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Evaluation of the benefits drawn by EU-15 countries as a result of cohesion policy implementation in the Czech Republic

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Contents

1 Executive summary

The aim of the study is to estimate the magnitude of benefits drawn by the EU-15 countries from the implementation of EU cohesion policy in the Czech Republic. The research is based primarily on data provided by The Ministry of Regional Development (MMR) supplemented by other sources such as Eurostat and EEIP´s internal databases. It should be borne in mind that the considerably stronger **overall effect of the accession of the Czech Republic to the EU is not a subject of the study.**

The benefits drawn by EU-15 from the implementation of cohesion policy in the Czech Republic are direct and indirect ones. **Direct gains emerge when companies or their subsidiaries from EU-15 countries become contractors in projects co-funded with cohesion policy measures**, which are implemented in the Czech Republic. In such case, EU-15 countries directly receive money from the cohesion funds back through EU-15 companies or their subsidiaries in the Czech Republic. In this study, the benefits were estimated to be **EUR 218 million.**

Indirect benefits can be divided into two categories. First, **welfare spillover benefits** occur due to an increased demand of the Czech economy for imported goods and services from EU-15 countries, emerging as spillover effects of cohesion funds spending. These benefits are expected to materialize in the future (in 2010 and beyond) in the value of **EUR 6,145 million**, so they might be viewed as future benefits. There are three main categories of those imports: consumption, investment, and production imports, which are imports of goods and services used as intermediates in production processes.

Import consumption multiplier benefits that occur as a consequence of extra spending of Czech consumers on consumer goods and services due to implementation of cohesion policy, of which a substantial part is imported from the EU-15 countries. These multiplier benefits account for almost **EUR 187 million.** Since these benefits were calculated for the 2004-2009 period, they

do not overlap with welfare spillover benefits (calculated for 2010+). **The total sum of benefits drawn by EU-15 countries from implementation of the cohesion funds in the Czech Republic are estimated at EUR 6,550 million**.

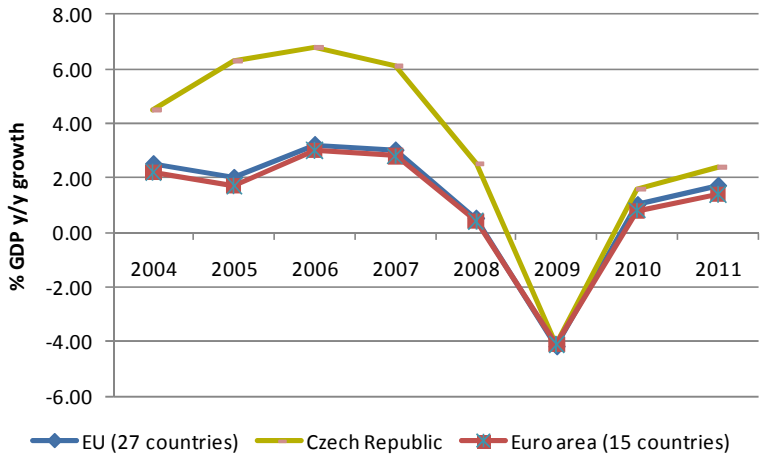
Subject of the research is the EU co-funded projects implemented in the Czech Republic between 2004 and 2009. EEIP a.s., a Czech consultancy company (EEIP), prepared this study for the purposes of the Ministry for Regional Development (MMR). EEIP has computed the estimates on the basis of the data provided by MMR and employed a similar approach to a Polish study: „Evaluation of the benefits drawn by EU-15 countries as a result of cohesion policy implementation in Poland".

2 Performance of the Czech economy in the context of the EU

The Czech Republic is as a member state of the EU-27 closely related to the other EU countries from several points of views including political view (through its accession to the EU in 2004), economic view (more than 60% of Czech exports flow to the EU) as well as social view (the geographical location of the Czech Republic and its history).

Not surprisingly, economic cycles of the Czech economy correspond (even though with a slight delay) to the cycles observed in the EU. Figure 1 demonstrates that the Czech Republic reported higher GDP growth than both EU-27 and Euro-area members (EA-15) countries in the 2004-2008 period, while in 2009 the Czech economy declined at the same pace (4.1%) as the EU-27 and EA-15 countries. In the coming years, Czech economy is expected to grow again faster than the EU-27 countries.

