

Hunya, Gabor

**Research Report**

## Regional Policy and FDI Location – an Overview of the Larger New EU Member States

wiiw Research Report, No. 393

**Provided in Cooperation with:**

The Vienna Institute for International Economic Studies (wiiw) - Wiener Institut für Internationale Wirtschaftsvergleiche (wiiw)

*Suggested Citation:* Hunya, Gabor (2014) : Regional Policy and FDI Location – an Overview of the Larger New EU Member States, wiiw Research Report, No. 393, The Vienna Institute for International Economic Studies (wiiw), Vienna

This Version is available at:

<https://hdl.handle.net/10419/204165>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# Research Reports | 393 |

March  
2014

*Gábor Hunya*

## **Regional Policy and FDI Location – an Overview of the Larger New EU Member States**



**R**  
**R**



Gábor Hunya is a research economist at the Vienna Institute for International Economic Studies (wiiw).

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 290657



*Gabor Hunya*

**Regional Policy and FDI  
Location – an Overview  
of the Larger New EU  
Member States**



# Contents

<i>Abstract</i> .....	i
1 Introduction .....	1
2 Greenfield FDI location trends in the NMS.....	2
3 Hungary.....	5
3.1 Disparities in terms of GDP and FDI capital .....	5
3.2 Location of greenfield FDI projects .....	7
3.3 Regional FDI policy tools .....	10
3.4 Industrial parks .....	14
3.5 Cluster development .....	15
3.6 Conclusions on Hungary.....	16
4 Poland .....	16
4.1 Regional differences .....	16
4.2 The role of regional investment aid ceilings .....	19
4.3 Special Economic Zones .....	22
4.4 Other regional policy tools influencing FDI .....	23
4.5 Conclusion for Poland.....	24
5 Romania.....	24
5.1 Regional development gaps in terms of GDP and FDI .....	24
5.2 Greenfield FDI projects .....	25
5.2 Regional policy affecting FDI .....	27
6 Conclusions.....	28
References .....	30

## List of Tables and Figures

Table 1	Share in FDI by number of companies and foreign equity capital stock in Hungary, per cent .....	7
Table 2	Share of government subsidies in the eligible investment value by regions.....	11
Table 3	Distribution of FDI projects by regions and aid ceiling for large investments in per cent Low: 30% and 40% of the eligible cost; High: 50% of the eligible cost .....	20
Figure 1	Number of greenfield projects in the larger NMS.....	3
Figure 2	The crisis period compared with the pre-crisis period in terms of project number, invested capital and job creation; 2009-1012 in % of 2005-2008.....	4
Figure 3	GDP per capita in per cent of the country average in Hungary's regions .....	5
Figure 4	Number of new greenfield FDI projects and created jobs by regions in Hungary .....	8
Figure 5	Share in projects per share in GDP by region and year in Hungary .....	8
Figure 6	Share of manufacturing and advanced services projects in Hungarian regions in the pre-crisis and post-crisis years.....	9
Figure 7	Number of large investment projects supported by individual government decision .....	12
Figure 8	GDP per capita in per cent of the country average in Polish regions.....	17
Figure 9	Change in the number of projects and jobs between 2005-2008 and 2009-2013 by regions in Poland.....	17
Figure 10	Share in projects per share in GDP by region and year in Poland.....	19
Figure 11	Share of manufacturing and advanced services projects in Polish regions in the pre-crisis and crisis years .....	21
Figure 12	GDP per capita in per cent of the country average in Romania's regions .....	25
Figure 13	Total number of FDI projects and created jobs by regions in Romania .....	26
Figure 14	Change in the number of projects and jobs between 2005-2008 and 2009-2013 by regions in Romania .....	26

## ***Abstract***

The paper compares three countries (Hungary, Poland and Romania) in terms of the number of greenfield FDI projects and of GDP by NUTS-2 sub-country regions. We discuss whether the particular regions received a smaller or larger share of projects than their share in GDP. Then we outline the regional and investment policy tools applied in each of the countries, looking at their possible impact on the location choice of investors. The investigation reveals significant regional gaps in attracting new FDI projects and a dominance of the capital cities. Regional discrepancies between NUTS-2 regions in terms of per capita GDP have become marginally smaller in recent years but were mainly unrelated to the location of new foreign investments. State aid for large investments, industrial parks and special economic zones has been among the most powerful tools directing the location choice of new FDI projects.

Keywords: FDI, industrial location, regional policy, FDI policy

JEL classification: F21, F23, R30, R38, R58





## **Regional policy and FDI location – an overview of the larger new EU Member States**

### **1 Introduction**

Policy tools to influence the location choice of FDI fall into two main categories: fiscal and non-fiscal, with non-fiscal incentives being constituted by financial and non-financial incentives (Bartels and Crombrugghe, 2009). Fiscal incentives may comprise investment aid, tax holidays, tax-free imports and tax exemptions. Non-fiscal incentives may include speedy depreciation, development bank loans and guarantees, R&D support, environmental standards support, labour training support, etc. In practice, most new EU Member States (NMS) apply some of these policy tools while treating foreign and domestic investors equally. The combined value of incentives for any project underlies the cap established by EU state aid rules. Beyond that, institutional capacity, fiscal capacity, level of development, etc. vary among countries and regions as to the size and effectiveness of policy measures.

Regional policy aims at diverting investments to less developed regions of a country. Regional investment policy tools may include incentives, development of business infrastructure (e.g. industrial parks) and business support services (such as clusters, business organisations, chambers), public investment in transport infrastructure (motorways, rail connections, airports), promotion of regions, etc. These are also widespread tools in the NMS.

Beyond investment and regional policy affecting all investors disregarding whether they are domestic or foreign, special policies may target foreign investors and SMEs. These two categories of companies are usually preferred for their outstanding impact on growth and employment. The reason for special treatment is information disadvantage in the case of foreigners and inferior access to skills and financing in the case of SMEs.

The relationship between FDI and economic policy is usually discussed based on the general policy environment, not just those measures specifically applied to foreign investors. Standard analysis of FDI policy makes comparisons between countries, ranking policy measures by their impact on FDI (Blomström and Kokko, 2003). Specific policy tools including FDI promotion and subsidies have also been compared (Bartels and de Crombrugghe, 2009). The evaluation of regional policy measures and regional FDI growth is hindered by the diversity of policies and lack of regional FDI data (Grima and Wakelin, 2001). As a consequence, the comparison of policies is usually qualitative as neither the measures nor their impacts are quantified.

There is a relatively thin literature on policy effectiveness in attracting FDI. Bellak, Leibrecht and Stehrer (2010) analyse the contribution of various public policies to attract inward FDI in manufacturing by comparing individual country indicators to the best practice. A distance from the best practice indicates which policy fields would need most improvement to step up FDI. They find that the Czech Republic, Hungary and Slovakia would gain most by increasing public R&D expenditure and improving the ICT infrastructure. These policy factors would support concentration and the development of agglomeration of economic activity. Looking at firm-level regional data in Poland, the Czech Republic and the former GDR in the period 2000-2010, Gauselmann and Marek (2011) indicate even more room for agglomeration effects. The specialisation of a region in the activity of the investor is found to be a significant location factor, while a too narrow specialisation of a region is not. Diversification is found to be beneficial to attracting FDI as is a higher level of economic development. They also find that capital regions have additional advantages, and higher wages do not deter investors as this is usually compensated by higher productivity.

The above papers come to the conclusion that FDI increases regional differences by locating in more developed regions/locations providing agglomeration advantages. Therefore the question arises how to divert investors to less developed, less agglomerated regions if regional inequality should be corrected. How can other location factors compensate for agglomeration disadvantages and with what policy tools? There are two options at hand. One is regional policy, which may correct the differences in the conditions of doing business. The other is FDI policy or in a broader sense investment policy, which may support and promote investment projects in less developed regions. The two sets of policies may go hand in hand: regional policy directs subsidies and investment promotion influences the location search of investors. FDI policy may also generate new agglomerations of production by setting up industrial parks.

In the following we outline how greenfield investments locate regionally ([www.fdimarkets.com](http://www.fdimarkets.com) database) and what tools can influence investors' locational decisions. One of the reasons for not using FDI statistics based on the balance of payments or the international investment position is to avoid the agglomeration bias to capital cities due to the concentration of headquarters in those cities. By focusing on concrete investment projects we also avoid problems of balance of payments statistics, such as FDI flows in special purpose entities and capital in transit (Hunya, 2013).

## **2 Greenfield FDI location trends in the NMS**

This paper looks at the regional distribution of greenfield projects of foreign investors in 2005-2012 (Table 1).<sup>1</sup> We compare two time periods: the years before the financial crisis,

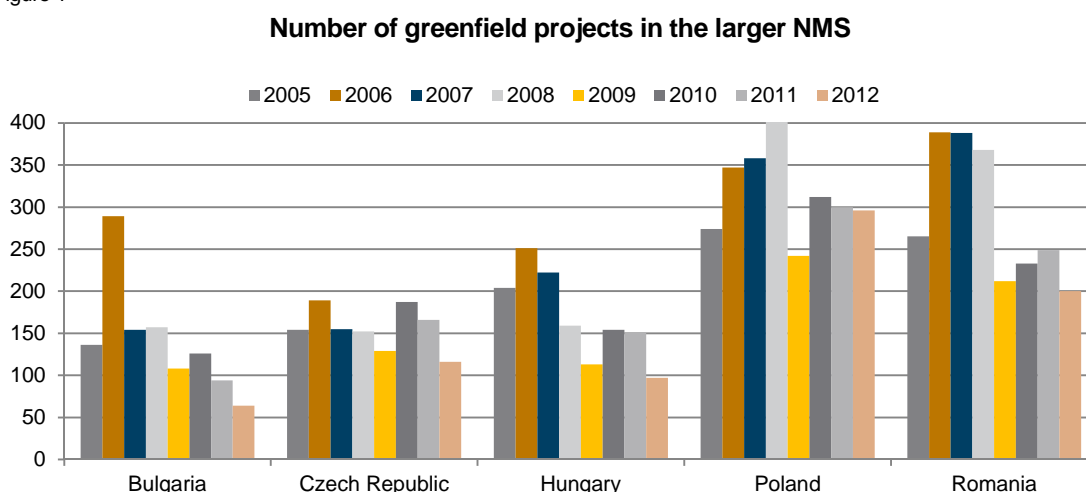
---

<sup>1</sup> The source is the *fdimarkets.com* database of the Financial Times Ltd. Data have been processed and grouped into NUTS-2 regions. The term greenfield project covers also expansions of existing projects at the same location. Data on

2005-2008, and those following it, 2009-2012. Thus we distinguish between the periods of FDI boom and bust, of fast economic growth and recession. First we look at the larger NMS, which comprise more than one NUTS-2 region (Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia), then we conduct policy analyses for the three largest recipients of FDI projects – Hungary, Poland and Romania.

Over the eight years investigated, the highest number of projects relative to GDP was recorded in Hungary and the lowest in the Czech Republic. Among the larger countries Romania attracted more projects per GDP than Poland. In absolute terms, Poland and Romania are ahead of the others (Figure 1).

Figure 1



Source: [www.fdimarkets.com](http://www.fdimarkets.com).

