledged the potential bias that stems from the overrepresentation of firms registered in the more prosperous metropolitan regions, they did not provide remedies for the issue. Similar to the above-listed works, the current analysis also bears the risk of analysing slightly distorted regional-level data and thus the results need to be interpreted with caution.

#### **4. Pre- and post-crisis regional distribution of foreign-owned companies**

The number of foreign-owned companies in the region and their latest reported operating revenue serve as the key indicators for a comparison of pre- and post-crisis territorial patterns of foreign investment. Both measures have to be taken into account to obtain a balanced view because it may be the case that in one region there are a few large foreign companies with high operating revenue, whereas in another region there are mainly small or medium-sized firms with low aggregate turnover.

The Herfindahl index, which is a widely used indicator of concentration, is suitable for estimating the territorial density of both the number of foreign-owned companies and their operating revenue. The index falls between 0 and 1, where higher values represent greater geographical concentration. For instance, if all the regions within a country have an

equal share of the total number of foreign firms or of total operating revenue, then the index would be equal to 0. Conversely, if only one region receives all foreign investors and produces the entire turnover, then the value of the index would be 1.

Table 2 shows the concentration indices in each country for each sample and for both indicators. For the purpose of this chapter the direction of change across the two periods is more relevant than the values themselves. In this respect, the table provides a straightforward picture. Both the distribution and the operating revenues of the post-crisis foreign firms show greater geographical concentration than in the case of foreign companies in the pre-crisis samples. On the one hand, foreign firms that entered central and eastern Europe after the global economic crisis are territorially more concentrated than those established in the previous period. In other words, fewer regions received a higher proportion of the newly established foreign firms after the crisis than before. On the other hand, the operating revenue produced by the foreign-owned firms incorporated after the crisis also demonstrates stronger territorial concentration than in the case of those foreign enterprises that were established before 2009.

**Table 2 Territorial concentration of foreign-owned companies and their operating revenue in central and eastern Europe before and after the economic crisis (Herfindahl index)**

	Regional concentration of foreign-owned companies		Regional concentration of operating revenue (turnover)	
	Pre-crisis	Post-crisis	Pre-crisis	Post-crisis
Czechia	.268	.384	.215	.295
Hungary	.373	.443	.304	.529
Poland	.211	.263	.166	.214
Slovakia	.232	.253	.219	.309

It is important to note that the calculation of the concentration index for operating revenue is based on firms' latest reported operating revenue. For most enterprises the latest available financial data are for 2012. It follows that higher post-crisis Herfindahl indices mean that the turnover of those foreign-owned enterprises that commenced their activity in or after 2009 is territorially more concentrated than for those firms that were already active before the crisis. To put it differently, post-crisis foreign firms produce a higher share of their total turnover in fewer

regions than those companies that were established before the crisis. In short, the territorial distribution of the operating revenue is more balanced in the pre- than in the post-crisis samples.

Nevertheless, the greater post-crisis geographical concentration of foreign-owned enterprises and their operating revenue does not necessarily mean that the same regions that had been the preferred targets of foreign investors before the crisis have also benefited from post-crisis trends. What is more, the territorial concentration of the firms and their operating revenue may, at least in theory, reflect different spatial processes: several scenarios are possible, at least hypothetically. Based on the literature and on the above figures the first and most likely possibility is that both the foreign companies and their turnover are concentrated in the same regions in both periods. A less likely alternative is that although in each period the geographical clustering of the firms and the turnover are strongly related to each other, different regions benefited from the spatial concentration before and after the crisis. A third possibility is that the concentration of the firms and that of turnover are not related to each other. This would be the case if in several regions there was a high number of foreign firms with relatively little cumulative operating revenue but, at the same time, there were also regions with a few large foreign-owned companies that produced the bulk of total turnover. To put it differently, if the geographical clustering of firms were distinct from the territorial concentration of operating revenue, then some regions would appear to be attracting exclusively small foreign enterprises, while others would have a few large foreign companies.

In order to determine which of the above scenarios has prevailed in central and eastern Europe, first it has to be assessed whether the regional concentration of firms corresponds to the regional concentration of operating revenue. A region's share of the total number of pre- and post-crisis companies and, similarly, the regional shares of total turnover produced by those companies are the two indicators relevant for this exercise. A strong correlation between the two measures would indicate that there is a high correspondence between the geographical concentration of the firms and their turnover.

However, as expected, the four capital city regions are strong outliers: in both periods they secured the vast majority of foreign firms and have been responsible for the lion's share of total operating revenue. Prague in Czechia, Budapest in Hungary, Mazowiecki in Poland and Bratislavsky

in Slovakia took the highest share of both the companies and the turnover and their role is so decisive in the samples that they strongly determine the correlation coefficients.<sup>11</sup> For this reason, the following calculations exclude the capital city regions and refer only to the remaining 54 central and eastern European regions.

In both periods the regional shares of foreign-owned companies and of turnover show a robust association with each other. In fact, the two measures are strongly correlated in the pre-crisis sample ( $\tau = .654$ ,  $p < .001$ ,  $N = 54$ ) and in the post-crisis sample, too ( $\tau = .679$ ,  $p < .001$ ,  $N = 54$ ).<sup>12</sup> Thus even after excluding the capital city regions, there remains a high level of correspondence between the regional concentration of foreign firms and the regional concentration of turnover produced by them. A visual inspection<sup>13</sup> of the association between the two measures also reveals that there is relatively little deviation among the regions; there are only a few outliers. This suggests that overall the composition of foreign firms with high and of low revenue is fairly well-balanced within the central and eastern European regions.

A notable exception is Nitriansky in Slovakia, which deserves further discussion. The district lies on the Hungarian border and has the highest proportion of minority ethnic Hungarians among the Slovak regions.<sup>14</sup> Especially in the pre-crisis period, the region's share of the total number of foreign companies (13 per cent) substantially exceeded its share of total turnover (6 per cent). In the post-crisis era the situation was similar but the difference between the two figures (20 per cent of all foreign companies and 15 per cent of total turnover) was somewhat smaller. The reason for this peculiar case is that Nitriansky is the preferred target of those Hungarian entrepreneurs who wish to take advantage of the lower

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11. In the pre-crisis sample Prague takes 49 per cent of all the foreign-owned companies in Czechia and 41 per cent of the total operating revenue produced by them. The corresponding pre-crisis shares for the other three capital city regions are the following (the first figure in the brackets represents the share of the total number of foreign-owned firms, while the second figure stands for the region's share of the total operating profit produced by the firms): Budapest (59 per cent and 51 per cent); Mazowiecki (42 per cent and 33 per cent); and Bratislavsky (42 per cent and 37 per cent). The following figures show the post-crisis shares of each region: Prague (60 per cent and 48 per cent); Budapest (65 per cent and 72 per cent); Mazowiecki (48 per cent and 39 per cent); and Bratislavsky (43 per cent and 51 per cent).
  12. Because of the relatively low number of observations and the non-normal distribution of the data, Kendall's tau-b ( $\tau$ ) was calculated, which is a nonparametric test of association.
  13. See Appendix 1 for the corresponding plots.
  14. According to the 2011 census, 24.6 per cent of Nitriansky's population was Hungarian (Slovak Statistical Office).

Slovak taxes and establish their business in Slovakia. In the pre-crisis sample nearly one-third (29 per cent) of all the foreign companies incorporated in this region had a Hungarian owner and in the post-crisis period this was even more dominant: more than 60 per cent of the newly incorporated foreign firms involved Hungarian ownership.

However, relative to the other foreign-owned enterprises in the region, these companies are small<sup>15</sup> and are active almost exclusively in the retail and transportation sectors. Almost two-third (63 per cent) of the firms with Hungarian ownership established before the crisis belonged to the wholesale and retail trade or to the transportation and storage sector and the figure is essentially the same (60 per cent) in the post-crisis sample, too. At the same time, the composition of the other foreign-owned companies is different: 42 per cent of them belonged to the manufacturing sector in the pre-crisis period and only 34 per cent were pursuing business in retail or transportation. After the crisis a profound shift took place and the share of newly incorporated manufacturing companies fell to 14 per cent, while the retail and transportation segment climbed to 47 per cent among the firms without Hungarian ownership. All in all, these figures suggest that the high density of small Hungarian-owned businesses in Nitriansky is responsible for the region's outlier position.

The other slightly puzzling case is the Czech Jihomoravsky in the pre-crisis period. Similar to Nitriansky, the region's share of foreign companies (10 per cent) was much higher than its share of total operating revenue (5 per cent). This was caused by a very large proportion of small foreign firms setting up their business in wholesale and retail: the share of enterprises active in this sector (38 per cent) was the highest among all the Czech regions, which put Jihomoravsky even ahead of Prague and its surrounding region, Středočeský (31 per cent in both cases). The average turnover of the foreign-owned wholesale and retail firms established before the crisis in Jihomoravsky amounted to 9.6 million euros, which was well below the same figure for other sectors (16.80 million euros) and even further below the average of the whole country sample (27.73 million euros). The area lies in a favourable geographical

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15. In the pre-crisis sample the average operating revenue of the foreign firms with Hungarian ownership in Nitriansky was 3.39 million euros compared with 11.91 million euros for the other foreign-owned companies in the region. In the post-crisis sample the difference was lower: firms owned by Hungarians produced an average of 3.38 million euros operating revenue, while the other foreign companies generated an average turnover of 5.59 million euros.

position because it shares a border with both Austria and Slovakia and is located close to Vienna and Bratislava, which seems to be attractive to many retail businesses. The strong concentration of these companies with relatively low average turnover explains the peculiar situation of Jihomoravsky. Even after the crisis, the region preserved its leading status in Czechia in securing wholesale and retail foreign investors: after Prague, the second highest number of firms active in this segment established their businesses there.

Besides the two cases mentioned above, the other central and eastern European regions demonstrate a consistent pattern in that a high regional concentration of foreign businesses involves a similarly high degree of concentration of operating revenue. This implies that in most of the regions there is a fairly balanced mixture of small and large firms, although there is some variation in this respect, due mainly to the varying sectoral composition of foreign companies. Before discussing the pre- and post-crisis sectoral patterns of FDI, it still needs to be determined whether the same or different regions have benefited the most from foreign investment in the two periods.

It goes without saying that the four capital city regions have been the biggest beneficiaries of foreign capital inflows both before and after the crisis. Actually, the crisis has even further strengthened their dominant positions; compared with the pre-crisis period these regions have registered higher shares both of the newly incorporated foreign companies and of total turnover after the crisis. It is hardly surprising that the capital cities and their immediate surroundings are capable of attracting the bulk of foreign investors. But what characterises the other central and eastern European regions? Is there a similar degree of continuity in their attractiveness or has the crisis shifted the location preferences of foreign investors?

After excluding the capital cities from the analysis, a comparison of the pre- and the post-crisis samples reveals that those regions that had been preferred targets of foreign companies prior to the crisis have been able to preserve their privileged status. The correlation coefficient between the regional share of the pre- and the post-crisis foreign investors is high and significant ( $\tau = .726$ ,  $p < .001$ ,  $N = 54$ ).<sup>16</sup> This suggests that those

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16. For a visual representation of the association between the two indicators see Appendix 2.

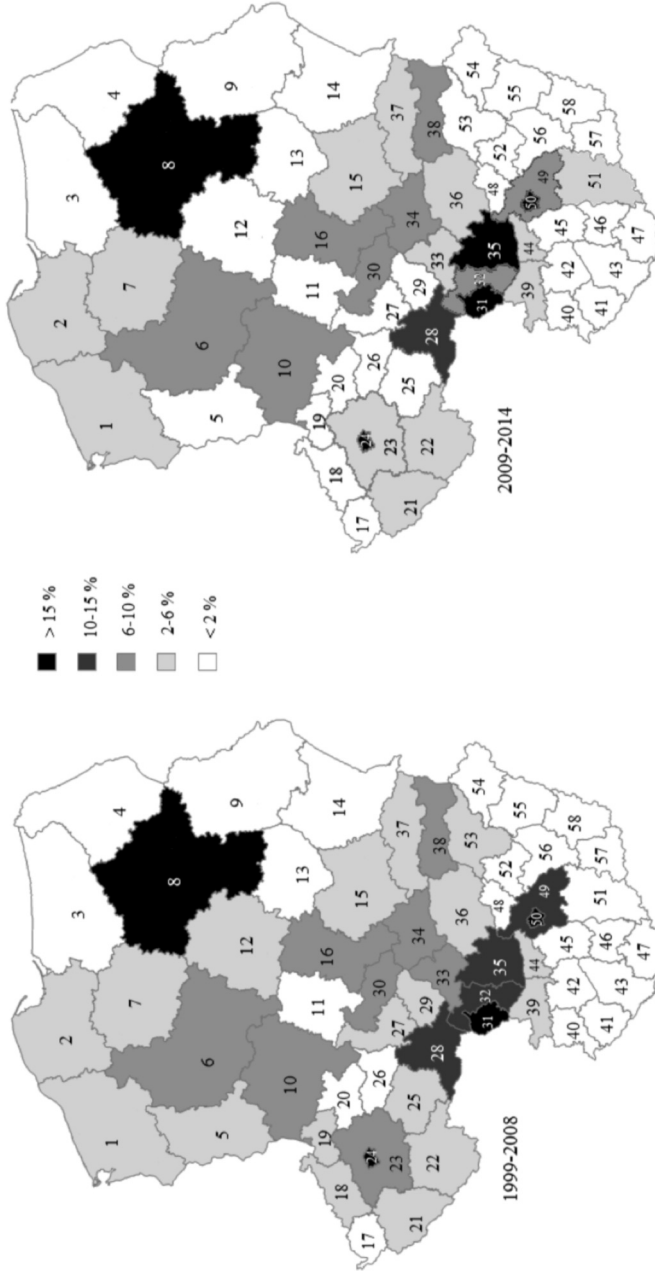
areas that had been successful in attracting external investors have continued to do so after the crisis, whereas those that failed to attract the attention of foreign enterprises were unable to improve their positions.

The maps in Figure 1 offer a visual comparison of the territorial distribution of foreign companies in the two periods. In order to enhance interpretation of the data, five categories were constructed from the regional shares of the total number of foreign firms and each region was classified into one of these categories. The maps reinforce the findings discussed above. On the one hand, they confirm the sustained dominance of the capital cities in attracting the majority of foreign companies. On the other hand, the images also show that the geographical concentration of the foreign-owned firms established after the crisis is higher than in the earlier period and, most importantly, new investments have concentrated in areas already attractive to external investors.

While after the crisis the capital city regions have not only retained but further strengthened their leading role, the majority of the other central and eastern European regions (39) remained in their pre-crisis category. At the same time, more than one-fifth of the territorial units (12) dropped to a category representing lower shares. Only three regions improved their positions compared with the pre-crisis period. Nitriansky experienced the highest jump among them as 20 per cent of the foreign companies in the post-crisis Slovak sample set up their business there, while in the earlier period this figure was 13 per cent. As mentioned above, the great inflow of small Hungarian firms in the retail and transportation sector explains the region's special status. The other winner of the post-crisis era is Małopolskie in Poland, which includes the city of Cracow. The region has been one of the main Polish hubs of foreign investors engaged in info-communication, professional, scientific and technical activities and business support services. After the crisis the role of foreign investors in these sectors has grown and Małopolskie continues to serve as one of the main targets of those businesses. This is why its relative share of the total number of post-crisis foreign companies increased.

The last region that improved its position is Bács-Kiskun in Hungary. Although the low number of enterprises in the post-crisis Hungarian sample does not allow us to draw definite conclusions about the status of this area, Bács-Kiskun has indeed gained the attention of foreign investors recently. The region received a major automotive investment in 2008 when Mercedes decided to build the company's first central and

Figure 1 Territorial distribution of foreign-owned companies in central and eastern Europe before and after the economic crisis (regional shares of total number of foreign firms in each country)



Note: The names of the regions with their corresponding numbers indicated on the map are in Appendix 3.



eastern European factory there. Production in the new plant began in late 2011 and the German company attracted several of its suppliers to the neighbourhood, such as HBPO Manufacturing or Phoenix-Mecano. This is reflected in the region's improving attractiveness to foreign enterprises.

## **5. Sectoral composition of pre- and post-crisis foreign investment**

While the pre- and the post-crisis territorial distributions of foreign investments show great similarities, the Amadeus dataset reveals that this is not the case with regard to sectoral composition. The data presented in Table 3 capture those shifts. The crisis has brought about a massive decline in the share of cost-intensive manufacturing investments and has led to an increase in the proportion of foreign companies in the service sector, especially in wholesale and retail trade and in professional, scientific and business services. These changes also mean that the average size of post-crisis foreign firms is significantly smaller than that of those established before the crisis. This is because the retail and business service companies, which are dominant in the second period, typically have lower average turnover than large manufacturing firms, which appear mostly in the pre-crisis samples. While the share of firms in retail and business services did not increase dramatically in each country after the crisis, their contribution to total turnover did. The rise was twofold in Czechia, almost threefold in Slovakia and nearly double in Poland.<sup>17</sup>

These figures suggest that foreign enterprises entering central and eastern Europe after the crisis are active mainly in the service sector and, on average, are smaller than the ones incorporated in the previous period. Manufacturing foreign investments, which have so far fuelled the export-led growth of these countries (Bohle and Greskovits 2012) are now in short supply. However, this phenomenon may not pose an obstacle to the economic recovery of central and eastern Europe. On the one hand, past investments remain functional despite the decline in production and revenues and there is little evidence of relocation or plant closures (Pavlínek 2015). On the other hand, planned manufacturing investments may have been postponed but not entirely dropped because of the global economic slowdown. For instance, Apollo Tyres, an Indian tyre manu-

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17. The Hungarian samples do not entirely show the trends that appear clearly in the other three countries. This might be related to the sub-optimal coverage of the Hungarian data.

Table 3 Post-crisis shifts in the sectoral composition of foreign firms

	Pre-crisis sample				Post-crisis sample			
	Average latest reported turnover (million euros)	Share of manufacturing firms	Share of firms in retail and business services <sup>a</sup>	Share of firms in retail and business services in total turnover	Average latest reported turnover (million euros)	Share of manufacturing firms	Share of firms in retail and business services <sup>a</sup>	Share of firms in retail and business services in total turnover
Czechia	27.74	28.21%	49.13%	24.14%	10.40	14.98%	62.92%	47.52%
Hungary	51.68	22.50%	48.82%	26.28%	21.71	20.56%	44.86%	27.24%
Poland	22.56	27.59%	43.06%	37.61%	12.16	20.48%	45.34%	60.88%
Slovakia	21.21	23.62%	51.47%	25.38%	5.66	8.75%	69.29%	66.03%
Central and eastern Europe	25.25	26.56%	47.01%	28.78%	12.52	14.11%	60.56%	55.72%

Note: <sup>a</sup>Firms active in wholesale, retail trade, repair of motor vehicles; professional, scientific and technical activities; and administrative and support service activities.

facturer, initially planned to open a new factory in Hungary in 2008 but because of the crisis the management decided to suspend the investment, only to return to the project in 2014 when the global automotive sector showed clear signs of recovery and the Hungarian government also offered a generous incentive package to the investor.<sup>18</sup>

While the crisis has – presumably only temporarily – limited the entry of manufacturing investors, it has provided a boost for service investments especially in the field of professional, scientific and business services. Since the mid-2000s central and eastern Europe has become an increasingly popular location for transnational companies that sought to outsource business service activities to low-cost areas. The crisis has intensified this process and central and eastern Europe has become a primary target of business process outsourcing and offshoring (Gál 2014; Micek in this volume). Although this sector is considered to be knowledge-intensive, foreign investors tend to set up their businesses in the less knowledge-intensive categories of the value chain: most of the

18. State aid: Commission endorses investment aid to Apollo Hungary for production of tyres in Gyöngyöshalász, *European Commission Press Release, IP14/970*, Brussels, 8 September 2014 (Available at: [http://europa.eu/rapid/press-release\\_IP-14-970\\_en.htm](http://europa.eu/rapid/press-release_IP-14-970_en.htm))

activities performed by foreign-owned business service firms in central and eastern Europe involve back office functions, customer contact, HR and IT support services (Capik and Drahokoupil 2011). This is similar to the case of manufacturing foreign investors, which have typically built assembly plants while keeping the higher value added activities such as research and development in their home countries.

In addition, the geographical distribution of foreign-owned business service companies is even more unbalanced than that of foreign firms in other industrial segments. Most of these enterprises are located in the metropolitan regions and in some second-tier cities that offer a relatively large supply of well-trained, but still relatively cheap labour (Gál 2014; Sass 2011). In fact, seven central and eastern European cities are listed in the 2015 Tholons ranking of the top 100 global outsourcing destinations (Cracow, ninth place, Prague fifteenth, Budapest twenty-fifth, Brno twenty-ninth, Warsaw thirtieth, Bratislava forty-ninth and Wrocław sixty-second).<sup>19</sup> This suggests that central and eastern Europe is indeed a top location for companies seeking to locate in large agglomerations.

The Amadeus dataset fully confirms the above observations. Both in the pre- and the post-crisis period the four capital city regions have secured the overwhelming majority of foreign firms in the segments of professional, scientific and technical activities and administrative and support services.<sup>20</sup> Only a limited number of other regions have been able to secure a notable share of these investments. In this respect, Jihomoravsky in Czechia, Dolnośląskie and Wielkopolskie in Poland, and the Nitriansky and Trnavsky regions in Slovakia show considerable foreign activity in this sector.

Notwithstanding the shift in the sectoral composition of external investors entering central and eastern Europe after the crisis, location preferences have not changed. In the post-crisis period the same regions have continued to be the preferred targets of foreign companies. This also implies that those regions in which the presence of foreign capital was

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19. Source: *2015 Top 100 Outsourcing Destinations*. Tholons Publication, December 2014.

Available at [http://www.tholons.com/nl\\_pdf/Tholons\\_Whitepaper\\_December\\_2014.pdf](http://www.tholons.com/nl_pdf/Tholons_Whitepaper_December_2014.pdf)

20. The share of the capital city regions in the firms active in these services are as follows (first figure stands for the share in the pre-crisis sample, while the second represents the value in the post-crisis sample): Prague: 76 per cent and 79 per cent; Budapest: 88 per cent and 65 per cent; Mazowiecki: 67 per cent and 71 per cent; and Bratislavsky: 68 per cent and 59 per cent.

low have been unable to catch up with the leading areas. But what is the nexus between the degree of internationalisation of central and eastern European regions and their growth performance after the crisis? To put it differently, does a strong foreign presence in the local economy relative to the other areas also involve more rapid economic recovery?

Comparable data on regional GDP are available only until 2011, which limits our ability to examine post-crisis growth patterns. Nevertheless, analysing the data may still reveal interpretable trends. Given that the capital city regions are extreme outliers in terms of their share of foreign investments they are not included in the calculations, to avoid distortion. Bearing these restrictions in mind, Figure 2 shows the association between the pre-crisis regional shares from the foreign enterprises and the post-crisis regional GDP growth relative to the national growth rate.

The figure shows that a larger international presence in a regional economy was to some extent associated with better post-crisis growth performance ( $\tau = .343$ ,  $p < .001$ ,  $N = 51$ ). At the same time, there is high variation in growth among the regions that had a similarly low share of foreign enterprises before the crisis, thus in their case the presence of foreign firms may not be a distinguishing factor for post-crisis growth. This is not surprising, however, because this group of regions demonstrates little variation in the regional share of foreign companies which, evidently, cannot account for the large variation in their relative growth rates.

It is important to remember that correlation is not causation and thus it cannot be argued that a more rapid post-crisis regional recovery was probably caused by the larger local presence of foreign investors. Figure 2 suggests only that those regions that have been able to attract a considerable number of foreign companies are probably also better equipped to adjust to changing external economic circumstances than those in which few foreign firms are active. This is because leading regions are central places with diversified domestic economies and considerable own resources and local demand to draw on when external circumstances turn unfavourable. This is consistent with the results of Capello and Perucca (2015). Because regions with high levels of FDI are also the more developed ones, these findings also imply that regional disparities may not decrease in the near future in central and eastern Europe unless regional growth trends shift radically at the expense of the more prosperous areas. This possibility, however, is unlikely in the

current economic environment in which sustained regional growth is increasingly associated with well-established ties to global markets, which also assumes a strong presence of multinational enterprises in the regional economy.

## 6. Conclusions

The empirical evidence presented in this work suggests that the crisis has not involved a territorial shift in the location preferences of foreign investors entering central and eastern Europe. The same regions have remained the preferred targets of foreign firms, as before the major global economic downturn. However, compared with the previous period, the post-crisis years have experienced a profound change in the sectoral composition of foreign investments. The number of new manufacturing investments declined sharply and the proportion of foreign companies in the service sector – especially in the business services segment – rose considerably. This implies that the most internationalised regional economies have preserved their privileged status, but in recent years they have tended to attract new foreign businesses in other economic sectors.

What do these processes imply for the long-term feasibility of the FDI-driven export-led growth strategies of central and eastern European economies? On the one hand, the crisis has not led to significant disinvestment and exit of capital from these countries: not even the foreign-owned financial sector has experienced a capital run, which otherwise was most susceptible to this (Epstein 2014). On the other hand, neither past manufacturing investments nor new investments in professional and business services represent knowledge-intensive, high value-added activities. In both cases foreign firms take advantage of the availability of a cheap, skilled workforce and refrain from relocating activities at the higher end of the value chain to central and eastern Europe. This implies that in the foreseeable future these countries may not be able to overcome the cheap labour bias that characterises most of the foreign investments there. In fact, low wages, in combination with relatively high skill levels, seem to remain their primary competitive advantage.

The lower foreign investment since the crisis poses a further challenge to domestic economic strategies. Because economic growth depends to a great extent on foreign investors, in order to avoid long-term decline



governments need both to retain existing foreign firms and to attract new ones. Given the similar comparative advantages of the four countries, the urge to secure more FDI in times of low foreign capital inflows may result in even tougher investment competition than previously. Such an outcome will have consequences for domestic tax systems, labour law and state budgets. At the same time, ‘fiscal discipline’ has become a key issue in post-crisis Europe: the EU strictly monitors central budgets and constrains government spending, which also limits the generosity of investment incentive schemes. Nevertheless, from the perspective of regional disparities a further widening gap between the internationally embedded, prosperous regions and those that are almost void of foreign investors can be expected.

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## References

- Antalóczy K. and Sass M. (2001) Greenfield investments in Hungary: are they different from privatization FDI?, *Transnational Corporations*, 10 (3), 39–60.
- Bandelj N. (2010) How EU integration and legacies mattered for foreign direct investment into Central and Eastern Europe, *Europe-Asia Studies*, 62 (3), 481–501.
- Bohle D. and Greskovits B. (2012) *Capitalist diversity on Europe's periphery*, Ithaca, Cornell University Press.
- Brown D.L., Greskovits B. and Kulcsár J.L. (2007) Leading sectors and leading regions: economic restructuring and regional inequality in Hungary since 1990, *International Journal of Urban and Regional Research*, 31 (3), 522–542.
- Capello R. and Perucca G. (2015) Openness to globalization and regional growth patterns in CEE countries: from the EU accession to the economic crisis, *JCMS: Journal of Common Market Studies*, 53 (2), 218–236.
- Capik P. and Drahokoupil J. (2011) Foreign direct investments in business services: transforming the Visegrád Four Region into a knowledge-based economy? *European Planning Studies*, 19 (9), 1611–1631.
- Casi L. and Resmini L. (2010) Evidence on the determinants of foreign direct investment: the case of EU regions, *Eastern Journal of European Studies*, 1 (2), 93–118.
- Casi L. and Resmini L. (2014) Spatial complexity and interactions in the FDI attractiveness of regions, *Papers in Regional Science*, 93 (Supplement S1), 551–78.
- Chidlow A., Salciuviene L. and Young S. (2009) Regional determinants of inward FDI distribution in Poland, *International Business Review*, 18 (2), 119–133.
- Drahokoupil J. (2009a) *Globalization and the state in Central and Eastern Europe: the politics of foreign direct investment*, London, Routledge.
- Drahokoupil J. (2009b) The politics of the competition state: the agents and mechanisms of state transnationalization in Central and Eastern Europe, in Bruszt L. and Holzhaecker R. (eds.) *The transnationalization of economies, states, and civil societies: new challenges for governance in Europe*, New York, Springer, 135–155.
- Epstein, Rachel (2014) Overcoming 'Economic Backwardness' in the European Union. *JCMS: Journal of Common Market Studies*, 52(1): 17–34.
- Fink P. (2006) FDI-led growth and rising polarisations in Hungary: quantity at the expense of quality, *New Political Economy*, 11 (1), 47–72.
- Gál Z. (2014) Relocation of business services into central and eastern Europe (evidence from trade and location statistics), *Romanian Review of Regional Studies*, 10 (1), 67–78.

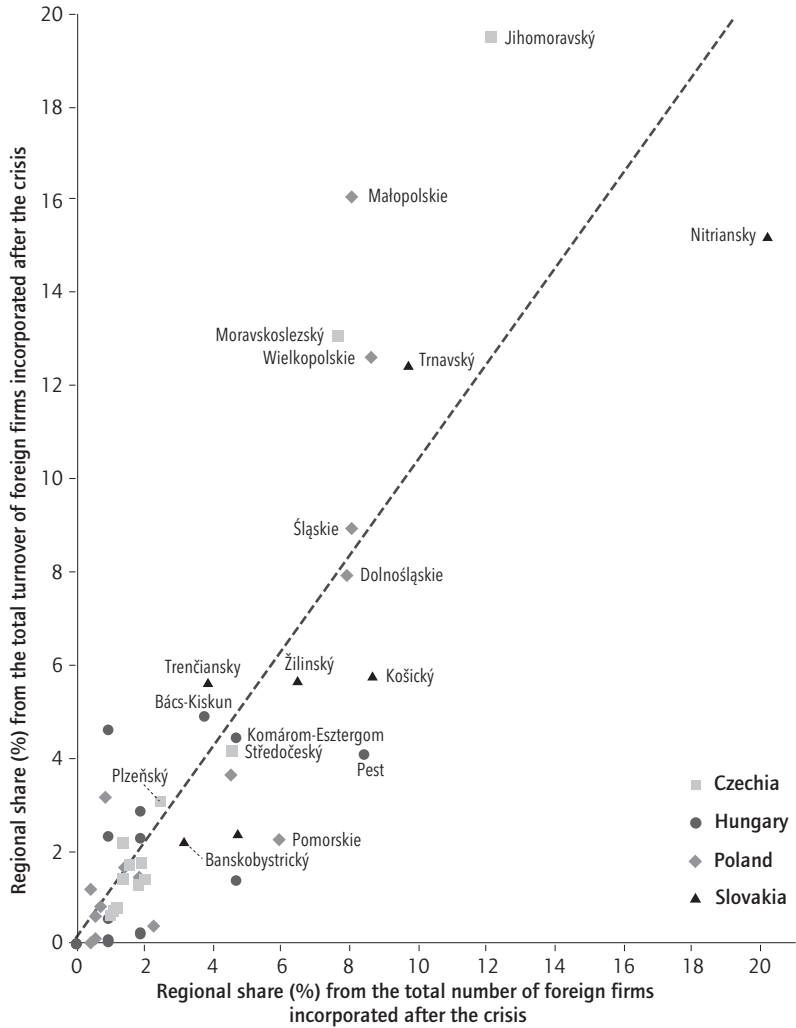


- Hirschman A.O. (1958) *The strategy of economic development*, New Haven, Yale University Press.
- Jensen C. (2004) Localized spillovers in the Polish food industry: the role of FDI in the development process?, *Regional Studies*, 38 (5), 533–548.
- Jensen C. (2006) Foreign direct investment and economic transition: panacea or pain killer?, *Europe-Asia Studies*, 58 (6), 881–902.
- Krugman P. (1991) Increasing returns and economic geography, *Journal of Political Economy*, 99 (3), 483–499.
- Krugman P. (1993) *Geography and trade*, Leuven, Leuven University Press.
- Lucas R.E. (1988) On the mechanics of economic development, *Journal of Monetary Economics*, 22 (1), 3–42.
- Marshall A. (1920) *Principles of economics: an introductory volume*, London, Macmillan.
- Massey D. (1984) *Spatial divisions of labor: social structures and the geography of production*, New York, Methuen.
- Medve-Bálint G. (2014) The role of the EU in shaping FDI flows to East Central Europe, *JCMS: Journal of Common Market Studies*, 52 (1), 35–51.
- Medve-Bálint G. (2015) *Converging on divergence: the political economy of uneven regional development in East Central Europe (1990-2014)*, PhD Dissertation, Budapest, Central European University.
- Micek G. (2015) FDI trends and patterns in business services, in this volume.
- Monastiriotis V. and Jordaán J.A. (2010) Does FDI promote regional development? Evidence from local and regional productivity spillovers in Greece, *Eastern Journal of European Studies*, 1 (2), 139–164.
- Myant M. and Drahoukoupil J. (2011) *Transition economies: political economy in Russia, Eastern Europe, and Central Asia*, Hoboken, Wiley.
- Myant M. and Drahoukoupil J. (2012) International integration, varieties of capitalism and resilience to crisis in transition economies, *Europe-Asia Studies*, 64 (1), 1–33.
- Myrdal G. (1957) *Economic theory and underdeveloped regions*, London, Duckworth.
- Nölke A. and Vliegenthart A. (2009) Enlarging the varieties of capitalism: the emergence of dependent market economies in east central and eastern Europe, *World Politics*, 61 (4), 670–702.
- Oman C. (2000) *Policy competition for foreign direct investment: a study of competition among governments to attract FDI*, Paris, Organisation for Economic Co-operation and Development.
- Pavlínek P. (2004) Regional development implications of foreign direct investment in Central and eastern Europe, *European Urban and Regional Studies*, 11 (1), 47–70.

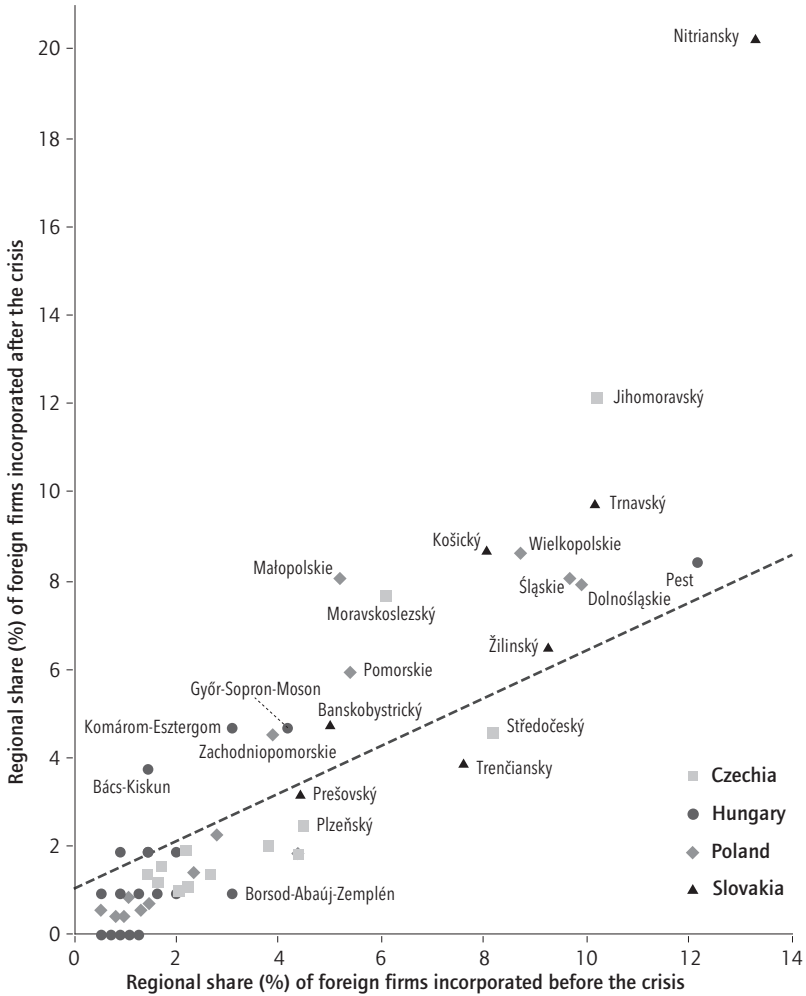
- Pavlínek P. (2015) The impact of the 2008-2009 crisis on the automotive industry: global trends and firm-level effects in Central and eastern Europe, *European Urban and Regional Studies*, 22 (1), 20–40.
- Petrakos G., Kallioras D. and Anagnostou A. (2011) Regional convergence and growth in Europe: understanding patterns and determinants, *European Urban and Regional Studies*, 18 (4), 375–391.
- Porter M.E. (1990) *The competitive advantage of nations*, New York, Free Press.
- Romer P.M. (1986) Increasing returns and long-run growth, *Journal of Political Economy*, 94 (5), 1002–1037.
- Sass M. (2003) *Competitiveness and economic policies related to foreign direct investment*, Working Paper 3, Budapest, Ministry of Finance.
- Sass M. (2011) The impact of foreign direct investment in business services on the local economy: the case of Hungary, in Rugraff E. and Hansen M.W. (eds.) *Multinational corporations and local firms in emerging economies*, Amsterdam, Amsterdam University Press, 51–73.
- Šćepanović V. (2013) *FDI as a solution to the challenges of late development: catch-up without convergence?*, PhD Dissertation, Budapest, Central European University.
- Sinn H.-W. and Weichenrieder A.J. (1997) Foreign direct investment, political resentment and the privatization process in Eastern Europe, *Economic Policy*, 12 (24), 177–210.
- Smętkowski M. (2013) Regional disparities in central and eastern European countries: trends, drivers and prospects, *Europe-Asia Studies*, 65 (8), 1529–1554.
- Smith A. and Swain A. (2010) The global economic crisis, Eastern Europe, and the Former Soviet Union: models of development and the contradictions of internationalization, *Eurasian Geography and Economics*, 51 (1), 1–34.
- Sonn J. W. and Lee D. (2012) Revisiting the branch plant syndrome: review of literature on foreign direct investment and regional development in Western advanced economies, *International Journal of Urban Sciences*, 16 (3), 243–259.
- Vachudova M.A. (2005) *Europe undivided: democracy, leverage, and integration after communism*, New York, Oxford University Press.
- Villaverde J. and Maza A. (2015) The determinants of inward foreign direct investment: evidence from the European regions, *International Business Review*, 24 (2), 209–223.



**Appendix 1 (cont.)**



## Appendix 2 The regional shares of foreign firms established before and after the crisis



### Appendix 3

#### Central and eastern European regions

No.	Region	Country	No.	Region	Country
1	Zachodniopomorskie	Poland	31	Bratislavský	Slovakia
2	Pomorskie	Poland	32	Trnavský	Slovakia
3	Warmińsko-Mazurskie	Poland	33	Trenčiansky	Slovakia
4	Podlaskie	Poland	34	Žilinský	Slovakia
5	Lubuskie	Poland	35	Nitriansky	Slovakia
6	Wielkopolskie	Poland	36	Banskobystrický	Slovakia
7	Kujawsko-Pomorskie	Poland	37	Prešovský	Slovakia
8	Mazowieckie	Poland	38	Košický	Slovakia
9	Lubelskie	Poland	39	Győr-Sopron-Moson	Hungary
10	Dolnośląskie	Poland	40	Vas	Hungary
11	Opolskie	Poland	41	Zala	Hungary
12	Łódzkie	Poland	42	Veszprém	Hungary
13	Świętokrzyskie	Poland	43	Somogy	Hungary
14	Podkarpackie	Poland	44	Komárom-Esztergom	Hungary
15	Małopolskie	Poland	45	Fejér	Hungary
16	Śląskie	Poland	46	Tolna	Hungary
17	Karlovarský	Czechia	47	Baranya	Hungary
18	Ústecký	Czechia	48	Nógrád	Hungary
19	Liberecký	Czechia	49	Pest	Hungary
20	Královéhradecký	Czechia	50	Budapest	Hungary
21	Plzeňský	Czechia	51	Bács-Kiskun	Hungary
22	Jihočeský	Czechia	52	Heves	Hungary
23	Středočeský	Czechia	53	Borsod-Abaúj-Zemplén	Hungary
24	Prague	Czechia	54	Szabolcs-Szatmár-Bereg	Hungary
25	Vysočina	Czechia	55	Hajdú-Bihar	Hungary
26	Pardubický	Czechia	56	Jász-Nagykun-Szolnok	Hungary
27	Olomoucký	Czechia	57	Csongrád	Hungary
28	Jihomoravský	Czechia	58	Békés	Hungary
29	Zlínský	Czechia			
30	Moravskoslezský	Czechia			



# **'Structural reforms' during the adjustment period: do competitiveness-enhancing measures lead to an increase in FDI?**

Tibor T. Meszmann

Europe has many strengths: we can count on the talent and creativity of our people, a strong industrial base, a vibrant services sector, a thriving, high quality agricultural sector, strong maritime tradition, our single market and common currency, our position as the world's biggest trading bloc and leading destination for foreign direct investment. (Europe 2020: 34)

Europe faces a moment of transformation. The crisis has wiped out years of economic and social progress and exposed structural weaknesses in Europe's economy. (Europe 2020: 3)

## **1. Introduction**

Compared with FDI, competitiveness enhancing measures have come to scholarly attention only more recently and sporadically. The comparative lack of literature on such measures is partly due to conceptual problems in assessing competitiveness and thus also these measures. Compared with governments and policy designers (for example, Tyson et al. 1984; Lall 2003), on the policy level, the scholarly community has not devoted much attention to the more specific issue of the relationship between competitiveness enhancing measures and FDI increases (for exceptions see Hunya 2000; Honkapohja and Korhonen 2013). As the quotations at the head of this chapter highlight, however, in the adjustment period, supranational agencies, including the European Commission, have focused particularly on competitiveness as a priority policy issue, but attention has also been paid to FDI. Whereas work by policy professionals has grown dramatically, critical analysis of the discourse and narratives surrounding 'competitiveness' as used in public policy circles is a fairly neglected sphere of scholarship (Bristow 2005). More specifically and constructively, while we can draw on accounts from the sphere of critical political economy concerning competitiveness and governance (for



example, Majone 1997; Holman 2004), investigations of the construction of the competitiveness-centred narrative are more rare (for example, Rosamond 2002).

In this chapter my aim is twofold, both theoretical and empirical. First, I shall outline competitiveness enhancing measures, including their relationship to FDI. Here, I define competitiveness enhancing measures as series of government-induced actions unfolding over a period of time, aimed *deliberately* at increasing national competitiveness. Second, my practical aim is to examine the recent history of competitiveness enhancing measures in selected countries on the southern and eastern EU periphery, and how the competitiveness enhancing measures they have implemented have targeted FDI increases. On a more theoretical level I discuss conceptual issues with regard to the causal relationship between competitiveness enhancing measures and FDI. Formulation of premises then enables me to carry out a content and discourse analysis of the collected empirical material and thus to answer the question of how competitiveness enhancing measures in southern and eastern EU peripheries in the adjustment period sought to increase FDI.

Among the countries on the EU's southern and eastern peripheries, I selected Hungary, Latvia, Portugal, Spain and Greece as these were also the cases – along with Romania and Cyprus – where the EU launched a special financial assistance programme to remedy an acute economic situation.<sup>1</sup> Besides annual growth surveys and the Europe 2020 document, altogether I analysed 44 documents, typically, but not only National Reform Programmes (NRP) and EC recommendations and Occasional Papers, Article IV Consultations of the IMF and shorter versions of OECD Economic Surveys.<sup>2</sup> The analysis of recommendations and implementations in five countries focuses especially on the EC annual growth surveys for the years 2008 and 2010–2013. The analysis pays somewhat more attention to European Commission-related documents, given that there was a marked change in EU economic strategy in 2008 and during the adjustment period. Nevertheless I do not compare competitiveness

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1. The EU also launched a special assistance programme in one non-southern, non eastern EU member, namely Ireland. A crucial document for assessing changes in all cases was the 2008 NRP. As Romania joined the EU only in 2007, no such report was prepared by 2008. Cyprus was eliminated due to the more unusual character of the crisis.
  2. The Annex lists all the reports which I analysed. Except for Latvia, I had at least three reports/papers written in 2008 (or earlier), and at least four reports for the adjustment period, written between 2010 and 2013.

enhancing measures in the five countries: their histories of EU integration differ substantially (see, for example, Halpern and Wyplosz 2002), and a straightforward comparison would have limited benefits. However, I devote some space to highlighting differences between the group of southern European countries, Greece, Portugal and Spain – the group of countries which suffered most in terms of competitiveness (see de Grauwe 2010) – and the post-socialist EU countries in central-eastern Europe, Hungary and Latvia.

I understand competitiveness enhancing measures as a government policy which has a history, unfolding over time (Pierson 2005) and as a semiotic element of a larger narrative, a 'text'. My method of assessing competitiveness enhancing measures in concrete reports (texts) is content analysis: I analyse fragments of texts as embedded in narratives (Franzosi 1998; Franzosi 2004): I collected and analysed all the sentences, paragraphs, sometimes whole sections from the abovementioned documents that discuss or are related to competition or competitiveness, and investment.

The chapter has the following structure. In Section 2 I tackle the question of what national competitiveness is. How is it defined academically and practically in the discourses of supranational bodies? For illustration, I draw not only on scholarly debates but also on the analysed material and on the formulations of supranational agencies. At the end of the section, I outline the concept of competitiveness enhancing measures as the main subject of the inquiry: as a policy progressing over time (Pierson 2003, 2005), and also as a cause of various outcomes, such as an increase in FDI. In Section 3 I discuss the history of competitiveness enhancing measures in the five selected countries. In this, the largest section in the chapter, I show how the introduction of competitiveness enhancing measures unfolded over time, becoming more radical since 2009, and taking various forms until 2013. In Section 4 I unpack and systematise competitiveness enhancing measures in the European Commission reports into four main types. In Section 5 I look into how competitiveness enhancing measures targeted FDI, or which specific competitiveness enhancing measure addressed FDI. In the final section, I summarise the main outcomes of this exercise and briefly evaluate competitiveness enhancing measures' 'success' and how they targeted FDI increases.

## **2. (National) competitiveness and competitiveness enhancing measures: overview and definitions**

Only relatively recently has national competitiveness become a dominant concept and policy issue. In policymaking, the concept possibly owes its popularity and appeal to its blending of general aims of competition-induced economic development (growth) in a global free-trade environment with social cohesion and prosperity at national level. Contemporary discourses of various international organisations and supranational agencies monitor and evaluate national economies, their institutions and sub-units in accordance with various indicators or link their performance to broadly defined competitiveness (for example, Garelli 2003).

In the past three decades, the notion of competitiveness has expanded in a spatial sense from the widely used, generally accepted microeconomic level of firms to regions and states, but increasingly also to supra-national entities, such as the EU. The concept of the *competitiveness of nations* or states entered the academic debate and policy analysis only in the 1980s. Many controversies were not resolved concerning its definition and use for policy purposes. While some scholars remained cautious (in general, see, for example, Porter 1990) critics not only questioned its utility altogether, (Krugman 1994; De Grauwe 2012), but even avoided the concept (Hall and Jones 1998) or even criticised its underlying assumptions as those of ‘comparative advantage’ (Prasch 1996; see also Hall and Jones 1998). Others conceptualise dimensions of competitiveness and formulate more precise analytical frameworks, linking up microeconomic and macroeconomic ‘composite’ indicators (Delgado et al. 2012; Haemaelainen 2003). Some highlight the temporal dimension of competitiveness, differentiating between outcome and process (Aiginger 2006), or short-run and long-run competitiveness (Boltho 1996).

Judging from its use in discourses and definitions, the notion of national competitiveness is strongly linked with issues of domestic or external market shares, trade at various levels, costs and productivity (cf. Delgado et al. 2012: 6), but it is also closely associated with presence in strategic industries, investment or endowments in economies of scale. Competitiveness is often understood as having a quantitative and a non-quantitative (qualitative) dimension. Quantitative competitiveness is often referred to as cost and exchange rate-related, and it is most commonly calculated from real or nominal effective exchange rates as

well as unit labour costs. The non-cost component includes institutional environment, proximity to major markets, technology and qualitatively differentiated products, and stresses the importance of intra-sector trade. (see, for example, OECD 1998) Global investment attractiveness (Delgado et al. 2012) is another indicator of the competitiveness of increasingly open economies with regard to foreign direct investment, which combines quantitative and qualitative issues. The latter is especially important and instrumental in assessing the competitiveness of countries and economies with low capital-intensive industries, such as the southern European economies before European integration or the central and eastern European post-socialist economies (for an overview, see De Grauwe 2010).

A widely, but not universally accepted consensus asserts that 'competitiveness is what underpins wealth creation and economic performance' (Delgado et al. 2012: 7), which links up issues of productivity with long-run prosperity (cf. Lewis 2004; Aiginger 2006). The biggest differences derive from scholars' choice of whether to include other, less strictly economic perspectives, most importantly, whether temporal (long-term) and social dimensions should be included in the definition of competitiveness. Two assessments can be adduced to illustrate this point. The first assessment highlights the importance of external, and short-term competitiveness. Competitiveness is:

the ability of a given country to produce goods and services of international quality standards more cost effectively than other countries. ... [where] REER misalignments will constitute a crucial component of a country's overall competitiveness, which should, however, be supplemented by a broader range of measures, including other relative price measures, external sector outcomes, production costs, and measures of institutional quality. (Di Bella et al. 2007: 4)

The second assessment incorporates the social and temporal perspective. Competitiveness is:

the ability to maintain market shares while *at the same time* being able to earn sustainable and high incomes, as well as maintain and improve social and environmental standards. (Aiginger 1998: 7, emphasis mine).

There is no consensus on competitiveness among supranational agencies. Reports by three of them – the IMF, the OECD and the European Commission – published in the period 2008–2013 do not contain explicit definitions of competitiveness, but there are significant differences in terms of emphasis. In contrast – especially – to IMF recommendations, EU documents such as the Annual Growth Survey (AGS) and Europe 2020 devote more attention to employment, social rights and environmental standards. But there is an increasing shift here, too. In March 2008, in their evaluation and revision of the Lisbon strategy, EU leaders concluded that ‘job creation and increasing competitiveness’ were the new priorities of the European joint economy. Apart from vaguely linking the issue of competitiveness to employment, EU authorities also identified four priority areas in which these issues were to be tackled: investing in knowledge and innovation, unlocking business potential (especially SMEs) and energy and climate change. During the adjustment period, competitiveness and growth were to be created within an economy that is also ‘smart, sustainable and inclusive’ (AGS 2010: 4), while job creation became secondary, linked only to the general goal. In the grand narrative of the 2010 Annual Growth Survey, competitiveness as a future EU goal appeared together and on a par with employment, productivity and social cohesion (a ‘competitive social market economy’). In the third Annual Growth Survey in 2013, ‘competitiveness’ in the introductory paragraph is linked only to growth and defined as an ultimate aim of economic restructuring.

Among EU member states, nowhere has economic transformation been intertwined with European integration more dramatically than in the transformation economies of the post-authoritarian southern European states in the 1980s (Greece, Portugal, Spain), and probably to an even greater extent in the post-socialist eastern European states from the 1990s (Hungary, Czechia, Slovakia, Poland, Slovenia, Latvia, Estonia, Lithuania, Romania and Bulgaria). The global economic crisis and the euro area crisis reinforced the ‘competitiveness’ driven focus of supranational agencies in interpreting developments in these countries. Most recently, in the adjustment period, policy recommendations and implementations in the countries of the European periphery within the framework of the global economic crisis were based on a single explanation: the crises were a consequence of serious losses of competitiveness on the part of these states, especially ‘too high’ unit labour costs (Wyplosz 2013).

The frequency of use of 'competitiveness' and its significance increased from 2008 to 2013, in all documents of supranational agencies, especially those of the European Commission. The notion of the competitiveness of national economies was also narrowed down and was increasingly associated with cost (as well as price) competitiveness and concerns about overall performance in external markets.<sup>3</sup> There was an increasing focus on structural measures to improve the cost and price competitiveness of national economies. In terms of its discursive use in the context of recommended measures – with the exception of documents related to Hungary – from 2009 onwards (external, cost) competitiveness is to be 'restored', 'regained', 'recouped' and not only 'increased', 'improved', 'maintained', 'ensured' or 'strengthened', as was characteristic of the recommendations of 2008. The greatest shift can be identified in the European Commission documents. There was a significant shift in focus from achieving the long-term goal of a research and development-driven knowledge-based economy, production of high value added goods and services, characterised by high employment rates to the new goal of export-oriented growth and recovery of the economy, with measures aimed at improving cost-driven competitiveness and export potential. For example, in the case of Portugal, there was a switch from 'improving the quality of public finances in intervention areas that boost the country's potential growth and employment and improving the productivity of factors' (POR EC 2008: 10) to more concrete 'modernisation measures and the focus of public policies on continuing to foster internationalisation, improving competitiveness and the country's export capacity, with the aim of achieving 40 per cent of GDP originating from exports' (PT EC 2011: 6; see also PT EC 2008: 10 and PT EC 2011: 15). We can see a similar turn in equivalent documents for Latvia, from 'developing a favourable and attractive environment for investment *and work*' (emphasis mine) to stressing only investment (cf. LV EC 2008: 5, 14 and LV EC 2011: 11). The case of Spain seems to be the least radical, as the 2008 NRP (cf. ESP EC 2008: 9–10) already included a 'move towards the internationalisation' of businesses, and the EC recommendations of 2008

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3. The NRPs of 2008 often include also free and sometimes even 'poetic' formulations and definitions of competitiveness. The most illustrative report is the 2008 NRP for Portugal. This document is rich in expressions, formulations and definitions surrounding the concept of competitiveness and measures to achieve it. For example: 'mobilising the agenda towards growth and competitiveness', 'the recognition of the contribution of women to a more far reaching concept of competitiveness and innovation in the business fabric' and 'culture can generate wealth and is an engine of growth, competitiveness, employment and innovation' (EC POR 2008: 4; 24, 35-36).

prioritised improved competition (liberalisation) in selected sectors (energy) and implementing education reform, while the 2012 equivalent formulated the goal of ‘reorientation of the economy towards tradables’ (ESP EC 2012: 46).<sup>4</sup> Not surprisingly, the most radical, negative change occurred in Greece<sup>5</sup>, in relation to which a purported reorientation to export-led recovery, a structural reform agenda is formulated typically ‘to strengthen external competitiveness, accelerate reallocation of resources from the non-tradable to the tradable sector, and foster growth’ (GRE EC 2010: 10).<sup>6</sup>

While they do not provide an explicit definition, the authors of IMF documents consistently focus on cost and price competitiveness in their assessments.<sup>7</sup> In a broader, comparative sense IMF documents occasionally use the term ‘competitive position of the economy’ (HU IMF 2008: 40), while discussing measures (structural reforms) to make the economy ‘competitive’ (for example, PT IMF 2008: 26). It is important to note that from 2009 the authors of IMF documents stress even more the issue of competitiveness for policy making, including ‘external competitiveness’ through cost channels’, or ‘international competitiveness’ (for example, HU IMF 2012: 13) which is judged in terms of REER (Real Effective Exchange Rate), labour productivity/unit labor costs/and external market share. In contrast, the authors of OECD and, especially, European Commission documents are less consistent in their use of the concept, as they also pay attention to non-cost factors, especially in the 2008 NRPs.

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4. The ‘increase in productivity by increasing qualification levels and innovation’ is not the only important goal in the 2008 document: the 2008 Spanish NRP celebrated major achievements in the implementation of R&D and innovation strategies, as well as a major increase in employment rates.
  5. Whereas the 2008 NRP for Greece also mentions the goal of ‘increasing the outward orientation’ of the economy, it formulates the general goal of establishing ‘a knowledge-based society by restructuring the Greek economy towards the production of high value added goods and services, [along with] the faster increase of productivity’ (GRE EC 2008: 5, 20–29). In contrast, the 2010 NRP already states the need for a medium-term programme, with the radical goal of ‘altering ‘the economy’s structure towards a more investment- and export-led growth model’ (GRE EC 2010: 10), a shift which is reinforced in the 2013 NRP.
  6. In the Greek case, the drama has unfolded through the implementation of cuts in public spending, equivalent to 7 per cent of GDP – which in any case is decreasing – already in 2010. The story underlying this is that ‘these cuts and the respective release of resources for the private sector are also expected to contribute to restoring competitiveness in a medium-term perspective’ (EC GRE 2010: 14).
  7. This is underlined in a reported exchange of views between national authorities and IMF staff. In a document from 2006, for example, we learn that the Greek authorities considered competitiveness in a broader sense, where ‘improved competitiveness [was] key to sustaining medium term growth and closing the gap in living standards with western Europe’ (GRE IMF 2006: 13).

In the 2010–2013 period, the concept's meaning narrows down in European Commission documents to market performance. Simultaneously, its relevance for policymaking increases. This is expressed most radically in the interchangeable use of 'export' (performance) and 'competitiveness' (LV EC 2011: 15). Another radical assumption is that improving cost competitiveness is a goal in itself, as it is alleged to condition growth (and in some definitions also jobs; see ESP EC 2011: 6; ESP EC 2013: 4; also LV EC 2011: 7). Another aim is to put in place structural measures supposed both to enhance enterprise competitiveness in open product markets and to foster exports and productivity, leading to economic growth (LV EC 2011: 11). Even if not unproblematic, a radically different – if rare – and broader definition of national competitiveness centres on a non-cost measure, namely skills. It proposes the adaptation of the labour force's skills to labor market demands to increase the 'competitiveness of individuals, [and consequently increase the competitiveness of] employers and [consequently increase the competitiveness of] the country' (HU EC 2012a: 73).

In this chapter I follow the broader definition of national competitiveness as a benchmark, which links economic performance with maintaining and improving social and environmental standards as a premise (cf. Aiginger 1998). I define competitiveness enhancing measures as policies that have a history. More precisely, competitiveness enhancing measures are series of government-induced actions unfolding over a period of time – stretching, for example, from plans and drafts to changes in legislation – aimed at increasing national competitiveness, implementation of which may last up to several years. Following more content-oriented definitions, competitiveness enhancing measures are thus about finding the 'right balance' to improve competitiveness; that is, to fulfil all the requirements of 'sound' fiscal policies, investment growth – especially in innovation and new product markets – and job creation, but also social and environmental standards.

### **3. Competitiveness enhancing measures in discourse and definitions**

Competitiveness enhancing measures as a cause have a temporal dimension (Pierson 2003): the implementation of steps realising concrete policies occurs over a period of time – time is needed so that competitiveness enhancing measures can become a cause. In the adjustment



period, from 2009 to 2013, measures evolved from drafts and plans to concrete measures. Moreover, in NRPs, for instance, a report on implementation of the measures is also produced, with various stages, reactions to proposals (from the IMF, the European Commission and so on), discussions with and involvement of relevant stakeholders, drafts, adopted legislative changes, measures and reports on implementation. Most measures typically needed a few years to be implemented: some more (for example, new legislation), some less (pressing labour unions for wage cuts).

In the EU discourse we find only one general, encompassing competitiveness enhancing measure, namely structural reforms, which then become the main focus of recommendations. ‘Structural reforms are an essential part of restoring Europe’s competitiveness’ (AGS 2012: 1). The AGS also introduces the term ‘structural reforms’ as a condition to ‘promote growth and boost competitiveness’ (AGS 2013: 13). *Structural reforms* denote first of all economic measures, and less environmental and – except employment – social issues. Moreover, structural reforms denote a series of actions over time, a process. More concretely, this process consist of ‘taking steps’ in the right direction, focusing mainly on consolidating public finances, reducing tensions in financial markets, reducing indebtedness, increasing the share of exports in GDP and creating a favourable environment for business. Implementation of structural reforms – which we can understand as a generic type of competitiveness enhancing measure – requires time and a certain process, from analysis to drafting and, typically, gradual implementation. The common denominator of the listed structural reforms is that they are economic measures favouring and encouraging private investment and simultaneously preparing and implementing cuts in public spending.

Structural reforms are thus general competitiveness enhancing measures, consisting of particular measures and occurring as a process unfolding over a period of time. The EC recommendations to Greece in the adjustment period (see Box) illustrate this conclusion. The NRP of Greece for 2011 (EC GRE 2011) lists both an extensive list of ‘main structural reforms implemented until 2010’, in line with recommendations from 2009–2010, but also a similarly long list of structural reforms in progress of implementation. The document (EC GRE 2011) also reports in greater detail on how these competitiveness enhancing measures came or are coming into existence.

### **The temporal dimension of CEM: Implemented and in progress of implementation. The example of Greece (EC GRE 2011)**

**Implemented CEM:** 1. Independence of the Hellenic Statistical Authority; 2. Overhaul of the tax system; 3. Fiscal Management and Responsibility Act; 4. Reform of local public administration ('Kallikrates'); 5. Private and public sector pension reform; 6. Labour market reform; 7. Financial Stability Fund; 8. Allocation of the private insurance sector supervision to the Bank of Greece; 9. Restructuring of the railway sector (OSE); 10. Liberalisation of road freight transport; 11. 'Fast-track' important investments 12. Horizontal legislation on the Services Directive; 13. Single Payment Authority for the wage bill in the public sector; 14. Online publication of all decisions involving commitments of funds in the general government sector; 15. New investment law; 16. Liberalisation of closed professions; 17. Healthcare reform; 18. Restructuring of the urban transport entity (OASA); 19. Law on combating tax evasion and restructuring of the tax services 20. Establishment of a commitment registry for the general government.

**CEM in progress of implementation:** 1. Simplification of the start-up of new businesses; 2. Simplifying licensing procedures for technical professions, industrial activities and business parks; 3. Single remuneration system for public sector employees; 4. Restructuring plan for Public Enterprises; 5. New Law for the Hellenic Competition Authority; 6. Privatisation Plan; 7. Liberalisation of the wholesale electricity market; 8. Single Public Procurement Authority.

European Commission reports for the other four cases also outline structural reform agendas and list measures. Common in these measures is the emphasis on creating a business-friendly environment, promoting entrepreneurship, less bureaucracy ('red tape') and 'improved' business-friendly regulation, modernisation of public administration, culminating in the post-2010 period in explicit support for the reallocation of resources to the tradable sector. The exact formulation of the structural reforms, however, understood as a set of policies to improve competitiveness, exemplified in export-driven growth, is formulated differently in different national contexts. The structural reform – also called 'modernisation' – for achieving an export-led recovery and 'restoring competitiveness' is again expressed most radically and neatly summed up in the Greek EC document: 'to modernise the public sector, to render product and labour markets more efficient and flexible, and create a more open and accessible business environment for domestic and foreign investors, including a reduction of the state's direct participation in domestic industries' (EC GRE 2010: 10). Similarly, in Latvia the list of

‘structural reform measures, that support expanding export possibilities and promote productivity to ensure more rapid growth’ aimed at rebalancing the economy towards the export driven ‘tradable sectors’ is the longest (LV EC 2011: 11), listing measures not only in the product and the labor markets, but also in financial markets. Finally, in the Portuguese NRP we find a resolute switch to structural reforms, where among the three actions listed as contributing ‘very significantly, and more rapidly, to the competitiveness of the Portuguese economy and to the correction of the existing imbalances’ we find the key goal of the measures: ‘reinforcing the internationalisation agenda’ (PT 2011: 17).<sup>8</sup> The measure of ‘reinforcing the internationalisation agenda’ includes ‘public policies [for] rebalancing incentives in favour of the tradable sector’, ‘improving the external image of Portuguese products’, ‘fostering the image of a modern and innovative Portugal’ and also ‘improving networks and logistics of access to the principal markets’ (PT 2011: 19).

The transition to tradable and export-led growth is the smoothest in Spanish NRPs, as the 2011 document does not mention export-led growth or a further need for reorientation. As economic growth slowed down in 2007, there were preparations to increase export orientation – ‘business internationalisation’ – already in 2008 (ESP EC 2008: 74, 78) and, more arguably, a preparedness to impose ‘austerity’ as a way to switch to tradeables (ESP EC 2008: 9–11). The 2011 and 2013 Spanish NRP documents discuss structural reforms, including: implementation of Services Directive; labour market ‘reform’; action in the housing and rental markets; fiscal incentives; other measures included in the Law on a sustainable Economy; and public pension system ‘reform’ (ESP EC 2011: 5). These measures are particularly close to those implemented in Hungary, where measures aimed at the ‘modernisation’ of public administration were central, alongside other measures supposed to foster a business-friendly environment, but labour market and education reform were on the structural reform agenda (HU EC 2011: 5, 9, HU EC 2012a: 18–22).

Formulations of OECD economic surveys and IMF Article IV consultations are similar, but here there is relatively less stress on structural reforms. The list includes more concrete policies, ‘structural factors’ to which competitiveness is linked. In keeping with the trend, the general

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8. The other two measures are ‘reduction of energy dependence’, and ‘increase in saving and reduction of indebtedness of all the domestic sectors’ (PT EC 2011: 17).

message of recommendations contained in OECD economic surveys and IMF Article IV consultations in 2008 differed little from their equivalents in 2010–2013, but there was a change in intensity and concreteness. There is a persistent focus on an evaluation of the business environment and a persistent and increasing stress on improving price competitiveness and market outcomes, via liberalisation of protected sectors, privatisation of state-owned enterprises and reduction of entry barriers in strategic sectors, as well as deregulation of professions.

For example, a 2010 IMF document on Latvia suggests that improving competitiveness depends on structural measures, more than or equal to cutting labour costs further (LV IMF 2010: 32). These structural policies are supposed to aim at achieving transparency, fighting corruption, removing obstacles to doing business, improving an unpredictable environment and governance shortcomings, all for a more stable policy environment, especially on taxes (LV IMF 2010 36–38).<sup>9</sup> In Hungary, the persistent stress was on 'continuous improvement of the business environment' as the goal to preserve or improve competitiveness or 'attractiveness for foreign direct investment' (HU IMF PIN 2008: 2–3; HU IMF 2008a: 44–45).<sup>10</sup> In the adjustment period, both IMF and OECD documents warned that 'structural factors' were hampering competitiveness, especially where investors' 'confidence' was at stake; thus the business environment required improvements through 'strengthening policy credibility', restoring bank intermediation and delivering a different fiscal adjustment (HU IMF 2013: 18; 1 cf HU OECD 2012: 1).

In all three southern European countries, OECD and IMF recommendations from 2008 (or somewhat earlier) centred on cost competitiveness measures, especially labour costs. Recommended measures included wage moderation or removing wage indexation, flexibilisation of wage setting (decentralisation of collective bargaining) and/or reducing

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9. This line of argument is strengthened in the 2013 document, where it is stated that there is 'a modest remaining competitiveness gap of about 4.6 per cent, which would need to be addressed through structural policies' (LV IMF 2013: 16), with such measures as promoting 'judicial efficiency' and 'monitoring state-owned enterprises' (LV IMF 2013).

10. Similarly, in the stand-by arrangements for Hungary we find the following assessment and objectives: 'to (i) reduce the government's financing needs and improve long-term fiscal sustainability, (ii) maintain adequate capitalization of the domestic banks and liquidity in domestic financial markets, and (iii) underpin confidence and secure adequate external financing. The government is in the process of considering additional steps to improve the competitive position of the economy, which are fully consistent with the programme' (HU IMF 2008: 40).

'rigidities' in employment protection legislation, expanding part-time work opportunities (POR OECD 2008: 123; GRE IMF 2006: 13; ESP OECD 2008: 7; GRE IMF 2009: 11). These more moderate recommendations intensified into more aggressive recommendations in the adjustment period. Measures included decentralisation of collective bargaining mainly to company level, drastic reductions in severance payments in Portugal (POR IMF 2012: 13) and abolition of administrative extensions of collective agreements (POR OECD 2012: 3). In Spain, reduction of other business costs was also suggested to counter the 'inertia in the wage bargaining system' (ESP IMF 2012; cf. ESP IMF 2012: 28). The most radical change in recommendations and implementations of decreasing labour costs and flexibilisation of working arrangements occurred in Greece, all on the pretext of restoring 'cost-competitiveness and boosting employment over the medium term' (GRE IMF 2013b: 6).<sup>11</sup>

#### 4. Types of measures

European Commission recommendations and NRPs are voluminous documents, which outline recommended competitiveness-related measures in detail. I unpacked and classified these measures in all five countries. There are seven main types of competitiveness enhancing measures that appear in reports and recommendations. Out of these, three are cost-related: (i) improving the business environment via legislative measures, for business operation and investment; (ii) labour market reforms and a deregulated (flexible) industrial relations (IR) system; and (iii) measures to lower prices in strategic sectors for business (transport, energy and so on). In addition, there are four non-cost competitiveness measures: (i) support for R&D/innovation, (ii) improving the education/skills of the active population, (iii) developing

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11. After wage restraint, wage cuts followed, including minimum wages. In terms of flexibility, more options were to be created 'for the adaptability of working hours, especially for small- and medium sized enterprises', while '[w]ork schedules shall be made more flexible in order to allow working hours to better adjust to demand and production patterns that may vary over time, as well as over sectors and firms, and thereby help employment and competitiveness.' Severance pay was reduced, but the government was also supposed to 'promote an efficient wage-setting mechanism, reduce non-wage labor costs' (for example, through steps to reduce the administrative burden and production patterns that may vary over time, as well as over sectors and firms, and thereby help employment and competitiveness). By early 2014, the government was supposed to 'review the minimum wage system, with a view to possibly improving its simplicity and effectiveness to promote employment and fight unemployment and help the competitiveness of the economy' (GRE IMF 2013: 205-207). Simultaneously, support for establishing and operating businesses was to become less costly (GRE IMF 2013: 207-208).

(environmental) infrastructure and (iv) introducing policies for environmentally sustainable development. Among these, I shall look at increasing investment in R&D/innovation as a percentage of GDP, with incentives for private investment, and skill development to meet the requirements of competitiveness, as only these measures are dealt with in more detail and targeted at private investment.<sup>12</sup>

The measure of *improving the business environment via legislative measures* figures prominently in country reports and recommendations, but it is especially dominant in relation to Greece, Hungary and Latvia. The whole arsenal of more specific competitiveness enhancing measures are listed in Latvia's NRP under 'Key policy directions and measures' for 'improving the business environment and modernisation of public administration': reducing administrative barriers (and improving quality of services); modernising public administration; improving the regulatory basis for employment legal relations, labour security and their application; combating grey economy; implementing the Services Directive in Latvia; and improving the absorption of EU funds (LV EC 2013: 29–34). More generally, a constant criticism directed by the European Commission towards the Hungarian authorities centred on falling 'confidence' among foreign investors, allegedly due to 'shortcomings in the stability, predictability and transparency of the institutional and policy framework' (EC HU 2012: 7).

As for implementation, during the adjustment period in Greece and Portugal there was an easing of the financial burden on businesses. In Greece, employers' social security contribution rates were reduced (EC GRE 2011).<sup>13</sup> Portugal seems most similar to Greece; a comprehensive reform of corporation tax was initiated to foster investment and competitiveness (POR EC 2012: 50–51). Similar steps were considered in Spain. The ESP NRP of 2011 lists measures to improve the competitive business environment by means of needs-based modernisation of public administration, via the introduction of a new Basic Statute for Civil Servants, as well as measures for 24-hour company formation. Although it was the least transparent and least acknowledged, Hungary also

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12. Note that the EC documents devote much attention to these often project-driven measures. My analysis remains general: due to lack of space I concentrated on highlighting some common characteristics.

13. In the most recent NRP, the 'Ministry of Finance [has the task] to produce a comprehensive list of nuisance taxes and levies, and eliminate them or transfer them (and the associated spending) to the central government budget' (EC GRE 2013b: 144).

decreased the financial burden on businesses in the post-2010 period, in line with recommendations.

Concerning *labour market and industrial relations reform*, the relevant competitiveness enhancing measures were especially detailed with regard to the countries of the EU south, in terms of both recommendations and implementation. For example, in Portugal there were drastic reductions in severance payments and abolition of administrative extensions of collective agreements (POR IMF 2012: 13).

Compared with the measure of *easing the financial burden on enterprises*, both the importance, elaboration and detailed variety of measures addressing the reduction of labour costs increased in the adjustment period. The 2008 NRPs, apart from measures serving ‘flexicurity’ (for example, ESP EC 2008: 13; HU EC 2008: 120), typically do not address issues of reducing labour costs, but tackle them indirectly, at best (POR EC 2008: 5). However, in the adjustment period measures included wage moderation or direct cuts in labour costs, both in the public and the private domain, as well as the introduction of institutional solutions for weakening the bargaining power of labor, and also offered cost-related solutions to labour market ‘rigidities’, such as diluting employment protection legislation.

Whereas there was increased support for labour market entry for disadvantaged groups in Greece, the case is extreme because it combined radical wage cuts, flexibilisation measures and new institutionalised solutions via both agreement between the social partners and unilateral government measures during the adjustment period, without prior announcement.<sup>14</sup>

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14. 2010 EC recommends radical labour market reforms for Greece: ‘Labour and wage reforms will help to curb undue wage pressures, which affect Greek competitiveness negatively. Reforms will ease entry to the formal labour market for groups like women and the young, and facilitate transition from temporary to permanent contracts. Labour market and wage reforms should also enable the public sector reforms to rapidly put downward pressure on private wages and improve competitiveness. Given the sensitivity of labour market and wage reforms, it was decided to follow a two-step approach after consultation with the authorities (in particular with the Ministry of Labour) and social partners. Firstly, the government will launch a social pact with social partners to forge consensus on decentralization of wage bargaining (to allow the local level to opt-out from the wage increases agreed at the sectoral level), the introduction of sub-minima wages for the young and long-term unemployed, the revision of important aspects of firing rules and costs, and the revision of part-time and temporary work regulations. Second, the government will enforce the required changes in wage-setting mechanisms and labour market institutions’ (GRE EC 2010: 22).

Measures directed at cutting labor costs intensified further in the adjustment period. Reforms fostering competitiveness included the following: flexibility in working time arrangements was introduced; the minimum wage system was reformed; a shift occurred to firm-level collective bargaining and wage setting; the notification period was reduced for the termination of permanent employment contracts; and wages could not be increased as defined in collective agreements until the unemployment rate falls below 10 per cent (EC GRE 2011: 36–37). This was not all: by 2013, the government was able unilaterally to alter the minimum wage system and initiate further cuts (EC GRE 2013b: 185).