Figure 1: GDP annual growth in the EU-27, EA-15 and Czech Republic in 2004-2011

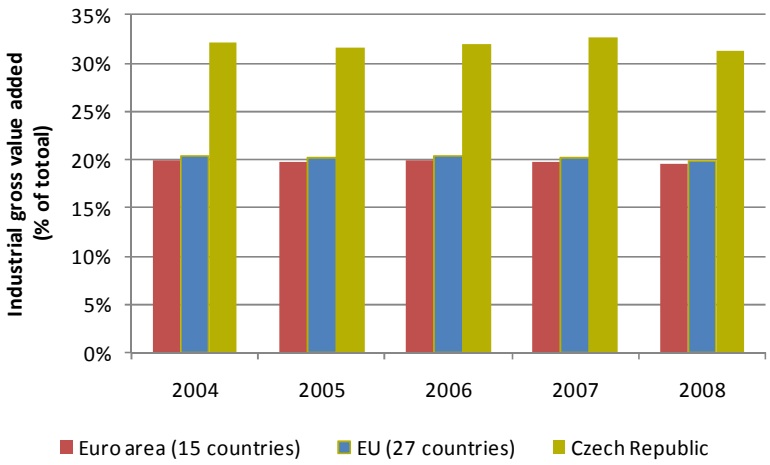


Note: Data for 2010 and 2011 are forecasted
Source: EEIP based on Eurostat

The structure of Czech economy differs from the EU-27 average as it relies significantly on its manufacturing industry. While industrial gross value-added share on total value added reached 32.1% in the Czech Republic in 2008, the similar share in the EU-27 amounted just 20% (Figure 2).

The high openness of the Czech economy (its exports/GDP ratio exceeds 60%) influences international trade flows with the EU in terms of both exports and imports, which generates benefits for the other member states of the EU as well as for the Czech Republic itself.

Figure 2: Industrial gross value-added share in the EU-27, EA-15 and Czech Republic in 2004-2008



Source: EEIP based on Eurostat

However, a strong reliance on industry means a double-edge sword for the Czech export-oriented economy. On one hand, a sharp decline in foreign demand (not only from the EU) has resulted in lower economic performance of the Czech economy in the 2009. On the other hand, a strong-industrial base combined with a conservative banking sector has made the Czech economy more resilient to the global crisis than other European countries.

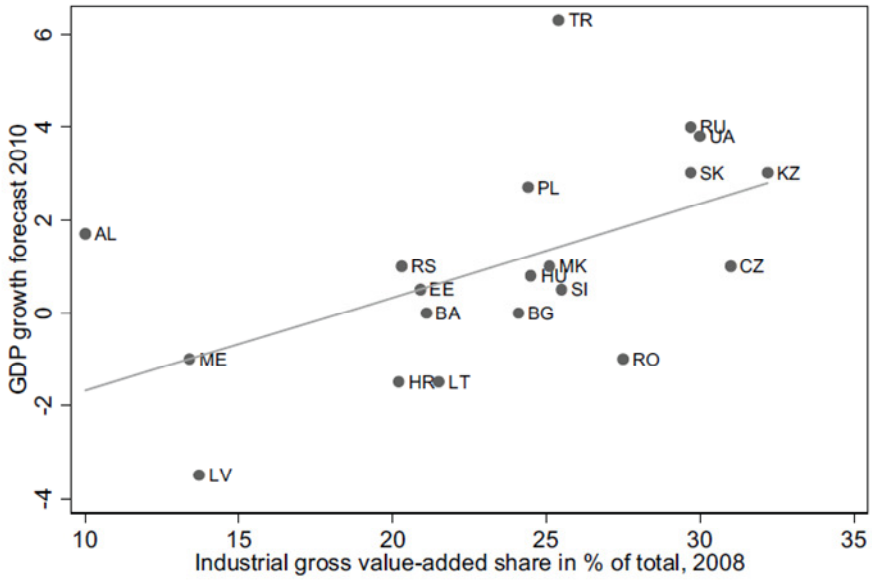
Figure 3 demonstrates the positive relationship between the projected GDP growth rate in 2010 and the size of the industrial base in selected European countries. WIIW (2010) concludes that a strong industrial base is one of the preconditions for a country gaining from an upswing in international trade. As a result, a strong industrial sector allows the country to increase exports and substitute imports and hence contributes positively to economic growth.

The outcome of the abovementioned analysis highlights the higher flexibility of Czech exports, what further affects higher Czech imports as well. As will be shown later in this study, many

Czech firms have subcontractors from EU-15 countries and also these subcontractors benefitted from flexible (and hence higher) Czech exports during the crisis.