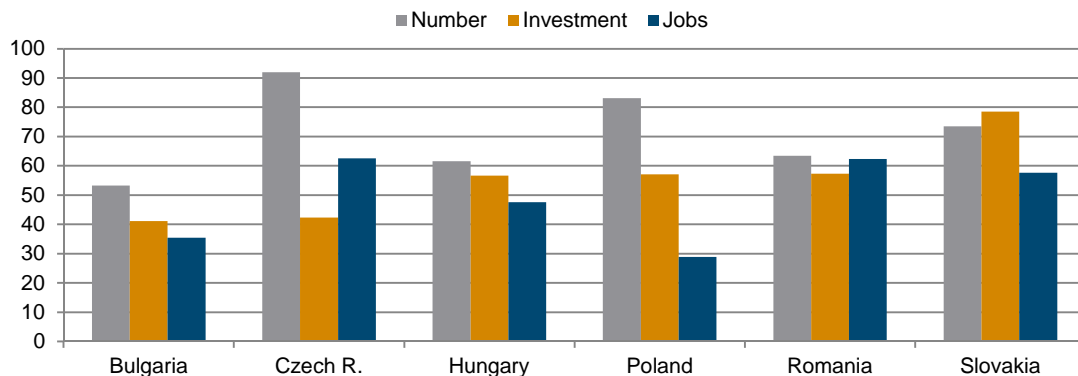
The total number of projects in the five countries over eight years increased until 2006, stayed close to that level in the following two years, and then declined. There was some recovery in 2010 and a deep fall in 2012. Some countries behaved differently, thus the 2006 peak was most pronounced in Bulgaria while the setback in 2011-2012 was most severe also in this country plus in the Czech Republic and Hungary. Poland showed the most balanced picture, with a temporary setback in 2009 and only minor declines following the 2010 recovery. It is important to point out the severity of the 2012 setback in several countries: the number of projects was below the 2010 low in all of them but Poland. FDI projects developed by and large in line with economic growth showing a double-dip recession and sluggish recovery in 2012.

---

invested capital and on job creation are to a large extent estimated, thus the number of projects is the most reliable indicator. The total number of projects includes also those which could not be attributed to a NUTS-2 region. Thus under the list of regions there is a category 'not specified'.

Figure 2

**The crisis period compared with the pre-crisis period in terms of project number, invested capital and job creation; 2009-1012 in % of 2005-2008**



Source: www.fdimarkets.com.

The comparison of the pre-crisis years with the post-crisis years (Figure 2) shows the most even number of projects for the Czech Republic where the setback in the crisis years was only 8%. It is followed by Poland with 17%. The most severe decline took place in Bulgaria (47%) closely followed by Hungary (38%) and Romania (37%).

The investment outlays in the projects (partly estimated by fdimarkets.com) declined most in Bulgaria and the Czech Republic while the pledged number of new employment fell most in Poland and Bulgaria and the least in the Czech Republic. Estimated values, which were introduced by the source in the absence of reported figures, distort these data, but on the whole it is true that the average size of the projects shrank both in terms of capital and employment. (Exceptions were Romania, where all three indicators – number, capital, jobs – fell by about 40% and Slovakia, where the average invested capital per project increased.) Scaling back project size and a shift from more to less capital-intensive activities were the logical consequences of the crisis.

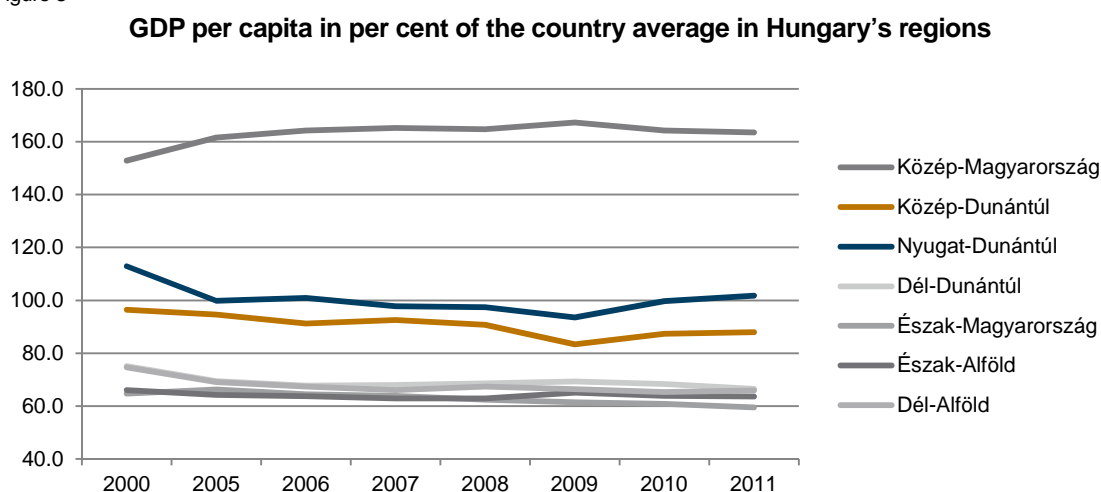
In the following we compare two countries with large setbacks (Hungary and Romania) and one with small setback (Poland) in terms of project number and trace the development of greenfield projects by sub-country regions. We also look at regional differences in terms of GDP and, if data permit, FDI companies. We discuss whether the region received a smaller or larger share of projects than its share in GDP. Then we outline the regional and investment policy tools applied in each of the countries, looking at their possible impact on the location choice of investors. We rely on data at the level of NUTS-2 regions and name the regions in the national language as used by Eurostat.

### 3 Hungary

#### 3.1 Disparities in terms of GDP and FDI capital

No catching-up of less developed regions in terms of per capita GDP has been achieved over the past 15 years in Hungary. Only the Közép-Magyarország (Central Hungary) region including the capital Budapest could catch up a bit to the EU average while all the other regions fell behind. Nyugat-Dunántúl (West-Transdanubia) was catching up in the 1990s but the process reversed later. Budapest and the Közép-Magyarország (Central Hungary) region have had a lasting advantage over the rest of the country in terms of GDP and FDI.

Figure 3



Source: Central Statistical Office, ksh.hu.

The recent development in per capita GDP shows some regional polarisation between 2000 and 2009 and some reversal in the most recent years. The lead of Közép-Magyarország over the national average per capita GDP increased from 52% in 2000 to 62% in 2005 and further to 67% in 2009, and declined to 63% in 2012. In a symmetrical development, Közép-Dunántúl and Nyugat-Dunántúl were losing in 2000-2009 but caught up in the last three years. The position of the rest of the country has been around two thirds of the national average but with a trend to decline. The most important change over the past seven years was the decline of Észak-Magyarország from 66% in 2005 to below 60% in 2012.

The leading role of Közép-Magyarország is outstanding as Budapest has become part of the European capital-city networks and competes for advanced business functions internationally. Its point of reference in terms of development and urban functions are other capital cities in Europe and not the rest of the country. The largest provincial towns in Hungary have a size of only one tenth of the Budapest agglomeration thus they provide opportuni-

ties for development of a very different scale. Provincial towns can attract less sophisticated business functions in manufacturing and services than Budapest.

The primary position of Budapest was underpinned by infrastructure projects, a radial motorway network centred on the city and the best international linkages also by rail and air among Hungarian cities. Provincial centres got closer to the capital city, gaining new opportunities and also losing some of the investments and purchasing power. Starting in the mid-2000s, the attraction of the investments including FDI to the capital and its vicinity was curtailed by high real estate prices and wages. Beyond cost advantages, government and EU support also tried to guide investments to less developed areas of the country. In the wake of the financial and fiscal crisis, corporate and public investments were cut back in Hungary; also FDI inflow fell and unemployment increased all around the regions. While some decentralisation of the large investments could be achieved partly as a result of government policy, regional disparities have not become smaller as a likely effect of the mounting problems of SMEs in less developed regions.

The distribution of the number of FDI companies and their FDI stock shows a strong concentration in Budapest.<sup>2</sup> The share of Közép-Magyarország (Central Hungary) in the number of FDI companies (with at least 10% foreign ownership) increased from 61% to 71% between 2000 and 2011. But its share in equity capital declined from 67% to 59% (Table 1 and Figure 3). Large capital-intensive companies settled or shifted their registration to Nyugat-Dunántúl (West Transdanubia) which increased the region's share from 11% to 21%. As the number of projects hardly increased there, new FDI took place most probably in the form of expansions of existing companies. Also a shift of investors' headquarters and the related FDI stock could be a reason for the sudden regional restructuring of FDI stock. Due to these reasons, 2011 data can be disregarded by which we are left with very stable shares of Hungarian regions in the foreign equity stock and an overwhelming concentration of FDI companies registered in Budapest.

The conclusion from the comparison of Figure 3 and Table 1 is that FDI has reinforced and did not mitigate regional disparities in Hungary. But as indicated in the introduction to this paper, FDI stock data may be too strongly influenced by investment decisions in the past and biased by financial flows and asset valuation while regional FDI flow data are not available. In the following we turn to the regional distribution of new greenfield investment projects, an indicator that is more sensitive to short-term changes. Another reason is that it is the location choice of new projects which lies in the focus of FDI policy.

---

<sup>2</sup> For Hungary regional FDI statistics on FDI companies are available from the Central Statistical Office, [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_qpk006.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qpk006.html).

Table 1

**Share in FDI by number of companies and foreign equity capital stock in Hungary, per cent**

<i>Number of FDI companies</i>	2000	2008	2011
Közép-Magyarország (Central Hungary)	61.3	70.1	71.5
Közép-Dunántúl (Central Transdanubia)	6.8	5.9	5.4
Nyugat-Dunántúl (West Transdanubia)	10.5	9.1	9.0
Dél-Dunántúl (South Transdanubia)	6.0	4.5	4.0
Észak-Magyarország (North Hungary)	3.2	2.6	2.5
Észak-Alföld (Northern Great Hungarian Plains)	4.6	3.0	3.0
Dél-Alföld (South Great Hungarian Plains)	7.6	4.7	4.6
Hungary number (100%)	26,634	28,993	29,879

Table 1 cont.

<i>Foreign equity capital stock</i>	2000	2008	2011
Közép-Magyarország	67.4	64.0	58.8
Közép-Dunántúl	7.0	9.1	7.0
Nyugat-Dunántúl	10.8	13.1	20.6
Dél-Dunántúl	2.0	1.2	1.5
Észak-Magyarország	4.6	3.2	2.8
Észak-Alföld	3.7	3.7	3.9
Dél-Alföld	3.3	3.1	3.0
Not allocated	1.3	2.6	2.4
Hungary, HUF bn (100%)	5,576.6	15,008.3	17,988.5

Source: Central Statistical office [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_qpk006.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qpk006.html).**3.2 Location of greenfield FDI projects**

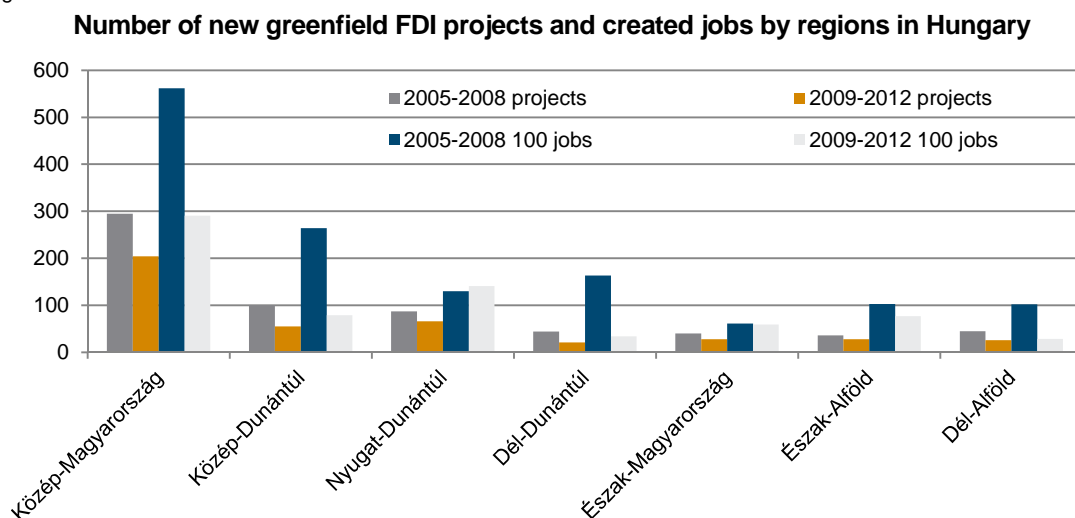
The location of greenfield projects established in 2005-2012 was less concentrated than that of the FDI capital. The share of Közép-Magyarország was 46% considering the number of announced greenfield projects, 41% in terms of the pledged new jobs and 37% in the announced investment capital. Közép-Dunántúl is second by a small margin and ahead of Nyugat-Dunántúl in terms of the number of new projects and with a wider margin in terms of jobs and capital. There is little difference between the remaining four regions; each of them received 6-7% of the projects in 2005-2012.