Taking Greece as an extreme case, there are major differences between Portugal and Spain, on one hand, and Latvia and Hungary, on the other. In the former, wage agreements, labour market reforms (including legislative reform), changes in wage setting mechanisms – decentralisation of wage bargaining to company or, at best, sectoral level – and measures aimed at the flexibilisation of the labour market, but also increasing labour market supply happened through an accord between the social partners. For example, in Portugal this was the case with the measure for ‘internal adaptability in the company through the flexibilisation of internal mobility, the organisation of working hours and wage bargaining. In addition, various procedures, notably collective dismissal, were also made more flexible’ (see POR EC 2011: 23; cf. POR EC 2012: 25–26; ESP EC 2008: 14, 65–72; ESP EC 2011: 16–20; ESP EC 2013: 28, 83, 97). The record in Spain is equally substantial.<sup>15</sup> In contrast, in Latvia and Hungary these measures were introduced unilaterally. Moreover, as labour was already weak or fragmented and wages were comparatively low, it focused mainly on increasing labour market supply, which was characteristic of all cases.

The reform of the labour market and industrial relations is connected to the measure of *increasing labour market supply* by creating incentives

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15. The 2011 NRP declares that ‘the government maintains its firm commitment to social dialogue as the most balanced and efficient instrument for tackling employment issues and improving the labour market, including the elements of flexicurity. In this context, on 29 July the government and the social partners signed the Declaration to Boost the Economy, Employment, Competitiveness and Social Progress, setting employment as the priority based on a balanced and sustainable economic growth model rooted in increasing productivity. The Declaration is the template for the process of reform to be tackled in this legislature, within the framework of a Social Dialogue strengthened by increasing its scope to include an extensive set of policies in the fields of economic and social policy, and which are essential to reactivate the economy and improve competitiveness.’



for various disadvantaged social groups to enter the labour market, also in line with the Europe 2020 strategy of poverty reduction. Typically, these measures combined a reform (cuts) in social benefit systems, education reforms – to bring disadvantaged groups to the labor market – and changes in labour codes allowing more flexible forms of employment.

The measure of increasing labour supply through providing support for various disadvantaged social groups (young people, women, the disabled) occurred in all cases. This is indirectly a labour cost-related measure, as it puts downward pressure on wages. This support for labour market participation typically came in the form of education and training. In the Latvian case, the measure of strengthening the labour supply is aimed at ‘improving the competitiveness of persons at unemployment risk at the labour market, including improvement of skills to match labour market demands’ (LV 2013). Similarly, the Hungarian 2012 NRP sets the target of ‘improving the “employability” of disadvantaged groups via education’, by adjusting ‘the skills of workers more to the actual labour market needs’ (see also POR EC 2011: 56, 64; ESP EC 2008: 86; ESP EC 2011: 18). The European Commission asserted that these reforms are intended to benefit Hungary’s competitiveness (EC 2012a).<sup>16</sup>

As for measures to lower prices in strategic sectors for business (transport, energy), a common measure characteristic of the whole period was liberalisation and sometimes privatisation of sheltered sectors with a dominant presence of state-owned enterprises (such as transport, energy), aimed at increasing competition in the sector and consequently price cuts. Institutionally, this was addressed in all cases in measures to increase the competences and autonomy of the competition authority.

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16. In the IMF recommendations, a common justification of labour market reforms, on the pretext of increasing employment, is labour market duality, between employees with permanent contracts and those in precarious employment or no employment at all. As unemployment increased, and underprivileged social groups exist in all societies, given the belief in straightforward market operations, there is a strong reason to even out their employment prospects at the cost of lowering labour standards and the wages of those in employment. Thus there have been increasing calls for wage moderation, lowering labour standards and overcoming ‘labour market rigidities in wage setting, employment protection and severance payment’ in order to overcome the labour market duality (ESP IMF 2012: 28), implemented with varying intensity.<sup>16</sup> In terms of the labor market, the IMF document formulated ‘a need for continuing microeconomic reforms to bring down the stubbornly high rate of structural unemployment and enhance competitiveness within the fixed exchange rate regime’ (IMF LV 2013: 17) to promote work incentives via fiscal reforms, such as reducing the duration of family benefits while enhancing formal child care and shifting active labour market policies towards in-work tax credits and benefits, but reducing the guaranteed minimum income (GMI) more gradually with rising income levels (16-17, 37).

Liberalisation was on the agenda already in 2008, although in most cases measures or at least recommendations intensified and became more concrete later. Moreover, in some cases, especially in Greece and, to a lesser extent, Portugal, the liberalisation wave spread to other spheres, especially services and 'regulated professions'.

The variation among cases is significant. Spain embraced liberalisation and pioneered a set of comprehensive measures already in 2008 (see ESP EC 2008: 142, 146). Hungary and Latvia also continuously addressed issues of liberalisation, but focusing on two sectors, energy and transport.<sup>17</sup> Greece, again, experienced the most radical liberalisation in the adjustment period, both extensively and intensively. Extensively, the measures introduced covered not only energy and transport, but also services (related to tourism), retail trade and 'regulated professions' (GRE EC 2013: 42). Measures aimed at 'enhancing competition and competitiveness' accelerated substantially in the adjustment period. They culminated in the 2013 recommendation to remove 'remaining unnecessary restrictions and barriers to entry', as well as liberalisation and privatisation in services dominated by state-owned industries (GRE EC 2013: 76, 194–201). Similarly, somewhat less radically, Portugal also liberalised regulated professions. The Portuguese authorities were also supposed to '[r]educe entry barriers in network industries and sheltered sectors of the economy such as services and regulated professions so as to increase competition and reduce excessive rents' (POR EC 2012: 68), as well as to 'eliminate special rights of the state in private companies (golden shares)' and to ensure fair public procurement processes (POR EC 2012: 74).<sup>18</sup>

In all NRPs, R&D/innovation is addressed, with relatively minor differences between 2008 and the adjustment period. The 2008 NRPs detail concrete, sometimes ambitious projects in support of product development, as well as the contribution of various digital technologies to increase product sophistication and production, all in service of developing a knowledge-based economy<sup>19</sup> (ESP EC 2008: 184). In contrast,

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17. In the European Commission's evaluation of liberalisation in transport, there was a 'setback' in Hungary (HU EC 2012b: 10).

18. There was also an elimination of 'context costs' in energy and telecommunications (POR EC 2012: 5), while it is also suggested that 'a reform of port labour and port governance, including the overhaul of port operation concessions, will lead to cost reductions and operational improvements in this part of the transport infrastructure critical for exports' (POR EC 2012: 5).

19. For example, support for projects focused on business and technological modernisation and innovation at SMEs.

NRPs from the adjustment period formulate normative goals of ‘structural reforms’ and support for innovation led by the private sector with a general aim of returning to the more general goals of increasing R&D/innovation as a percentage of GDP by 2020 (see ESP EC 2011: 21). In all countries, there is arguably more support for innovative, export-driven enterprises or cooperation between enterprises and scientists (LV EC 2013a: 40–44; POR EC 2011: 27–29, 57). Finally, in the adjustment period there are new policies and legislative solutions for investment in R&D/innovation, such as new public procurement laws in Portugal (POR EC 2011: 16) and Hungary (HU 2011: 40). Interestingly, the European Commission criticised Hungary for paying insufficient regard to R&D/innovation (EC 2012) and cuts in higher education.

While R&D/innovation regained its importance irrespective of the crisis in all countries, Greece is an exception, as spending on R&D/innovation decreased drastically in the adjustment period. The 2011 NRP thus formulated a timid recommendation to reconsider revising the target of 2 per cent of GDP for R&D spending down to 0.67 per cent. Modest measures were launched in order to fight the brain-drain and unemployment (EC GRE 2011: 40; GRE EC 2013: 50–51).

Turning to measures related to skill development, from 2008 to the adjustment period a significant change occurred in education goals – at least in some cases – from investment in more general skills to investment in more concrete ones.

The 2008 NRP for Latvia formulated the most generally inclusive education goal as a competitiveness measure. The aim was to:

[D]evelop qualitative education supply for adults providing sustainable competences for work, civil participation, personality growth and promoting development of competitive knowledge economy based on high skills, as well as a democratic society in Latvia. (LV EC 2008: 14)

Such an assessment differed markedly from reforms in the adjustment period. The direction of reforms is spelled out most specifically for Hungary, exemplified by diversifying the range of non-university, tertiary education and training to address the needs of the labour market.

**Table 1 Types of measures in the National Reform Program (NRP) of selected member states**

Types of measure	Greece	Hungary	Latvia	Portugal	Spain
Improving the business environment via legislative measures	Dominant	Dominant	Dominant	Present	Present
Labour market reforms, deregulated (flexible) industrial relations	Dominant	Present	Present	Dominant	Dominant
Measures to lower prices in strategic sectors for business (transport, energy)	Dominant	Present / continuous	Present / continuous	Present / dominant	Present / continuous
Increase investment in R&D/innovation as a percentage of GDP	Present/weak	Present	Present	Present	Present
Skills development (education)	Present	Present	Present	Present	Present

Table 1 summarises the findings across cases. We can see that Greece is an extreme case, while the countries of the eastern EU (Hungary and Latvia) and the southern EU (Spain and Portugal) show different patterns. More specifically, the greatest difference is in the stress on flexibilising industrial relations and cutting labour costs in the south (mostly absent in the East), and improving the business environment, which is more pronounced in the east. These differences point to two important structural differences between these two groups of countries. The first is the absence of relevant and strong industrial relations actors, especially sectoral and national level trade unions in the east. The second is the currency and the exchange rate regime: Spain and Portugal (along with Greece), as members of EMU, could not use the flexible exchange rate regime to cut costs, as Hungary could, and thus had to turn to more unpopular measures to cut labour costs directly.

## **5. Do competitiveness enhancing measures target foreign direct investment and, if so, how?**

Perhaps we might expect there to be a straightforward positive relationship between competitiveness enhancing measures and FDI; that is, the more types and specific competitiveness enhancing measures are

outlined or implemented, the more stress there would be on FDI. However, content analysis of the relevant documents indicates that 'FDI' occurs fairly rarely in recommendations as a policy concern.<sup>20</sup> Nevertheless, as words 'FDI' and 'private investment' occur more often in the analysed reports since 2010, while FDI and private investment as a policy concern gain in significance in the adjustment period. This also means that although the connection is weak and poorly specified, FDI is still positively associated with competitiveness enhancing measures.

In European Commission recommendations in 2008 the long-term goal is a research and development-driven knowledge-based economy, the production of high value added goods and services and high employment rates (a higher share of exports was also addressed). Typically, increasing FDI was not mentioned, only increasing the share of private investment, mainly in R&D/innovation. In turn, in the adjustment period (2010–2013) the new goal is an export-oriented reorientation and economic recovery, with measures to improve cost competitiveness and increase export potential, which in most cases (LV, GR, HU, PT) goes hand in hand with competitiveness enhancing measures involving institutional reform to attract FDI. There is also substantial variation among cases: recommendations to Greece and NRPs contain the most references to FDI or private investment, while almost none were made with regard to Spain.

What type of the already discussed competitiveness enhancing measures tackle FDI or private investment? A particular type of competitiveness enhancing measure aims at improving the institutional environment for business, favourable legislation and creating supportive public infrastructure for private investment by generally targeting private investment. Within this, the focus shifts to FDI more evidently in countries where private capital is predominantly foreign, as in Hungary. The second type of competitiveness enhancing measure in which FDI is spelled out is investment in R&D/innovation. Finally, more specific measures concern the operation of agencies for attracting FDI.

Greece introduced a new agency for attracting FDI in 2008, with an extensive 'stock-taking', brokering role, including a legal expert council to improve the legislative framework for FDI (GRE EC 2008: 46). By 2011

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20. I expanded the search to include 'private investment' and 'investment' to get more results.

measures included adopting a 'Fast Track' legal framework for large-scale investments, a comprehensive strategy to promote exports and the adoption of a new Investment Law; '[m]oreover, a law that modifies the existing institutional framework of the Hellenic Competition Committee and a law that simplifies and accelerates the process of licensing industrial activities, business parks and technical professions have been submitted to Parliament' (GRE EC 2011: 31).

In Latvia the general aim was to attract FDI 'to sectors oriented towards external demand [especially those with high added value]'. A particular type of competitiveness enhancing measure – improving the business environment – was supposed to provide assistance in achieving this goal. A more specific competitiveness enhancing measure was investor motivation 'via the servicing activity of several Latvian agencies which provide the necessary information, communicate with the relevant institutions, offer places for implementation of investment projects ... and ensure harmonised inter-institutional cooperation for successful implementation of investment projects'. In 2012, activities for attracting FDI were focused on the priority countries by preparing/developing recommendations for certain sectors and fields and intense investor post-servicing (LV EC 2013a: 38; also LV EC 2011: 16).

Hungary developed a more selective FDI focus, insisting on FDI in R&D/innovation. Thus, as of 2008 drafted decrees were supposed to target prioritised funding of investments in research and development with 'closer cooperation in the domain of FDI' (HU EC 2008: 52). This focus remained also in the adjustment period (HU EC 2012a: 32). The other specific FDI-related competitiveness enhancing measure was to increase the 'competitiveness of a few key industrial sectors and services with FDI involvement in knowledge-intense activities (pharmaceutical industry, biotechnology, the car industry, ICT sectors and business and creative services) with good growth potential ... capable of adjusting to the networks of the industrial sector on the global market or supplier chains' (HU EC 2008: 71). Comprehensive education reform was implemented during the adjustment period to attract FDI. The reform included 'diversifying the range of non-university, tertiary education training' to create 'a suitable qualification ratio that meets modern labour market needs' (HU EC 2011: 13).

Portugal's NRPs listed competitiveness enhancing measures related to attracting FDI only in a more general framework. The government was

supposed to continue a policy of ‘attracting foreign investment to modernise business with strong national involvement’ and a general policy of increasing the ‘capacity [of the national economy] to attract foreign investments’ (POR EC 2011: 16, 22). Although evaluating the country fairly critically as an FDI destination, the reports on Spain did contain explicit measures related to attracting FDI, but only private investment (ESP EC 2013: 8). There is only a general commitment formulated on behalf of both the public and private sectors ‘to the physical, human and technological capitalisation of the economy’ (ESP EC 2008: 17).

In sum, apart from the cases presented, there is little explicit information on how competitiveness enhancing measures (should) target FDI in the reports. Apart from one progress report (LV EC 2013a), reports do not inform us on how the *mechanism* works or should work, but only suggest that these measures – as part of structural reforms – are a necessary condition of export and private investment-led development. Explicitly stated concerns about increasing or retaining FDI, however, remain modest in the reports.

## **6. Conclusion: summary and an evaluation of the measures implemented**

Structural reforms during the adjustment period produced significant changes, but did not necessarily increase national competitiveness. While cost competitiveness improved and ‘structural reforms’ gained momentum in all the examined countries they did not produce the anticipated positive effect on growth and employment. More precisely, while unit labour costs decreased below or to pre-crisis levels, minimum wages in all countries fell or stagnated and nominal average wages increased only slightly – as in Spain and Hungary – but mainly remained under the 2008 level. However, compared with 2007, unemployment rates increased in all the countries analysed, while employment rates barely changed. There were also significant changes in trade balances and in expenditure/cuts within the framework of public administration reform, supposedly to create a business friendly environment. As a rule – except in Greece – current account balances in all countries improved consistently from 2009 (with the exception of Latvia in 2011). A major part of this was due to a continuously improving trade balance of goods and services and increased shares of exports in

GDP.<sup>21</sup> Except for Greece,<sup>22</sup> in all countries the rise in export shares in GDP was above 10 per cent, especially until 2012. Cuts manifested themselves also in public administration and social benefits. Nevertheless, GDP growth was modest at best.

The evidence is most negative in the case of Greece: competitiveness enhancing measures were the most radical here, but no economic growth or employment creation occurred. Although it has been argued that '[t]he reforms that have already been enacted in key areas are expected to assist the recovery effort by creating a more competitive and flexible economic environment' (EC GRE 2013: 3), the huge social costs of competitiveness enhancing measures and their implications (for example, a 'brain drain' of the skilled workforce) may lead to radically different outcomes.

Competitiveness enhancing measures targeting poverty reduction and employment generation by reforms of the labour market and industrial relations require more systematic and focused attention. These measures are highly controversial as they seem to have created social conflicts, such as feuds between 'insider' wage earners with standard employment and disadvantaged groups on the outside. Moreover, these competitiveness enhancing measures often restricted or ran against institutionalised practices of including organised labor in decision-making on social policies and wage setting. The long-term impact of these competitiveness enhancing measures is thus important.

Evidence on the impact of competitiveness enhancing measures on private investment and, more particularly, FDI is also inconclusive. Competitiveness enhancing measures specifically targeting FDI varied substantially in the five cases we analysed, ranging from general FDI (Greece) to export-driven FDI (Latvia) and sector-specific 'good FDI' (Hungary, perhaps, or Portugal) or even no measures on FDI, in the case of Spain. As the contributions to this volume show, the record is varies considerably, but overall FDI stagnated or fell below the 2008 level, although sometimes it is difficult even to assess investment data in nationally defined strategic sectors (as in Hungary). After delineating

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21. In Greece, the trade balance improved both because imports fell and exports modestly grew after 2009. However, exports did not recover to the 2008 level. Latvia is a partial exception, as the trade balance worsened in 2011 compared with the previous year.

22. In Greece, the export share in GDP grew modestly compared with 2008, by 1.7 per cent (IMF data). In absolute terms, (taking the overall fall in GDP into account) the change is still negative.



periods for examination (for example, competitiveness enhancing measures implemented in 2010–2012 versus ‘retained’ FDI levels and flows in 2012–2014), it is certainly worth scrutinising in greater depth the relationship between disaggregated competitiveness enhancing measures and actual FDI and private investment levels, in various sectors, as well as their purposes. However, this is demanding research outside of the scope of this chapter.

This exercise has other, more general comparative conclusions. There is a clear difference between recommendations for the central and eastern European countries (Latvia and Hungary) and the two southern European countries (Portugal and Spain). The most striking difference is that improving cost competitiveness features higher on the agenda for the south, especially wage cuts or wage moderation, whereas in the east the stress is more on structural measures, such as ‘regaining investors’ trust’ in Hungary, or on improving the business environment in Latvia. The other difference is the complete absence of intermediation of competitiveness enhancing measures via social dialogue in central and eastern Europe. Social dialogue is judged to be an important mechanism in southern Europe for implementing competitiveness enhancing measures, but its significance faded in the adjustment period. The most radical case is that of Greece, as it combines extremes of both. Similar to Spain and Portugal, recommendations focused on decreasing or moderating labour costs. In the adjustment period competitiveness enhancing measures increasingly emphasised structural measures, even more than in Hungary and Latvia.

In the analysed reports, competitiveness and thus also competitiveness enhancing measures are not defined strictly. Due to the level of abstraction associated with it, it functions rather as a ‘fuzzy concept’ (Lakoff 1973). Furthermore, definitions of competitiveness are fragmentary, and change over time, especially in the adjustment period, compared with 2008. There is also a major difference in measures proposed and associated definitions of competitiveness between the European Commission, on one hand, and the IMF and the OECD, on the other, which is particularly manifest in the pre-adjustment period. The authors of the IMF and – to a lesser extent – the OECD documents stress ‘external competitiveness’. While generally more concerned about R&D/innovation and issues of non-cost competitiveness, during the adjustment period European Commission recommendations also seem to shift more focus onto external competitiveness. In terms of the

classification of measures, the strongest emphasis, especially in the adjustment period, was on improving the cost competitiveness of business (by decreasing labour costs and administrative costs), improving the general environment for business (where the measure of public administration reform was high on the agenda) and price competitiveness via liberalisation and privatisation in sheltered sectors. There was much emphasis on non-cost competitiveness measures and these occurred only in EC documents.

In this chapter I have attempted to shed light on concepts and discourses surrounding competitiveness and its relationship to FDI. We have seen that competitiveness enhancing measures only sporadically aim at increasing FDI and somewhat more systematically target private investment more generally. In some countries, private investment is supported by government measures only in selected sectors. The findings also indicate that the major general measure of structural reform tackled in all five cases – in varying intensities – concerns the ‘institutional environment’ facing investors, but also institutions of industrial relations and public governance. In this sense, after 1989, it is justified to stress again the issue of institution building.

Two major limitations of this chapter remain, stemming from the methods and data used to assess the impact of competitiveness enhancing measures on FDI. The empirical material on which this chapter is based – reports of supranational agencies – provide us with only an initial overview, a potential map for further research on competitiveness enhancing measures and its impact on FDI. Therefore there is room for more in-depth research, which brings us to the selection of methods and data. A deeper assessment would necessitate a more targeted analysis of specific competitiveness enhancing measures and rely on other methods of data collection, including interviews with relevant actors, such as leaders of FDI-targeting agencies in the countries analysed. This would provide us with a more precise assessment of which competitiveness enhancing measures attract FDI and how. One could evaluate specific competitiveness enhancing measures targeting FDI, such as investment in R&D/innovation in various countries. Similarly, for example, for Hungary there is good reason to believe that during the drafting of the new Labour Code in 2012, concrete measures for attracting and retaining FDI in metal manufacturing were important. A concrete case study could spell this out in more detail.

## References

- Aiginger K. (1998) Introduction, in OECD (ed.) *The competitiveness of transition economies*, Paris, Organisation for Economic Co-operation and Development, 7-13.
- Aiginger K. (2006) Revisiting an evasive concept: introduction to the special issue on competitiveness, *Journal of Industry, Competition and Trade*, 6 (2), 63–66.
- Boltho A. (1996) The assessment: international competitiveness, *Oxford Review of Economic Policy*, 12 (3), 1–16.
- Bristow G. (2005) Everyone's a 'winner': problematising the discourse of regional competitiveness, *Journal of Economic Geography*, 5 (3), 285–304.
- Burawski D. and Murawiak K. (2004) Competitiveness of post-socialist economy: the importance of institutions, *Studentckie Prace Prawnicze, Administratywistyczne i Ekonomiczne*, 2, 69–85.
- De Grauwe P. (2010) Introduction, in De Grauwe P. (ed.) *Dimensions of competitiveness*, Cambridge MA, MIT Press, ix-xvi.
- De Grauwe P. (2012) In search of symmetry in the eurozone, CEPS Policy Brief 268, Brussels, Centre for European Policy Studies.
- Delgado M., Ketels C., Porter M. and Stern S. (2012) The determinants of national competitiveness, NBER Working Paper 18249, Cambridge MA, National Bureau of Economic Research. <http://www.nber.org/papers/w18249>
- Di Bella G., Lewis M. and Martin A. (2007) Assessing competitiveness and real exchange rate misalignment in low-income countries, IMF Working Paper WP/07/20, Washington, DC, International Monetary Fund.
- Dunford M., Louri H. and Rosenstock M. (2001) Competition, competitiveness and enterprise policies, in Hall R., Smith A. and Tsoukalis L. (eds.) *Competitiveness and cohesion in EU policies*, Oxford, Oxford University Press.
- Dunn E.C. (2004) *Privatizing Poland: baby food, big business, and the remaking of the Polish working class*, Ithaca, Cornell University Press.
- Fagerberg J. (1996) Technology and competitiveness, *Oxford Review of Economic Policy*, 12 (3), 39-51.
- Fagerberg J., Srholec M. and Knell M. (2007) The competitiveness of nations: why some countries prosper while others fall behind, *World Development*, 35 (10), 1595–1620.
- Ferrer Núñez J. and Kernohan D. (2006) Enlargement and industrial competitiveness: policy implications for new and old member states of the EU, CEPS Working Document 235, Brussels, Centre for European Policy Studies.
- Franzosi R. (1998) Narrative analysis – or why (and how) sociologists should be interested in narrative, *Annual Review of Sociology*, 24, 517–554.
- Franzosi R. (2004) Content analysis, in Hardy M. and Bryman A. (eds.) *Handbook of data analysis*, London, Sage.

- Garelli S. (2003) Competitiveness of nations: the fundamentals, in IMD (ed.) World competitiveness yearbook 2003, Lausanne, Institute for Management Development.
- Hall R.E. and Jones C.I. (1999) Why do some countries produce so much more output per worker than others?, *Quarterly Journal of Economics*, 114 (1), 83–116.
- Halpern L. and Wyplosz C. (2001) Economic transformation and real exchange rates in the 2000s: the Balassa–Samuelson connection, in UNECE (ed.) *Economic surveys of Europe*, Geneva, United Nations Economic Commission for Europe, Chapter 6.
- Hämäläinen T.J. (2003) National competitiveness and economic growth: the changing determinants of economic performance in the world economy, Cheltenham, Edward Elgar.
- Holman O. (1996) *Integrating Southern Europe: EC expansion and the transnationalization of Spain*, London, Routledge.
- Holman O. (2004) Integrating peripheral Europe: the different roads to 'security and stability' in Southern and Central Europe, *Journal of International Relations and Development*, 7 (2), 208–236.
- Honkapohja S. and Korhonen I. (2013) Restarting growth in Europe after the Great Recession: CEE versus other countries, in Nowotny E., Mooslechner P. and Ritzberger-Grünwald D. (eds.) *A new model for balanced growth and convergence: achieving economic sustainability in CESEE countries*, Cheltenham, Edward Elgar, 19-35.
- Høyland B., Moene K. and Willumsen F. (2009) *The tyranny of international index rankings*, Working Paper.
- Hunya G. (2000) *International competitiveness impacts of FDI in CEECs*, wiiw Research Report 268, Vienna, Vienna Institute for International Economic Studies.
- Krugman P. (1994) Competitiveness: a dangerous obsession, *Foreign Affairs*, 73 (2), 28–44.
- Lakoff G. (1973) Hedges: a study in meaning criteria and the logic of fuzzy concepts, *Journal of Philosophical Logic*, 2 (4), 458–508.
- Lall S. (2003) Foreign direct investment, technology development and competitiveness: issues and evidence, in Lall S. and Urata S. (eds.) *Competitiveness, FDI and technological activity in East Asia*, Cheltenham, Edward Elgar, 12-56.
- Lebrun I. and Pérez E. (2011) Real unit labor costs differentials in EMU: how big, how benign and how reversible?, *Economy and Markets*, 5 (4), Eurobank EFG.
- Lewis W.W. (2004) *The power of productivity: wealth, poverty, and the threat to global stability*, Chicago, University of Chicago Press.

- Majone G. (1997) From the positive to the regulatory state: causes and consequences in the mode of governance, *Journal of Public Policy*, 17 (2), 139–167.
- Mallariopoulos D. (2010) How much did competitiveness of the Greek economy decline since EMU entry?, *Economy and Markets*, 5 (4), Eurobank EFG.
- Nugent J.B. (2002) Trade liberalization: winners and losers, success and failures: implications for SMEs, *Forum Series on the Role of Institutions in Promoting Growth*, Washington, DC, USAID.
- Pierson P. (2003) Big, slow-moving, and... invisible, in Mahoney J. and Rueschemeyer D. (eds.) *Comparative historical analysis in the social sciences*, Cambridge, Cambridge University Press, 177–207.
- Pierson P. (2005) The study of policy development, *Journal of Policy History*, 17 (1), 34–51.
- Porter M.E. (1990) *The competitive advantage of nations*, London, Macmillan.
- Rosamond B. (2002) Imagining the European economy: 'competitiveness' and the social construction of 'Europe' as an economic space, *New Political Economy*, 7 (2), 157–177.
- Tyson L.D., Cohen S.S., Teece D. and Zysman J. (1984) *Competitiveness: the report of the President's Commission on Competitiveness*, Washington DC, Government Printing Office.
- Wyplosz C. (2013) Eurozone crisis: it's about demand, not competitiveness, Draft Working Paper January 2013, Geneva, Graduate Institute of International and Development Studies.  
[https://www.tcd.ie/Economics/assets/pdf/Not\\_competitiveness.pdf](https://www.tcd.ie/Economics/assets/pdf/Not_competitiveness.pdf)
- Yap J.T. (2004) A note on the competitiveness debate, PIDS Discussion Paper Series 2004-39, Makati City, Philippine Institute for Development Studies.

## **Annex**

### **Documents analysed**

#### EU level

AGS 2011	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. Annual Growth Survey: advancing the EU's comprehensive response to the crisis, Brussels, 12.1. 2010.
AGS 2012	Communication from the Commission Annual Growth Survey 2012, Brussels, 23. 11 2011.
AGS 2013	Communication from the Commission Annual Growth Survey 2013, Brussels, 28.11.2012.
EUROPE 2020	A strategy for smart, sustainable and inclusive growth. Communication from the Commission, COM(2010) 2020, Brussels, 3.3.2010.

#### National level

##### **Greece**

EC GRE 2008	Ministry of Economy and Finance (2008) National Reform Programme for Growth and Jobs 2008–2010, October 2008.
GRE EC 2010	EC Directorate-General for Economic and Financial Affairs (2010) The Economic Adjustment Programme for Greece, European Economy Occasional Papers No. 61.
GRE EC 2011	Hellenic Republic, Ministry of Finance (2011), National Reform Programme 2011–2014, April 2011.
GRE EC 2013a	Ministry of Finance, Greece (2013) Greek National Reforms Program April 2013
GRE EC 2013b	European Commission Directorate-General for Economic and Financial Affairs, The Second Economic Adjustment Programme for Greece, Second review – May 2013.
GRE IMF 2006	Greece: 2005 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice; and Statement by the Executive Director for Greece 2006 International Monetary Fund January 2006 IMF Country Report No. 06/4 Washington D.C.

- GRE IMF 2009 Greece: 2009 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Greece. International Monetary Fund, August 2009, IMF Country Report No. 09/244.
- GRE IMF 2013a Greece: First and Second Reviews under the Extended Arrangement under the Extended Fund Facility, Request for Waiver of Applicability, Modification of Performance Criteria, and Rephrasing of Access—Staff Report; Staff Supplement; Press. Release on the Executive Board Discussion; and Statement by the Executive Director for Greece. 2013 International Monetary Fund, January 2013, IMF Country Report No. 13/20.
- GRE IMF 2013b Statement by Thanos Catsambas, Alternate Executive Director for Greece, 9 January 2013, in GRE IMF 2013a.
- GRE OECD 2005 Koutsogeorgopoulou V. and Ziegelschmidt H. (2005) Raising Greece's Potential Output Growth, OECD Economics Department Working Papers, No. 452, OECD Publishing. <http://dx.doi.org/10.1787/017462764373>
- GRE OECD 2009 Koutsogeorgopoulou V. (2009) Raising Education Outcomes in Greece, OECD Economics Department Working Papers, No. 723, OECD Publishing. <http://dx.doi.org/10.1787/221221773888>
- GRE OECD 2010 Greece at a Glance: Policies for a Sustainable Recovery. OECD, 2010.

## **Hungary**

- HU EC 2008 Hungary National Action Programme for Growth and Employment – 2008–2010 Compiled for the European Union's Lisbon Strategy
- HU EC 2011 Government of the Republic of Hungary: National Reform Programme of Hungary based on the Széll Kálmán Plan, April 2011.
- HU EC 2012a National Reform Programme of Hungary 2012, April 2012.
- HU EC 2012b Council Recommendation on the National Reform Programme 2012 of Hungary and delivering a Council opinion on the Convergence Programme of Hungary, 2012-2015. Brussels, 6 July 2012.

- HU IMF 2008 IMF Country Report No. 08/361 Hungary: Request for Stand-By Arrangement—Staff Report; Staff Supplement; and Press Release on the Executive Board Discussion 2008 International Monetary Fund November 2008.
- HU IMF 2010 International Monetary Fund (2010) Hungary: Fifth Review Under the Stand-By Arrangement, IMF Country Report No. 10/80 March 2010.
- HU IMF 2013 Hungary: 2013 Article IV Consultation and Third Post Programme Monitoring Discussions—Staff Report; Informational Annex; Public Information Notice; and Statement by the Executive Director, IMF Country Report No. 13/85, International Monetary Fund March 2013.
- HU OECD 2007 Árpád Kovács (2007) Competitiveness and Modernisation of Public Finances: Selecting an Action Scenario in Hungary following EU Accession. OECD Journal on Budgeting, 6 (3), OECD.
- HU OECD 2010 Beynet P. and Kierzenkowski R. (2012) Ensuring Debt Sustainability Amid Strong Economic Uncertainty in Hungary, OECD Economics Department Working Papers, No. 958, OECD Publishing.  
<http://dx.doi.org/10.1787/5k98rws3vxp-en>
- HU OECD 2012 OECD Economic Surveys Hungary, Overview, March 2012.

### **Latvia**

- LV EC 2008 Report on Progress in Implementation of the National Lisbon Programme of Latvia, Riga, October 2008.
- LV EC 2011 National Reform Programme of Latvia for the Implementation of the Europe 2020. Strategy, Riga, April 2011.
- LV EC 2013a Progress Report on the Implementation of the National Reform Programme of Latvia within the Europe 2020 Strategy, Riga, April 2013.
- LV EC 2013b EU BOP Assistance to Latvia – Second Review under Post-Programme Surveillance, European Commission Directorate General, Economic and Financial Affairs. Brussels, 15 January 2013.



- LV IMF 2009 International Monetary Fund (2009) Republic of Latvia: First Review and Financing Assurances Review Under the Stand-By Arrangement, Requests for Waivers of Nonobservance of Performance Criteria, and Rephasing of Purchases Under the Arrangement IMF Country Report No. 09/297, 28 January 2009.
- LV IMF 2010 International Monetary Fund (2010) Republic of Latvia 2010 Article IV Consultation, IMF Country Report No. 10/356, December 2010.
- LV IMF 2013 IMF (2013) Republic of Latvia 2012 Article IV Consultation and Second Post-Programme Monitoring Discussions. IMF Country Report No. 13/28 January 2013.

### **Portugal**

- POR EC 2008 Cabinet of the National Coordinator of the Lisbon Strategy and the Technological Plan (2008) Lisbon Strategy National Plan of Reforms (PNR) – Portugal. Report on the implementation of the PNACE 2005–2008 PNR – New Cycle: 2008–2010, October 2008.
- POR EC 2011 Portugal 2020, National Reform Programme, Approved by the Council of Ministers, March 2011.
- POR EC (2012) European Commission, Directorate-General for Economic and Financial Affairs (2012) The Economic Adjustment Programme for Portugal Sixth Review – Autumn 2012 European Economy, Occasional Papers 124.
- POR IMF (2008) Portugal: 2008 Article IV Consultation—Staff Report; Staff Statement, Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Portugal, IMF Country Report No. 08/323, October 2008.
- POR IMF (2013) Portugal: Sixth Review Under the Extended Arrangement and Request for Waivers of Applicability of Performance Criteria, 26 December 2012.
- POR OECD (2008) OECD (2008) OECD Economic Surveys: Portugal Volume 2008/9, June 2008.
- POR OECD (2012) OECD (2012) OECD Economic Surveys: Portugal, Overview Volume 2008/9, July 2012.

## **Spain**

- ESP EC 2008 Spain – National Reform Programme: 2008 Progress Report, Madrid, October 2008.
- ESP EC 2011 National Reform Programme, Spain, 2011.
- ESP EC 2012 European Commission, Directorate-General for Economic and Financial Affairs (2012) The Financial Sector Adjustment Programme for Spain EUROPEAN ECONOMY Occasional Papers 118, October 2012.
- ESP EC 2013 National Reform Programme, Kingdom of Spain. (Provisional translation)
- ESP IMF 2008 IMF (2008) Spain: 2008 Article IV Consultation - Concluding Statement of the Mission, Madrid, 9 December 2008.  
<http://www.imf.org/external/np/ms/2008/120908.htm>
- ESP IMF 2012 IMF (2012) Spain: 2012 Article IV Consultation, Madrid, IMF Country Report No. 12/202 July 2012.
- ESP OECD 2008 OECD (2008) OECD Economic Surveys: Spain, Policy Brief, November 2008.
- ESP OECD 2012 OECD (2012) OECD Economic Surveys: Spain, Overview, November 2012.



# FDI in the automotive plants in Spain during the Great Recession

Ricardo Aláez-Aller, Carlos Gil-Canaleta, Miren Ullibarri-Arce

## 1. Introduction

These are heady times for output in Spain's automotive industry. With official figures still pending, the national organisation of vehicle makers ANFAC (Spanish Association of Automobile and Truck Manufacturers) estimates that 2.4 million vehicles were assembled in Spanish plants in 2014. This is more than 10% up on the figure for 2013, and 20% up on 2012.

In 2011 a total of 34 different vehicle models were assembled at Spanish plants. In 2013 the figure rose to 39, and is expected to reach 45 by 2016. Almost all Spanish assembly plants have been awarded new models in the past two years, and none seems currently to be under any short- or medium-term threat of closure or drastic cutbacks in production. Indeed, the two US-based assemblers with plants in Spain (Ford & GM), under pressure after incurring substantial losses on their operations in Europe, have begun restructuring their European value chains, and they are now placing much more emphasis on their Spanish plants. Ford Valencia has been selected as the assembly plant for the company's high-end models in Europe.

At the same time SERNAUTO (Spanish Association of Equipment & Component Manufacturers), which represents 1000 automotive industry suppliers, expects sales in the Spanish components & assemblies sector to increase by 24% over the next 6 years. SERNAUTO member companies provided an estimated 309,000 jobs in 2013, and the prospects for growth suggest that a further 30,000 direct jobs could be created by 2020.

The Spanish automotive industry forms part of a Europe-wide value chain (Domanski and Lung 2009; Lampón et al. 2014). As such it has been hit hard by the slump in vehicle sales in Europe during the Great Recession. According to OICA data, 18.8 million new vehicles were registered in Europe in 2007, while in 2010 the figure was 15.6 million and in 2013 it

fell to a historical low of 14.1 million. However, aside from the quantitative effects of this short-term reduction (or is it also structural?) in EU vehicle sales on vehicle assembly operations, the question arises of what changes the Great Recession may have caused in the organisation of the value chain in the European automotive industry. The need to cut back production capacity and reorganise the sector could affect the geographical distribution of the value chain, and may therefore also be affecting more qualitative aspects of the place occupied by Spanish assembly plants in the European automotive production system. Against this background, this paper seeks to analyse the investment decisions of automotive groups with plants in Spain during the years of the Great Recession, focussing on FDI (foreign direct investment) inflows to vehicle assemblers in Spain. The analysis seeks to provide a description of the trends affecting the position occupied by Spanish vehicle assembly plants in Europe and, at the same time, to enable hypotheses to be drawn concerning potential trends in the organisation of production within Europe.

This study covers solely assemblers with plants in Spain. Specifically, it analyses the country's 13 biggest vehicle assembly plants in terms of production volumes. FDI statistics provided by international organisations and national statistics offices (UNCTAD, OECD, EUROSTAT and, in the case of Spain, the Ministry of the Economy and Competitiveness) are useful for reporting flows between countries, but are not meaningful in reporting events between medium-sized and small countries and highly specific production sectors. Moreover, such data provide very little information on the qualitative implications of FDI flows, because all that they do is to measure them quantitatively. Accordingly, the analysis presented here begins by offering generic data on FDI during the Great Recession in the EU, obtained from the OECD & covering NACE codes 34 and 35.

However, the most valuable information in both quantitative and qualitative terms concerning FDI in the Spanish automotive assembly industry is drawn from a wide range of other sources: annual reports published by transnational companies, company press releases, information published in the specialist and general media and a survey completed by shop stewards in the largest trade union at 12 of the 13 assembly plants examined. These unusual sources are used because the study looks at corporate decisions made especially from 2012-2013 onwards, which means that little supporting material on them can be found in scientific journals.

The conclusions of the study describe, albeit cautiously, a scenario in which changes that can be seen as structural are taking place. The Great Recession has substantially altered the context of the automotive sector in Europe. Indeed, the sector has shifted from opening plants in a context where the basic issue was how and where to extend the automotive value chain to a completely different approach in which the goal is now to cut back on production capacity, i.e. to decide which plants must be closed down and how production can be made more flexible to adapt to the prevailing uncertainty as to how the market will perform. In this new scenario, cost control is essential to staying in business (Amighini and Gorgoni 2014). The speed at which decisions are made differs substantially from one assembler to another, so recognising which actors are at the cutting edge of restructuring may enable us to draw conclusions concerning the future of production in various European countries, including Spain, in the value chain of the automotive industry.

## **2. Operations at assembly plants during the Great Recession**

Any presentation of vehicle assembly operations in Spain must start by describing the Spanish plants assembling vehicles during the period covered by the analysis, i.e. 2007-2014. Table 1 lists the 13 Spanish assembly plants considered. Their main characteristics can be summed up as follows:

- They are all owned by transnational firms with foreign capital. Specifically, 2 German-based transnationals (VW Group & Daimler), 2 French-based transnationals (Renault & PSA), 2 US-based transnationals (Ford & GM), 1 Italian-based transnational (IVECO) and 1 Japanese-based transnational (Nissan) have assembly plants in Spain.
- There have been no greenfield investments in assembly plants in Spain for the past 30 years (the opening of SEAT's Martorell plant in 1993 can be seen as the transfer of the old SEAT plant in Barcelona's *Zona Franca*). This means that all investment in the sector during the Great Recession went into existing plants.
- Truck & commercial vehicle assembly accounts for a significant proportion of operations at Spanish plants. In fact there are 3 plants

specialising in commercial vehicles and trucks and 4 more where light commercial vehicles (LCVs) form part of the range of vehicles assembled.

- The total number of direct jobs at assembly plants was estimated at 58,602 in 2013 (this figure was obtained from ANFAC based on data from the Spanish National Office of Statistics (INE)), averaging out to around 4,500 per plant.

Table 1 **Automotive assembly plants in Spain**

Company	Plant location	Production (in thousands)		%Δ 2007-2013	Employment (number of workers)	
		2007	2013		2007	2013
	Spain	2,795.36	2,139.65	-23.46	-	-
VW-Group	Barcelona	398.69	390.04	-2.17	11,050	11,458
	Pamplona	228.42	289.58	26.78	3,926	4,491
PSA	Vigo	547.2	406.5	-25.71	9,700	6,900
	Madrid	136.5	54.8	-59.85	2,900	2,041
Renault	Valladolid	102.10	124.94	22.37	-	2,460
	Palencia	176.69	142.74	-19.21	-	-
GM	Zaragoza	489.80	281.17	-42.59	7,662	5,700
Ford	Valencia	404.74	226.72	-43.98	-	8,000 (2015)
Nissan	Barcelona/Avila	222.91	140.0	-37.19	6,033	4,850
Daimler	Vitoria	97.10	73.25	-24.56	3,075	3,500
Iveco (LCV)	Valladolid	40.32	19.16	-52.48	-	1,047
Iveco (T&B)	Madrid	25.58	28.44	11.18	2,904	3,000

Source: Company Annual Reports, OICA and information published in the specialist and general media

Over the two decades preceding the Great Recession the location of operations in the automotive value chain in Europe was characterised by two hierarchical structures: one for assembly and the other based on functions (Lung 2007; Pavlínek 2015).

The assembly-based hierarchy resulted in geographical distinctions according to technology levels and prices, with high-end models being assembled mainly in core countries – France and Germany – while the peripheral states of Europe were specialised in the assembly of smaller vehicles (as in the case of Spain).

The function-based hierarchy is similar to that found in most sectors, with the exception of operations that require products to be localised for each domestic market. In the automotive industry, R&D was concentrated in the core regions of the EU (mainly in each company's country of origin), home to development centres for assemblers, suppliers and engineering firms, while actual assembly work was more widely scattered (in line with the hierarchy of locations mentioned above).

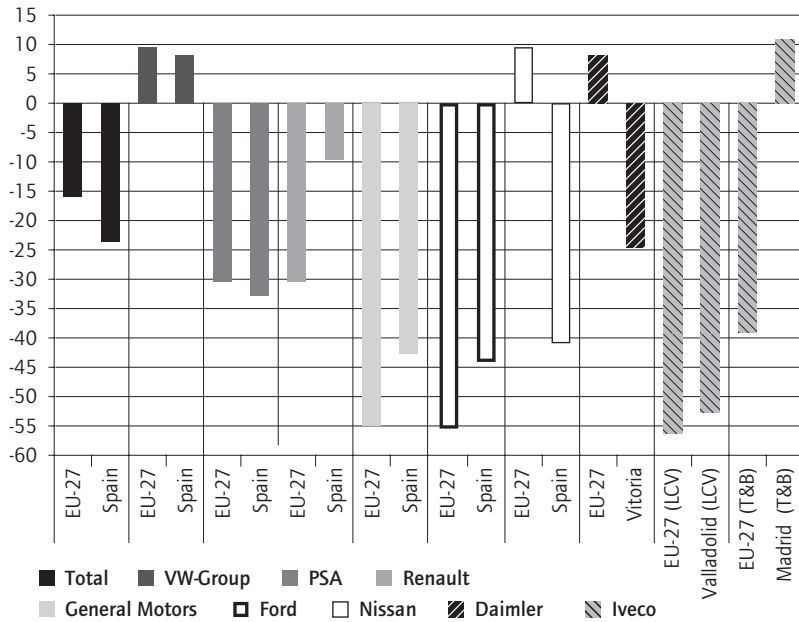
An examination of the data on vehicle production and exports from Spanish plants during the Great Recession (2007-2014) corroborates that the features considered by previous publications (Aláez-Aller et al. 2009) as characteristic of the vehicle assembly business in Spain are as follows:

- The output of Spanish plants is destined mainly for export: in 2013 exports accounted for around 87% of the total (ANFAC 2013), which is about the same level maintained since 2008. The equivalent figure for 2004-2007 was 82.1%. A geographical breakdown of trade flows clearly shows the place occupied by Spain within the European automotive industry, i.e. that of a country focused on the assembly of smaller vehicles (Lung 2003, 2007; Jürgens and Krzywdzinski 2009). The situation did not change during the period under investigation, and the main destinations of exports in 2013 (according to ANFAC, 2013) were France (27.5%), Germany (15.0%), the UK (13.0%) and Italy (7.9%). Altogether the EU-27 accounted for 78.3% of vehicle exports from Spanish plants. If the rest of Europe is added (mainly Turkey, Switzerland and Russia), the figure rises to 88.4%.
- The place occupied by Spanish automotive producers in the EU value chain has been limited to the assembly of vehicles with medium/low added value. A breakdown by segment of the data for passenger car assembly in Spanish plants (ANFAC 2013) reveals that this fact remained true in 2013, when 777,991 small vehicles, 371,241 medium-sized vehicles, 227,975 small people-carriers, 18,700 large people-carriers and 323,793 SUVs were assembled. However this situation seems to be changing, judging from the new models allocated to Spanish plants for which assembly is to begin in 2015. As indicated below, this could mark the beginning of a change in the production specialisation of Spanish plants within the European automotive value chain.



The trend in Spanish automotive production, measured in terms of the number of vehicles assembled per plant per annum, can be seen in Figure 1 (see Annex 1) and Table 2. From 2007 to 2013 the total number of units assembled fell by more than 23%, compared to a fall of just under 16% in the EU-27 as a whole. This relatively poor performance by Spanish plants can be attributed to a) the fact that the assemblers who performed worst in the EU-27 (Ford & GM: see Figure 2) have a relatively stronger presence in Spain, and b) to the high proportion of output accounted for by industrial vehicles and LCVs, the types of product hardest hit by the cutback in demand in the EU-27 during the Great Recession. Of the 8 transnational assemblers with plants in Spain, 2 performed substantially worse here than they did over the whole of the EU-27 (Nissan & Daimler, explained in both cases by the type of product assembled in Spain), 2 slightly worse (VW Group & PSA) and the other 4 significantly better (Renault, GM, Ford & IVECO).

Figure 2 Automotive Assemblers with plants in Spain: EU-27 and Spanish plants production, percentage change 2007-2013



Source: Company Annual Reports and OICA

Table 2 Vehicle production in the Spanish assembly plants (in thousands)

		2007	2008	2009	2010	2011	2012	2013
<b>Total</b>	<b>EU-27</b>	19,018.15	17,710.13	14,963.66	16,494.99	17,302.22	16,047.27	16,045.95
	<b>Spain</b>	2,795.36	2,466.37	2,143.81	2,350.75	2,299.76	1,932.30	2,139.65
<b>VW-Group</b>	<b>EU-27</b>	4,100.01	4,124.82	3,612.38	4,109.50	4,617.51	4,680.05	4,499.61
	<b>Spain</b>	627.12	629.38	544.78	671.39	706.77	664.6	679.63
	<b>Barcelona</b>	398.69	370.29	301.28	335.05	353.42	377.34	390.04
	<b>Pamplona</b>	228.42	259.09	243.49	336.33	353.35	287.28	289.58
<b>PSA</b>	<b>EU-27</b>	2,742.91	2,477.81	2,146.33	2,343.55	2,302.16	1,988.92	1,918.71
	<b>Spain</b>	683.7	554.3	512.7	524.6	451.6	374.7	461.3
	<b>Vigo</b>	547.2	439.6	384.9	399.3	355.8	298.3	406.5
	<b>Madrid</b>	136.5	114.7	127.8	125.3	95.8	76.4	54.8
<b>Renault</b>	<b>EU-27</b>	1,828.05	1,510.97	1,457.72	1,622.20	1,569.65	1,331.33	1,275.52
	<b>Spain</b>	367.62	327.32	374.63	398.52	406.87	343.49	332.93
	<b>Valladolid</b>	102.10	93.15	94.80	95.10	97.79	83.74	124.94
	<b>Palencia</b>	176.69	164.79	255.28	262.07	239.75	202.39	142.74
<b>General Motors</b>	<b>EU-27</b>	1,928.32	1,643.31	1,137.85	1,246.53	1,198.14	927.51	867.27
	<b>Spain</b>	489.80	427.05	340.67	380.87	365.41	264.85	281.17
<b>Ford</b>	<b>EU-27</b>	2,303.94	2,142.49	1,660.01	1,304.29	1,173.96	1,029.16	1,031.20
	<b>Spain</b>	404.74	357.64	300.34	256.65	229.91	149.74	226.72
<b>Nissan</b>	<b>EU-27</b>	576.63	543.79	390.72	528.12	635.26	653.73	633.60
	<b>Spain</b>	222.91	157.23	52.57	104.86	154.75	143.16	140.0
<b>Daimler</b>	<b>EU-27</b>	1,309.23	1,372.90	1,024.57	128.00	1,355.64	1,713.14	1,421.78
	<b>Vitoria</b>	97.10	102.39	54.60	70.30	90.22	76.15	73.25
<b>Iveco (LCV)</b>	<b>EU-27</b>	91.38	73.77	35.78	47.99	—	42.04	39.90
	<b>Valladolid</b>	40.32	30.78	12.33	15.07	—	18.18	19.16
<b>Iveco (T&amp;B)</b>	<b>EU-27</b>	101.46	99.28	39.88	48.41	34.02	53.08	62.03
	<b>Madrid</b>	25.58	24.30	7.38	9.85	—	19.35	28.44

Source: Company Annual Reports, OICA and information published in the specialist and general media

As can be seen in Figure 1 (Annex 1), output at Spanish plants continued to follow a similar trend to that at assemblers across the EU-27 as a whole in the Great Recession. Specifically:

- The performance across Europe of the German-based assemblers with plants in Spain (VW Group & Daimler) is better than the general average trend for the EU-27. Similarly, the Spanish VW plants have performed at levels very similar to those of the EU-27 as a whole, and the Daimler plants only slightly lower (as mentioned above, the relatively poor performance in general of the

LCV market during the Great Recession may have been influential here, as this type of vehicle accounts for a relatively large proportion of the total output of the Daimler plant in Vitoria). The trend over time for German-based assemblers is linked to the relatively good performance of vehicle sales on the German market during the Great Recession.

- The performance across Europe of the French-based assemblers with plants in Spain (PSA & Renault) is worse in terms of output than the general average for vehicle production in the EU-27. PSA's plants in Spain have performed very similarly to those of the group in the EU-27 as a whole. In the case of Renault, the Spanish plants have performed better than the average for the EU-27 as a whole. Here also it must be mentioned that the output of French-based assemblers has been largely influenced by vehicle sales in France during the Great Recession.
- The worst performance across the EU-27 during the Great Recession is that of the US-based assemblers, with the number of vehicles assembled dropping by more than half from 2007 to 2013. For both Ford and GM the falls in output at their Spanish plants were somewhat lower than for the EU-27 as a whole, but even so production at their Spanish plants is down by more than 40% on their 2007 figures in terms of the number of vehicles assembled. It is precisely these assemblers that have reacted most strongly, cutting back their production capacity in Europe with a view to becoming profitable again as quickly as possible.

### **3. Quantitative analysis of FDI during the Great Recession**

Investment activity by transnational corporations is usually measured via information on foreign direct investment. FDI flows usually include three main components: holdings in capital stock (purchases of shares in foreign companies), reinvestment of profits (including that part of corporate profits not distributed as dividends or received by foreign owners of companies) and intra-company loans (granted by parent companies to subsidiaries). FDI *stock* refers to the value of the holdings of parent companies in their subsidiaries plus the net debt owed by the subsidiaries to their parent companies.

When general figures on FDI are presented, a distinction is usually drawn between stock and flow variables, and inflow and outflow data are given for each category. Inflows of FDI to a specific country refer to the variation over the period considered (normally one year) in the value of the assets which (depending on the definition of FDI) are controlled by foreign firms in that country. The stock variable deals with the value of all the FDI by foreign firms into a country at a specific time (the inward stock of that country).

The data on FDI flows available from official statistics do not usually offer detailed breakdowns by areas of activity. In the case of the automotive industry, Figure 3 and Figure 4 are based on statistics provided by the OECD on FDI in the field of 'Motor and Other Transport Equipment' (NACE 3400 and 3500).

Figures 3 and 4 are drawn up on the basis of the inward stock of FDI for 2005, which is allocated a value of 100 as the base year. The data for the subsequent years up to 2012 are calculated by adding the inflows of FDI from the ongoing year to the position calculated for the previous year. The graphs are drawn up in this way for two main reasons:

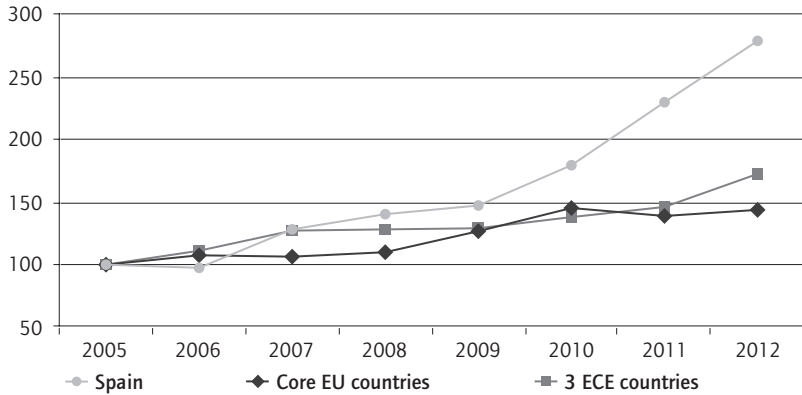
- Not all the stock data are considered, because they are valued at the market prices of each year, so positions can change substantially even if there is no new investment.
- Inflows are not considered because they do not measure how significant the entry of new investments is in proportion to the stock of FDI (e.g. a country with FDI close to 0 in the base year could show extraordinary growth in percentage terms even though that growth is not truly meaningful for its FDI stock).

The data are grouped by country in an attempt to draw conclusions concerning the effects of the Great Recession on changes over time in the FDI stock of the automotive industry in different EU Member States. The countries for which data are available are thus grouped into three categories: core EU countries (the sum of Germany, France, Italy and the UK), three countries of central-eastern Europe (CEE – the sum of the data for Poland, Czechia and Slovakia) and Spain.

Figures 3 and 4 should be interpreted solely in terms of trends. They show clearly that FDI behaved consistently across the countries of the EU during the early stages of the Great Recession, i.e. up to 2009. However,

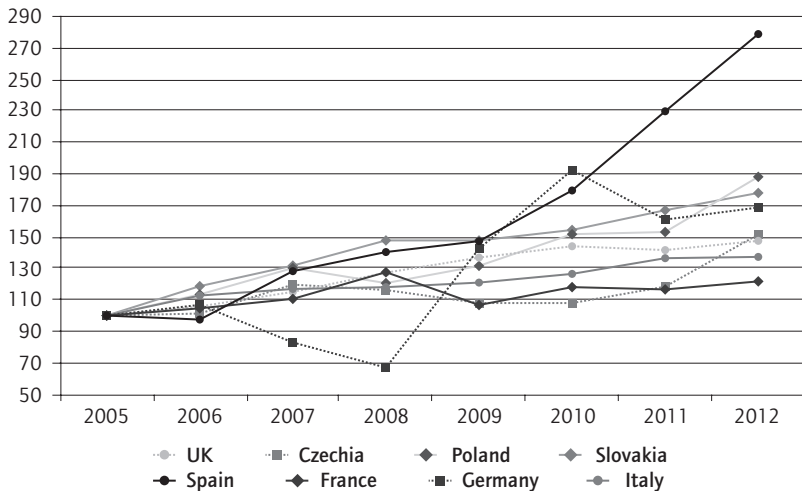
from 2011/2012 onwards FDI in this sector behaved more dynamically in Spain than in the other countries considered (although the behaviour of FDI in Poland in 2012 is similar to that in Spain).

**Figure 3 FDI in Motor and Other Transport Equipment**



Note: Inward stock of FDI for 2005=100. Data for the subsequent years are calculated by adding the inflows of FDI from the ongoing year to the position calculated for the previous year. Core EU countries (Germany, France, Italy and the UK). Three East-central Europe countries (Poland, the Czechia and Slovakia). Source: OECD

**Figure 4 FDI in Motor and Other Transport Equipment by country**



Note: Inward stock of FDI for 2005=100. Data for the subsequent years are calculated by adding the inflows of FDI from the ongoing year to the position calculated for the previous year. Source: OECD

In any event, this compilation of general figures on the dynamics of FDI does not provide sufficiently detailed information on the qualitative aspects needing to be examined to tell whether the FDI inflow process may be reflecting a change in the location of activities in the value chain of the automobile industry in the EU, and specifically whether there is any significant variation in the position of the operations located in Spain. To that end, the following sections present an individualised analysis of investments in the 13 vehicle assembly plants located in Spain.

#### **4. Investments in Spanish assembly plants during the Great Recession**

Investment in automotive assembly plants tends to be associated with the awarding of new models: when a plant is awarded such, this usually entails an assurance that it will remain operational at least for the lifetime of that model (6-9 years). Once the decision is made it can therefore be considered that the transnational corporation in question intends to keep that plant open.

The analysis of investment in Spanish automotive plants can therefore be seen as equivalent to a study of awards for the assembly of new models during the period under analysis (2008-2014). Awards of new models can be grouped under two headings, with clearly different implications. The first case is that of a model which is a new version of one already assembled at that plant, while the second is that of a new model which is significantly different from the type of vehicle assembled there to date. This categorisation system is used below to characterise the awarding of models to Spanish plants during the period under analysis (Table 3).

We look first at the awarding of new generations of models already assembled at plants. Such decisions should be seen as merely maintaining the status quo by renewing models as necessary. The trend in output of each plant as from the time of the award depends on the life cycle of the model and, evidently, on how successful it is in terms of sales. The following plants can be included under this heading:

- **VW in Pamplona** (assembly of the VW Polo A05 began in 2009, and that of its upgrade – the Polo A05GP- in February 2014).

- **Seat in Barcelona** (assembly of the replacement for the Seat León began in 2014, and that of the replacement for the Seat Ibiza is due to begin in 2016).
- **Renault Palencia** (this plant has been awarded the fourth-generation Mégane, assembly of which is due to start in 2016).
- **Mercedes Vitoria** (this plant was awarded the assembly of the Class V people carrier and the third generation of the Vito Mercedes, assembly of which began in 2014).
- **Opel Zaragoza** (this plant has been awarded the new version of the Corsa, production-run assembly of which will begin in 2015, replacing the model which began to be assembled there in 2007; and the fifth generation Corsa, assembly of which will begin in 2017. It was also awarded the second-generation Meriva in 2010 and its update in January 2014, and is to make the new Meriva, assembly of which is expected to commence in 2016).
- **PSA Vigo** (the new generation of the C4 Picasso and the Grand C4 Picasso began to be assembled at this plant in 2013. It has recently been awarded the K9, production-run assembly of which is expected to begin in 2018, assuring the continuation of production of LCVs, which began in 2007).
- **IVECO** (the company's Valladolid plant is to make the third generation Iveco Daily Van as from 2015).
- **IVECO** (the Madrid plant began to assemble Stralis and Trakker trucks in 2013).
- **Nissan Ávila** (this plant began assembling the NT500 truck, the replacement of the Atleon, in 2014).
- **Nissan Barcelona** (this plant has been awarded the new pick-up model replacing the current Nissan Navara. It was also awarded the Pulsar, which it began assembling in 2014, and the NV200, which it began assembling in 2009).
- The awards of new electric-drive versions of those models which were being assembled at PSA Vigo, Nissan Barcelona and

Mercedes Vitoria should also perhaps be included under this heading. This is the pattern followed by most assemblers which have decided to launch electric versions of existing models. In any event, such awards are essentially symbolic as the low sales of these plug-in electric versions mean that they have very little weight in the total output of the plants.

The second heading covers the awarding of completely new models to Spanish plants. Such decisions can be interpreted as more significant evidence of change in terms of the position occupied by Spanish plants in the automotive value chain in the EU. The changes involved may be quantitative (affecting the volume and value of the output awarded) and qualitative (affecting the type of product assembled, i.e. the market segment into which the vehicles awarded fit in comparison with those previously assembled at the plant). The following decisions can be placed under this heading:

- Assembly of the Audi Q3 at the **Seat Barcelona** plant as from 2011 (this plant has also been awarded the replacement of the Q3, assembly of which is expected to commence in 2017). This decision entails not just a greater volume of work but also the awarding of a model which is qualitatively superior to those previously assembled in Barcelona.
- The award of the assembly of the Cactus model to the **PSA plant in Madrid**, which entails a considerable change in the activities of a plant whose future was in doubt. In commercial terms the model awarded can be seen as a bold strategy by PSA: models with uncertain futures in terms of sales have tended to be awarded to highly flexible plants with low adjustment costs which are capable of dealing with broad fluctuations in demand.
- The awarding of the Opel Mokka, assembly of which began at the **Opel Zaragoza** plant in 2014, can also be considered as a new model, as it is a vehicle whose characteristics are unlike those of any previously assembled at the plant.
- A special mention must also be given to Ford's reorganisation of production in Europe, which has resulted in the shutdown of three plants (Dagenham and Southampton in the UK and Genk in Belgium). This reorganisation has entailed radical changes for the



Ford Valencia plant, which has been awarded Ford's top-of-the-range models for assembly in Europe: the new Mondeo (assembly of which began in late 2014, with the plant also due to assemble the hybrid HEV version and a deluxe version known as the Mondeo Vignale), the S-Max (summer 2015) and the Galaxy (summer 2015). The plant has also held on to the assembly of the Ford Kuga (which began in 2012) and the Transit Connect (which began in 2013).

- The Renault Valladolid plant can also be placed under this heading thanks to the awarding of the Captur (Renault's first small crossover vehicle, assembly of which began in April 2013) and the Renault Twizy (a genuine plug-in electric vehicle, production of which began in 2012, albeit with low sales - 9020 vehicles in 2012 and 3025 in 2013). This plant also assembles engines for the group, and was awarded the assembly of two new engine models in 2011. It also assembled the Modus from 2005 to 2012/2013.
- The Renault Palencia plant was awarded a new medium-sized crossover vehicle (which will probably be sold under the name Renault Kadjar), assembly of which is expected to begin in 2015.
- The commencement of production-run assembly of the Citroën C-Élysée and the Peugeot 301 at the PSA Vigo plant in 2012 also resulted in an increase in the range of products assembled at that plant.

Decisions on awarding new models are being made more and more directly in the form of auctions between the plants belonging to a company. Assemblers are using their options for awards as a bargaining chip for obtaining cuts in labour costs and increased work flexibility at their various plants. This form of bargaining is much more effective in a context of production cutbacks such as that brought on by the Great Recession. The information available concerning awards refers directly to the plants bidding to obtain each model, and corporate executives have even stated in public the reasons why their companies have opted for particular plants rather than competing ones. In the case of Spanish plants the information published in the press mentioned the following competition processes involving specific plants:

- Seat Barcelona competed with the VW Group plant in Brussels for the award of the assembly of the Audi Q3. It also competed, this

Table 3 Awards of new models to the Spanish plants\*.  
Investment associated with the award of new models

		2007-09	2010-12	2013-15	2016→	Investment (million €)
VW-Group	Barcelona		Audi Q3 (2011)	Seat Leon (2014)	Seat Ibiza (2016) Audi Q3 (2017)	830
	Pamplona	Polo A05 (2009)		Polo A05 GP (2014)		
PSA	Vigo	C4 Picasso (1)	C-Élysée (2012) Peugeot 301 (2012)		K9 (2018)	1162
	Madrid			Cactus (2014)		30
Renault	Palencia	Mégane (2008)			Mégane (2016) Kadjar (2015)	190
	Valladolid		Twizy (2012)	Captur (2013) New engines (2013)		170
General Motors	Zaragoza	Corsa (2007)	Meriva (2010)	Meriva (2014) Corsa (2015) Mokka (2014)	C3 Picasso (2016) Meriva (2016)	775
Ford	Valencia	Focus (2007)	Kuga (2012) Transit Connect (2013) C-Max(3) (2010)	Mondeo(2) (2014) S-Max (2015) Galaxy (2015)		1100 (2009/12) 1200 (2012/14)
Nissan	Barcelona	NV200 (2009)		Pulsar (2014)	Pick-up (Navarra)	305
	Ávila			NT500 (2014)		120
Daimler	Vitoria			Clase V (2014) Vito (2014)		190
Iveco (LCV)	Valladolid			Van Iveco Daily (2015)		15
Iveco (T&B)	Madrid			Stralis&Trakker (2013)		500

\*New version of a model already assembled at that plant figure in italic. Completely new models figure in bold. (1) Grand C4 Picasso is also included. (2) The HEV hybrid car and Mondeo Vignale are included. (3) From 2013 on it will be also a PHEV version.

Source: author's own elaboration

time unsuccessfully, with the Kvasiny plant in Czechia for the award of the new SEAT brand SUV. According to an interview given by SEAT Chairman J. Stackmann to Bloomberg in June 2014, when this decision was made public, the reasons why the award went to the Kvasiny plant were its lower labour costs and the fact that there was more space for production at the Czech plant. It might be thought that in these processes the decision is already made in advance, based on a number of factors other than the comparative labour costs of the plants. However, assemblers always have an incentive to use labour costs as an argument because this strengthens their bargaining position in drawing up future agreements with workers.

- The process of inter-plant competition was also mentioned specifically in the awarding of the K9 commercial vehicle to the PSA plant in Vigo. In this case the Spanish plant is thought to have been bidding against the plant in Trnava, in Slovakia. PSA Vigo also competed (unsuccessfully) in 2012 with the French SevelNord plant for the updated versions of the Jumpy and Expert commercial vehicles. The fact that SevelNord was already assembling the previous models did not prevent PSA from reaching an agreement with the workers there that entailed a two-year wage freeze and measures to increase work flexibility.

In an effort to find out how the workers themselves view this inter-plant competition for the awarding of new models, shop stewards from the UGT trade union at Spanish assembly plants were asked to complete a brief survey on the matter (Annex 2).

Replies were received from 11 of the 13 plants. An examination reveals that nine out of the 11 plants were aware of having bid against other plants belonging to the group for the awarding of models. Moreover, in the opinion of the workers themselves, the main advantages of their plants for the awarding of models lay in establishing agreements to foster flexibility (in functions, timetables and production schedules), the acceptance of wage freezes in all cases and the elimination of certain special conditions enjoyed by workers. All the replies obtained stressed the importance of greater work flexibility for the awarding of new models to their plants; indeed this was the top-rated factor in 7 cases. The setting up of a two-tier wage scale enabling companies to pay less to newly recruited workers at plants was also rated as a significant factor in 7 of

the replies obtained, and as the most significant factor (over and above increased flexibility) in 4 of the 10 surveys in which this question was answered.

## **5. Have there been changes in the location of the value chain in the EU?**

On the basis of the decisions concerning the awarding of models presented above, the question that must now be asked is whether the Great Recession has brought changes other than adjustments in production capacity that can be considered as structural changes in the location of the automotive value chain in the EU, and how exactly the plants in Spain fit into the new scenario.

The most striking thing about the geography of the automotive value chain in the EU is how the core regions have managed to avoid losing their relative importance in the location of assembly operations (Lung 2003, 2007). In this context, Spain's main competitors for small vehicle assembly operations have tended to be CEE countries. As a result, automotive plants in Spain might be expected to be among those hardest hit by the opening of new plants in CEE countries.

In the years leading up to the Great Recession the key issue for the future of production at Spanish plants was whether they would be able to maintain existing operations and prevent their relocation. The likelihood of relocation was linked to the vulnerability of these plants which, according to the relevant literature, depended on factors such as sunk costs, operating costs and territorial anchoring factors (Alález-Aller and Barneto-Carmona 2008). This analysis concluded in general and for the case of Spain in particular with a prediction that assemblers were unlikely to shut down plants in Spain and transfer production to greenfield plants in east-central Europe. However, it still made sense to open new plants in CEE countries in terms of increasing total assembling capacity and starting up operations in Europe for assemblers who were not already making vehicles in the EU.

This scenario of increasing output changed radically with the onset of the Great Recession, when the key issue became how to cut back production capacity, which meant deciding which plants to keep operational and which ones to close down. Vehicle assembly in the EU was characterised

by an overcapacity that was detrimental to assemblers' profitability, leading them to consider how this problem could be corrected. In that context there were three types of production environment in the EU, each with its pros and cons as regards maintaining vehicle assembly operations: the core countries, the CEE countries and, basically, Spain.

As expected, restructuring has affected some assemblers more than others, with those who were under most pressure from the drop in profitability induced by the Great Recession being affected most. Distinctions must be drawn between the following reactions on the part of assemblers with plants in Spain:

- The German assemblers (VW Group & Daimler) seem to have felt the least pressure to adjust their production capacity and restructure their business. This is consistent with the relatively good performance of the German market, which is the main market for sales in the EU for both corporations. There have been no major changes in the status quo at the Spanish plants operated by these assemblers, and they have been awarded new models to replace the ones they were already assembling. The Barcelona plant owned by SEAT, the brand hit hardest by the Great Recession, was awarded a new model (Audi Q3), offsetting the decrease in the plant's capacity utilisation.
- It is the American assemblers (Ford & GM) which have undertaken the most far-reaching restructuring of their assembly operations in the EU. At the end of 2012, Ford announced the closure of three plants in Europe (Genk in Belgium, and Southampton and Dagenham in the UK), forcing the company to reorganise its production in Europe with a view to bringing its European operations back into profit by 2015/2016. This restructuring has resulted in the Spanish plants in Valencia taking over the assembly of the models previously made in Genk. In short, the Spanish plant has improved its position both quantitatively and qualitatively (it is now to assemble vehicles with more added value). The small vehicle assembly operations previously handled by Ford in Valencia have been transferred to the Saarlouis plant in Germany. For its part, GM has also restructured its operations in Europe, seeking to bring them back into profit in the same timeframe as Ford. GM has shut down 2 plants in the EU (Bochum in Germany in 2014 – making this the first automotive plant to shut down in

that country since World War II – and Antwerp in Belgium in 2010). The Opel plant in Spain seems to have come out of the process stronger thanks to the awarding of three models (one update and two new models).

- In an intermediate position, French assemblers have also found it necessary to cut back their production capacity in Europe, though the extent of that need depends on the operating results of each firm and the proportion of their production capacity in use. PSA has the worse figures, and has closed down a plant in France (Aulnay near Paris, where the last vehicle rolled off the assembly line at the end of 2013). Renault has not had to resort to traumatic plant closures but has reached agreements with its workforce to cut back their numbers and freeze wages. Both companies have awarded new models to their Spanish plants, which in some cases have resulted in improvements in their positions in the European value chain.
- The need to cut back and rationalise the use of production capacity has provided a stimulus for further agreements between assemblers regarding the sharing of plant capacity (e.g. the agreement between GM and PSA under which vehicles for both brands are assembled at their Opel Zaragoza and PSA Vigo plants in Spain).

A review of the decisions made during the Great Recession by assemblers with production plants in Spain brings to light trends in the geographical distribution of the value chain of the industry in Europe. Indeed, falling sales across Europe and an increase in the relative importance of other regions of the world in the industry's turnover have accelerated capacity adjustments in Europe (Pavlínek, 2015). The main trends observed can be summed up as follows:

- The R&D centres of assemblers continue to be located mainly in the country of origin of each transnational corporation (and are sometimes even more centralised at specific locations – Aláez-Aller et al. 2009), though expansion into other regions (Latin America, the USA, Asia) has resulted in the setting up of secondary R&D centres there with a view to adapting products to local tastes and regulations (Sturgeon et al. 2008).

- The adjustments made to correct overcapacity at assembly plants seem to have focused mainly on plants located in the core areas of Europe, with plants being shut down in Belgium, the UK, France, Germany and Italy (the Termini factory in Sicily). With regard to the awarding of new models, Spanish plants have not only consolidated their position but also seem to be filling the gap left by capacity adjustments in core EU countries. In this respect, it is the restructuring decisions made by US assemblers (Ford & GM) that provide the clearest guidelines for understanding the new trends. Within these US transnational corporations with operations in the EU, circumstances have arisen with the greatest power to catalyse potential geographical readjustments in assembly operations: in particular negative operating results in Europe and a position more insulated from political interference in corporate decision-making concerning the distribution of activities between countries (it must be recalled that the French state owns 17.93% of voting rights in Renault and has recently taken a stake in the capital of PSA which gives it 14% of voting rights, while the state of Lower Saxony holds 20% of voting rights in the VW Group). The restructuring of Ford and GM in Europe has strengthened the position of Spanish plants in both qualitative and quantitative terms: Opel Zaragoza is expected to account for 40% of the company's assembly operations in Europe and Ford Valencia has become the US corporation's most important plant in Europe in terms of the awarding of new, high-end models and volume of investment.