For instance, a share of industrial import on total imports to the Czech Republic from Germany amounted more than 75% in 2009, which underlines the importance of the Czech industry for German exports. Moreover, this fact fosters potential synergic effects of EU exports to out-of-EU countries and hence might positively affect overall competitiveness of the EU on the global markets.

Figure 3: Post-crisis growth and the industrial base



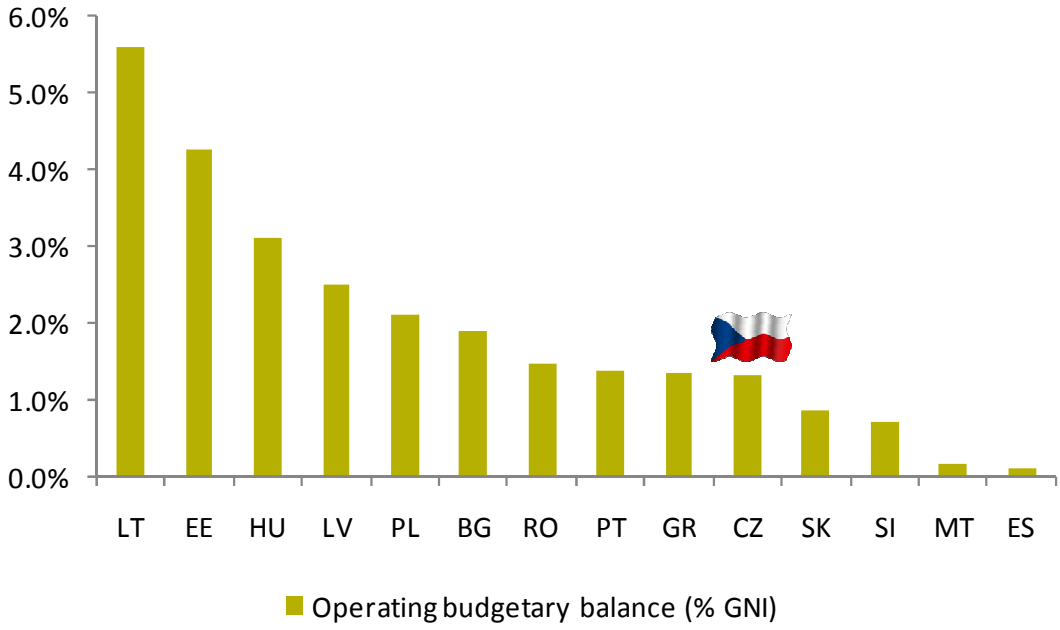
Source: WIIW (2010)

2.1 Financial relationships and flows between the Czech Republic and the EU

In this part we focus on support from EU funds to the Czech Republic in terms of EU budget position. As this analysis provides a complex view on EU funding towards the Czech Republic, it encompasses not only cohesion funds but also other EU support funding including agriculture subsidies, internal policy funds and pre-accession tools. The Czech Republic receives relatively lower amount of funds from the EU budget compared to other net receivers (Figure 4). As of the

end of 2009, the Czech Republic obtained from the EU budget EUR 1.7 billion or 1.35% of its Gross National Income (GNI), i.e. a similar relative amount to Portugal and Greece. However, this number might be misleading, because these net benefits are calculated for the year 2009, when no bail-outs from European funding occurred. When considering the extra EUR 110 billion from EU coffers for Greece in May 2010 and further EUR 85 billion emergency funding to Ireland in November 2010, this balance will be much higher this year (a detailed discussion on additional funding to other EU members such as Portugal or Spain goes out of the scope of this document).