In 2009-2012 the number of new greenfield investment projects (excluding projects not allocated to regions) was only two thirds of the number in the pre-crisis years of 2005-2008 (Figure 4). The decline was most rapid in Dél-Dunántúl and Közép-Dunántúl while the most withstanding regions were Észak-Alföld and Nyugat-Dunántúl. Similar to the FDI statistics, Nyugat-Dunántúl took over as the second most important FDI location in the post-crisis years; the attractiveness of geographic location close to the main Western markets became more prominent. Also Közép-Magyarország and Észak-Magyarország received increasing shares of the new projects.



The number of new jobs in Hungary fell back by almost 50% after the crisis, even more than the number of investment projects. The number of newly announced jobs declined the least in Észak-Magyarország and Észak-Alföld, and most in Dél-Alföld and Dél-Dunántúl; it even increased in Nyugat-Dunántúl.

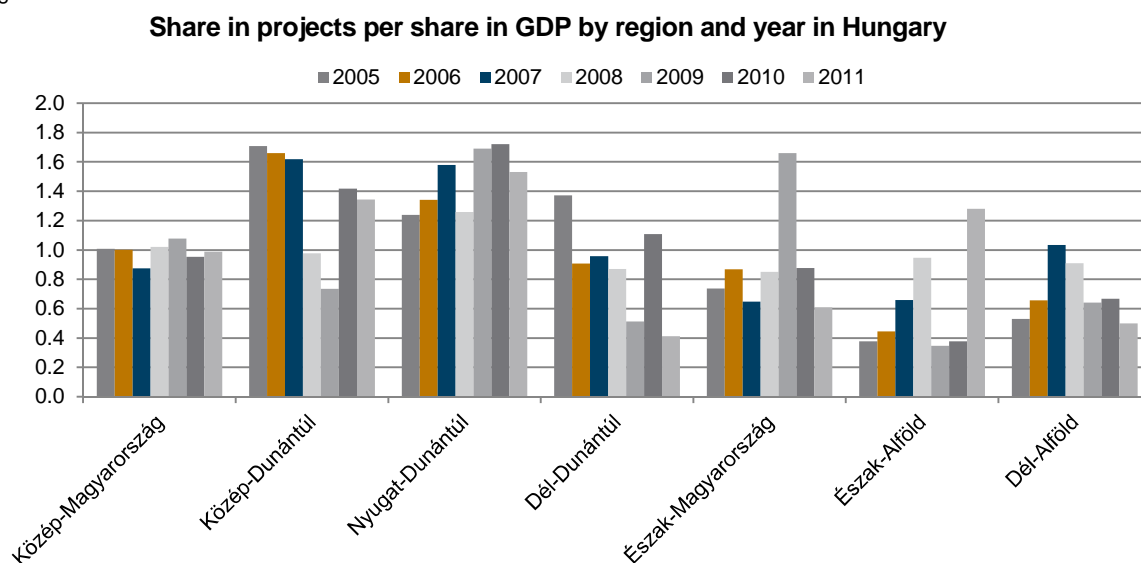
Figure 4



Source: fdimarket.com.

It is worth taking the size of the region into consideration to see whether the share in the number of projects is higher or lower than the region's share in GDP. Data above one in Figure 5 indicate that the region's share in the number of projects was higher than that in GDP.

Figure 5



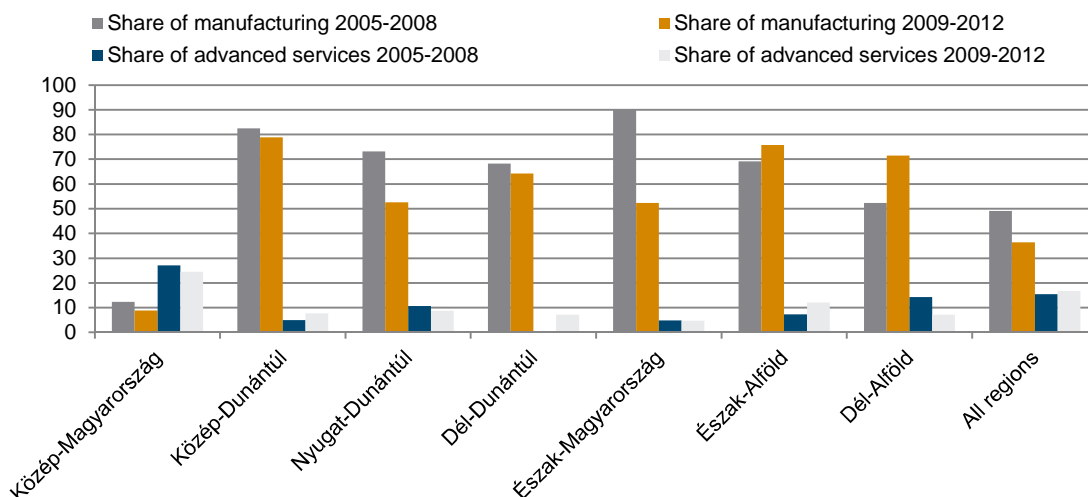
Source: fdimarket.com.

The Közép-Magyarország region has an indicator of 1.0 in Figure 5, meaning that it is equally dominant in terms of the number of greenfield projects and in terms of GDP. The regions with an indicator above 1, meaning that they have higher shares in the number of new projects than in GDP, are Nyugat-Dunántúl and Közép-Dunántúl. The other, less developed regions received even less new FDI projects than their level of development would suggest. They received small numbers of projects not only in absolute terms, but also compared to their share of GDP, except in one or two years. But in some post-crisis years Észak-Magyarország and Észak-Alföld received a higher share of projects than their shares in GDP.

In terms of pledged jobs per GDP, Közép-Magyarország has indicators lower than 1 and in terms of investment value per GDP higher than 1, denoting that projects in this region are more capital intensive and less labour intensive than in the rest of the country. Észak-Magyarország and Észak-Alföld could increase their importance in terms of new jobs in greenfield projects (share in total and per GDP). Similar trends in Dél-Dunántúl and Dél-Alföld reversed starting from 2009. In terms of invested capital only Észak-Alföld has been a clear winner in recent years. By most fdimarkets.com indicators, this region and Észak-Magyarország could catch up while they did not catch up in terms of GDP.

Figure 6

**Share of manufacturing and advanced services projects in Hungarian regions in the pre-crisis and post-crisis years**



Source: fdimarket.com.

The share of manufacturing in the total number of projects (for which both activity and regional data are available) was 49% in 2005-2008 and declined to 36% in the 2009-2012 period (higher shares and less decline than in Poland) (Figure 6). Thus manufacturing suffered large relative losses due to the crisis. At the same time, the share of advanced services increased from 15% to 17% (similar to the ratios in Poland). The capital of the coun-

try clearly dominates the services sector, whereas other regions are more industrial oriented. Közép-Magyarország is the region with the lowest share of manufacturing and the highest share of services which are natural attributes to capital city agglomeration. Although the share of these activities declined among the projects in this region, the region's share in the country increased in both activities: in the total number of manufacturing projects from 10% to 12% and in the total number of advanced services projects from 72% to 76%.

Közép-Dunántúl and Nyugat-Dunántúl are the two regions which had the highest numbers of manufacturing projects in both time periods. Their shares fell back after the financial crisis when Észak-Alföld and Dél-Alföld gained.

The indicators of the allocation of greenfield projects can be summarised as follows. The leading position of Közép-Magyarország is not very pronounced overall but it dominates the advanced services sector. The most prominent regions receiving FDI projects relative to their size are in the North-West of the country (Nyugat-Dunántúl, Közép-Dunántúl); of them Nyugat-Dunántúl has maintained its position after the crisis while Közép-Dunántúl recovered only in the last two years of the observation period. The rest of the North shows signs of catching up (Észak-Magyarország, Észak-Alföld), while the South (Dél-Dunántúl, Dél-Alföld) is losing out by most indicators. The Észak-Alföld region has been the most successful in avoiding a major decline in the number of manufacturing and advanced services projects. In the following it will be investigated whether these trends coincide with the potential effects of investment policies.

### **3.3 Regional FDI policy tools**

European Union projects are by far the most valuable resources to support regional development. They come from two main funds, the Economic Development Operational Programme (with the aim of fostering economic growth in Hungary, through strengthening competitiveness) and the Regional Operational Programmes for each of the NUTS-2 regions. In the 2007-2013 period, the highest per capita support in the framework of the two operational programmes ('Economic Development' and 'Regional') was received by Észak-Magyarország (Northern Hungary) followed with a distance by the Dél-Alföld (South Great Hungarian Plains) and Közép-Dunántúl (Central Transdanubia) regions (Állami Számvevőszék, 2012). Közép-Magyarország (Central Hungary) was not among the primary targets as this region was not eligible for funds through the Economic Development Operational Programme and received less than average in per capita terms from the Regional Development Operational Programme. These figures suggest that due to eligibility rules the regional support did flow to the less developed regions.

There is no direct link between FDI and the above-mentioned operational programmes, but among the companies benefiting from economic development funds there were both majority Hungarian- and majority foreign-owned firms. Ten large public enterprises including public transport companies received the overwhelming majority of the funds. They had to spend the funds based on public procurement in which all EU companies including FDI companies in Hungary could participate but their share in the business is unknown. In the survey of the top 100 companies receiving EU funds there were 46 majority Hungarian- and 35 majority foreign-owned private companies (*Figyelő*, 40/2013). The comparison of their performance reveals that only the majority foreign-owned companies could increase exports and employment during and after the investment period. The majority domestic-owned companies reported declining production and employment in the wake of the financial crisis despite the supported investments.

After EU accession, government aid to big investors has become the central government policy tool to attract FDI (Hungarian Investment and Trade Agency, [www.hita.hu](http://www.hita.hu)). Non-refundable direct cash subsidy based on an individual government decision can be given for selected investment projects. According to the conditions, the value of the project must be at least EUR 10 million if it is not eligible for EU co-financed tenders. In case the project may qualify for EU co-financed tenders, the investment volume must be at least EUR 25 million. The number of jobs created by the project must be at least 25 in the 'preferred regions': Észak-Magyarország (Northern Hungary), Észak-Alföld (Northern Great Hungarian Plain), Dél-Alföld (South Great Hungarian Plain) and Dél-Dunántúl (South Transdanubia). The limit is 50 jobs in the rest of the country. Also the subsidy rate in the eligible investment value is differentiated. The highest, 50% subsidy rate is allowed in the 'preferred regions' and less in the rest (Table 2).