In their award processes transnational corporations try to get workers at different plants to compete for the new model, awarding points for medium-term commitments to maintain a system of industrial relations that involves cost cutbacks and increased flexibility and adaptation in the current context of uncertainty as regards market trends. Workers at plants in Spain seem to have contributed enough in terms of labour cost cutbacks for the sum of other factors (logistical costs, availability of suitable suppliers, proximity to end markets, production experience, quality of assembly, etc) to tip the balance in favour of deciding to award models to them.

There seems to be no doubt that the distinctive situation prevailing in Spain during the Great Recession has undermined trade union bargaining power. Indeed, numerous company closures, unemployment

rising to close to 25% of the working age population, the lack of expectation of any positive changes in the job market and widespread cutbacks in wage levels in Spain have produced a context in which workers react purely defensively in bargaining processes, seeking to maximise the likelihood of retaining their jobs. Moreover, the labour market reforms that came into force in Spain in mid-2012 brought in institutional changes to the job market which catalysed wage decreases as a fundamental tool for increasing competitiveness abroad in the context of the single currency.

According to the statistical information available, during the Great Recession Spain has behaved in a way that seems to be helping to increase its relative advantages in terms of labour costs in the EU. Nominal unit labour costs (Table 4) have decreased in the Spanish economy, especially in 2009-2013, while the equivalent costs have increased in core European countries with automotive assembly plants (Belgium, France, Germany, the UK and Italy) and also in CEE countries (though in this latter case the main increase was between 2007 and 2009, since when levels have remained steady).

Information on hourly costs in the field of manufacturing motor vehicles, trailers and semi-trailers (Table 5) places Spain in an intermediate position. During the Great Recession hourly costs in core countries moved further away from Spanish costs in both absolute and relative terms, while hourly costs in CEE countries rose from 2008 to 2012, but more moderately than the increases in costs per hour in Spain. It must be pointed out that the moderation of labour costs in Spain was especially noteworthy in 2013-2014 (Table 6), following the entry into force of the aforementioned 2012 labour reforms.

The geographical distribution of assembly plants in Europe seems to have shifted from a hierarchy in which high-end models were made in core countries and cheaper models on the periphery to a more scattered pattern of assembly of high-end models in which Spain holds a bigger share. In the medium and long term this could lead to a reduction in the number of vehicles assembled in core countries, with the slack being taken up by plants on the periphery of Europe. In any event, although the trends mentioned seem to have moved more quickly during the Great Recession, they are still only observable in those assemblers which are least profitable and which are held back by political resistance when it comes to reducing assembly operations in the core countries of the EU.



Table 4 Nominal unit labour cost (2005=100)

	2007	2008	2009	2010	2011	2012	2013
Belgium	104.2	108.8	113.0	112.7	115.7	120.4	122.8
Czechia	103.0	106.5	108.9	108.5	109.0	112.6	112.5
France	103.5	106.8	110.7	111.5	113.0	115.3	116.8
Germany	97.2	99.4	105.0	103.9	105.0	108.2	110.4
Hungary	108.4	113.1	116.3	115.6	118.3	121.3	126.0
Italy	103.6	108.3	112.6	112.4	113.5	116.0	117.4
Poland	101.6	108.9	111.4	113.0	114.3	116.1	–
Romania	120.9	148.6	152.9	149.2	138.8	144.9	148.5
Slovakia	102.2	106.7	112.8	111.8	112.7	113.8	112.8
Slovenia	103.7	110.3	119.8	120.3	119.4	120.3	119.3
Spain	107.4	113.4	115.1	113.0	111.9	108.6	106.8
United Kingdom	105.5	108.8	115.6	117.5	118.9	122.0	123.6

Source: Eurostat, Annual National Accounts, ESA-95

Table 5 Total labour cost per hour (€). Manufacture of motor vehicles, trailers and semi-trailers

	2000	2004	2008	2012
Belgium	28.38	34.29	32.97	44.91
Czechia	4.37	6.52	10.08	11.38
France	24.84	33.24	33.38	38.51
Germany	37.78	41.39	43.14	47.91
Hungary	4.62	7.08	8.86	9.41
Italy	20.45	23.08	25.50	30.11
Poland	–	4.70	7.52	8.09
Romania	–	2.16	3.90	4.86
Slovakia	2.72	3.77	7.77	9.54
Slovenia	–	–	12.73	13.74
Spain	18.63	20.34	23.66	25.39
United Kingdom	25.81	24.99	23.82	24.17

\*NACE\_R1 (2000 and 2004) and NACE R2 (2008 and 2012). Manufacture of motor vehicles, trailers and semi-trailers.

Source: Eurostat. Four-yearly Labour Cost Survey (LCS), total labour cost (excluding apprentices), for enterprises with at least 10 employees

Table 6 Total labour cost per hour (€) in manufacturing, Spain

	Total labour cost (€)	2007=100
2007Q3	19,80	100,00
2008Q3	20,74	104,75
2009Q3	21,68	109,49
2010Q3	21,43	108,23
2011Q3	22,32	112,73
2012Q3	22,79	115,10
2013Q3	23,19	117,12
2014Q3	23,11	116,72

Source: Quarterly Labour Cost Survey (INE)

## 6. Conclusions

Automotive assemblers in Spain expect a considerable increase in production in the coming years in terms of the number of vehicles assembled. This expectation is based on the awarding of new models and on the substantial investment made in Spanish plants in the past three years. The most striking aspect of these optimistic forecasts is that they are made in a context of overcapacity in the automotive industry in Europe, plant closures, cutbacks in the capacity of existing plants and uncertainty as to how demand for vehicles will develop in the EU in the years to come. Why is it that Spanish plants seem to have become more attractive as candidates for being awarded more production in the European value chain of this industry? Apart from quantitative changes, have there also been qualitative changes in Spanish assembly plants during the Great Recession?

Seeking to answer these questions, this study has analysed trends in production and investment decisions at the 13 automotive assembly plants in Spain during the Great Recession. An examination of the facts clearly reveals that Spanish plants have been allocated a considerable number of new models, including the investment that this entails. The models in question are not just new generations of vehicles already assembled in Spain but also brand-new vehicles, and there seems to be a trend for the assembly of high-end models to be transferred to Spain. Given that assemblers have set up the award processes as de facto auctions in which their European plants bid against one another, the next question that arises is what advantages Spanish plants have

demonstrated in order to attract these FDI flows, particularly in the past three years.

The advantages of locating assembly operations in Spain may be linked to the distinctive performance of the Spanish economy during the Great Recession, which has resulted in substantial reductions in the bargaining power of Spanish trade unions, as a result fostering the spread of agreements that entail decreases in labour costs and greater work flexibility. Although similar processes can be found in other EU countries, the data available indicate that they have been more intense in Spain, as might be expected in view of the country's poor situation in economic and labour terms (following the bursting of the real estate bubble and its effects on employment, banking and public finances in Spain).

This apparent increase in the advantages of locating assembly operations in Spain can be seen particularly clearly in the decisions made by Ford and GM to restructure their European operations. The foregoing sections describe how Spanish plants have benefited most in terms of workload and the quality of the models that they have taken on as both firms seek to quickly return their European operations to profitability. However, other major European assemblers have not made such radical changes in the location of the operations in their value chain, so it remains to be seen whether greater pressure on the profit margins of those assemblers that have not clearly restructured their European operations will result in a similar process of relocation of high-end models from previous core areas towards the old periphery. Only then will it be possible to state whether the Great Recession has brought about a structural change in the geography of the value chain in the EU and whether the place occupied by Spain in particular in that value chain has changed.

## References

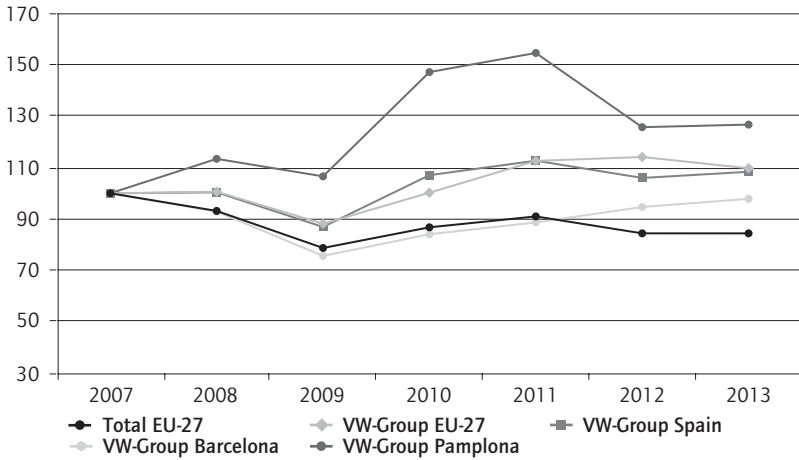
- Aláez-Aller R. and Barneto-Carmona M. (2008) Evaluating the risk of plant closure in the automotive industry in Spain, *European Planning Studies*, 16 (1), 61-80.
- Aláez-Aller R., Bilbao-Ubillos J., Camino-Beldarrain V. and Longás-García J.C. (2009) Reflexiones sobre la industria española del automóvil y sus perspectivas, *ICE. Revista de Economía*, 850, 41-56.
- Amighini A. and Gorgoni S. (2014) The international reorganisation of auto production, *The World Economy*, 37 (7), 923-952.
- ANFAC (2013) Memoria Anual 2013, Madrid, Asociación Española de Fabricantes de Automóviles y Camiones. <http://www.anfac.com/documents/tmp/memoria2013.pdf>
- Domanski B. and Lung Y. (2009) The changing face of the European periphery in the automotive industry, *European Urban and Regional Studies*, 16 (1), 5-10.
- Jürgens U. and Krzywdzinski M. (2009) Changing East-West division of labour in the European automotive industry, *European Urban and Regional Studies*, 16 (1), 27-42.
- Lampón J.F., Lago-Peñas S. and Cabanelas P. (2014) Can the periphery achieve core? The case of the automobile components industry in Spain, *Paper in Regional Science*. doi: 10.1111/pirs.12146
- Lung Y. (2003) The changing geography of the European automobile system, *Cahier du GRES*, 2003-10.
- Lung Y. (ed.) (2007) *Coordinating competencies and knowledge in the European automobile system - CoCKEAS*, Luxembourg, Office for Official Publications of the European Communities.
- OICA (1998-2013) *Production statistics*, Paris, International Organization of Motor Vehicle Manufacturers.
- Pavlínek P. (2015) The impact of the 2008-2009 crisis on the automotive industry: global trends and firm-level effects in Central Europe, *European Urban and Regional Studies*, 22 (1), 20-40.
- Sturgeon T., Van Biesebroeck J. and Gereffi G. (2008) Value chains, networks and clusters: reframing the global automotive industry, *Journal of Economic Geography*, 8 (3), 297-321.

All links were checked on 17 June 2015.

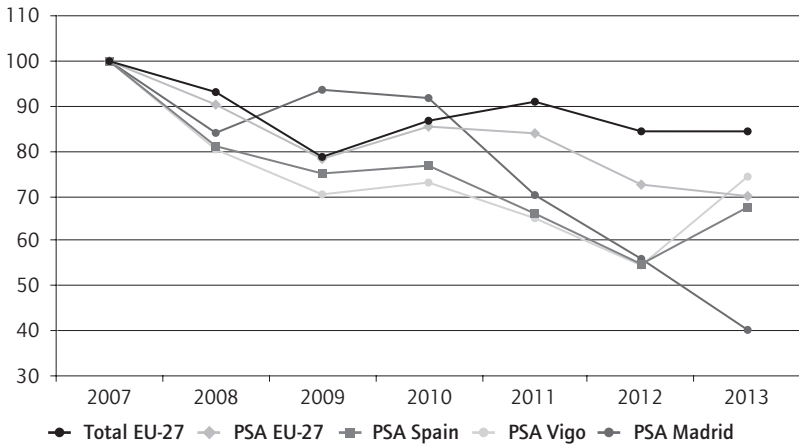
## Annex 1

Figure 1 Vehicle production (2007=100)

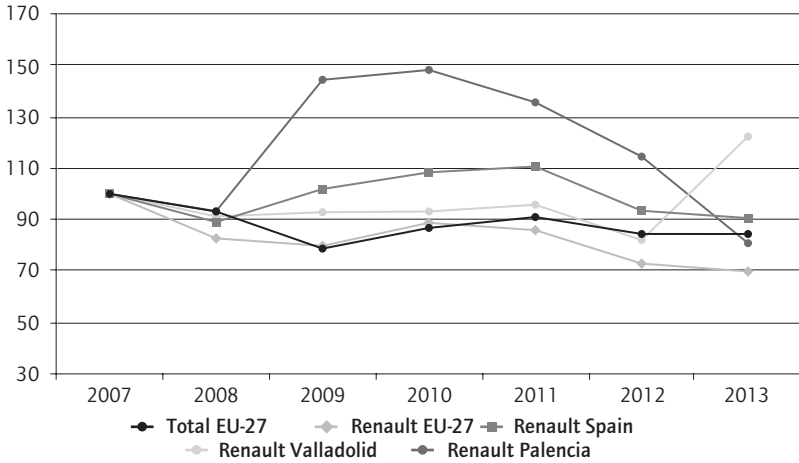
### VW-Group



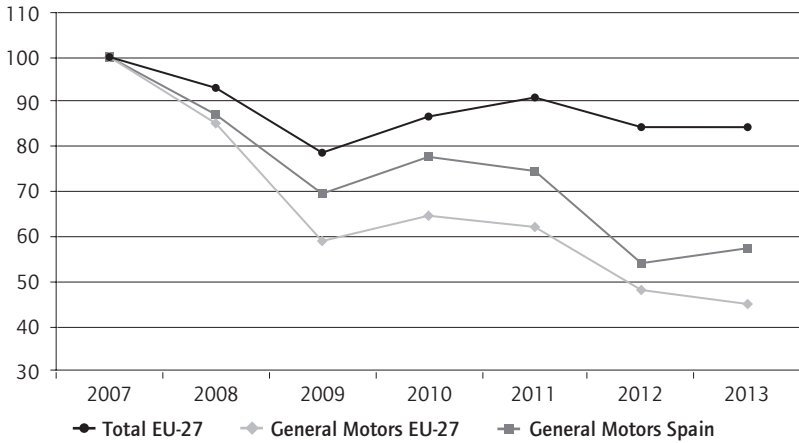
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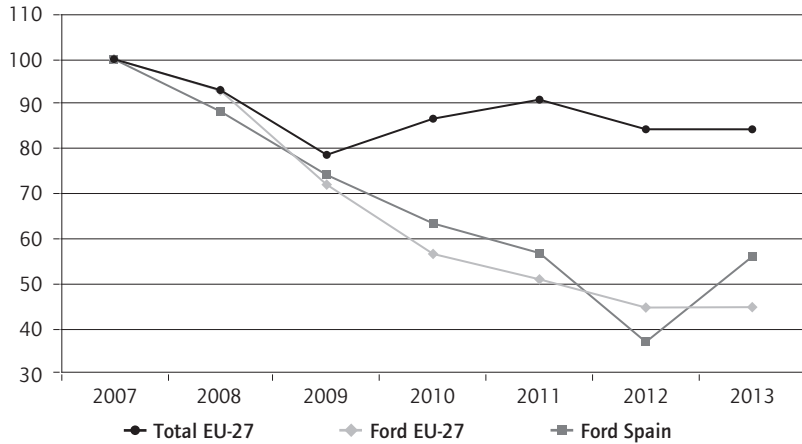
**Renault**



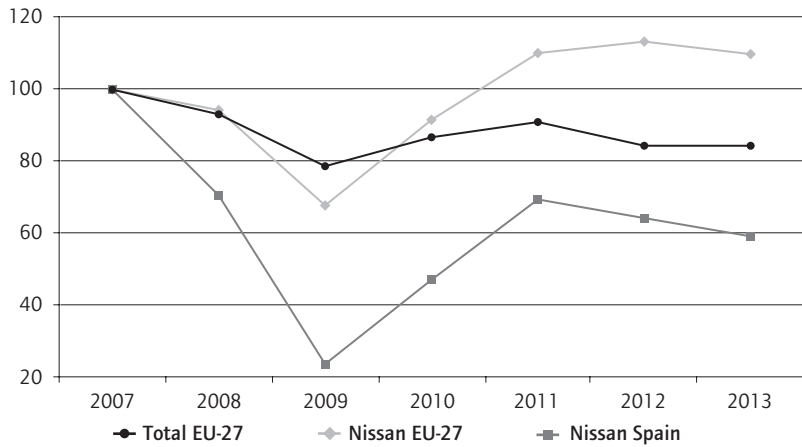
**General Motors Group**



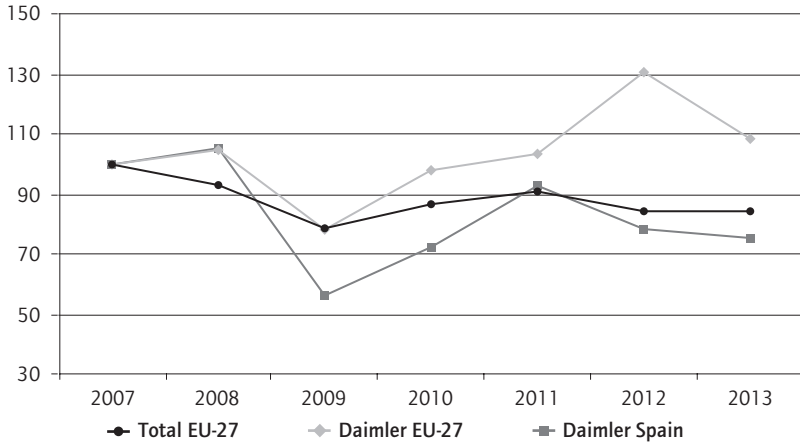
### Ford Group



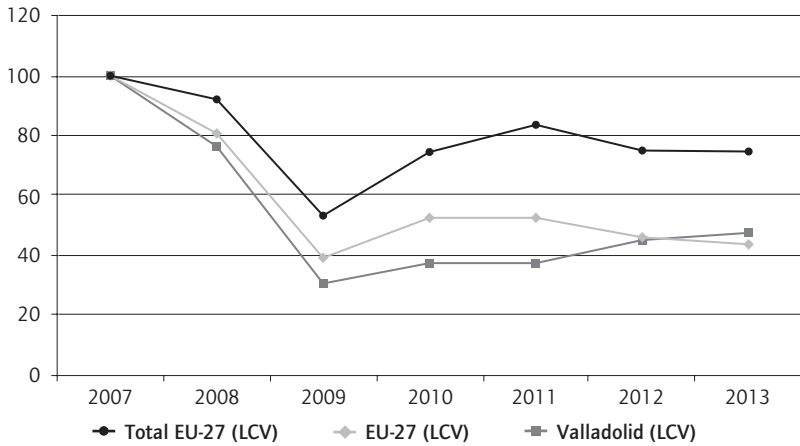
### Nissan



**Daimler**

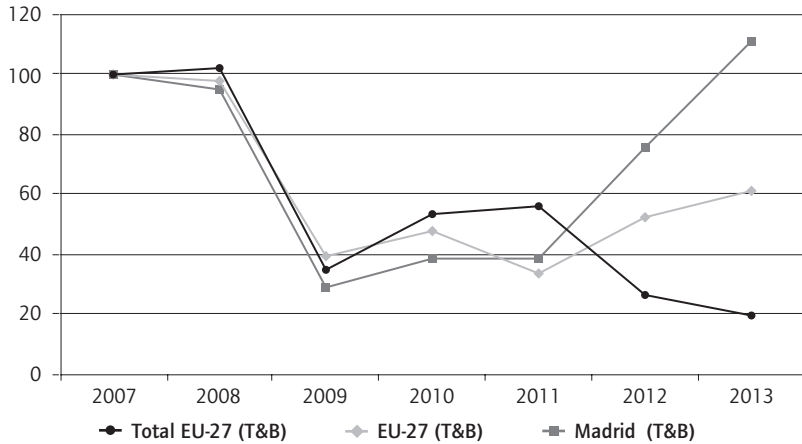


**Fiat-Iveco LCV**





### Fiat-Iveco. T&B plants production



Source: OICA and Annual Reports

## Annex 2

### Survey conducted on trade union shop stewards at assembly plants

1. Have there been any changes in the models produced at your plant since 2008? Are there any changes approved for the near future? Please indicate the year of introduction and the name of the new model. If you have any information on the matter please indicate the approximate amount in Euros that has been/is to be invested in your plant to cater for the assembly of the new model. Please also indicate whether there have been any other major capital investments in the plant (aside from those linked to new models) since 2008, and if so their approximate amount and year of implementation.

New model? (since 2008):

Year of commencement of production (past or envisaged):

Approximate amount of investment for new model (in millions of euros):

Other investments: approximate amount:

2. Are you aware of any competition between your plant and others belonging to the same multinational firm to secure the allocation of the model or other investments? If so, please indicate where the plants with which you competed for investment are located.

Did you bid against other plants for the awarding of the new model?

Where (in what country) are the plants with which you competed?

3. Have you had to negotiate changes in working conditions in connection with the allocation of new models or other investments? If so indicate which of the following were involved:
  - Wage cuts
  - Greater flexibility in working hours & calendars
  - Greater functional flexibility
  - Different wage scales
  - Others (please specify)

4. Please rate the above issues on a scale of 0 to 9 in terms of which you consider most influential in securing the new model for the plant (0 = no influence; 9 = decisive):
- Wage cuts
  - Greater flexibility in working hours & calendars
  - Greater functional flexibility
  - Different wage scales
  - Others (please specify)

# Foreign direct investment in the context of the financial crisis and bailout: Portugal

Joaquim Ramos Silva

## 1. Introduction

The experience of the Portuguese economy with foreign direct investment (FDI) after the outbreak of the global financial crisis in 2008 and the sovereign crisis that followed represents a new stage in its complex history with this increasingly critical flow. This is true with regard to both inward and outward flows and stocks and it is the main focus of the present chapter, which focuses on the period 2008–2013, especially after Portugal's bailout by international institutions in May 2011,<sup>1</sup> which lasted until June 2014.

At the beginning of the twenty-first century, the Portuguese economy was characterised by fundamental weaknesses, including very slow growth and serious macroeconomic imbalances, demonstrated by high and persistent public and current deficits (Andrade and Duarte 2011). External economic relations must be highlighted in this context (Silva and Simões 2012). Besides excessive current deficits and the loss of market share in major export destinations (Amaral 2006), its difficulties in attracting large net FDI inflows, as well as those encountered by Portuguese companies in the process of internationalisation through direct investment provide substantial evidence of the seriousness of the external challenges (Simões and Cartaxo 2011 and 2012). At the onset of the crisis, the troubles also began to affect the ability of the indebted Portuguese state and firms to borrow in international markets. Indeed,

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1. The so-called Troika: the European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF). In order to obtain loans (up to 78 billion euros) on more favourable terms than those prevailing in the international financial markets, the government of Portugal, supported by the three main political parties, signed an agreement with these institutions in May 2011. The document – the so-called 'Memorandum of Understanding', hereafter 'the Memorandum' (Portuguese Government 2011) – established the economic policy conditionals to be followed during the next three years (that is, up to June 2014). As will be shown below, in important respects, the Memorandum was relevant to the analysis of FDI issues in the period.

after 2008, although it mainly affected the financial sector, it also had a strong impact on the economy as a whole.

Certainly, many of these problems were not confined to the 2000s and were already visible in the previous decade or even before (Silva 2013). In the early twenty-first century, however, the Portuguese economy and its firms found themselves unprepared to find a place in such increasingly competitive environments as the European Single Market and the euro area, not to mention emerging markets and globalisation. This means that the key problems of Portuguese economy were primarily structural and the conditions required by euro area membership were not being considered for major policy purposes, such as disciplined macroeconomic management or adequate preparation for global competition (Silva 2012).

When the financial crisis of 2008 shook the fragile Portuguese economy and the subsequent sovereign crisis led to the bailout of May 2011,<sup>2</sup> the shock was widespread. For example, GDP gradually fell by around 7 per cent from 2008 to 2013, and after very slow growth (0.9 per cent) in the following year, by the beginning of 2015, in contrast to Ireland or Spain, signs of a recovery were scant (and based on consumption rather than investment).<sup>3</sup> Obviously, there are some industries (in particular, traditional ones such as tourism, footwear and wine) and firms that have managed to overcome the challenges of the crisis and the internationalisation process in the adverse conditions prevailing in the period. However, this is not a systemic feature of the Portuguese economic situation, especially if we consider the minimum requirements for sustained competitiveness. Moreover, if there has been a significant improvement

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2. In order to understand the entire context better, it is convenient to recall an important caveat. Prior to the Memorandum, political factors did not have to be completely disregarded. At the beginning of 2010, Portugal's sovereign bond yields were clearly below those of other countries at risk in the European Union. However, after the elections of October 2009, there was a minority government (in fact, a continuation of the previous government) in a weak political position, while the president had a different political orientation. By the middle of 2010, sovereign bond yields began to rapidly increase and Portugal was still far from the new ECB policy of 'whatever it takes' to save the common currency. The conditions were thus highly favourable for political confrontation. After the Memorandum was signed, in June 2011, further elections were held and a coalition politically more in accordance with the president became the new government.
  3. Data for Portugal in 2014 from the National Institute of Statistics (February 2015); the European Commission estimates (November 2014) for the year 2015 forecast that Portugal will grow between 1 per cent and 1.5 per cent, while Ireland and Spain will grow faster, at above 2.5 per cent. In these estimates, Greece also received a more favourable forecast, but we need to take into account the possible effects of the change in government after the elections of January 2015 (Silva, 2015).

in the external balance in recent years it was in an environment not only of sharp cuts in wages and 'brutal' tax rises, but also increasing inequality and poverty (OECD 2014), the emigration of qualified people, extension of working time and the elimination of holidays. Clearly, most of these trends, particularly after 2011, were no stimulus for structural productivity gains (for example, in terms of labour productivity per hour, whose low level and slow catch-up was at the root of Portuguese economic stagnation in the early 2000s and later financial and sovereign crises, insofar as it means that it will not be possible to pay debts in the long term). In addition, as shown by Cravinho (2015), the basis of this 'medicine' was essentially cost competitiveness of the worst sort, involving, as we have mentioned, substantial cuts in nominal wages and social benefits, rather than structural competitiveness, which requires the use of better qualified workers and a much broader vision.

It is important to recall that the deterioration of the Portuguese economy during the 2000s affected external relations – ranging from trade to FDI – and other flows, such as revenues. Furthermore, from the economic policy point of view, the two decades or so that preceded the crisis of 2008 were clearly characterised by *a distortion that favoured the non-traded goods and services sector*, which was highly negative for a small economy such as Portugal (Silva 2013), as the case of exports has shown fairly well.<sup>4</sup> Indeed, such an orientation has acted as a disincentive to prepare well to face the European Single Market and tough international competition. It was one of the main reasons for the poor results observed in the decade before the crisis (for example, after having slowed down since the early 1990s, the process of real convergence with European partners was interrupted by the turn of the century). Taking into account all these trends we may put a few questions to be clarified in the present chapter: how did Portuguese FDI react to the crisis and the

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4. The Portuguese coalition government (2011–2015) and the media claimed emphatically that the ratio of exports of goods and services to GDP had at last substantially increased in the period (concerning the analytic relevance of this issue, see Silva 2008: 15). However, while accepting the good export performance of many firms, the increase in this indicator was due mainly to the sharp drop in GDP and to other circumstances, most not related to this government; for example, according to the figures released by the National Institute of Statistics, on average, the annual growth rate of exports in 2010–2013 was below that of 2005–2007; in other words, export performance was already improving before the crisis. Also, in the previous bailout programmes in 1978 and 1983 Portuguese exports increased very rapidly – albeit for different reasons (currency devaluation) – and external equilibrium was restored, but only for a short period. In other words, we need more time to see whether the recent export trend is sustainable, particularly in the context of an effective economic recovery. Establishing a strong and competitive export sector requires deep roots.

bailout? Which policies were adopted towards FDI? What was their impact on employment and elsewhere? It is perhaps too early to obtain clear and definitive answers to all these issues, but we shall begin the necessary work of diagnosis and evaluation in this chapter.

Before starting our analysis, we must alert the reader to some fundamental flaws of the available statistical data.<sup>5</sup> Although we also use other sources (UNCTAD and Eurostat, for example), the Bank of Portugal is the primary provider of data on flows and stocks of FDI (inward or outward), which are also used by Eurostat. In our principal source, data are obtained through the usual international rules and practices (for more details, see IMF 2009), but we must be cautious about interpreting these official FDI figures, which are imperfect from several points of view.

A few examples, not necessarily related to statistical methodology, are likely to show the crux of the problems we face at this level. *First*, FDI inflows from 1996 to 2013,<sup>6</sup> on an annual basis have always been positive, but behind this there are very high investments as well as high disinvestment inflows, resulting in relatively meagre net positive results (see Annex 3) and, consequently, a modest increase in investment stock. *Second*, as far as FDI outflows are concerned, we have no credible information about their final destination, to the extent that Portuguese corporations use third countries fairly substantially to invest abroad, most notably the Netherlands. This is well-known among FDI specialists (Dunning and Lundan 2008) and not specific to Portugal, although strongly evident there. *Third*, to take a more recent example, Chinese investments in Portugal have been prominent in the crisis period, especially since 2011 and the privatisation process, estimated at around 6 billion euros by the end of 2014 (Le Monde 2015), but we find no trace of similar amounts in national statistical sources (see, for example, Annex 1). This example illustrates how foreign investors also largely use third countries as intermediaries to enter Portugal. *Fourth*, contrary to what happens in some western and central European countries, Portugal does not have complementary databases from chambers of commerce and similar institutions that, even if created for other purposes, would allow us to obtain a more realistic picture of the movements and state of inward

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5. For a more general treatment of the deficiencies of world FDI statistics, see Dunning and Lundan (2008: 12–15). The first chapter of this reference book deals directly or indirectly with this central topic for researchers in the field.

6. Much of this chapter is based on a consistent series on FDI provided by the Bank of Portugal (and AICEP) over the years 1996–2013. However, the series was broken in the middle of 2014.

and outward FDI in Portugal, particularly as far as the role of firms are concerned. *Fifth*, and finally, since the early 2000s, research work on individual internationalised firms and cases has increased (GEPE 2001), particularly on enterprises investing abroad, but we are still far from having a desirable level of data from which to draw solid and representative conclusions on the subject.

Therefore, when we try to go beyond the global flows and stocks of Portuguese FDI in the main period under analysis (for details see Annexes 1 to 3), and we take a closer look at its origins and destination, its distribution by economic activity and form and its impact on employment, the inferences may be nothing more than loose approximations. This is perhaps the result of a long-lasting neglect of the relationship between the Portuguese economy and FDI (not in political rhetoric, but in practical and operational terms), a problem whose effects we cannot easily overcome in the short term. In this study, we shall strive to make the best of the fairly limited information that is available. In addition, in order to reduce the statistical gap, we also use some data found in the news media – Portuguese and international – that we consider helpful.

To summarise the present chapter, after this introduction, in Section 2 we put our analysis of FDI in the context of the evolution of the Portuguese economy in recent decades. In Section 3 we look in detail and from various perspectives at inward/outward flows and stocks in the period of crisis and bailout that is at the core of our analysis. For obvious reasons, we begin with the policy measures taken after 2011, such as the speeding up of the privatisation programme and the granting of ‘golden visas’ to non-EU residents. Then, focusing on 2008–2013, we examine FDI in terms of its distribution by country of origin and destination, breakdown by economic activity and forms of investment and the origin of the leading foreign affiliates. In the course of this we make comparisons, in particular with previous periods. We adapted our research methodology to the fact that we are analysing a short and peculiar period of recent Portuguese history. In the penultimate section we synthesise the main trends of the period, based on our empirical analysis. In the final section, we draw some conclusions and raise a few topics for further research.

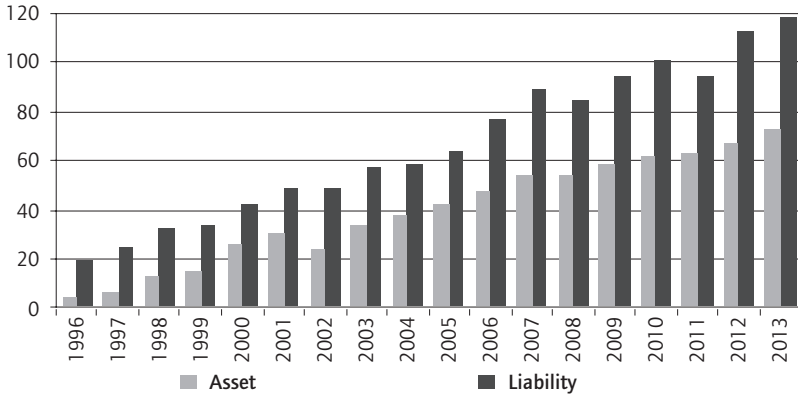


## 2. Historical overview of FDI in the Portuguese economy

Despite the peculiar situation created by the financial and the sovereign debt crises in 2008–2013, in order to better understand FDI in the Portuguese economy we must look briefly at recent decades. In the second half of the twentieth century, only joining the European Free Trade Association (EFTA) in 1960 led to significant investment of foreign capital in Portugal – particularly up to the early 1970s – often within the context of the outsourcing of industry from northern European countries. Later, except for a few years in the 1980s, both before and after EU membership, Portugal has never attracted large FDI inflows (Silva 1990). More recently, in an account of the first twenty years in the European Union (1986–2005), it was demonstrated how, after the initial wave (1986–1991), inflows clearly decreased as part of world FDI inflows (Silva 2006: 501). With the fall of the Berlin Wall, the competition to attract FDI increased and Portugal was unable to maintain its position (see, for example, the stark contrast with Ireland during the 1990s, in Silva 2000; both countries were, however, subjected to a very similar framework in terms of EU policy towards ‘cohesion countries’ designed in the late 1980s).

Meanwhile, like other southern countries of the European periphery, Portugal basically remained a host FDI country, not a significant foreign investor. Figure 1 shows the international foreign investment position of Portugal from 1996 to 2013. It is clear that liabilities always surpass assets. However, during a short period at the turn of the century – more precisely, 1998–2001 – net outward investment overtook net inward investment (see Annex 3), in large part related to investments in Brazil, attracted by the privatisation process then ongoing in that country in the telecommunications, energy and other infrastructural sectors (Silva 2005; da Fonseca et al. 2011). After this short but intense experience, Portuguese outward FDI clearly slowed down. Nevertheless, we cannot deny that Portuguese enterprises, of different sizes and sectors, like those of many other countries since the 1990s (including developing and emergent economies), also became investors abroad. This increased Portugal’s economic links with the outside world in a new and important dimension due to the long-term characteristics of FDI that entail a greater commitment on the part of firms in more competitive contexts.

Figure 1 Portuguese Foreign Direct Investment Position, 1996–2013 (euro billion)



Source: Banco de Portugal

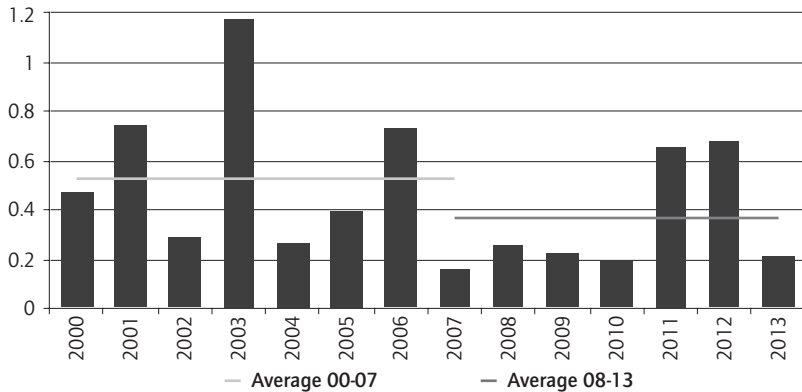
With regard to FDI inflows, Figure 2 gives a more recent picture on a comparative global basis. Indeed, the 2000s show a similar trend to the one we have just described: these flows to Portugal have been at a relatively low level and fairly irregular. It is true that, like most other investments, by their nature FDI flows are not steady; moreover, for example, in the fourteen years covered by Figure 2, no clearly discernible trend is visible but rather substantial annual variability. However, despite the higher figures for 2011 and 2012, FDI inflows in 2008–2013 – whose main features we will analyse in the next section – were, on average, below those of 2000–2007, at 0.36 per cent and 0.52 per cent, respectively, of the world total. This is not surprising given that the later period was characterised by high uncertainty, a factor that heavily influences FDI decisions.

Summarising, in recent decades, apart from short periods – such as the late 1960s/early 1970s or the late 1980s – Portugal has never attracted large amounts of FDI; similarly, only during a few years at the turn of the century was the country a significant investor abroad.<sup>7</sup> Furthermore, inward and outward flows have both proved to be erratic, as if a consistent strategy was lacking with regard to this key aspect of modern open economies, for instance as regards integration into global value

7. Not taking into consideration colonial ties prior to 1974.

chains (UNCTAD 2013). This also shows that Portuguese FDI flows are more likely to be determined by short-term specific contexts, as happened with the privatisation programme in some years or the launching of a major but isolated investment, the main example of which – as far as inflows are concerned – remains Auto Europa, whose production of automobile parts for Volkswagen began in 1996.

Figure 2 Inward flows to Portugal as a proportion of world FDI, 2000–2013 (% of total)

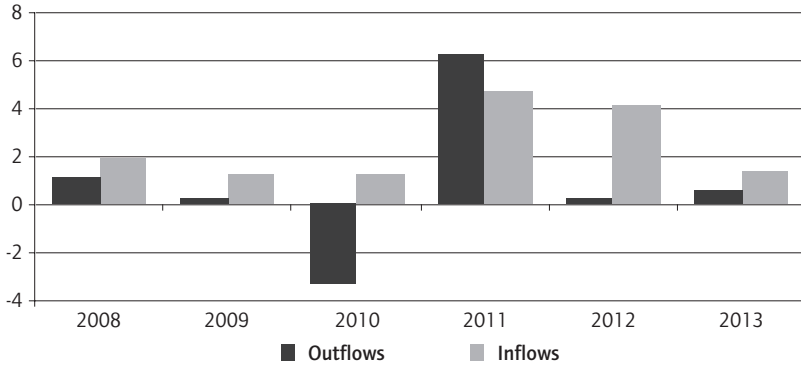


Source: UNCTAD

### 3. FDI inflows and outflows and related dimensions under the conditions of crisis and bailout

During the crisis and later ‘austerity’ policies, economic growth, rising GDP per capita or expanding markets – among other things – were certainly not motives for attracting FDI inflows, to adopt the usual theoretical paradigms (UNCTAD 1998). On the contrary, in the search for cash resources, privatisation programmes – usually involving the sale of public companies at below market value (in normal conditions) or the sale of indebted firms with potential, market power or technology – are much more relevant FDI determinants. Similar short-term expedients – such as the granting of ‘golden visas’ by the government to non-EU residents – also became more feasible. In the present section we begin our detailed analysis of the period 2008–2013 with these policy measures (for a more global view of this period, see Figure 3).

Figure 3 Portugal FDI flows as a percentage of GDP



Source: Eurostat

### 3.1 Expediency measures: the privatisation programme and the granting of 'golden visas'

The Memorandum of May 2011 (Portuguese Government 2011) was clear about privatisation. The programme was supposed to be accelerated in 2011–2012 and to involve some of the most important companies that remained in public ownership – in most cases only partially – such as in the energy sector (EDP, REN, Galp), transport (ANA [airports], TAP [air company], and CP Carga [railway freight]), communications (CTT, the mail company) and insurance (Caixa Seguros), to mention the main companies referred to in the Memorandum. The initial objective was to obtain 5.5 billion euros in revenue by the end of the programme. However, although that objective was attained, the Memorandum did not impose the complete sale of larger companies. In the financial and banking conditions then prevailing in Portugal, this meant they would be sold mainly to foreign investors. Essentially, it meant the foreign private acquisition of Portuguese public assets.<sup>8</sup> A door was thus opened to foreign investors with relatively abundant financial resources, pre-

8. Later, in the summer of 2014, just after the end of the official bailout period, the collapse of Grupo Espírito Santo (GES), long the most important financial group in Portugal with close links to the real economy, but with risky and opaque operations abroad, created a similar situation. A few months later, by the beginning of 2015, the assets of GES after having been broken up, including the 'clean' part of its bank ('Novo Banco'), were being sold off, mainly to foreign buyers. Despite its intrinsic interest and the issue's affinities with the policy part of the present volume – management of the sale of the remainder of GES was conducted

eminently the Chinese companies that bought EDP, REN and Caixa Seguros, which gave them – as far as the first two companies are concerned – a crucial role in the Portuguese energy sector.

After the end of the bailout programme – and by the end of 2014 – most of the privatisation plan had been implemented and the biggest remaining stake was in TAP, although in 2015 this company, too, was slated for sale. According to the daily *Público* (2014), by November 2014 fourteen companies in which the state had a share had been privatised, totally or partially.<sup>9</sup> Most of these privatisations – and the more profitable ones – occurred in 2011–2012, during the first phase of the bailout programme. In any case, the same source estimated the total revenue of these sales at 9.28 billion euros, 68.7 per cent above the targeted revenue of the Memorandum. However, as mentioned by *Público*, it must be noted that the remaining public assets for sale, including TAP, ‘will not bring money to the state’; in other words, state-owned property that represented significant net positive assets – and, not surprisingly, where economic rents were not negligible due to previous public ownership and deficient regulation, as in the energy sector – had already been sold.

Here is not the place to discuss privatisation in detail and its ‘economic rationale’, even considering the circumstances in which Portugal was immersed. Nevertheless, there is no doubt that in this case the government’s objective of obtaining the maximum cash revenue for the state in

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directly or indirectly by the government and the Bank of Portugal – the default of GES in 2014 departs from our central theme and thus we shall not develop it in detail. However, in our view, this collapse illustrates a glaring deficiency in the bailout programme, at least as carried out by the Portuguese government, which has focused almost exclusively on public finance policies (spending and taxation – without discussing the quality of the measures taken), neglecting the banking and financial basis of the crisis. The demise of GES just after the end of the bailout programme is unlikely to have been accidental.

9. Nevertheless, according to the data provided by *Público* (2014), and not considering the case of sales in the stock exchange dispersed among different owners, in the four main privatisation deals, Chinese capital participated in three: the acquisition of 21.35 per cent of EDP for 2.7 billion euros (Three Gorges, December 22, 2011); 80 per cent of Caixa Seguros for 1.65 billion euros (Fosun, 9 January 2014); 25 per cent of REN for 593 million euros, which also includes a 15 per cent stake of Oman Oil (State Grid, 2 February 2012). The second most important privatisation by revenue obtained was the sale of 95 per cent of ANA for 1.88 billion euros to Vinci (a French company, 27 December 2012). Camargo Corrêa and AMIL, both from Brazil (not necessarily the country of the direct investor), acquired, respectively, 9.6 per cent of Cimpor (for 354.2 million euros) and 100 per cent of Caixa Saúde (for 85.6 million euros) in 2012; Isabel dos Santos, close to the government of Angola, acquired Zon for 163.8 million euros (12 June 2012). Of 14 privatisations, only one was clearly acquired by a Portuguese company: 95 per cent of EGT was bought by Mota-Engil, a construction firm.

the short term often prevailed over any other purpose, no matter what a given privatisation's impact on the economy or the consequences for the firm itself might be in the long run. From the FDI point of view, an obvious issue is whether an acquisition of existing assets could possibly have the same impact as greenfield investment, most obviously with regard to employment. Indeed, a number of studies have demonstrated that asset acquisitions are likely to have a negative impact on employment (Buckley and Artisien 1987; Margolis 2006). This is even more true with regard to public companies that have not yet been 'restructured', particularly if cost reduction is of particular importance to the new owner, which is frequently the case.

Another policy characteristic of the period was the granting of fast-track 'golden visas' to non-EU citizens who acquire – 'invest in' – properties worth at least 500,000 euros, which makes them, if correctly registered, part of the item 'real estate' with regard to FDI (in)flows. According to the *Financial Times* (2014: 3), the programme has been 'highly successful' and in two years it attracted 1.972 billion euros from outside. Again, '80 per cent of the 1,775 permits have been issued to Chinese citizens' (ibid.). The real estate sector (and construction in general), whose importance strongly increased in the period of policy bias favourable to the non-tradable goods and services sector (Silva 2013), also became characterised by heavy lobbying, which remains active. We may concede that the 'golden visas' policy contributed to the revival of real estate, but despite the importance of tourism in the Portuguese economy, in a country whose population is rapidly ageing, it is illusory to see this sector (as well as construction) as a major driver of sustainable economic growth. In addition, in November 2014 the Portuguese judiciary acted on allegations of serious corruption involving some highly placed members of the border agency that grants these visas to rich non-EU residents.<sup>10</sup>

Clearly, privatisations and the granting of 'golden visas' were a response to short-term concerns, such as the urgent need for financial funds (to

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10. After these events, the popular press raised allegations of money laundering, through the channel of golden visas, in the order of 500 million euros. Of course, there is no precise information about all aspects of the policy, but its closer scrutiny began in November 2014 and in 2015 the Portuguese government decided to extend fast-track golden visas to non-EU residents who invest in culture and science. All this means that, under the circumstances, this policy is not necessarily erroneous, but it is very limited and entails risks of illegality that cannot be overlooked.

‘reduce the deficit’ and the burden of public debt<sup>11</sup> or to reactivate stagnant sectors), rather than the much-needed structural transformation of the Portuguese economy towards sustained competitiveness and higher productivity.

### 3.2 Main features of FDI inflows and outflows to/from Portugal

For statistical reasons presented in the introduction and examined in more detail below, it is advisable to analyse inflows and outflows at the same time, because there are important connections between them.

As Figure 4 shows, two advanced ‘tax havens’,<sup>12</sup> the Netherlands and Luxembourg, as countries of origin, are – cumulatively – the most important net investors in Portugal during the crisis, accounting for more than half the total. Spain comes third with 15 per cent and these three countries represent 70 per cent of the net total invested in 2008–2013. If we look at FDI inflows (Table 1) by investing country in each year of the period, we note that the Netherlands, Luxembourg and Spain occupy a leading position in most years. Some new investors, such as Angola, Brazil and China, are not significantly represented in Figure 4 (accumulated net inflows), but according to Table 1, in some years they were among the leading investors (China only in 2013). In any case, it is apparent in Figure 5 as well as in Table 1 that a high concentration of these flows comes from western Europe, particularly EU member states (for example, the United States appears only once as leading investor, taking sixth place in 2011). A similar global feature of FDI inflow distribution was obtained for a previous period (Silva 2006: 503–504).

As regards net FDI outflows, Figure 5 and Table 1 show the results for the period in terms of symmetrical indicators. Again, the Netherlands is by far the main partner by net accumulated outflows, and Germany is second, but outside the euro area Poland (third) and the United States (sixth) are important countries. Moreover, in Table 1, despite the fact that

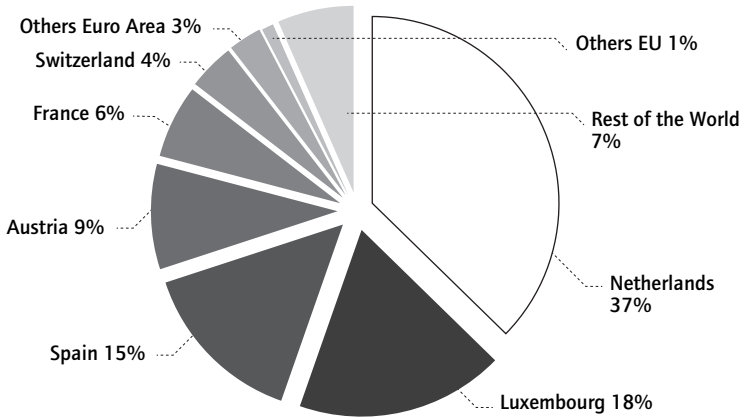
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11. It is, however, important to note that every year since 2010 Portuguese public debt has increased in relation to GDP. Representing 93.3 per cent in 2010 (the Troika’s evaluation), the ratio reached more than 130 per cent in 2014, according to the figures released in March 2015. Nevertheless, the pace of the increase has been smaller since 2012.

12. We borrow the expression from Dunning and Lundan (2008: 12).

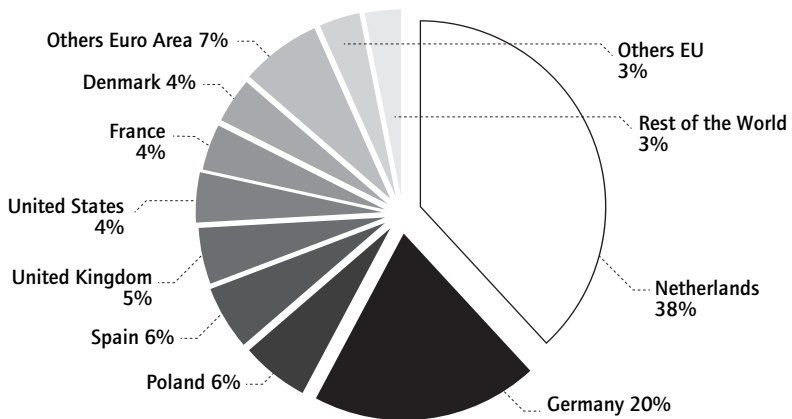
the Netherlands occupies pole position four times, the scenario is somewhat more diversified than for net inflows. For example, in the six years displayed in the table, Angola, Brazil and Mozambique appear several times in the leading group of countries of destination, although, according to Figure 5, their place in the accumulated net flows seems to be negligible in 2008–2013.

Figure 4 Net inward FDI by country, 2008–2013 (accumulated flows)



Source: Banco de Portugal

Figure 5 Net outward FDI by country, 2008–2013 (accumulated flows)



Source: Banco de Portugal



Table 1 FDI net inflows and outflows, by country

FDI net inflows – Ranking by country						
	2008	2009	2010	2011	2012	2013
1 <sup>st</sup>	United Kingdom	Netherlands	Luxembourg	Netherlands	Luxembourg	Belgium
2 <sup>nd</sup>	Canada	France	Netherlands	Spain	Austria	Spain
3 <sup>rd</sup>	Luxembourg	Spain	Brazil	Switzerland	Spain	France
4 <sup>th</sup>	Spain	Luxembourg	Italy	France	Netherlands	United Kingdom
5 <sup>th</sup>	Sweden	Brazil	Austria	Germany	Angola	Switzerland
6 <sup>th</sup>	Malta	Ireland	Malta	USA	Cyprus	Brazil
7 <sup>th</sup>	Belgium	Angola	Cyprus	Italy	Germany	China
8 <sup>th</sup>	Netherlands	Cyprus	Angola	Cyprus	Switzerland	Angola
9 <sup>th</sup>	France	Switzerland	Hungary	Australia	Malta	Austria
10 <sup>th</sup>	Italy	Austria	Germany	Venezuela	France	Japan

FDI net outflows – Ranking by country						
	2008	2009	2010	2011	2012	2013
1 <sup>st</sup>	Netherlands	Netherlands	Luxembourg	Netherlands	Netherlands	Germany
2 <sup>nd</sup>	France	Denmark	Poland	Angola	Angola	Spain
3 <sup>rd</sup>	Brazil	Brazil	United Kingdom	Luxembourg	France	Poland
4 <sup>th</sup>	Germany	Germany	Angola	United Kingdom	Italy	Luxembourg
5 <sup>th</sup>	United Kingdom	USA	USA	Spain	Poland	United Kingdom
6 <sup>th</sup>	Poland	Ireland	Spain	Belgium	Denmark	USA
7 <sup>th</sup>	Hungary	Spain	Hungary	Ireland	USA	Denmark
8 <sup>th</sup>	Luxembourg	Romania	Italy	Poland	Hungary	Ireland
9 <sup>th</sup>	Italy	Mozambique	Mozambique	USA	United Kingdom	Italy
10 <sup>th</sup>	South Africa	Mexico	Germany	Italy	Germany	France

Source: Banco de Portugal

In light of previous data, one of the most striking features is the leading position of the Netherlands in both net inflows and net outflows. Appropriately, UNCTAD Report of 2013 (pp. 70–71) noted with precision how Portuguese outward FDI has been characterised by ‘large jumps’, with a focus on the Netherlands:

Portuguese firms' relocation of capital to the Netherlands is likely to have created this peculiar pattern of outward FDI from Portugal ... Most, if not all companies in the PSI-20, the main stock exchange index in Portugal, are thought to have a holding company in the Netherlands. As such, the Netherlands has become the largest inward investor in Portugal and the largest destination for Portuguese outward FDI in recent years.

In light of previous periods, the crisis and the bailout seem to have accelerated this process of relocation.

At this point, and in order to better understand the relevance of this bilateral relationship during this period, we must distinguish between *final investors* and *direct investors*. A final investor<sup>13</sup> is the firm through which the investment is channelled to the host country, but not necessarily the primary investor; for example, an internationalised firm may use a subsidiary in another country to invest abroad (among other reasons, because there are better conditions for financing the operation or less 'red tape' in the country where the subsidiary is established). A direct investor is the mother firm in its home country, where the effective decision about FDI is, in principle, taken (and managed). In light of this, in the Portuguese case, companies may use the Netherlands (to mention the most obvious case) to invest in a third and ultimate destination, or vice versa. Indeed, much of 'Dutch' investment in Portugal is in reality Portuguese investment returning home through a Dutch base. For example, in 2010–2011 the sale to Telefonica of the holding in Vivo of Portugal Telecom (PT), and later the acquisition of a holding in Oi by PT – both operations of a Portuguese company in Brazil that amounted to several billion euros each – were essentially made not directly but through the final investor (Simões and Cartaxo 2012).<sup>14</sup> It should be recalled that one of the most passionate public debates in recent years concerned the relocation of the holding of Jerónimo Martins (Pingo Doce), a major distribution group that has important investments abroad, from Portugal to the Netherlands. Under current conditions, internationalised firms have no other choice, if local conditions to outward investment are not favourable and they want to remain competitive: they have to migrate. Globalisation and the free circulation of capital facilitate this, particularly within the EU, with its different national frameworks.

13. The term 'indirect' is also used for 'final' (see Kalotay 2012).

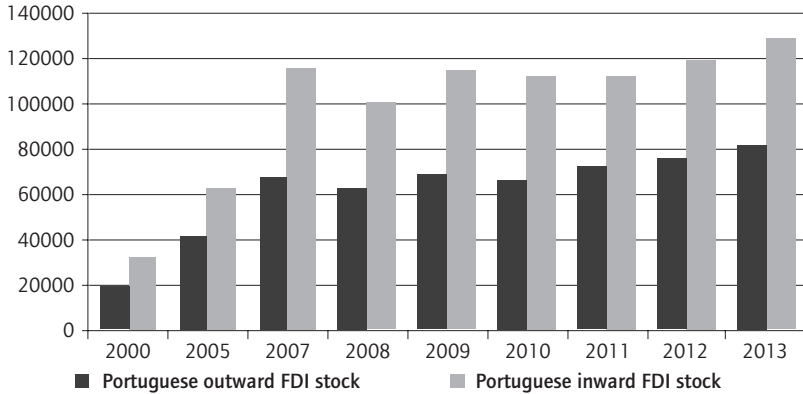
14. Although, indirectly and imprecisely, the large size of these outflows movements are clearly visible in Figure 3 for 2010 and 2011.

Concluding this point, we must now turn our attention to Annex 3. This shows our calculations of the *permanency rate*, a measure that relates both annual flows, inward and outward, by their weight in GDP through their movements in terms of the balance of payments – that is, credit, debit and net value – particularly in the period 1996–2013. In the case of Portuguese inward FDI, we have the inflow investment (credit) and disinvestment (debit), and the net value that results from credit *less* debit. For Portuguese outward FDI, we have the debit (investment abroad), the credit (disinvestment, that is, Portuguese outward FDI that returns home), and the net value, in this case, is represented by debit *less* credit. Credit and debit thus have different signs (+ and –) because we are dealing with inflows and outflows (this does not apply to the balance of payments, but we are more concerned with the economic sense of these moves). This measure aims to know whether these flows show a trend in terms of country of destination (Portugal for inward flows and the countries where Portugal invests for outflows). As can be observed in Annex 3 (at the bottom), in the 1980s the permanency rate was very high, meaning that most of the flows remained in the country of destination. However, the permanency rate clearly decreased over the different periods that we have considered and the period 2008–2013 shows the lowest permanency rate of all. Of course, faced with these data it is not easy to draw conclusions because we don't know whether 'bad' investment is being substituted by 'good' investment, or inversely, but underlying them there is a great and increasing instability of FDI flows towards and from Portugal. This is an issue that deserves more in-depth study and is linked – among other dimensions – to the dynamic specialisation of the country through its economic structure and its possible changes.

### 3.3 Stocks of FDI

It is also necessary to look briefly at the evolution of inward and outward FDI stocks. Figure 6, based on UNCTAD data, enables us to make a few observations on the subject. In light of what we have seen so far, it is not surprising that inward Portuguese FDI stock is substantially greater than outward stock, and their evolution relatively synchronised over the years 2000–2007 and 2008–2013. However, looking at Figure 6 the pace of evolution during both periods is perhaps the most important aspect. Indeed, in the early 2000s the two stocks considerably increased while, by contrast, in 2008–2013 their stagnation and slow movement are clear.

Figure 6 Portuguese outward and inward FDI stock (USD million)



Source: UNCTAD

### 3.4 Breakdown of FDI flows by sector of economic activity and form

We shall present our main findings by comparison of the periods 2000–2007 and 2008–2013; although the two periods do not have the same length, they allow us to take into account trends before and after the crisis. Annexes 4 to 7 will help us in this endeavour (where there were significant negative changes in some items, we used tables instead of figures). First, we refer to the main empirical trends of the sectoral and formal dimensions of FDI and then address some qualitative issues.

As regards the distribution of net FDI inflows by sector of activity (Annex 4), in both periods financial and insurance activities are the most important item; their share increased during the crisis (from 39.1 per cent to 65 per cent). By contrast, the second item of 2000–2007, consulting, scientific and technical activities lost ground, plummeting from 30.9 per cent to only 3.9 per cent. The residual ‘others’ remained important, at 17.9 per cent (previously 20.2 per cent). Not surprisingly, during the crisis and bailout, in view of the above, manufacturing, real estate and utilities increased their shares in total net accumulated inflows, although in a modest way by value (for details, see Annex 4). Furthermore, foreign disinvestment in the item ‘retail and wholesale trade’ was boosted considerably between both periods, which is not surprising after two decades of strongly increasing consumption.

Turning our attention to the net FDI outflows from Portugal by sector of activity, first, it is important to note that their accumulated value was greatly reduced between the two periods (see Annex 5). As far as distribution is concerned, it is clear that, like net inflows, the item 'financial and insurance activities' always occupies first place, but its weight increased substantially in 2008–2013 (84.4 per cent as against 48.9 per cent in 2000–2007). In general, this pattern, for both outflows and inflows, was also confirmed by authors that analysed other periods (Simões and Cartaxo 2011, 2012; Silva 2006). According to Annex 5, the item 'consulting, scientific and technical activities', second by net value within Portuguese FDI outflows in 2000–2007 (22.4 per cent of the total), lost almost completely ground in 2008–2013 (with only 0.6 per cent of the total), and 'manufacturing' occupies second place in the latter period (22.6 per cent), although its absolute accumulated value is not much different from that of 2000–2007. Most of the other items have secondary importance in this context, but it must be stressed that outflows in construction were dominated by disinvestment in 2008–2013.

Analysis of the form of FDI also provides relevant information about the changes that occurred in the period of the crisis and bailout. Examining the data on net inward flows by form (Annex 6), equity is by far the most important item in both 2000–2007 and 2008–2013 (63.3 per cent and 54 per cent, respectively), but the increase in the share of reinvested profits is remarkable (from 14.4 per cent to 36.2 per cent). By contrast, the item 'credits and lending' changed its sign, from positive to negative. Finally, 'real estate' remained approximately at the same level (15.1 per cent and 13.7 per cent, respectively). Continuing our analysis of FDI forms, now from the perspective of Portuguese net outflows (Annex 7), it is quite clear that reinvested profits dethroned equity as the main item, going from 5 per cent in 2000–2007 to 72 per cent in 2008–2013 (and inversely for equity, from 75 per cent to 0 per cent). The share of credits and loans increased slightly (16 per cent and 19 per cent), and the other items are residual or marginal as forms of FDI in the 2000s.<sup>15</sup>

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15. As mentioned earlier, regarding outward FDI, Portugal is still in an initial phase, and according to a publication by AICEP (2012) its most dominant type of firm is commercial subsidiaries: 'It is estimated that more than 60% of foreign affiliates with Portuguese capital correspond to affiliates exclusively with commercial purposes, which involve less risks and are less costly in terms of investment, allowing however the acquisition of the much desired international experience' (p. 6).

### 3.5 Brief overview of the leading foreign affiliates in 2013

Also, we should complement our analysis with other data, for example, on the main foreign subsidiaries in Portugal by sales in 2013; Annex 8 shows the twenty companies in this group. Curiously, no Dutch company is found in this set of foreign-owned firms. Spain leads with four subsidiaries (two related to REPSOL, a retailer and a steel mill). Three countries each have three companies in the group. Let us start with Germany, which is well represented in manufacturing (Volkswagen – Auto Europa, Continental Mabor and Bosch). According to the same Annex, France and Brazil each have three subsidiaries. However, in January 2015, two Brazilian subsidiaries (PT Comunicações and MEO) were sold to a French company (Altice); the process of this sale was complex and was only completed by the end of May 2015 (according to the media, Portugal Telecom SGPS has changed its name to Pharol). Thus, if the selection of main foreign affiliates remains the same in the middle of 2015, France would become the most represented country in the group with five companies (one more than Spain). Moreover, five other countries also had subsidiaries in the group: the United Kingdom (2), Italy (2), Emirates (1) and Switzerland (1 – Nestlé); the United States was represented only by OCP in pharmaceuticals, with modest sales, below 500 million euros.

### 3.6 Synthesis of the main trends of Portuguese FDI flows and stocks after 2008

Disregarding the statistical problems mentioned earlier, in this section we synthesise the main trends of Portuguese FDI flows and stocks (inward or outward) observed in the course of our research. Although we focus on 2008–2013, as in other parts of this chapter, in order to better understand the issues under analysis, we also make comparisons with previous periods and add some relevant facts that occurred after 2013.

- Following the historical pattern of recent decades, both flows from and to Portugal remained highly irregular and unstable in 2008–2013, which is quite evident, for example, from the permanency rate indicator.
- In the same period, as compared with the previous one at the beginning of the twenty-first century, FDI inflows to Portugal shrank significantly as a proportion of similar world flows.

- The empirical findings also show that Portugal has a peculiar pattern in its internationalisation through FDI, in which third countries, particularly the Netherlands, play a major role as a vehicle of both inward and outward flows; the available data suggest that this role has increased in the period of the crisis and bailout.
- Relative to 2000–2007, when the FDI stocks, inward and outward, increased substantially, in 2008–2013 there is a fairly clear trend towards stagnation or slow growth.
- Although it is not apparent in the official statistics, new investors such as Angola, China and even Thailand (which acquired the BES hotel network at the beginning of 2015) appeared or, like Brazil, consolidated their position (Silva 2014).
- Over the period, Portuguese-speaking countries have been an important destination of Portuguese FDI outflows, but their weight seems negligible in term of global net value. Insofar as the internationalisation of Portuguese firms is relatively recent they seem to have moved faster in this linguistic area, also disinvesting when necessary for their strategy.
- As far as sectoral patterns are concerned, financial and insurance activities absorbed the most important part of net inflows to Portugal, in both 2008–2013 and 2000–2007. This is largely due to methodological reasons that have not been addressed in this chapter (FDI is reported mainly through financial holding companies), but it must be pointed out that its share increased substantially during the crisis. On the other hand, consulting, scientific and technical activities largely ceased to attract FDI to Portugal. Manufacturing, utilities and real estate, among other minor items, increased their share in the total but their net absolute value remains low (Annex 4). During the crisis, retail and wholesale trade increased their negative contribution to the net inflows to Portugal (foreign capital strongly disinvested in the sector), showing the inversion of a trend of high consumption growth that characterised the first two decades of EU membership. Most of these trends reflect the environment of the crisis and the bailout, and the policy measures that were implemented. The same could be said of the sectoral patterns of net Portuguese FDI outflows. They decreased strongly between both periods and, as in

the previous case, financial and insurance activities are dominant in Portuguese investment abroad, and indeed have increased their share. By contrast, consulting, scientific and technical activities lost considerable ground and almost disappeared as a positive contributor to Portuguese net outflows. Also, manufacturing became a more important sector of destination during the crisis, and other items are relatively insignificant (see Annex 5).

- If we look from the perspective of the *form* of FDI (Annex 6), we observe that, as far as net inflows are concerned, equity remained most important in both periods, although more recently its share has diminished. By contrast, the share of reinvested profits rose substantially during the crisis. Real estate operations are an important form with a similar percentage in both periods, and other items are negligible or negative (such as credit and lending). Regarding the forms of Portuguese FDI net outflows (Annex 7), the most salient fact is the strong increase in the share of reinvested profits to the detriment of equity. Credits and loans and real estate operations also increased their share, but only slightly. To conclude our consideration of the form of FDI, the new role of *reinvested profits* during the period, either for inflows or outflows, must be highlighted. It came to the fore because the crisis discouraged new investments and firms preferred, when possible, to expand existing businesses through resources generated by their own activity.
  
- From the policy point of view, FDI flows fundamentally revealed short-term concerns, in particular the increase in public revenues (through a large programme of privatisation, in large part characterised by foreign acquisitions, that produced two-thirds more than the targeted revenue required by the Memorandum), but also the granting of ‘golden visas’ to non-EU residents who invested in real estate. Clearly, this kind of measure prevailed over a structural approach, that is, a response to fundamental problems seriously affecting the Portuguese economy, such as the lack of competitiveness and the need to substantially improve productivity. For example, there was nothing comparable to the investment of Embraer (a Brazilian aircraft producer) during the second half of the 2000s, when, after acquiring OGMA in 2005 (presently with about 1,600 employees), it expanded to Évora, creating around 500 direct jobs in this high-technology industry in its new plants (Cechella et al. 2014).



- If we consider the availability of financial resources and its new role as a driver in the world economy, it is natural that China's weight has increased in Portuguese FDI inflows. Moreover, in recent years Portugal became the fourth destination of Chinese FDI outflows in the European Union (just after the United Kingdom, Germany and France), and the member state with the largest amount of Chinese FDI per capita (Le Monde 2015). However, the entry of Chinese state-owned firms on a large scale is now an issue of worldwide concern (Globerman 2015; Sauvant 2013), and countries such as Canada have imposed restrictions (Van Harten 2014).<sup>16</sup> Specifically, in the case of Portugal it is not clear whether we are facing a traditional problem from the past – that is, an emerging power in search of areas of influence through vulnerable countries<sup>17</sup> – or economic involvement in the Portuguese economy that will improve its efficiency and performance. For example, the Memorandum recommended elimination of the substantial economic rents that exist in the virtually monopolised energy sector; the Chinese investor that has taken a dominant position in the privatised EDP, however, has have done everything it can to retain such privileges. It may not be a good idea to discriminate against Chinese or other capital with similar characteristics, but monitoring of the process will be important and, at the very least, it would be wise for Portugal to balance such influences.<sup>18</sup>
  
- Not only because of privatisation but also later, after the collapse of Grupo Espírito Santo in summer 2014 and the sale of its parts (a process still largely ongoing in the first half of 2015) and the entry of new investors, the position of foreign subsidiaries in Portugal has

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16. On this subject, see also several chapters of Sauvant and Reimer (2012).

17. This policy may lead to relatively more generous offers in the case of privatisations (for details, see Silva and Galito 2014). On China's loan policy towards other countries, see *The Economist* (2015).

18. According to the *Financial Times* (2 June 2015), the coming sale of Novo Banco, the most profitable remnant of GES (see Note 8), will probably come under Chinese ownership. The *Financial Times* commented on the fight between two Chinese groups for the acquisition of financial services in Europe, as followings: 'The main battleground is in Portugal, where China has become the biggest source of foreign direct investment. By the end of June, Fosun International and Anbang Insurance are expected to submit the highest final bids for Novo Banco, the country's third-biggest bank by assets. A €4bn-plus acquisition of Novo Banco would represent more than 2 per cent of country's gross domestic product' (ibid.: 19). The consideration that the two Chinese groups were in a better position to win this battle was, however, denied by part of the Portuguese media (see *Diário Económico*, June 2).

undergone fairly significant changes in the period through a number of major deals, such as the sale of major Brazilian subsidiaries in the telecommunications sector to a French company in 2015.

These are the main conclusions stemming from our empirical study of Portuguese FDI, particularly of the changes that occurred during the period of the crisis and bailout.

#### **4. Conclusion**

The worsening of Portugal's economic fundamentals in the first decade of the twenty-first century, aggravated by the outbreak of the international crisis in 2008 and by the deep sovereign crisis that followed, which also affected other euro-zone countries, particularly on the EU periphery, led to a bailout by the Troika in May 2011. The underlying agreement was framed by a Memorandum, which lasted three years up to June 2014, although some conditionals and monitoring of the process remained. Without neglecting the historical background and the environment from which this situation emerged, this chapter focused on the Portuguese economy's relationship with FDI during 2008–2013. We analysed the main dimensions of FDI, flows and stocks, inward or outward, and we referred to other relevant aspects, such as the role of particular countries, sectors, firms and cases. However, due mainly to statistical reasons, our analysis has important limitations and requires further in-depth research work.

Portugal has never had strong links with FDI, but the period 2008–2013, in particular after 2011, stands out. For example, the attraction of FDI was driven mainly by short-term concerns such as the *privatisation program* (to mitigate the problems generated by the public deficit and debt) and other *expediency measures*, such as the fast-track granting of 'golden visas' to non-EU residents who invest in the real estate sector. Whatever the measures, and probably due to austerity and uncertainty about the final outcome of the bailout, FDI inflows have not been significant by international standards and *indeed have diminished*. As far as FDI outflows are concerned, Portuguese firms intensified their relocation to other countries, particularly to the Netherlands, where conditions for conducting operations abroad are much more favourable, making Portugal even more passive and marginalised from this point of view.

Therefore, during this period the evidence shows that a strategic approach continues to be lacking in all the processes involving Portuguese FDI, no matter what the dimension studied. In fact, there were major short-term problems and the link with FDI could contribute to their solution, but what is effectively missing for a small country such as Portugal is an approach to FDI linked to the necessary structural transformation of its economy towards increased international competitiveness and improved productivity, both based on advanced factors (such as technology and the use of higher qualified workers). Clearly, it was not this path that was followed, and short-term objectives, relatively easy to implement given the circumstances, largely prevailed over any other policy consideration.

## References

- AICEP (2012) Internacionalizar: aspectos a acautelar num processo de IDPE (Investimento Directo Português no Estrangeiro), Lisboa, AICEP Portugal Global.
- Amaral J.F. (2006) Evolução do comércio externo português de exportação (1995-2004), GEE Papers 1, Lisboa, Gabinete de Estratégia e Estudos, Ministério da Economia e da Inovação.
- Andrade J.S. and Duarte A. (2011) The fundamentals of Portuguese crisis, *Panoeconomicus*, 58 (2), 195-218.
- Buckley P. and Artisien P. (1987) Policy issues of intra-EC direct investment: British, French and German multinationals in Greece, Portugal and Spain, with special reference to employment effects, *Journal of Common Market Studies*, 26 ( 2), 207-230.
- Cechella C., Franco G.H.B., Silva J.R. and Dentinho T.P. (2014) New dimensions of Brazilian economy internationalization: Portugal as a strategic location for EMBRAER's investments and their impact on the regional economy, *Revista Portuguesa de Estudos Regionais*, 35, 3-13.
- Cravinho J. (2015) As ilusões da ortodoxia oficial: competitividade e modelo de crescimento, Público, 22 February 2015.
- da Fonseca M.J.M., Silva J.R. and Menezes A.M.F. (2011) Internationalization under strains: the case of Portugal Telecom in Brazil from the perspective of its investments, financial performance and returns, Paper presented to 7<sup>th</sup> Iberian International Business Conference: Iberian Firms in a New World, ISEG, Lisbon, 7-8 October 2011.
- Dunning J.H. and Lundan S.M. (2008) *Multinational enterprises and the global economy*, 2<sup>nd</sup> ed., Cheltenham, Edward Elgar.
- Financial Times (2014) Investing in Portugal, FT Special Report, 5 December 2014.
- Economist (2015) Yuan for all, 31 January 2015.
- GEPE (2001) A internacionalização das empresas portuguesas: uma perspectiva genérica, *Semanário Económico*, Lisboa, Gabinete de Estudos e Prospectiva Económica, Ministério da Economia.
- Globerman S. (2015) Host governments should not treat state-owned enterprises differently than other foreign investors, *Columbia FDI Perspectives* 138, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.
- Kalotay K. (2012) Does it matter who invests in your country?, *Columbia FDI Perspectives* 66, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.