Figure 4: Operating budgetary balance of net EU budget receivers in 2009

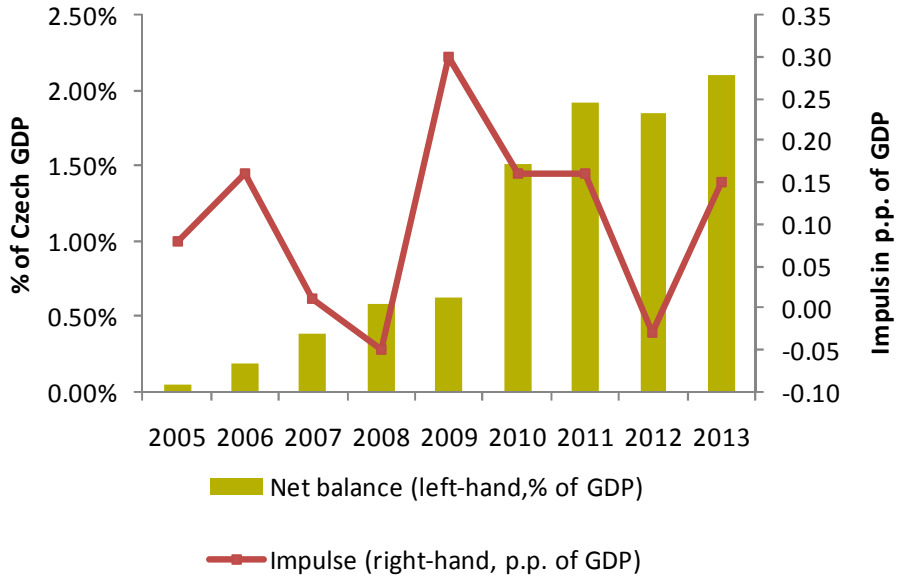


Source: This figure shows an overall balance of the Czech Republic with the EU budget (i.e. not just not only support from cohesion funds)
Source: EEIP based on European Commission

The drawdown of EU funds has meant an important stimulus for the Czech economy, which was magnified in 2009, i.e. during the peak of the crisis, when an estimated impact of EU funds amounted to a record level of 0.30 p.p. of Czech GDP (Figure 5). The figure also highlights the importance of EU funds for the Czech economy during the crisis year 2009. On the other hand, during "normal" growth periods (such as 2007-2008) the stimulus was not so significant. CNB

states that "*A strong increase in the inflow of funds for structural operations is expected in 2010, when, according to Ministry of Finance estimates, the net balance of the Czech Republic vis-à-vis the EU should jump to 1.5% of GDP. It should continue rising in subsequent years to more than 2% of GDP in 2013*" (CNB, 2009, p. 38). Such a positive stimulus increases the Czech economy's demand and hence higher imports from EU-15 countries as described in the following part of this study.

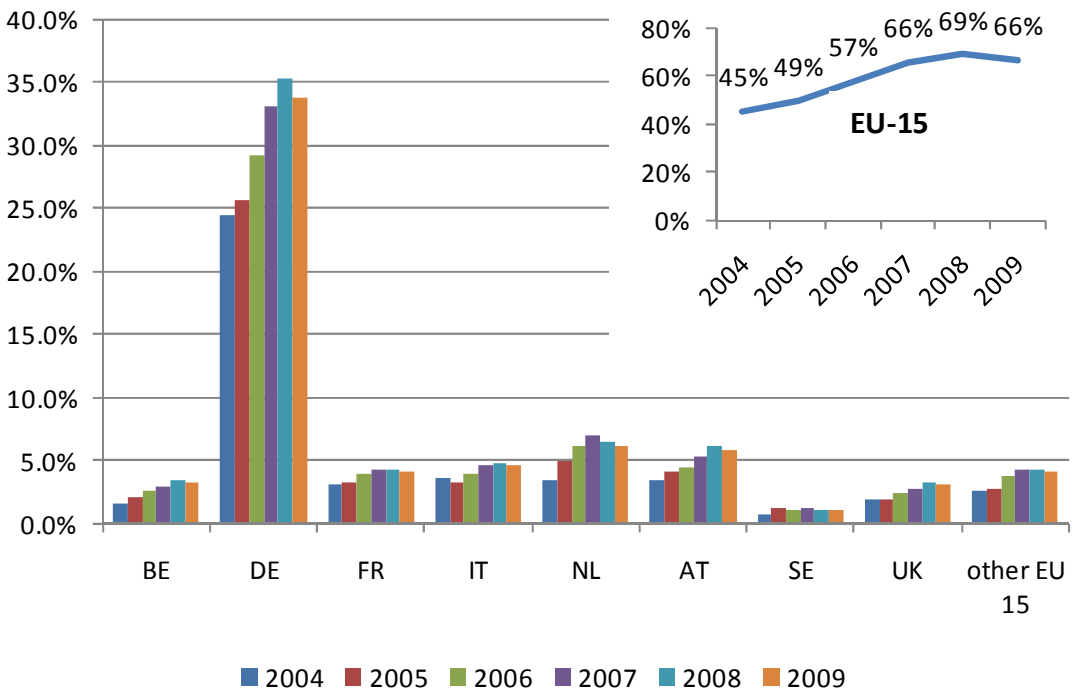
Figure 5: Expected financial flows resulting from the Czech Republic's EU membership and estimated impacts of drawdown of EU funds by the private sector on the economy