---

Table 2

**Share of government subsidies in the eligible investment value by regions**

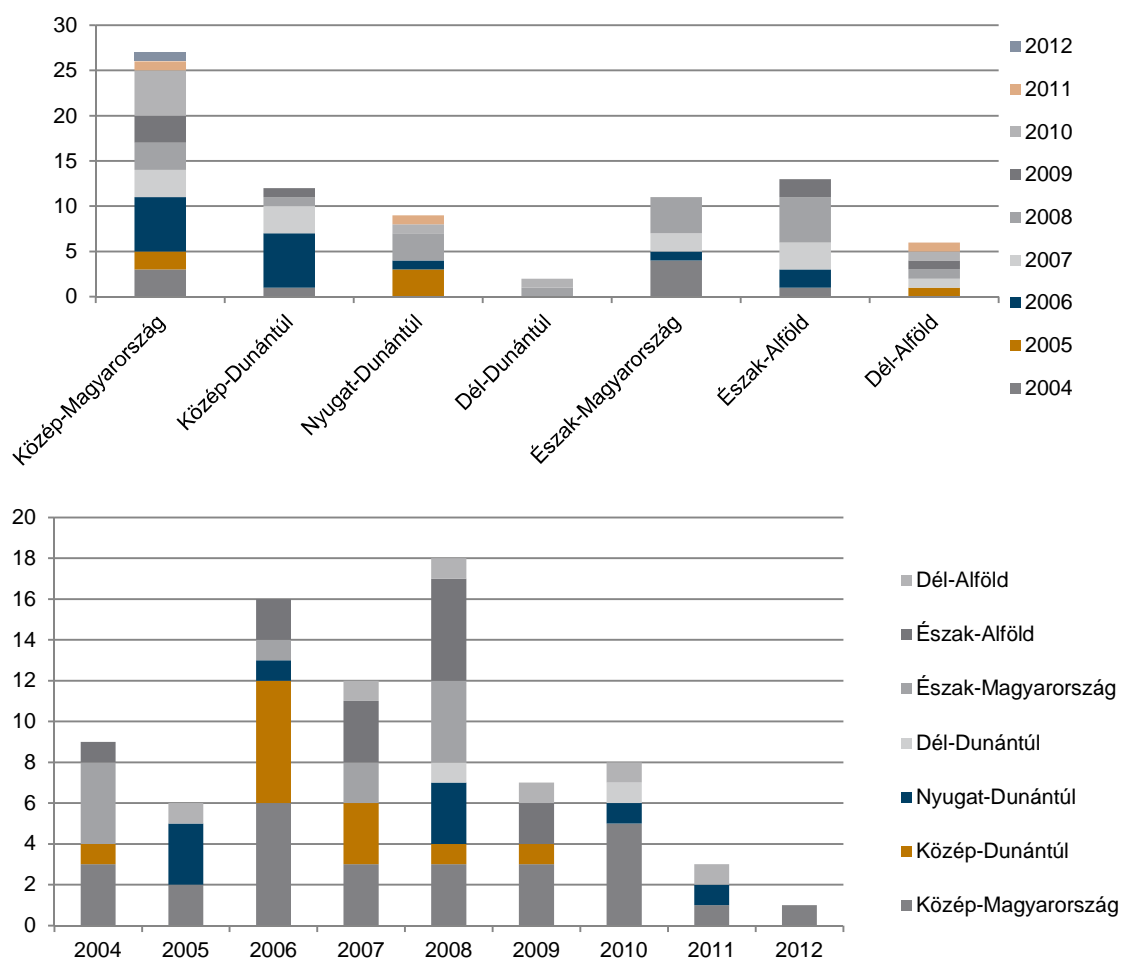
Budapest	10%
Közép-Magyarország (without Budapest)	30%
Nyugat-Dunántúl	30%
Közép-Dunántúl	40%
Dél-Dunántúl	50%
Észak-Magyarország	50%
Észak-Alföld	50%
Dél-Alföld	50%

Source: Ministry of National Economy.

---

Figure 7

**Number of large investment projects supported by individual government decision**



Source: Ministry of National Economy.

How far the selective subsidy rate influenced the location choice of big investors can be derived from the information on the regional distribution of projects benefiting from the non-refundable aid. In Figure 7 we group the 80 large investment projects that received individual government support by year and region.<sup>3</sup> It can be assumed that investors would go for higher subsidy content when choosing a location, but other factors also play a role in deciding about the location of the investment. It is obvious from the figures that the most developed region, Közép-Magyarország, received the highest number of large investments, one third of the total. The low subsidy rate notwithstanding, two thirds of the projects in this region were implemented in Budapest. This advantage of the capital is relatively much smaller than its weight in greenfield investments, or GDP.

<sup>3</sup> Only 8 of the large projects have domestic share capital, the rest are foreign owned.

Other regions, with less than 50% subsidy rates, were among the average receivers of projects; they were neither advantaged nor disadvantaged by large investors. The two most favoured regions after Közép-Magyarország were the two Northern regions, Észak-Magyarország and Észak-Alföld, while the southern periphery, especially Dél-Dunántúl, has been the most disadvantaged. The regional pattern of the large supported projects' location is thus similar to that of the greenfield projects in general, but the North-Eastern regions of Hungary show an even clearer advantage. It seems that the high subsidy rate and the special government programme directed investors to these less developed regions. At the same time, other less developed regions in the South of the country could not benefit.

In more prosperous times the chances for regional equalisation were better than in the crisis period also because there were much more projects than later. The annual number of supported projects showed an upswing before the crisis, in 2006-2008. In 2007 and 2008, when the total number was highest, the share of Közép-Magyarország was lower than in most other years. It was in these two years when Észak-Magyarország became a favoured destination. An explanation can be the mounting labour shortage in Central and Western Hungary and perhaps also the new motorway connection to the North-East of the country. Thus in times of high foreign investment activity in large (mainly manufacturing and advanced services) projects the absorption capacity of the Central Region was not satisfactory and investors had to diversify their locations.

After 2009, Közép-Magyarország regained its prominence among the number of subsidised projects. In the first two crisis years there were much less supported projects than before and in 2010 the interest of big investors evaporated. It must be noted here that investment subsidy requests are made before the project implementation starts; e.g. the support to the Mercedes factory in Dél-Alföld was granted in 2008 while production was launched in 2011 when almost half of the investment subsidy was still outstanding.

The use of the large investment support by individual government decision became marginal in the final years of the period investigated. There were only four supported projects in 2011 and merely one in 2012. While the continuing recession in Europe and in Hungary has certainly reduced investors' activity, it is also obvious that the near disappearance of large FDI projects coincides with the change of government. The Fidesz-led centre-right coalition changed the business environment to the worse, reducing trust and increasing risk for potential investors.

Beyond the aid to large investment projects, there are some minor and more dispersed policy schemes to attract investors specifically to the less developed regions. Policies respond to the problem that most of the projects have been located in larger towns even if they went to less developed regions. The government therefore started to act on the mu-

nicipal and micro-regional level in 2009. The ‘Investor-friendly settlements programme’ was started with the aim to improve local business conditions and develop skills of local authorities to attract investors.<sup>4</sup> Local authorities have been supported to assess their local investment environment and develop an investment promotion strategy also under the new government. In 2011 there were 45 settlements, in 2012 another 18 settlements which finalised their strategies and prepared promotion materials. These were mostly towns with 5-30 thousand inhabitants, usually in more backward regions.<sup>5</sup> There is no information yet whether these policies have been able to attract new projects.

While the ‘Investor-friendly settlements programme’ shows some similarities with the British ‘local enterprise partnerships’<sup>6</sup> which took over some parts of the regional development policy, the Hungarian scheme is less cooperation based and cluster enhancing. The further development of the programme, however, is included in the Partnership Agreement 2014-2020 and is supporting more the cooperation-related activity in the framework of the ‘community-led local development tool’ (Ministry for National Economy, 2013). The ‘integrated territorial development tool’ outlined in the same document puts the 19 counties and not the NUTS-2 regions in the position of the basic unit of regional development. Thus the objective of regional policy is shifting away from the NUTS-2 regions.

Another decentralised policy tool is represented by ‘free entrepreneurial zones’. The government published in early 2013 a list of 47 areas that qualify for this status. These are underdeveloped micro-regions (járás) comprising small towns and villages. Companies investing in these zones may realise special tax benefits (i.e., reduced corporate income tax, social tax, and vocational training contributions). Mostly domestic SMEs are expected to locate in these zones.

### **3.4 Industrial parks**

In addition to investment support schemes, Hungary offers a diverse range of industrial parks owned either by municipal authorities or by private companies.<sup>7</sup> There were more than 200 operating sites as of end-2011 with more than 200 thousand employees. Establishing a company or business in an industrial park has many advantages. One is the services offered: the park management is familiar with the local business environment and support from municipalities can be available. Infrastructure and other services are provided

---

<sup>4</sup> [www.videklogisztika.hu/vidlog4.pdf](http://www.videklogisztika.hu/vidlog4.pdf)

<sup>5</sup> <http://www.hita.hu/Content.aspx?ContentID=bcb6c8b4-a2d5-48ac-a1e2-a37962008eee>

<sup>6</sup> Local enterprise partnerships, which unite local authorities and businesses, were formed in 2011 by the Department for Business, Innovation and Skills to help determine what was important locally and encourage economic growth. <https://www.gov.uk/government/policies/supporting-economic-growth-through-local-enterprise-partnerships-and-enterprise-zones>

<sup>7</sup> Industrial parks in Hungary differ significantly from the Special Economic Zones in Poland which enjoy a specific incentive system, see below.

in most parks. As a result, projects in industrial park can be implemented much faster than elsewhere. Of the 50 largest multinational companies present in Hungary, more than half operate in industrial parks.<sup>8</sup>

Under the pre-accession FDI policy regime, Hungary used to have highly preferential treatment for investors in duty-free zones which were in this respect similar to their Polish counterparts. Being duty-free meant a special 'ex-territorial' status for export-oriented firms and provided them long tax holidays. Almost all the large efficiency-seeking FDI projects before 2004 were established in this form but preferences expired in the course of time. As the duty-free zone status was not tied to a specific pre-defined area, it could be established anywhere in the country and the government was not engaged in regional policy when authorising the zones. They were mostly set up in Budapest, the Nyugat-Dunántúl (West Transdanubia) and the Közép-Dunántúl (Central Transdanubia) regions which had a more developed infrastructure than other regions and were closer to West European markets. The location of tax-free zones increased the regional polarisation of FDI. Later most of the zones continued as industrial parks where suppliers of the main investors set up their businesses. New industrial parks established in the less developed regions of the country in the past ten years could attract investments if other locational factors were also advantageous. These late-comers could hardly change the regional pattern of industrial location.

### **3.5 Cluster development**

Clusters of cooperating firms were rare in the 1990s and did not operate in an institutionalised form. Cluster institutions came into existence by government initiative, the Cluster Programme of 2000. Grants were provided for the set-up and operation of cluster management organisations as part of the Széchenyi Plan (domestic funds) in 2001-2004. As a result of the cluster support programme, approximately 50 clusters or cluster initiatives operated in 2007. The first was the Pannon Automotive Cluster (PANAC) initiated by the Ministry of Economy with the involvement of three major Hungarian-based car manufacturers (Suzuki, Opel, Audi) and more than 50 SMEs. The cluster members are located in Nyugat-Dunántúl (West Transdanubia) and Közép-Dunántúl (Central Transdanubia).

In the 2007-2013 EU financing period, the Hungarian Pole Programme was set up for cluster development and for the improvement of the business environment in the major towns with a budget of EUR 1.5 billion. The Hungarian Pole Programme is a comprehensive economic development programme funded by Structural Fund sources with a strong focus on the eight pole cities in Hungary (Budapest, Miskolc, Debrecen, Szeged, Pécs, Székesfehérvár, Veszprém, Győr). The target is to develop the business environment and help export-oriented firms and innovative clusters in cooperation with local universities.

---

<sup>8</sup> [http://www.mfa.gov.hu/kulkepvisolet/UK/en/en\\_Bilateralis/hita\\_jp.htm](http://www.mfa.gov.hu/kulkepvisolet/UK/en/en_Bilateralis/hita_jp.htm)



This programme stresses the importance of agglomerations and it is complementary to the 'investor-friendly settlements programme'.

### **3.6 Conclusions on Hungary**

Hungary's economy is centred on the capital city, Budapest. The Western regions of the country are more developed and attracted more FDI than the rest of country. FDI policy was in the core of development policy in Hungary at least until 2010 when the national-oriented centre-right government came into power. The location of foreign investment projects to less developed regions was a crucial component of that policy. A simple discussion of data revealed that it did have some success at least in the North of the country. But although new FDI projects and the location of large investment projects have become more decentralised over the years, this could not change the discrepancies in per capital GDP.