- Le Monde (2015) L'Europe, cible privilégiée de la Chine, *Éco&Entreprise*, 17 February 2015.
- Margolis D. (2006) Should employment authorities worry about mergers and acquisitions?, *Portuguese Economic Journal*, 5 (2), 167-194.
- OECD (2014) *Relatórios económicos da OCDE Portugal: outubro de 2014 - sumário*, Paris, Organisation for Economic Co-operation and Development.
- Portuguese Government (2011) *Memorando de entendimento sobre as condicionalidades de Política Económica*, 17 May 2011.
- Público (2014) *Privatizações*, 16 November 2014.
- Sauvant K.P. (2013) Three challenges for China's outward FDI policy, *Columbia FDI Perspectives* 106, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.
- Sauvant K.P. and Reimer J. (eds.) (2012) *FDI perspectives: issues in international investment*, 2<sup>nd</sup> ed., New York, Vale Columbia Center on Sustainable International Investment, Columbia University.
- Silva J.R. (1990) Luso- American economic relations and the Portuguese membership of the European Community, in Calvet de Magalhães J., de Vasconcelos A. and Silva J.R. (eds.) *Portugal: an Atlantic paradox*, Lisbon, Institute for Strategic and International Studies, 77-139.
- Silva J.R. (2000) The Portuguese economy in the light of Irish experience: a comparison of the 1990 decade, in *Issues on the European economics: recent developments*, Proceedings of the 3<sup>rd</sup> Conference on European Economics, 10-11 December 1999, CEDIN/ISEG, Lisbon, 221-242.
- Silva J.R. (2005) A internacionalização das empresas portuguesas: a experiência brasileira, *Revista de Administração de Empresas*, 45 (Edição especial Minas Gerais), 102-115.
- Silva J.R. (2006) O investimento directo estrangeiro na economia portuguesa, in Romão A. (ed.) *A economia portuguesa : 20 anos após a adesão*, Coimbra, Almedina, 491-518.
- Silva J.R. (2008) Internationalization strategies in Iberoamerica: the case of Portuguese trade, *Project Document*, Santiago do Chile, United Nations.
- Silva J.R. (2012) Crise em Portugal e na Europa: o momento para repensar os caminhos da teoria e das políticas económicas, in Silva J.R. (ed.) *Portugal, a Europa e a crise económica e financeira internacional - Homenagem ao Professor António Romão*, Coimbra, Almedina, 159-180.
- Silva J.R. (2013) A integração mundial da pequena economia e o caso português, in Lopes J.C., Santos J., Aubyn M.S. and Santos S. (eds.) *Estudos de homenagem a João Ferreira do Amaral*, Coimbra, Almedina, 623-659.
- Silva J.R. (2014) As relações económicas luso-brasileiras desde a década de noventa: uma visão estratégica, *Nação e Defesa*, 138, 90-116.

- Silva J.R. (2015) After Greece, what's next for Portugal?, *Europe's World*, 26 March 2015. <http://europesworld.org/2015/03/26/greece-whats-next-portugal/#.VRQnEfmG98E>
- Silva J.R. and Galito M.S. (2014) China's approach to economic diplomacy and human rights, *International Journal of Diplomacy and Economy*, 2 (1/2), 23-41.
- Silva J.R. and Simões C.C. (2012) Portuguese exports and FDI: observations from the firms' perspective, *China-USA Business Review*, 11 (6), 820-835.
- Simões V.C. and Cartaxo R.M. (2011) Inward FDI in Portugal and its policy context, 2011, *Columbia FDI Profiles*, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.
- Simões V.C. and Cartaxo R.M. (2012) Outward FDI from Portugal and its policy context, 2012, *Columbia FDI Profiles*, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.
- UNCTAD (1998) *World investment report 1998 - Trends and determinants*, Geneva, United Nations Conference on Trade and Development.
- UNCTAD (2013) *World investment report 2013 - Global value chains: investment and trade for development*, Geneva, United Nations Conference on Trade and Development.
- Van Harten G. (2014) Canada's non-reciprocal BIT with China: would the US or Europe do the same?, *Columbia FDI Perspectives* 136, New York, Vale Columbia Center on Sustainable International Investment, Columbia University.

All links were checked on 06 August 2015.

## Annex 1 Geographical distribution of inward FDI flows (credit) to Portugal, 2000-2013 ('000 euros)

	2000	2001	2002	2003	2004	2005
<b>World</b>	26,594,587	27,866,318	21,707,163	32,224,368	27,111,220	27,676,638
<b>Developed economies</b>						
<b>Europe</b>						
Switzerland	314,868	361,038	524,851	169,617	291,890	497,010
European Union	22,119,378	22,703,447	19,555,018	23,398,877	22,648,862	25,483,838
Netherlands	4,238,444	3,755,079	3,210,839	4,500,254	3,648,950	3,653,255
France	2,845,489	3,006,460	4,100,143	3,715,277	3,097,021	3,911,338
Germany	5,442,419	4,760,001	2,769,182	2,858,073	3,416,703	4,637,718
Spain	4,691,908	1,981,686	1,824,523	3,569,770	4,456,393	4,027,728
United Kingdom	2,679,198	5,887,739	3,148,734	432,5257	4,126,375	3,490,411
<b>North America</b>						
Canada	67,884	60,854	13,275	6,340,283	360,466	150,890
United States	306,474	898,947	833,106	1,182,472	1,044,201	657,626
<b>Other developed economies</b>						
Australia	885	3	1,472	541	2,531	125
Japan	9,828	6,126	20,725	27,830	8,882	1,6753
<b>Developing economies</b>						
<b>Africa</b>						
Angola	1219	2,208	1,630	8,017	4,163	6,255
Mozambique	303	525	345	91	21	16
<b>Asia and Oceania</b>						
China		980	1,463	148	313	217
<b>Latin America and the Caribbean</b>						
Brazil	144,452	265,803	397,193	25,4345	2,4251	6,9120

Source: Banco de Portugal

**Annex 1 Geographical distribution of inward FDI flows (credit) to Portugal, 2000-2013 ('000 euros) (Continued)**

2006	2007	2008	2009	2010	2011	2012	2013
32,820,132	32,633,798	35,287,296	32,017,747	39,622,139	43,086,515	47,655,795	30,109,086
786,029	890,486	1,930,344	1,359,805	1,907,359	2,891,360	2,017,689	896,323
28,340,862	29,673,119	31,688,900	29,431,677	35,116,015	38,908,316	44,416,264	28,061,172
4,776,306	4,661,349	5,735,588	5,673,153	4,939,744	10,520,899	5,510,482	2,396,847
4,298,888	3,386,862	4,488,639	5,619,569	6,656,995	6,559,670	7,122,438	5,441,027
5,177,659	6,444,626	5,331,580	4,185,226	6,395,247	3,878,876	2,940,227	3,448,794
4,196,491	5,400,448	5,507,296	4,153,064	5,704,977	8,474,910	8,843,375	6,713,787
4,606,239	5,258,820	5,577,662	6,575,282	4,305,304	5,072,066	4,366,869	4,736,958
1,742,887	741,719	601,616	1,103	17,257	149,540	14,319	12,538
869,070	794,410	481,818	27,1731	499,797	522,405	400,860	95,071
28,414	17,0771	58,642	63,644	651	19,709	2,567	4,396
32,900	19,490	30,125	21,727	12,091	-12,698	684	49,299
17,672	15,184	49,820	116,030	32,842	-102,782	226,531	83,117
1,895	175	23	1,564	1,527	786	410	1,114
1	2,226	1,650	-1,049	625	538	442	157,762
92,256	11,4340	81,075	328,415	1,834,042	29,988	175,590	169,939



## Annex 2 Geographical distribution of outward FDI flows (debit) from Portugal, 2000-2013 ('000 euros)

	2000	2001	2002	2003	2004	2005
<b>World</b>	14,002,093	13,384,156	11,611,646	10,093,213	11,951,799	9,780,692
<b>Developed economies</b>						
<b>Europe</b>						
Switzerland	11,127	18,734	24,965	20,053	28,865	22,906
European Union	7,641,682	10,310,581	9,362,111	5,273,517	9,552,551	6,613,129
Netherlands	3,651,150	3,206,275	5,937,644	1,128,562	2,589,893	2,524,273
France	55,108	108,396	34,574	55,795	496,633	142,294
Germany	125,866	15,254	11,109	16,920	124,377	52,290
Spain	2,548,331	4,210,923	2,766,640	950,543	2,691,155	1,733,161
United Kingdom	469,835	379,206	96,701	78,919	275,318	141,616
<b>North America</b>						
Canada	1,546	4,297	8,230	1,563	1,357	279,331
United States	202,405	84,128	204,771	66,496	308,946	195,599
<b>Other developed economies</b>						
Australia	655	536	807	535	1,256	618
Japan	100			12		2,537
<b>Developing economies</b>						
<b>Africa</b>						
Angola	121,897	56,757	50,341	40,075	103,090	263,647
Mozambique	98,486	69,404	37,561	26,035	22,718	33,053
<b>Asia and Oceania</b>						
China	2,006	440	292	56	1,695	2,228
<b>Latin America and the Caribbean</b>						
Brazil	3,842,643	2,279,264	1,091,302	194,119	509,768	350,985

Source: Banco de Portugal

## Annex 2 Geographical distribution of outward FDI flows (debit) from Portugal, 2000-2013 ('000 euros) (Continued)

2006	2007	2008	2009	2010	2011	2012	2013
9,828,043	14,835,430	11,376,143	7,770,221	9,789,794	19,559,679	15,965,770	14,047,534
25,254	51,848	55,564	32,861	39,508	29,697	16,243	16,640
6,312,121	10,202,943	8,380,422	5,500,098	5,739,503	16,769,254	13,170,476	13,070,484
3,685,728	5,739,502	3,662,763	2,419,187	2,055,939	13,286,134	11,025,286	8,867,785
74,413	101,672	347,831	70,997	89,197	105,537	270,265	92,037
113,194	111,526	219,730	368,732	87,262	35,280	85,008	2,254,692
1,083,552	1,940,456	2,231,925	1,257,462	773,176	1,729,475	710,057	1,183,644
252,820	586,488	504,888	63,755	259,035	247,456	173,295	149,677
21,096	1,088	2,089	40,141	6,416	14,276	10,368	4,069
229,033	372,185	138,916	296,559	153,194	110,291	147,901	73,434
4,362	8,410	2,796	4,524	5,964	3,658	5,272	4,920
578	733	289	49	146	-1,116	-365	77
273,720	451,124	775,127	693,765	669,472	909,505	892,131	129,634
40,591	113,243	83,445	161,805	79,928	135,123	153,061	93,308
3,078	3,629	1,377	-2,945	-3,923	3,562	-5,046	2,347
426,596	665,733	539,194	518,356	1,681,061	554,422	552,975	361,854

## Annex 3 FDI flows as a percentage of Portuguese GDP

	Portuguese Inward FDI				Portuguese Outward FDI				(A) – (B)
	Credit (1)	Debit (2)	Net (A) (1)-(2)	Permanency Rate %	Credit (1)	Debit (2)	Net (B) (2)-(1)	Permanency Rate %	
1996	4.9	3.8	1.1	22.3	0.4	1.0	0.6	58.6	0.5
1997	7.8	5.8	2.0	25.9	0.4	2.2	1.8	81.4	0.2
1998	9.9	7.5	2.4	24.4	5.2	8.5	3.2	38.3	-0.8
1999	11.4	10.5	0.9	8.0	6.0	8.5	2.5	29.4	-1.6
2000	20.7	15.1	5.6	27.1	4.0	10.9	6.9	63.0	-1.3
2001	20.5	15.4	5.1	25.0	4.7	9.9	5.2	52.3	0.0
2002	15.2	13.9	1.3	8.8	8.3	8.1	-0.1	-1.4	1.5
2003	22.0	17.7	4.3	19.7	2.9	6.9	4.0	57.8	0.3
2004	17.8	16.8	1.0	5.7	3.9	7.8	3.9	50.2	-2.9
2005	17.4	15.5	2.0	11.4	5.1	6.2	1.1	17.4	0.9
2006	19.7	14.5	5.2	26.5	2.5	5.9	3.4	57.9	1.8
2007	18.6	17.3	1.3	6.9	6.2	8.5	2.3	27.1	-1.0
2008	19.7	17.9	1.8	9.0	5.3	6.4	1.0	16.5	0.7
2009	18.2	17.1	1.1	6.1	4.1	4.4	0.3	7.6	0.8
2010	22.0	20.9	1.1	5.0	8.6	5.4	-3.1	-57.8	4.3
2011	24.5	19.9	4.6	18.6	5.0	11.1	6.1	54.8	-1.5
2012	28.1	24.0	4.1	14.7	9.1	9.4	0.3	2.8	3.9
2013	17.6	16.2	1.4	7.8	7.6	8.2	0.6	7.6	0.7
1980–1989	1.3	0.1	1.2	91.3	0.1	0.1	0.0	72.1	1.2
1990–1995	3.9	1.6	2.2	57.1	0.1	0.6	-0.5	80.9	2.7
1996–1999	8.5	6.9	1.6	20.2	3.0	5.1	2.0	51.9	-0.4
2000–2007	19.0	15.8	3.2	16.4	4.7	8.0	3.3	40.5	-0.1
2008–2013	21.7	19.3	2.3	10.2	6.6	7.5	0.9	5.3	1.5

Source: Banco de Portugal

## Annex 4 Portugal: Net FDI inflows, by sector of economic activity, 2000–2007 and 2008–2013 ('000 euros)

Net FDI inflows by sector of activity	2000	2001	2002	2003	2004	2005	2006	2007	Total
<b>Total</b>	<b>7,201,971</b>	<b>6,962,762</b>	<b>1,911,756</b>	<b>6,333,851</b>	<b>1,558,085</b>	<b>3,159,842</b>	<b>8,695,404</b>	<b>2,237,608</b>	<b>38,061,279</b>
Financial and insurance activities	5,421,674	2,235,615	961,110	-2,224,803	188,665	2,048,582	4,931,322	1,623,207	15,185,372
Manufacturing	134,256	-356,604	-117,875	290,999	838,287	-226,742	278,169	10,417	850,907
Consulting, scientific and technical activities	238,018	282,011	-35,510	6,398,346	2,391,275	156,339	1,965,030	327,563	11,723,072
Real estate	85,039	135,629	-270,337	174,703	34,948	384,131	54,040	194,927	793,080
Construction	-15,097	81,435	59,269	61,168	34,412	38,501	-154,230	11,121	216,579
Information and communication	419,049	200,639	92,866	569,368	-159,966	95,648	-400,642	-75,988	740,974
Utilities	-51,617	82,271	67,828	10,930	136,650	11,445	354,925	387,497	999,929
Retail and wholesale trade	545,688	3,679,414	191,220	596,969	-2,970,466	-419,560	-52,881	-1,691,222	-120,838
Others	424,961	622,352	963,185	456,171	1,064,280	1,071,498	1,719,671	1,350,086	7,672,204
Net inflows FDI by activity	2008	2009	2010	2011	2012	2013	Total		
<b>Total</b>	<b>3,184,585</b>	<b>1,948,169</b>	<b>1,997,708</b>	<b>8,020,544</b>	<b>7,000,742</b>	<b>2,345,354</b>	<b>24,497,102</b>		
Financial and insurance activities	1,513,050	2,314,523	1,626,555	4,588,520	4,699,066	1,343,487	16,085,201		
Manufacturing	402,775	-1,076,616	696,226	760,653	-64,431	773,776	1,492,383		
Consulting, scientific and technical activities	933,567	-48,897	259,051	270,615	-862,190	411,719	963,865		
Real estate	372,883	261,273	263,517	-34,760	72,015	216,940	1,151,868		
Construction	-10,671	71,809	34,146	104,220	109,626	126,000	435,130		
Information and communication	296,476	-35,405	139,574	227,399	168,536	24,805	821,385		
Utilities	119,976	179,549	-954,738	-14,030	2,526,668	-461,861	1,395,564		
Retail and wholesale trade	-1,265,252	-395,176	-721,063	2,398,066	-193,453	-2,063,672	-2,240,550		
Others	821,781	677,109	654,440	-280,139	544,905	1,974,160	4,392,256		

Source: Banco de Portugal

Annex 5 Portugal: Net FDI outflows, by sector of economic activity, 2000–2007 and 2008–2013 ('000 euros)

Net outflows FDI by sector of activity	2000	2001	2002	2003	2004	2005	2006	2007	Total
<b>Total</b>	<b>8,826,556</b>	<b>6,997,303</b>	<b>-158,372</b>	<b>5,833,053</b>	<b>6,002,339</b>	<b>1,697,490</b>	<b>5,691,176</b>	<b>4,013,338</b>	<b>38,902,883</b>
Financial and insurance activities	5,894,916	2,733,060	2,521,851	-640,995	1,459,321	189,336	3,249,780	3,635,270	19,042,539
Consulting, scientific and technical activities	2,175,126	813,844	348,605	-102,656	4,201,091	30,252	1,446,966	-180,302	8,732,926
Others	203,217	-60,471	-4,320	6,353,840	199,201	91,364	269,884	150,522	7,203,237
Manufacturing	389,166	117,234	25,812	228,009	-59,655	600,351	104,584	180,709	1,586,210
Wholesale and retail trade	77,113	3,208,861	-3,086,708	42,185	130,707	696,202	219,350	117,637	1,405,347
Utilities	1,240	3,340	11,660	2,206	-53,281	134,980	224,508	267,417	592,070
Construction	58,310	147,612	-7,024	-63,951	107,672	-7,253	183,482	-237,969	180,879
Real Estate	13,786	12,184	17,886	10,042	21,694	15,527	-31,220	61,567	121,466
Information and communication	13,682	21,639	13,866	4,373	-4,411	-53,269	23,842	18,487	38,209
<b>Net outflows FDI by sector of activity</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total</b>		
<b>Total</b>	<b>1,871,549</b>	<b>587,723</b>	<b>-5,657,691</b>	<b>10,722,102</b>	<b>450,530</b>	<b>1,074,581</b>	<b>9,048,794</b>		
Financial and insurance activities	888,113	743,541	-6,184,207	10,470,788	149,942	1,566,606	7,634,783		
Manufacturing	265,419	437,292	624,367	332,028	521,678	-133,932	2,046,852		
Wholesale and retail trade	261,997	325,319	-194,510	599,502	-339,400	25,246	678,154		
Utilities	47,334	-53,423	-20,221	177,856	-36,440	97,175	212,281		
Others	153,919	6,536	205,672	-757,810	502,697	81,756	192,770		
Real estate	89,753	-8,871	23,634	21,822	2,168	-17,296	111,210		
Consulting, scientific and technical activities	472,183	-754,992	139,224	-2,201	101,577	96,158	51,949		
Information and communication	24,042	14,668	35,982	-8,606	-747	-33,921	31,418		
Construction	-331,211	-122,347	-287,632	-111,277	-450,945	-607,211	-1,910,623		

Source: Banco de Portugal

Annex 6 Portugal: Net inward flows, by form: 2000-2007 and 2008-2013 ('000 euros)

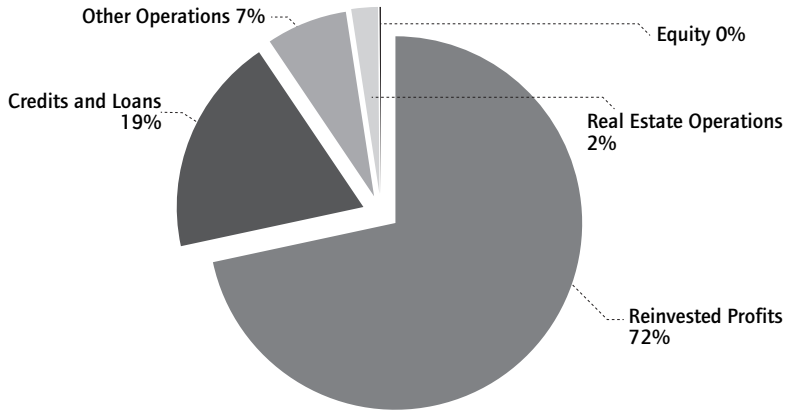
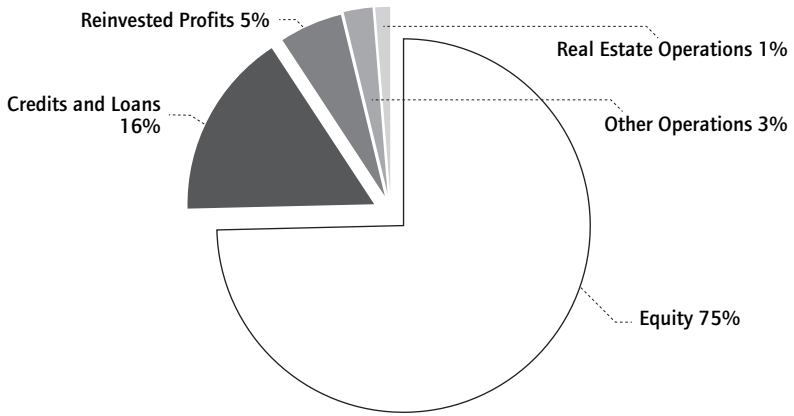
	2000	2001	2002	2003	2004	2005	2006	2007	Total
<b>Total Net FDI</b>	<b>7,201,971</b>	<b>6,962,762</b>	<b>1,911,756</b>	<b>6,333,851</b>	<b>1,558,085</b>	<b>3,159,842</b>	<b>8,695,404</b>	<b>2,237,608</b>	<b>38,061,279</b>
Equity	5,807,862	1,295,173	1,526,609	5,912,724	3,674,960	1,207,129	4,412,974	245,345	24,082,776
Real estate operations	250,297	323,990	481,337	600,244	707,499	917,321	1,130,693	1,353,402	5,764,783
Reinvested profits	692,816	726,463	-556,571	400,340	504,056	666,916	2,221,529	840,088	5,495,637
Credits and lending	437,918	4,584,096	454,871	-599,705	-3,336,218	361,352	922,799	-204,683	2,620,430
Other operations	13,078	33,040	5,511	20,248	7,788	7,122	7,410	3,457	97,654

	2008	2009	2010	2011	2012	2013	Total
<b>Total Net FDI</b>	<b>3,184,585</b>	<b>1,948,169</b>	<b>1,997,708</b>	<b>8,020,544</b>	<b>7,000,742</b>	<b>2,345,354</b>	<b>24,497,102</b>
Equity	1,171,276	86,413	333,860	4,617,904	6,524,562	505,740	13,239,755
Reinvested profits	906,781	1,121,167	2,715,500	1,439,898	1,024,042	1,648,837	8,856,225
Real estate operations	874,466	543,691	409,560	438,165	421,024	667,802	3,354,708
Other operations	35,188	27,882	2,889	15,130	-4,916	-1,167	75,006
Credits and lending	196,872	169,017	-1,464,102	1,509,446	-963,972	-475,858	-1,028,597

Source: Banco de Portugal

**Annex 7 Portugal: Net FDI outflows, by form, 2000–2007 and 2008–2013**



Source: Banco de Portugal

## Annex 8 Portugal: main foreign affiliates in the country, ranked by sales, 2013 ('000 euros)

Rank	Company	Industry	Country of origin	Sales
1	REPSOL PORTUGUESA	Oil and gas	Spain	2,085,604,769
2	PT COMUNICAÇÕES	Telecommunications	Brazil*	1,708,228,286
3	SAIPEM (PORTUGAL)	Services	Italy	1,609,158,385
4	VOLKSWAGEN AUTOEUROPA	Automotive industry	Germany	1,606,039,683
5	BP PORTUGAL	Oil and gas	United Kingdom	1,489,925,070
6	AUCHAN PORTUGAL	Retail	France	1,404,983,164
7	CEPSA	Oil and gas	Emirates	1,304,487,294
8	WELLAX FOOD LOGISTICS	Wholesale	Brazil	1,273,702,634
9	MEO	Telecommunications	Brazil*	1,054,564,457
10	VODAFONE PORTUGAL	Telecommunications	United Kingdom	1,051,859,779
11	ENDESA ENERGIA	Utilities	Italy	800,577,832
12	CONTINENTAL MABOR	Chemicals	Germany	794,328,034
13	DIA PORTUGAL	Retail	Spain	776,612,589
14	ITMP ALIMENTAR	Retail	France	741,325,339
15	REPSOL POLÍMEROS	Chemicals	Spain	637,885,959
16	PEUGEOT CITRÖEN AUTOMÓVEIS	Automotive industry	France	503,922,579
17	OCP-PORTUGAL	Pharmaceutical	United States	488,425,869
18	SN SEIXAL - SIDERURGIA NACIONAL	Metal transformation	Spain	468,894,489
19	BOSCH CAR MULTIMÉDIA PORTUGAL	Electrical machinery	Germany	446,454,694
20	NESTLÉ - PORTUGAL	Agro industry	Switzerland	442,323,324

Note: \* Participation sold by Brazilian Oi to Altice (a French company) in January 2015.

Source: Based on "500 maiores e melhores empresas", Exame, November 2014





# Foreign direct investment and the development of the automotive industry in central and eastern Europe

Petr Pavlínek

## 1. Introduction

In an increasingly globalized economy, foreign direct investment (FDI) by transnational corporations (TNCs) is considered a major force in the economic development of less developed economies, including the economies of central and eastern Europe (CEE) (e.g. Jindra et al. 2009).<sup>1</sup> In the early 1990s, it was argued that a successful ‘transition’ to capitalism in CEE would depend on large FDI inflows for triggering the necessary industrial restructuring, modernization and successful economic development (e.g. Fischer and Gelb 1991; Dunning 1993; EBRD 1993). Consequently, CEE countries were urged to open up their economies to global capital (Gowan 1995). The automotive industry was at the forefront of this FDI-driven development strategy in which foreign TNCs took over the CEE automotive industry through heavy capital investment, restructuring it and incorporating it into European and global production networks in the 1990s and 2000s (Pavlínek 2002a; Pavlínek 2002c; Pavlínek et al. 2009). The goal of this chapter is to analyze FDI in the CEE automotive industry, examining trends and patterns since the 1990s with a focus on the 2000s and especially the period after the 2008-2009 economic crisis.

The automotive industry has experienced major reorganization on a global scale since the early 1990s and now represents one of the most globalized industries (Dicken 2011). This reorganization involved the rapid expansion of core-based vehicle assembly firms and their principal suppliers into less developed countries, made possible by the liberalization of trade and FDI policies (Sturgeon et al. 2008; Sturgeon and Lester 2004; Humphrey and Memedovic 2003; Humphrey 2000). This expansion was driven by the

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1. In this paper, central and eastern Europe (CEE) denotes the region composed of former state socialist countries located in Europe outside the former Soviet Union, which have automobile assembly plants (Czechia, Hungary, Poland, Romania, Serbia, Slovakia and Slovenia).

efforts of automotive lead firms to increase sales and production in rapidly growing, less developed countries. It took several distinct forms (Humphrey et al. 2000). Brazil, China, India and, more recently, Russia are examples of countries that have attracted major inflows of FDI in the automotive industry mainly because of their large market potential. India, China, and Russia are examples of 'protected autonomous markets' in which governments eased restrictions on FDI while continuing to protect the national market and domestic producers. Brazil and Thailand are examples of 'emerging regional markets' typified by the combination of trade liberalization and regional integration (Humphrey and Oeter 2000). These countries tend to see automotive FDI as a way of developing (e.g. China and India) or modernizing (e.g. Russia) their domestic automotive industry. In addition to market penetration, TNCs expanded their production in less developed economies in order to increase their competitiveness in more developed markets by shifting production to peripheral areas located close to the affluent markets of North America and Western Europe. Mexico, Spain and CEE are the best examples of such 'integrated peripheral markets' that have been integrated through FDI into the traditional core areas of automotive manufacturing in North America and Western Europe (Humphrey and Oeter 2000; Layan 2000).

This chapter focuses on CEE as an example of an integrated peripheral market. It argues that the 2008-2009 global economic crisis coincided with the end of the period of rapid expansion of the CEE automotive industry related to the opening up of CEE to foreign trade and FDI in the 1990s and the European Union (EU) membership in the 2000s. Although the FDI-driven development of the CEE automotive industry is continuing in the aftermath of the economic crisis, it is no longer predominantly based on building new greenfield factories but increasingly on consolidating the existing spatial structure of the automotive industry in the form of expanding profitable investments through reinvestment. This consolidation phase is typified by continuing process and product upgrading and by the much more selective and uneven functional upgrading of the CEE automotive industry (Pavlínek et al. 2009; Pavlínek and Ženka 2011). Although this upgrading is crucial for maintaining the competitiveness of the CEE automotive industry, it is unlikely to alter its peripheral position in the European automotive industry division of labor, which will continue to be largely based on low labor costs compared to the Western European automotive industry core. The pressure to control rising wages in the CEE automotive industry is likely to intensify through inter-plant competition, the intensification of

the work process in the form of process upgrading and also through the selective devaluation of national currencies. This chapter also argues that large inflows of FDI led to the restructuring and rapid development of the automotive industry in CEE countries at the expense of excessive foreign domination and control and possibly limiting the industry's potential for future economic development and for closing the gap between CEE and Western European economies.

I start with a discussion of the position of CEE in the global and European division of labor in the automotive industry. This is followed by an overview of FDI trends in the CEE automotive industry, including an evaluation of automotive FDI trends in individual CEE countries. Next, I consider the future prospects of automotive FDI and its long-term developmental effects in CEE. Finally, I summarize the main points in the conclusion.

## **2. The global and European context of developments in the CEE automotive industry**

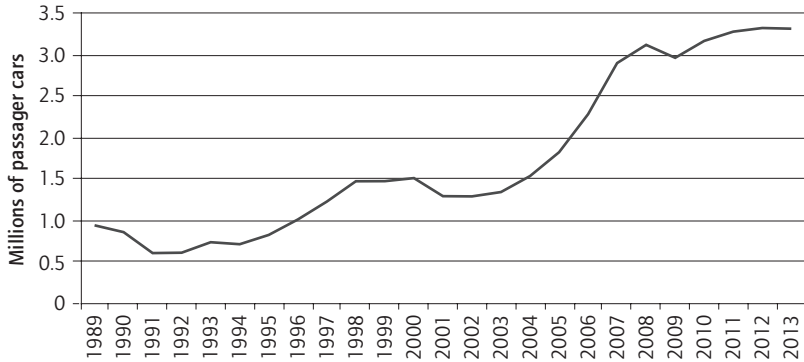
The much delayed acquisition and rescue of Serbia's struggling automaker Zastava by the Italian Fiat company in January 2010 marked the final step in the takeover of the CEE passenger car (henceforth car) industry by core-based automotive TNCs and its integration into the European automotive production system. The CEE automotive industry has been profoundly transformed since the end of state socialism (e.g. Pavlínek 2002a; Pavlínek 2002c; Havas 2000; Pavlínek et al. 2009). In the late 1980s, the inefficient and obsolete CEE automobile producers were struggling to meet their domestic demand and produce competitive vehicles that would sell in the lowest and cheapest market segments in Western Europe (e.g. Nestorovic 1991). Twenty-five years later, the foreign-controlled export-oriented automotive industry of the CEE countries is playing an increasingly important role in their domestic economies when measured in terms of employment, production and value added. It also plays a growing role in the European automotive industry as a whole. Overall production of cars more than tripled in CEE between 1989 and 2013, from 945,000 to 3.3 million units (Figure 1). By 2013, CEE countries accounted for 19.1% of total European car output, compared with just 5.0% in 1990 and 3.9% in 1991 (OICA 2014).<sup>2</sup> The

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2. Together with Russia and Ukraine, CEE accounted for 30.4% of the total 2013 European production of cars (OICA 2014, national statistical offices of the respective CEE countries).

automotive supplier industry grew even faster than vehicle assembly because, in addition to supplying new assembly plants in CEE, many supplier branch plants were established in CEE to supply West European assembly operations (e.g. Pavlínek 2003).

Figure 1 Car production in central and eastern Europe, 1989-2013



Source: Based on the data from national statistical offices (1989-2006), OICA (2014)

The post-1990 CEE automotive industry transformation needs to be understood in the broader context of developments in the global automotive industry in the past three decades. The global automotive industry, one of the most globalized industries (Dicken 2011), has undergone major changes in the organization of production and, consequently, in the geography of production (Sturgeon et al. 2008; Sturgeon and Van Biesebroeck 2009; Lung 2004; Bailey et al. 2010). In particular, the concentration and consolidation of the automotive industry went hand in hand with its internationalization and a change in the methods of producing automobiles. Automakers vigorously pursued the so-called platform strategy to maintain large economies of scale, the traditional source of price competitiveness, while achieving economies of scope through the production of greater numbers of different models built on the same platform (e.g. Lung 2004). Automotive lead firms also consolidated their supplier base by introducing modular production and reducing the number of direct suppliers (e.g. Humphrey and Salerno 2000; Sturgeon et al. 2008). The most important module suppliers were forced to establish production facilities wherever the automakers they supply assemble automobiles (the so-called follow supply or global supply) (Humphrey 2000; Humphrey and Memedovic 2003). To achieve this increased international presence, large suppliers engaged in a wave

of mergers and acquisitions leading to the emergence of an elite group of 'global suppliers'. These were not only required to follow the automakers to foreign countries, but also had to increase their research and development (R&D) capabilities in order to participate in the development of modules, components and production technologies (co-design) with lead firms (Sturgeon and Lester 2004; Humphrey 2000; Humphrey and Memedovic 2003).

For the most part of the 20<sup>th</sup> century, automotive production networks were organized predominantly at national scale (Dicken 2011). In the last three decades, however, automotive lead firms have increasingly organized their production networks on a macro-regional scale, encompassing for instance the whole EU or NAFTA (North American Free Trade Agreement) area (Bordenave and Lung 1996; Freyssenet and Lung 2000; Lung 2004; Sturgeon et al. 2008; Sturgeon and Van Biesebroeck 2009; Hudson and Schamp 1995). Cut-throat competition in the automotive industry is forcing lead firms to continuously design new strategies to keep their car production costs as low as possible. Various production and organizational strategies have been employed to achieve this goal, such as the use of lean production (Womack et al. 1990), a platform strategy (Lung 2004), modular production (Frigant and Talbot 2005; Frigant and Layan 2009) and the development of export-oriented production in low-cost countries to supply the markets of developed countries (Humphrey and Oeter 2000).

Export-oriented low-cost production plants have been established in peripheral areas located close to developed countries' markets such as Mexico (Humphrey and Oeter 2000; Sturgeon et al. 2010), Spain (Layan 2000) and CEE (Pavlínek 2002c). Additionally, compared to the saturated markets of developed countries with their predominantly replacement demand, demand from first-time buyers has been growing rapidly in such 'emerging' economies as China, India and Brazil (Liu and Yeung 2008; Liu and Dicken 2006; Humphrey 2003). This new demand, projected to continue growing strongly in the near future, reflects rapid economic growth and rising per capita incomes in these countries, combined with a rapidly growing population (with the exception of China).<sup>3</sup> The enormous market potential combined with political pressure

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3. The population of less developed countries increased from 4.7 billion in 1997 to almost 6.0 billion in 2014. During the same period, the population of more developed countries grew from 1.1 billion to 1.25 billion (PRB 2014; PRB 1997).

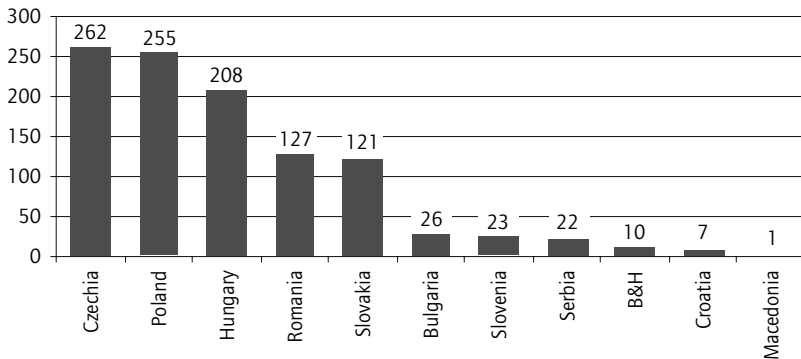
to produce automobiles locally prompted large, mostly core-based, lead firms to establish assembly operations in these countries, in turn, contributing to extremely rapid production increases in these ‘peripheral markets’, especially in China, since the mid-1990s.

Along with Mexico, CEE is a prime example of an ‘integrated peripheral market’ (Humphrey and Oeter 2000) that has become a favorite manufacturing location for core-based automotive TNCs since the early 1990s following the period of swift liberalization of CEE economies in association with the ‘shock therapy’. The existing inefficient and obsolete state-owned domestic automakers were unable to compete in the new market-based economic environment and became easy targets for takeovers by Western TNCs strongly encouraged by CEE governments (e.g. Pavlínek 2002c; Pavlínek 2006). For core-based automotive TNCs, CEE became an attractive low-cost production region located close to the Western European market. Central Europe has attracted the largest inflows of automotive FDI in the entire CEE since 1990, with the vast majority going into car assembly and the production of related components, fuelled by the region’s proximity to the Western European market, low production costs, the prospect of early EU membership, its market potential, a skilled labor force, government investment incentives, liberal labor legislation and a relatively well developed infrastructure (Pavlínek et al. 2009). Romania followed Central Europe in the 2000s, and Serbia, whose integration was stalled by the war and economic sanctions in the 1990s, in the 2010s.

The foreign takeover of the CEE automotive industry took on several forms and came in several waves of FDI. First were acquisitions of existing vehicle plants, most of which took place in the 1990s. Examples include VW’s 1991 acquisition of the Czech Škoda and the Slovak BAZ, Fiat’s 1992 takeover of the Polish FSM, Daewoo’s 1995 acquisition of the Polish FSO and Renault’s 1999 purchase of the Romanian Dacia (e.g. Pavlínek 2002c). Second, new greenfield assembly factories were established by core-based lead firms, starting with Suzuki in Hungary in 1990 and GM in Poland in 1995, with the majority being built in the 2000s, including TPCA (the joint venture of Toyota, Peugeot and Citroën) and Hyundai in Czechia; Kia and PSA Peugeot Citroën in Slovakia; and Mercedes in Hungary (e.g. Pavlínek 2015). Third, key foreign suppliers followed foreign lead firms to CEE, setting up their manufacturing operations in countries where lead firms had established vehicle assembly operations in order to supply the most important components. Spatial

proximity plays an important role in modular production and the just-in-time delivery of pre-assembled modules and crucial components (Frigant and Lung 2002; Larsson 2002; Pavlínek and Janák 2007). Fourth, foreign component suppliers were attracted by low-cost production in CEE and invested heavily in both takeovers of domestic companies and in greenfield production sites (e.g. Pavlínek 2002b). Between 1997 and 2009, foreign suppliers built 1,062 new plants in CEE (EY 2010) (Figure 2). In addition to the possibility of supplying foreign-owned assembly plants in CEE, many foreign suppliers were attracted by low labor costs and set up plants in CEE to supply assembly plants in Western Europe. Overall, based on data from the national banks of individual countries, foreign companies invested more than €30 billion in the CEE automotive industry between 1990 and 2012.

Figure 2 The number of newly built foreign automotive supplier plants by country in CEE, 1997-2009



Source: EY (2010)

As a result of large FDI inflows, the CEE automotive industry periphery has been very dynamic (e.g. Pavlínek et al. 2009; Pavlínek and Ženka 2011; Bernaciak and Šćepanović 2010; Domański et al. 2013; Sass and Szalavetz 2013). The CEE automotive industry has been restructured, modernized and expanded (e.g. Pavlínek et al. 2009; Bernaciak and Šćepanović 2010), local capabilities have been enhanced (Domański and Gwosdz 2009) and a significant, although very uneven, upgrading has taken place (Pavlínek and Ženka 2011). This rapid development of the industry has been organized and directed from abroad and core-based automotive TNCs now fully control the CEE automotive industry through direct ownership of the vast majority of both assembly plants and key



automotive suppliers. This almost total dependence on foreign capital is a sign of the weak and continuing peripheral position of CEE in the European automotive industry system despite its restructuring, modernization and upgrading. The position of CEE in the European automotive industry is in many respects similar to that of Mexico in the context of North America (Sturgeon et al. 2010).

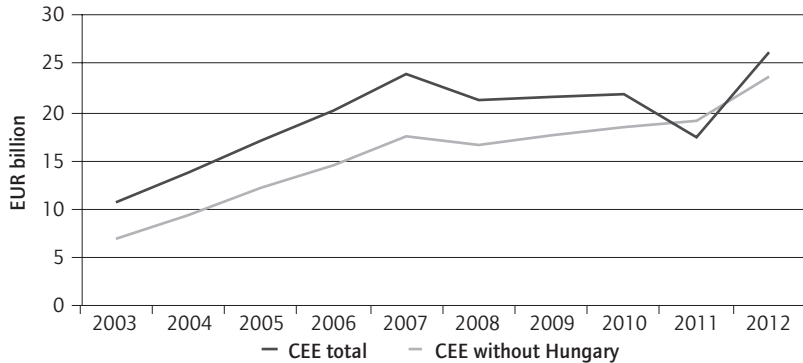
CEE has two basic roles in the European automotive industry production system (Havas 2000; Pavlínek 2002c; Pavlínek et al. 2009): first and foremost is the high-volume production of standard car models; second is the low-volume assembly of luxury models and other niche market vehicles. Additionally, the CEE automotive industry has served as a testing ground for new production methods which, if successful, are consequently introduced in core areas of the automotive industry such as Western Europe.

### **3. FDI trends in the CEE automotive industry**

Based on data from the National Banks of CEE countries, the FDI stock in the narrowly defined automotive industry (NACE 29) stood at €26.2 billion in CEE as of 2012, compared to €10.7 billion in 2003 (Figure 3). Including Fiat's investment in Serbia, the total FDI stock exceeded €27 billion. The highest stocks were in Czechia (€10.1 billion) and Poland (€8.0 billion), followed by Romania, Hungary and Slovakia at less than €3 billion each. Slovenia's stock was only €266 million (Figure 4). However, Hungary's stock decreased from €6.4 billion in 2007 to negative €1.7 billion in 2011 partially because a large Audi investment in Hungary was transferred from manufacturing to other services for statistical and accounting purposes (Antalóczy and Sass 2014). The real 2012 automotive FDI stock of Hungary was therefore at a similar level to that of Czechia and Poland. Consequently, the real FDI stock in the CEE automotive industry exceeded €30 billion in 2012 and was close to €35 billion if we include FDI in the closely related supplier industries, such as the production of tires, which are not classified within the narrowly defined automotive industry (NACE 29). Together, Czechia and Poland attracted more than twice the amount of automotive FDI as the rest of CEE according to official national statistical data. The automotive FDI stock steadily increased between 2003 and 2007. It decreased during the economic crisis, with the lowest point achieved in 2011, only to recover in 2012, suggesting that the negative effects of the economic crisis on FDI

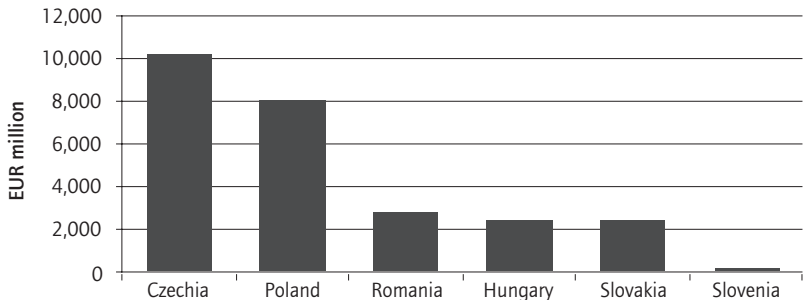
were only temporary. However, the FDI data for the entire CEE were affected by large fluctuations in the automotive FDI stock of Hungary. Without Hungary, the rest of the CEE automotive industry recorded only a slight decrease in total FDI stock in 2008, only for it to be recovered in 2009. Overall, however, FDI stock increased more slowly during the 2008-2012 period than between 2003 and 2007 (Figure 3).

Figure 3 Total automotive (NACE 29) FDI stock in CEE (Czechia, Hungary, Poland, Romania, Slovakia, Slovenia) and in CEE excluding Hungary, 2003-2012



Source: Based on data from the national banks of individual countries (2004-2014) and Eurostat (2014)

Figure 4 FDI stock in automotive industry (NACE 29), 2012

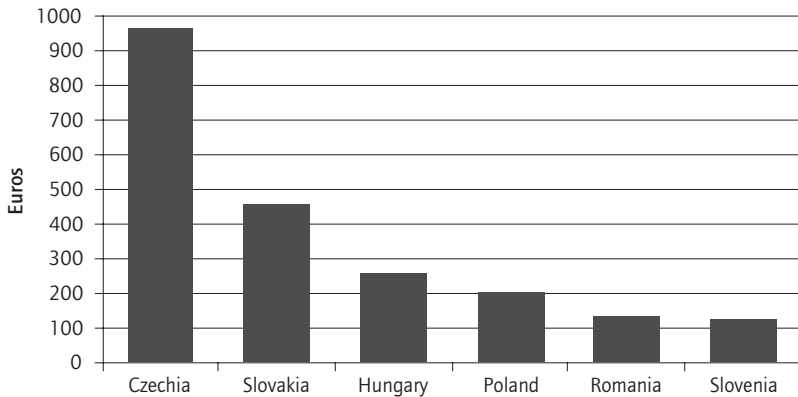


Source: Based on data from the national banks of individual countries (2013-2014) and Eurostat (2014)

Since the early 1990s, CEE countries were generally open to automotive FDI despite differences in national FDI policies (Drahokoupil 2009; Bartlett and Seleny 1998). However, since the late 1990s, CEE countries engaged in competitive bidding for flagship investments (Drahokoupil,

2008; Kolesár, 2006). Therefore, rather than attributing the leading positions of Czechia, Poland, Hungary and Slovakia to differences in their institutional environment compared to the rest of the region, it can be attributed to their relative geographical location with respect to the European automotive industry core and especially that of Germany. As of 2012, Czechia also had the highest automotive FDI stock per capita (€963), followed by Slovakia (€457) and Hungary (€254), further underlining the importance of geographic location close to the Western European automotive market for the spatial distribution of large automotive FDI in CEE (Figure 5).

Figure 5 Automotive FDI stock per capita (NACE 29) in CEE in 2012

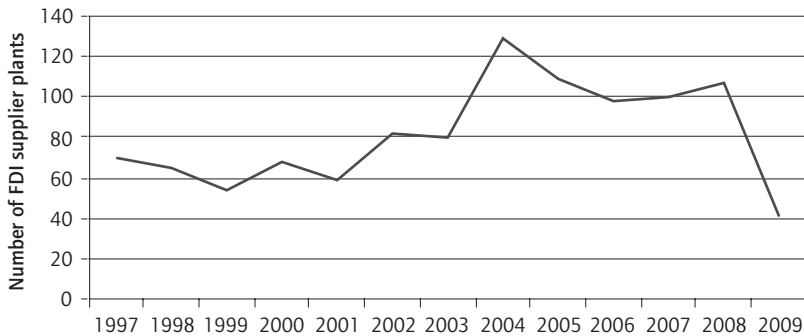


Source: Based on data from the national banks of individual countries (2013-2014) and Eurostat (2014)

FDI trends in the CEE automotive industry have largely been driven by the investment and location decisions of lead assembly firms (assemblers). These decisions triggered investment waves of their principal suppliers who followed them into CEE to meet the co-location requirements of modular production through follow sourcing (Sturgeon and Lester 2004; Frigant and Lung 2002; Pavlínek and Janák 2007). The construction of greenfield assembly plants began in the early 1990s in CEE but peaked in the 2000s before and shortly after EU accession. The establishment of new foreign-owned supplier factories peaked in 2004, though has since substantially declined, especially during the 2008-2009 economic crisis (Figure 6). After 2009, automotive investment in CEE continued at a much lower level than in the first half of the 2000s, with especially Western European investment declining well into 2013 as the number of investment projects in the automotive industry of CEE, Russia,

Ukraine and Belarus decreased by 8% compared to 2012 (EY 2014). Ernst & Young (2014: 50) talk about ‘the end of the Central and Eastern European “miracle”’. It is reasonable to assume that, at least for the time being, the period of rapid expansion of the automotive industry in CEE is over. We should not expect any new waves of greenfield assembly plant construction in CEE on the scale of the 2000s and associated investment waves in the automotive components industry in the foreseeable future. Instead, we should expect the consolidation of existing investments and, in some cases, their gradual expansion. Investment in the components industry is likely to continue at significantly lower levels than in the early 2000s and the period prior to the 2008-2009 economic crisis since automotive supplier networks are now already established in CEE.

Figure 6 The number of newly built FDI-based supplier factories in CEE, 1997-2009



Source: Based on data from EY (2010)

To illustrate these trends in a national context, I will briefly analyze FDI trends in the CEE automotive industry, looking at the total FDI stock in the automotive industry of individual CEE countries. Based on automotive FDI, we can classify CEE countries into three categories. Czechia, Poland and Hungary form the first group, typified by the highest FDI stock in the automotive industry (Figure 4). These three countries have benefited from their geographic proximity to Western Europe and especially Germany, low wages, FDI-friendly policies and industrial tradition. The second group includes Slovakia and Romania with lower automotive FDI stock than the first group, although Slovakia has the second highest FDI stock per capita in the entire CEE (Figure 5). Compared to the first group, Slovakia and Romania are latecomers that were not very successful in attracting large FDI inflows in their automo-

tive industries in the 1990s but experienced rapid FDI growth in the 2000s because of their EU membership, FDI-friendly policies and lower wages than the first group (Pavlínek 2014). Finally, Slovenia and Serbia form the third group, typified by low levels of automotive FDI compared to the first two groups. Relatively high wages compared to the rest of CEE and the country's small size explain the relatively low FDI stock and low FDI per capita in the Slovenian automotive industry. In the case of Serbia, the main reason for low levels of automotive FDI is related to its delayed economic liberalization and opening to FDI compared to the rest of CEE because of the war and economic sanctions in the 1990s. Throughout the 2000s, all CEE countries fiercely competed for new automotive FDI projects, offering large incentives, low taxes and other FDI-friendly policies (Pavlínek 2014; Drahokoupil 2009). National automotive FDI accounts illustrate that CEE continues to be attractive for automotive FDI after the 2008-2009 economic crisis, which is now mainly directed at expanding existing FDI projects. At the same time, parts of CEE, especially in Central Europe, have become less competitive in the most labor-intensive low-skill automotive assembly, such as the assembly of cable harnesses, because of rising wages, leading to the relocation of these manufacturing activities to cheaper locations such as Romania or North Africa (Pavlínek 2015). This underscores the importance of low wages for the future competitiveness of automotive manufacturing in CEE. The national level analysis also underscores the uneven nature of FDI inflows, contributing to the uneven development of the automotive industry and the uneven effects of the 2008-2009 economic crisis.

It is important to note that the following analysis has been negatively affected by the uneven quality and availability of statistical data provided by the national banks of individual CEE countries and by Eurostat, making the compilation of longer-term trends and reliable international comparisons difficult, if not impossible. The quality of FDI data from CEE national banks was cross-checked against the Eurostat FDI database and found to be compatible. In the case of Czechia, Hungary, Slovakia and Slovenia, the definition of FDI is in line with IMF recommendations (BPM5). The Polish and Romanian methodologies also observe the 10% ownership criterion for defining FDI and record FDI flows on a directional basis. Poland also observes reverse capital investments. However, as of 2007, the fully consolidated system was not applied in Poland, while Romania was waiting for its companies to apply the international financial reporting standards in order to apply the current operation performance concepts (ECB 2007).

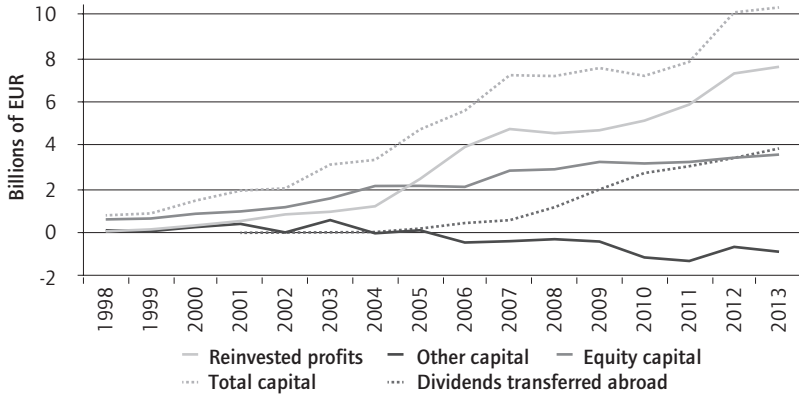
### 3.1 Czechia

At €10.2 billion, Czechia had the CEE's highest FDI stock in the narrowly defined automotive industry (NACE 29) as of 2012. The period between 1991 and 1998 was dominated by the Volkswagen (VW) investment in Škoda Auto and the related foreign takeovers of Czech automotive suppliers and new FDI greenfield projects by foreign suppliers of Škoda Auto (Pavlínek 2008; Pavlínek and Janák 2007). Automotive FDI stock increased steadily between 1998 and 2012 from €0.8 billion after the Czech government introduced a system of investment incentives in April 1998 (Pavlínek 2002b; Dražokoupil 2009) (Figure 7). The fastest increase took place between 2003 and 2007, with TPCA and Hyundai investing in new greenfield assembly plants and their principal Japanese and South Korean suppliers following suit. FDI inflows stagnated during the economic crisis. Reinvested profits have been the most important source of new FDI. At the same time, however, the outflow of profits in the form of dividends transferred abroad has been steadily increasing since 2000, peaking in the economic crisis at €813 million in 2008. Between 2000 and 2012, EUR 3.9bn were transformed abroad from the Czech automotive industry in the form of dividends paid to foreign parent companies (Figure 7) (CNB 2014). These general trends are also supported by data on new investments in the supplier sector. The post-1997 steady increase in the number of new supplier factories peaked in 2003, collapsed during the 2008-2009 economic crisis and began to recover after 2010 (Figure 8). A 2009 survey of 263 companies in the broadly defined Czech automotive industry conducted by the author suggested that more than half of the surveyed companies (149 companies or 56.7%) stopped or postponed their investment plans because of the economic crisis. Among the 98 foreign companies that answered the question, the share of companies postponing their investments because of the economic crisis was 55.1%.

The effects of the economic crisis in the Czech automotive industry were significant, with the broadly defined automotive industry shedding 10% of its workers (Pavlínek and Ženka 2010; Pavlínek 2015). These job losses affected the whole industry, hitting both foreign and domestic companies regardless of their position in the automotive value chain. Of the 15 bankruptcies, plant closures and relocations during and immediately after the economic crisis, nine involved foreign-owned component suppliers (Pavlínek, 2015). 9,187 jobs were lost, 8,037 (87.5%) of which were in these nine companies. Given a more than 90% share of foreign

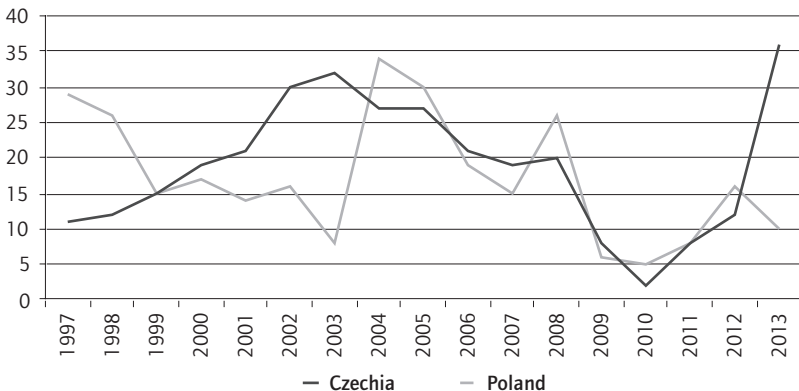
companies in Czech automotive turnover and value added (Pavlínek and Žižalová 2014), foreign companies were not affected more by job losses than domestic companies.

Figure 7 FDI stock (1998-2012) and the stock of dividends transferred abroad (2000-2012) in the Czech automotive industry (NACE 29)



Source: Based on data from CNB (2001-2014)

Figure 8 The number of newly built FDI-based supplier factories in Czechia and Poland, 1997-2013



Note: The 2010-2013 Czech data also refer to the expansions of existing investments and include domestic suppliers.

Source: Based on data from EY (2010) (1997-2009), CzechInvest (2014) (2010-2013 Czech data) and PIFIA (2013) (for 2010-2013 Polish data)

The three largest job losses were in U.S.-owned companies. The largest was caused by Delphi Packard, a manufacturer of cable harnesses, relocating from Česká Lípa to the Romanian town of Sânnicolau Mare. Delphi Packard employed 3,400 workers in Česká Lípa before the crisis in 2007 but began shedding workers in 2008. Then, in August 2010, it was decided the factory would close in May 2011. The remaining 1,400 jobs were lost. Delphi Packard now supplies cable harnesses to Škoda Auto from Romania (interview on June 13, 2011). The company attributed its decision to close the plant and relocate production to high production costs, intense competition and terminated contracts with Audi and BMW. The second largest job loss was related to the relocation of AEES Czech Platinum Equity (previously Alcoa Fujikura), also a manufacturer of cable harnesses, to Romania due to lower labor costs in 2009. The plant, which employed 2,200 workers in 2007, began to dismiss workers in 2008 because of lower demand for its cable harnesses from Škoda Auto. The factory was closed in 2009, shedding its remaining 733 workers (Eurofound 2014). The third largest job loss of 980 jobs involved the 2008 closure of a subsidiary of the US automotive sealing systems producer Henniges Automotive located in Ostrava (Pavlínek 2015).

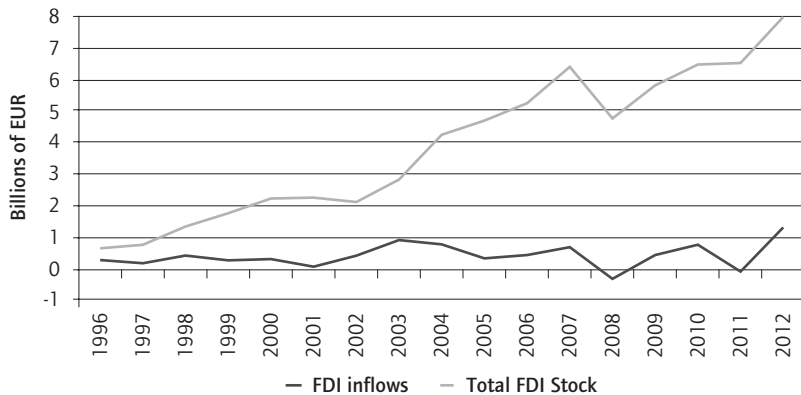
Czechia continues to benefit from its geographic proximity to Germany, significantly lower labor costs than in Western Europe, a well-developed supplier base and increasing agglomeration economies. These factors are expected to contribute to the expansion of existing factories in the form of reinvested profits and attract additional FDI in the supplier sector in the foreseeable future. The latest major expansion was announced in March 2014 when VW, following a VW-wide competition, decided that a new large Škoda SUV (the Snowman) will be produced in Czechia. Škoda Auto will invest €450 million in expanding its Kvasiny assembly plant in eastern Bohemia, creating 1,500 jobs and attracting new component suppliers. The June 2014 decision by Nexen, a South Korean tire producer, to build its €829 million tire factory in Czechia (near the town of Žatec) represents the largest greenfield investment in the Czech automotive industry after the economic crisis and the third largest foreign investment in the country since 1993. Nexen's location decision suggests that Czechia continues to be attractive for new large FDI projects by global automotive suppliers.



### 3.2 Poland

As of 2012, Poland's total FDI stock in the automotive industry stood at €8.0 billion. Similarly to Czechia, Poland has benefitted from its geographic proximity to Germany and substantially lower labor costs (Pavlínek 2006). Between 1996 and 2012, annual inflows of FDI in the automotive industry were volatile and strongly affected by business cycles and large investment projects (Figure 9). The greatest decrease in FDI inflows and FDI stock was recorded during the 2008-2009 economic crisis, with the FDI stock decreasing by more than €1.6 billion in 2008. The country recorded negative FDI inflows (minus €325 million), negative reinvested earnings (minus €213 million), a decrease in equity capital (by €68 million) and the outflow of profits (€44 million).

Figure 9 FDI inflows and FDI stock in the Polish automotive industry (NACE 29), 1996-2012



Source: Based on data from NBP (2014) and Eurostat (2014)

Given the size of its automotive sector, the number of bankruptcies, closures, and relocations was low in Poland during the economic crisis. The most important examples of bankruptcies and closures included Toora Poland, which went bankrupt in 2008 (260 jobs lost); the International Automotive Components Group (IAC), which closed down its factory in Teresin and laid off 240 workers in 2009; and Leoni, which closed its Ostrzeszów factory and dismissed 500 workers in 2010. Only two important relocations took place during the economic crisis. Takata Petri closed down its Wałbrzych factory and relocated its production to Romania in 2009 (500 jobs lost) and Remy International relocated

production from its Świdnica factory to Hungary and to its other facilities in Poland (200 jobs lost) in 2009 (Eurofound 2014).

After negative FDI inflows in 2011, the Polish automotive industry received record inflows of €1.3 billion in 2012. The number of newly built foreign components plants also is similarly volatile (Figure 8), peaking in 2004 at 34 and again in 2008 at 26. The lowest point was reached in 2009 and 2010 with six and five respectively (PIFIA 2013; EY 2010).

Total vehicle output decreased in Poland by 39% between 2008 and 2013 (from 951 thousand units to 583 thousand units), mainly due to a 43.6% decrease in the output of cars (from 842 thousand to 475 thousand units) (OICA 2014) affecting all manufacturers in Poland (Fiat, GM Opel and FSO). However, Poland has a more diversified automotive industry than its Central European neighbors. For example, compared to Czechia, Hungary, Slovakia and Romania, Poland is a major producer of commercial vehicles (108 thousand units in 2013, compared to 4,458 in Czechia, 2,400 in Hungary, zero in Slovakia and 38 in Romania). The output of commercial vehicles decreased by only 2.3% (2,582 units) between 2008 and 2012. Compared to other CEE countries, Poland also relies more on the supplier sector than on vehicle assembly. This sector accounted for 60% of its automotive industry output and 43% of its exports in 2012, and 16 of the 40 engine factories of CEE, Russia, Ukraine and Belarus are located in Poland (PIFIA 2013).

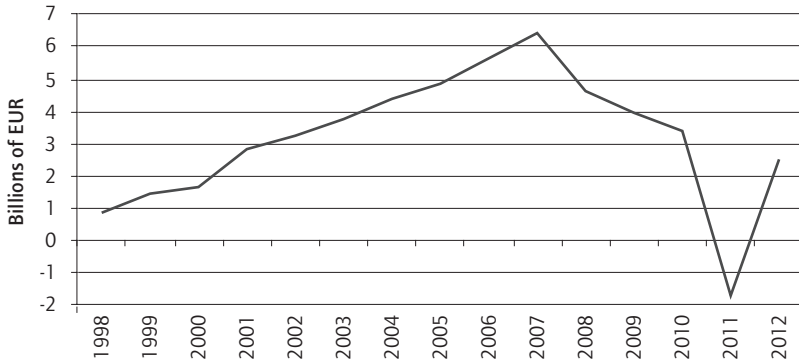
In 2014, VW chose the Polish town of Września near Poznań for its new commercial vehicle factory, which will further strengthen Poland's specialization in the assembly of commercial vehicles and attract additional component suppliers to Poland. The VW investment is worth more than €800 million. Production will start in 2016 and the planned annual production capacity of 100 thousand vehicles should be reached in 2019. KPMG (2013) has projected a 10.4% increase in the total FDI stock in the Polish automotive industry for 2014 and a 10% increase for 2015. Similarly, it has projected an annual increase in the investment flows in the automotive industry of 8.3% in 2014 and 9.6% in 2015. There are thus strong indications that the Polish automotive industry has overcome the economic crisis and is set to grow strongly in the near future based on the rebound in FDI inflows that will be attracted by the continuing competitive advantages of Poland: its geographic location next to Germany, low labor costs, skilled labor and a large domestic market.

### 3.3 Hungary

Hungary was the first CEE country to attract a foreign greenfield car assembly plant in 1990 (Suzuki) and also the last one so far (Mercedes-Benz in 2008). The country has become a favorite location for foreign automotive companies because of the presence of factors similar to those in the rest of CEE. In particular, the combination of its geographic proximity to Western Europe and low labor costs together with other factors such as investment incentives and flexible labor laws have attracted large automotive FDI. Automotive FDI stock increased rapidly before the 2008-2009 economic crisis from €866 million in 1998 to €6.4 billion in 2007. After 2007, however, FDI stock declined to minus €1.7 billion in 2011 before recovering to €2.5 billion in 2012 (Figure 10). According to data from the Central Bank of Hungary (CBH 2014), the automotive industry experienced a negative inflow of €7.8 billion in 2011 followed by an inflow of €4 billion in 2012. These unusual swings in the statistically reported automotive FDI stock and FDI inflows are difficult to interpret but they obviously have little in common with the actual situation because Hungary did not experience any such dramatic disinvestment in its automotive industry. On the contrary, over €4 billion were invested in the Hungarian automotive industry by foreign companies between 2009 and 2013 (CTCS 2014). This would suggest that the actual FDI stock in the Hungarian automotive industry is around €10 billion, i.e. at the same level as Czechia and higher than in Poland. As noted previously, about half of the dramatic decline in the FDI stock is attributable to the transfer of Audi's large FDI stock in Hungary from manufacturing to other services in the form of a Hungary-based foreign-owned holding company established by Audi in 2011 (Antalóczy and Sass 2014).

The greatest job losses attributable to the 2008-2009 economic crisis took place in 2010 (Boros 2013) as automotive industry sales decreased on average by 30-40% (Antalóczy and Sass 2011) and the output of cars fell by 39% between 2008 and 2010 (from 342,359 units in 2008 to 205,571 in 2010 (OICA 2014). For example, Dräxlnmaier laid off 450 workers in Mór, Denso cut 800 jobs in Székesfehérvár and Tyco Electronics 330 jobs in Esztergom. As in other CEE countries, Hungary has been increasingly threatened by the relocation of labor-intensive parts of the automotive value chain abroad. In 2012, for example, Remy Automotive Hungary relocated its production from Mezőkövesd to China, South Korea and Mexico (200 jobs were lost) and Car-Inside closed two

Figure 10 FDI stock in the Hungarian automotive industry (NACE 29), 1998-2012

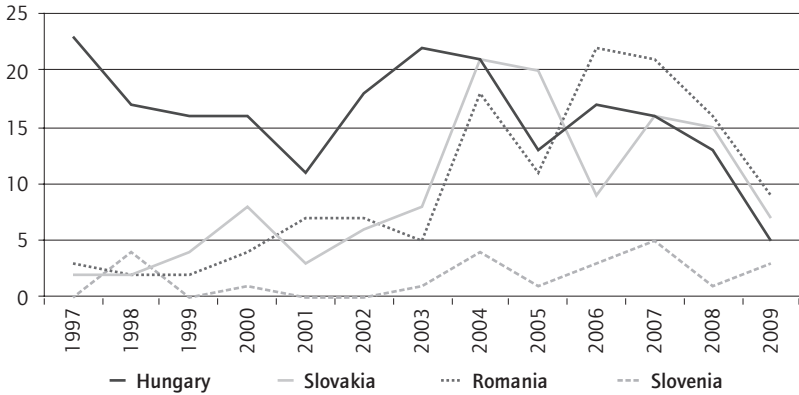


Source: Based on data from CBH (2014) and Eurostat (2014)

factories in Jánosháza and Lenti and relocated their production to Bosnia-Herzegovina, resulting in 300 layoffs (Eurofound 2014). However, the number of relocations from Hungary has so far been low in the automotive industry. Sass and Hunya (2014) identified only four relocations between 2003 and 2011, significantly less than in the case of Czechia and Slovakia (Pavlínek 2015). At the same time, there have been over 60 relocations to Hungary from abroad in the automotive industry (Sass and Hunya 2014), although the 2007-2009 economic crisis saw a sharp decline in the number of newly built supplier factories by foreign companies (Figure 11). The Michelin plant in Budapest will close in 2015 (Eurofound 2014).

Several large projects account for a high share of the large automotive FDI inflows after the 2008-2009 economic crisis. Mercedes-Benz's investment in its new assembly plant at Kecskemét (€800 million) was completed in 2012 and attracted 30-40 foreign suppliers to set up new factories supplying its production from Hungary. Examples include Johnson Controls, Brose, Knorr-Bremse, Siemens, Magna, Dürr and Kuka. Ten of these suppliers are located within the Mercedes-Benz production complex at Kecskemét. In addition to Mercedes-Benz and its suppliers, Hungary attracted additional large automotive FDI after the economic crisis, including major expansion projects by Opel, Audi and Hankook Tire. Opel invested €500 million in expanding its engine factory in Szentgotthard, completed at the end of 2012. Opel also announced an additional €130 million expansion of its plant in 2013. In 2013, Audi

Figure 11 The number of newly built FDI-based supplier factories in Hungary, Romania, Slovakia and Slovenia, 1997-2009



Source: Based on data from EY (2010)

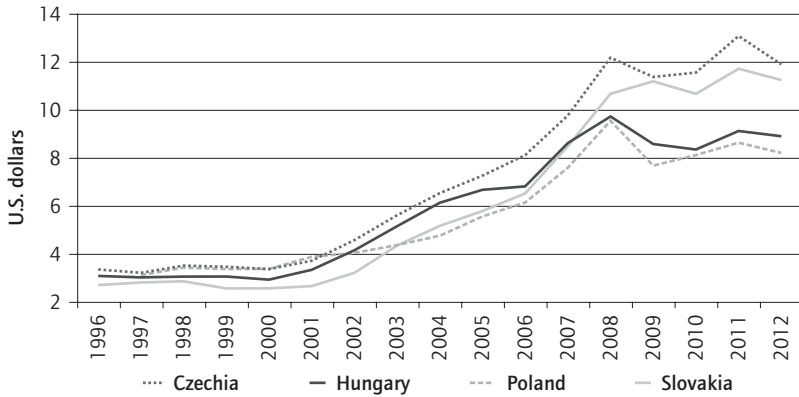
completed a €900 million expansion of its vehicle assembly plant in Győr, while Hankook Tire announced a €306 million expansion of its factory in Rácalmás in 2014.

These automotive investments suggest that Hungary has been more successful than all other CEE countries in attracting large volumes of automotive FDI after the 2008-2009 economic crisis. It is very likely that this success is related to the growing wage gap between Hungary and its major competitors, Poland, Czechia and Slovakia since 2008 (Figure 12). The Hungarian Forint was significantly devalued during the economic crisis, lowering Hungarian wages and making Hungary more attractive in the eyes of foreign investors. Compared to Poland, Hungary has a less militant labor force and better infrastructure. As with other CEE countries, Hungary has also vigorously competed for new FDI, offering attractive investment incentives. All these factors mean that Hungary will continue to be a very attractive location for automotive FDI in the foreseeable future as well.

### 3.4 Slovakia

Compared to the 1990s, Slovakia experienced a rapid increase in automotive FDI in the 2000s by attracting PSA Peugeot Citroën and Kia greenfield car assembly plants to Trnava and Žilina. Both assemblers

Figure 12 Hourly compensation costs in manufacturing (in U.S. dollars) in Czechia, Hungary, Poland and Slovakia, 1996-2012

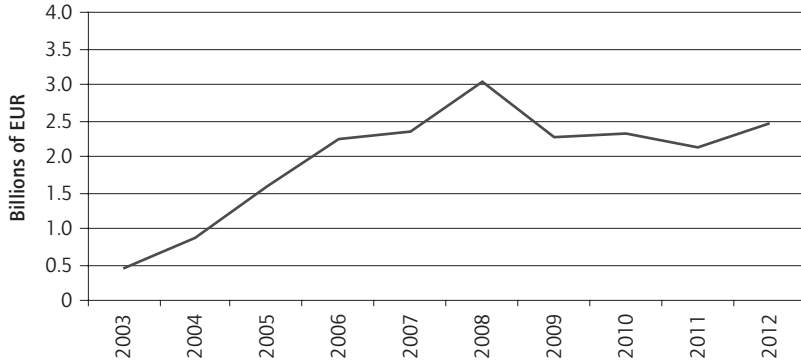


Source: Based on data from USBSL (2013)

attracted large FDI by their principal component suppliers. Additionally, VW substantially expanded its production in Slovakia after 2000, attracting a number of its most important suppliers as well (Pavlínek 2014; 2015). The number of new FDI projects in the supplier industry sharply increased in the early 2000s, peaking in 2004 and 2005 (Figure 11). Automotive FDI stock increased from €448 million in 2003 to €3 billion in 2008 before declining to €2.5 billion in 2012 (Figure 13). This rapid increase in FDI inflows in the automotive industry was the outcome of policy changes in the late 1990s and early 2000s which significantly increased the country's attractiveness in the eyes of foreign TNCs. For example, the Slovak government introduced a new system of generous investment incentives and lowered corporate taxes from 43% to 29%. It introduced a flat 19% income, corporate and value-added tax and a flexible labor code in 2003 (Fisher et al. 2007; Bohle and Greskovits 2006; Duman and Kureková 2012; Pavlínek 2014). As a result of large FDI inflows, car production increased from 3,453 units in 1990 to 180,706 units in 2000, 556,941 units in 2010 and 975,000 in 2013 (OICA 2014; ZAP 2000). Consequently, Slovakia now has the largest per capita vehicle production in the entire world and is the second largest producer of cars in CEE after Czechia.

The 2008-2009 economic crisis led to a 19.2% decrease in the output of cars and decreasing output in the entire supplier industry. FDI inflows slowed and the FDI stock declined. There were 13 bankruptcies, plant

Figure 13 FDI stock in the Slovak automotive industry (NACE 29), 2003–2012



Source: Based on data from NBS (2013) and Eurostat (2014)

closures and relocations abroad in the Slovak automotive industry during and immediately after the economic crisis. Nine of these involved the labor-intensive assembly of cable harnesses, an area especially sensitive to labor costs. For example, Delphi eliminated 1,900 jobs in Senica between 2006 and 2010 and relocated the assembly of cable harnesses to Romania, Tunisia and Turkey between 2007 and 2011 (interview on June 13, 2011, Pavlínek 2015). In the wake of the economic crisis, Delphi created only 250 new jobs in Senica between 2012 and 2014 (Eurofound 2014). The second largest job loss in Slovakia was associated with the closure of Yazaki Slovakia in Prievidza in western Slovakia in 2010. At the time of its closure, the Japanese assembler of cable harnesses employed 1,211 workers. Molex Slovakia closed its factory and eliminated 1,000 jobs at Kechnec in eastern Slovakia in 2010, transferring cable harness production to its Chinese subsidiary. Similarly, the bankruptcy of Jas Elmont, a Slovak producer of cable harnesses located in Snina in eastern Slovakia, resulted in 1,000 layoffs.