Note: Data for 2010-2013 are estimates
Source: EEIP based on annual reports of banks and Czech National Bank

Figure 6 demonstrates the openness of the Czech Republic to imports from EU-15. It could be seen that the imports from EU-15 tend to copy the growth of GDP (being thus influenced positively by the cohesion policy). **The total openness to EU 15 imports of Czech economy ranged in 2004 – 2009 between 45% to 69% indicates that quite a substantial part of cohesion policy payments spent in the Czech Republic returned to EU 15 members.** The highest openness to imports has Czech Republic towards Germany, followed by the Netherlands and Austria.

Figure 6: The openness of Czech economy to imports from EU-15 (measured in %, Imports/GDP)

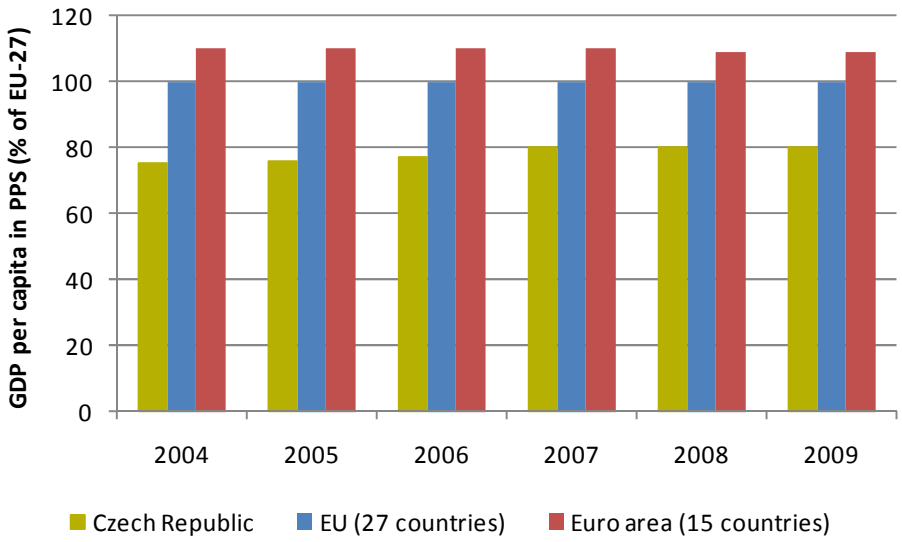


Source: EEIP based on EUROSTAT

3 EU funds and the Czech Republic

Since the 2004 accession of the Czech Republic to the EU, its relative GDP per capita in purchase-power-standards (PPS) ratio has grown from 75% in 2004 up to 80% level as of the end of 2009 (Figure 7). Among the most important drivers of this GDP growth and of increasing performance of the Czech economy have also been the EU funds (including the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund (CF)) as was demonstrated in the previous part.

Figure 7: GDP per capita in PPS in the EU-27, EA-15 and Czech Republic in 2004-2009



Source: EEIP based on Eurostat

Despite the increasing living standards measured by GDP per capita (80.3% of EU average in 2009), the Czech Republic should remain a net receiver from cohesion funds (the EU benchmark is set to 90% of EU average). The Czech Ministry of Finance expects that all Czech regions (except for Prague) would be entitled to get funding from the Convergence Aim as their GDP per capita would stay under 75% of EU average at least until the year 2011 (Table 1).