## **4 Poland**

### **4.1 Regional differences**

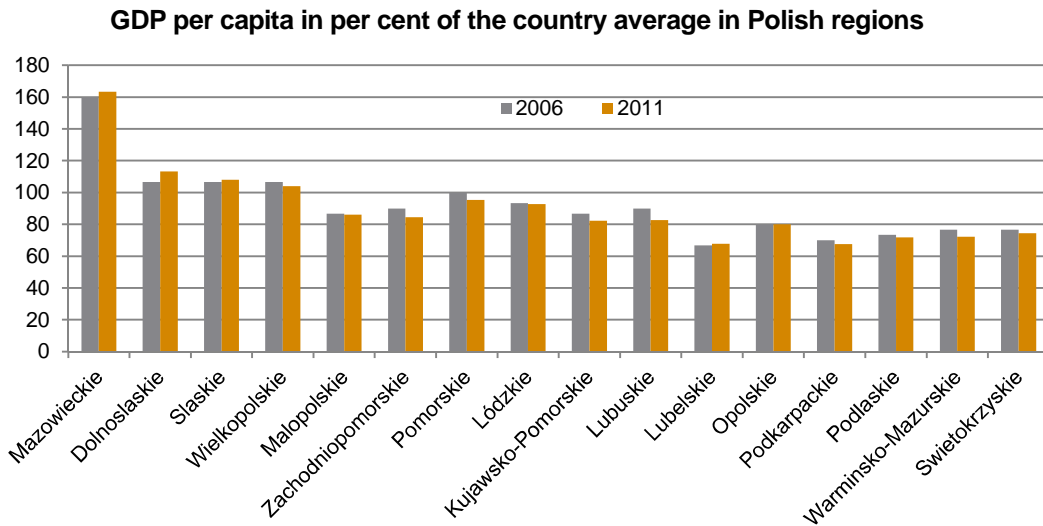
Poland is the largest among the NMS, with a population almost four times that of Hungary. Still, the number of FDI projects is only about twice as high. In another comparison, Poland has two times more inhabitants than Romania but received only 10% more projects. These data, together with similar indicators on FDI stock per GDP, indicate that Poland is less penetrated by foreign firms than the smaller NMS. Its economic growth and exports do not depend to such a large extent on the performance of foreign subsidiaries as in Romania and especially Hungary. Related or not to this fact is another, that Poland's economic growth was preserved during and after 2008 and was one of the most robust in Europe.

Despite the lower significance of FDI for the economy as a whole, the Polish government pursues an active investment promotion policy with special services to foreign investors by the Polish Information and Foreign Investment Agency (PAIilZ). It also applies specific policy instruments to direct the location of investment projects by differentiated regional aid (the first six regions in the figures below had an aid intensity ceiling of 30% or 40%, the rest 50% in 2007-2013), free zones, industrial parks, etc. Geographic conditions such as the settlement network, past industrial structure or closeness to borders and other economic factors modify the influence of such policy steps. Still it is justified to look for connections between regional development, regional FDI location and regional policy.

Poland is not only the largest but also the most decentralised country among the NMS. The region where the capital city Warsaw is located accounts for only one quarter of the country's GDP and FDI projects, as opposed to one third or more in the other countries. Its per capita GDP is 2.5 times higher than in Lubelskie and other regions in the South-East of

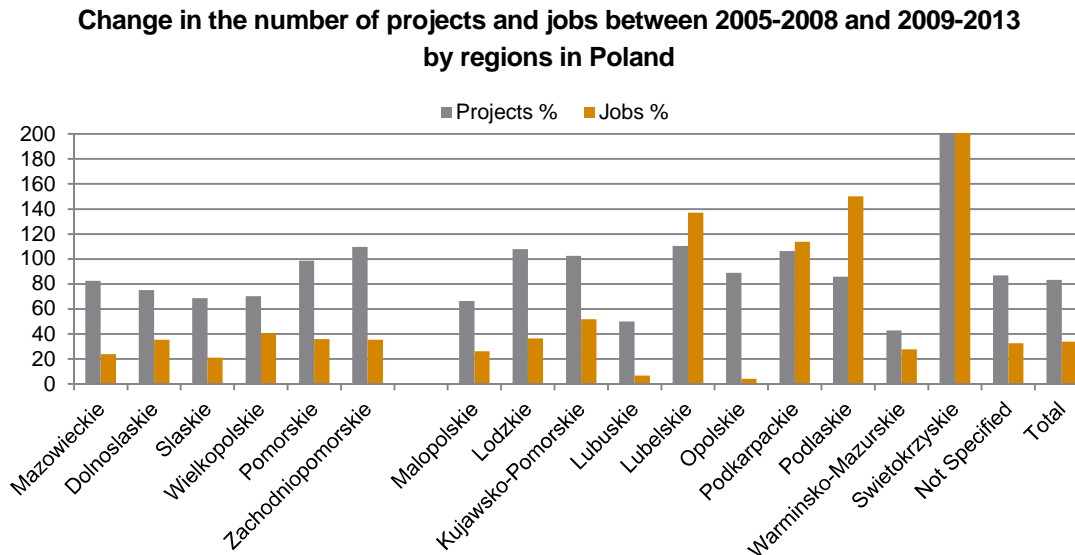
the country. This discrepancy is only marginally narrower than in Hungary. In the period 2006-2011 for which data are available, the leading position of the three most developed regions – Mazowieckie, Dolnoslaskie and Slaskie – increased while most regions lost in comparison with the national average (Figure 8). Among the least developed regions, Lubelskie and Opolskie could slightly improve their positions. The latter exceptions did not change the trend towards regional polarisation.

Figure 8



Source: Eurostat.

Figure 9



Source: www.fdimarkets.com.

The concentration of greenfield FDI projects is less marked in Poland than in Hungary or Romania and it diminished after 2008. The dominance of the capital is not very strong as

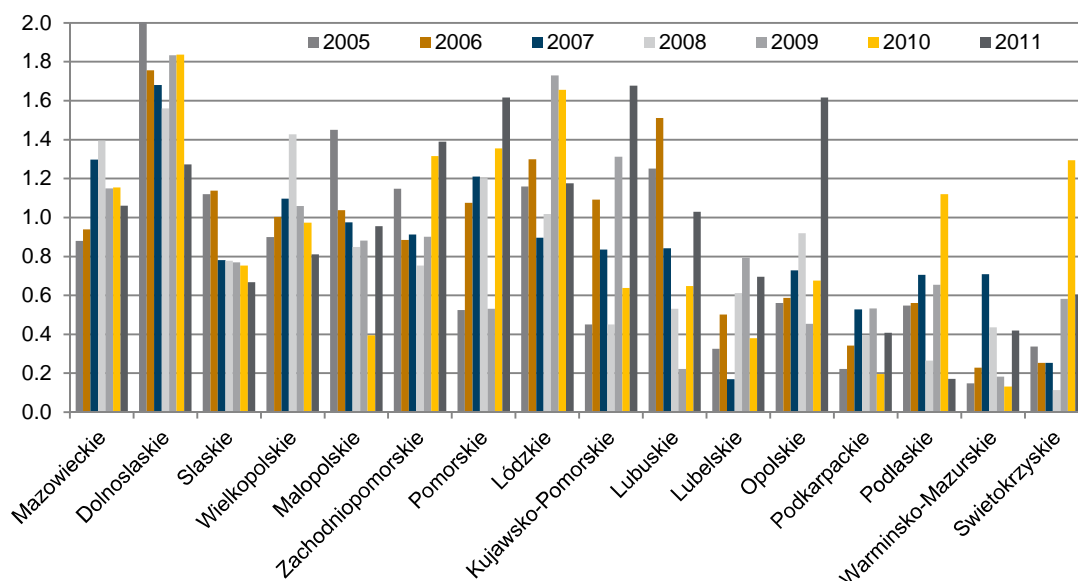
there are also other agglomerations of production in the country. The industrial regions in Silesia (Dolnośląskie and Śląskie) together received similar numbers or even more projects than the Mazowieckie region. The difference among the advanced regions lies in the structure of projects: FDI projects in Silesia target mainly the manufacturing sector while the capital city specialises in services. When investment in manufacturing fell due to the crisis, the share of the Silesian regions declined as well. Other regions which had earlier had structural problems, but also large conurbations could transform and catch up by attracting FDI (the traditional textiles industry region Łódź, or the mining regions of Upper Silesia). The earlier loss-making industries in the Śląskie voivodship restructured by FDI, based on improved infrastructure and skilled labour, and the automotive industry became one of the main activities.

In the post-crisis years the number of projects was 17% lower and the number of jobs was 66% lower than in the pre-crisis period. The crisis-related setback in the number of projects was highest in four of the more developed regions (Figure 9). At the same time, there was a significant increase in many of the less developed regions, first of all in Swietokrzyskie but also in Lubelskie and Podkarpackie. Swietokrzyskie recorded the lowest number, only seven projects in the pre-crisis period, but 24 more recently when it took the 10<sup>th</sup> position out of 16 regions. (It must be noted, however, that in 2012 five out of eight projects were textile outlets in a new shopping centre.) Some mid-range regions, such as Łódzkie, maintained their shares by the number of new projects. The most serious setbacks took place in two of the less developed regions, namely Lubuskie and Warmińsko-Mazurskie. As to the decline in the number of new workplaces, it was most serious in the four most developed regions as well as in three other regions where also the number of projects declined. Still there were three regions where the number of announced new jobs increased compared with the pre-crisis years albeit from a very low level.

Considering the number of new projects in relation to the size of the region in terms of GDP we find that the largest agglomerations and most developed regions, Mazowieckie, Dolnośląskie and Łódzkie, received higher shares of projects than their weight in GDP in almost all years between 2005 and 2011 (above 1.0 in Figure 10). Śląskie and Wielkopolskie were successful in attracting projects compared with their levels of development only in 2-3 years. Equally successful in the last couple of years were also the three Northern regions along the sea. Most of the successful regions were those which had a capital of at least half a million inhabitants while the less developed regions had no such concentration of population. This shows that the agglomeration of population and economic activity were important features in a region's attractiveness to new projects. Regions with less FDI projects per GDP have both lower GDP and smaller towns. It is worth noting that the most developed Polish voivodships/agglomerations – Mazowieckie (Warsaw), Śląskie (Katowice) and Wielkopolskie (Poznan) – received not only the largest numbers of new projects but also the highest amounts of FDI inflows.

Figure 10

Share in projects per share in GDP by region and year in Poland



Source: Eurostat and fdimarkets.com.

Less developed regions usually got even less of the projects than their shares in GDP although three of them had at least one outstanding year between 2005 and 2011. Swietokrzyskie, Lubelskie and Podkarpackie could catch up somewhat in terms of project number but lost in terms of GDP in the post-crisis years. Regional and FDI policies may have had a role in directing investors to these regions even if they could not speed up economic development.

#### 4.2 The role of regional investment aid ceilings

Over the past decade one cannot speak of an FDI policy as such, first of all because all investors – both foreign and domestic – have been subject to the same investment conditions. FDI incentives have been available not as special subsidies but as promotion and services by PAIIZ and other government and regional agencies aiming at informing and serving potential investors.

In the 2004-2006 period European regional policy targeted rather small NUTS-3 regions. In Poland the whole country except the four most developed city regions (Wroclaw, Krakow, Warszawa and the Gdansk-Gdynia-Sopot conurbation) were allowed to provide aid amounting to 50% of the eligible investment cost (European Commission, 2004); the situation was similar to that in the other countries under survey. Starting in 2007, the policy focus shifted to NUTS-2 regions. In this period, six out of 16 Polish regions (voivodships) were allowed only low aid ceilings, 30% of the eligible investment costs in Mazowieckie, 40% in five other regions, while the rest of the country enjoyed 50%. Assuming that in the

first couple of years of the 2007-2013 financing period investment projects were based on decisions taken before 2007, the post-crisis years more or less correspond to the two regional aid periods.

The differentiated aid intensity ceiling applied by voivodships is a major regional development tool. The ceilings apply to large investment projects in selected economic activities while SMEs may even receive 20% higher aid. Within these ceilings, government grants can be provided to large investments with important job creation and technological development effects (see: [http://www.paiz.gov.pl/governmental\\_grants](http://www.paiz.gov.pl/governmental_grants)). Twenty-five grant programmes for 'investment of considerable importance for the national economy' were signed with foreign investors between 2007 and 2012, with some funds being also paid out during these years (see:

<http://www.mg.gov.pl/Wspieranie+przedsiebiorczosci/Wsparcie+finansowe+i+inwestycje/Pomoc+na+inwestycje+o+istotnym+znaczeniu+dla+gospodarki>).

Beyond the specific targeted programmes, a larger number of manufacturing and advanced services projects received subsidies from standard programmes. In the framework of the Multi-Annual Support Programme support was tied to size, sector and job creation of the investment projects. In addition, employment grants have been provided for four kinds of investment: production, modern services, R&D and big investment in other sectors.