By 2011 the total output of the automotive industry had recovered to pre-crisis levels, with large production increases being recorded in 2012 and 2013 due to a major expansion of production at VW Slovakia and due to PSA and Kia each reaching full production capacity of 300,000 vehicles per year. In 2009, VW Slovakia won the VW concern-wide competition to assemble the smallest VW car (the VW Up!, Škoda Citigo and Seat Mii), launched in 2011. VW invested €308m to increase the production capacity of VW Slovakia to 400,000 units, adding 1,500 jobs and doubling its output (419,888 cars in 2012 compared to 210,441 in 2011

and 104,300 in 2009) (VW, 2013). A new €600m welding plant was built in 2013 and VW Slovakia announced an additional €500m investment in its Bratislava plant in January 2015 aimed at expanding the welding plant to produce bodies for the Bentley Bentayga SUV. This will increase VW's total 1991-2016 investment in Slovakia to €2.5bn. However, based on the analysis of business announcements of new investments and the expansion of production in the Slovak automotive industry, FDI in the supplier industry did not pick up significantly until 2013, with the lowest point reached in 2012.<sup>4</sup> In 2014, three new greenfield factories were announced by component suppliers while there were only two between 2010 and 2013 (Eurofound 2014). The vast majority of new FDI is now flowing into the expansion of production, rather than the greenfield factories characteristic of the early- and mid-2000s.

As with other CEE countries, Slovakia will continue to benefit from its geographic proximity to Germany and the rest of the Western European automotive industry core, backed by its low wages and the aggressive investment promotion policy of the Slovak government. Compared to Czechia, Hungary and Poland, Slovakia has a distinct advantage in using the Euro, thereby eliminating currency exchange risks, something highly valued by foreign investors (2011-2013 interviews). However, as the Czech, Hungarian and Polish currencies devalued during and after the economic crisis, relative labor costs increased in Slovakia since it did not benefit from devaluation. While Slovakia had the lowest labor costs in Central Europe in the late 1990s and early 2000s, by 2012 its wages surpassed those of Hungary and Poland and were only slightly lower than those of Czechia. Following the devaluation of the Czech crown at the end of 2013, Slovak wages may have become the highest in Central Europe. It remains to be seen what effect this change will have on future inflows of FDI, though it is safe to conclude that Slovakia will be less competitive in attracting labor-intensive automotive production based on low labor costs than it was in the 2000s.

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4. There were seven announcements in 2008, eight in 2009, six in 2010, six in 2011, four in 2012, 12 in 2013 and eight by September 2014 (ERM 2014).



### 3.5 Romania

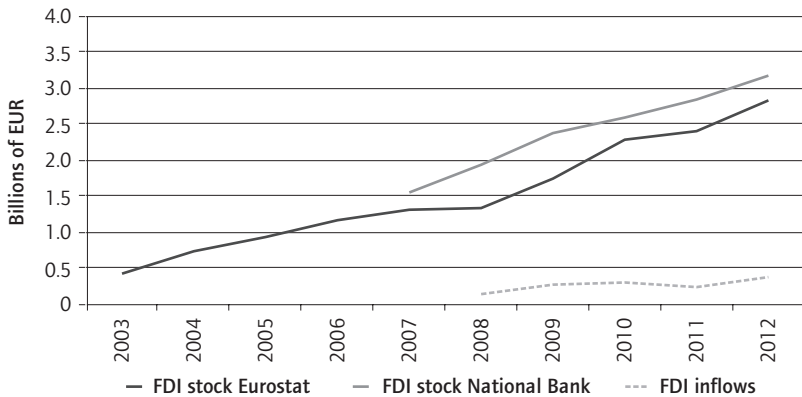
Romania's automotive FDI remained limited until the late 1990s despite selling 51% of the shares of Automobile Craiova to Daewoo (South Korea) in 1994. The purchase of Dacia by Renault in September 1999 and the subsequent development of Dacia as Renault's global low-cost brand in the 2000s transformed the Romanian automotive industry. This purchase was followed by a wave of investments by Renault's principal suppliers, peaking in 2006 and 2007 before the economic crisis (Figure 11). Examples include Auto Chassis International, Valeo, Euro APS, Johnson Controls, Autoliv, Inergy, Euralcom, Michelin and Continental. By 2014, Renault alone had invested €2.2 billion in Dacia (Gillet 2014).

As opposed to Renault, Daewoo never achieved its ambitious plans in Craiova and declared bankruptcy in 1998, leaving the Craiova factory in limbo until 2006 when it was repurchased by the Romanian government. One year later, the government sold its 72.4% stake to Ford for €57 million. Ford promised to invest €675 million (Egresi 2007) with the aim of producing 300,000 cars and 300,000 engines in the Craiova factory annually. In January 2013, Ford became the sole owner of the Craiova plant and assumed full management control. It encouraged 40 of its most important European suppliers to set up operations in Romania and about 20 of them signed contracts with Ford. However, the economic crisis slowed down Ford's progress in Craiova. Instead of mid-2009, assembly did not start until 2012 when only 30,591 B-Max minivans were produced (OICA 2014). The expansion of the product portfolio to include a small car planned for 2010 did not materialize. In 2013, Ford produced 68,000 cars and 250,000 engines in Romania. Examples of foreign suppliers which have already set up manufacturing operations in the proximity of the Craiova plant include Johnson Controls, Bamesa, Kirchoff Automotive, Leoni Wiring Systems and Gestamp Automocion.

According to Eurostat data, the automotive FDI stock in Romania increased from €416 million in 2003 to €2.8 billion in 2012 (NACE 29) (Eurostat 2014). The National Bank of Romania reports FDI data for 'transport means', which is a broader category than NACE 29, listing an increase in automotive FDI stock from €860 million in 2004 to €3.2 billion in 2012 (NBR 2013). Annual inflows ranged from €131 million in 2008 to €368 million in 2012 (Figure 14). Between 1997 and 2009, 127 new supplier plants were built in Romania. The greatest increase took place before the economic crisis in 2006 and 2007. As in other CEE

countries, there was a sharp decrease in the number of newly built supplier plants in 2008 and 2009 (Figure 11). However, Romania continues to be attractive for relocations from other countries, including Central Europe. It benefits from EU membership and low wages. The 2012 average hourly manufacturing wages were €36.98 in Germany compared to €3.78 in Romania, €9.30 in Czechia, €6.96 in Hungary, €6.42 in Poland and €8.79 in Slovakia (USBLS 2013). Between January and September 2014, 11 new automotive investments by foreign companies were announced, including five new factories and six expansions to existing plants. These new investments will create 10,500 jobs (Eurofound 2014). In 2013, ten new automotive projects were announced that would create 4,254 jobs, including eight expansions, one new factory and one administrative center. The most important is a €300 million expansion of the transmission plant in Sebes by Daimler where production is scheduled to start in 2016. In 2012, foreign investors announced 12 automotive industry projects in Romania, expected to create 8,550 new jobs (Eurofound 2014).

Figure 14 FDI stock and FDI inflows in the Romanian automotive industry (2003-2012)



Note: the Eurostat data refer to FDI in NACE 29, the data from the National Bank of Romania refer to FDI in 'transport means'.

Source: Based on data from NBR (2013) and Eurostat (2014)

Ford has been using its Craiova plant to extract concessions from workers in its other European plants by threatening to move production there. In 2014, for example, workers in Ford's Cologne plant agreed to a more flexible shift system and working hours after the company threatened to

move production of its Fiesta model to Romania (Henning 2014). Workers' concessions in Cologne amount to USD 400 million in savings over the period 2017-2021 (ANE 2014). Despite low wages, Romania itself has not been spared of relocation threats by automotive lead firms. For example, because of rapidly rising wages at Dacia following the 2008 strike, Renault has repeatedly threatened to move production to Morocco where it started assembly of Dacia cars in a new factory in 2012. The average monthly salary at the Dacia Mioveni factory in Romania was about €900 in 2014 (€950 including bonuses) compared to €285 in early 2008 before the strike. This 216% increase between 2008 and 2014 compares with a 30% increase in inflation over the same period (Rosemain and Timu 2014).

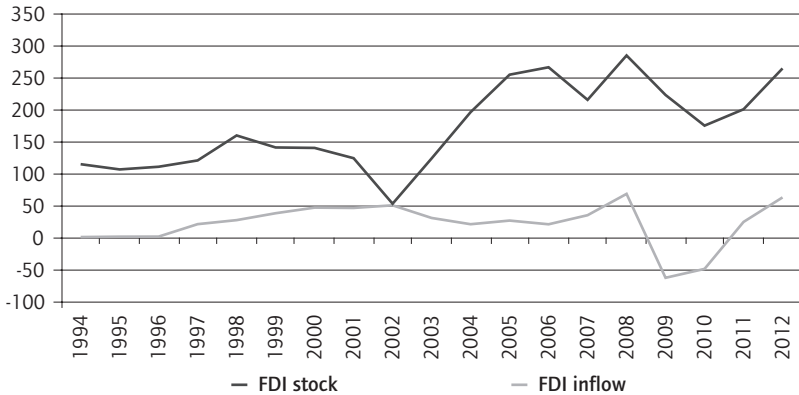
Despite production cuts and layoffs, Romania did not experience any relocations abroad, bankruptcies or closures in its automotive industry during and after the 2008-2009 economic crisis (Eurofound 2014). Instead, it benefited from relocations from other countries during this period. The prospects for further FDI in the Romanian automotive industry are very good because Romanian manufacturing wages continue to be 90% lower than in Germany and are also significantly lower than those in Central Europe. Romania will also continue to benefit from its EU membership.

### 3.6 Slovenia

At €266 million as of 2012, Slovenia had the lowest automotive FDI stock of CEE countries with car assembly plants (excluding Serbia) (Figure 15). FDI stock in the automotive industry increased rapidly in the early 2000s before the 2007-2008 economic crisis, peaking in 2008 before declining by 38% in 2009 and 2010. Recovery began in 2011 though the 2012 stock was still lower than in 2008.

Slovenia has only one car assembly plant (Revoz), located in Novo Mesto. Renault has been the majority shareholder of Revoz since 1991 and its sole owner since 2004. The assembly plant has an annual capacity of 220,000 units but has not been working at full capacity for many years. In 2013, it assembled 93,700 vehicles and was projected to produce 120,000 vehicles in 2014. Its production peaked in the aftermath of the economic crisis in 2009 (202,570 units) and 2010 (201,039 units) as sales of small cars were boosted by government scrappage schemes introduced

Figure 15 FDI stock and FDI inflows in the Slovenian automotive industry (1994-2012)



Source: Based on data from BS (2013) and Eurostat (2014)

in France and other Western European countries in 2009 (OICA 2014; Stanford 2010; Pavlínek 2015).

As in other CEE countries, Slovenia's automotive industry was hit by the 2008-2009 economic crisis, resulting in significant job losses. During and after the economic crisis, five automotive supplier plants, two of them Slovenian-owned, were closed between 2007 and 2014 with a total job loss of 1,343. Two suppliers produced car seat covers and one made leather products for the automotive industry, suggesting a vulnerability of labor-intensive production in Slovenia to closure and relocation (Eurofound 2014). For example, Siemens closed its Transportation Systems factory in Maribor in 2009, laying off all 322 workers.

As of 2014, Renault invested €450 million in the Revoz assembly plant to assemble small Renault cars, such as the Clio and most recently the third generation Twingo (STA 2014b). Renault invested €150 million in 2013 and 2014 alone to launch production of the new Twingo and the four-seat Smart (Smart Forfour), a new city car co-produced by Renault-Nissan and Daimler. Production was upgraded and expanded by about 25% from slightly over 600 cars a day to around 800 in December 2014. This production increase created about 450 new jobs in 2014 in addition to the 270 jobs created between March and June 2013 (STA 2014a). However, in 2011 and 2012, 850 jobs were eliminated at Revoz (Eurofound 2014). Only about 30% of the components for the new

Twingo are made in Slovenia, a percentage lower than that of large-volume assembly plants across CEE. This suggests that because of its low-volume production, the Revoz assembly plant has attracted fewer foreign component suppliers to Slovenia than other car assembly plants across CEE. Between 1997 and 2009 there were 23 investments in new automotive suppliers plants, less than 10% of the number of investments attracted by Czechia and Poland and also substantially less than the numbers of suppliers attracted to Slovakia and Hungary (Figure 11).

Compared to other CEE countries, no new supplier factories have been built in Slovenia after the economic crisis (2010-2014). Slovenia is less attractive as a destination for automotive FDI than other CEE countries for two basic reasons. First, the low-volume production at Revoz makes it more difficult to convince foreign suppliers to co-locate their factories in the proximity of the Revoz plant. Second, relatively high Slovenian wages compared to other CEE countries make Slovenia less attractive as a destination for FDI seeking low labor-cost locations.

### 3.7 Serbia

Established based on a license purchased from Italy's Fiat company, Kragujevac-based Zastava was Serbia's only car assembly company since the 1950s (Pavlínek 2002a). In 2010, Fiat took over the Kragujevac Zastava plant on establishing the Fiat Automobili Srbija (FAS) joint venture between Fiat (67%) and the Serbian government (33%). Since then, Fiat has reportedly invested €1.0-1.2 billion in the construction of a new assembly plant, heavily subsidized by the Serbian government's investment incentives and tax breaks. Despite the new assembly plant, vehicle assembly has remained at a low level. In 2013, FAS, which makes the small Fiat 500L model, assembled 10,905 cars. This was even less than in 2012 (11,032 units) and FAS failed to meet its plans to assemble between 110,000 and 140,000 vehicles in 2013. There was no significant production increase in 2014, with only 4,180 vehicles being assembled there during the first six months (OICA 2014). The new assembly factory has an annual capacity of 186,000 vehicles so it is reasonable to assume that it will gradually increase its output. Low labor costs are FAS's greatest asset, being 80% lower than in Italy and starting at about 30,000 dinars (\$360) a month. The average monthly wage of assembly workers is 34,000 dinars (\$400), a third of what Fiat pays its workers in Poland. Fiat has already attracted several foreign suppliers to the vicinity of the

FAS plant, including Johnson Controls, and it claims that the local content is 67%. Other foreign investors have established subsidiaries in Serbia in 2013, including Germany's Bosch to produce windscreen wipers and Finland's PKC to assemble wire harnesses (MacDowall 2013; Economist 2013). FAS hopes to assemble 100,000 vehicles in 2015 due to the anticipated cancellation of a 30% duty on vehicles imported by Russia from Serbia, which could significantly increase the country's exports to Russia (Vorotnikov 2014).

#### **4. Future prospects of automotive FDI in central and eastern Europe and its long-term developmental effects**

Let us step back from the empirical details and address the more general questions regarding the development of the FDI-driven automotive industry in CEE. First, I will consider why CEE is set to remain attractive for automotive FDI. Second, I will address the long-term effects of FDI-driven development of the automotive industry for CEE countries and their position in the international division of labor.

##### **4.1 The continuing attractiveness of CEE for automotive FDI**

Although the pre-2008-2009 economic crisis investment boom in the automotive industry is unlikely to be repeated, CEE will continue to be attractive for automotive FDI in the future due to a combination of favorable factors. The most important ones are the persisting wage gap between Western Europe and CEE, its geographic proximity to the affluent Western European markets and EU membership. In addition to the advantages of transnational economic integration, EU membership contributes to the CEE's economic and political stability.

Automakers need to make cars where they sell them on account of logistical reasons, political pressure and local content requirements (Sturgeon et al. 2008). This is what makes the relative geographic location of CEE so important to the European automotive industry. The political and economic instability east of the EU borders, increasing distance from the Western European markets and non-membership of the EU make a major shift of production capacity further east unlikely in the foreseeable future despite lower wages in countries such as Ukraine.

Additionally, CEE countries have willingly engaged in the ‘race to the bottom’ by offering generous investment incentives and favorable conditions to foreign TNCs (e.g. Dražokoupil 2009; Pavlínek 2014).

Western European automakers have used threats to shift production from Western Europe to CEE to discipline and extract various concessions from their workers in Western Europe. Therefore, the continuing wage gap between the Western European and CEE automotive industry is of vital importance for automotive lead firms and for continuing investment in the CEE automotive industry. Although, some automotive industry ‘experts’ argue that wages are no longer an important location factor in the automotive industry (Bella 2013), the actual behavior of both assembly firms and component suppliers suggests otherwise. This is reflected in their location choices and also in the continuing pressure to maintain wages as low as possible even in the cheapest CEE locations through threats of relocations abroad. In Western Europe, automakers and component suppliers threaten workers with relocations to CEE; in Central Europe, workers are threatened with relocations to Romania, Turkey or North Africa; while in Romania, workers are threatened with relocations to North Africa (Henning 2014; Rosemain and Timu 2014).

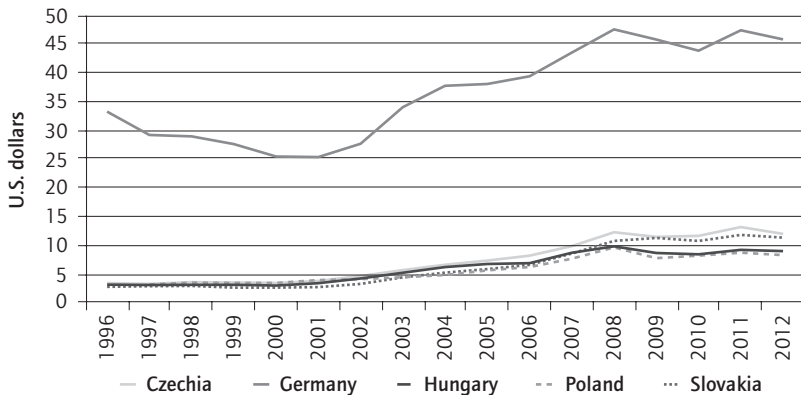
There have been a large number of relocations from Western Europe to CEE. To name just one example, Audi relocated its entire production of gasoline engines from Ingolstadt, Germany to Győr, Hungary, in the 1990s and 2000s after its German workers did not make sufficient concessions to satisfy demands for greater flexibility and lower wages. As a consequence, with its annual production of almost two million engines, Audi’s Győr engine factory has become the world’s largest engine plant. In the case of Central Europe, relocations took place during and after the economic crisis, especially in the most labor-intensive segments of the automotive industry value chain, such as the assembly of cable harnesses (Pavlínek 2015).

The overall impact of the CEE automotive industry growth and relocations from Western Europe to CEE on West European automotive employment has been significant, with the number of persons employed (NACE 29) decreasing by 13.9% (from 1.97m to 1.69m) between 2005 and 2013. At the same time, CEE employment increased by 21.4% despite the economic crisis. Among the major CEE producers (Czechia, Hungary, Poland, Romania, Slovakia and Slovenia) employment grew from

490,000 in 2005 to 591,000 in 2013. The fastest growth was recorded in Slovakia (up 49% from 41,479 to 61,857) while the slowest was in Czechia (up 0.4%). As of 2013, the highest employment in the CEE automotive industry was in Poland (163,000), Czechia (143,000) and Romania (138,000) (Eurostat 2015). Additionally, employment tripled among minor CEE producers (Bulgaria and the Baltic states), going up from 6,569 to 21,088 between 2005 and 2013. However, the fastest growth in CEE automotive employment took place prior to the 2008-2009 economic crisis. Between 1999 and 2008, the number of persons employed in the manufacture of motor vehicles, trailers and semi-trailers (NACE 34) increased by 50%, against a 5% decrease in Western Europe (Eurostat 2015). Although it is difficult to attribute exactly how much of the employment decline in Western Europe was directly related to growth in CEE, the inter-relationship is strong as automotive production was partially shifted to CEE from Western Europe.

The 1996-2012 development of hourly compensation costs in manufacturing suggests that the wage gap in the manufacturing industry between Western Europe and CEE is slowly narrowing (Figure 16). In Czechia, Hungary, Poland and Slovakia, average hourly compensation costs in manufacturing as a percentage of German costs increased from 10.5% in 1997 to 22.1% in 2012. In the automotive industry (NACE 29), the gap between Central Europe and Germany is slightly wider than in the manufacturing industry as a whole. In 2012, Poland's hourly compensa-

Figure 16 Hourly compensation costs in manufacturing, in U.S. dollars, 1996-2012

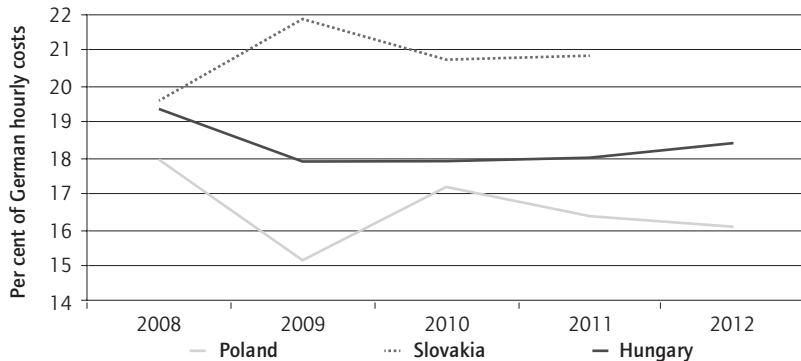


Source: Based on data from USBLS (2013)



tion costs were 16.1% of the German level, while Hungary's were 18.4%. In 2011, Slovakia's automotive industry wages were 20.9% of the German level. Between 2008 and 2012, Hungarian and Polish compensation costs as a percentage of German levels decreased. Slovakia's levels increased between 2008 and 2011 but decreased between 2009 and 2011 (USBLS 2013) (Figure 17). These decreases suggest that the graduate closure of the wage gap in the automotive industry between Central Europe and Germany is not necessarily an automatic and one-way process.

Figure 17 Hourly compensation costs in the automotive industry (NACE 29) as a percentage of German costs in Hungary, Poland and Slovakia, 2008-2012



Source: Based on data from USBLS (2013)

Relative to German levels, compensation costs in manufacturing increased most rapidly in Slovakia (from 8.2% to 24.7% between 1996 and 2012), compared to a slightly lower increase in Czechia (from 10.2% to 26.1%) and lower increases in Hungary (from 9.4% to 19.5%) and Poland (10.8% to 18.0%) (USBLS 2013) (Figure 16). Since the Czech National Bank's 10% devaluation of the Czech crown at the end of 2013, Slovak manufacturing wages most likely became the highest among these four Central European countries in 2014.<sup>5</sup> Compared to its neighbors, Slovakia, a Eurozone member, cannot use currency devaluations to maintain its wage competitiveness. The rise in Slovak industrial wages from the lowest to second highest in Central Europe within one decade has undermined its wage competitiveness, one of its most important

5. The average 2013 wage in constant prices in USD: Czechia \$15,266, Slovakia \$15,239, Poland \$13,690, Hungary \$13,214 (OECD 2014).

competitive advantages in the 2000s, and it might negatively influence future FDI inflows in the Slovak automotive industry (Pavlínek, 2014). Automotive lead firms have attempted to slow down relative wage increases in Slovakia, trying to keep them at a minimum. In 2014, for example, VW Slovakia proposed a 4% cut in workers' salaries despite a low average monthly wage (€1,400 in 2013) and €170m profits earned by VW Slovakia in 2013 (SME 2014).

## 4.2 Long-term effects of FDI-driven automotive industry development in CEE

Since the early 1990s, the automotive industry has become a dominant industrial sector across CEE, significantly increasing its share of total exports, industrial production and job creation. In Slovakia, the industry directly accounted for 12% of total production and indirectly for 17%, 4% of total value added, 26% of exports and 20% of imports in 2012. It employed 60,828 workers directly and an additional 140,000 indirectly (ZAP 2013; Luptáčík et al. 2013). In 2013, it accounted for 41% of total manufacturing industry revenues (MIT, 2014). In Czechia, the narrowly defined automotive industry (NACE 29) accounted for 23.1% of manufacturing industry revenues and 13.2% of manufacturing industry employment in 2013, employing 137,906 workers (compared to 153,896 in 2008) and accounting for 22.2% of total Czech exports (MIT 2014). In Poland, the narrowly defined automotive industry accounted for 8.6% of the total gross value added and employed 156,000 workers in 2012. The broadly defined automotive industry employed 362,200 workers. There were 2,819 automotive industry companies in 2012 (KPMG 2013). In Hungary, the automotive industry accounted for almost 20% of total industrial output, 10% of GDP and 18% of total exports in 2013, while the broadly defined automotive industry employed 115,717 workers (CTCS 2014).

These data for individual CEE countries confirm the increased importance of the FDI-based automotive industry for economic growth in CEE in the 1990s and especially in the 2000s, contributing to capital formation, driving exports and creating tens of thousands of new jobs. At the same time, however, the dependence of CEE economies on the externally owned and controlled automotive industry has increased and this dependence is likely to grow further in the future since FDI inflows in the automotive industry are set to continue, although they are likely to be smaller than in the 2000s.

To evaluate the potential long-term effects of the externally owned and controlled automotive industry on CEE economies, we can turn to economic geography, students of which have analyzed the effects of FDI on regional economies in the peripheral regions of Western Europe and in Canada since the 1970s (Firn 1975; Dicken 1976; Britton 1980; Hayter 1982; Schackmann-Fallis 1989; Amin et al. 1994; Phelps 1993). These studies point out the long-term structural costs of external ownership and control of economic activities for peripheral regions in the form of 'truncated development'. Externally owned manufacturing branch plants usually play a distinct role in a corporate hierarchy, being concentrated on routine manufacturing activities while lacking strategic and high value-added functions, such as decision-making powers about strategic planning, investment, product portfolio, market research and research and development (R&D) competencies. These functions remain concentrated in corporate headquarters or specialized R&D facilities in prosperous core regions (e.g. Britton 1980; Hayter 1982; Hayter and Watts 1983; Schackmann-Fallis 1989). In the case of foreign investment, these high value-added functions tend to remain concentrated in the home countries of principal investors while routine manufacturing functions are developed in host economies. For example, the truncation argument was summarized by Hayter and Watts (1983:171) as follows:

...[I]n the long run branch plants are counter productive to regional development goals... because branch plants bring primarily unskilled jobs, limit local autonomy over investment decision making, arrest export potential in high technology goods, and, by relying on corporate rather than local linkages, increase import dependency on goods, services and technology.

Ultimately, truncated development contributes to value transfer from peripheral to core regions, making it more difficult for the affected regional economies to close the development gap with more developed core regions because of its negative effects on their indigenous growth potential (e.g. Schackmann-Fallis 1989). In the 1990s, the truncation and branch plant economy literature conclusions were challenged by arguments that branch plants were transformed into 'performance/networked branch plants' with greater autonomy and more functions and competencies than traditional branch plants (Phelps 1993; Amin et al. 1994). This has especially been the case in the automotive industry due to the changes in the organization of production and supplier relations experienced in the 1980s and 1990s (Womack et al. 1990). However, these changes have been limited and are

insufficient to significantly alter the position of performance/networked branch plants in the corporate hierarchy and its spatial division of labor (Pike 1998; Dawley 2011). Furthermore, the positive changes affected the minority of branch plants (Dicken et al. 1994). As such, the problems associated with truncation and the branch plant economy persisted (Pike 1998).

Are the findings of the truncation literature relevant for the current situation in CEE? Truncation and truncated development were already observed in CEE after the first wave of FDI in the early 1990s (e.g. Grabher 1994; 1997; Hardy 1998). More evidence of economic and regional development risks related to large FDI inflows and their potential long-term structural costs was provided in the 2000s. For example, in the context of the CEE automotive industry it was argued that FDI potentially had both positive and negative effects on host economies (Pavlínek 2004). While FDI often leads to increased production, exports and job creation, wage increases, improvements in labor productivity and competitiveness, growth in real income and tax base, and spillovers to domestic companies, it can also lead to the downsizing of production, labor shedding and transfer of R&D abroad at the enterprise level in addition to a number of potential negative local and regional developmental effects. These include, for example, a dependency on foreign capital, external control, the poaching of skilled workers from domestic companies, the crowding out of domestic companies, deskilling and the development of a dual economy.

At the national level, questions have been raised about the long-term economic effects of large automotive FDI inflows on domestic economies. For example, in the mid-1990s Ellingstad (1997) warned of the development of what he calls the ‘maquiladora syndrome’ in CEE, a reference to the problems related to the rapid growth of a foreign capital-dominated manufacturing industry and pointing to a number of FDI effects described by the truncation literature. State-based competition over large FDI projects in the automotive industry (regulatory arbitrage) has led to major state expenditure on investment incentives to attract strategic investors. These incentives are a form of state subsidy paid to foreign companies often at the expense of spending on education, domestic R&D, indigenous companies and other sectors of the domestic economy, and which contribute to the ‘race to the bottom’ in CEE (e.g. Bohle 2006; UNCTAD 1998).

It has also been argued that large foreign investors gained a disproportionate influence over state economic and education policies in CEE in the form of ‘corporate capture’ (Pavlínek 2014; Phelps 2000; Phelps 2008). Nölke and Vliegenthart (2009) have further developed this line of thought, arguing that a new distinct basic variety of capitalism, what they call a dependent market economy, has emerged in CEE. Such an economy differs from liberal market economies and coordinated market economies, the two dominant varieties of capitalism, through its greater dependence on foreign capital. This external dependence is its most important feature (see also Vliegenthart 2010). However, Nölke and Vliegenthart (2009) do not address the potential long-term consequences of this external dependency for CEE economies, with the exception of the threat of potential relocation ‘further east’. As I have already noted, the relocation threat in the CEE automotive industry is greatest in the most labor-intensive and low-skilled manual operations, such as the assembly of cable harnesses (Pavlínek 2015; Pavlínek et al. 2009), while the potential for large-scale relocations of vehicle assembly operations from CEE is low in the foreseeable future. This is because of local content requirements, political pressure to produce within the EU, logistic reasons, transportation costs and large sunk costs in new investments.

There are already signs that the long-term effects of the industry’s dependency on foreign capital will be very similar to those described by the truncation literature: concentration on routine assembly operations, the weak development of R&D functions (Pavlínek 2012) and other strategic functions in foreign subsidiaries (Pavlínek 2014), limited spillovers from foreign to domestic companies (Pavlínek and Žížalová 2014), the weak development of domestic companies, their limited upgrading and subordinate and dependent position in automotive GPNs (Pavlínek and Ženka 2011; Pavlínek and Žížalová 2014). All these factors will strongly influence the long-term prospects of the CEE automotive industry for catching-up with the more developed Western European automotive industry core.

It is important to realize that both foreign and domestic companies are important for successful economic development in the contemporary globalizing economy since both contribute to value creation and capture in different ways. Therefore, CEE governments should focus more on the long-term and sustainable development of the domestic automotive industry through targeted strategic industrial policies mitigating the overwhelming dependence on foreign capital. Greater investment in

human capital in the form of high quality technical education and job training should attract more FDI in high value-added activities and contribute to the gradual upgrading of the CEE's position in the automotive industry's division of labor.

## 5. Conclusion

The CEE automotive industry has been integrated into the European and global automotive industry since 1990 mainly through the investment and trade activities of foreign TNCs. Foreign capital financed the restructuring of the existing CEE automotive industry and the build-up of new production capacity. Consequently, vehicle output more than tripled between 1990 and 2013, while the supplier industry grew even faster (e.g. Pavlínek 2003). In the contemporary global automotive industry, CEE represents a prime example of an 'integrated peripheral market' made up of attractive production locations geographically close to large and affluent markets in developed economies and with significantly lower production costs, mainly because of lower wages. The high degree of integration of the CEE's automotive industry into the European production system and its overwhelming dependence on exports increased its vulnerability in the 2008-2009 economic crisis. The crisis led to declines in production and FDI inflows across the CEE automotive industry, although its effects, including post-crisis recovery, were geographically highly uneven.

Between 1990 and 2012, foreign automotive lead firms invested more than €30 billion in the CEE automotive industry, with the fastest increase in FDI stock taking place between 2000 and 2007. FDI inflows slowed during the 2007-2009 economic crisis and FDI stocks tended to decrease as foreign investors repatriated profits generated in CEE rather than reinvesting them. Although this decrease was only temporary and total FDI stock recovered by 2012, it suggests that the CEE automotive industry is vulnerable to increased profit repatriation and lower levels of investment during economic crises. Since investment by foreign lead firms in the CEE automotive industry is part of their profit-making behavior, we might expect that profit repatriation and the outflow of value from CEE will eventually exceed the volume of invested capital.

Individual automotive FDI country trends reflect the investment and location decisions of automotive lead firms, national differences in

institutional environment, and the degree of success or failure in competitive bidding among CEE countries for large investment projects. Recent FDI trends suggest that CEE continues to be an attractive destination for automotive FDI. Although the large FDI inflows related to the construction of new assembly plants in the early and mid-2000s are unlikely to be repeated any time soon, CEE will continue to be attractive for automotive FDI as long as the wage gap between CEE and Western Europe persists. It will take many decades for CEE wages to catch up with wages in Western Europe at the current rate of wage increases.

Was there any alternative to the FDI-driven development of the automotive industry in CEE after 1990? Given the CEE's history of automotive industry underdevelopment throughout the entire 20<sup>th</sup> century and the state of the CEE automotive industry at the end of the state socialist period in the late 1980s (Nestorovic 1991; Pavlínek 2002a), CEE countries were not in a position to pursue the successful development of an independent automotive industry. Attempts by domestic automakers to pursue independent development strategies, such as those by the Romanian Dacia and Russian AVTOVAZ in the 1990s and 2000s, were unsuccessful as these domestic automakers were unable to compete with the technologically more advanced production and vehicles of core-based TNCs (Pavlínek 2002c). Neither were CEE countries in a position to negotiate better terms for automotive FDI due to their small markets, similar factor endowments and strong competition over automotive FDI. As such, automotive TNCs were able to negotiate very favorable terms for their investment in CEE, often at the expense of CEE taxpayers and the subordination of state policies to the interests of foreign investors (Pavlínek 2014).

While FDI in the automotive industry strongly contributed to economic growth, job creation and the export competitiveness of CEE economies, it also significantly increased their dependence on the externally owned and controlled automotive industry. External control limits the potential economic benefits of the automotive industry for CEE economies because of truncation and because of limited opportunities for the development of an indigenous automotive industry. The long-term economic policies of individual CEE countries can be negatively affected by corporate capture, which tends to benefit foreign investors at the expense of domestic companies and population. Foreign ownership also undermines value capture in CEE and leads to value transfer from CEE to the core

regions of the global automotive industry. The increased dependence of CEE economies on the automotive industry also increases their vulnerability to business cycles. In the long run, therefore, the development of the automotive industry in CEE will most likely be significantly more beneficial for foreign capital than for CEE economies and their population.

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### **References**

- Amin A., Bradley D., Howells J., Tomaney J. and Gentle C. (1994) Regional incentives and the quality of mobile investment in the less favoured regions of the EC, *Progress in Planning*, 41 (Part 1), 1-112.
- ANE (2014) Ford will keep Fiesta production in Germany after cost-saving deal, *Automotive News Europe*, 10 June 2014. <http://europe.autonews.com/article/20140610/ANE/140609836/ford-will-keep-fiesta-production-in-germany-after-cost-saving-deal> (accessed October 24, 2014).
- Antalóczy K. and Sass M. (2011) The impact of the crisis on the Hungarian automotive industry, Paper presented at the EADI-DSA 2011 conference 'Rethinking development in an age of scarcity and uncertainty: new values, voices and alliances for increased resilience', 19-22 September 2011, University of York.
- Antalóczy K. and Sass M. (2014) Tükör által homályosan: a külföldi közvetlen befektetések statisztikai adatainak tartalmáról [Through a glass darkly: about the content of FDI data], *Külgazdaság*, 58 (7-8), 30-57.
- Bailey D., de Ruyter A., Michie J. and Tyler P. (2010) Global restructuring and the auto industry, *Cambridge Journal of Regions Economy and Society*, 3 (3), 311-318.
- Bartlett D. and Seleny A. (1998) The political enforcement of liberalism: bargaining, institutions, and auto multinationals in Hungary, *International Studies Quarterly*, 42 (2), 319-338.
- Bella T. (2013) Zabije nás nakoniec úspech našich automobiliek?, *SME*, 9 December 2013. <http://ekonomika.sme.sk/c/7028263/zabije-nas-nakoniec-uspech-nasich-automobiliek.html>



- Bernaciak M. and Ščepanović V. (2010) Challenges of upgrading: the dynamics of East Central Europe's integration into the European automotive production networks, *Industrielle Beziehungen*, 17 (2), 123-146.
- Bohle D. (2006) Neoliberal hegemony, transnational capital and the terms of the EU's eastward expansion, *Capital & Class*, 30 (1), 57-86.
- Bohle D. and Greskovits B. (2006) Capitalism without compromise: strong business and weak labor in Eastern Europe's new transnational industries, *Studies in Comparative International Development*, 41 (1), 3-25.
- Bordenave G. and Lung Y. (1996) New spatial configurations in the European automobile industry, *European Urban and Regional Studies*, 3 (4), 305-321.
- Boros J. (2013) Rising speed – Audi in Győr and Suzuki in Esztergom to produce new models as from this summer, *Budapest Telegraph*, 15 February 2013. [http://www.budapesttelegraph.com/news/235/rising\\_speed\\_%E2%80%93\\_audi\\_in\\_gyor\\_and\\_suzuki\\_in\\_esztergom\\_to\\_produce\\_new\\_models\\_as\\_from\\_this\\_summer](http://www.budapesttelegraph.com/news/235/rising_speed_%E2%80%93_audi_in_gyor_and_suzuki_in_esztergom_to_produce_new_models_as_from_this_summer)
- Britton J.N.H. (1980) Industrial dependence and technological underdevelopment: Canadian consequences of foreign direct investment, *Regional Studies*, 14 (3), 181-199.
- BS (2013) Direct investment 2013, Ljubljana, Bank of Slovenia.
- CBH (2014) Foreign direct investment - updated tables, Budapest, Central Bank of Hungary.
- CNB (2001-2014) Přímé zahraniční investice [Foreign direct investment], Annual publications, Prague, Czech National Bank.
- CTCS (2014) A study on the Hungarian automotive industry: market opportunities for Canadian automotive suppliers, Canadian Trade Commissioner Service. [http://www.enterprisecanadanetwork.ca/\\_uploads/resources/A-Study-on-the-Hungarian-Automotive-Industry.pdf](http://www.enterprisecanadanetwork.ca/_uploads/resources/A-Study-on-the-Hungarian-Automotive-Industry.pdf)
- CzechInvest (2014) Incentives granted from April 1998 to 30 June 2014, Prague, CzechInvest.
- Dawley S. (2011) Transnational corporations and local and regional development, in Pike A., Rodríguez-Pose A. and Tomaney J. (eds.) *Handbook of local and regional development*, London, Routledge, 394-412.
- Dicken P. (1976) The multiplant business enterprise and geographical space: some issues in the study of external control and regional development, *Regional Studies*, 10 (4), 401-412.
- Dicken P. (2011) *Global shift: mapping the changing contours of the world economy*, London, Sage.
- Dicken P., Forsgren M. and Malmberg A. (1994) The local embeddedness of transnational corporations, in Amin A. and Thrift N. (eds.) *Globalization, institutions and regional development in Europe*, Oxford, Oxford University Press, 23-45.

- Domański B., Guzik R., Gwosdz K. and Dej M. (2013) The crisis and beyond: the dynamics and restructuring of automotive industry in Poland, *International Journal of Automotive Technology and Management*, 13 (2), 151-166.
- Domański B. and Gwosdz K. (2009) Toward a more embedded production system? Automotive supply networks and localized capabilities in Poland, *Growth and Change*, 40 (3), 452-482.
- Drahokoupil J. (2008) The investment-promotion machines: the politics of foreign direct investment promotion in Central and Eastern Europe, *Europe-Asia Studies*, 60 (2), 197-225.
- Drahokoupil J. (2009) *Globalization and the state in Central and Eastern Europe: the politics of foreign direct investment*, London, Routledge.
- Duman A. and Kureková L. (2012) The role of state in development of socio-economic models in Hungary and Slovakia: the case of industrial policy, *Journal of European Public Policy*, 19 (8), 1207-1228.
- Dunning J.H. (1993) The prospects for foreign direct investment in Eastern Europe, in Artisien P., Rojec M. and Svetli i M. (eds.) *Foreign investment in Central and Eastern Europe*, New York, St. Martin's Press, 16-33.
- EBRD (1993) *EBRD economic review: annual economic outlook*, London, European Bank for Reconstruction and Development.
- ECB (2007) *European Union balance of payments/International investment position statistical methods*, Frankfurt am Main, European Central Bank.
- Economist (2013) *Manufacturing in Serbia: Balkan legacy*, *The Economist*, 2 November 2013. <http://www.economist.com/node/21588926>
- Egresi I. (2007) Foreign direct investment in a recent entrant to the EU: the case of the automotive industry in Romania, *Eurasian Geography and Economics*, 48 (6), 748-764.
- Ellingstad M. (1997) The maquiladora syndrome: Central European prospects, *Europe-Asia Studies*, 49 (1), 7-21.
- Eurofound (2014) *European Restructuring Monitor*. <http://www.eurofound.europa.eu/observatories/european-monitoring-centre-on-change-emcc/european-restructuring-monitor>
- Eurostat (2014) *Structural business statistics*. <http://ec.europa.eu/eurostat/web/structural-business-statistics>
- Eurostat (2015) *Structural business statistics: annual detailed enterprise statistics - industry and construction*. <http://ec.europa.eu/eurostat/web/structural-business-statistics>
- EY (2010) *The Central and Eastern European automotive market: industry overview*, Detroit, Ernst & Young.
- EY (2014) *EY's attractiveness survey Europe 2014: back in the game*, Detroit, Ernst & Young.

- Firn J.R. (1975) External control and regional development: the case of Scotland, *Environment and Planning A*, 7 (4), 393-414.
- Fischer S. and Gelb A. (1991) Issues in the reform of socialist economies, in Corbo V., Coricelli F. and Bossak J. (eds.) *Reforming Central and Eastern European economies: initial results and challenges*, Washington, DC, World Bank, 67-82.
- Fisher S., Gould J. and Haughton T. (2007) Slovakia's neoliberal turn, *Europe-Asia Studies*, 59 (6), 977-998.
- Freyssenet M. and Lung Y. (2000) Between globalisation and regionalisation: what is the future of the motor industry?, in Humphrey J., Lecler Y. and Salerno M.S. (eds.) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Macmillan, 72-94.
- Frigant V. and Layan J.B. (2009) Modular production and the new division of labour within Europe: the perspective of French automotive parts suppliers, *European Urban and Regional Studies*, 16 (1), 11-25.
- Frigant V. and Lung Y. (2002) Geographical proximity and supplying relationships in modular production, *International Journal of Urban and Regional Research*, 26 (4), 742-755.
- Frigant V. and Talbot D. (2005) Technological determinism and modularity: lessons from a comparison between aircraft and auto industries in Europe, *Industry and Innovation*, 12 (3), 337-355.
- Gillet K. (2014) Dawn of the Dacia: how Romania's nothrills car maker raced ahead, *The Guardian*, 21 October 2014. <http://www.theguardian.com/business/2014/oct/21/dacia-romania-car-maker-europe-sales>
- Gowan P. (1995) Neo-liberal theory and practice for Eastern Europe, *New Left Review*, 1/2013, 3-60.
- Grabher G. (1994) The disembedded regional economy: the transformation of East German industrial complexes into Western enclaves, in Amin A. and Thrift N. (eds.) *Globalization, institutions and regional development in Europe*, Oxford, Oxford University Press, 177- 195.
- Grabher G. (1997) Adaptation at the cost of adaptability? Restructuring the Eastern German regional economy, in Grabher G. and Stark D. (eds.) *Restructuring networks in post-socialism: legacies, linkages, and localities*, Oxford, Oxford University Press, 107-134.
- Hardy J. (1998) Cathedrals in the desert? Transnationals, corporate strategy and locality in Wroclaw, *Regional Studies*, 32 (7), 639-652.
- Havas A. (2000) Changing patterns of inter- and intra-regional division of labour: Central Europe's long and winding road, in Humphrey J., Lecler Y. and Salerno M.S. (eds.) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Palgrave Macmillan, 234-262.
- Hayter R. (1982) Truncation, the international firm and regional policy, *Area* 14 (4), 277-282.

- Hayter R. and Watts H.D. (1983) The geography of enterprise: a reappraisal, *Progress in Human Geography*, 7 (2), 157-181.
- Henning D. (2014) Ford Cologne: management and IG Metall union blackmail workers, *World Socialist Web Site*, 24 February 2014. <http://www.wsws.org/en/articles/2014/02/24/ford-f24.html>
- Hudson R. and Schamp E.W. (eds.) (1995) *Towards a new map of automobile manufacturing in Europe? New production concepts and spatial restructuring*, Berlin, Springer.
- Humphrey J. (2000) Assembler-supplier relations in the auto industry: globalisation and national development, *Competition & Change*, 4 (3), 245-271.
- Humphrey J. (2003) Globalization and supply chain networks: the auto industry in Brazil and India, *Global Networks: a Journal of Transnational Affairs*, 3 (2), 121-141.
- Humphrey J., Lecler Y. and Salerno M.S. (eds.) (2000) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Palgrave Macmillan.
- Humphrey J. and Memedovic O. (2003) *The global automotive industry value chain: what prospects for upgrading by developing countries*, Vienna, United Nations Industrial Development Organization.
- Humphrey J. and Oeter A. (2000) Motor industry policies in emerging markets: globalisation and the promotion of domestic industry, in Humphrey J., Lecler Y. and Salerno M.S. (eds.) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Palgrave Macmillan, 42-71.
- Humphrey J. and Salerno M.S. (2000) Globalisation and assembler-supplier relations: Brazil and India, in Humphrey J., Lecler Y. and Salerno M.S. (eds.) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Palgrave Macmillan, 149-175.
- Jindra B., Giroud A. and Scott-Kennel J. (2009) Subsidiary roles, vertical linkages and economic development: lessons from transition economies, *Journal of World Business*, 44 (2), 167-179.
- Kolesár P. (2006) *Race to the bottom? The role of investment incentives in attracting strategic automotive foreign direct investment in Central Europe*, Budapest, Central European University.
- KPMG (2013) *Condition of the automotive industry and its role in the Polish economy: report by KPMG in Poland on the initiative of the Polish Automotive Industry Association*, Warsaw, Polish Automotive Industry Association.
- Larsson A. (2002) The development and regional significance of the automotive industry: supplier parks in Western Europe, *International Journal of Urban and Regional Research*, 26 (4), 767-784.

- Layan J. (2000) The integration of peripheral markets: a comparison of Spain and Mexico, in Humphrey J., Lecler Y. and Salerno M.S. (eds.) *Global strategies and local realities: the auto industry in emerging markets*, Basingstoke, Palgrave Macmillan, 16-41.
- Liu W. and Dicken P. (2006) Transnational corporations and 'obligated embeddedness': foreign direct investment in China's automobile industry, *Environment and Planning A*, 38 (7), 1229-1247.
- Liu W. and Yeung H.W.C. (2008) China's dynamic industrial sector: the automobile industry, *Eurasian Geography and Economics*, 49 (5), 523-548.
- Lung Y. (2004) The changing geography of the European automobile system, *International Journal of Automotive Technology and Management*, 4 (2/3), 137-165.
- Luptáčík M., Habrman M., Lábaj M. and Rehák Š. (2013) The importance of automotive industry for the Slovak economy: empirical result, Bratislava, University of Economics in Bratislava, Department of Economic Policy.
- MacDowall A. (2013) Serbian manufacturing: cars drive hopes for industrial revival, *ft.com*, 28 October 2013. <http://www.ft.com/intl/cms/s/0/7a7ab4e0-3a42-11e3-9243-00144feab7de.html#axzz3eApjQdxO>
- MIT (2014) *Panorama zpracovatelského průmyslu ČR 2013* [Panorama of the Czech manufacturing industry], Prague, Ministry of Industry and Trade. <http://www.mpo.cz/dokument154179.html>
- NBP (2014) Foreign direct investment in Poland, Warsaw, National Bank of Poland. <http://www.nbp.pl/homen.aspx?f=/en/publikacje/ziben/ziben.html>
- NBR (2013) Foreign direct investment in Romania 2012, Bucharest, National Bank of Romania and National Institute of Statistics.
- NBS (2013) *Priame zahraničné investície, 2010* [Foreign direct investment, 2010], Bratislava, National Bank of Slovakia.
- Nestorovic C. (1991) The automobile-industry in the East: national and international strategies, *Eastern European Economics*, 29 (4), 34-85.
- Nölke A. and Vliegenthart A. (2009) Enlarging the varieties of capitalism: the emergence of dependent market economies in East Central Europe, *World Politics*, 61 (4), 670-702.
- OECD (2014) *OECD.StatExtracts*. <http://stats.oecd.org>
- OICA (2014) *World motor vehicle production by country and type, 1997-2013*, Paris, International Organization of Motor Vehicle Manufacturers.
- Pavlínek P. (2002a) Restructuring the Central and Eastern European automobile industry: legacies, trends, and effects of foreign direct investment, *Post-Soviet Geography and Economics*, 43 (1), 41-77.
- Pavlínek P. (2002b) The role of foreign direct investment in the privatisation and restructuring of the Czech motor industry, *Post-Communist Economies*, 14 (3), 359-379.

- Pavlínek P. (2002c) Transformation of the Central and East European passenger car industry: selective peripheral integration through foreign direct investment, *Environment and Planning A*, 34 (9), 1685-1709.
- Pavlínek P. (2003) Transformation of the Czech automotive components industry through foreign direct investment, *Eurasian Geography and Economics*, 44 (3), 184-209.
- Pavlínek P. (2004) Regional development implications of foreign direct investment in Central Europe, *European Urban and Regional Studies*, 11 (1), 47-70.
- Pavlínek P. (2006) Restructuring of the Polish passenger car industry through foreign direct investment, *Eurasian Geography and Economics*, 47 (3), 353-377.
- Pavlínek P. (2008) *A successful transformation? Restructuring of the Czech automobile industry*, Heidelberg, Physica Verlag.
- Pavlínek P. (2012) The internationalization of corporate R&D and the automotive industry R&D of central and eastern Europe, *Economic Geography*, 88 (3), 279-310.
- Pavlínek P. (2014) Whose success? The state-foreign capital nexus and the development of the automotive industry in Slovakia, *European Urban and Regional Studies*. doi: 10.1177/0969776414557965
- Pavlínek P. (2015) The impact of the 2008-2009 crisis on the automotive industry: global trends and firm-level effects in Central Europe, *European Urban and Regional Studies*, 22 (1), 20-40.
- Pavlínek P., Domański B. and Guzik R. (2009) Industrial upgrading through foreign direct investment in Central European automotive manufacturing, *European Urban and Regional Studies*, 16 (1), 43-63.
- Pavlínek P. and Janák L. (2007) Regional restructuring of the Škoda auto supplier network in the Czech Republic, *European Urban and Regional Studies*, 14 (2), 133-155.
- Pavlínek P. and Ženka J. (2010) The 2008-2009 automotive industry crisis and regional unemployment in Central Europe, *Cambridge Journal of Regions Economy and Society*, 3 (3), 349-365.
- Pavlínek P. and Ženka J. (2011) Upgrading in the automotive industry: firm-level evidence from Central Europe, *Journal of Economic Geography*, 11 (3), 559-586.
- Pavlínek P. and Žižalová P. (2014) Linkages and spillovers in global production networks: firm-level analysis of the Czech automotive industry, *Journal of Economic Geography*. doi: 10.1093/jeg/lbu041
- Phelps N.A. (1993) Branch plants and the evolving spatial division of labor: a study of material linkage change in the Northern Region of England, *Regional Studies*, 27 (2), 87-101.

- Phelps N.A. (2000) The locally embedded multinational and institutional capture, *Area*, 32 (2), 169-178.
- Phelps N.A. (2008) Cluster or capture? Manufacturing foreign direct investment, external economies and agglomeration, *Regional Studies*, 42 (4), 457-473.
- PIFIA (2013) The automotive sector in Poland: sector profile, Warsaw, Polish Information and Foreign Investment Agency.
- Pike A. (1998) Making performance plants from branch plants? In situ restructuring in the automobile industry in the United Kingdom, *Environment and Planning A*, 30 (5), 881-900.
- PRB (1997) 1997 World population data sheet, Washington, DC, Population Reference Bureau.
- PRB (2014) 2014 World population data sheet, Washington, DC, Population Reference Bureau. <http://www.prb.org/Publications/Datasheets/2014/2014-world-population-data-sheet.aspx>
- Rosemain M. and Timu A. (2014) Dacia thrives as Europe's cheapest cars revive Romania, *Bloomberg*, 12 September 2014. <http://www.bloomberg.com/news/articles/2014-09-11/europe-s-cheapest-cars-reviving-romania-as-dacia-thrives>
- Sass M. and Hunya G. (2014) Escaping to the East? Relocation of business activities to and from Hungary, 2003–2011, Discussion Papers MT-DP - 2014/7, Budapest, Institute of Economics, Centre for Economic and Regional Studies.
- Sass M. and Szalavetz A. (2013) Crisis and upgrading: the case of the Hungarian automotive and electronics sectors, *Europe-Asia Studies*, 65 (3), 489-507.
- Schackmann-Fallis K.P. (1989) External control and regional development within the Federal Republic of Germany, *International Regional Science Review*, 12 (3), 245-261.
- SME (2014) Volkswagen chce znížiť platy, odborárov zaskočil, *SME*, 21 January 2014. <http://ekonomika.sme.sk/c/7074289/volkswagen-chce-znizit-platy-odborarov-zaskocil.html>
- STA T.M. (2014a) Revoz announces 450 new jobs following production expansion, *The Slovenia Times*, 2 October 2014. <http://www.sloveniatimes.com/revoz-announces-450-new-jobs-following-production-expansion>
- STA T.M. (2014b) Revoz launches production of new Renault Twingo, *The Slovenia Times*, 8 May 2014. <http://www.sloveniatimes.com/revoz-launches-production-of-new-renault-twingo>
- Stanford J. (2010) The geography of auto globalization and the politics of auto bailouts, *Cambridge Journal of Regions Economy and Society*, 3 (3), 383-405.
- Sturgeon T., Van Biesebroeck J. and Gereffi G. (2008) Value chains, networks and clusters: reframing the global automotive industry, *Journal of Economic Geography*, 8 (3), 297-321.

- Sturgeon T.J., Gereffi G., Rogers K.B. and Fernandez-Stark K. (2010) The prospects for Mexico in the North American automotive industry: a global value chain perspective, *Actes du GERPISA*, 42, 11-22.
- Sturgeon T.J. and Lester R.K. (2004) The new global supply base: new challenges for local suppliers in East Asia, in Yusuf S., Altaf M.A.A. and Nabeshima K. (eds.) *Global production networking and technological change in East Asia*, Washington, DC, World Bank, 35-87.
- Sturgeon T.J. and Van Biesebroeck J. (2009) Crisis and protection in the automotive industry: a global value chain perspective, in Evenett S.J., Hoekman B.M. and Cattaneo O. (eds.) *Effective crisis response and openness: implications for the trading system*, Washington, DC, World Bank, 285-305.
- UNCTAD (1998) *World investment report 1998 - Trends and determinants*, Geneva, United Nations Conference on Trade and Development.
- USBLS (2013) *International comparisons of hourly compensation costs in manufacturing, 1996-2012*, Time Series Tables, 9 August 2013, Washington, DC, U.S. Bureau of Labor Statistics, Division of International Labor Comparisons.
- Vlienghart A. (2010) Bringing dependency back in: the economic crisis in post-socialist Europe and the continued relevance of dependent development, *Historical Social Research / Historische Sozialforschung*, 35 (2), 242-265.
- Vorotnikov A. (2014) Russia to cancel import duties on import of Fiat cars from Serbia, *Automotive Logistics*, 29 October 2014. <http://www.automotive-logisticsmagazine.com/news/russia-to-cancel-import-duties-on-import-of-fiat-cars-from-serbia>
- VW (2013) *Volkswagen Slovakia: facts and figures*, Bratislava, VW Slovakia.
- Womack J.P., Jones D.T. and Roos D. (1990) *The machine that changed the world*, New York, Rawson Associates.
- ZAP (2000) *Slovak Republic automotive industry: statistics - Yearbook 2000*, Bratislava, Automotive Industry Association of the Slovak Republic and Slovak Chamber of Commerce and Industry.
- ZAP (2013) *Základné informácie o automobilovom priemysle a jeho význame pre SR* [Basic information about the automotive industry and its importance for Slovakia], Bratislava, Automotive Industry Association of the Slovak Republic.

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# FDI trends and patterns in electronics

Magdolna Sass

## 1. Introduction

This chapter analyses developments in FDI in the electronics industry in five East Central European countries (the four Visegrad countries: Czechia, Hungary, Poland and Slovakia; and Estonia) which represent the overwhelming majority of total production in the Central and Eastern European (CEE) region, with only Russia, of the region's remaining countries, also having a substantial share<sup>1</sup>. Furthermore, three Mediterranean countries (Greece, Portugal and Spain) are also included in the analysis for comparative reasons. The main research question is whether there are any new post-crisis trends and patterns in FDI and location competition in the electronics industry compared to the pre-crisis period. In the analysis, simple statistical methods and various statistical data are used, given the limited availability of and problems surrounding FDI data.

The chapter shows that the five CEE countries became important locations of the electronics industry, especially from a European perspective, through an FDI-based, ongoing restructuring of the industry. Thus the dominant producers are local subsidiaries of foreign-owned multinational companies, which were even able to gain in terms of their relative country-level shares of production, employment, value added or R&D during the crisis, indicating the higher vulnerability of domestically-owned companies compared to their foreign-owned counterparts. During the crisis, the five CEE countries were able to gain in terms of their shares in European electronics FDI, production, and to a lesser extent in value added, and most probably were able to slightly decrease their dependence on imported inputs. At the same time, the Mediterranean countries basically stagnated in all areas, due less to the increase in the CEE shares and more to larger shares of certain 'old' EU Member States, especially

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1. Reed Electronics Research, August 2013.

Germany, in European production and value added. Thus the restructuring of European electronics production progressed further during the crisis years and changed to some extent direction, reflecting the changes in the competitiveness of individual EU Member States and their differing specialisation in the various, heterogeneous segments of the electronics industry. This latter aspect is boosted by the fact that even inside the CEE group of countries developments differ slightly at country level. Overall, if we assume the continuation of the during- and post-crisis trends, a further increase in the importance of the CEE countries analysed (and even other countries in the CEE region) can be expected in the European electronics industry.

The chapter is structured as follows. First, the main characteristics and pre-crisis developments of the industry are presented, followed by a section on data, data problems and methodology. FDI data are then looked at, supplemented by an analysis of other data on foreign-owned companies, output, value added, employment and exports. Outward FDI (OFDI) and relocations are examined in the penultimate section, while the last section concludes.

## **2. Pre-crisis trends in the electronics industry with specific regard to the CEE**

The electronics manufacturing (and related services) has been one of the main drivers of globalisation, being one of the most integrated industries in global terms and with exceedingly strong links to other industries and sectors. It contributes significantly to economic development and growth, directly and indirectly, through improving productivity in other sectors. The industry is characterised by an increasingly fragmented production process, with individual activities transferred to those locations where they can be carried out at lower costs and/or more efficiently (OECD 2004; UNCTAD 2004). A further interesting feature is the heterogeneity of products belonging to it.<sup>2</sup> These are very heterogeneous in terms of

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2. For example, Decision (2009) categorised electronics products by application sector in the following product groups: Audio and video; Home appliances; Data processing; Telecom; Aerospace and defence; Automotive; Industry and Medical. Custer Consulting Group (2013) listed the following market segments: inside the Volume group (the production of which is shifted to low cost areas): Computers and mobile communication devices; Other consumer electronics; Datacom, telecom; and Automotive, and inside the 'Protected' group: Military; Medical; Instruments and controls; High IP Content.

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their factor intensity, level of innovation, R&D intensity, the availability of economies of scale, specific transport costs, importance of the speed of response to changes in market demand, etc. Thus their levels of fragmentation, tendency to relocation and the acceptable distance between the host/producing country and the market differ to a great extent.

The industry is very sensitive to business cycles. It is vulnerable to global recessions, not only directly but also indirectly, and on account of its strong links with other industries (e.g. the automotive industry or computer-aided production systems in other sectors). Because of this, electronics was one of the industries hardest hit by the crisis, with the focus being heightened on economies of scale, productivity and cost reductions. This resulted in a restructuring process featuring increased merger and acquisition (M&A) and relocation activities in the companies affected. Different regional specialisations throughout the world explained the divergence between pre-crisis growth rates. While Asia was relatively specialised in mass-market products, Europe focused more on the production of professional and automotive electronic equipment. European shares in global production were high especially in the industrial, aerospace and defence, automotive and medical application sectors before the crisis. (DECISION 2009: 11)

The analysed CEE countries emerged as new locations for the global electronics industry after 1990. Prior to 1990, their electronics industries lagged considerably behind those of developed countries and were to a great extent dependent on foreign technology (Radosevic 2005). All countries participated in the CMEA division of labour in electronics, and thus had substantial capacities. Production was concentrated in large conglomerates and had strong ties with the military sector. Of these large conglomerates, the only one to survive was the Hungarian Videoton, on the basis of an innovative strategy and alliances with large multinationals (Radosevic and Yoruk 2001 and see Box 2 for details). The others were mostly cut up into smaller units and privatised or liquidated (Szanyi 2006). However, the industry's relatively well-developed human capital and expertise remained in place. The mid-1990s saw the start of a revival and quick expansion of the industry in the countries analysed, based mainly on the establishment of new production facilities by foreign multinational companies. In doing so, they have become active participants in the ever-increasing and extensive globalisation of the electronics industry. This FDI-based revival started at different times in

the countries analysed (Linden 1998; Radosevic 2005; Szanyi 2006; Sass and Szanyi 2012). Hungary was the first to open up its economy to FDI, including electronics investments. The special regulation of industrial free trade zones was especially attractive for large, greenfield projects assembling mainly imported inputs for export, using relatively cheap local unskilled or semi-skilled labour – thus attracting certain segments of the electronics manufacturing industry to the country (See e.g. Antalóczy and Sass 2001). Czechia offered substantial incentives to (among others) electronics projects starting in around 1998, while Poland and Slovakia caught up later. Overall, incentives for FDI projects in the electronics industry have been considerable in CEE countries (see e.g. Drahoukoupil 2009). As a result of these developments, by 2003 the production of Hungary, Czechia and Poland exceeded that of Mexico, though was still considerably less than that of the East Asian economies and lower than that of Ireland. The three aforementioned CEE countries had a diversified production structure with substantial capacities for basically all segments of the IT manufacturing industry. However, their exports were less diversified in terms of the industry's sub-segments, consisting mainly of computers, parts and components and consumer electronics, and indicative of the persisting technological backwardness of the analysed countries. By 2001, Hungary and Czechia were by far the biggest exporters in absolute terms, as well as being the countries with the highest export intensity (export/production) (Radosevic 2005: 6). In all four Visegrad countries, subsidiaries of foreign multinationals (with the exception of a few, usually smaller-sized locally-owned companies) dominated the industry, with a high integration in global value chains – of which the high export intensity was one indication (see e.g. Kaminsky and Ng (2001) or Sass and Szalavetz (2013) for a statistical analysis, Deutsche Bank (2014) shows that the Visegrad countries are very well integrated in European (EU-15) value chains<sup>3</sup>). It is important to note that, compared to other industries' (agriculture, apparel or automotive) global value chains, the labour component of IT hardware points to a relatively higher share of knowledge-intensive and high-skilled technology-intensive work, at the expense of moderately or low-skilled labour-intensive activities (Barrientos et al. 2010: 11) thus in principle offers plenty of upgrading opportunities for the countries involved. Indeed, there were signs of upgrading in the operating structures of

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3. Deutsche Bank (2014) shows that besides Vehicles, Telecom and Electrical Machinery are the most important export goods of the Visegrad countries and Estonia, and that all of them have a comparative advantage in the production of electrical equipment.

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foreign-owned electronics companies and increasing local value added in the Visegrad countries (Szalavetz 2004; Sass and Szalavetz 2013).

Furthermore, the FDI-based integration in global value chains (GVCs) went hand-in-hand with considerable technology transfer, one indication of which is the changes in the (revealed) comparative advantages of the analysed countries (IMF 2013; Rahman and Zhao 2013). This development came together with a one-sided specialisation of the analysed countries (Galgóczi 2009) through efficiency-seeking FDI, making them vulnerable to external shocks, an indication of which was the considerable fall in production levels during the crisis.

Besides substantial relocations targeting the CEE region, (Hunya and Sass 2005) a few substantial relocations during that period had already highlighted the sector's high concentration and low locational loyalty and its vulnerability to changes in the demand structure and relative wages (UNCTAD 2003)<sup>4</sup>. The parallel emergence of competitive foreign locations offering enormous amounts of cheap labour, especially in Asia, has also been shaping European developments, to a much greater extent than in other industries as electronics is relatively more rootless (Sturgeon and Van Biesebroek 2010; Dicken 2011). Against this background the crisis emerged, hitting electronics very hard.

### 3. Data and methodology

On account of data availability, electronics is defined in this paper as covering categories C26 (manufacture of computer, electronic and optical products) and C27 (manufacture of electrical equipment) in accordance with NACE rev. 2 (2008). In principle, FDI sector statistics are available in this breakdown, but, presumably for confidentiality reasons, Eurostat and certain national banks do not provide data on FDI in C27 (equipment). This is only available together with data on five other manufacturing sub-industries (C15, C23, C31, C32 and C33<sup>5</sup>). The national

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4. For example, the transfer of the production of IBM Storage Products from Székesfehérvár, Hungary to China in 2003 resulted in a loss of more than five thousand jobs (including agency workers), and to a substantial decrease in production and exports for Hungary.
  5. C15: Manufacture of leather and related products, C23: Manufacture of other non-metallic mineral products, C31: Manufacture of furniture, C32: Other manufacturing, C33: Repair and installation of machinery and equipment.

banks of the analysed countries follow different practices. While the Czech and Polish national banks publish grouped data, no data has been published in Slovakia for the years after 2009. Estonia publishes aggregated data for total manufacturing. The Hungarian National Bank is the only one publishing separate data for C27 (equipment). Furthermore, Eurostat provides FDI data solely for the period starting with 2008 and with data missing for certain countries for the overall period or for certain years. This problem significantly affects the use of FDI data. The magnitude of the problem may be seen in the case of Hungary, the only country among the analysed ones for which we have separate FDI data for C27 (equipment). In Hungary, the FDI stock at the end of 2012 amounted to 2,275.3 million euros in C26 (products), and to 670.6 million euros in C27 (equipment). Adding the second figure to the first increases the stock of electronics FDI by almost 30%.

That hiatus in FDI data and the problems of FDI stock and flow data for measuring the size of foreign-owned activity (Lipseý 2006) are dealt with here by supplementing the analysis with output, gross value added and related data of the electronics sub-industries, available from Eurostat for all the analysed sub-industries and for a considerably longer period of time. Another data source on the shares of foreign-owned companies in the analysed countries is published by the OECD.<sup>6</sup> The use of this data is all the more justified, as Lipsey (2006) notes that the balance of payments and national accounts data are only rough indicators of the extent of FDI, and are especially weak in measuring changes over time.

Though foreign trade data may provide a good indication of the role of a given country in the European and international division of labour and of its changes over time, these data refer to gross export and import values without showing local value added. In this field, the data on trade in value added calculated by the OECD and WTO can be used as an indication of the extent of local added value and any changes therein. However, these data are only available until 2009.

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6. These data are not available for Greece.

### Box 1 Data problems

A short note on data problems is important before delving into the analysis of available statistics. The first problem arises when we want to analyse the home country distribution of FDI in electronics. Large and especially non-EU multinationals usually realise their investment projects through one of their subsidiaries for various reasons. Cost minimisation (tax optimisation) plays a role when a tax haven (e.g. Cayman Islands) or a country with advantageous fiscal regulations (e.g. the Netherlands or, in certain industries, Ireland) is 'inserted' between the ultimate owner and the investment project. An 'intermediary' subsidiary can be used for other purposes as well: for example when a regional or European centre manages other subsidiaries on the continent, when the 'intermediary' subsidiary has in-depth knowledge of or close contacts with the final destination of the investment, etc. (Kalotay 2012). As shown by developments in Hungary, the use of 'intermediary' subsidiaries became more frequent during and after the crisis (Antalóczy and Sass 2014). Table 1 shows, that in the case of the top 13 foreign electronics investors (and the top locally-owned company) in Hungary in 2012, the final owner's home country is the same as that of the immediate/direct owner in only four cases (and partially in one case). The same problem may arise in the case of the industry affiliation of electronics investment. The most obvious case is that of certain multinationals in the automotive sector with electronics activities (supplying electronic parts and components for vehicles) but registered under the category 'Transport equipment'. Furthermore, certain multinationals manage their local production units under a local service management unit which acts as the owner. In such a case, FDI is realised and registered under 'Business services' while the activity actually carried out is for the most part electronics. That may also affect output and gross value added data. The above problems teach us to be cautious about the available macro data.

Besides the above-listed data problems, missing data for one or more of the analysed countries and for one or more years add to analysis difficulties. These problems are handled here through using multiple data sources and trying to put together the jigsaw puzzle of developments in the analysed industry. Furthermore, this is the reason for using only simple statistical indicators.



Table 1 Top companies in electronics in Hungary (2012)

Name of the company	Nationality of direct owner	Nationality of final owner	Sales (million HUF)	Export/sales (%)	Number of white-collar employees	Number of blue-collar employees
<b>Samsung Electronics</b>	Korean	Korean	713,517	90.5%	969	712
<b>Flextronics International</b>	Austrian	Singapore/US	511,215	91.0%	3,342	4,847
<b>Nokia Komárom</b>	Finnish	Finnish	394,376	95.5%	1,085	1,706
<b>PCE Paragon Solutions</b>	Cayman Islands	Taiwanese	379,430	98.5%	347	320
<b>Jabil Circuit Hungary</b>	Dutch, Luxembourgish, Scottish	US	342,333	99.6%	538	4032
<b>National Instruments Hungary</b>	Dutch	US	265,260	99.7%	655	490
<b>GE*</b>	Hungarian	US	(1,395,908) electronics: lighting, e.industry, healthcare, aviation: 208,852	98%	3,169	5,912
<b>Philips***</b>	Dutch	Dutch	157,920	95.3%	44	46
<b>Siemens*</b>	Austrian	German	79,694	45.7%	814	548
<b>Sanmina-SCI** (data for 3 subsidiaries)</b>	Dutch/US/Dutch	US	4,548+44,033+0	96%; 99.9%; -	145+687+0=832	329+415+0=744
<b>FIH Europe</b>	Hong Kong	Taiwanese	8,318	3.9%	79	43
<b>IBM (4 subsidiaries)</b>	Irish, Dutch	US	71,558	79.3% (including services export)	total: 3,978	
<b>NXP Semiconductors (formerly part of Philips)</b>	Dutch	Dutch	2,443	99.8%	150	0
<b>Videoton* (25 member companies)</b>	Hungarian	Hungarian	98,135	58.6%	total: 7,052	

Note: direct owner: the nationality of the company which actually made the investment; final owner: the nationality of the final/ultimate owner company. – \* 'Holding-type' organisation, with various activities including electronics – \*\* Most probably in the process of reorganising into a holding – \*\*\* Under liquidation in 2013

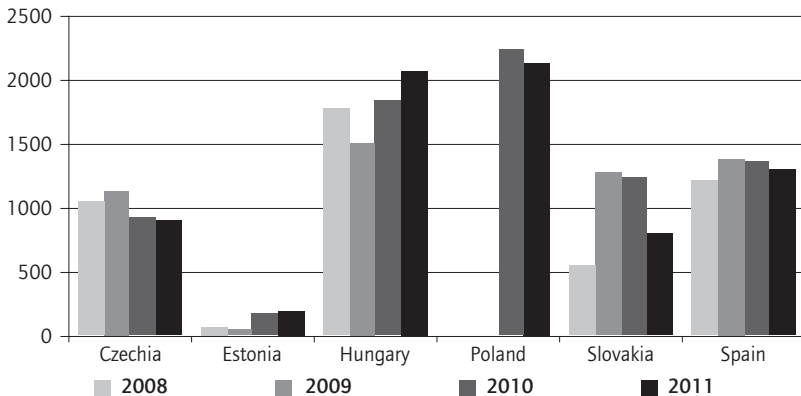
Source: HVG (Hungarian economic weekly), company balance sheets

## 4. FDI trends in electronics

Available data indicate a relatively low share of the five analysed countries in EU27 FDI as well as a small increase in this share during the crisis, indicating some limited changes in the European distribution of labour based on FDI data.

As already mentioned, FDI data are available only for one electronics sub-industry of the two: C26 (products). Inward FDI stock data are relatively substantial in the analysed countries in this sub-industry (cf. Figure 1). Seen in relation to country size (in terms of population or GDP), Hungary and Slovakia stand out as FDI recipients. Overall however, FDI stock decreased throughout the crisis, except in Estonia and Hungary.

Figure 1 **Inward FDI stock in the manufacture of computer, electronic and optical products (C26), 2008-11, million euros**



Source: own calculations based on Eurostat data. Note: data are missing for Greece and Portugal, and for Poland for 2008 and 2009

Overall, the combined share of the five CEE countries in 2010 in total EU27 C26 FDI stock is only slightly more than 3% – a very low percentage (Table 2). Poland and Hungary had the highest shares, each with around 1%. Larger shares can be arrived at through simply adding up CEE country data in the industry<sup>7</sup>, but even then the CEE share is still only

7. In Eurostat, EU27 data are considerably higher for 2008, 2009 and 2010 than the simple sum of member country data. Country shares for 2011: Czechia: 1.4%; Estonia: 0.3%, Spain: 2%; Hungary: 3.2%; Poland: 3.3%, Slovakia: 1.2%.

9.4%. However, EU27 FDI stock in this industry is dominated by the UK (32.7%), Ireland (11.3%), Germany and the Netherlands (9.9% each), France (6.4%) and Finland (5.5%). Thus, the combined CEE share is similar to that of Germany (or the Netherlands), but is considerably lower than that of the UK or Ireland.