Table 3

**Distribution of FDI projects by regions and aid ceiling for large investments in per cent**  
**Low: 30% and 40% of the eligible cost; High: 50% of the eligible cost**

	2005-2008	2009-2012	Change in number, %
Total number of projects			
Low-aid regions	72.2	69.4	-21
High-aid regions	27.8	30.6	-9
Total job creation			
Low-aid regions	62.2	57.5	-68
High-aid regions	37.8	42.5	-62
Number of manufacturing projects			
Low-aid regions	64.6	56.3	-55
High-aid regions	35.4	43.7	-34
Number of advanced services projects			
Low-aid regions	83.6	79.6	6
High-aid regions	16.4	20.4	38

Source: [www.fdimarkets.com](http://www.fdimarkets.com).

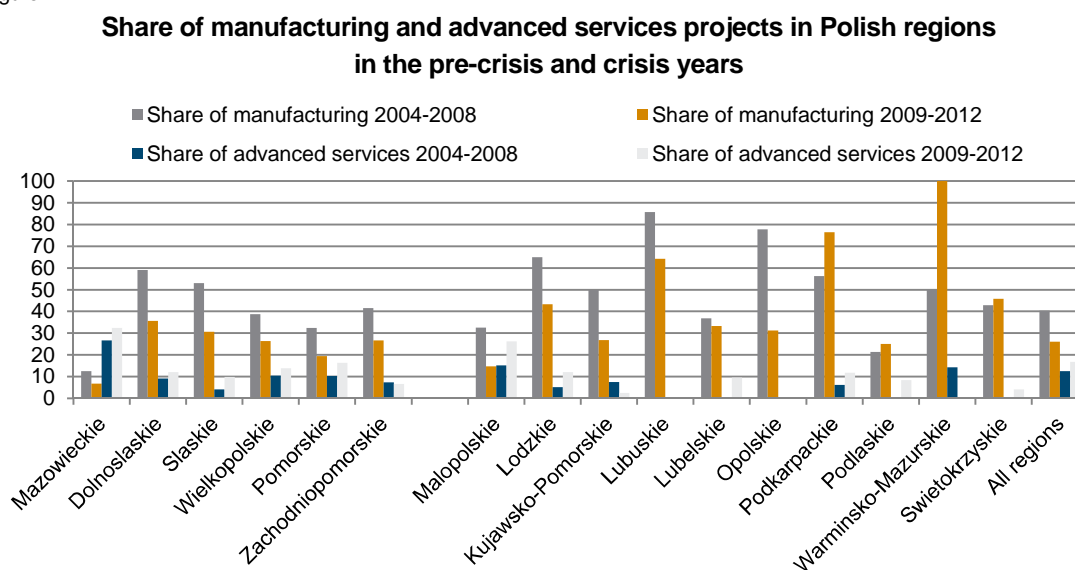
As it was shown in Figure 10, there were regions with increasing and decreasing numbers of projects in regions with both high and low aid intensity. But the overall setback in the crisis years was more severe in the high-aid regions than in the low-aid ones, especially in

terms of the number of projects (Table 3). Differentiated aid intensities can thus be related to the regional distribution of investments and new jobs. The share of regions with high aid intensity increased in the total number of projects and job creation but still they accounted only for a bit more than one quarter of the new projects in the period 2009-2012.

The two main sectors of the economy which are most relevant for growth and may also benefit of state aid are manufacturing and advanced services<sup>9</sup>. These sectors also follow specific regional distribution patterns in terms of cost optimisation of production, labour and transport. Other sectors such as financial services tend to be registered in the capital city while retail outlets are registered as individual projects in almost all settlements of a certain size and can also not benefit from public aid programmes.

The share of manufacturing in the total number of projects (for which both activity and regional data are available) was 40% in 2005-2008 and declined to 26% in the period 2009-2012 (Figure 11). At the same time, the share of advanced services increased from 13% to 17%. The rest of the projects were mainly in the retail sector in both periods.

Figure 11



Source: www.fdimarkets.com.

Less developed, high-aid regions with a lower number of projects had a higher share of manufacturing than the advanced low-aid regions. The number of projects declined less in low-aid regions (by 9%) than in the high-aid regions and even rose in some of them. Thus the share of low-aid regions in manufacturing projects increased. A similar process took place in terms of job creation.

<sup>9</sup> The projects are classified by their main economic activity, not the NACE category of the company. Advanced services include the activities: business services, research and development, design-development-planning, headquarters and ICT services.

The number of advanced services projects and also the job creation in these activities was higher after 2008 than before. The increase was stronger in the high-aid regions but still 80% of such projects were located in the low-aid regions.

As new FDI projects and job creation shifted from manufacturing to advanced services, the importance of large cities (higher skilled workforce, agglomeration advantages) increased for investors. Although backward regions also profited from advanced services projects, job creation remained very concentrated. The number of jobs in advanced services rose from less than fifty thousand in 2008 to hundred thousand in 2012 and the share of the eight large agglomerations stayed dominant with more than 86% (PAIZ, 2012).

### **4.3 Special Economic Zones**

A major regional development tool shaping the distribution of greenfield and brownfield FDI projects in Poland have been the special economic zones (SEZs). These were established as a vehicle to attract FDI to backward regions as stipulated by SEZ Act of October 1994. The first SEZ was set up in 1995 in the Podkarpackie region in the South-East and the next two in 1996 in the Śląskie and Podlaskie (North East) regions. The process of establishing new zones continued until a total number of 14 had become operational. Later SEZs were turned into the special industrial park organizations in a certain geographic area. They have units in several locations within their scope of activity. Investors can not only settle into established industrial parks, but those fulfilling specific conditions can demand the extension of a SEZ to their plot. In addition, there are industrial parks providing investment sites with no SEZ status throughout the country.

Most of the SEZs are located in the South of Poland with its relatively good infrastructure, large cities and dense population, as well as in the North-East of the country (Jones Lang LaSalle, 2013). The voivodships in the centre and the East have no such facilities. Thus, their regional distribution indicates that SEZs have been a vehicle of structural restructuring by FDI in regions with good potential rather than of attracting investments into less developed and sparsely populated areas. Initially many of the potential projects were not large enough in terms of potential capital investment (threshold of eligibility about EUR 2 million) thus in 2001 the threshold was significantly lowered (to EUR 100,000). In more developed areas, such as the vicinity of Cracow and Warsaw (Technopark Modlin), SEZ technology parks were set up and proved successful in attracting a number of projects. As of 2011 (KPMG, 2011) the 14 SEZs operating in Poland were the main hubs of greenfield investments employing a quarter of a million people (total manufacturing employment is about 2 million) in 1400 companies (both with foreign and domestic capital).

SEZs attracted greenfield investment project by offering special incentives: low-cost land with developed infrastructure, up to 15 years of corporate income tax holidays and job cre-

ation grants as well as exemption of local taxes. SEZ legislation was modified in 2008, extending the operation of SEZs to 2020; it is not clear what will happen beyond that date. In fact the uncertainty about the future status of SEZ-related subsidies is one of the main problems of investors in Poland (PAIZ, 2012a). The problem at issue is not the advantages of industrial parks as such, but the related fiscal incentives provided to investors which settle in the zones. The time of tax exemption for newly established businesses may not be enough for them to benefit from the maximum amount of subsidies. Most importantly, the corporate income tax holiday should be phased out as it is not easily consolidated with other forms of regional aid to calculate the maximum level. The current policy-relevant question is whether the operation of SEZs should be extended or whether investment incentives other than tax exemptions can be enough to allow investors to make use of the maximum state aid intensity in the region where they locate. As SEZs do not allow more aid than approved as maximum, the territories of the country outside the SEZs are not necessarily disadvantaged.

#### ***4.4 Other regional policy tools influencing FDI***

The size, competence and activity of regional governments may have their own distinct impacts on regional development. In the 1999 regional reorganisation, 49 former voivodships were merged into 16 administrative self-governing units which also obtained NUTS-2 status in the EU regional policy framework. Findings by Chidlow and Young (2008) suggest that the larger autonomy of the new Polish regions increased the differences between them in their attractiveness for inward foreign investment due to specific institutional and business environment characteristics. But, on the whole, investors followed cost-related advantages. The authors found that those investors for whom agglomeration, knowledge and market factors were the main motives tended to choose the Mazowieckie region. However, investors for whom low-cost input such as labour and geographical factors were important favoured other regions.

It is not clear how far regional administrative authorities could influence the development of their voivodships. Although the competencies attached to Polish regions are higher than those in Hungary and Romania where NUTS-2 regions have no functions in the state administration, public governance in Poland is found to be rather weak in a thorough study by Kozak (2012). But the annual investment attractiveness surveys (Novicky, 2009 and 2012) of voivodships show that, beyond transport infrastructure, the main factor modifying the position of regions in recent years in terms of attracting investment projects was the investors-related activity of the administrations. Also the indicator for the change in the attractiveness of voivodships was important; it may be in part considered as a result of the efforts by regional and local authorities. Other factors such as labour market, market size and other social and economic indicators were less influential as they did not change very much over the four-year period.



#### **4.5 Conclusion for Poland**

In sum, the recent shifts in the location of FDI projects in Poland show a slow movement away from the more developed voivodships to the less developed regions where higher public aid ceilings are applied. Within the regions, new projects concentrate in larger cities making the divide by settlement size more important than the one by region. This is all the more the case for the growing number of projects and jobs in advanced services driven by agglomeration advantages. Beyond public aid ceilings, special economic zones may have contributed to the shift of investment to the North and the South-East of Poland.

### **5 Romania**

#### **5.1 Regional development gaps in terms of GDP and FDI**

Regional disparities in Romania are measured in terms of larger NUTS-2 regions than in the other countries under survey which diminishes regional differences. At the same time, Romania has the smallest region for the capital city, which comprises only the Bucharest agglomeration (Bucuresti-Ilfov region). As a result, the capital region is more dominant in terms of per capita GDP or FDI than in the other countries. Bucuresti-Ilfov has 2.2-2.4 times higher GDP per capita than the national average (Figure 12) against 1.6 times in the case of the capital regions in Poland and Hungary. The dominance of the capital was higher during the crisis years of 2008-2010 than before. Other regions in Romania show modest discrepancies between 62% and 114% of the average in 2010. Among the seven non-capital regions, only Vest (the historical Banat province with the seat Timisoara) has been above the national average in each year since 2000.

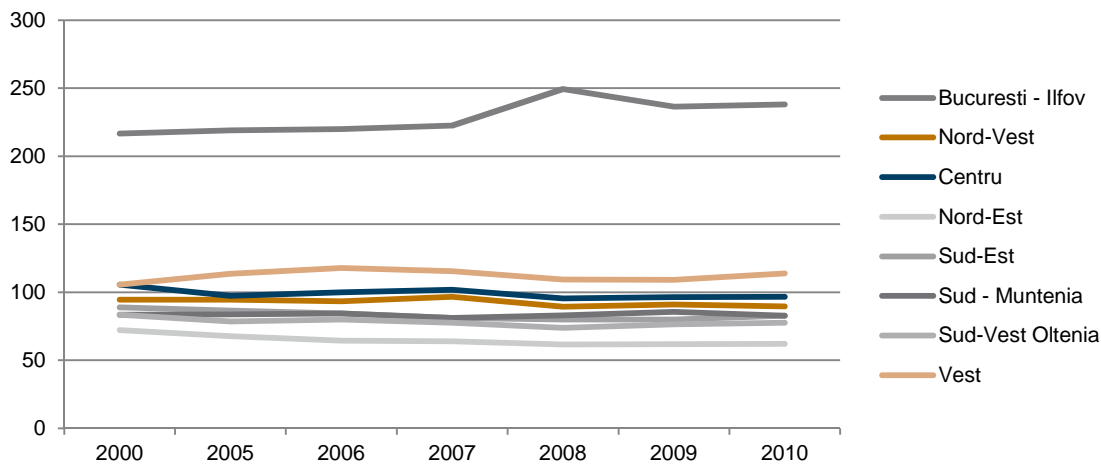
Over a longer time-span (2005-2010) the two most developed regions (Bucuresti-Ilfov and Vest) increased their advance as against the other regions which all lost relative positions. The largest loss was registered in Centru, which turned from a region with above-average GDP per capita into one below it (third in the ranking). The least developed region, Nord-Est, also fell back ten percentage points, from 68% of the country average in 2005 to 62% in 2008 and 2010, while the smallest decline was booked by Sud-Muntenia. As a result of these changes, regional differences increased in Romania and the economic centre of the country has shifted to the South-West.

In 2006-2008 FDI boomed in Romania in terms of inflows through the financial account of the balance of payments (EUR 8.6 billion on annual average). These were years of intensive privatisation sales and record volumes of greenfield investments. In the subsequent years FDI inflows fell back to about one quarter, reflecting the impact of the crisis and the end of large privatisations. The distribution of FDI stocks changed somewhat to the benefit of regions more remote from the centre of the country. The share of Bucuresti-Ilfov declined from 62.6% in 2008 to 60.6% in 2012, mainly due to diminishing FDI in financial ser-

vices centred in the capital. Also Sud-Est and Centru recorded declining shares in the FDI stocks while the regions in the West and the East of the country gained shares.

Figure 12

**GDP per capita in per cent of the country average in Romania's regions**



Source: Eurostat.

**5.2 Greenfield FDI projects**

FDI project data (fdimarkets.com), covering only new equity investments, show a smaller concentration than FDI data based on the financial account. On average, only about 40% of the projects and 30% of the capital investment and jobs were recorded in the Bucuresti-Ilfov region between 2005 and 2012. The other major FDI locations were all in the Western part of the country.

Comparing the pre- and post-crises years, the number of greenfield projects were cut to half in terms of number, capital and jobs alike (Figures 13 and 14). 2009 was the year with the lowest number of new projects and 2010 that with the lowest amount of capital. As in other countries under survey, projects became smaller during the crisis than before.

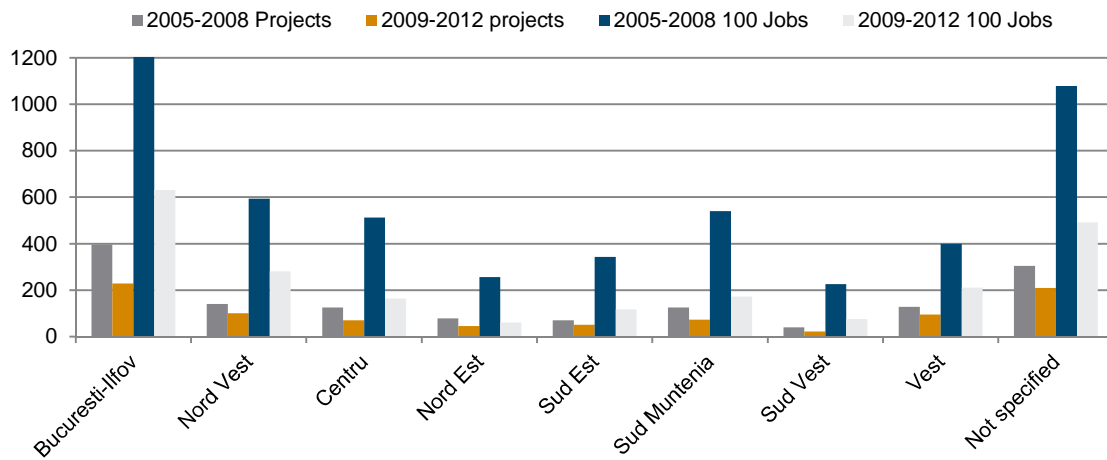
The most severe setbacks in terms of project number were registered in Sud-Vest, Centru, Bucuresti-Ilfov, Nord-Est and Sud-Muntenia, declining to less than 60%. In terms of job creation Nord-Est was hit hardest, followed by Bucuresti-Ilfov, both registering numbers falling to less than 30% of the pre-crisis years. Thus the capital region was among the losers by both indicators – a result similar to what was shown by FDI stock data but deviating from the GDP trend.

The two regions along the Western border of the country, Vest and Nord-Vest, managed to get through the crisis with much less loss than the other regions. Their shares in the coun-

try increased in terms of new foreign investment projects which were in line with their growing shares in FDI stock and GDP. Geographic proximity to the main markets coincided here with more advanced industrial tradition and better infrastructure while wages were not significantly higher than in the rest of the country. Thus all the most important location factors supported the shift of projects from the capital city to the West of the country. Also sectoral changes played a role, as manufacturing projects mostly locate in cities in the West of the country. There was no motorway network to spread new investments to the East of the country as in Hungary.

Figure 13

**Total number of FDI projects and created jobs by regions in Romania**

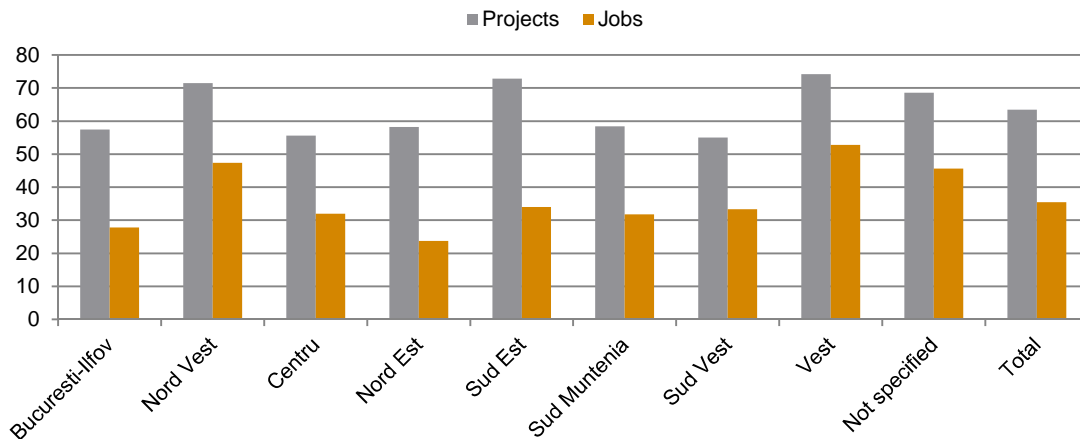


Remark: Bucuresti-Ifov 2009-2012 jobs: 226800.

Source: fdimarkets.com.

Figure 14

**Change in the number of projects and jobs between 2005-2008 and 2009-2013 by regions in Romania**



Source: fdimarkets.com.

Another gaining region was Sud-Est, which also includes the seaside where new projects were set up in the energy sector (wind farms) and related to ports. These activities are not labour intensive, bringing few jobs and little new purchasing power. No wonder that by receiving such projects the region did not gain shares in the FDI stocks or in per capita GDP. The least developed regions received even less projects relative to others after the crisis. Nord-Est, Sud-Vest and Sud Muntenia registered large declines.

## **5.2 Regional policy affecting FDI**

It is difficult to establish a link between regional investment support and regional FDI development. The exception may be Bucuresti-Ilfov, where the state aid intensity is 40% as against 50% in the other regions. These ceilings are valid for large companies, while medium-size companies may receive 50% and 60% respectively, small companies up to 60% and 70% respectively. Just as in other countries, aid is provided as cash grants and aims to attract especially large investment projects. The programme in itself is nation-wide and does not distinguish between regions. In 2012-2013 the range of eligible projects became more selective than before; it now benefits primarily projects in higher technology activities. At the same time the eligible minimum job creation limit was reduced from 500 to 200.

The low fiscal capacity of the Romanian government has seriously infringed the application of the state aid programme for large investors. Between 2007 and 2013 the Ministry of Public Finance (MPF) approved financing for only 52 investment projects worth EUR 3.08 billion, of which EUR 727.19 million was state aid (MPF press release 24.01.2014) and the aid intensity remained below the eligible level. As most of the projects were initiated after 2010, the paid aid was only EUR 319 million. The approved state aid accounts for only one fourth of the total investment amount included in the support mechanism. Of the 52 projects only 16 were finalised between 2007 and 2013 (eight of them in 2013), the rest is in the process of implementation. The relatively small number of projects and the very limited amount of aid may not have been very important for the location of investors.

For SMEs there have been EU programmes to support new investments. The regional distribution of supported projects shows that SMEs (Hunya, 2011) in more developed and urban areas were more likely to receive support due to their ability to write business plans and go through administrative hurdles. The Romanian government had some additional national multi-annual programmes to grant direct support to SMEs with the aim of improving competitiveness. But financing was cut back severely in 2010, thus the impact on competitiveness and regional development remained marginal.

Government policy and regional support are not among the prime location factors of foreign investments in Romania. A questionnaire survey undertaken in June 2011 among foreign manufacturing companies outside the Bucharest Ilfov region (Danciu and Strat,

2012) discussed the location factors for (63) efficiency-seeking and market-seeking firms. The results revealed that efficiency seekers were more interested in the existence of the nearby airports, the available labour force, low costs of labour and the existence of other companies with the same profile in the location as compared to market seekers. The latter chose the location in accordance with the number of the attainable inhabitants. This means that both types prefer agglomerations, the one for clustering of production, the other for population density.

Large towns in Romania provide agglomeration advantages for manufacturing and advanced services. University centres are the main locations of tradable services, first of all for IT companies. While Bucharest takes the largest part, also Iasi, Cluj, Brasov, Sibiu and Timisoara have established themselves as independent regional poles for investments in IT products, services and outsourcing according to a survey and set of interviews (<http://business-review.ro/featured/regional-romanian-it-hubs/>). Most of the companies are foreign subsidiaries but Romanian companies supplying foreign clients are also present. These towns provide good infrastructure, air links to main European cities, and university graduates. Low office space rents and cheap labour cost give provincial towns a competitive edge over the capital. Several local authorities support the clustering of IT although they lack financial resources. For example, the Romanian government and the Cluj city administration (Nord-Vest) together with the local businesses initiated the development of the Cluj IT Innovation Cluster, an agglomeration of IT businesses which could attract large international companies.

Government programmes are in place also to set up business incubators and industrial/business parks. The number of business and technological incubators is 52, out of which 48 are functional (<http://www.portalincubatorimm.ro/incubatoare>) hosting 20 companies on average. The least frequented regions are those which are less developed anyway (Sud-Est, Sud Muntenia, Sud-Vest, Nord-Est). The more developed regions (Centru, Vest, Nord-Vest) are privileged by a higher number of such structures. The same applies for the regional distribution of cluster organisations. These have public support and offer some minor tax benefits for companies. Neither of these publicly supported programmes could contribute to diminishing regional development and FDI gaps in Romania – on the contrary, more developed cities were able to attract more funds and businesses.

## **6 Conclusions**

Starting from 2008, FDI declined and the number of new FDI projects diminished in all new EU Member States. Projects became smaller and shifted to new advanced service activities. Regional discrepancies between NUTS-2 regions in terms of per capita GDP became marginally smaller but were mainly unrelated to the location of new foreign investments.

Three country studies revealed significant regional gaps in attracting new FDI projects and a dominance of the capital cities.

Some of the less developed regions in Hungary and Poland could improve their positions in terms of FDI location relative to other parts of the country. Various policy tools applied to increase the FDI attractiveness of less developed regions contributed to this result. State aid for large investments, industrial parks and special economic zones were among the most powerful tools directing the location choice of new projects.

The fiscal capacity of Romania did not allow for redirecting FDI projects to the less developed regions. Although the dominance of the capital city diminished, the less developed regions of the country lost shares in new FDI projects. The access to aid, business parks and incubators was more successful in regions with superior development.

Regional policy focusing on NUTS-2 regions was not in a position to address the regional inequalities between agglomerations and rural areas. Regions do not matter much for investors' location choice because they first think in terms of countries with a distinct legal and investment environment and, as a next step, they look at specific investment sites. Regions may only have importance in case these can offer significantly different business environments. Such difference can be the different aid intensity of NUTS-2 regions.