**Table 2 Share in EU total IFDI stock in the manufacture of computer, electronic and optical products (C26), 2008-10, (%)**

	2008	2009	2010
Czechia	0.58	0.60	0.45
Estonia	0.04	0.02	0.09
Spain	0.67	0.73	0.66
Hungary	0.99	0.80	0.89
Poland	n.d.	n.d.	1.09
Slovakia	0.30	0.67	0.59

Source: own calculations based on Eurostat data

Investor countries differ for the analysed economies, though EU home countries dominate everywhere, according to Eurostat data.<sup>8</sup> Basically all C26 FDI stock in Estonia originates from the EU27. That share is similarly high in Spain (fluctuating between 70 and 80%), lower in Czechia and Hungary (between 50 and 60%), and even lower in Poland and Slovakia (below 50%). The share of the New Member States is substantial only in Slovakia (mainly due to certain Hungarian investments there, partly connected to foreign-owned subsidiaries (e.g. Samsung) investing through their Hungarian subsidiaries in Slovakia, and partly due to 'original' Hungarian FDI). The stock of German and Dutch FDI in the analysed industry exceeds 100 million euros in each of the four Visegrad countries. France is an important investor in Spain, while Austria is an important one in Hungary (partly due to indirect investments by the German Siemens and the US/Singaporean Flextronics, investing in Hungary through their Austrian subsidiaries (Table 1)). Until recently, Finland was an important investor in Hungary (Nokia). Sweden is one of the leading investor countries in Estonia (almost exclusively) and in Poland. The UK is an important investor in Spain, and has some relatively substantial investments in Czechia and Slovakia. From outside the EU-27, in 2011 China was an important investor in Poland; Hong Kong and

8. Due to the reasons discussed in the section on data problems, data on home countries must be handled with care. Eurostat data on investor countries are available until 2011.

Japan in Hungary and Poland; South Korea (Samsung) in Hungary, Poland and Slovakia; and Taiwan (Foxconn) in Czechia.

The share of electronics in total FDI is low: in CEE it ranges from 1% (Czechia) to 3.3% (Slovakia), and seems to be lower in the Mediterranean countries (Spain: 0.3%). In the analysed country group, Hungary and Slovakia are the only countries where that share exceeds the EU-27 average (2.3%).<sup>9</sup> The latter may point to the fact that more footloose capacities (i.e. with lower invested amounts and thus sunk costs<sup>10</sup>) were transferred to the CEE countries. Separately collected data on relocations also show how this movement of capacities has added to existing capacities in the CEE countries. In a previous paper (Hunya, Sass 2005) we showed that in the FDI literature, relocation is identified as efficiency-seeking or vertically integrated FDI, as opposed to market-seeking or horizontally integrated FDI. However, FDI statistics are not able to grasp the whole extent of relocation, offshoring and offshore outsourcing. For the pre-crisis period, on the basis of the data of the European Restructuring Monitor we showed that in 2005 a large number of relocation projects transferred capacities to the CEE countries, resulting in substantial job creation in the NMS-8, mainly in the electronics and automotive industries, and job losses in Germany. But based on the available information one cannot find any link between the two processes. We later analysed Hungary separately for the period 2003 - 2011, finding out that electronics – together and interlinked with the automotive industry – was the most important sector for relocations, both to and from Hungary, in the period 2003 - 2011 (Sass and Hunya 2014). In another paper (Sass and Szanyi 2012) we analysed relocations in the electronics sector in Hungary for the period 2003 - 2010, finding out that on the basis of the number of cases electronics relocations were more frequent in the crisis period. We also found that it is usually Western European locations (mainly Germany) which are affected (i.e. capacities are transferred from there to Hungary), and that not only Western European multinationals are moving their capacities: many US, Japanese and other East-Asian companies relocated electronics activities to Hungary.<sup>11</sup> While

9. Calculations based on Eurostat data.

10. We assume the relatively low invested amounts on the basis of comparing FDI and the output/production data. A similar conclusion is drawn on the basis of detailed data provided by the Deutsche Bundesbank on total assets per employee of German FDI in CEE and other countries in 2003 by Lipsey (2006).

11. We saw relocations *inter alia* by the US IBM, Jabil, National Instruments, Delphi and Sanimna-SCI, the Dutch Philips, the German Continental, Epcos, Zeiss and Robert Bosch, the French Kontavill and Schneider Electric, the Japanese Clarion and Sanyo, the Korean Samsung and the Finnish Elcoteq.

relocation is basically an intra-European phenomenon in terms of the locations affected at both ends, compared to other industries, non-EU locations are more frequently involved. Interestingly enough, among the foreign locations affected, there was only one case where the source country was one of the analysed Mediterranean countries (Spain) out of 48 cases of relocations to Hungary for the period 2003 - 2010 (Sass and Szanyi 2012). Furthermore, there were only a few cases of backshoring during the crisis, with activities previously relocated away from Hungary to other (mainly Asian) countries being moved back. On the basis of the analysis of the Hungarian case we found that the employment impact of electronics relocations is possibly the highest among all industries, possibly pointing to the relatively labour-intensive nature of the activities involved. As the presence of backshoring indicates, there are relocation cases where multinational companies transfer activities away from the analysed countries. In the case of Hungary, in Hunya and Sass (2014) we identified various instances of relocations of the Hungarian subsidiaries of multinational companies away from Hungary in the period 2003 – 2011, with the highest number of cases (13 of the total 42) in the electronics industry. Six of these involved relocations to China and were usually relatively large projects causing a high number of job losses in Hungary. For example, the most recent relocation in 2014 was by Nokia, which closed its Komárom plant (opened in 2000) after the business line in question (production of mobile phones) was acquired by Microsoft. The shutdown of the factory resulted in the dismissal of 1800 workers and production being moved to Asia. In terms of their distribution over time, there is no clear-cut pattern concerning the pre-crisis and post-crisis numbers of relocations from Hungary, possibly due to their overall low number. We suspect that relocations to and from other CEE countries may be similar in terms of frequency and magnitude.<sup>12</sup>

The role of the state has already been underlined in terms of attracting FDI, among others in electronics, through offering generous incentives to investing firms. As far as developments during the crisis are concerned, they are much less documented. An analysis by Paul et al. (2014) of the New Members States of the EU shows that a composite index, evaluating infrastructure, quality of institutions, labour market and taxation from the point of view of FDI, declined in all CEE countries except Poland between 2007 and 2010, mainly due to a reduction in tax competitiveness.

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12. Furthermore, we found a few cases (though not in electronics), when the concentration of capacities results in relocations from one CEE country to another.

A more detailed analysis is yet to be undertaken on post-crisis FDI promotion in the analysed countries.

## 5. Foreign-owned companies in electronics

Market players can be grouped into three categories in all the analysed CEE countries. The first, most important group from the point of view of production or export is that of large-sized foreign-owned companies. Subsidiaries of foreign multinationals form two sub-groups: (i) ones with their own brands, and (ii) OEMs (original equipment manufacturers), EMSs (electronics manufacturing services) or ECMs (electronic contract manufacturers). Locally owned large-sized companies belong to the second group and may function as OEMs, EMSs, ECMs and/or as integrator companies supplied by smaller, locally owned companies. A third group consists of small and medium-sized companies, both foreign- and locally-owned, which are usually suppliers of the local or geographically close subsidiaries of foreign multinationals, in many cases with the mediation of a company from the first or second group. According to the literature, the share of foreign-owned subsidiaries has played a dominant role in all the analysed countries.<sup>13</sup>

The OECD publishes statistics on the share of foreign-owned subsidiaries in various sectors and industries. Compared to the FDI data discussed in the previous section, the time series here are longer, available for more countries and for both electronics sub-industries. The indicators show that foreign-owned companies play either an important (Mediterranean countries) or a dominant (Visegrad countries and Estonia) role. These data also give a further indication of changes during the crisis years (Table 3).

First of all, it should be noted that in all the analysed countries the industry is dominated by a few large subsidiaries of multinational companies, while domestically owned firms are usually of much smaller

13. In Czechia (Guimón 2013): the list of major investors in Czechia contains numerous electronics firms (CzechInvest 2008). In Estonia, 'The sector is strongly orientated towards foreign markets as most of the large companies are foreign-capital owned'. <http://www.tradewithestonia.com/exporters-db/sector/18/electronics-and-optics>, or see Tiits and Kalvet (2012). For Hungary see Plank and Staritz (2013) or Sass (2013), for Poland: Woodward (2005) or Garbacz (2010). For Slovakia: [http://www.sario.sk/sites/default/files/content/files/electrotechnical\\_industry.pdf](http://www.sario.sk/sites/default/files/content/files/electrotechnical_industry.pdf)

size in terms of the number of employees and/or production values. Though the number of foreign-owned companies is usually very low compared to the total number of companies<sup>14</sup>, they are responsible for the bulk of employment and especially of production, value added and R&D. Foreign-owned companies represent the overwhelming majority of electronics production and value added in the five CEE countries, and they are the largest employers in Estonia, Hungary and Slovakia. Concerning the qualitative aspects of employment Plank and Staritz (2013) analyse whether economic and social upgrading has occurred through the increased involvement and integration of Hungary (and Romania) into global production networks in the electronics industry. They show that the activities in the electronics industry in the analysed countries are still mainly of a labour-intensive nature where the majority of work can be performed by un-/semi-skilled workers. Work practices in the sector are neo-Taylorist, featuring very flexible employment regulations and direct control regimes with the consequence that working conditions differ from those in Western Europe: they 'are characterized by a polarized workforce, relatively low wages with a high variable share, flexible working time arrangements and precarious employment relationships, as well as hostility towards trade unions. The social upgrading experiences in Hungarian and Romanian electronics plants shed a differentiated light on the socioeconomic impact of "high-tech" industries' (Plank and Staritz 2013: 19). The uniform nature of these developments in Hungary and Romania may indicate that in the other analysed countries, FDI-based integration into global production networks or global value chains may result in similar problems.

Foreign-owned subsidiaries are the most important sources of R&D in electronics in the CEE countries, except to a certain extent in Poland, the country with the lowest absolute values of ICT R&D expenditure and personnel amongst the countries analysed. On the other hand, in Hungary electronics R&D is carried out almost exclusively by foreign-owned companies. Various studies indicate the increasing though still minor importance of the CEE countries for foreign R&D activities. Back in 2005, Kalotay (2005) already noted the emerging importance of the CEE countries for R&D investments, emphasizing that mainly European multinational companies in the automotive and electronics industries were locating R&D facilities in Czechia, Hungary and Poland. There are currently several studies underway to investigate the possibility of

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14. The exception is Estonia, where the total number of electronics companies is very low.

relocating R&D activities to CEE countries with considerable production capacities in the given industry. This is also true for the electronics sector. While the search for knowledge as a driver of R&D FDI in CEE is still of secondary importance, there are signs that this has changed to some extent recently (Gauselmann et al. 2011; Sass 2013). Gauselmann (2013) has shown that CEE sub-regions are seemingly catching up as target locations for knowledge and technology sourcing of MNEs, and the factors determining the location choices are increasingly similar to those in developed economies, indicating the region's emergence as a competitor to Western European and Mediterranean R&D locations. Further important findings concern the actual content of R&D: Rugraff (2014) analysed foreign direct R&D investment in Central Europe (Visegrad countries) and based on a detailed analysis of the Czech electronics, electrical equipment, machinery and automotive industries found that it continued to be mainly in support of production and associated with the international exploitation of technology produced in Western headquarters and subsidiaries. His results are all the more important as Czechia was the Central European leader in foreign direct R&D investments and the Czech government led the region in promoting foreign R&D investment. In Sass (2013), I have analysed the R&D activities of Hungarian subsidiaries of foreign multinational companies in the automotive and electronics industries. On the basis of case studies, I found great diversity in terms of subsidiaries' R&D activities, ranging from simple testing to fundamental research. The knowledge-seeking motive, though still minor, is increasingly present in locating R&D activities to Hungary. In Sass and Hunya (2014) we also noted the increase in the number of R&D relocations, including electronics manufacturing and services, especially after 2008, which may be related to the crisis-related strengthening of the efficiency-seeking and cost-reduction motive of the Western European companies concerned.

The structure of the industry differs somewhat in the two Mediterranean countries from that of the CEE countries, with the share of foreign-owned companies in all areas being smaller (except for their size), indicating a stronger locally-owned production base (Table 3).

As far as developments during the crisis are concerned, the data in Table 3 indicate that the share of foreign-owned companies in the total number has grown in all countries except Slovakia, indicating that the crisis affected local companies much more seriously than foreign-owned ones – resulting in some of them disappearing. The share of foreign-owned



Table 3 The share of foreign-owned companies in % of total

	No. of enterprises		Employment		Production value		Value added		R&D expenditure		R&D personnel	
	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011
<b>Czechia</b>												
26	4.2	4.8	72.3	66.1	91.5	90.7	67.6	56.3	54.9	...	48.4	...
27	1.6	1.7	60.6	65.6	67.8	73.7	57.1	67.2	59.0	...	55.8	...
<b>Estonia</b>												
26	63.6	68.8	89.9	91.6	90.2	98.7	88.7	95.8	50.0*	100	55.6*	38.5
27	56.8	58.8	67.5	71.5	71.6	76.6	68.1	76.6	100*	50.0	55.8*	72.9
<b>Hungary</b>												
26	5.8	7.6	85.3	85.6	97.1	97.4	91.2	91.2	94.1	...	78.9	...
27	12.6	13.5	75.6	71.5	90.1	86.9	89.4	80.2	89.6	...	84.6	...
<b>Poland</b>												
26	23.7	22.2	58.4	61.0	77.4	85.2	60.4	64.4	18.4	5.6	11.1	7.2
27	19.0	25.0	51.1	56.6	71.5	66.5	62.0	62.3	49.1	81.0	32.0	63.6
<b>Slovakia</b>												
26	19.4	6.7	77.0	79.3	97.5	97.4	89.3	88.0	57.1*	...	42.4*	...
27	21.6	5.9	67.4	68.5	78.8	79.1	58.5	67.3	100*	...	56.1*	...
<b>Portugal</b>												
26	7.7	6.9	46.6	36.2	67.3	29.7	57.6	36.6	...	...	...	...
27	4.6	4.8	47.7	50.4	51.5	48.3	56.7	53.8	...	...	...	...
<b>Spain</b>												
26	2.5	2.0	19.0	13.9	34.5	15.5	18.3	15.0	16.6*	11.5	13.4*	10.1
27	2.9	4.5	32.4	41.2	37.0	54.8	38.6	52.2	22.2*	42.1	19.6*	12.8

Notes: \*2009; data for Greece are not available; Employees: for Portugal and Spain: number of persons employed; other countries: number of employees (in full-time equivalent units). Source: own calculations based on OECD AMNE ([http://stats.oecd.org/Index.aspx?DataSetCode=AMNE\\_IN](http://stats.oecd.org/Index.aspx?DataSetCode=AMNE_IN))

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companies in employment, production and value added also grew in most cases, also indicating that locally-owned companies were losing ground to foreign-owned ones.

## **6. Other indirect measurements of FDI trends**

In this section, data providing information on changes to the European distribution of production in electronics and possible developments in local value added are analysed, i.e. changes in the level of integration of the analysed countries into the European distribution of production, providing indirect information about FDI in the sector. We start by analysing output, value added and employment, before looking at data on net exports.

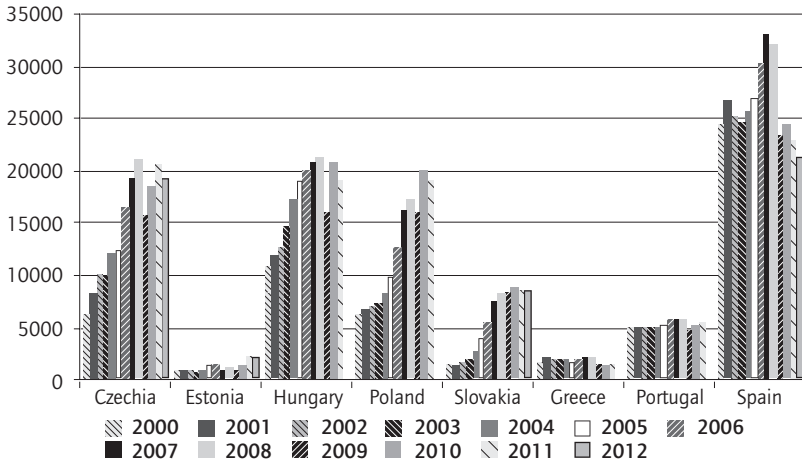
## **7. Developments in output**

Output and value added trends, partly due to the dominant or important role played by foreign-owned subsidiaries, provide indications of shifts in the European division of labour. Electronics production has increased in the Visegrad countries and Estonia, while stagnating or decreasing in the Mediterranean countries. However, the relationship between these two trends is not as straightforward as it seems.

Eurostat national accounts data provide information on the two electronics sub-industries (C26 and C27) at both country and European level, allowing us to see how production output and value added data have evolved in absolute terms and in terms of the given country's share in the EU27 for a longer period of time, i.e. 2000 – 2012. This period includes the crisis years more fully than the previous data.

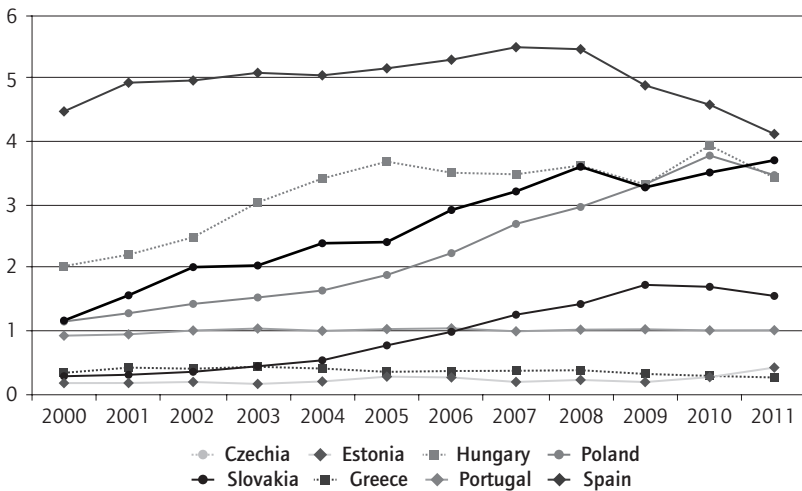
Combining the data on the two sub-industries (Figure 2), we see clearly that output in the five CEE countries increased substantially in the period analysed, with a short break during the crisis, especially in 2009. Looking at the Mediterranean countries for the same period, output stagnated in Greece and Portugal, while in Spain it increased substantially until the crisis, only to decrease in the post-crisis period. Even so, Spain was the largest producer in 2011 among the analysed countries, followed neck and neck by Czechia, Hungary and Poland.

Figure 2 Combined C26 and C27 output in the analysed countries, 2000-2012, (million euros)



Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 3 Share of the analysed countries in the EU-27's total C26 and C27 output, 2000-2011 (%)



Source: author's calculations based on Eurostat national accounts data (NACE classification)

The above statements are reinforced by Figure 3: while Spain still had the largest share in EU27 production in 2011, it had declined steeply to the levels progressively attained by Czechia, Hungary and Poland. Slovakia's electronics output was less dynamic, while the shares of Portugal and Greece remained basically stagnant. While the total share of the Mediterranean countries was between 6 and 7% until 2009, it then declined to below 5.5%; in the same period that of the five CEE countries grew from 4.8% in 2000 to almost 12% in 2008 and 2009 and to 12.6% in 2011. In terms of the breakdown of EU27 electronics output, there was thus a considerable shift away from the Mediterranean countries during the crisis to other countries, including the five CEE economies.

Changes in the shares of the individual Member States in the total electronics output of the EU27 (Figure 4) show interesting developments, putting the relative gains and losses of the analysed CEE and Mediterranean countries into another perspective.

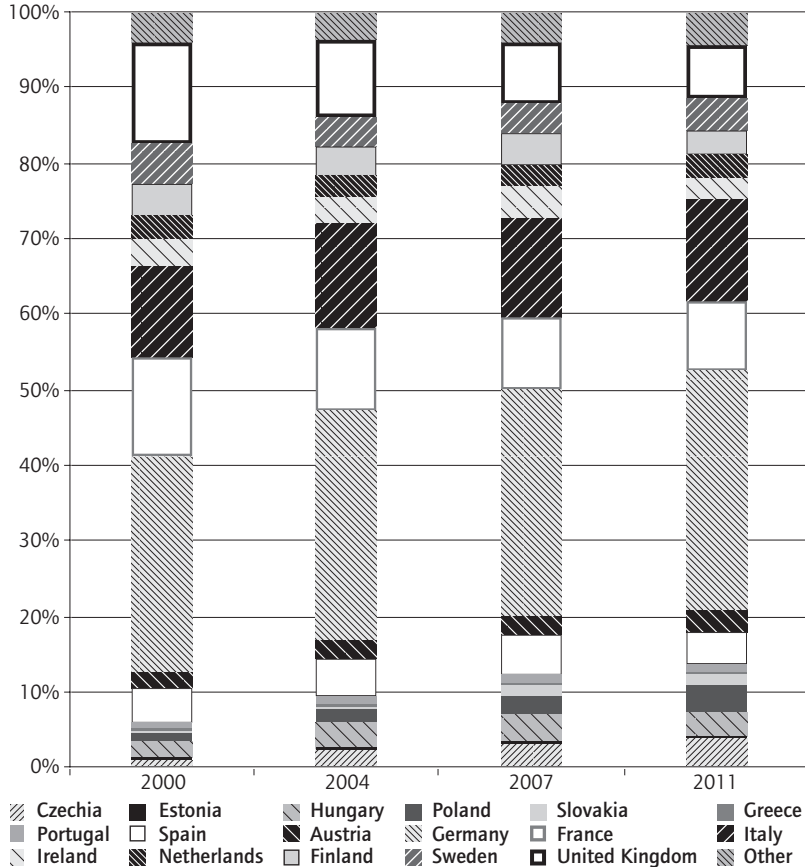
The relative losses in the shares of the Mediterranean countries result only to a lesser extent from the gains of the five CEE countries. Germany and Austria alone gained by far more during the crisis period than these CEE economies.<sup>15</sup> Thus the relative losses in shares in EU output of the Mediterranean countries can be attributed to two developments: increases in the shares in the CEE countries, and to a greater extent, increases in the shares of certain 'old' EU Member States. This indicates significant divergences in the relative competitiveness of EU Member States, 'old' and 'new' alike, in the electronics industry.

However, developments differ to a great extent in the two sub-industries. With regard to C26 (products) (cf. Appendix Figure 1), output grew dynamically in all the analysed CEE countries, while decreasing in the three Mediterranean economies. This momentum came to a halt in the crisis years, and even saw a decrease in 2010. Hungary became the largest producer, replacing Spain in 2005. The total share of the eight analysed countries in EU27 output grew from 9% in 2000 to 19% in 2011, clearly led by the gains of the CEE economies (from below 5% to 16%). On the other hand, in the other sub-industry, C27 (equipment) (cf. Appendix

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15. Other 'during-crisis winners' include Italy, the Netherlands and Sweden. It is interesting to note that in the case of these countries, with the exception of Austria, relative shares in EU output had been continuously declining in the pre-crisis period, while quite substantially increasing after 2007.

Figure 4 Shares of the EU Member States in total EU C26 and C27 output; 2000, 2004, 2007 and 2011 (%)



Note: without Luxembourg, Malta (2000, 2004, 2007 and 2011) and Latvia (2011).  
 Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 2), a dynamic increase characterised Czechia, Estonia, Poland, Portugal and Slovakia, which was to some extent broken by the crisis, but recovered soon afterwards. On the other hand, in Greece, Spain and Hungary, the crisis had a lasting negative impact on output. Even so, Spain was the largest producer among the analysed countries in 2012, followed by Poland and Czechia. The share of the eight countries in EU27 total output went up from 13 to just 17%, while the share of the CEE countries exceeded that of the Mediterranean countries only from the

crisis years onwards. In this sub-industry, the shift was thus much less spectacular. This can be partly attributed to the fact that in the C27 category, lower growth was expected for the EU as a whole compared to the world and Asia (Custer Consulting Group 2013), mainly due to the decline in telecom production, in which Europe has become increasingly de-specialised. Differences in relative specialisations thus caused different during-crisis changes at country level.

## **8. Developments in value added**

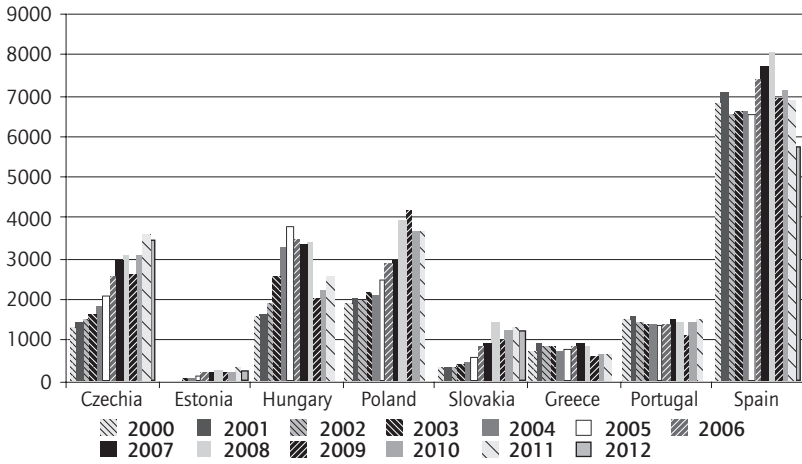
Data on value added provide a somehow different picture (Figure 5). The dynamism characterising developments in output is much less present in the development of gross value added, especially for Hungary and Slovakia. As regards Spain, stagnation turned into a decrease during the crisis years, while in Greece, output stagnation has been coupled with a decrease in value added. In the case of Poland, the crisis had a lasting negative impact on value added. It would thus seem that for the most part capacities linked to production with lower value added have been shifted within Europe.

As regards the shares of the analysed countries in EU27 electronics value added (cf. Figure 6), Spain remains in pole position, even though its share has been decreasing since 2009, taken up mainly by Czechia. Poland's and Hungary's shares have also considerably decreased, in particular during the crisis.

In terms of the share of the eight countries in the EU27 total, this grew from 8% in 2000 to almost 13% in 2008, before declining somewhat during the crisis. While the Mediterranean countries were characterised by a stagnant share between 5 and 6%, that of the analysed CEE countries grew to almost 7%, though also with some stagnant periods. Thus in value added, the shift away from the Mediterranean countries towards other countries including the CEE economies was much less pronounced, with stagnation characterising the three Mediterranean countries and small gains the CEE countries.

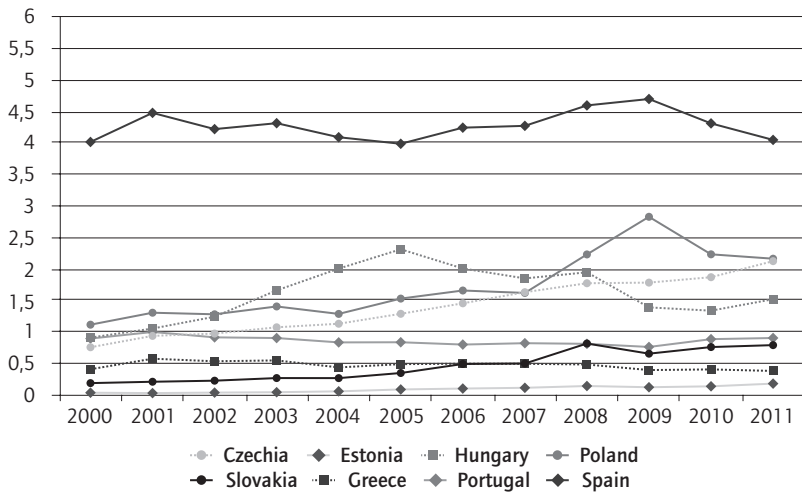
Looking at the country breakdown of total EU value added (cf. Figure 7) in the analysed period and also during the crisis years, gains characterise the five CEE countries, except for Hungary, and stagnation the Mediterranean countries. However, certain 'old' EU Member States

Figure 5 Gross value added of C26 and C27 in the analysed countries, 2000-2012 (million euros)



Source: author's calculations based on Eurostat national accounts data (NACE classification)

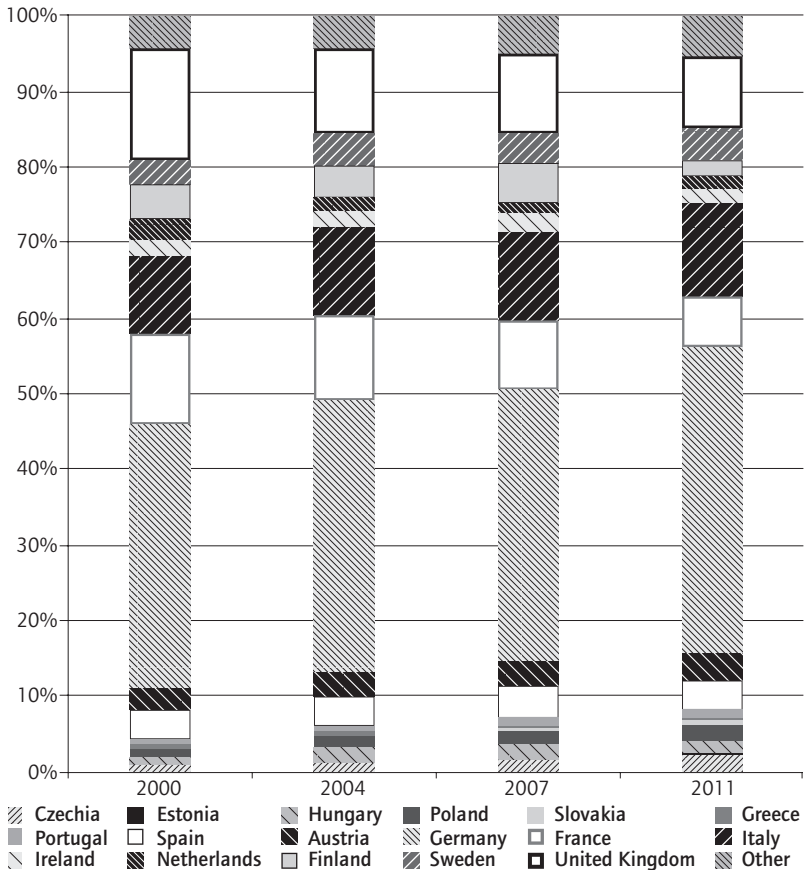
Figure 6 Share of the analysed countries in the EU27 gross value added of C26 and C27, 2000-2011 (%)



Source: author's calculations based on Eurostat national accounts data (NACE classification)

gained shares, especially during the crisis years. Here again, the relative gains of the CEE countries are far surpassed by the percentage point gains of Germany alone, indicating that shifts amongst the 'old' EU-countries were again more significant. One possible explanation for this is that electronics activities characterised by higher added values were retained by and even moved back to certain 'old' EU countries presumably with a higher level of competitiveness in the area in question.

Figure 7 Share of the EU Member States in total EU value added for C26 and C27, 2000, 2004, 2007 and 2011 (%)



Note: without Luxembourg, Malta (2000, 2004, 2007 and 2011) and Latvia (2011).

Source: author's calculations based on Eurostat national accounts data (NACE classification)



Different shares of the sub-industries in value added are responsible for changes at country level (cf. Appendix Figures 4-8). Overall, the relative specialisation of the CEE is still much stronger in C26 (products) with on average lower added value than in C27 (equipment) compared to the Mediterranean countries.

## 9. Employment

Developments in employment reinforce the above-described changes – at least until 2008, the latest year for which comparable data from Eurostat are available. According to these, total European employment in the two electronics sub-industries declined by 10% between 2000 and 2008. All four Visegrad countries belonged to the EU Member States<sup>16</sup> which gained at least half a percentage point in terms of their shares in EU electronics employment. Germany and Romania were the other two members of the 'gaining club'. By contrast, Ireland, France, the Netherlands and the United Kingdom each lost more than 0.5 percentage points.

## 10. Developments in net exports

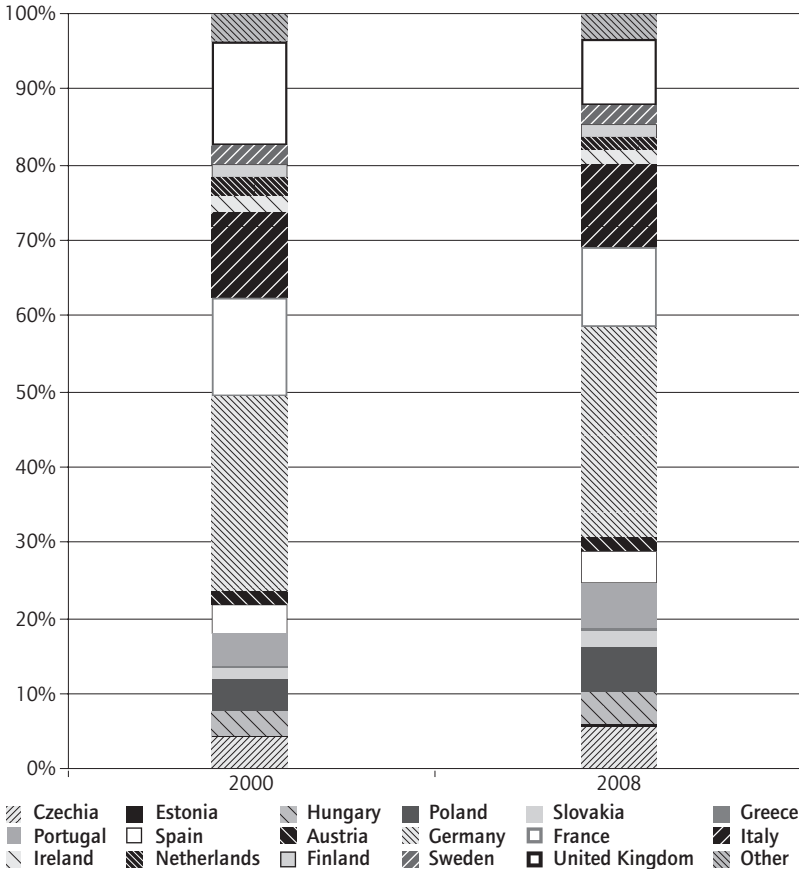
It is interesting to see to what extent changes in the share of European production and value added are attributable to the activities of local and/or locally-owned companies. Statistics on the internationally competitive part of production, i.e. that which is exported, may give an indication of local content. However, '...conventional trade statistics are a poor guide to bilateral export exposures for supply chain countries' (IMF 2013: 13). As a result, the OECD-WTO data on trade in value added are used.<sup>17</sup> Unfortunately, these are calculated separately solely for C26 (products) and not for C27 (equipment). This database gives an indication of the extent to which the analysed countries are integrated into electronics global value chains and of the role of foreign-owned companies (and imported inputs) in the exports of a given country. Unfortunately, 2009 is the latest year for which data are available.

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16. Estonia gained only 0.15 percentage points, reaching a 0.4 % share in total EU electronics employment – due to its small size.

17. [http://stats.oecd.org/Index.aspx?DataSetCode=TIVA\\_OECD\\_WTO#](http://stats.oecd.org/Index.aspx?DataSetCode=TIVA_OECD_WTO#)

Figure 8 Country breakdown of EU electronics employment, 2000 and 2008 (%)



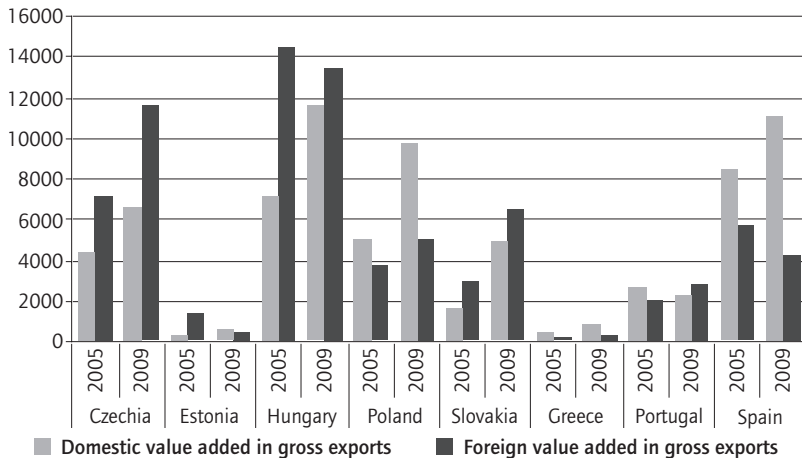
Note: used for 2000 due to a lack of data for Estonia 2001, Greece 2003, Latvia 2002, Malta 2001, Poland 2002, Slovenia 2002; for 2008: 2007 data for Greece, Spain, France, Latvia, Malta, UK, Croatia, Cyprus, Latvia, Luxemburg, Malta not included (due to missing or very low data – below 10000).

Source: author's calculations based on Eurostat

In a previous analysis using this database, the IMF (2013) noted for manufacturing exports as a whole that the Visegrad countries' bilateral exposure to final demand in Germany was at a much lower level than indicated by 'traditional' trade statistics, and thus their exposure to European and world trade was at a much higher level. This indicates the importance of non-German companies in integrating CEE countries in GVCs as well as the high export intensity of German electronics produc-

tion. Furthermore, the analysis showed the evolution of revealed comparative advantages (RCA) of the Visegrad countries, Germany and the Mediterranean countries, indicating a substantial shift between 1995 and 2009 (Rahman and Zhao 2013). There is a clear RCA shift away from labour-intensive towards capital- and knowledge-intensive manufacturing in the Visegrad countries, while maintaining their advantage in labour- and capital-intensive industries.<sup>18</sup> This may indicate upgrading shifts in the role of the CEE countries in the European distribution of activities. Changes are less straightforward in the Mediterranean countries, as Spain lost its RCA in knowledge-intensive activities, maintaining it only in capital-intensive ones; Greece had lost its RCA in all activities by 2009, while Portugal's large RCA in labour-intensive activities was still there, though with a smaller magnitude, in 2009, while its RCA in capital-intensive manufacturing operations was slowly increasing.

**Figure 9 Foreign and domestic value added as reflected by the gross exports of the analysed countries, 2005 and 2009 (USD million)**



Source: author's calculations using basic decomposition of OECD gross export data

Comparing data for a pre-crisis (2005) and the latest available year (2009), it is clear that the share of foreign value added embodied in gross exports is relatively high in the analysed country group, ranging from 28% (Spain) to 63% (Czechia) in 2009 (cf. Figure 9). Overall, this ratio in 2009 was still considerably higher in the CEE countries than in the

18. Hungary had RCA in knowledge-intensive activities only.

Mediterranean countries. While in all countries there was an increase in the absolute values of domestically produced parts between 2005 and 2009, in 2009 in Czechia, in Hungary, in Slovakia and in Portugal more than half of gross exports was not produced locally. However, the share of foreign value added content of gross exports declined in all the countries, except for Czechia, Greece and Portugal. Thus while there were signs of growing local value added during the crisis, the analysed countries' participation in ICT trade was still very much dependent on imported inputs.

## **11. Outward FDI (OFDI) and relocations in the electronics industry in the analysed countries**

While much less important than inward FDI and inward relocations, OFDI and outward relocations are also to be found in the countries analysed. The restructuring of the division of labour in electronics are part of an ongoing process which gained in momentum during the crisis period as a result of growing competitive pressure on companies, inducing them to find further ways to reduce costs. One way to do this is to transfer activities to locations where they can be carried out more efficiently and/or at considerably lower costs. Against this background, one could expect increased relocation activity during the crisis. While the CEE countries were still net receivers in this process, there were a few relocations in the other direction.

As already seen, the sector is usually dominated by the subsidiaries of large foreign multinational companies, with only a few indigenous firms. We could thus expect relatively low OFDI by indigenous firms due to their relative weakness, while indirect OFDI by foreign-owned subsidiaries of multinationals could be more substantial.<sup>19</sup> According to the data, OFDI stock in electronics has been negligible, with the exception of Hungary and Poland and to a certain extent Greece (Table 4).

Further data reveal that the most important host countries in the case of Hungary are Slovakia and Brazil, and in the case of Poland various developed European countries (France, Germany, UK) and developed

19. Data should be analysed with care, as closures of foreign affiliates appear in FDI (and not in OFDI) statistics as a negative number. However, when a local affiliate is the parent of a foreign investment (the so-called indirect OFDI), it is recorded on the OFDI side.

countries outside Europe (in North America, and in Asia, notably Singapore). For Greece, the most important host country is Romania.<sup>20</sup>

Table 4 Direct investment position abroad in C26 (products), EUR million

	2008	2009	2010	2011	2012
EU-27	194,369	191,009	207,472	421,791	
Czechia	1	2	3	2	:
Estonia	2	-1	2	1	5
Greece	32	32	32	32	:
Spain	:	:	:	:	:
Hungary	388	473	502	563	:
Poland	:	:	847	836	:
Portugal	:	:	:	:	:
Slovakia	2	1	1	0	:

Source: Eurostat, EU direct investment positions, breakdown by country and economic activity (NACE Rev. 2)

There are signs that resident firms, including a few indigenous local firms, are attempting to enhance their productivity and competitiveness through relocating the most labour-intensive activities to neighbouring or geographically close countries with lower wages, i.e. realising efficiency-seeking investments. On the other hand, the strategy of certain indigenous and highly competitive companies includes OFDI to developed countries, where they are acquiring existing brands, patents, etc. or simply being much closer either to the innovative centres of the given segment of the industry (thus investing with a strategic asset-seeking motive) or to their (potential) customers (market-seeking motive) or both.

The most obvious example for relocations is the case of the Hungarian Videoton (see Box 2). Other such companies from Poland are TelForceOne operating in wholesale trade and consumer electronics, with subsidiaries in Czechia, Romania, Slovakia and Ukraine; Relpol, a manufacturer of electromagnetic products with two production plants abroad (in Ukraine and Lithuania) and several distribution-oriented subsidiaries in other European countries; and Apator, a producer of metering and switchgear with six foreign subsidiaries in Russia, Germany, Czechia, Ukraine and

20. This may refer to ICME ECAB S.A., a company producing power, telecommunications and data transmission cables. See [http://www.cablel.ro/index\\_en.php](http://www.cablel.ro/index_en.php). ICME ECAB is one of the largest cable producers in Romania. The company had over 490 employees and sales of EUR 88 million in 2009. ICME ECAB is part of the Greek group Hellenic Cables. See <http://www.romania-insider.com/greek-money-fuel-romanian-companies/27544/>

## Box 2 Videoton

Videoton is a large-sized Hungarian-owned electronic manufacturing services (EMS) provider, which now belongs to the largest regional players, supplying European, US and Japanese electronics and automotive companies. It supplies, among others, Robert Bosch, Continental, Delphi, Luk, Suzuki and Visteon in the automotive sector and ABB, Braun, Electrolux, Legrand, Panasonic, Philips, Siemens, Stadler, Schneider Electric in electronics. It is the fourth largest European EMS. Based on its own traditional technologies and competencies and close cooperation with its partners, the company manufactures parts, sub-assemblies and modules in electronics, plastics and machinery. Videoton provides a wide range of products for the automotive, consumer electronics, household appliances, IT, office equipment and telecommunication industries.

Its predecessor was established back in 1938. It became a major state-owned company in the 1980s, employing 18 000 people. After the collapse of its regional markets it was bought by three Hungarian individuals in the framework of privatisation in 1992. The company group at present employs more than 7300 employees, out of which more than 1200 work in the foreign subsidiaries. Its revenues amounted to more than 300 million euros (more than 380 million USD) in 2011. With regard to its production operations, besides producing electronics and automotive products, the company also produces related metal and plastic products. It also provides various services to its customers, such as engineering, supply chain management, back-end technologies, logistics etc. The company's headquarters are located in Székesfehérvár, though it has eleven locations in and outside Hungary. It is a group of at least twenty companies linked to each other through various direct and indirect equity holdings.

As for its foreign subsidiaries, Videoton acquired 98% of the shares of a Bulgarian firm in Stara Zagora in 1999. It established a joint venture with a Ukrainian company, Tochpribor, in 2009 in Mukachevo. Moreover, it owns a Bulgarian holding company located in the capital, Sofia. Wages in both countries were and still are substantially lower than in Hungary. As a response to pressure to increase wages in Hungary, the company transferred its most labour-intensive activities to these foreign subsidiaries, explaining why it is considered as one of the few examples of efficiency-seeking outward investors in Hungary.

Sources: [http://www.videoton.hu/downloads/videoton\\_general\\_eng.pdf](http://www.videoton.hu/downloads/videoton_general_eng.pdf), balance sheets of the company and Radosevic and Yoruk (2001)

the United Kingdom<sup>21</sup> (Kaliszuk and Wancio 2013). The case of Apator, a company which has invested in developed 'old' EU Member States as well, points to the second type of strategy, i.e. being closer to (potential) customers and to the innovative centres of the segment.

On the other hand, there are a few cases of local subsidiaries of foreign multinationals investing abroad. For example the Hungarian subsidiary of the Korean firm, Samsung, is the parent company of a Slovakian and a Czech subsidiary and of one Romanian branch. The electronics OFDI of Hungary in Brazil can be attributed to a Hungarian Foxconn subsidiary, FIH Europe. Nevertheless, overall inward FDI still dwarfs OFDI in the CEE electronics sector, in terms of both its value and the number of projects.

## 12. Conclusion

CEE countries have become important locations for the global and especially for the European electronics industry, due to an FDI-based shift in the global and especially European division of labour and capacities. Local subsidiaries of foreign-owned multinational companies are the most important players in the industry. Given the higher than average manufacturing sensitivity of the industry to business cycles, we suspected that major changes occurred during the crisis. We were only able to partially document this due to missing data and data problems. This forced us to rely on multiple data sources for direct or indirect information on the industry. According to this, the share of the five CEE countries in EU27 electronics FDI is still relatively low, probably indicating that the activities transferred here are relatively footloose due to low invested amounts and thus low sunk costs. Furthermore, foreign-owned companies were able to further increase their shares in employment, production, value added and R&D during the crisis, indicating that the crisis negatively affected locally-owned companies much more. Output data of electronics show that, after a decline during the crisis, the CEE countries were able to restore their pre-crisis momentum, while the Mediterranean countries were characterised by stagnation or decline. Interestingly enough, the stagnation of the Mediterranean countries went hand-in-hand with an increase in electronics activities not only in the analysed CEE countries but also –

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21. <http://www.apator.com/uploads/files/consolidated-report-2012.pdf>

and even more - in certain 'old' EU Member States, especially Germany and Austria. The during-crisis gains by these 'old' EU Member States were much larger (in % points) than those of the CEE countries. Thus the crisis induced a redistribution of electronics activities among EU countries based on their levels of competitiveness. The magnitude of the changes in electronics value added is smaller compared to that of output. However, the two sub-industries differ significantly: overall, the relative specialisation of CEE countries is still much stronger in C26 (products) with on average lower value added than in C27 (equipment) compared to the Mediterranean countries. Different industry mixes per country and different relative specialisations may thus be responsible for differences in changes at country level. The average share of foreign value added was still higher in the CEE in 2009 than in the Mediterranean countries, indicating a higher reliance on imported inputs, and indirectly, a presumably higher share of assembly and/or lower value added activities. While new capacities have been created in the CEE countries, relocations from other, mainly Western European countries were also responsible for these changes. On the other side of the coin, it is interesting to note that the ongoing restructuring of the European electronics industry resulted in OFDI and relocations away from the CEE countries, though their extent is of course much smaller compared to incoming FDI. It is also interesting to see the emergence of indigenous multinational electronics companies from the region, especially from Poland and Hungary, indicating their increasing level of competitiveness.

As for the future, it is important to note that among the 'old' EU Member States there is a clear divergence in terms of the size of the electronics capacities they host, a process which seems to have accelerated during the crisis. Besides wage competitiveness, other factors influencing national and regional competitiveness are playing an increasing role in determining the location of electronics capacities, and we were unable to rule out an emerging home-country bias, especially during the crisis years. These factors will certainly affect further developments in the CEE countries. On the one hand, assuming the continuation of the during- and after-crisis trends, a further steady increase in the importance of the analysed CEE countries can be expected in European electronics production, as they host major capacities and there is evidence of capacity upgrading. Reflecting relative wage increases, the CEE countries may thus climb slowly up the added-value ladder, partly due the most labour-intensive activities being relocated to lower-wage European and non-European locations and partly due to further relocations of higher



added-value activities there, including some R&D. On the other hand, in connection with developments in the EU-15, differences between individual countries with different levels of competitiveness in the various electronics activities may cause further divergence in terms of their roles in the European division of electronics activities.

### **Acknowledgement**

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### **References**

- Antalóczy K. and Sass M. (2001) Greenfield investments in Hungary: are they different from privatization FDI?, *Transnational Corporations*, 10 (3), 39-60.
- Antalóczy K. and Sass M. (2014) Tükör által homályosan: a külföldi közvetlentőkebefektetések statisztikai adatainak tartalmáról [Through a glass darkly: about the content of the statistical data on foreign direct investment], *Külgazdaság*, 59 (7-8), 30-57.
- Barrientos S., Gereffi G. and Rossi A. (2010) Economic and social upgrading in global production networks: developing a framework for analysis, Working Paper 3, Manchester, Capturing the Gains. [http://www.capturingthegains.org/publications/workingpapers/wp\\_201003.htm](http://www.capturingthegains.org/publications/workingpapers/wp_201003.htm)
- Custer Consulting Group (2013) Business outlook: global electronics industry. <http://www.custerconsulting.com/>
- CzechInvest (2008) The Czech EE/electronics industry. [http://czbrcham.org/yahoo\\_site\\_admin/assets/docs/Investment\\_Opportunities\\_-\\_Electronics.232122727.pdf](http://czbrcham.org/yahoo_site_admin/assets/docs/Investment_Opportunities_-_Electronics.232122727.pdf)
- DECISION (2009) World electronic industries, 2008-2013: executive summary, Paris, DECISION & Etudes Conseil. <http://www.decision.eu/>
- Deutsche Bank (2014) CEE: fit for the next decade in the EU, EU Monitor. European Integration, 24 April 2014.
- Dicken P. (2011) *Global shift: mapping the changing contours of the world economy*, 6<sup>th</sup> ed., Thousand Oaks, Sage.
- Drahokoupil J. (2008) The investment-promotion machines: the politics of foreign direct investment promotion in Central and Eastern Europe, *Europe-Asia Studies*, 60 (2), 197-225.

- Galgóczy B. (2009) Boom and bust in Central and Eastern Europe: lessons on the sustainability of an externally financed growth model, *Journal of Contemporary European Research*, 5 (4), 614-625.
- Garbacz A. (2010) The electronics market in Poland, Warsaw, Polish Information and Foreign Investment Agency. [http://www.paiz.gov.pl/files/?id\\_plik=14302](http://www.paiz.gov.pl/files/?id_plik=14302)
- Gauselmann A. (2013) R&D co-operation in European post-transition economies, IWH Discussion Papers 4, Halle, Halle Institute for Economic Research. <http://www.iwh-halle.de/d/publik/disc/4-13.pdf>
- Gauselmann A., Knell M. and Stephan J. (2011) What drives FDI in Central-Eastern Europe? Evidence from the IWH-FDI-Micro database, *Post-Communist Economies*, 23 (3), 343-357.
- Guimón J. (2013) Attracting R&D of multinational companies in the Czech Republic, The Innovation Policy Platform. [https://www.innovationpolicyplatform.org/sites/default/files/rdf\\_imported\\_documents/AttractingR&DOFMultinationalCompaniesInTheCzechRepublic\\_0.pdf](https://www.innovationpolicyplatform.org/sites/default/files/rdf_imported_documents/AttractingR&DOFMultinationalCompaniesInTheCzechRepublic_0.pdf)
- Hunya G. and Sass M. (2005) Coming and going: gains and losses from relocations affecting Hungary, *wiiw Research Reports* 323, Vienna, Vienna Institute for International Economic Studies.
- IMF (2013) IMF multi-country report: German-Central European supply chain - cluster report, IMF Country Report 13/263, Washington, DC, International Monetary Fund.
- Kaliszuk E. and Wancio A. (2013) Polish multinationals: expanding and seeking innovation abroad, Warsaw, Institute for Market, Consumption and Business Cycles Research and New York, Vale Columbia Center on Sustainable International Investment. [http://ccsi.columbia.edu/files/2013/10/Poland\\_2013.pdf](http://ccsi.columbia.edu/files/2013/10/Poland_2013.pdf)
- Kalotay K. (2005) The Central European research and development platform for investors, *The Journal of World Investment & Trade*, 6 (6), 995-1009.
- Kalotay K. (2012) Indirect FDI, *The Journal of World Investment & Trade*, 13 (4), 542-555. doi: 10.1163/221190012X649841
- Kaminsky B. and Ng F. (2001) Trade and production fragmentation: Central European economies in European Union networks of production and marketing, Policy Research Working Paper 2611, Washington, DC, World Bank.
- Linden G. (1998) Building production networks in Central Europe: the case of the electronics industry, BRIE Working Paper 126, Berkeley, University of California.
- Lipsev R.E. (2006) Measuring the impacts of FDI in Central and Eastern Europe, NBER Working Paper 12808, Cambridge MA, National Bureau of Economic Research. <http://www.nber.org/papers/w12808>

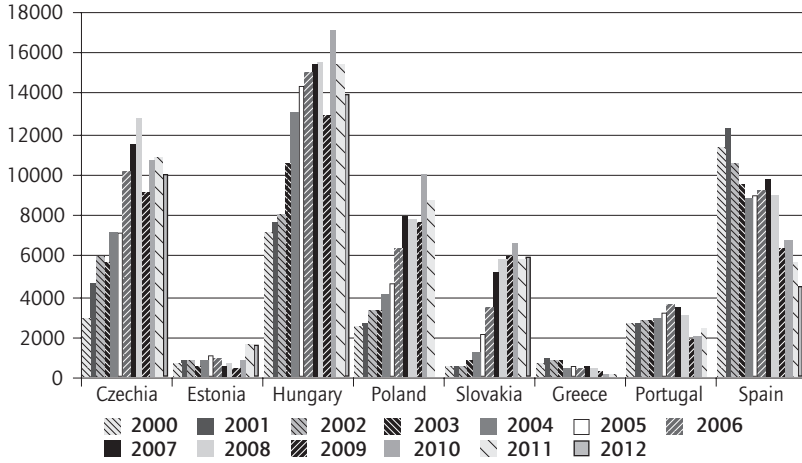
- OECD (2004) OECD information technology outlook, Paris, Organisation for Economic Co-operation and Development.
- Paul A., Popovici A.C. and Calin C.A. (2014) The attractiveness of CEE countries for FDI: a public policy approach using the TOPSIS method, *Transylvanian Review of Administrative Sciences*, 42 E, 156-180.
- Plank L. and Staritz C. (2013) 'Precarious upgrading' in electronics global production networks in Central and Eastern Europe: the cases of Hungary and Romania, Working Paper 31, Manchester, Capturing the Gains. <http://www.capturingthegains.org/pdf/ctg-wp-2013-31.pdf>
- Radosevic S. (2005) The electronics industry in Central and Eastern Europe: a new global production location, *Papeles del Este*, 10,1-15. <http://revistas.ucm.es/index.php/PAPE/article/view/PAPE0505120009A/25775>
- Radosevic S. and Yoruk D.E. (2001) Videoton: the growth of enterprise through entrepreneurship and network alignment, Working Paper 3, London, Centre for the Study of Economic & Social Change in Europe. <http://eprints.ucl.ac.uk/17578/1/17578.pdf>
- Rahman J. and Zhao (2013) Export performance in Europe: what do we know from supply links?, IMF working Paper 13/62, Washington, DC, International Monetary Fund.
- Rugraff E. (2014) Foreign direct R&D investment in Central Europe: where do we stand?, Document de Travail 2014-22, Strasbourg, Bureau d'économie théorique et appliquée. <http://www.beta-umr7522.fr/productions/publications/2014/2014-22.pdf>
- Sass M. (2013) Case study evidence of the extent and nature of foreign subsidiaries' R&D and innovation capability in Hungary, GRINCOH Working Paper 2.11, Budapest, Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences. [http://www.grincoh.eu/media/serie\\_2\\_international\\_economic\\_relations/grincoh\\_wp2.11\\_sass.pdf](http://www.grincoh.eu/media/serie_2_international_economic_relations/grincoh_wp2.11_sass.pdf)
- Sass M. and Hunya G. (2014) Escaping to the East? Relocation of business activities to and from Hungary, 2003–2011, Discussion Papers MT-DP - 2014/7, Budapest, Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences.
- Sass M. and Szalavetz A. (2013) Crisis and upgrading: the case of the Hungarian automotive and electronics sectors, *Europe-Asia Studies*, 65 (3), 489-507.
- Sass M. and Szanyi M. (2012) Two essays on Hungarian relocations, Discussion Papers MT-DP - 2012/23, Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences.
- Sturgeon T. J. and Van Biesebroeck J. (2010) Effects of the crisis on the automotive industry in developing countries: a global value chain perspective, Policy Research Working Paper 5330, Washington, DC, World Bank.

- Szalavetz A. (2004) Az információtechnológiai forradalom és a felzárkózó gazdaságok [The information technology revolution and the emerging economies], Budapest, Kossuth.
- Szanyi M. (2006) Competitiveness and industrial renewal via production relocation by global multinational networks: post 1990s development in Hungary's electrical industry, Working Paper 1215-5241, Budapest, Institute for World Economics.
- Tiits M. and Kalvet T. (2012) Nordic small countries in the global high-tech value chains: the case of telecommunications systems production in Estonia, Working Papers in Technology Governance and Economic Dynamics 38, Tallinn University of Technology.
- UNCTAD (2003) World investment report: FDI policies for development: national and international perspectives, Geneva, United Nations Conference on Trade and Development.
- UNCTAD (2004) World investment report: the shift towards services, Geneva, United Nations Conference on Trade and Development.
- Woodward R. (ed.) (2005) Networks and competitiveness in Polish foreign-owned and domestic firms, CASE Report 6, Warsaw, Center for Social and Economic Research. <http://ssrn.com/abstract=1411207>

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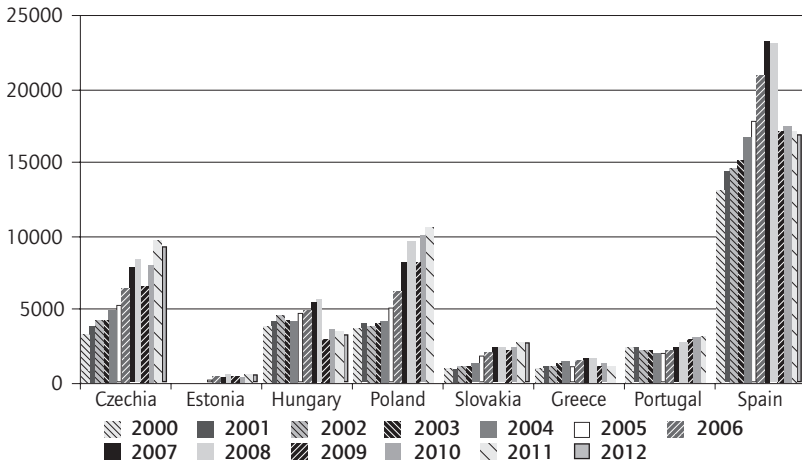
## Appendix

Figure 1 Output of Manufacture of computer, electronic and optical products (C26) in the analysed countries, 2000-2012, (million euros)



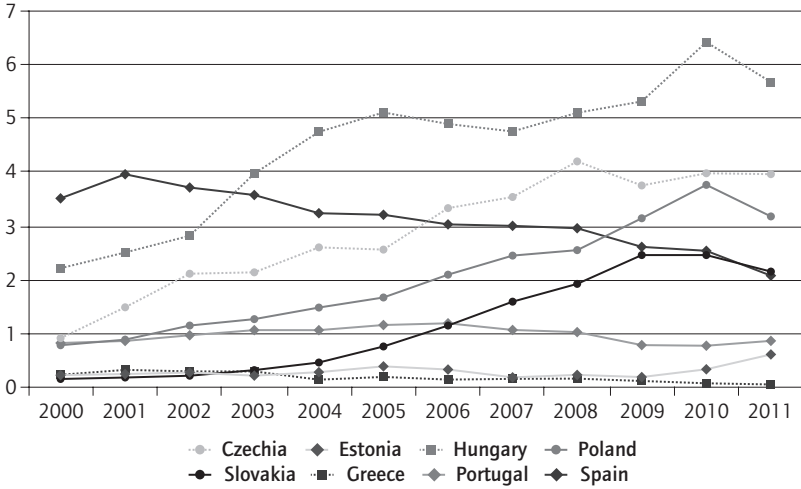
Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 2 Output of Electrical equipment (C27) in the analysed countries, 2000-2012, (million euros)



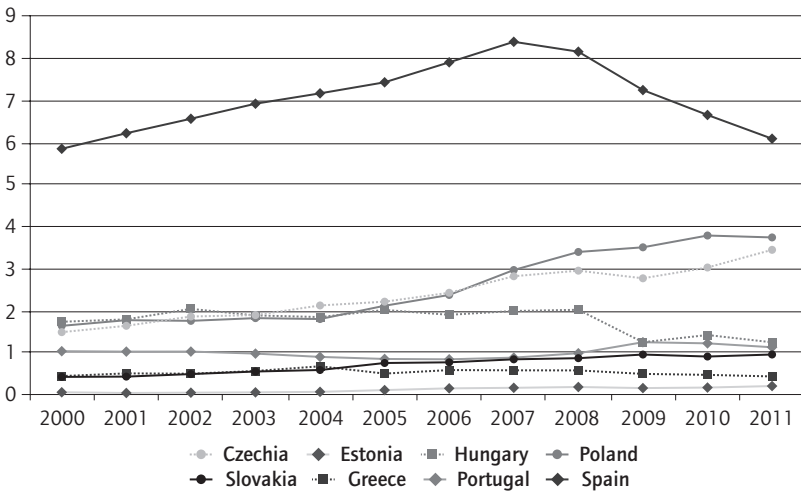
Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 3 Share of the analysed countries in the EU27 output of Manufacture of computer, electronic and optical products (C26), 2000-2012 (%)



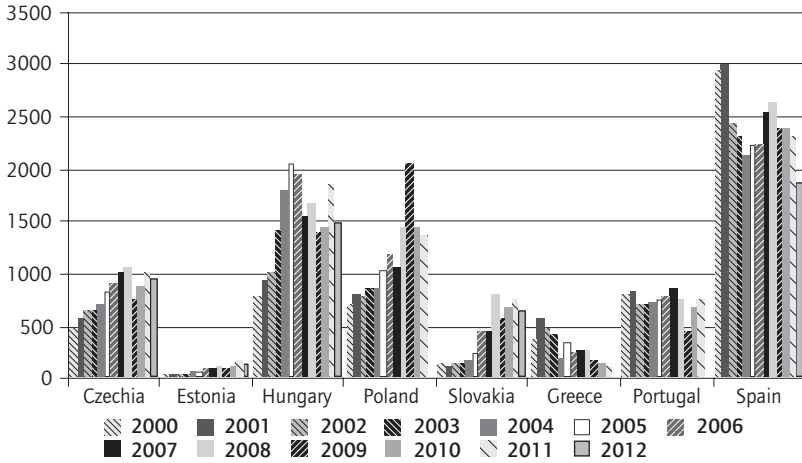
Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 4 Share of the analysed countries in the EU27 output of Electrical equipment (C27), 2000-2012 (%)



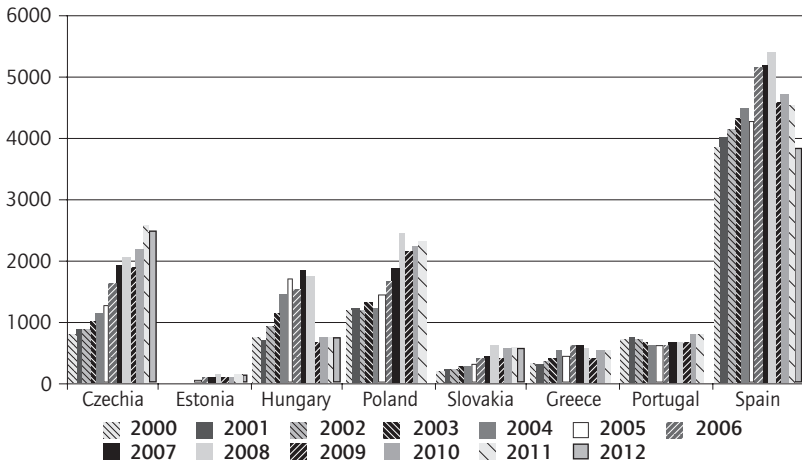
Source: author's calculations based on Eurostat national accounts data (NACE classification)

**Figure 5** Gross value-added of Manufacture of computer, electronic and optical products (C26) in the analysed countries, 2000-2012, (million euros)



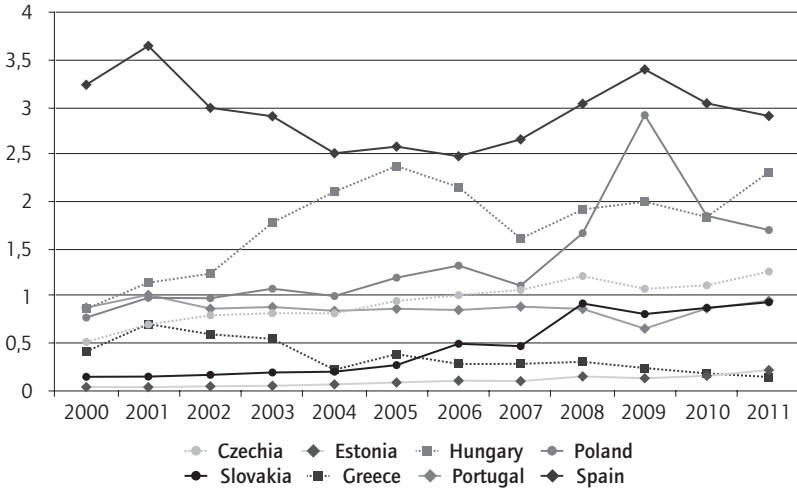
Source: author's calculations based on Eurostat national accounts data (NACE classification)

**Figure 6** Gross value-added of Electrical equipment (C27) in the analysed countries, 2000-2012, (million euros)



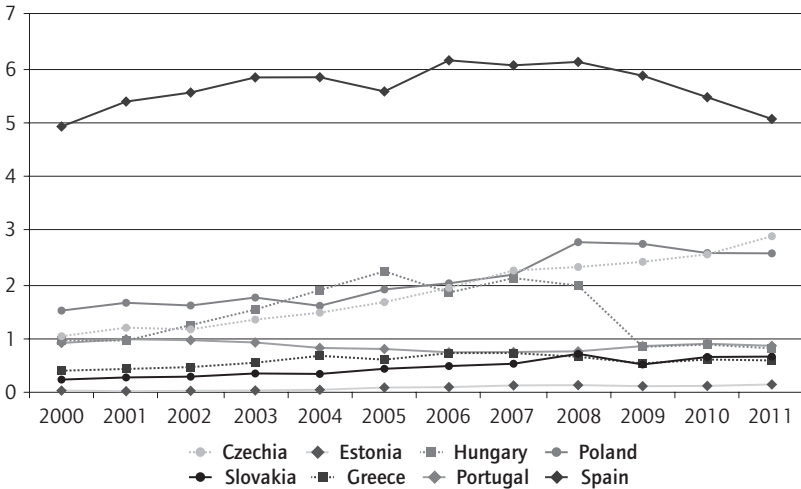
Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 7 Share of the analysed countries in the EU27 gross value-added of Manufacture of computer, electronic and optical products (C26), 2000-2012 (%)



Source: author's calculations based on Eurostat national accounts data (NACE classification)

Figure 8 Share of the analysed countries in the EU27 gross value-added of Electrical equipment (C27), 2000-2012 (%)



Source: author's calculations based on Eurostat national accounts data (NACE classification)





# FDI trends in the business services sector: the case of Poland

Grzegorz Micek

## 1. Introduction

Business services play an important role in the economic growth of capitalist economies. In particular, knowledge-intensive activities are classified among the top target industries of investment-incentive policies worldwide (UNCTAD 2014), whereas knowledge-intensive business services are considered to be increasingly fundamental to the development of national and regional innovation systems (Hipp et al. 2013). Within the sector, transnational companies offer new and complex services and sell them worldwide.

Globally, foreign direct investment (FDI) in knowledge-intensive business services has been in decline during the recent crisis, but in central and eastern Europe, the sector has experienced significant growth since the late 2000s. This is related to the reconfiguration of services and their spatial dispersion, which has often been led by cost considerations. As a result, new locations have emerged in the past decade and knowledge-intensive business services have spread to more peripheral European regions. These processes have been documented by Gallego and Maroto (2013: 14), who argue that knowledge-intensive business services 'are more and more prone to localize in areas where decreasing agglomeration economies are taking place ... [and] in more hinterland European areas'.

What is the reason for such trends? Apart from the cost considerations mentioned above, 'nearshoring' and offshoring trends have been magnified by the decreasing need for knowledge-intensive business services to be located in close proximity to customers. As shown by the software companies discussed by Weterings (2006) and Weterings and Boschma (2009), learning and innovation have not been improved by locating in the vicinity of customers. Gallego and Maroto (2013), on the other hand, argue that the enhanced role of the nodes of transport

networks is a key determinant of attracting knowledge-intensive business services, while Capik and Drahokoupil (2011: 1628) point to the importance of passive policies of ‘targeted subsidies, often implemented separately from knowledge promotion policies’.

A different logic underpinning the offshore outsourcing of business services has also recently evolved in Western European economies. As argued by Gupta (2011), the initial driving rationality of achieving cost effectiveness through ‘labour arbitrage’ is not as important as it was before the crisis. For offshored business services improved agility and flexibility have become vital, besides pure labour-cost considerations. Consequently, service companies have transformed their operating models in the direction of componentisation (fragmentation of services) and global sourcing.

In this chapter we discuss the development of the business services sector in Poland, one of the leading countries in terms of knowledge-intensive business services FDI growth, and identify crisis and post-crisis changes that have taken place in knowledge-intensive business services in this semi-peripheral European country. The chapter challenges Gupta’s (2011) argument and asserts that cost-related factors have played the prime role in attracting FDI in business services to Poland. The abundance of skilled staff and university graduates has also contributed to the dynamic growth of the knowledge-intensive business services sector, but knowledge-intensive business services FDI in central and eastern Europe has generally not been strongly knowledge-seeking (Capik and Drahokoupil 2011). We also examine labour market trends and point to the mixed and uneven evidence of upgrading of the Polish knowledge-intensive business services sector. We also investigate spillover effects and assess the sustainability of knowledge-intensive business services in Poland.

The chapter is based on multiple data sources. In order to put Poland in the central and eastern European context, data on FDI stock have been taken from the Eurostat database. Data on exports and employment come from the WTO database. In addition, the chapter has benefitted greatly from the findings of the Association of Business Service Leaders, which publishes comprehensive annual reports on foreign-owned knowledge-intensive business services in Poland, based on systematic questionnaires. It also builds on the author’s research on the impact of the knowledge-intensive business services sector on the local economy in the Kraków region (Micek et al. 2011), which involved unstructured interviews in

foreign-owned knowledge-intensive business services centres (mainly in finance and accounting and software development centres).

The chapter is structured as follows. After providing background information concerning the development of the knowledge-intensive business services sector in central and eastern Europe in the Introduction it offers a snapshot of the size and the structure of foreign-owned business service centres operating in Poland (Section 2). Section 3 discusses the locational advantages of Poland with regard to knowledge-intensive business services FDI. Next, the emphasis shifts to upgrading processes and the focus is put on new functions acquired by knowledge-intensive business services centres and labour market trends (Section 4). The knowledge-intensive business services sector also influences the Polish economy in the form of spillover effects, which are analysed briefly in Section 5. Finally, the sustainability of FDI-based growth of knowledge-intensive business services and general post-crisis trends are discussed.

## **2. The size of the knowledge-intensive business services sector in central and eastern Europe**

The differentiation of knowledge-intensive business services used in this chapter is consistent with the classification developed by Schnabl and Zenker (2013). The following business sectors are thus treated as the building blocks of knowledge-intensive business services (NACE Revision 2<sup>1</sup>):

- IT services (NACE 62–63)
  - Computer programming, consultancy and related activities (NACE 62)
  - Information service activities (NACE 63)
- Legal and accounting services (NACE 69)
- Activities of head offices (NACE 70)
- Architectural and engineering activities (NACE 71)
- Scientific R&D (NACE 72)
- Advertising and market research (NACE 73)

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1. Using NACE Revision 1.1. Gallego and Maroto (2013) and Hipp et al. (2013) argue KIBS should include: computer and related activities (NACE 72), research and development (73), and some other knowledge-based business activities (74.1–74.5). To a large extent these categories reflect those treated as knowledge-intensive business services in the chapter.

Using ISIC Revision 4 two general sections of business activities may be classified as knowledge-intensive business services: information and communication (J) and professional, scientific and technical activities (M).<sup>2</sup>

As seen from the above-listed types of business, knowledge-intensive business services may vary significantly in terms of the type of knowledge and skills used. On the other hand, most of these operations may be standardised to such an extent that they may be offshored easily (Burnete 2014; Gál 2014). Knowledge-intensive business services is not a uniform sector, either, in view of the wide variety of occupations represented.