The large size of regions and the dominance of large cities hinder the effectiveness of policies aiming at regionally balanced development. But it would be counter-productive to weaken agglomerations, which are the main engines of growth and locations of FDI. Therefore 'the EU should not be concerned with regional disparities in each country and a large share of the EU budget should go to countries instead of regions at any level of development' (Marzinotto, 2012). EU funds should reinforce rather than substitute national policies and the disparities stemming from geography and efficient concentration of economic activities should not be weakened. Support for creating agglomeration advantages by clustering, industrial parks etc. in less developed regions may increase attractiveness for new investments.

## References

- Állami Számvevőszék (State Audit Office of Hungary) (2012), Jelentés a beruházásokhoz kapcsolódó adókedvezmények és támogatások ellenőrzéséről (Audit report on investment-related tax allowances and support), Budapest.
- Bartels, F. L. and S. A. de Crombrugghe (2009), 'FDI Policy Instruments: Advantages and Disadvantages', UNIDO, Research and Statistics Branch, Working Paper No. 1, Vienna.
- Bellak, C., M. Leibrecht and M. Liebenstein (2010), 'Attracting foreign direct investment: the public policy scope for South East European countries', *Eastern Journal of European Studies*, Centre for European Studies, Alexandru Ioan Cuza University, Vol. 1, pp. 37-53, December.
- Bellak, C., M. Leibrecht and R. Stehrer (2010), 'The role of public policy in closing foreign direct investment gaps: an empirical analysis', *Empirica*, Springer, Vol. 37, No. 1, pp. 19-46, February.
- Blomström, M. and A. Kokko (2003), 'The Economics of FDI Incentives', in: H. Herrmann and R. Lipsey (eds), *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries*, Springer, Heidelberg.
- Chidlow, A. and S. Young (2008), 'Regional Determinants of FDI Distribution in Poland', William Davidson Institute Working Paper No. 943.
- Danciu, A.R. and V.A. Strat (2012), 'The FDI profile in the Romanian manufacturing sector', *Review of Applied Socio-Economic Research*, Vol. 4, Issue 2, pp. 57-71.
- European Commission (2004), Regional aid map for the 10 new Member States, [http://ec.europa.eu/competition/state\\_aid/regional\\_aid/regional\\_aid.html](http://ec.europa.eu/competition/state_aid/regional_aid/regional_aid.html).
- Grauselmann, A. and P. Marek (2011), 'Regional determinants of MNE's location choice in transition economies', *WIFO Working Papers*, No. 412, Austrian Institute of Economic Research (WIFO), Vienna.
- Grima, S. and K. Wakelin (2001), 'Regional Underdevelopment: Is FDI the Solution? A Semiparametric Analysis', *CEPR Discussion Paper*, No. 2995.
- Hunya, G. (2011), 'An assessment of the access by Romanian SMEs to structural Funds', *Danube Law and Economics Review*, No. 4, December, pp. 19-49.
- Hunya, G. (2013), 'Growth Engine Stutters', *wiiw FDI Report Central, East and Southeast Europe*, The Vienna Institute for International Economic Studies (wiiw), Vienna.
- Jones Lang LaSalle (2013), 'Made in Poland; Investors guide for manufacturing companies', [http://www.joneslanglasalle.com/MediaResources/EU/Marketing/Poland/Made\\_In\\_Poland\\_e-version.pdf](http://www.joneslanglasalle.com/MediaResources/EU/Marketing/Poland/Made_In_Poland_e-version.pdf).
- Kozak, M.W. (2012), 'Multi-Level Governance: possibilities for implementation in Poland', *Zeszyty Naukowe WSEI seria: Ekonomia*, Vol. 4, No. 1, pp. 55-78.
- KPMG (2011), *Special Economic Zones*, 2011 Edition.
- Ministry for National Economy (2013), 'Hungarian Partnership Agreement, for the 2014-2020 programme period: Final Draft', Budapest.
- Nowicki, M. (ed.) (2009 and 2012), 'Investment Attractiveness of Voivodships and Sub-Regions of Poland', The Gdansk Institute for Market Economics.
- PAIZ (2012), 'Poland, outsourcing cluster in Europe', [http://www.paiz.gov.pl/20120917/poland\\_outsourcing\\_cluster\\_in\\_europe](http://www.paiz.gov.pl/20120917/poland_outsourcing_cluster_in_europe).
- PAIZ (2012a), 'Legal barriers in FDI inflow to Poland', [http://www.paiz.gov.pl/20120125/legal\\_barriers\\_in\\_fdi\\_inflow](http://www.paiz.gov.pl/20120125/legal_barriers_in_fdi_inflow).
- Wisniewski, A. (2005), 'The Impact of Foreign Direct Investment on Regional Development in Poland', *IWE-HAS Working Papers*, No. 162, September.
- Wren, C. and J. Jones (2010), 'Assessing the regional impact of grant and FDI location: evidence from U.K. regional policy, 1985-2005', *Journal of Regional Science*, No. 12.

## Short list of the most recent wiiw publications (as of March 2014)

For current updates and summaries see also  
wiiw's website at [www.wiiw.ac.at](http://www.wiiw.ac.at)

### Regional Policy and FDI Location – an Overview of the Larger New EU Member States

by **Gábor Hunya**

wiiw Research Reports, No. 393, March 2014  
31 pages including 3 Tables and 14 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

### wiiw Monthly Report 3/14

edited by **Mario Holzner and Sándor Richter**

- Graph of the month: Share of foreign value added in the exports of selected countries
- Opinion corner: What might be the economic consequences of a potential territorial break-up of Ukraine?
- Trade integration, vertical specialisation and employment growth in the new Member States
- Trade in jobs: a counterfactual exercise
- Vertical trade and business cycle correlations
- Statistical Annex: Selected monthly data on the economic situation in Central, East and Southeast Europe

wiiw, March 2014  
28 pages including 13 Tables and 7 Figures  
(exclusively for Members of wiiw)

---

### Investment to the Rescue

by **Vladimir Gligorov, Mario Holzner, Gabor Hunya, Michael Landesmann, Olga Pindyuk et al.**

wiiw Forecast Report. Economic Analysis and Outlook for Central, East and Southeast Europe,  
Spring 2014  
wiiw, March 2014  
132 pages including 27 Tables and 25 Figures  
hardcopy: EUR 80.00 (PDF: EUR 65.00)

---

### wiiw Monthly Report 2/14

edited by **Mario Holzner and Sándor Richter**

- Graph of the month: Foreign trade of the automotive industry in the NMS-7
- Sources of economic growth in CEE countries before and after the crisis: domestic effects and the importance of spillovers from Germany
- German firms drive innovation in Europe and around the globe
- Germany's services exports – bigger than you might think
- Opinion corner: How do you assess the possible impact of the FED's continuing tapering on Central, East and Southeast Europe?
- Statistical Annex: Selected monthly data on the economic situation in Central, East and Southeast Europe

wiiw, February 2014  
29 pages including 14 Tables and 8 Figures  
(exclusively for Members of wiiw)

---



## **wiiw Monthly Report 1/14**

edited by **Mario Holzner and Sándor Richter**

- Graph of the month: Dependence of selected European countries on gas imports from Russia, 2012, in %
  - Some lesser known facts about Ukraine's foreign trade
  - Opinion corner: Russia and Ukraine – three questions, nine answers
  - EU cohesion policy: the case of Estonia
  - New CAP reform: changes and prospects under the new MFF deal 2014-2020
  - Statistical Annex: Selected monthly data on the economic situation in Central, East and Southeast Europe
- wiiw, January 2014  
28 pages including 10 Tables and 3 Figures  
(exclusively for Members of wiiw)
- 

## **What Remains of the Theory of Demand Management in a Globalising World?**

by **Amit Bhaduri**

wiiw Policy Notes and Reports, No. 12, December 2013  
8 pages  
PDF: free download from wiiw's website

---

## **State Aid and Export Competitiveness in the EU**

by **Roman Stöllinger and Mario Holzner**

wiiw Working Papers, No. 106, December 2013  
35 pages including 6 Tables and 3 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

## **wiiw Monthly Report 12/13**

edited by **Leon Podkaminer**

- The elasticity of the new EU Member States' imports: implications for external rebalancing in Europe
  - State aid and export competitiveness in the EU – first results
  - European financial policy, as if banking mattered (Further notes on the crisis in the euro area)
  - Statistical Annex: Selected monthly data on the economic situation in Central, East and Southeast Europe
- wiiw, December 2013  
31 pages including 15 Tables and 1 Figure  
(exclusively for Members of wiiw)
- 

## **Labour Market Developments and Social Welfare**

by **Hermine Vidovic**

wiiw Research Reports, No. 392, November 2013  
35 pages including 8 Tables and 11 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

## **Vilnius Eastern Partnership Summit: A Milestone in EU-Russia Relations – not just for Ukraine**

by **Peter Havlik**

wiiw Policy Notes and Reports, No. 11, 25 November 2013  
32 pages including 15 Tables and 1 Figure  
PDF: free download from wiiw's website

---

## **wiiw Handbook of Statistics 2013: Central, East and Southeast Europe**

covers key economic data on Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Ukraine  
wiiw, Vienna, November 2013 (ISBN 978-3-85209-035-1)  
436 pages including 250 Tables and 124 Figures  
Hardcopy + CD-ROM with PDF: EUR 92.00  
(time series given for 2000, 2005, 2009-2012, graphs range from 2008 to September 2013)  
Download PDF: EUR 70.00  
(PDF with identical content as hardcopy)  
Hardcopy + CD-ROM with Excel tables and PDF: EUR 250.00  
Download Excel tables and PDF: EUR 245.00  
(time series in MS Excel format run from 1990-2012 (as far as available))

---

## **Importing, Productivity and Absorptive Capacity in Sub-Saharan African Manufacturing Firms**

by **Neil Foster-McGregor, Anders Isaksson and Florian Kaulich**

wiiw Working Papers, No. 105, November 2013  
28 pages including 8 Tables and 5 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

## **wiiw Monthly Report 11/13**

edited by **Leon Podkaminer**

- No take-off in Central, East and Southeast Europe so far
  - Albania: the remedy is worse than the disease?
  - Bosnia and Herzegovina: still making up its mind
  - Kazakhstan: low oil prices create devaluation pressure
  - Kosovo: constant voting wears away the backwardness
  - Macedonia: recovery on track
  - Montenegro: facing challenges
  - Russian Federation: firm in stagnation, with dim way out
  - Serbia: risking recession
  - Ukraine: on the path towards EU association?
  - Statistical Annex: Selected monthly data on the economic situation in Central, East and Southeast Europe
- wiiw, November 2013  
38 pages including 17 Tables  
(exclusively for Members of wiiw)
- 

## **Auswirkungen der Arbeitsmarktöffnung am 1. Jänner 2014 auf den Wirtschafts- und Arbeitsstandort Österreich**

by **Michael Landesmann, Isilda Mara, Hermine Vidovic, Helmut Hofer, Philip Schuster and Gerlinde Titelbach**

wiiw Research Papers in German language, October 2013  
85 pages including 26 Tables and 28 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)



Herausgeber, Verleger, Eigentümer und Hersteller:

Verein „Wiener Institut für Internationale Wirtschaftsvergleiche“ (wiiw),  
Wien 6, Rahlgasse 3  
ZVR-Zahl: 329995655

Postanschrift: A-1060 Wien, Rahlgasse 3, Tel: [+431] 533 66 10, Telefax: [+431] 533 66 10 50

Internet Homepage: [www.wiiw.ac.at](http://www.wiiw.ac.at)

Nachdruck nur auszugsweise und mit genauer Quellenangabe gestattet.

P.b.b. Verlagspostamt 1060 Wien

Offenlegung nach § 25 Mediengesetz: Medieninhaber (Verleger): Verein "Wiener Institut für Internationale Wirtschaftsvergleiche", A-1060 Wien, Rahlgasse 3. Vereinszweck: Analyse der wirtschaftlichen Entwicklung der zentral- und osteuropäischen Länder sowie anderer Transformationswirtschaften sowohl mittels empirischer als auch theoretischer Studien und ihre Veröffentlichung; Erbringung von Beratungsleistungen für Regierungs- und Verwaltungsstellen, Firmen und Institutionen.