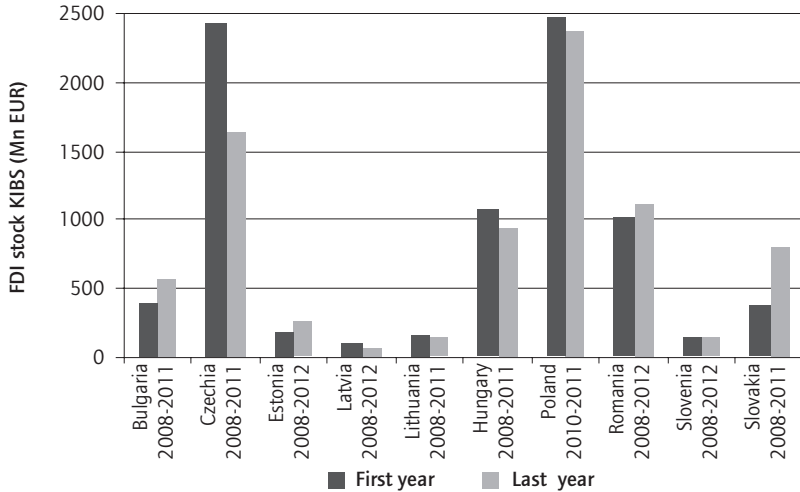
Foreign-owned knowledge-intensive business services are most commonly offered by business service centres. Based on ownership they are usually divided into two categories: outsourcing (third party customer) and captive (shared service) centres. However, with the rise of companies offering not only internal services, but also outsourcing, a hybrid form has recently emerged. The chapter focuses on knowledge-intensive business services centres as examples of vertical FDI; this is because only a few large knowledge-intensive business services centres operating in central and eastern Europe might be treated as market-seeking, demand-driven horizontal FDI (Barba-Navaretti and Venables 2004), whereas the majority are classified as vertical FDI resulting from outsourcing and firms' disintegration.

The growth of knowledge-intensive business services FDI in central and eastern Europe was significant before 2008, which is illustrated by the growing number of centres, increasing employment and rising FDI stock. As mentioned in the introductory section, business services have been claimed to be one of the global losers during the recent financial crisis: in terms of the loss in FDI stock, they have been classified among the ten industries with the largest declines in greenfield FDI between 2011 and 2012 (UNCTAD 2013). This worldwide trend, however, has not been shared by the majority of CEE countries. According to the Eurostat data, only Czechia reported a significant decline in knowledge-intensive business services FDI in the early 2010s; other CEE states still managed to attract knowledge-intensive business services FDI in this period (see Figure 1).

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2. ISIC sector N (administrative and support service activities) has been excluded from the analysis, because it includes a large number of numerous non-foreign entities.

Figure 1 FDI stock in the knowledge-intensive business services sector in ten CEE countries, 2008–2011/2012



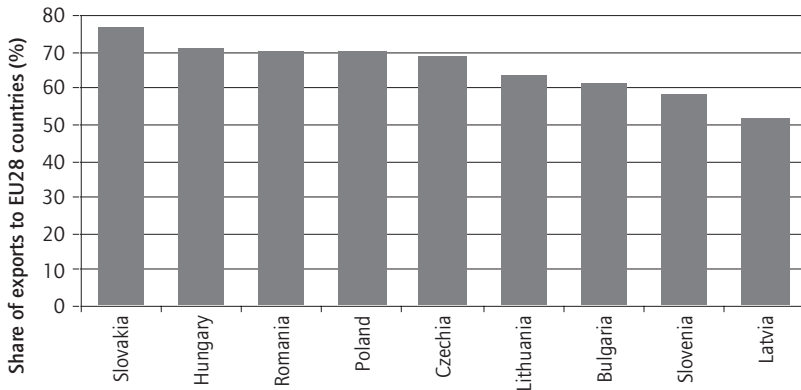
Note: FDI KIBS data include: IT services (J 58, 62-63), legal services and accounting (M 69), architectural and engineering activities (M 71), scientific R&D (M 72), advertising and market research (M 73).  
Source: Eurostat (2014)

Still, Figure 1 needs to be treated with caution. According to Fifekova and Sass (2011), data on FDI in business services are unreliable because they vary greatly depending on source. As a result, it does not provide a good basis for international comparisons; instead, data on trade flows – export and import statistics – are suggested both by Fifekova and Sass (2011) and Gál (2014) as a more accurate measure of the size of the knowledge-intensive business services sector. Even though both foreign-owned and domestic companies contribute to the export data, the share of exports from foreign-owned companies constitutes the vast majority of total exports.

High rates of exports are evident in computer services, in particular in the case of Lithuania, Romania, Poland and Estonia. Among the new EU member states, Hungary is a rare exception: between 2011 and 2013, it recorded a 10 per cent decline in exports of other business services. As shown by Gál (2014), CEE exports growth rate was higher before the crisis than the global or EU15 average. However, it must be emphasised that in absolute terms, knowledge-intensive business services export levels in central and eastern Europe are still relatively low. For the sake

of comparison, the volume of German exports of computer services are twice as big as those from CEE, while its exports in other business services are three times as big. CEE exports are highly dependent on EU economies, as it is reported for computer services (Figure 2): in this subcategory, CEE countries export between 50 and 75 per cent of their total exports to other EU member states.

Figure 2 The share of exports to EU28 countries in total computer services exports, 2012 (%)

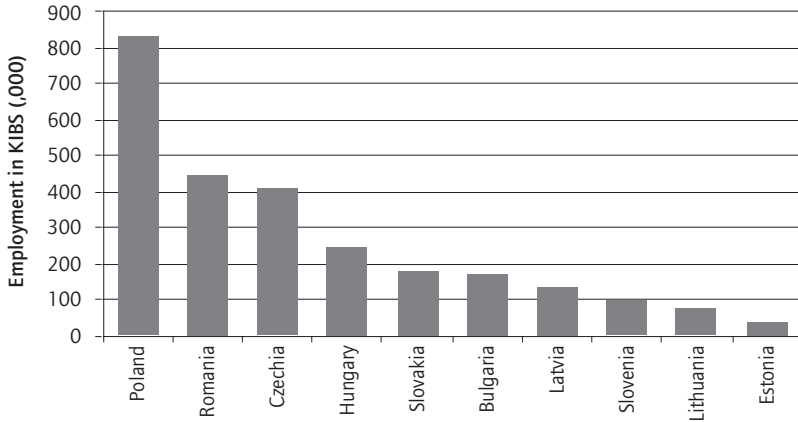


Source: WTO (2014)

On the other hand, data on trade flows in knowledge-intensive business services may be also biased due to the non-reporting or double reporting of re-exports (Fifekova and Sass 2011). For this reason, it could be argued that with knowledge-intensive business services becoming more labour-intensive, it is employment, rather than FDI or the trade flow data, that should be considered as a good proxy of knowledge-intensive business service size. The three largest economies in this respect in central and eastern Europe – also the most populated countries – Poland, Romania and Czechia, accounted for 64 per cent of total knowledge-intensive business services employment in the region in 2012 (Figure 3).

Between 2010 and 2012 significant growth in knowledge-intensive business services employment was observed. This is particularly true for the information and communication sectors in Estonia and Lithuania. The only instance of declining employment was reported for Bulgaria and Romania in relation to professional, scientific and technical activities.

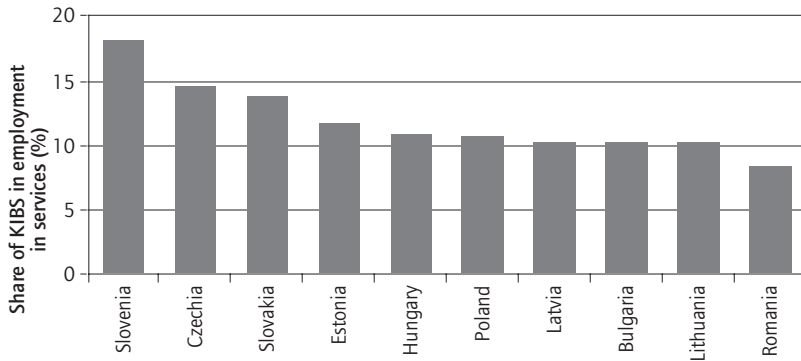
Figure 3 Employment in knowledge-intensive business services in central and eastern Europe by country, 2012



Note: Knowledge-intensive business services: professional, scientific and technical activities, information and communication. For Romania data for 2011.

Source: WTO (2014)

Figure 4 Share of knowledge-intensive business services in total service employment by CEE country, 2011



Note: Knowledge-intensive business services: professional, scientific and technical activities, information and communication.

Source: WTO (2014)

In terms of the share of knowledge-intensive business services in countries' total employment in services, smaller states seem to perform better. As illustrated by Figure 4, in Slovenia the share of such services



exceeds 15 per cent of total employment in services; the strength of the knowledge-intensive business services sector is also evident in Czechia and Slovakia. The lower knowledge-intensive business services shares in Hungary, Poland, Romania and Bulgaria in comparison with Western European countries – for example, in Germany it is 13.4 per cent – reveal a higher significance of more traditional service sectors. The latter might also reflect a more deferred pattern of economic transition, in particular in the last two countries.

### **3. Poland as the emerging regional core of knowledge-intensive business services**

In terms of FDI, trade and employment data, some central and eastern European countries seem to have performed better than others during the recent crisis. This is especially true in the case of Poland, which has played a leading role in the region with regard to knowledge-intensive business services employment, both before and since the crisis. According to the WTO, Poland's wider knowledge-intensive business services sector, consisting of professional, scientific and technical activities, as well as information and communication, currently employs 800,000 people. This includes both domestic and foreign companies. According to the calculations of the Association of Business Service Leaders (ABSL 2014), 128,000 people were employed in larger foreign-owned knowledge-intensive business services centres in Poland in 2014. The discrepancy between the two estimates stems from the fact that the latter classifies some business service centres under the category 'financial and insurance activities' (NACE K).

Between 2005 and 2014, the annual employment growth rate in Polish knowledge-intensive business services centres was estimated at 15 per cent and did not vary significantly year by year. Crisis trends were visible between 2009 and 2010, when fewer new centres were established in the country. As claimed by the ABSL, however, the post-2010 period has witnessed the emergence of new centres: 105 new units were created in 2012 and 2013, whereas in 2009 and 2010 the corresponding number was half that. Moreover, organic growth of the existing centres has been observed: almost 90 per cent of centres have widened the scope of services offered in recent years (ABSL 2014).

Knowledge-intensive business services FDI in Poland has also undergone operational and labour-related changes. According to ABSL, 87 per cent of centres have recently expanded the scope of their activities and 90 per cent of centres have declared employment growth until the end of 2015 (ABSL 2014). The shift is observed in the form of new operations acquired by knowledge-intensive business services centres, which is visible particularly in the field of banking, insurance and financial services and knowledge process outsourcing. For some knowledge-intensive business services centres, the search for new customers has resulted in a shift towards more a hybrid model, in which not only shared services, but also outsourcing services are offered.

With regard to ownership changes, during the global crisis Poland attracted numerous American business service centres. Between 2009 and 2012, 40 new American units were established; as a consequence, there were almost 160 US centres out of 470 centres operating in the country in 2014 (Table 1). The inflow of American FDI is not only driven by cost-based considerations, but also for family-related reasons (observed also in the case of software development centres; see Micek 2009). The share of EU-based centres, by contrast, decreased from 57 per cent of total employment in 2010 to 51 per cent in 2014 (ABSL 2014). At the same time, knowledge-intensive business services companies from emerging economies, such as Wipro and Infosys, have entered Poland, treating it as a gateway to the EU market. The mature knowledge-intensive business services sector in Poland has also become attractive to Middle Eastern and African investors, interested not only in greenfield investment, but also in mergers and acquisitions enabling them to enter the EU economic space.

Table 1 Breakdown of employment in foreign business service centres in Poland in terms of the investor's country of origin, 2010 and 2014 (%)

Country of origin	2010	2014
United States	32	38
EU	57	51
France	18	18
UK	11	8
Germany	9	9

Source: ABSL (2011, 2014)

As for the internal distribution of knowledge-intensive business services centres, it seems that a new round of location competition is currently taking place in Poland. Following similar processes observed over a decade ago in western Europe and documented by Richardson and Gillespie (2003), there is a growing tendency towards spatial deconcentration. The latter is manifested by two processes. First, the capital city of Warsaw does not play a dominant role in the spatial pattern of knowledge-intensive business services centre distribution;<sup>3</sup> it has been outperformed by Krakow, which concentrates over 30,000 employees in foreign-owned knowledge-intensive business services centres (Sektor 2014). Second, smaller locations are increasingly gaining in importance. Poland has 11 cities with over 300,000 inhabitants; these mid-sized units, such as Bydgoszcz, Lublin, Radom and Szczecin, have started to attract finance and accounting centres and, to a smaller extent, those performing IT outsourcing functions. This spatial trend seems to support a well-known argument of Harvey (2003), according to which capitalist economies have an intrinsic drive to incorporate new spaces. Referred to by Harvey as a 'spatial fix', this constitutes the capitalist system's attempt to resolve oncoming crises through geographical expansion. The evidence presented in this chapter shows that in different spatial dimensions central and eastern Europe, Poland and mid-sized cities are taking advantage of this development.

#### **4. Attracting knowledge-intensive business services FDI to central and eastern Europe and Poland – location factors**

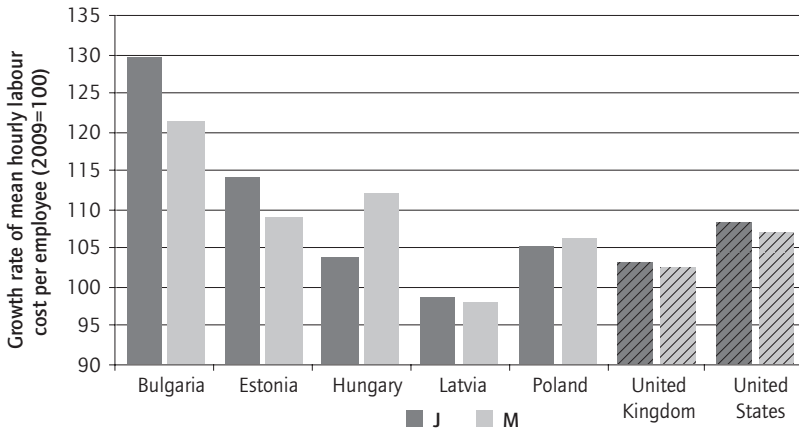
There is contradictory evidence concerning the role of various location factors in attracting business services FDI. Their significance depends largely on the size of the company and the scope of its activities. For instance, Gál (2014) claims that in central and eastern Europe cost-based considerations are the domain of larger, more labour-intensive service centres, whereas smaller companies rarely list low labour costs as the most important location factor. However, it must be kept in mind that labour costs constitute about 65 per cent of total costs in knowledge-

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3. In other CEE countries the urban hierarchy is more skewed and the capital city economically and demographically dominates other urban agglomerations. In Hungary, for instance, Budapest is dominant in terms of knowledge-intensive business services employment (HOA 2013).

intensive business services centres in Poland (ABSL 2014). Mean hourly labour costs grow faster in central and eastern Europe than in developed Western economies (Figure 5), which results in a steadily decreasing comparative advantage for central and eastern Europe in terms of wages. On the other hand, remuneration is still much lower than in western Europe, and the labour cost gap between old and new EU member states remains considerable, despite the higher growth dynamics in the latter region (Figure 6).

Figure 5 Growth rates of mean hourly labour cost per employee in knowledge-intensive business services in central and eastern Europe, 2009–2012



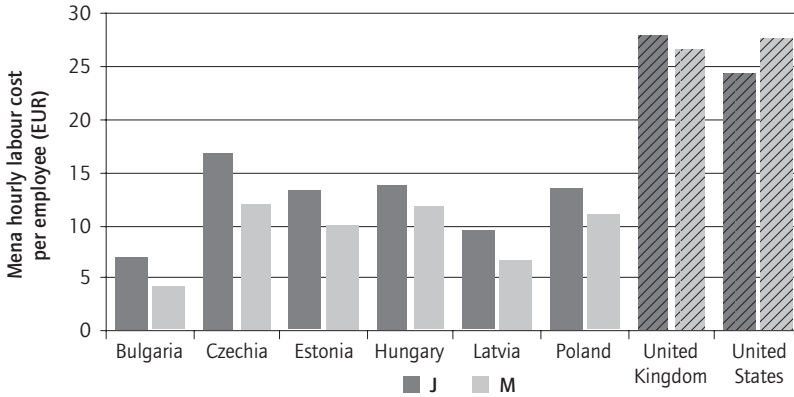
Note: J: information and communications; M: professional, scientific and technical activities.

Data for Estonia 2011–2013.

Source: ILO (2014)

The crisis has accelerated the inflow of knowledge-intensive business services to Poland because many companies recognise offshoring as an opportunity to reduce internal costs by externalising non-core business activities (Chilimoniuk-Przeździecka 2011). In this respect, the crisis has affected the corporate strategies of western European enterprises and has ‘enabled various large companies to reduce their operating costs and look for new outsourcing opportunities’ (interview with the manager of a large foreign-owned outsourcing centre in Poland, 2011). It can thus be argued that (lower) labour costs have played a significant role in the growth of the Polish knowledge-intensive business services sector, especially during the crisis period.

Figure 6 Mean hourly labour cost per employee in knowledge-intensive business services in central and eastern Europe, 2012



Note: J: information and communications; M: professional, scientific and technical activities.  
 Data for Romania and Czechia 2011.  
 Source: ILO (2014)

Apart from lower wages, the comparative advantage of central and eastern Europe and Poland stems from two types of locational advantage. First, Gál (2014) argues central and eastern Europe attracts FDI in offshorable services due to its talented, highly educated labour, rather than simply because of low wages. In this regard, it can be argued that the local capabilities of the new EU member states, and of Poland in particular, rely heavily on the well-trained and motivated workforce. For employees, knowledge-intensive business service centres provide an opportunity to acquire experience in an international environment and to master foreign languages, as their work usually involves telephone or e-mail contacts with native speakers; moreover, the majority of centres co-finance language courses (Micek et al. 2011). A substantial number of centres offer services for the whole of Europe and hence the command of rarer languages seems to be an important factor in attracting knowledge-intensive business services to university cities with large linguistic departments. The ABSL survey reveals that for selected job offers over 10 per cent of Polish centres require a knowledge of Arabic, Ukrainian and Romanian, and over 20 per cent Hungarian, Portuguese, Finnish and Danish (ABSL 2014). Second, not only Poland, but also other central and eastern European countries are characterised by close geographical, political and cultural proximity to the western part of the continent. This may not only reduce costs, but also facilitates control, increases efficiency and reduces risks (Gál 2014).

Public policies and subsidies are often considered important determinants of foreign firms' location decisions (Drahokoupil 2008). On the other hand, it seems that even though foreign-owned knowledge-intensive business services companies use investment incentives, they do not rank them as the main investment factor. This can be illustrated by the words of one of managers: 'If we had not used the subsidy, we would probably have come to Poland anyway, maybe a bit later'. Hence, it might be argued that Poland and the central and eastern European region offer huge cost advantages even without investment incentives, and the latter may matter only for the final selection of the investment site.

Finally, global factors may affect the scale of outsourcing. Sass and Kalotay (2012), for example, argue that the crisis has opened up opportunities for multinational companies from emerging markets to enter or expand their activities in Hungary. As shown in the previous section, the same logic holds in the case of Poland, where new subsidiaries of Asian-owned knowledge-intensive business service centres have been opened in order to penetrate the EU market.

## **5. Labour market effects of knowledge-intensive business services in Poland**

From the Polish labour market perspective, foreign-owned knowledge-intensive business services are important in a number of respects. To start with, such services provide job opportunities and reduce unemployment among graduates. It can therefore be argued that the dynamic growth of knowledge-intensive business services centres has slowed down the process of emigration of educated graduates to other EU countries (Micek et al. 2011). The centres also give their employees the possibility to pursue employment in line with their university specialisation, especially in the case of economics and IT, the majority of technical and scientific studies, and some humanities and linguistic studies.

Even if offshoring centres are often blamed for employing highly educated workers in low-skilled jobs, Beerepoot and Hendriks (2013: 823) demonstrate that offshore service sector work is 'part of the longer-term career planning of workers and an opportunity for strengthening their employability on the global labour market'. Similar trends can be observed in Poland, where the relatively early stage of development of the offshore service sector provides workers with opportunities for local

upward labour mobility. Based on interviews it can be argued that, thanks to frequent training sessions (often taking place abroad), knowledge-intensive business service centres' employees acquire new skills that are often not available in their local environments. The exchange of codified information frequently takes place not only in the form of training sessions, but also through the inflow of employees educated outside the city (and educated at other universities), including foreigners. Foreign employees, who frequently have more extensive experience, are an important factor in the development of Polish knowledge-intensive business service centres, given that the number of languages used in the centres has already reached 40 and is constantly growing.

Except from finance and accounting centres, there is generally a positive societal attitude towards work in the knowledge-intensive business services sector. The image of such employment has been improved in recent years by various promotional campaigns. One example is the campaign by industry leaders and local authorities in Kraków, launched shortly before the crisis under the slogan 'An Expert, Not a Machine'. The main idea of the initiative was to change the negative picture of knowledge-intensive business services employees as merely 'punching in financial data', and to show that outsourcing creates opportunities for professional development. On the other hand, research conducted by Micek et al. (2011) demonstrated that only two-thirds of knowledge-intensive business services employees agree that the statement 'An Expert, Not a Machine' reflects the reality of work at knowledge-intensive business service centres.

Changes in the Polish labour market induced by foreign-owned knowledge-intensive business services entail growing attrition rates in some indigenous companies related to the growth of foreign centres. Managers of Polish-owned firms argue that each entry of a foreign-owned company forces them to improve working conditions in order not to lose the most experienced staff: 'The explosion of new foreign companies entering the market and new employment opportunities has prompted salary increases at our company' (interview with a manager of a business process outsourcing centre, 2011).

As for remuneration patterns, salaries in knowledge-intensive business service centres are relatively high. For senior posts they even significantly exceed average wage levels in Poland's service sector (Table 2). Micek et al. (2010) demonstrated that in 80 per cent of Kraków's knowledge-

intensive business service centres gross remuneration in 2007 exceeded the average wages in the Kraków enterprise sector. There is certainly wide diversity in this respect, as wages of employees of R&D centres were twice as high as those in business outsourcing centres (Micek et al. 2011).

Table 2 Average (optimal) gross monthly salary in knowledge-intensive business service centres where knowledge of English is required (euros)

Post	Poland	Czechia	Hungary	Romania
Customer service, specialist (1+ year of experience)	900	875	1,100	625
Customer service, team leader (team: 5-15 FTE)	1,675	1,525	1,650	1,000
General ledger, junior accountant (1-2 years of experience)	850	925	1,000	550
General ledger, senior accountant (over 3 years of experience)	1,475	1,625	1,500	900
IT/technical support, 1st line support (up to one year of experience)	800	875	925	550
IT/technical support, 2nd line support	1,275	1,075	1,150	775

Source: ABSL (2014) based on Hays Poland data (2014)

With the exception of trade unions active in a few captive centres operating within large industrial holdings – for example, in banking and the energy industry – the knowledge-intensive business services sector is largely non-unionised. As a result, there is no organised employee response to legislative changes. Some of the recent regulatory modifications, however, have had a considerable effect on working conditions in the sector. Since the beginning of 2014, for instance, companies providing cross-border services from Poland for other time zones have been allowed to carry out their tasks on Sundays and public holidays, so that they can stay in constant contact with the customer.

## 6. Upgrading and spillover effects in the knowledge-intensive business services sector

Upgrading and modernisation in the knowledge-intensive business services sector may involve a shift to more advanced operations and certain changes in the labour market, such as the acquisition of new skills and salary increases. In Poland, the evidence of upgrading is mixed and uneven; it also depends strongly on the source and the profile of



knowledge-intensive business service centres (see Hardy et al. 2011). Even though there are cases of centres moving up to outsourcing of knowledge processes (KPO), the most advanced business processes are still rare. For instance, knowledge management services are offered by only 8 per cent and legal processes by 11 per cent of foreign-owned knowledge-intensive business service centres (ABSL 2014). In IT services, there have also been cases in which new processes have been moved to Poland, whereas less advanced processes have been offshored to Asian countries; as argued by one of the managers, it is common that Polish software development centres conduct 'more and more important and critical projects'. On the other hand, it is still difficult to make generalisable conclusions on the basis of the few available examples of upgrading.

As for the impact of knowledge-intensive business services FDI on economic development in a broader sense, at least three types of spillover can be identified. The first, most obvious effect is direct employment in foreign-owned knowledge-intensive business service centres. With its over 100,000 employees, steady 20 per cent compound annual employment growth rate and 50 per cent increase in employment since 2012 (ABSL 2014), knowledge-intensive business services FDI is among the most job-generating sectors in the Polish economy. In terms of level of employment, in 2013 knowledge-intensive business service centres outperformed coal mining, and by 2017 they are expected to overtake the automotive industry. Second, spillover with regard to indirect employment in companies supplying knowledge-intensive business service centres (indirect effects) and their employees (induced effects) should also be taken into account. Such spillover could be measured in terms of multiplier effects.<sup>4</sup> It turns out, however, that in the case of the knowledge-intensive business service sector, indirect multiplier effects do not play a significant role in job creation. For instance, Micek et al. (2011) showed that in Kraków, every 100 workplaces in the knowledge-intensive business services sector had generated 27 new jobs in cooperating companies and firms supplying consumer services for employees. Employment generated from the suppliers' side was limited and the multiplier effects were very low in comparison with industry (passenger transportation, for instance, generated 46 new jobs per 100 workplaces;

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4. Micek (2011) provides an insight into the methodology of estimating indirect and induced multiplier effects.

see also Micek 2010). The main type of multiplier effect in the knowledge-intensive business services sector are therefore induced effects in the form of spending of wages by knowledge-intensive business services employees (two-thirds of total amount of multiplier effects).

Third, from the knowledge spillover perspective (Martin and Moodysson 2013) information might be transferred via three types of sourcing: monitoring, mobility and collaboration. With regard to monitoring the search for knowledge outside the organisational boundaries of companies, without direct interaction with other firms, definitely occurs in the knowledge-intensive business services sector. Intermediaries such as the Association of Business Service Leaders, the Polish Information and Foreign Investment Agency and Pro Progressio play an important role in this respect; they organise or support various knowledge-intensive business services-oriented events and produce reports outlining trends and developments in the sector based on company questionnaires. As for employee mobility and the creation of new companies, in contrast to manufacturing the knowledge-intensive business services sector is not largely driven by spin-off companies. In terms of labour mobility, even if official turnover rates are relatively moderate, the readiness to relocate expressed by Polish employees seems to be one of the factors that attract knowledge-intensive business services companies to Poland. The research conducted by Hays Poland (10 Lat 2015) demonstrate that 85 per cent of knowledge-intensive business service employees declare their readiness to relocate due to job-seeking reasons. Polish workers are willing to commute or even move from a remote part of the country to the location of a business service centre. The high potential for labour mobility in Poland is attractive to knowledge-intensive business services, but at the same time generates a high turnover problem: as one manager of a business process outsourcing centre stated, '[a]mong employees there is a belief that they must to change job from time to time. It is difficult to retain loyalty between the company and employee'. Last but not least, knowledge sourcing through bilateral collaboration seems to be relatively undeveloped. Collaboration is supported mainly by intermediaries – not only national associations, but also local chambers of foreign investors – that organise informal business events. However, cases of business collaboration between companies remain scarce.

## **7. Conclusion: sustainability of FDI-based growth of knowledge-intensive business services in Poland**

This chapter has showed that central and eastern European countries have not been affected by the recent crisis in knowledge-intensive business services FDI to the same extent as the rest of the global economy. It has focused on Poland, the regional leader in terms of knowledge-intensive business services employment, where steady growth in the number of foreign-owned centres has been reported over the past decade. The analysis has demonstrated that the crisis period has opened opportunities to outsource non-core functions and build new knowledge-intensive business service capacities in peripheral European countries. These processes have been driven mainly by cost considerations (in particular, the labour-cost gap), but they have also been facilitated by the skilled workforce and, to a lesser extent, by the favourable regulatory environment.

The issue of the sustainability of knowledge-intensive business services FDI in comparison with, for instance, foreign investment in manufacturing, is rarely brought up in Polish academic and public discussions. Gál (2014) argues that in the short term, foreign-owned knowledge-intensive business services are here to stay. This judgement is also reflected in the strongly optimistic growth forecasts for the foreign knowledge-intensive business services sector in Poland: the most cautious expectations report 150,000 employees at the end of 2015 (Sektor 2014). The positive trends that made the knowledge-intensive business services sector more resilient include the diversification of business services offered and the presence of new investors from emerging markets. As a consequence, Poland is now more widely recognised as an attractive location for knowledge-intensive business services than a decade or so ago.

On the other hand, there are potential dangers to the long-term resilience of FDI-based growth of knowledge-intensive business services in Poland, and in central and eastern Europe more generally. In view of rising wages and labour costs, the biggest threat is related to the (re)emergence of new locations outside Europe, especially in India and the Philippines, and the relocation of knowledge-intensive business services capacities to these regions. The hypothetical closure of large companies (>1,000 employees each) that employ almost 50,000 workers in Poland would result in a substantial increase in unemployment and generate a need for retraining.

In view of the dependence of the real estate market on knowledge-intensive business services tenants, relocations would also lead to a significant increase in office vacancy rates.

Last but not least, the danger of being locked into less advanced knowledge-intensive business services must be taken into account. The possible shift towards more value added services cannot be taken for granted, especially given that the evidence on functional upgrading of knowledge-intensive business services is so far scarce and very uneven (see Section 5 of this chapter and Capik and Drahekoupil 2011). Such upgrading would require a change of institutional and regulatory frameworks, making them capable of attracting and maintaining more value added services, as well as the introduction of tax exemptions for advanced business services.

In order to maintain the current level of knowledge-intensive business services FDI inflows, the following factors seem to play an important role. First, agglomeration economies and cluster building matter. It is thus essential to build local coalitions among knowledge-intensive business service centres to enhance tertiary education. Moreover, in order to maintain FDI, upgrading within supply chains plays a significant role. However, case-based and mixed evidence on these trends in Poland and in central and eastern Europe more generally is scarce, even though one of the largest knowledge-intensive business service centres has recently moved some business processes to the Philippines and simultaneously has acquired advanced financial processes from its western European counterpart. Established and mature local linkages may also limit foreign-owned knowledge-intensive business services' relocation options. So far, however, the role of local suppliers and knowledge spillovers has been limited to less advanced producer services (Micek at al. 2011).

Companies cannot retain skilled staff when personnel turnover rates are high. Reported voluntary annual attrition rates do not exceed 20 per cent and are smaller in R&D centres (ABSL 2014). On the other hand, the pool of skilled and experienced labour in foreign-owned knowledge-intensive business services is definitely an asset, although it is diminishing. The decreasing availability of skilled workers has generated a need to seek employees abroad. This points to the increasing need to train potential and current knowledge-intensive business services employees so that the competitive advantage of foreign-owned centres in Poland is maintained.

## References

- 10 lat sektora nowoczesnych usług biznesowych w Polsce (2015) Warsaw, Polish Information and Foreign Investment Agency, Hays Poland.
- ABSL (2010) Sektor SSC/BPO w Polsce, Warsaw, Association of Business Service Leaders.
- ABSL (2014) Sektor nowoczesnych usług biznesowych w Polsce, Warsaw, Association of Business Service Leaders.
- Barba-Navaretti G. and Venables A.J. (2004) *Multinational firms in the world economy*, Princeton, Princeton University Press.
- Beerepoot N. and Hendriks M. (2013) Employability of offshore service sector workers in the Philippines: opportunities for upward labour mobility or dead-end jobs?, *Work, Employment and Society*, 27 (5), 823–841.
- Burnete S. (2014) Industries in Central and Eastern Europe are making strides towards servitization, *Studies in Business and Economics*, 9 (1), 35–42.
- Capik P. and Drahekoupil J. (2011) Foreign direct investments in business services: transforming the Visegrád Four region into a knowledge-based economy?, 19 (9), 1611–1631.
- Chilimoniuk-Przeździecka E. (2011) Offshoring in business services sector over the business cycle: a case of growth of the international cooperation, *Folia Oeconomica Stetinensia*, 10 (1), 7–19. doi: 10.2478/v10031-011-0005-2
- Drahekoupil J. (2008) *Globalization and the state in Central and Eastern Europe: the politics of foreign direct investment*, London, Routledge.
- Fifekova M. and Sass M. (2011) Offshoring and outsourcing business services to Central and Eastern Europe: some empirical and conceptual considerations, *European Planning Studies*, 19 (9), 1593–1609.
- Gál Z. (2014) Relocation of business services into Central and Eastern Europe (evidence from trade and location statistics), *Romanian Review of Regional Studies*, X (1), 67–78.
- Gallego J. and Maroto A. (2013) Specialization in knowledge-intensive business services (KIBS) across Europe: permanent co-localization to debate, *Regional Studies*. doi: 10.1080/00343404.2013.799762
- Górecki J. (2014) Za pięć lat nawet 200 tys. zatrudnionych w centrach usług z kapitałem zagranicznym, *Potencjał wzrostu sektora ICT w Polsce w perspektywie do 10 lat*, Ministry of Economy, 22–24.
- Gupta S. (2011) Review and positions: a practitioner perspective on 'smarter sourcing' in a post-crisis environment, *Competition & Change*, 15 (3), 239–251.
- Guzik R. and Micek G. (2008) Impact of delocalisation on the European software industry, in Labriandis L. (ed.) *The moving frontier: the changing geography of production in labour intensive industries*, Aldershot, Ashgate, 229–254.

- Hardy J., Sass M. and Pollakova Fifekova M. (2011) Impacts of horizontal and vertical foreign investment in business services: the experience of Hungary, Slovakia and the Czech Republic, *European Urban and Regional Studies*, 18 (4), 427–443.
- Harvey D. (1985) The geopolitics of capitalism, in Gregory J. and Urry D. (eds.) *Social relations and spatial structures*, Basingstoke, Macmillan, 128–163.
- Harvey D. (2003) *The new imperialism*, New York, Oxford University Press.
- Hipp C., Gallego J. and Rubalcaba L. (2013) Shaping innovation in European knowledge-intensive business services, *Service Business*. doi: 10.1007/s11628-013-0217-7
- HOA (2013) *SSC (Shared Service Centre) Survey*, Budapest, Hungarian Outsourcing Association.
- ILO (2014) *Wage statistics* [http://www.ilo.org/travail/areasofwork/wages-and-income/WCMS\\_142568/lang-en/index.htm](http://www.ilo.org/travail/areasofwork/wages-and-income/WCMS_142568/lang-en/index.htm)
- Martin R. and Moodysson J. (2011) Innovation in symbolic industries: the geography and organization of knowledge sourcing, *European Planning Studies*, 19 (7), 1183–1203.
- Mature Market Developing Talents (2013) *Warsaw*, Hays Poland.
- Micek G. (2009) Investigating the emergence of software development centres in Central and Eastern Europe, *Geographia Polonica*, 82 (2), 21–33.
- Micek G. (2010) Oddziaływanie firm transportu pasażerskiego na rozwój Krakowskiego Obszaru Metropolitalnego, *Prace Geograficzne*, 124, 29–43.
- Micek G. (2011) Estimating multiplier effects on the local scale, *Acta Universitatis Lodzianensis, Folia Oeconomica*, 252, 175–190.
- Micek G., Działek J. and Górecki J. (2010) *Centra usług w Krakowie i ich relacje z otoczeniem lokalnym*, Kraków, Wydawnictwo Uniwersytetu Jagiellońskiego.
- Micek G., Działek J. and Górecki J. (2011) The discourse and realities of offshore business services to Kraków, *European Planning Studies*, 19 (9), 1651–1668.
- Richardson R. and Gillespie A. (2003) The call of the wild: call centres and economic development of rural areas, *Growth and Change*, 34 (1), 87–108.
- Sass M. and Kalotay K. (2012) Inward FDI in Hungary and its policy context, *Columbia FDI Profiles: country profiles of inward and outward foreign direct investment issued by the Vale Columbia Center on Sustainable International Investment*. [http://ccsi.columbia.edu/files/2014/03/Profiles-\\_Hungary\\_IFDI\\_19\\_Oct\\_2012\\_-\\_FINAL\\_0.pdf](http://ccsi.columbia.edu/files/2014/03/Profiles-_Hungary_IFDI_19_Oct_2012_-_FINAL_0.pdf)
- Schnabl E. and Zenker A. (2013) *Statistical Classification of Knowledge-Intensive Business Services (KIBS) with NACE Rev. 2*, evoREG Research Note #25, Karlsruhe, Fraunhofer Institute for Systems and Innovation Research ISI.
- UNCTAD (2013) *World investment report 2013 - Global value chains: investment and trade for development*, Geneva, United Nations Conference on Trade and Development.

UNCTAD (2014) World investment report 2014 - Investing in SDGs: an action plan, Geneva, United Nations Conference on Trade and Development.

WTO (2014) World Trade Report 2014 - Trade and development: recent trends and the role of the WTO, Geneva.

All links were checked on 17 June 2015.

# Global value chains and business models in the central and eastern European clothing industry

Adrian Smith and John Pickles

## 1. Introduction

Recent years have been something of an ordeal for the central and eastern European clothing sector. Following two decades of steady and deepening integration into European production and contracting networks with their origins in European Union (EU) outward processing trade schemes (Pellegrin 2001; Begg et al. 2003), the sector has been struggling with three main challenges: the removal of quota-constrained trade,<sup>1</sup> associated competitive pressures from low-cost producers around the world (Smith et al. 2008; Pickles and Smith 2011), and the global economic crisis, which resulted in a significant reduction in demand in core European markets.

This chapter examines the range of regional economic and employment adjustments that have taken place in the clothing industry in central and eastern Europe, focusing on the Slovak case as it has responded to these challenges. It situates this case study in the context of wider changes in the industry and its adoption of particular business models in central and eastern Europe. The chapter explores the ways in which regional concentrations of export-oriented clothing production sustained employment in often peripheral regional economies when, particularly during the 1990s, de-industrialisation was occurring in other branches (Pickles 2002; Smith 2003). It examines how increasing competitive pressures started to unravel these regional production systems, leading to a much more differentiated landscape of firm-level strategies and uneven upgrading capacities among enterprises. Within the context of further economic crisis-induced restructuring over the past five years, the chapter highlights the ways in which proximity to key Western buyers, often through joint

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1. The removal of quota-constrained trade at the end of 2004 was part of the phasing out of the Multi-Fibre Arrangement which had governed international trade in textiles and clothing for many decades. See Abernathy et al. (2006), Curran (2008a, 2008b), Gereffi and Frederick (2010) and Pickles (2006).



ventures and foreign direct investment, has been one way in which production has been sustained in some peripheral regional economies.

Reflecting on recent debates concerning industrial upgrading in the global value chain literature, the chapter makes two main conceptual contributions. First, it argues that too little consideration has been given to the wider political economy within which business strategies in global value chains are situated (see also Bair 2005; Selwyn 2012; Smith 2014). We seek to understand how the current global economic crisis is affecting the long-term sustainability of regionalised production systems and we highlight not only declining demand in core markets but the impacts that state policy frameworks for EU economic integration and the clothing industry's ownership structures have had on the changing landscape of competitiveness. We highlight the role of foreign ownership in firms' responses to these increasing competitive pressures; especially the roles that proximity to buyers, foreign investors and consequent connections to primary markets have in sustaining the production of particular products during times of liberalisation and crisis.

Second, the chapter examines the role of labour in the tightening landscape of 'relative competitiveness' in global value chains. We argue that labour's positional power<sup>2</sup> within export-oriented value chains has led to some temporary and partial improvements for worker remuneration and working conditions. In particular, we show how the industry negotiated contract prices to reflect the higher wage claims of workers as local labour markets tightened. However, labour's positional power also leaves it vulnerable to deepening competitive pressures as production costs have increased and trade liberalisation and the economic crisis since 2007 have exacerbated economic decline. Workers' ability to leverage higher wages and associated payments heightened vulnerability to the loss of key orders from western European buyers. As they responded to local labour market conditions, export-dependent firms faced further competitive pressures as other costs – such as energy, short-term credit, and inputs – increased and employment growth in other industrial and service sectors further tightened local labour markets. A common, though not universal, outcome was firm bankruptcy and factory closure.

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2. By labour's 'positional power' we mean workers' ability to leverage improvements in wage rates and/or working conditions in an effort to enhance their 'conditions of social reproduction'. Recent work in the global value chain tradition has begun to argue that this constitutes a parallel process of 'social upgrading' running alongside 'industrial upgrading' (Barrientos et al. 2011).

The chapter is organised as follows. Section 2 highlights the need to consider the wider political economic environments within which value chains are embedded and the role of foreign direct investment, business strategies and labour in shaping the strategic behaviour of firms in these networks. These arguments are pursued in Section 3 through a consideration of the competitive pressures in the global and central and eastern European clothing industries, which is followed by an examination of the long-run trajectories of the Slovak clothing industry and its regional dynamics. These sections highlight the significance of international trade liberalisation, EU enlargement and euro-zone integration, as well as the role of ownership structures in explaining different regional trajectories. The chapter then turns to consider the impact of the global economic crisis, the ways in which vulnerability to market shocks has been articulated with increasing labour costs in the industry associated with wage bargaining and the variegated effects on employment and output: significant contraction and employment downsizing in some firms, alongside the sustaining of particular product niches for export production in others. The chapter concludes with a consideration of these dynamics for conceptualisations of business strategies in global value chains.

## **2. Global value chains, the economic crisis, and the global political economy**

The integration of producers and workers in various parts of the world economy into export-oriented value chains has given rise to an extensive literature. It is not our intention to review this literature here, not least because a range of reviews already exist (Leslie and Reimer 1999; Smith et al. 2002; Bair 2005, 2009; Staritz 2011). As Bair (2005) notes, however, the earlier focus of much of this work on global commodity chains has shifted towards a consideration of the way that value chains are organised and governed and of the implications for industrial upgrading (see Sturgeon 2009; Gereffi et al. 2005). In this later literature a primary focus has been the mechanisms whereby firms and industries engineer a process of industrial upgrading to capture additional functions in supply chains that generate higher value added. Humphrey and Schmitz (2002), for example, distinguish between four types of upgrading in global value chains: product, process, functional and chain upgrading. Product and process upgrading involve firms retaining their position in a chain by enhancing productivity gains through adopting new production

processes or new configurations of product mix. Functional upgrading involves a movement 'up' the chain into newer, higher value added activity, such as full package and own design/own brand manufacturing in the clothing sector. Chain upgrading involves a movement to new activity, which may also imply higher skills and capital requirement and value added (see also Milberg and Winkler 2013). Consequently, the analytical focus has shifted from an earlier emphasis on the significance for economic development of the difference between buyer-driven and producer-driven commodity chains (Gereffi 1994) to one oriented towards understanding the mechanisms whereby industrial upgrading can be achieved and exploring the developmental implications of upgrading (Gereffi et al. 2005; Bair 2005, 2009).

Within research on the central and eastern European clothing sector, there has been an engagement with these wider debates, but attention has been focused mainly on the shifting economic geographies of the industry, its connections to issues of unequal power relations within European production networks (Smith 2003) and the variety of possible upgrading, downgrading and restructuring strategies at work, moving the debate away from a singular focus on upgrading (Pickles et al. 2006; Smith et al. 2008; Pickles and Smith 2011, 2015). As Plank and Staritz (2009: 66) have argued, for example, attention needs to be focussed beyond the 'black box' of the firm to consider also who benefits from upgrading: 'Even if firms gain rewards for their upgrading efforts, the rewards may not be passed on to workers in the form of higher wages, greater job security or improved working conditions. Firm upgrading may even be based on deteriorating working conditions' (see also Bair 2005; Barrientos et al. 2011; Smith 2015).

Recent work on global value chains and the economic crisis has suggested that one of the reasons that the 2008–2009 crisis became a global one so rapidly was 'the role of trade in the transmission of the economic crisis [which] was heightened by the predominance of business models based on global production and trade networks ... Specifically, GVCs [global value chains] can partially explain the apparent overreaction of international trade to the financial crisis' (Cattaneo et al. 2010: 9). Global value chains highlight the heightened interdependencies in the world economy and have become transmission belts for the economic crisis (Smith 2013). In Europe, central and eastern European integration in the European economy in the context of EU enlargement was driven in large part by export-led models of development organised through trans-

border value chains with important implications for the dissemination of the crisis (Smith and Swain 2010; Pavlínek 2012).

Understanding the economic crisis therefore requires that analytical attention be paid to processes operating within global value chains beyond the increasingly dominant focus on industrial upgrading. Across the world, clothing industries have been experiencing the real material limits of market contraction in the context of crisis,<sup>3</sup> and significant concerns are emerging over the sustainability of some production complexes (Forstater n.d.; Gereffi and Frederick 2010; Leucuta n.d.; Smith 2015). Our argument is that much – although certainly not all – global value chain research has neglected full consideration of the wider political economy within which value chains are embedded; notwithstanding Smith et al.'s (2002), Bair's (2005) and Selwyn's (2012) critical evaluations, as well as work on global production networks (Henderson et al. 2002; Coe et al. 2004). This implies the need to consider a wider range of agents – other than firms and their managers – and a wider set of possible firm trajectories (other than upgrading) in the process of restructuring within global production (Smith 2015). This includes a consideration of workers in the establishment of competitive conditions within which firm- and regional-level trajectories play out (see Levy 2008; Selwyn 2012). In this chapter we explore the ways in which labour and labour costs in central and eastern Europe articulated with demand-side shocks associated with the crisis and inflationary pressures on the cost structure of the industry through integration in the euro zone. We consider the negative consequences of the 2008 economic crisis on consumer demand for clothing and how it became articulated with increasing production costs, including those associated with euro-zone accession. Those firms that were able to establish close relations with western European buyers through joint ventures with foreign investors were able to secure sufficiently long-term contracts, inter-firm know-how and access to investment to enable these firms to upgrade by implementing a fuller range of production activities beyond assembly production. As a consequence, they have been able to weather the crisis more effectively and even to implement technological and production upgrading programmes. However, this remains an uncertain strategy that has been possible only in a relatively small number of – nevertheless important – cases.

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3. Gereffi and Frederick (2010) estimate that US consumer spending in clothing fell by 3.6 per cent in 2008 and by 10 per cent in the first quarter of 2009. In the EU, household expenditure on clothing fell by 6 per cent between 2008 and 2009 (calculated from Eurostat data).

In addition to a consideration of the political-economic dynamics in which global value chains are embedded, our theories also need to consider more fully the role of agents other than firm managers and buyers in value chain restructuring, particularly the role that labour plays in shifting landscapes of competitiveness and associated dynamics (Coe et al. 2008; Pickles and Smith 2011; Selwyn 2007, 2012). For example, as Bair (2005: 166) has argued, ‘firms that successfully participate in global value chains may not deliver benefits to workers in the form of higher wages, greater job security or improved working conditions’; which is most certainly the case at times of economic crisis. Smith et al. (2002: 47) go on to argue that labour must be analysed in global value chains as an active agent in the shaping of chain governance and competitiveness (see also Barrientos et al. 2011; Coe et al. 2008; Coe and Jordhus-Lier 2010; Cumbers et al. 2008). A key dimension of this more recent work has been to focus on the ‘social upgrading’ of the position of workers in global value chains in which improved working conditions (wages and formalisation of employment) and enhanced workers’ rights and entitlements (worker voice and freedom of association) are achieved (Barrientos et al. 2011; Posthuma and Nathan 2010). In this chapter we argue that some workers within export-oriented value chains in central and eastern Europe have been able to gain certain temporary, yet partial, victories, particularly in relation to wages. Firm managers have responded to tightening labour markets with wage increases and other enhanced employment benefits, but these have also created vulnerabilities to the wider competitive pressures which the clothing industry has been experiencing, especially as it became affected by trade liberalisation and the falling demand due to the global economic crisis. Improved wages were not always achieved through the action of organised labour unions, which in the Slovak context are relatively weak or even non-existent in clothing firms that are not former state-owned enterprises. Rather, changes in wages and working conditions reflected capital’s reaction to tightening local labour markets and workers’ ability to demand wage increases. The close geographical proximity to its main markets that underpins the ability of the Slovak clothing industry to sustain itself has been severely tested as a result of the embeddedness of this system in wider political economic systems affecting corporate demand, on one hand, and labour’s uneven ability to secure gains, on the other. In the following section, we situate the Slovak clothing industry in the wider context of the industry in central and eastern Europe and its reconfiguration after the collapse of state socialism. We then examine the global and pan-regional competitive pressures experienced within the clothing industry and their impacts on the sector in Slovakia.

### **3. Business strategies in the central and eastern European clothing industry: from state-socialist full-package production to export processing**

Over the past twenty years, clothing producers in central and eastern Europe have been increasingly integrated into western export markets and European production networks. From the early to mid-1980s, producers in central and eastern Europe, particularly in Poland, Hungary, Bulgaria, and the former Czechoslovakia and Yugoslavia began producing under contract for manufacturing and retail companies in the EU (Fröbel et al. 1980; Lane and Probert 2009; Pickles and Smith 2011, 2016) and to a lesser extent in the United States. In the 1980s, state policy in western Europe – especially EU trade policies and customs agreements – played a vital role in encouraging European manufacturers and retail buyers to expand their production networks into central and eastern Europe (Pickles and Smith 2016).<sup>4</sup> Full-bundle (later cut-and-make and cut-make-trim) production was encouraged under special preferential customs agreements known as outward processing trade (Pellegrin 2001; Begg et al. 2003).<sup>5</sup> Full-bundle production refers to the system of exporting from the buyer country all the components of a garment, including patterns, pre-cut fabric, yarn, thread, buttons and packaging, to be assembled in an central and eastern European country and then re-exported to the buyer country. The system was designed explicitly to protect western European fabric and yarn manufacturers, while giving them access to lower labour costs in assembly plants in central and eastern Europe. This process was driven directly by European Economic Community (EEC) and EU trade and customs policies through outward processing trade regulations, which created trade quotas allowing for production sharing arrangements to be established between EEC countries and those in central and eastern Europe. Outward processing trade allowed the temporary export of fabrics and trim for outward processing in central and eastern European countries and the re-import of manufactured clothing with duties being paid only on the value added; that is, the cost of labour for sewing (Pellegrin 2001; Pickles and Smith 2016).

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4. The 2001 ETUI volume *CEE Countries in the EU Companies' Strategies of Industrial Restructuring and Relocation* (Gradev 2001) was particularly important in detailing the relationship between company strategies and the effects of relocation and contracting decisions on labour throughout ECE.

5. In Germany and the Netherlands, the more common term for full-bundle and outward processing trade is the Lohn system. It remains the primary mode of contracting for many exporting firms in central and eastern Europe.

With the collapse of Soviet-bloc and domestic markets for central and eastern Europe textiles and clothing in the early 1990s, outward processing trade assembly production became the dominant form of production within a struggling state-owned and increasingly privatised industry (Pickles and Smith 2015). While the 1990s saw industry-wide collapse, some clothing enterprises were able to sustain minimal levels of state underwriting, contracting and production, and in some state and former-state firms managers were able to struggle along in generally unfavourable circumstances. In other cases, new small private locally-owned enterprises emerged based on ad hoc contracting or new buyer relationships. In the mid-1990s, as competitive pressures (and wage and other cost pressures) increased in central Europe, a second tier of producers in Bulgaria, Romania and the Baltic States began to emerge, with Romanian export production becoming the primary location for outward processing trade in the region.<sup>6</sup>

While most countries in central and eastern Europe experienced these same processes of reform and restructuring, each did so in distinctive ways, depending on the specific form and timing of the fiscal crises of the state, the policies and pace adopted for the state's withdrawal of enterprise investment and wage budgets, and the specific adjustment paths and privatisation processes attendant on the rapid loss of state socialist markets. Each of these circumstances had its own effects as firms restructured to new labour market conditions, ownership patterns and cost structures in highly competitive international contracting environments.

Core factories were therefore able to sustain production and employment, at the same time as employment in the western European textile, clothing and footwear industries more generally had declined precipitously as sourcing moved to lower-cost locations (ILO 1996) resulting in a loss of employment in the EU clothing sector between 1985 and 1995 of 40 per cent (Stengg 2001: 3). But even in central and eastern Europe after 1989 some policy-makers quickly wrote off entire industries, with state authorities in Bulgaria, for example, going as far as to declare the clothing industry moribund (Pickles and Begg 2000) and state policy-making

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6. By 2006, the European Working Conditions Observatory estimated that about 80 per cent of orders placed in Romania were based on the Lohn system (EWCU <http://www.eurofound.europa.eu/ewco/2006/05/RO0605NU03.htm>). See also Plank and Staritz (2009) for a discussion of the Romanian experience.

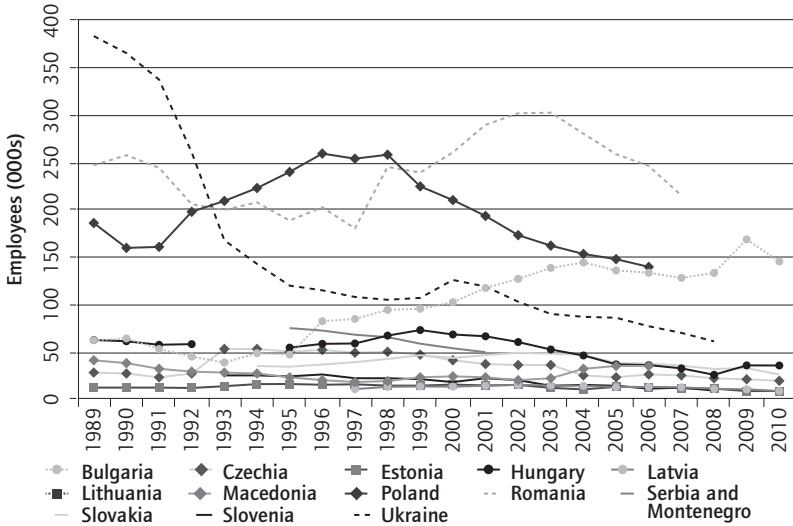
formations in Slovakia almost completely rejecting any industrial policy relating to the clothing sector in preference for more capital intensive industries, such as automotive assembly (Pavlínek 2002; Dražokoupič 2008; Smith and Ferencikova 1998). Policy-makers throughout the region adopted similar 'commonsense' understandings that these were footloose 'sunset' industries whose likely demise should be reflected in state policies, or their absence (see Pickles and Smith 2016).

Industry analysts were largely misinterpreting employment declines in western Europe and intense intra-enterprise struggles for capital and power in central and eastern Europe as industrial decline. In fact, what was occurring was a recomposition of the industry, involving new international divisions of labour, which themselves were being partially opened around new forms of trade regulation. This was far from a tale of industrial decline, although it was one in which labour was becoming differentially repositioned in relation to the (re)creation of international production networks and the reconfiguration of new geo-economic borders in Europe and beyond. As a result, at the very time the state-run clothing industry in central and eastern Europe was experiencing difficulties associated with the collapse of centralised planning and domestic demand, factories and workshops were being rapidly integrated into the supply chains of European buyers as the nearest export processing zone for the western European clothing industry, embedding production in outsourcing networks supported by state and EU near-shoring policies (Graziani 1998; Pellegrin 2001; Pickles and Smith 2016).

In these contexts employment shifts occurred in the textile and clothing industry. Except in Ukraine, Russia and Poland, clothing employment first stabilised and then grew across central and eastern Europe (Figure 1), and soon accounted for almost one-fifth of total manufacturing employment in Romania and one-quarter in Bulgaria (Figure 2). By the latter part of the first decade of the twenty-first century, in most central and eastern European countries employment in the industry continued to account for at least 5 per cent of manufacturing employment. But, unlike the fully integrated textile and apparel production systems before 1989, the re-emergent clothing industry after 1989 was inserted into fragmented global value chains as low-cost sewing workshops and export processing platforms.

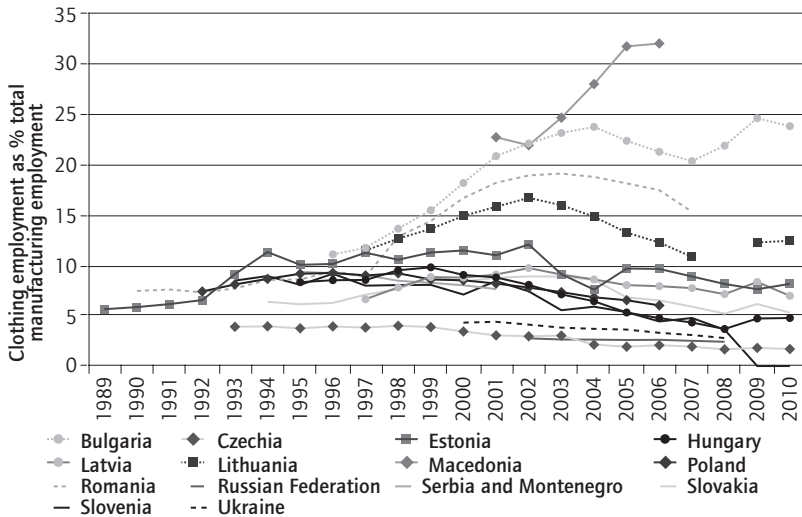


Figure 1 Clothing employment in central and eastern Europe, 1989–2010



Source: Based on International Labour Organization databases

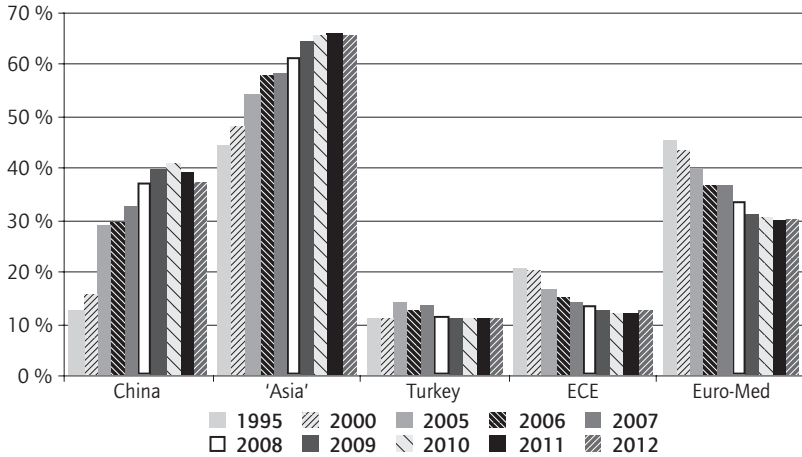
Figure 2 Clothing employment as a percentage of total manufacturing employment in central and eastern Europe, 1989–2010



Source: Based on International Labour Organization databases

The consequence was that for much of the mid-1990s clothing exports to core markets in the EU15 continued to grow, mostly via outward processing trade mechanisms. However, as trade became increasingly liberalised between the EU and the countries of central and eastern Europe (notably those themselves undergoing EU accession), outward processing trade regimes became less significant as manufacturers struggled to upgrade their functions and systems, and to capture higher profits from their contracts. Between 1995 and 2005 the phased removal of trade quotas resulted in increasing competition from producers in China and other lower cost locations which were able to undercut higher cost production on the margins of the EU (Curran 2008a, 2008b; OECD 2004; Pickles and Smith 2011; Staritz 2011). For example, Chinese and ‘Asian’ exports to EU markets increased rapidly (Figure 3). Exporters in Turkey, central and eastern Europe and North Africa continued to play an important role, but they also experienced a relative decline, with somewhat of a stabilisation of regional sourcing from the Euro-Mediterranean region in recent years.

Figure 3 Share of EU15 clothing imports by macro-region, 1995–2012



Notes: Asia: China, India, Bangladesh, Hong Kong, Indonesia, Vietnam, Sri Lanka, Pakistan, Thailand, Cambodia, Macau, South Korea, Lao, Taiwan, Malaysia.

Central and eastern Europe: Romania, Bulgaria, Poland, Hungary, Czechia, Slovakia, FYR Macedonia, Baltic States, Ukraine, Slovenia, Belarus, Croatia, Bosnia & Herzegovina, Albania, Moldova.

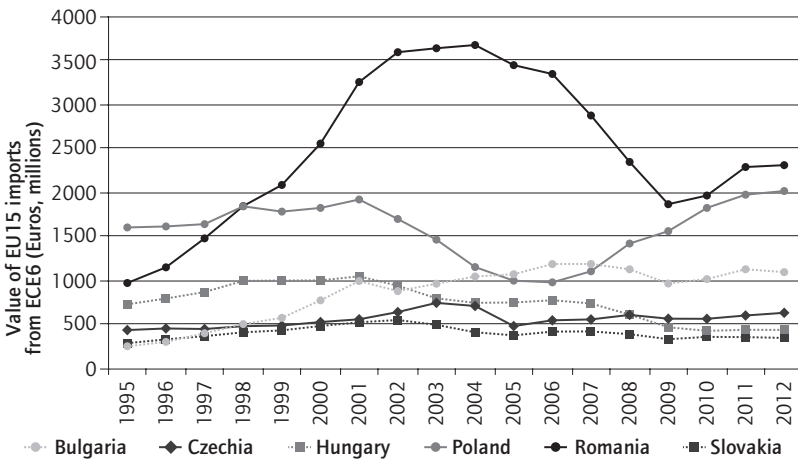
Euro-Med: Turkey, Central and Eastern Europe, Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia.

Source: Based on Comext database

However, this macro-regional set of changes masks important national-level changes. For example, while Poland and Hungary saw an absolute

decline in the level of clothing exports to EU15 markets during the 1990s and early 2000s, exports burgeoned in Romania and Bulgaria (Figure 4). A wave of crises was also experienced around the 2005 quota phase-out, with Romanian clothing exports falling precipitously, although recovering immediately following the 2008 global economic crisis. Polish clothing exports, once written off as a fading industry, have returned to positive growth since 2006, as they have also following the economic crisis in Romania and Bulgaria.

Figure 4 Clothing exports from selected central and eastern Europe suppliers to EU15 markets, 1995–2012



Source: Based on Comext database

The incorporation of proximate assembly producers in low-wage countries on the margins of the EU was part of a broader EU strategy of labour market reform orchestrated under pressure from large industry and retailer associations. As these fractions of western European capital sought to extend the frontiers of accumulation opportunity by eastwards expansion, national and EU policies created ever more conducive policy frameworks for them. This so-called ‘golden bands’ approach was a driving motif for both enlargement and trade integration in and beyond Europe. The EU market became embedded within ‘three golden bands’ of clothing production and exports, which were increasingly important to the accumulation strategies of western European industrial and retail capital in the clothing sector: core EU/European, central European and North African and wider eastern European locations. Beyond these three

golden bands, and in the context of the significant trade liberalisation that the end of quota-constrained trade in 2004 and 2008 represented, the effect of the rise of certain Asian production sites was profound (Figure 3). While many central and eastern European countries saw a relative reduction in their exports to the EU over this period, many continued to operate in those markets and some even saw absolute growth of clothing exports. These macro-regional systems of ‘golden bands’ production were, of course, part of wider geo-political and geo-economic integration projects between the EU and its neighbouring states. Partly concerned with restricting migrant labour flows, partly connected to the consolidation of dictatorial governments controlling the rise of radical Islam in North Africa, and partly connected with the geographical expansion of the economic interests of EU capital to enable EU-based firms to access cheaper labour reserves in neighbouring states, these frameworks underpinned in important ways a much larger system of macro-regional integration (see, for example, Smith 2014, 2015).

#### **4. Competitive pressures, EU enlargement, the state and euro-zone integration: transformations of the Slovak clothing sector**

In order to examine the changing divisions of labour in the European clothing industry we examine the case of Slovakia. Slovakia exemplifies some of the broader trends in the industry in central and eastern Europe as it has responded to increasing competitive pressure and trade liberalisation (see Pickles and Smith 2016 for a fuller exploration of some features of the Slovak case). The replacement of the state socialist full-package model of clothing production by the outward processing trade-dominated, export-oriented form of integration into EU production networks and markets sustained the clothing industry in Slovakia at around 6 per cent of total industrial employment (30,000 employees in 1995<sup>7</sup>), at a time when the post-socialist economy was going through major recession. However, since the mid-2000s there have been

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7. These data from the Slovak Statistics Office only include firms over 20 employees and thus under-represent the total employment in the clothing sector in which small firms are also found. For example, ILO LaborSta database figures suggest that employment levels in the clothing industry in 1995 were around 35,000, albeit a similar proportion of total manufacturing employment. SARIO (the Slovak Investment and Trade Development Agency) reports that over 40,000 people were employed in textiles and clothing industries in 1999 <http://www.sario.sk/?textile-and-clothing>

sustained job losses in the industry as competitive pressures increased (16,000 jobs lost between 2002 and 2011), and industrial value added has declined. While export activity sustained industrial production in regions that were dependent on clothing production, the recent economic crisis has been particularly damaging to this model of export dependence, and now threatens the survival of major parts of the industry and the economic vitality of its regions.

Around the time of EU enlargement the industry also experienced increasing wage pressure, which impacted on the shifting geography of clothing production. The prioritisation by the state of EU membership (2004) and euro-zone (2009) accession added to the cost pressures for clothing producers. The relative export competitiveness of Slovak firms was further undermined by the appreciation of the Slovak koruna against the euro in the run up to euro-zone integration.<sup>8</sup> The effects of this were heightened because many production contracts with western European buyers had already been negotiated in euros.<sup>9</sup> While some firms were able to negotiate currency appreciation and wage inflation pressures through twice yearly systems of contract price renegotiation with EU buyers,<sup>10</sup> the export competitiveness of many firms was affected.

Currency appreciation occurred at the same time as national legislation increased the minimum wage in Slovakia, which raised wage levels for the lowest paid segment of industrial workers in Slovakia, among whom clothing workers were a significant group. Following an eight-year period of wage limitation under the neoliberal Dzurinda governments (see Stenning et al. 2010), the social democratic-nationalist/populist coalition which came to power in 2006 increased the national minimum wage by 10.2 per cent in October 2006 (to 220 euros) (Barošová 2007) and by a further 4.1 per cent to 308 euros in January 2010.<sup>11</sup> This reflected not only changing national political priorities but also a political settlement following the 2006 election involving a stronger role for national trade unions and greater positional power for organised labour.

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8. Between 2005 and 2008 the Slovak koruna appreciated in value against the euro by 24 per cent (Kubosova 2008; see also Plank et al. 2009), and this continued in 2008 (16 per cent in May 2008 alone), just prior to the European Central Bank locking the euro/koruna exchange rate for the 1 January 2009 conversion to the euro.

9. Interview with senior manager, German-Slovak joint venture, Prešov, June 2008; interview with senior manager, German-Slovak joint venture, Spišska Nová Ves, June 2008.

10. Interview with senior manager, Italian-Slovak joint venture, Prešov, June 2008.

11. See [http://www.sktday.com/content/2088\\_minimum-monthly-wage-slovakia-rose-307-70](http://www.sktday.com/content/2088_minimum-monthly-wage-slovakia-rose-307-70).

Integration in the euro zone, membership of the EU and wage pressures were connected to expectations about future national economic growth and the ability of labour to leverage wage increases. Together these forces generated intense pressure on factory managers to increase wages during the mid-2000s. The managing director of one large, former state-owned enterprise in eastern Slovakia, for example, estimated that wage inflation (despite the fact that clothing workers remained the lowest paid of all manufacturing employees) and currency appreciation increased total operating costs by 22 per cent in 2008 alone.<sup>12</sup> This was compounded by the loss of workers from labour-intensive industries as both migration to EU15 states and sectoral restructuring increased, particularly as small firm development and shifts into tertiary sector employment became more important (see also Plank et al. 2009). Despite the fact that for many workers the expected benefits of migration to the EU15 were not always realised,<sup>13</sup> out-migration and sectoral restructuring both served to create a situation in which factory managers found themselves having to provide additional wage and non-wage benefits in order to deal with a tightening labour market for clothing workers.

The global economic crisis had a significant impact on these regional production systems, as core markets in Western Europe contracted and orders were lost. According to data from EURATEX,<sup>14</sup> 2008 and 2009 EU household consumption in textiles and clothing fell for the first time in seven years, and 2011 consumption remained below the level of 2007. The economic crisis increased pressure on the industry, which in the case of Slovakia led to a significant reduction in exports to core markets in EU15 countries. This was accompanied by extensive downsizing and bankruptcy in the industry, estimated to have resulted in the loss of approximately 12,000 jobs since 2005. During the height of the economic crisis, national production fell by 36 per cent in textiles and clothing at the lowest point in February 2009 and by 10.7 per cent in 2009 as a whole (compared with 2008). Exports to the main EU15 markets fell by 7 per cent between 2007 and 2008 and did not return to early 2008 levels.<sup>15</sup> Overall, Slovakia's share of the EU15 clothing market fell from 1 per cent in 1995 to 0.5 per

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12. Interview with managing director, former state-owned enterprise, Michalovce, October 2009.

13. Interview with senior manager, German-Slovak joint venture, Prešov, June 2008.

14. Interview with senior personnel, EURATEX, Brussels, July 2012.

15. Industrial production data for February 2009 are derived from ŠÚSR (2009a) and for 2009 as a whole from ŠÚSR (2009b). Trade data are extracted from Comext, the Eurostat trade database.

cent in 2011, although – as we note later – there are certain product niches that have proved very resistant to these wider changes.

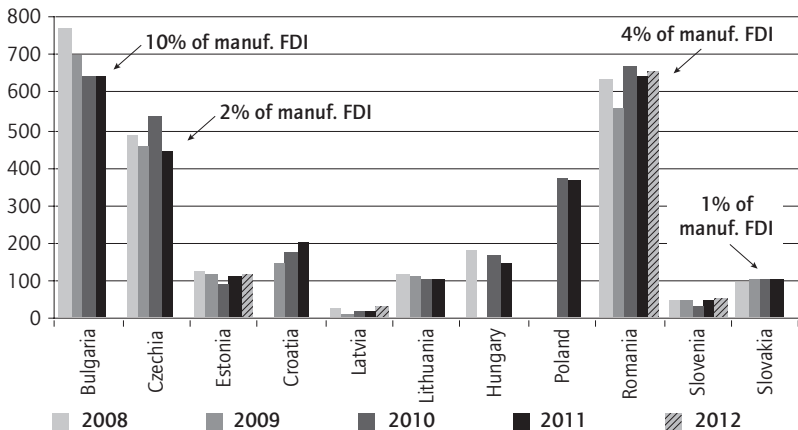
What these transformations mean for the sustainability of labour-intensive clothing production in Slovakia and more generally across central and eastern Europe remains an open question, but the reliance on a model of development wedded to EU15 export markets integrated through European production networks exposed producers across the region to demand-side shocks (Smith and Swain 2010). Export demand in some sectors of Slovakian industry has started to rebound, mainly in electronics, machinery and transport equipment (ŠÚSR 2010), but sectoral restructuring and the broader recomposition of the economy are creating new opportunities for workers to put further pressure on clothing firm managers who are trying to retain their workers, with important regional consequences. In the following section we turn to regional trajectories in the clothing industry and their relationship to the business strategies of lead firms in wider production networks.

## **5. Foreign investment and regional trajectories in the Slovak clothing industry**

In the context of these changing competitive pressures in the clothing industry in this section we examine some of the ways in which regional economies are being re-positioned and the primary business strategy drivers of these changes. It documents an eastward regional shift in the industry, which occurred from the mid-1990s to the crisis of 2007, during the period of intense trade liberalisation and EU enlargement. It also explores the implications of liberalisation and enlargement for employment levels and worker livelihoods in the main centres of production. Our argument is that foreign ownership of firms and deep integration into western European production networks and corporate structures have been central to determining the sustainability of key firms during a period of intensifying competitive pressure and decline in core markets. While overall levels of FDI in the textiles and clothing industry remain relatively low across central and eastern Europe (with the exception of Bulgaria and Romania; Figure 5), there are important firm-level and sub-national regional concentrations of FDI. Firms with significant levels of foreign investment and joint ownership have had some success in sustaining employment, benefiting from inter-firm learning and investment, and have been able to reposition themselves in

international markets as competitive pressures increased, resulting in some stability in product-level export profiles. This contrasts with the more precarious position of firms which operate as contract manufacturers for western buyers who have not developed a deeper engagement with the region.

Figure 5 Stock of FDI in the central and eastern European textiles and clothing industry, 2008–12 (million euros)



Source: Eurostat

At national level, the Slovak clothing industry has seen a steady loss of employment since 2000. The biggest decline in district-level clothing employment occurred in the main centres located in western and central Slovakia, where wage costs have tended to be highest and increasing, although employment decline has also been occurring in some lower cost regions of east Slovakia.<sup>16</sup> Several of the main districts in western and central Slovakia have seen an almost complete collapse of employment in the sector. For example, the district of Trenčín, which used to be known as the ‘fashion capital’ of Slovakia, dropped from being the second most important employer of clothing workers in 1997 to twenty-fourth position in 2007, as 92 per cent of employment in the sector was lost.<sup>17</sup> This was associated with significant downsizing of production and employment in

16. These districts are Trnava, Trenčín, Banská Bystrica, Revúca, Žilina and Púchov. Two of the districts experiencing the largest decline (Trenčín and Banská Bystrica) also experienced the highest percentage wage increase between 1997 and 2007.

17. Between 2007 and 2011 there was modest growth of clothing employment in the region.



the Ozeta Neo enterprise, which, like other large former state-owned enterprises, had an extensive branch plant structure in surrounding districts. The significance of the decline in the Ozeta Neo enterprise also affected other districts around Slovakia because of the branch plant structure of the firm, so typical of former state-owned enterprises.<sup>18</sup> Similarly high levels of employment loss have been experienced in Banská Bystrica (–92 per cent) in central Slovakia with the collapse of the former state-owned Slovenka enterprise, which meant that the district fell between 1997 and 2007 from eighth to forty-first, and Trnava in western Slovakia saw employment loss of –91 per cent over this period.<sup>19</sup> In the regions with the highest levels of employment decline in the clothing sector, such as Trenčín, mass regional unemployment has been avoided largely through sectoral restructuring into electronics, electronic engineering and automobile components associated with new foreign investment (SITA 2010). In this way, the downgrading of the clothing sector has, in part, accompanied a process of sectoral restructuring through the growth of employment in new sectors, although it remains unclear as to whether this involves the shift of capital and labour from clothing to these ‘new’ sectors, not least given the very different range of skills, knowledge and experience required, and the very different gender balance of employees in these sectors.

Despite this loss of employment in western regions, several districts experienced an increase or stabilisation of clothing employment levels. All were in eastern Slovakia where wage levels in the sector are lowest. These regions have been able to cope with increasing competitive pressures as they have benefitted from the shift of production to lower labour cost locations, a process that continued in the 1990s as firms in some of the more costly districts in western, and more recently eastern Slovakia set up outward processing arrangements across the border in western Ukraine (see Kalantaridis et al. 2008; Smith et al. 2008; Pickles and Smith 2016). Driven in large part by wage and other – for example,

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18. Ozeta Neo inherited a branch plant system of four other plants in addition to the main factory in Trenčín (located in Hlohovec, closed in 2004 with the loss of 570 jobs), Topoľčany (180 jobs lost in 2009), Tornaľa (bankrupt in 2007) and Skalica (reduced employment in 2007 and then closed). The bankruptcy in late 2007 of the Tornaľa branch (district of Revúca in east Slovakia) resulted in the district falling from tenth position in 1997 to forty-second in 2007 as employment fell by 90 per cent. Ozeta Neo also reduced employment at its plant in Skalica in 2007. Reports suggest that unemployment in the town is around 22 per cent as a result of this factory closure; according to the local mayor, ‘1,200 women used to work in the ... Ozeta factory’ (Liptáková 2009).

19. Between 2007 and 2011 there was modest growth in clothing employment in Trnava.

energy – cost differentials, these cross-border production networks allowed Slovak producers to sustain cost-competitive production for western European production networks by allowing firms to upgrade into full-package production utilising lower cost suppliers in Ukraine. At the same time, pre-existing industrial infrastructure and relatively lower wage rates in districts in eastern Slovakia provided parallel cost advantages for some western contractors looking to relocate production away from the increasingly costly locations in western parts of the country.

Low labour costs are, however, not the *only* determinant of locational and sourcing decisions in the clothing sector (see Abernathy et al. 2006; Pickles 2006; Pickles and Smith 2010), nor are increasing wage costs the *only* element in determining district-level employment decline (Pickles and Smith 2016). For example, in some regions – such as the Humenné district in eastern Slovakia – there have been overall increases in clothing employment alongside wage increases. The key to employment growth in such areas has been foreign direct investment in several factories producing high quality, highly capital-intensive clothing products, such as hosiery for Italian markets. It is to the role of foreign investment and joint ventures that we turn in the following section.

## 5.1 Foreign investment, market proximity and uneven upgrading

The sustainability of the clothing sector at firm and district levels in selected eastern Slovak regions during the crisis has in part been related to the ownership structure of firms, the associated degree of integration into western European production networks and corporate structures and the resulting product specificity. Firms with significant levels of foreign investment and ownership have had some ability to sustain employment and to reposition themselves in international markets as competitive pressures increased. Several of these key firms in eastern Slovakia are positioned in western European markets as producers of relatively high quality and high value clothing products, often designer brand men's suits and trousers, men's shirts and hosiery. For example, one former state-owned factory in eastern Slovakia has until recently been able to sustain production in part due to close relations with an Italian investor and brand owner. Despite significant formal changes in ownership over time, production of higher value men's tailored clothing in association with a range of local sub-contractors in eastern Slovakia and firms across the

border in western Ukraine (Smith et al. 2008; Pickles and Smith 2016) enabled the development of close production arrangements with the Italian market. This has also meant increasing local economic dependency on the factory as the main local employer. The local industrial structure in this primarily rural region is highly dependent on the industry, with 67 per cent of local manufacturing employment in the clothing industry. However, even this proximity to foreign buyers in production networks is coming under pressure and some job losses are occurring, particularly among factories in the sub-contracting network used to sustain production at peak times.<sup>20</sup>

Foreign ownership of firms is important to their ability to sustain employment levels. Such linkages provide organisational knowledge and capacities, as well as links to key EU markets. As a result, they have deeper levels of integration in European production networks than is found in other districts. The main examples of FDI have enabled relatively stable employment levels in relatively peripheral districts. These firms have benefitted from close relations and joint ventures with Italian and German buyers, which have enabled factories to sustain production as *preferred suppliers*, and to work with their respective Italian and German partners to respond to increasing cost pressures by deciding to out-source elements of production, notably in a set of emergent cross-border relations with factories in western Ukraine. Close buyer proximity also allowed for sustaining year-round orders, and thereby reduced seasonal fluctuations, provided greater financial stability to producers and enabled product upgrading through shifts into new product areas to diversify firm portfolios.<sup>21</sup> Geographical proximity to the main market also underpinned the survival of these firms: as one managing director argued, ‘our one advantage compared to Asia is that we are able to react [to orders] in two weeks, sometimes within one week, and when this flexibility is combined

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20. Interview with joint owner, small clothing producer, Prešov, October 2009. This firm’s employment in the district continued to decline over the late 2000s and early 2010s and is estimated now to be around 300 employees primarily involved in finishing work (labelling and packaging) for production from Ukraine.

21. For example, in one firm a shift into women’s trouser production had been agreed with the German joint venture partner and main customer so that the firm continued to produce men’s trousers as it had for nearly twenty years but diversified into this new segment to provide greater financial stability and to build on its emerging production capacity in western Ukraine (interview with senior manager, German-Slovak joint venture, Prešov, October 2009). Another example, involving a process of shifting into new activity has involved an Italian-Slovak joint venture manager establishing leisure industry activity in the local area (interview with managing director, Italian-Slovak joint venture, Prešov, October 2009).

with quality in terms of both sewing and finishing [colour-fastness and washing specificities], we are more competitive'.<sup>22</sup>

Forms of process upgrading have also been introduced in some of these firms to increase production flexibility to meet the demands of quick response supply and fast fashion from buyers, even in segments such as tailored suits. In order to deal with reduced stock inventory among retailers, joint venture firms have been able to adopt quick response approaches to supply orders in two to three weeks.<sup>23</sup> As noted by Plank et al. (2009), higher value production has provided producers with some flexibility to manage the increasing cost and competitive pressures that all firms have been experiencing. However, where this has also taken place in a context of an unrelenting attention to cost reduction, even in some of these more successful firms that have been able to sustain regional export production worker benefits have recently been eroded to keep cost increases as low as possible.<sup>24</sup> Not surprisingly, the extent to which such suppliers have been able to reposition from a situation of being 'captive suppliers' to more relational forms of interaction with their main customers is limited (see Gereffi et al. 2005). Some greater functional downgrading of tasks to suppliers has occurred (especially washing, packaging, labelling, quality control), but other key functions – such as design and fabric sourcing – remain largely the responsibility of the buyer located in western Europe. Designs are provided to the firms electronically for them to complete the garment (cut-make-trim or CMT production). As a result, only limited design activity or other higher value added activities have emerged within these firms, posing real limits to firm upgrading. Some firm-level upgrading away from CM and CMT production has occurred but the ability to break into own brand and own design manufacturing has been limited. The Slovak branches of these foreign firms have been able to exploit their close proximity to Italian and German buyers (who are often direct owners or co-owners) and their particular product niche (high quality men's trousers, suits and shirts, and women's pantyhose) in order to ensure some stability in orders and exports during a period of dramatic tightening of competitive pressure.

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22. Interview with senior manager, German-Slovak joint venture, Prešov, October 2009.

23. In one Italian-Slovak joint venture firm, quick response–tailored garment manufacturing accounted for up to one-third of production in 2009 (interview with managing director, Italian-Slovak joint venture, Prešov, October 2009).

24. In one firm this involved the cancellation of several employee benefits including free massage and sauna usage and subsidised vacations and other leisure activities, and reduced pension benefits (interview with senior manager, German-Slovak joint venture, Prešov, October 2009).

By contrast, many domestically-owned firms lacking such market proximity have struggled. This has especially been the case for some of the large former state-owned firms, even when they have occupied a similar product niche in export production. At times this has been due to particular forms of ownership and management relations, including the asset-stripping of some key firms, leading to branch plant closure or a loss of key markets and orders. As the general director of one large, former state-owned enterprise argued, 'our mistake was that we focused on export markets and not so much on the domestic market'.<sup>25</sup> Faced with a significant increase in costs due to wage increases and currency appreciation, this firm lost its key orders from long-standing western European buyers. As a result, total employment in the firm fell from 1,300 in 2002 to 700 in 2005, and 260 in 2010. It is doubtful that a focus on the relatively small domestic market would have improved this firm's prospects; rather it was their lack of close connections to other foreign buyers that resulted in declining orders as the firm could not meet the price requirements of their main buyers.

Increasing wage levels, the attendant increasing costs of production in central and western Slovakia and exchange rate appreciation have underpinned the decline of some segments of the clothing industry in this part of the country. As western and central regions declined in the late 1990s and early 2000s, clothing employment in eastern Slovakia stabilised. More recently these regional production complexes have suffered from increasing wage pressure, exchange rate appreciation prior to joining the euro zone, sectoral restructuring into new industrial activity – such as electronics and automobile production – and increasing tertiary sector activity. On top of this comes the impact of the global economic crisis and the resulting demand slumps in core markets (discussed further in the following section). These cost pressures have been articulated with a set of firm organisational structures that have contributed to the range of trajectories identified. Many of the large former state-owned firms that were at the core of the outward processing trade systems developed from the 1980s onwards have experienced increasing competitive pressures and the loss of key orders from main customers in EU15 markets. Those that have been able to forge connections with western buyers through joint ventures or buy-outs have weathered this storm more easily, partly by having privileged access to western buyers and markets. However, those

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25. Interview, general director, large former state-owned enterprise, Michalovce, October 2009).

that have experienced a shift towards ownership structures involving private equity investors have experienced asset stripping, while others have lost key contracts and orders because of the organisational distance that they experienced as part of large contracting networks across Europe. In the clothing sector it is the combination of product specificity and the political economy of ownership structures which matter most in understanding the ability of firms to negotiate increasing labour costs, some of which result from the growth of higher wage levels in sectors undergoing growth, such as automobiles and electrical/electronic engineering taking also the differential landscape of upgrading/downgrading in the restructuring of global production networks into account.

## 5.2 Workers, labour markets, the economic crisis and regional shifts

We have argued that research on industrial and regional upgrading in global value chains requires an understanding of the wider political economy and ownership structures within which production networks are embedded. Thus far we have focused on the role of foreign investors and state projects of macro-regional and financial integration – EU accession and euro-zone integration – in the ability of firms to cope with processes of global trade liberalisation. While functional and other forms of upgrading may be apparent across central and eastern Europe (Pickles et al. 2006), these have been articulated with a range of other causal mechanisms related to wider and changing political-economic conditions that are central in assessing the extent to which a process of industrial and/or regional upgrading is possible in a context of rapid trade liberalisation and restructuring (Pickles and Smith 2016). Furthermore, the global economic crisis is setting real limits to possibilities for industrial and regional upgrading. In other words, there is a need to move away from a firm-level and agency-focussed approach to upgrading towards a framework that recognises the embeddedness of firm and sectoral-level change within the context of wider political economies, and state and non-state institutional action (Smith et al. 2002; Coe et al. 2008; Wallerstein 2009; Smith 2014). This suggests the need for a framework that seriously takes into account ‘the forces external to the chain that structure (enable and limit) what actors in the chain do’ (Sturgeon 2009: 128). In the current conjuncture, a consideration of the political economy of the economic crisis is crucial when considering the trajectories of regional economies and industrial upgrading.

What does a reliance on export-led models of development and the current economic crisis mean for the sustainability of worker livelihoods in the clothing industry in Slovakia? Worker livelihoods in the industry have been significantly affected by the economic crisis since 2008 as jobs have been shed and unemployment has increased. However, in their search to sustain their social reproduction in a rapidly growing economy up until the economic crisis, workers in the clothing industry also had an impact on the sustainability of the industry through the wage gains that they were able to attain. Interviews with a range of firms highlighted the ways in which managers had to respond to pressures from workers to increase wages and other non-wage benefits in order to continue to secure the workforce in the face of other national (due to the development of sectors such as automotive assembly and electronics and electrical engineering) and international (post-EU enlargement) job opportunities and to maintain production in order to meet orders. In these contexts, workers in the clothing industry were able to achieve marginal gains in real wages and non-wage benefits, including an extension in some cases of social wage provision, although this is not always through the action of organised labour and trade unions. For example, average monthly wages in the clothing industry increased by 16 per cent between 2009 and 2011, compared with a 12 per cent increase for manufacturing wages as a whole.<sup>26</sup> Improvements in working conditions were often the response of firm managements to a tightening of labour supply in order to retain key workers, as discussed above.

In the context of the current crisis, these moments of relative positional power have been undermined by increasing price squeezing throughout the supply chain and the tightening of demand in the main EU markets. Together these have produced pressures for further rounds of outsourcing, creating significant limits to worker agency and its ability to benefit from upgrading strategies.

Particularly in large former state-owned factories, integration into international production networks provided important opportunities for worker mobilisation and for managers to garner contracts from buyers who were concerned about their compliance with the codes of conduct demanded by their customers. Pickles and Smith (2010: 114) identified a

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26. Calculated from ŠÚSR (2012). These figures are for enterprises with more than 20 employees and therefore do not cover smaller workshops, where wage levels are likely to be much lower and worker exploitation higher.

bifurcation of experience between non-unionised new firms and former state-owned factories. They found that in factories where unionisation rates were high, workers benefited from wage and non-wage conditions that had their roots in state socialism. Firm managements retained the social wage partly because of continuing trade union presence and the social pact between the union and management, and partly because of the increasingly tight labour markets as skilled workers have been recruited away to other factories which are perceived to have longer term prospects than former state-owned firms or have left the industry for higher-paying jobs in other sectors. Continuing commitments to the social wage enabled management to maintain some workforce stability and thereby guarantee in-factory skill capacities, but also put pressure on factory cost structures at a time when contract prices are being squeezed downwards. One way in which some of the larger clothing enterprises – including both former state-owned and newly established factories – have been dealing with these pressures is to provide extra support to sustain core workers, while also engaging in secondary outsourcing to lower-cost producers in countries such as Ukraine (see above).

In conditions in which regional unemployment levels are increasing, clothing factories are still finding it difficult to recruit skilled and trained workers. In part this is due to the *relative* attractiveness of employment in other sectors compared with clothing, and the loss of employees to other EU countries following enlargement. This is in contrast to the period prior to EU enlargement when clothing production sustained many local economies based on former state-owned enterprises and alternative job opportunities for clothing workers were more limited.<sup>27</sup> The increasing relative tightness of labour markets in the clothing sector has also been connected to a steady erosion of training and apprenticeship opportunities across Slovakia in the textiles and clothing sectors, leading to erosion in the supply of skilled workers.<sup>28</sup> Workers were choosing other employment opportunities but together these forces have meant that clothing workers were able to establish certain enhancement to working conditions and benefits as labour markets tightened and at the same time as the industry was facing increasing competitive pressure.

The ability of workers to leverage improvements in wage levels and working conditions even during the economic crisis and a period of

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27. Interview with head of trade union, former state-owned enterprise, Púchov, November 2003.

28. Interview with director, Stredné odborné učilište, Trenčín, November 2003.



tightening competitive pressure is illustrated by the week-long strike in August 2010 by clothing workers in two Italian-owned factories in the Vranov nad Topľou district in east Slovakia, resulting in a 15 per cent increase in wages, partly related to performance.<sup>29</sup>

The timing of the growth of wage pressure coincided with the government's increases in the national monthly minimum wage in October 2006 (Barošová 2007) and in January 2010. In labour-intensive industries such as clothing, these minimum wage increases were important to sustain workers' wages, but also affected firm competitiveness in the wider context of liberalisation.<sup>30</sup>

The implications of these pressures became even clearer in the context of the global economic crisis. The increasing fragility of contracting relations and supply chains during the crisis in a liberalised trade environment became apparent as the industry witnessed increasing pressure on contracting prices and as the volume of orders was reduced. Interview evidence has highlighted the tightening of contract prices across the industry, notably during the economic crisis.<sup>31</sup> In a number of key examples, the inability of producers to meet tighter pricing of contracts from western European buyers has meant a significant loss of orders, reductions in employment and closure of branch plants (see also Doktor 2009). Consequently, the positional power of workers which had enabled the leveraging of improved wage and other payments is fragile given the wider structural logics of contracting in the global clothing industry. Moments of change that enabled the leveraging of improvements for workers in terms of social wage benefits, the minimum wage and wider social conditions (provision of subsidised or free transportation) have come rapidly undone in the context of the global economic crisis as firms were either unable to survive or moved eastwards as they sought out new contracting opportunities.

Firms in global value chains that involved a strategic partnership with a foreign joint venture partner generally withstood these crises more readily than firms operating for domestic markets or those with more

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29. See Buzinkay (2010a, 2010b) and Anon (2010). These two firms, only established in spring 2010, are owned by Italian investors also associated with another local clothing firm with a major interest in nearby Humenné.

30. Interview, general director, large former state-owned enterprise, Michalovce, October 2009.

31. For example, interviews with managing director, major retailer and franchise company, eastern Slovakia, 2008 and with senior manager, German-Slovak joint venture, Prešov, 2008 and 2009.

tenuous contractual relations with buyers. But participation in global value chains created its own problems, as such producers were often being constrained by outward processing trade and rules of origin requirements and, as a result, had limited opportunities for upgrading. In this sense, participation in global value chains, far from fostering inter-firm learning (as it had done in the 1990s and early 2000s), exacerbated the effects of the crises of the late 2000s and constrained the options available to resolve them. In some cases, upgrading of production processes involving shifts into retailing and brand development were accompanied by flexible business strategies and generated success until the financial crises undermined cash-flow and led to bankruptcy independently of profitability.<sup>32</sup> The impact that this restructuring is having on worker livelihoods is clear with increasing levels of regional unemployment; increasing pressure on firms is being translated into job losses and downward pressure on wages relative to other manufacturing wages,<sup>33</sup> with consequences for the workers in terms of increasing labour market precariousness.

## 6. Conclusions

The global economic crisis has radically transformed worker livelihoods and firm competitiveness across central and eastern Europe, especially in the clothing industry, which had been one of the mainstays of industrial and regional resilience in late socialism and during the first 15 or so years of post-socialist transformation. This rapid transformation is taking the form of increasing mass unemployment and precariousness among workers in the context of the global economic crisis. In Slovakia, the industry is being sustained in smaller numbers and specific locations, usually in circumstances in which close relations with EU15 buyers through joint ventures and FDI have been established, and where particular product- and market-niches have been established, particularly in higher quality and higher value products (Pickles and Smith 2011; see also Plank et al. 2009: 30–31). In other national contexts evidence suggests that the resumption of export growth in recent years has been accompanied by continuing employment decline, suggesting an emerging pattern of jobless growth.

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32. Interviews with managing director, major brand clothing retailer, eastern Slovakia, 2008.

33. Between 2000 and 2010, average monthly wages in textiles and clothing relative to average manufacturing industry wages dropped from 71 per cent to 65 per cent and were consistently the lowest among all manufacturing industry branches (490 euros in May 2010).

These developments require a reconsideration of global value chain models focused primarily on upgrading trajectories, to allow consideration of two elements. First, understanding the dynamics of global value chains necessitates that consideration be given to the full range of agents (foreign ownership structures and management, state policy frameworks – for example, EU strategies for regionalised sourcing in the wider Europe (see also Begg et al. 2003; Pickles and Smith 2011, 2016) and regional state-aid programmes – and workers, and their positional power in global value chains. The experience of the majority of workers in the Slovak clothing industry appears to be paradoxical. Some groups of workers have been able to increase wage levels and social benefits, which over time – in the context of the crisis-induced decline in demand for products – led to a reduction in the number of workers in this position as employment shrank due to increasing uncertainty about long-term sustainability.

Second, consideration is required of the wider political economy that structures the forms of capitalist relations found in global value chains, shorter lead times, lower contract prices and higher quality requirements between buyers and suppliers, not to mention the implications for workers (see also Smith et al. 2002; Selwyn 2012; Smith 2015). The economic crisis, political-economic integration into wider geopolitical units (EU enlargement and euro-zone integration, for example), state policy frameworks relating to international exchange rates and national minimum wage regulations have all played critical roles in changing the competitive pressures in the Slovak clothing industry in pan-European production networks. We have focused attention on ownership relations and how these have structured certain relations of proximity to core markets for some export-oriented firms, enabling them to weather the storms of trade liberalisation and economic crisis. Together, these forces suggest that a focus on dynamics of industrial upgrading alone is insufficient. We have stressed the importance of understanding the range of repositioning experienced by firms integrated into pan-European production networks, as they articulate with wider economic trajectories and fluctuations in demand in core markets and with state projects of social regulation and macro-regional integration. Our analysis suggests that a bleak future lies ahead for significant parts of the Slovak clothing industry and its associated production networks, especially because of the economic crisis and decline in demand in its major markets. However, the analysis also suggests that stabilisation and even growth in certain product areas and particular regional economies has been achieved, not least leading to a recent positive growth in value added in the industry.

For some firms, particularly those that have upgraded both their products, processes and social conditions of work, the immediate future seems more secure, particularly where international buyer networks remain strong and longstanding.

While at an aggregate national scale the relative decline and restructuring of the clothing industry, when set alongside the growth of higher value added sectors such as automobile production, may not be particularly problematic for the national economy, this restructuring does present a number of structural problems for economic development. In particular, it tends to enhance dependency on a smaller range of industrial export activities vulnerable to external shocks, such as the on-going European crisis. It also does little to alleviate problems of sub-national regional uneven development, because the loss of clothing jobs, especially in the poorer regions of eastern Slovakia, has tended to take place in regional economies where clothing has been the key sector and diversification has not occurred.<sup>34</sup> Finally, sectoral restructuring or upgrading into new industrial activities does not necessarily resolve the unevenly gendered nature of clothing employment decline. For example, while women occupied 39 per cent of industrial jobs in Slovakia, 90 per cent of clothing workers and only 21 per cent of automobile assembly workers were women, while average female wages in clothing were just 53 per cent of total average manufacturing wages. These issues become all the more important given the uncertainties over the nature and form of any post-crisis recovery in the main export markets and the continued and prolonged stagnation in core export markets.

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34. With perhaps the exception of the Trenčín region in western Slovakia which has – despite the decline of the clothing sector – been recipient of sizable inward investment in the automobile sector. Whether this sectoral restructuring has created employment for the workers who are no longer employed in the clothing sector is, however, unclear.

Pickles J., Buček M., Pástor R. and Begg B. (2014) 'The political economy of global production networks: regional industrial change and differential upgrading in the East European clothing industry', *Journal of Economic Geography* doi:10.1093/jeg/lbt039. Arguments presented here are elaborated more fully in Pickles J. and Smith A. (with Begg R., Buček M., Roukova P. and Pástor R.) (2016) *Articulations of Capital: Global Production Networks and Regional Transformations*, Oxford, Wiley.

## References

- Abernathy F., Volpe A. and Weil D. (2006) The future of the apparel and textile industries: prospects and choices for public and private actors, *Environment and Planning A*, 38 (12), 2207–2232.
- Anon (2010) Na východe štrajkuje takmer štyristo ľudí, *Hospodarske noviny online*, 25 August 2010. <http://hn.hnonline.sk/na-vychode-strajkuje-takmer-styrsto-ludi-401549>
- Bair J. (2005) Global capitalism and commodity chains: looking back, going forward, *Competition & Change*, 9 (2), 153–180.
- Bair J. (2009) Global commodity chains: genealogy and review, in Bair J. (ed.) *Frontiers of commodity chain research*, Stanford, Stanford University Press, 1–34.
- Barošová M. (2007) Government increases minimum wage by 10%, *European Industrial Relations Observatory Online*. <http://www.eurofound.europa.eu/eiro/2006/11/articles/sk0611039i.htm>
- Barrientos S., Gereffi G. and Rossi A. (2011) Economic and social upgrading in global production networks: a new paradigm for a changing world, *International Labour Review*, 150 (3–4), 319–340.
- Begg R., Pickles J. and Smith A. (2003) Cutting it: European integration, trade regimes and the reconfiguration of East-Central European apparel production, *Environment and Planning A*, 35 (12), 2191–2207.
- Buzinkay A. (2010a) Boj o mzdy v textilách vyvrcholí štrajkom, *Hospodarske noviny online*, 17 August 2010. <http://hn.hnonline.sk/boj-o-mzdy-v-textilkach-vyvrcholi-strajkom-400038>
- Buzinkay A. (2010b) Stovky Slovákov štrajkujú, chcú od Talianov vyššie platy, *Hospodarske noviny online*, 25 August 2010. <http://hn.hnonline.sk/stovky-slovakov-strajkuju-chcu-od-talianov-vyssie-platy-401548>
- Cattaneo O., Gereffi G. and Staritz C. (2010) Global value chains in a postcrisis world: resilience, consolidation and shifting end markets, in Cattaneo O., Gereffi G. and Staritz C. (eds.) *Global value chains in a postcrisis world: a development perspective*, Washington, DC, World Bank, 3–20.

- Coe N., Dicken P. and Hess M. (2008) Global production networks: realizing the potential, *Journal of Economic Geography*, 8 (3), 271–295.
- Coe N., Hess M., Yeung H., Dicken P. and Henderson J. (2004) Globalising regional development: a global production networks perspective, *Transactions of the Institute of British Geographers*, 29 (4), 468–484.
- Coe N. and Jordhus-Lier D. (2010) Constrained agency? Re-evaluating the geographies of labour, *Progress in Human Geography*. doi: 10.1177/0309132510366746.
- Cumbers A., Nativel C. and Routledge P. (2008) Labour agency and union positionalities in global production networks, *Journal of Economic Geography*, 8 (3), 369–387.
- Curran L. (2008a) Forecasting the trade outcomes of liberalisation in a quota context: what do we learn from changes in textiles trade after the ATC?, *Journal of World Trade*, 42 (1), 129–150.
- Curran L. (2008b) Unpicking the textiles trade: the impact of liberalization on the global textiles sector, *Global Trade and Customs Journal*, 3 (7/8), 261–274.
- Doktor V. (2009) Na v chode zatvárajú odevné firmy, *Hospodárske noviny*, 29 September 2008, 13–14.
- Drahokoupil J. (2008) *Globalization and the state in Central and Eastern Europe: the politics of foreign direct investment*, London, Routledge.
- Forstater M. (n.d.) Sectoral coverage of the global economic crisis: implications of the global financial and economic crisis on the textile and clothing sector, Geneva, International Labour Office. [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_162597.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_162597.pdf)
- Fröbel F., Heinrichs J. and Kreye O. (1980) *The new international division of labour: structural unemployment in industrial countries and industrialisation in developing countries*, Cambridge, Cambridge University Press.
- Gereffi G. (1994) The organization of buyer-driven commodity chains: how U.S. retailers shape overseas production networks, in Gereffi G. and Korzeniewicz M. (eds.) *Commodity chains and global capitalism*, Westport, Greenwood Press, 95–122.
- Gereffi G. and Frederick S. (2010) The global apparel value chain, trade, and the crisis: challenges and opportunities for developing countries, in Cattaneo O., Gereffi G. and Staritz C. (eds.) *Global value chains in a postcrisis world: a development perspective*, Washington, DC, World Bank, 157–208.
- Gereffi G., Humphrey J. and Sturgeon T. (2005) The governance of global value chains, *Review of International Political Economy*, 12 (1), 78–104.
- Gradev G. (2001) CEE countries in the EU companies' strategies of industrial restructuring and relocation, Brussels, ETUI.

- Graziani G. (1998) Globalization of production in the textile and clothing industries: the case of Italian foreign direct investment and outward processing in Eastern Europe, BRIE Working Paper 128, Berkeley, University of California. <https://escholarship.org/uc/item/5cr30690>
- Hale A. and Wills J. (eds.) (2005) *Threads of labour: garment industry supply chains from the workers' perspective*, Oxford, Blackwell.
- Henderson J., Dicken P., Hess M., Coe N. and Yeung H. (2002) Global production networks and the analysis of economic development, *Review of International Political Economy*, 9 (3), 436–464.
- Humphrey J. and Schmitz H. (2002) How does insertion in global value chains affect upgrading in industrial clusters?, *Regional Studies*, 36 (9), 1017–1027.
- ILO (1996) Globalization changes the face of textile, clothing, and footwear industries, Press release ILO/96/33, 28 October 1996. [http://www.ilo.org/global/about-the-ilo/media-centre/press-releases/WCMS\\_008075/lang-en/index.htm](http://www.ilo.org/global/about-the-ilo/media-centre/press-releases/WCMS_008075/lang-en/index.htm)
- Kalantaridis K., Slava S. and Vassilev I. (2008) Global networks and the reorganization of production in the clothing industry of post-socialist Ukraine, *Global Networks*, 8 (3), 308–328.
- Kubosova L. (2008) Slovakia to extend euro area to Central Europe, *EU Observer*, 9 July 2008. <http://euobserver.com/9/26466>
- Lane C. and Probert J. (2009) *National capitalisms, global production networks: fashioning the value chain in the UK, USA and Germany*, Oxford, Oxford University Press.
- Leslie D. and Reimer S. (1999) Spatializing commodity chains, *Progress in Human Geography*, 23 (3), 410–420.
- Leucuta C. (n.d.) Sectoral coverage of the global economic crisis: implications of the global financial and economic crisis on the Romanian textile and clothing sector, Geneva, International Labour Office. [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_161988.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_161988.pdf)
- Levy D. (2008) Political contestation in global production networks, *Academy of Management Review*, 33 (4), 943–963.
- Liptáková J. (2009) Eastern towns get European money to build brownfield industrial parks: new projects in Eastern Slovakia aim to reduce high local unemployment, *The Slovak Spectator*, 16 February 2009. [http://www.spectator.sk/articles/view/34392/17/eastern\\_towns\\_get\\_euro\\_pean\\_money\\_to\\_build\\_brownfield\\_industrial\\_parks.html](http://www.spectator.sk/articles/view/34392/17/eastern_towns_get_euro_pean_money_to_build_brownfield_industrial_parks.html)
- Milberg W. and Winkler D. (2013) *Outsourcing economics: global value chains in capitalist development*, Cambridge, Cambridge University Press.
- OECD (2004) *A new world map in textiles and clothing: adjusting to change*, Paris, Organisation for Economic Co-operation and Development.

- Pavlínek P. (2002) Transformation of the Central and East European passenger car industry: selective peripheral integration through foreign direct investment, *Environment and Planning A*, 34 (9), 1685–1709.
- Pavlínek P. (2012) The impact of the 2008-2009 economic crisis on the automotive industry: global trends and firm level effects in Central Europe, *European Urban and Regional Studies*. doi: 10.1177/0969776412460534
- Pellegrin J. (2001) *The political economy of competitiveness in an enlarged Europe*, Basingstoke, Palgrave.
- Pickles J. (2002) Gulag Europe? Mass unemployment, new firm creation, and tight labour markets in the Bulgarian apparel industry, in Rainnie A., Smith A. and Swain A. (eds.) *Work, employment and transition: restructuring livelihoods in post-communism*, London, Routledge, 246–272.
- Pickles J. (2006) Trade liberalization, industrial upgrading, and regionalization in the global clothing industry, *Environment and Planning A*, 38 (12), 2201–2206.
- Pickles J. and Begg R. (2000) Ethnicity, state violence, and neo-liberal transitions in post-communist Bulgaria, *Growth and Change*, 31 (2), 179–210.
- Pickles J. and Smith A. (2010) Clothing workers after worker states: the consequences for work and labour of outsourcing, nearshoring and delocalisation in post socialist Europe, in McGrath-Champ S., Herod A. and Rainnie A. (eds.) *Handbook of employment and society: working space*, Cheltenham, Edward Elgar, 106–123.
- Pickles J. and Smith A. (2011) Delocalization and persistence in the European clothing industry: the reconfiguration of trade and production networks, *Regional Studies*, 45 (2), 167–185.
- Pickles J. and Smith A. (with Begg, R., Buček, M., Roukova, P. and Pástor, R.) (2016) *Articulations of capital: global production networks and regional transformations*, Oxford, Wiley.
- Pickles J., Smith A., Buček M., Roukova P. and Begg B. (2006) Upgrading, changing competitive pressures and diverse practices in the East and Central European apparel industry, *Environment and Planning A*, 38 (12), 2305–2324.
- Plank L. and Staritz C. (2009) Global production networks, uneven development and workers: experience from the Romanian apparel sector, *Journal für Entwicklungspolitik*, 2, 62–87.
- Plank L., Staritz C. and Lukas K. (2009) Labour rights in global production networks: an analysis of the apparel and electronics sector in Romania, Vienna, Arbeiterkammer. <http://media.arbeiterkammer.at/wien/PDF/studien/LabourRights.pdf>



- Posthuma A. and Nathan D. (2010) Introduction: scope for aligning economic and social upgrading within global production networks in India, in Posthuma A. and Nathan D. (eds.) *Labour in global production networks in India*, New Delhi, Oxford University Press, 1–33.
- Selwyn B. (2007) Labour process and workers' bargaining power in export grape production, North East Brazil, *Journal of Agrarian Change*, 7 (4), 526–553.
- Selwyn B. (2012) Beyond firm-centrism: re-integrating labour and capitalism into global commodity chain analysis, *Journal of Economic Geography*, 12 (1), 205–226.
- SITA (2010) V trenčianskom regióne odevný priemysel nahradila elektrotec, Slovenská informačná a tlačová agentúra, Bratislava, 20 April 2010.
- Smith A. (2003) Power relations, industrial clusters and regional transformations: pan-European integration and outward processing in the Slovak clothing industry, *Economic Geography*, 79 (1), 17–40.
- Smith A. (2013) Europe and an inter-dependent world: uneven geo-economic and geo-political developments, *European Urban and Regional Studies*, 20 (1), 3–13.
- Smith A. (2014) The state, institutional frameworks and the dynamics of capital in global production networks, *Progress in Human Geography*. doi: 10.1177/0309132513518292
- Smith A. (2015) Economic (in)security and global value chains: the dynamics of industrial and trade integration in the Euro-Mediterranean macro-region, *Cambridge Journal of Regions, Economy and Society*. doi: 10.1093/cjres/rsv010
- Smith A. and Ferenčíkova S. (1998) Inward investment, regional transformations and uneven development in Eastern and Central Europe: enterprise case-studies from Slovakia, *European Urban and Regional Studies*, 5 (2), 155–173.
- Smith A., Pickles J., Buček M., Begg B. and Roukova P. (2008) Reconfiguring 'post-socialist' regions: cross-border networks and regional competition in the Slovak and Ukrainian clothing industry, *Global Networks*, 8 (3), 281–307.
- Smith A., Pickles J., Begg R., Roukova P. and Buček M. (2005) Outward processing, EU enlargement and regional relocation in the European textiles and clothing industry: reflections on the European Commission's communication on 'the future of the textiles and clothing sector in the enlarged European Union', *European Urban and Regional Studies*, 12 (1), 83–91.
- Smith A. et al. (2002) Networks of value, commodities and regions: reworking divisions of labour in macro-regional economies, *Progress in Human Geography*, 26 (1), 41–63.
- Smith A. and Swain A. (2010) The global economic crisis, Eastern Europe and the former Soviet Union: models of development and the contradictions of internationalization, *Eurasian Geography and Economics*, 51 (1), 1–34.

- Staritz C. (2011) Making the cut? Low-income countries and the global clothing value chain in a post-quota and post-crisis world, Washington, DC, World Bank.
- ŠÚSR (2009a) Industrial Production in February 2009, Bratislava Available at: <http://portal.statistics.sk/showdoc.do?docid=16902>
- ŠÚSR (2009b) Industrial Production Index in 2009, Štatistický úrad Slovenskej republiky. <http://portal.statistics.sk/showdoc.do?docid=16466>
- ŠÚSR (2010) Index priemyselnej produkcie, June 2010, Bratislava, Štatistický úrad Slovenskej republiky.
- ŠÚSR (2012) Ročenka priemylsu SR 2012, Bratislava, Štatistický úrad Slovenskej republiky.
- Stengg W. (2001) The textile and clothing industry in the EU: a survey, Enterprise Papers 2, Brussels, European Commission.
- Stenning A., Smith A., Rochovská A. and Świątek D. (2010) Domesticating neo-liberalism: spaces of economic practice and social reproduction in post-socialist cities, Oxford, Wiley-Blackwell.
- Sturgeon T. (2009) From commodity chains to value chains: interdisciplinary theory building in an age of globalization, in Bair J. (ed.) *Frontiers of commodity chain research*, Stanford, Stanford University Press, 110–135.
- Wallerstein I. (2009) Production networks and commodity chains in the capitalist world economy, in Bair J. (ed.) *Frontiers of commodity chain research*, Stanford, Stanford University Press, 83–89.

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# Steel in the European Union in the wake of the global economic crisis

Vera Trappmann

## 1. Introduction

The European steel sector is in crisis. This is not a new diagnosis, to be sure, but in recent years the crisis has become multidimensional. Once a sector linked to national production, at most regionally organised, steel is now a transnational industry. During the recent economic downturn and in its aftermath, pressures related to global market integration, increasing overcapacity and the emergence of new Asian competitors have become even more pronounced. These pressures have been compounded by shrinking European demand, rising energy prices in the European Union (EU) and uncertainty regarding future energy price developments.

The most dramatic effect of the 2008 economic downturn was, first of all, a fall in demand and a severe production decline, which hit the European steel sector after it had experienced an unforeseen boom in profits and production due to new demand from China. The severe decline caused an immediate loss of about 66,000 jobs in the EU. Second, steel companies lost equity base and reduced their investments, which puts the future of the European steel industry in jeopardy. The sector is confronted with the simultaneous effects of low demand and overcapacity on the globalised steel market. The resulting challenges – the need for capacity reduction and restructuring – have been known and practiced in the industry for decades. The current situation is more difficult compared with previous years, however, due to rising raw material prices, rising energy costs, stricter environmental regulations in the EU and increased competition from non-EU producers. In principle, the crisis has not turned the sector ‘upside down’, but has rather amplified trends that were discernible even before the downturn. However, the depth of the slump, in particular a long-lasting decline in demand, has put the sector under considerable stress. The reactions of European policymakers and business representatives resemble those of earlier crises and have involved attempts by the EU to introduce new supranational regulations and to

implement company restructuring programmes. What is new in terms of business strategy is the increased use of whipsawing (the organization of competition between plants in the context of production allocation and collective bargaining with the aim of extracting labour concessions – Greer and Hauptmeier 2015) and social dumping.

This chapter is structured as follows. It begins with an overview of past trends in European steel, including the fact that it was the first sector to be governed by supranational regulation. The core of the chapter analyses the impact of the 2008 economic crisis on production and employment, foreign direct investment and the dominant business model followed in the industry. The last section concludes and discusses the sector's future prospects.

## **2. Steel in Europe: national, transnational, global**

Thirty years ago, Europe was the world's largest steel producer. The steel industry used to be nationally regulated and nationalised but since the 1970s, it has slowly become privatised. Since the mid-1990s a major process of concentration, privatisation and transnationalisation has turned it into a globalised sector. Currently the largest steel producers in the EU are multinational companies ArcelorMittal and Tata Steel, followed by the German ThyssenKrupp and the Italian Riva Group.

In its heyday, steel was the first sector in Europe to become subject to supranational regulation. The creation of the European Coal and Steel Community (ECSC) in 1952 was aimed at reducing competition between steel companies located in different European countries (Houseman 1991). This was fairly successful initially when increasing demand encountered increasing production within the ECSC. For two decades, the steel sector in western Europe expanded and proved relatively crisis-proof (Buntrock 2004). The expansion of steel, however, led to overproduction and Europe faced the problem of price dumping. Already in 1967, the European Commission warned against further investments, as capacities were already considered very high. At the same time, imports from emerging markets were rising and steel was being increasingly substituted with other materials. In the early 1980s, capacity utilisation was only about 56 per cent, which led to severe financial problems for many steel plants (Buntrock 2004). National governments stepped in offering high subsidies to prevent plant closures and potential

job losses in locations where unemployment was already high. In some cases, the steel mills were even nationalised.<sup>1</sup>

As a matter of fact, according to the ECSC Treaty, states were officially prohibited from subsidising the steel industry, and access to outside funding for investment was restricted. All firms were obliged to communicate their investment plans to the High Authority, the predecessor of the European Commission, and later to the European Commission itself. The European Commission was even allowed to settle the minimum and maximum prices of steel and introduce production quotas. These powers were not used during the 1950s and 1960s, and states regulated – and often subsidised – their individual industries as they saw fit. It was in the 1970s that the European Commission first began to use the power granted it in the ECSC Treaty, introducing several industrial policy plans, each one more interventionist than the last. The objective was to distribute the hardship of reduced demand for steel equally across the regions but also to prevent high transfer payments, such as those in the agriculture sector (Eckart and Kortus 1995). Externally, the European Commission initiated and established anti-dumping taxes also in order to apply pressure to make other countries restrict their exports to Europe (Houseman 1991). In line with the so-called Davignon Plan, it introduced a code on aid (Buntrock 2004), defining conditions under which companies were allowed to receive state support. With regard to subsidies, states did not follow the code on aid and the Commission did not really sanction misbehaviour, but retrospectively allowed the subsidies and prolonged deadlines (Eckart and Kortus 1995). Politically, the Davignon Plan represented a cornerstone of European industrial policy. In a medium-term perspective, it was not only to ensure capacity reduction and prohibit state subsidies, but also to help guarantee the single market, modernise assets, reanimate the market and protect steel-production regions by creating a social policy to assist redundant steelworkers and their communities (Houseman 1991). From an economic point of view, as an attempt to hinder market mechanisms, control prices and organise competition, it was not successful, mainly because the member states did not respect the instruments and supranational decisions and continued to subsidise their steel economies.

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1. In France, two state firms, representing up to 90 per cent of the industry, merged into one, called Usinor. A total of 57 per cent of the sector was nationalised in Belgium and 36 per cent in the Netherlands (Conrad 1997). In the UK, 14 large private steel companies were consolidated into British Steel, which led to the renationalisation of 76 per cent of British steel production.

They were unable to prevent the dramatic downsizing of the 1980s: during the last quarter of the twentieth century, the industry lost more than 50 per cent of its jobs (see Table 1 below).

**Table 1 Employment loss of the largest EU steelmakers in the EU15, 1975–2005 ('000s)**

	1975	1980	1985	1990	1995	2000	2005
<b>Germany</b>	232	197	151	125	93	77	72
<b>Italy</b>	96	100	67	56	42	39	39
<b>France</b>	158	105	76	46	39	37	37
<b>UK</b>	194	112	59	51	38	27	22

Source: World Steel Association (2004)

In a nutshell, the supranational industrial policy failed. Notwithstanding the ECSC's supranational coordinating bodies, the bulk of the problems that emerged in the sector were tackled nationally and employment losses could not be prevented. The only benefit of the programmes was that 'nobody was fired': all workers left the industry with special programmes guaranteeing 'socially responsible restructuring'.

The socially responsible approach in western Europe was in stark contrast to the type of restructuring that took place in central and eastern European steel industries in the context of their EU accession in 2004 and 2007. The old EU member states were afraid of a further increase in overproduction and the lower prices of steel in central and eastern and in south-eastern Europe. Hence, EU15 steel lobby groups convinced politicians to make accession conditional on the privatisation and downsizing of central and eastern European steel companies. As early as 1993, the EU set out its special interest in the steel industry in additional protocols to the Europe Agreement with Poland and Czechia, stating that those two countries would have to follow the obligations laid down by the European Steel Aid Code and limit state aid. In addition, EU steel producers lobbied for the greatest possible reduction of the candidate countries' production capacities as part of any state aid agreement. Particularly strong pressure came from France, Italy and Spain, which claimed, for example, that Poland would have to curtail exports when answering increasing Polish demand (Keat 2000). Another rationale, if not publicly revealed, of the EU and its steel lobby groups was to prevent increased competition on the European steel market after accession (Trappmann 2013).

Despite the lobbying, Poland and Czechia were granted opt-outs from the European Steel Aid Code for a transitional period of restructuring on condition that restructuring was linked to capacity reduction, and depending on the viability of firms under normal market conditions at the end of the restructuring period. These periods ended on 31 December 2003, with restructuring to be completed in December 2006. Thus, right from the beginning, the Commission defined mechanisms intended to weaken the competitiveness of the accession countries' steel industries. Due to protracted negotiations on the exact modalities of the sector's restructuring it was a long time before the competition chapter of Poland and Czechia's accession negotiations could be closed. In the end, the restructuring terms were precisely defined in Protocol No. 8 to the Accession Treaty, also referred to as the Steel Protocol.

Even though only Poland and Czechia – as the largest steel producers in central and eastern Europe – were covered by the Steel Protocol, employment reduction was a top priority in other CEE countries and monitored by the EU as well. In Romania, the industry's privatisation was conditioned on restructuring of companies before the investor Lakshmi Mittal would buy it. In the Galati steel mill, employment reduction took place, even though the privatisation agreement stipulated that employment at the plant would be protected for five years. At Siderugica in Hunedoara, the workforce was reduced from 8,000 to 2,000 employees before Mittal acquired the company in 2003. Mittal promised that this would be the full extent of job losses but then he reduced employment even further. In effect, in 2009, only 700 workers were working at the plant (Varga 2011). Slovakia was an exception in this regard; following US Steel's acquisition of the largest steelworks in Košice, the employment level could be maintained until 2010 (Sznajder and Trappmann 2014).

**Table 2 Employment reduction of the largest steelmakers in central and eastern Europe, 1990–2006**

	1990	2004	2006
<b>Poland</b>	147,000	30,928	30,388
<b>Czechia</b>	93,000	25,914	n.a.
<b>Romania</b>	n.a.	65,000 (2000)	23,301 (2008)

Source: HIPH for Poland; OS Kovo for Czechia, and European Commission (2009) for Romania



Despite the controversy surrounding the role of the EU in guiding the restructuring process in steel sector in the new EU member states, it has to be acknowledged that privatisation and FDI inflows have led to the modernisation of central and eastern European steel mills, which would otherwise not have been competitive vis-à-vis western European and non-EU sites. Technologies implemented were new and gave central and eastern European facilities a competitive edge over other European sites: when further capacity reduction took place within transnational companies in the aftermath of the 2008 downturn, the high-tech-equipped sites were spared from closure.

### **3. Challenges due to the 2008 financial and economic crisis**

#### **3.1 Demand, capacities and employment restructuring**

The financial and economic crisis has put considerable pressure on the European steel sector. First, and most dramatically, European demand has shrunk as a consequence of the downturn in steel-consuming industries, such as construction and the automotive sector, as well as the reduction of local public investments. In 2009, automotive production in the EU decreased by 40 per cent and that in construction by 10 per cent compared with previous years (Perlitz 2009). On a global scale demand has increased, but this is due only to an increase in Chinese demand that is served regionally. Experts on the sector assume that European demand will not recover to the pre-crisis level and thus that the competition for sales will intensify and the capacity reduction will become an economic and political goal (interviews with experts from the sector).

Second, there is overcapacity in the EU steel sector, currently estimated at approximately 80 million tonnes, compared with total EU production capacity of 217 million tonnes. The EU is not alone in this respect: globally, the industry is considered to have approximately 542 million tonnes of excess capacity, with 200 million tonnes in China alone (EU 2013). All in all, as a consequence of the fall in demand for steel and increased imports EU steel production is still only at 73 per cent of the pre-crisis level (see Table 4 below).

Table 3 Demand for steel before and after the crisis ('000 tonnes)

	2007	2011	2013
Germany	45,992	45,141	41,500
France	19,147	16,304	14,566
Spain	27,500	14,000	11,337
Italy	38,102	28,089	23,044
UK	14,570	11,048	9,690
Poland	14,002	11,659	11,241
Czechia	7,599	6,985	6,675
Romania	5,957	4,025	3,522
Latvia	564	622	230
USA	120,381	101,000	106,300
Japan	85,900	69,600	70,900
China	435,860	667,930	771,729
CIS	65,264	62,688	67,055
EU	219,064	170,852	153,286
World	1,328,888	1,519,643	1,648,127

Source: World Steel Association (2014)

Table 4 European steel production before and after the crisis ('000 tonnes)

	Pre-crisis production in 2007	Production in 2013
Germany	48,550	42,645
Italy	31,553	24,080
France	19,250	15,685
Spain	18,999	14,252
UK	14,317	11,858
Poland	10,632	7,950
Czechia	7,059	5,171
Romania	6,261	2,985
EU 27	210,185	166,208

Source: World Steel Association (2014)

The low production rate eventually resulted in employment cuts and even site closures. Approximately 7 per cent of jobs in the sector have been destroyed in the aftermath of the 2008 crisis.

In terms of site closures, the crisis has mainly hit companies and sites located in the old EU member states. The European Restructuring Monitor (ERM) reports five closures since 2009 of sites located in Spain,

Table 5 Employment in the steel sector in the EU, 2008–2012

	2008	2010	2011	2012
Germany	95,390	89,664	90,645	88,296
Belgium	16,931	14,212	14,197	13,319
Denmark	450	418	414	359
France	33,006	24,300	23,800	23,800
UK	22,996	18,864	18,471	19,500
Italy	39,388	37,140	36,898	36,131
Luxembourg	6,775	6,072	5,588	4,984
Netherlands	8,124	8,850	8,530	8,314
Greece	2,609	2,320	2,177	1,845
Spain	27,354	25,403	24,355	23,531
Portugal	708	251	200	180
Austria	14,491	13,579	13,380	13,530
Finland	11,000	10,150	10,485	9,100
Sweden	18,700	17,330	17,000	18,000
EU15	297,922	268,553	266,140	260,889
Bulgaria	8,300	4,710	3,425	2,950
Estonia	138	109	109	109
Croatia				200
Latvia	2,633	2,267	2,195	2,325
Poland	29,340	25,475	25,630	22,770
Romania	22,670	16,800	24,700	22,960
Slovakia	11,841	11,102	12,024	11,539
Slovenia	3,489	3,289	3,248	3,141
Czechia	21,505	18,020	17,172	15,799
Hungary	10,345	8,400	8,305	8,174
EU28	416,198	367,717	364,051	350,121

Source: Eurofer. Data made available by the German Steel Federation

Belgium, Austria and the United Kingdom. According to ERM, closures – which affected around 3,000 workers – were managed by social plans and with help of the European Globalisation Adjustment Fund. Internal restructuring led to the loss of another 13,000 jobs, mostly at Tata Steel, in the United Kingdom, ThyssenKrupp in Germany and ArcelorMittal in Spain. Reported reasons for internal restructuring were cost-cutting plans, financial losses and the decrease in demand. The ERM reports provide some insights into the restructuring processes. In the case of Germany, restructuring took place via social plans, in particular partial retirement, and thus no forced redundancies occurred. This was due to

the age structure of German steel sector employees (the average age at some plants is 50) and to the existence of productivity reserves that had not been used during the boom times. At Tata Steel in the United Kingdom, some units were closed already in 2011, but further redundancies were announced in 2012 for Wales, Yorkshire, West Midlands and Teesside due to overcapacity and shrinking demand. Restructuring occurred via cross-matching – that is, by putting out a 'call' for volunteers and then allowing those who are at risk of dismissal to move into the positions made vacant by those leaving voluntarily. Because of the ageing population, voluntary redundancy was often combined with early retirement. With its new manager for Europe, Tata has also hoped to increase its market share due to the price stability it ensured thanks to its acquisition of ore mines, which would make it independent from world market prices.

The ERM reports little restructuring activity among the new EU member states. Mechel Campia Turzii in Romania has started a restructuring programme due to the decrease in demand and Liepajas Metalurgas in Latvia went bankrupt in 2014 after failing to finance a restructuring plan of 52 million euros, despite being the country's largest employer (compare European Monitoring Centre on Change). It was bought by an Ukrainian investor KVV Group that won out over a Russian bidder and took over production in April 2015. Apparently, 500 out of the 1,300 redundant workers were recently rehired. While according to the Latvian Labour Office a substantial share of workers has already found new employment (Baltic Course 2015) trade unions claim that it is a serious problem in the port town, with no similar industry situated in the region (Lulle 2013). The biggest decrease in employment in the new EU member states occurred in Poland, Czechia and Bulgaria. In Poland this was linked not only to the economic crisis but also to the termination, in 2009, of the social package that trade unions had negotiated with Mittal when he bought the Polish steel company in 2003, which had guaranteed a no-redundancy policy until 2009. Immediately after the deal expired, Mittal initiated a voluntary departure programme and replaced core workers by agency workers (Trappmann 2013). In Bulgaria, the employment loss was due to the insolvency of the biggest steel producer Kremikovtzi in 2008. Kremikovtzi was the reason why Bulgaria requested an extension to the restructuring period initially laid down by the EU in the course of the country's EU accession negotiations as the company had not yet met its restructuring and viability target as established in the protocol to the Accession Treaty. Despite 220 million euros in state subsidies the

company became short of liquidity. It engaged in barter trade to obtain raw materials and requested advance payments from customers, which led to increases in raw material prices and lower sales (European Commission 2010).

### 3.2 European foreign direct investments

Aggregate data for investments in the steel industry are not available; similarly, individual companies refuse to reveal business data, citing commercial secrecy. Nevertheless, it is possible to describe broad trends in this area. A Deutsche Bank study on investments in energy-intensive sectors, which includes metal production, shows that companies have substantially reduced their capital stock (Deutsche Bank Research 2013). During the past 18 years, companies in the metal sector have invested more in their assets than they have amortised in only two years. The sites – according to the report’s conclusion – will be soon worn out. Between 1995 and 2001, the net fixed assets in the industry decreased by 11 per cent, while in other sectors they increased. In this regard, some observers fear or even forecast the deindustrialisation of the EU.

Looking at the FDI flows into new EU member states, reliable data exist for the metal production sector originating from Germany (Table 6). Here the picture is clear: investment levels have declined since the outbreak of the crisis.

**Table 6 Foreign direct investments to 10 new EU member states from Germany, NACE 24–25 (including the manufacture of basic metals and of fabricated metal products, except machinery and equipment) (million euros)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Germany</b>	6	-14	11	121	195	103	-42	38	28	-67

Source: Eurostat (2014)

According to sector experts, some investments in the EU steel industry that were decided before the crisis have been completed, but new investments have not occurred (interview May 2015). This is a problem because some EU steel mills are already relatively old and thus face increasing repairs and maintenance costs (EY 2014); they would therefore need substantial investment to increase productivity. Since the

outbreak of the 2008 crisis, however, steel companies' strategy has instead focused on cost savings and restructuring. Companies are highly indebted and pressures for further consolidation have increased. ThyssenKrupp has sold its stainless steel segment to Outokumpu, a Finnish company, and its US steel plant to a joint venture of ArcelorMittal and Nippon Steel. Tata Steel has sold its long products segment to a financial investor. Similarly, ArcelorMittal has outsourced and capitalised its stainless steel segment, while Riva is trying to sell its plant in Taranto to ArcelorMittal.

Employers' associations in the steel sector stress the role of EU energy policy as a factor that might hinder future investments in the EU. They also argue that companies that forecast ever higher energy costs will become more likely to invest outside the EU (interview May 2015). The first steps in the latter direction can already be observed, and the trend can be illustrated by two big investment projects undertaken by ThyssenKrupp, a company that previously pursued a rather nationally-oriented investment strategy.

In 2007 ThyssenKrupp started to build a new site in the United States in the hope of market expansion and lower energy costs. With ThyssenKrupp Americas it was the largest European foreign direct investor in the steel segment. The investment was guided by two factors. First, the automotive market was supposed to expand in the United States and US steel was in depression, which made the investment look lucrative. Second, shale gas seemed cheaper than oil and therefore foreign direct investment in the United States was considered to ensure a cost advantage. ThyssenKrupp also built a steel mill in Brazil to gain access to raw materials, strategic seaside location and lower personnel costs, and to deliver raw steel to the US Alabama steel site. Neither of the investment projects proved successful, however. Instead, they consumed billions of euros and were considered a loss for the European corporation: the construction of the two sites alone, carried out between 2007 and 2011, cost 15 billion dollars. The economic crisis and the related fall in demand, coupled with operational problems, turned the investments into cost-spending projects, without bringing any returns. As a consequence, the management tried to get rid of the two plants. In 2014, it sold the US unit in Alabama to ArcelorMittal, but still has not found a customer for the Brazilian plant. In view of these losses and the overcapacity in Europe, in 2011 the management decided to diversify production and reduce the share of sales generated by steel. In addition to the American plant, the company also

sold its stainless steel segment. In 2013, only 20 per cent of sales were coming from steel, compared with 40 per cent in 2008 and 70 per cent in earlier years. The employees have accepted an in-house tariff agreement reducing working time by three hours until 2020, which meant that they will receive about 5 per cent less net income (interview May 2015).

Other steel producers also claim that following the customer is a major motive for FDI outside the EU, mainly in developing markets. But it is also the uncertainty about the future European energy policy that makes companies invest in countries with low energy costs. For instance, the Austrian Voest Alpine made its last major investment – of about 550 million euros – not in Austria or elsewhere in the EU but in the United States. The company expected an upsurge in demand from the US automotive industry, but it also justified its move by lower US energy prices. Voest invested in a new technology for hot-briquetted iron, a pre-product needed for steel that is not based on iron ore or coke but on gas, which is much cheaper in the United States. Even taking into account the costs of shipping it back to Austria, this product will cost the company 200 million euros less a year than the equivalent produced in Austria. Overall, during the past 10 years, two-thirds of Voest's investments have been to modernise and increase the efficiency of its Austrian steel mills and one-third have been invested in new production in Asia and the United States. The proportion is likely to change in the future given that Voest seeks to increase the share of sales made outside the EU. With the latter objective, the company is not alone in Europe.

### 3.3 International competition

In terms of competition from outside producers, China in particular is perceived as a threat to the European steel industry as it sells directly to the EU and surrounding markets. In addition, the prices of Chinese steel are very attractive thanks to subsidies for energy and water, low credit rates for investments and so-called 'export discounts', tax concessions introduced in an attempt to promote exports. Given that demand in Asia is satisfied locally and thus shrinking, producers from Russia or Turkey are also increasingly on the lookout for new customers in the EU. The war in Ukraine has further accelerated the need to export to the EU as demand from Russia, the traditional customer, has plunged. Imports to the EU compared with the level of own production are on the increase (Eurofer 2014). China, Russia, Turkey and Ukraine already account for 50 per cent

of all EU steel imports, delivering mainly to the construction industry. The imports from China are particularly contested by European steel producers due to the alleged use by the former of market-distorting subsidies;<sup>2</sup> an antidumping lawsuit in this area is currently being launched by the EU against China. Other countries are trying to increase the competitiveness of their steel products by imposing trade restrictions on steel products from other countries. These restrictive measures include tariff barriers and non-tariff measures (related notably to technical regulations and conformity assessment procedures), again undermining the competitiveness of EU products (European Commission 2013). Countries such as Russia or Brazil have pursued a strict market foreclosure strategy and demanded quotas for locally produced steel in steel consumption.

### 3.4 Raw materials

In the aftermath of the 2008 financial crisis, the provision of raw materials has become a considerable problem. Steelmaking depends on resources that are scarce in Europe and due to expanded production outside Europe the demand for these resources has increased, along with prices. The limited number of suppliers of raw materials, particularly of iron ore, has increased their power, which has disrupted traditional supply chains.<sup>3</sup> Moreover, raw material prices are now increasingly determined on the stock market, which results in severe short-term price fluctuations. From the long-term perspective, prices have risen considerably: if 1 tonne of iron ore cost 20 USD in 2000 and 50 USD per tonne in 1998, by 2010 it had risen to 150 USD. Scrap metal cost 100 euros per tonne in 2000 and 400 euros in 2010. The price for coking coal increased from 100 USD to 700 USD per tonne, and for iron ore from 100 USD to 500 USD. Furthermore, countries such as India, China, the Russian Federation and Egypt imposed export restrictions and export duties on raw materials, which contributed to further raise steel production costs in the EU.

2. State subsidies make it impossible for companies to fail. Moreover, attempts to reduce capacities have so far been unsuccessful: while capacity is reduced in some places, it is increased elsewhere (Song and Liu 2012). The persistence of overcapacity led to a new export orientation: in 2014, China exported 80 million tonnes of steel (Bloomberg 2014), about 5 percent of world production.
3. For example China, a country with huge coal reserves, tried to limit its export quota of raw materials, which benefitted Chinese steel producers. The restriction of exports, however, was determined to be unjustified by the World Trade Organisation and had to be removed (Barkley 2012).



These changes in raw materials supply have had two dramatic consequences. First, steel producers have increasingly tried to purchase their own raw material capacities and to vertically integrate their operations by upstreaming in order to become less dependent. ArcelorMittal, the largest EU steel producer, purchased iron ore mines in the United States, Canada, South America, Africa, Ukraine, Kazakhstan and Bosnia, and coal mines in Kazakhstan, Russia and the United States. This strategy was initiated before the crisis, when Mittal had made huge gains and looked for potential investments. When steel demand decreased it compensated some of the losses with the revenues from its iron ore mines. ThyssenKrupp similarly embarked on an upstream strategy of buying mines, but decided to sell them when its financial problems became more acute. Second, steel producers have sought to an even greater extent to flexibilise their production process. With the fluctuation in raw material prices, long-term contracts with customers could not be sustained and have become shorter. Currently, production orders are made on a quarterly basis, which has led to an enormous need for flexibilisation of production. For workers, this has meant work intensification in peak times and greater job insecurity at times when orders are lower. Even though raw material prices have recovered slightly and now stand at the pre-crisis level, the shock of production volatility is still felt in the sector.

### 3.5 Environmental protection and energy policy

Another challenge to the steel industry is the need to address the issue of environmental protection. In relation to environmental issues, however, world regions pursue very different policies, with the EU being the strictest in forcing steel producers to buy EU CO<sub>2</sub> emission certificates, the price of which has risen steadily. As a result, the EU steel industry is confronted with higher energy prices than most of its international competitors, and given that approximately 40 per cent of total operational costs are energy costs, there are growing concerns that the EU's industrial base might be destroyed due to CO<sub>2</sub> efficiency rules. European steelmakers are particularly vocal in pointing out their huge competitive disadvantage and try to bargain for exemptions and the extension of lower emission prices. With the policy in place, they fear the loss of further 300,000 jobs (interview November 2010).

Some steelworks could work autonomously without using public energy supply as they have co-generation plants, but in these cases CO<sub>2</sub> emissions are often too high. The substitution of these energy sources would not only increase costs, but also require substantial increases in local energy supply. In Austria, for instance, the Voest Alpine steelmill needs 33 TWh of electricity per year, whereas the country's entire annual consumption is only 68 TWh. This indicates that the problem in case of substitution of the autonomously gained energy would be considerable.

To conclude, the challenges for European steel are immense. The sector has to obtain raw materials security; manage price volatility; improve cost competitiveness; manage cash flows; respond to weak demand; innovate new products or applications to attract new customers; optimise product portfolios to expand market access; and expand geographically (see also EU 2013).

#### **4. Social dumping and employment flexibility in the wake of the crisis**

In view of the changes and challenges facing the European steel sector, most companies had refined their strategic priorities even before the crisis. Putting increased emphasis on customer needs has had a knock-on effect for human resource management strategies based on training and employee responsibility, as well as more generally on working conditions. In most companies, new forms of work have had to be introduced and the relationship with customers, suppliers and employees has changed. The current financial crisis has accelerated restructuring and employment flexibilisation, whereas cost-cutting and productivity enhancement goals have become key for all producers. This section will present some features of the new post-crisis business model in the European steel industry, with particular focus on its employment effects. The account is based on research conducted by the author between 2009 and 2012 at one big multinational steel company (MNSC).

The production process at MNSC is planned globally and managed via benchmarks. The individual sites have to document every element of the production process: the use of raw materials, energy consumption, maintenance costs, the number of workplace accidents and personnel costs. As a result of the benchmarking process, MNSC's locations have become comparable in terms of their cost structures and they compete

with each other over production quotas and investments. The rivalry divides the plants into winners and losers: only the five top-performing units, due to their good reputation as cost-saving plants, receive new investments. Under these circumstances, even profitable locations are threatened with closure.

Cost-cutting pressures exerted under these conditions are an example of employer-driven social dumping. The use of the latter term is justified given that in the examined context, cost reduction is first and foremost achieved by lowering social and employment standards. In manufacturing sectors the most commonly used social dumping practices are relocations, measures aimed at increasing employment flexibility, benchmarking and inter-plant 'beauty contests' initiated by the management, which are also termed 'whipsawing' (Greer and Hauptmeier 2015).

At MNSC, social dumping has acquired a new quality with the financial crisis. Initially, for a number of months, production at MNSC was reduced to 20 per cent of capacity, implemented by means of production stoppages and temporary closures of some mills so that at times, only nine of MNSC's 25 blast furnaces in Europe were operating. This hit the central management hard, who subsequently decided that the company needed more flexibility in order to reduce fixed costs by 10 billion USD annually. The cornerstone of the new flexibility strategy was cutting labour costs during downturns. MNSC accordingly sought to decrease the workforce to 80 per cent of capacity utilisation per site, demanding that this should be implemented by increasing external flexibility, that is, by reducing the core workforce by 20 per cent and replacing it with agency workers or zero-hours contract workers.

Individual company sites tried to follow this new requirement in a variety of ways. The most labour-friendly solution was implemented in Germany, where no employment reduction occurred but some permanent workers were transferred to newly created internal subsidiaries providing services to different company divisions. Formally separate from the company, their transfer helped reduce the headcount at sites and thus comply with the central management's demands. In other countries, such as Poland, the number of workers was reduced to 80 per cent of capacity utilisation by means of dismissals, and those who left received just the minimum severance pay defined by law. Half the dismissed workers were rehired as agency workers with a guarantee that their salary would not be reduced in the course of the next two years. According to the local management,

this was an incentive for the employees to embrace cooperation with the temporary work agency.

In other European countries, the management's social-dumping pressure has also resulted in the increase of external flexibility and new forms of flexibility, but also in redundancies and site closures, mainly in Belgium and France. In response to the declining demand from the automotive industry, a coke plant and production lines for finished products in Belgium were closed in 2013; as a result, 1,300 workers lost their jobs. Thanks to government intervention, no forced redundancies occurred in France, but the closure took place through the use of early retirement schemes and redeployment after training programmes for new investments, such as the production of Usibor or food cans. All in all, the management justified the closures with the need to reduce capacity and sustain the most profitable sites.

## **5. Conclusions and outlook**

The current problems of the European steel sector lie mainly in worldwide overproduction, which results in low capacity utilisation, increasing imports from emerging markets and persistently low demand. The European steel sector faced a similar situation in the 1980s, when capacity utilisation was at 56 per cent in the EU. In the 1980s, politicians reacted promptly, granting state aid to the sector and even renationalising it in some countries; the primary aim back then was to safeguard jobs and the industrial base in Europe. The expiry of the ECSC treaty in 2002 nurtured a debate on whether the EU should continue to consider the steel sector as a special case and pursue 'managed restructuring' as a policy paradigm, or regard external competition as a positive factor that facilitates restructuring processes. The latter 'non-intervention paradigm' prevailed and ended the 'managed restructuring' era: it no longer focused on the protection of the EU market, but rather on its opening up for foreign markets (Sedelmeier 2002).

Eleven years after the expiry of ECSC, a new policy paradigm came to the fore. Recent plant closures that had attracted public attention, as well as the increasing number of job losses alarmed European policymakers. In July 2012, a High-Level Roundtable (HLR) was set up by the Vice-President of the Commission and Commissioner for Industry and Entrepreneurship in cooperation with the Commissioner for Employment

and Social Affairs with the aim of seeking possibilities to boost the industry's development, not at least because several other industries depend on steel production. In order to minimise the negative social impacts of the crisis on the steel industry, the EU proposed a 'European Steel Plan'. As part of the Plan, in 2013 the Commission adopted the so-called Action Plan for a Competitive and Sustainable Steel Industry in Europe, which advocated additional financial support for technological innovations that would help reduce the dependence on costly raw materials. It also called for a comprehensive trade strategy involving various trade policy tools guaranteeing European steel producers access to third-country markets.

The Action Plan represents an important step in acknowledging the difficulties faced by the sector. However, it does not signify a return to the 'managed restructuring' paradigm, as it is just a soft law instrument advising common action.<sup>4</sup> In its current shape the Action Plan is far from an attempt to control market mechanisms of the kind undertaken in the 1980s, when production capacities were allocated across European regions equally in order to safeguard employment. Today regions are competing for production on the basis of cost efficiency, and employment has been reduced solely to a cost factor. In this regard, it is notable that while the Action Plan tries to improve regulatory conditions for the industry, it does not offer mechanisms to protect employment. One could therefore call this new paradigm 'the coordination of competitive environments': even with a new supranational European sectoral policy, it remains a considerable challenge for steelworkers to protect their interests in the new post-crisis situation in the face of harsh competition between individual locations and management's lack of local attachments.

It seems crucial for the future of European steel that investments are made to modernise plants and to compete technologically with developing countries. Given the composition of costs in steel production – the large share of raw material and energy prices – it seems worth investing in research and innovation in order to find cheaper alternatives to the existing raw materials, as well as for the production process. In

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4. A window of opportunity for more interventionist policies opened up only for a very short period of time in the late 2000s. Following the outbreak of the crisis, national states stepped into safeguard employment by offering labour market instruments that would allow companies to cut labour costs without making workers redundant. Short-time working schemes were introduced by many EU countries, and were particularly generous and widespread in the German metal sector.

principle, research and innovation are areas in which the European Union has strengths, which suggests that if business, research and politics continue to cooperate, the relocation of steel outside the EU can be prevented. However, recent trends indicate that companies are primarily interested in cost reduction and not in innovation. Moreover, if the sector fails to offer stable employment and employment security, it will be the task of European policymakers to lay down basic conditions to keep the sector in line with European values concerning decent work.

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### **References**

- Bacon N. and Blyton P. (1996) Re-casting the politics of steel in Europe: the impact on trade unions, *West European Politics*, 19 (4), 770–786.
- Baltic Course (2015) Liepajas metalurgs employs 550 workers at the moment, Riga, Baltic Course, 17 February 2015. [http://www.baltic-course.com/eng/good\\_for\\_business/?doc=102547](http://www.baltic-course.com/eng/good_for_business/?doc=102547)
- Barkley T. (2012) China loses trade appeal over its curbs on exports, *The Wall Street Journal*, 31 January 2012. <http://online.wsj.com/article/SB10001424052970204652904577193131423685816.html>
- Buntrock O. (2004) Problemlösung im europäischen Mehrebenensystem: das Beispiel der Stahlpolitik der europäischen Gemeinschaft für Kohle und Stahl (EGKS), Wiesbaden, Deutscher Universitäts-Verlag.
- Clauwaert S. and Schömann I. (2012) The crisis and national labour law reforms: a mapping exercise, Working Paper 2012.04, Brussels, ETUI.
- Conrad C. (1997) Europäische Stahlpolitik zwischen politischen Zielen und ökonomischen Zwängen, Baden-Baden, Nomos.
- Eckart K. and Kortus B. (1995) Die Eisen- und Stahlindustrie in Europa im strukturellen und regionalen Wandel, Wiesbaden, Deutscher Universitäts-Verlag.
- EMCC (2015) European restructuring monitor, European Monitoring Centre on Change. <http://www.eurofound.europa.eu/observatories/european-monitoring-centre-on-change-emcc/european-restructuring-monitor>

- Eurofer (2014) Economic and steel market outlook 2014–2015, 23 January 2014.
- European Commission (2009) Report from the Commission to the Council and the European Parliament - Second monitoring report on steel restructuring in Bulgaria and Romania, COM(2009) 146 final, 1 April 2009.
- European Commission (2010) Report from the Commission to the Council and the European Parliament - Third monitoring report on steel restructuring in Bulgaria, COM(2010) 125 final, 31 March 2010.
- European Commission (2013) Communication from the Commission to the Parliament, the Council, the European Economic and Social Committee and the Committee of Regions - Action Plan for a competitive and sustainable steel industry in Europe, COM(2013) 407 final, 11 June 2013.
- EY (2014) Global steel 2014 - Planning to profit from opportunity: preparing for future demand, Ernst & Young Global Limited.
- Greer I. and Hauptmeier M. (2015) Marketization and social dumping: management whipsawing in Europe's automotive industry, in Bernaciak M. (ed.) Market expansion and social dumping in Europe, London, Routledge, 125-139.
- Heymann E. (2013) Carbon Leakage: Ein schleichender Prozess, Deutsche Bank Research, 18 December 2013.
- Heymann E. (2014) Investitionen in Deutschland auf Branchenebene, Deutsche Bank Research, 9 December 2014.
- Houseman S.N. (1991) Industrial restructuring with job security: the case of European steel, Cambridge, Harvard University Press.
- Keat P. (2000) Penalizing the reformers: Polish steel and European integration, *Communist and Post-Communist Studies*, 33 (2), 201–221.
- Lulle A. (2013) Estonia, Latvia, Lithuania - Labour relations and social dialogue: annual review 2013, Warsaw, Friedrich Ebert Foundation.
- Meardi G. and Trappmann V. (2013) Between consolidation and crisis: divergent pressures and sectoral trends in Poland, *Transfer: European Review of Labour and Research*, 19 (2), 195–204.
- OS Kovo Internal sources.
- Perlitz U. (2009) EU-Stahlindustrie: weiter in Richtung High-Tech-Erzeugnisse, *EU Monitor* 69, Deutsche Bank Research, 8 September 2009.
- Sedelmeier U. (2005) Sectoral dynamics of EU Eastern enlargement: advocacy, access and alliances in a composite policy, in Schimmelfennig F. and Sedelmeier U. (eds.) *The politics of European Union enlargement: theoretical approaches*, London, Routledge, 235–255.
- Song L. und Liu H. (eds.) (2012) *The Chinese steel industry's transformation: structural change, performance and demand on resources*, Cheltenham, Edward Elgar.

- Sznajder-Lee A. and Trappmann V. (2014) Overcoming post-communist labour weakness: attritional and enabling effects of multinationals in Central and Eastern Europe, *European Journal of Industrial Relations*, 20 (2), 113–129.
- Trappmann V. (2013) *Fallen heroes in global capitalism: workers and the restructuring of the Polish steel industry*, Basingstoke, Palgrave Macmillan.
- Varga M. (2011) *Striking with tied hands: strategies of labour interest representation in post-communist Romania and Ukraine*, Doctoral thesis, Amsterdam, University of Amsterdam.
- World Steel Association (2011) *Steel statistical yearbook 2011*, Brussels, World Steel Association Committee on Economic Studies.
- World Steel Association (2014) *Steel statistical yearbook 2014*, Brussels, World Steel Association Committee on Economic Studies.
- Yin R. (2011) *Metallurgical process engineering*, Berlin, Springer.

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