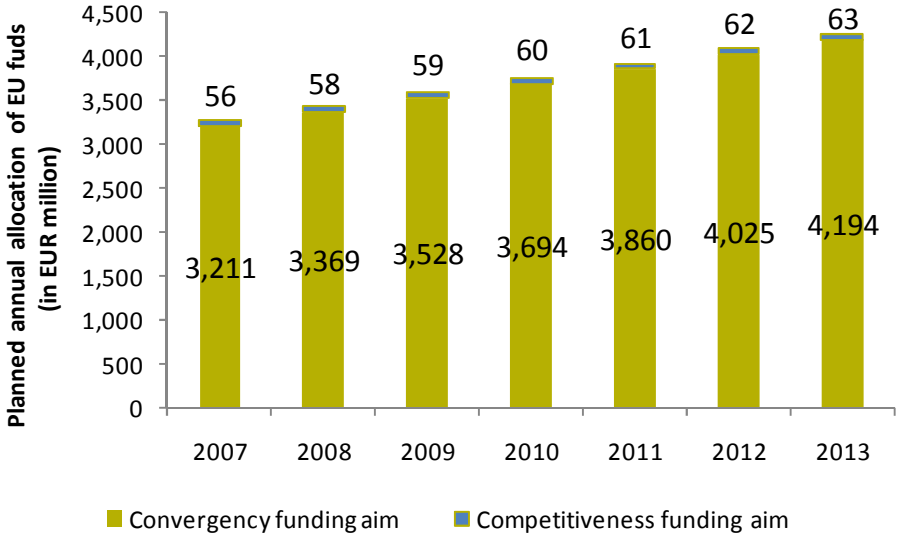
Table 1: Development of a GDP-per-capita ratio in the 2006-2011 period (% of EU average)

	2006	2007	2008	2009 forecast	2010 forecast	2011 forecast	Average 2007-2009
Czech Republic	76.9	80.1	80.3	80.3	80.4	80.7	80.2
Prague	161.6	172.2	173.1	187.1	193.1	197.3	177.5
Central Bohemia	72.7	75.7	73.8	72.9	72.4	73.1	74.0
South-West	70.7	71.1	70.9	68.4	67.8	67.3	70.1
North-West	60.5	61.8	62.7	59.7	58.3	57.3	61.4
North-East	64.2	65.9	64.7	63.4	92.7	62.1	64.7
South-East	68.7	71.7	72.0	70.1	69.7	69.5	71.3
Central Moravia	59.7	62.3	63.0	61.7	60.9	60.7	62.3
Moravia-Silesia	64.0	67.4	67.6	65.2	63.8	63.2	66.8

Source: Ministry of Finance

The Czech Republic is supposed to get EUR 26.3 billon from EU funds for the 2007-2013 period; thereof 98.4% for the Convergence Aim and 1.6% for the Competitiveness Aim (Figure 8). While the EU funding to the Czech Republic amounted EUR 3.6 billion in 2009, the planned allocation in 2013 should increase up to EUR 4.3 billion.

Figure 8: Planned annual allocation of EU funds for the Czech Republic



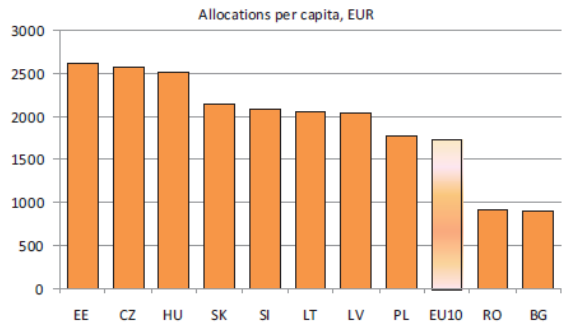
Source: National Strategic Reference Framework (2007)

Estonia, Czech Republic and Hungary report the highest allocations per capita of EU funds (EUR 2.5 thousands) across EU-10 countries (Figure 9). On the other hand, in the terms of a

share of allocated funds to country´s GDP the Czech Republic shows under-average value (18% vs. 20% EU-10 average). Poland reports the largest absolute allocation worth almost EUR 70 billion (Figure 10).

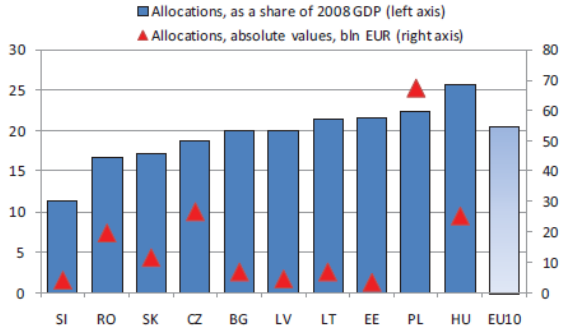
We should highlight that in most EU-10 countries the annual allocated amounts of EU funds have doubled in nominal terms for the 2007-2013 period (average allocation amounts approx. 3% of country´s GDP) compared to the previous 2004-2006 perspective.

Figure 9: Allocation per capita of EU funds across countries in 2007-2013



Source: OECD, World Bank (2010)

Figure 10: Distribution of EU funds across countries in 2007-2013

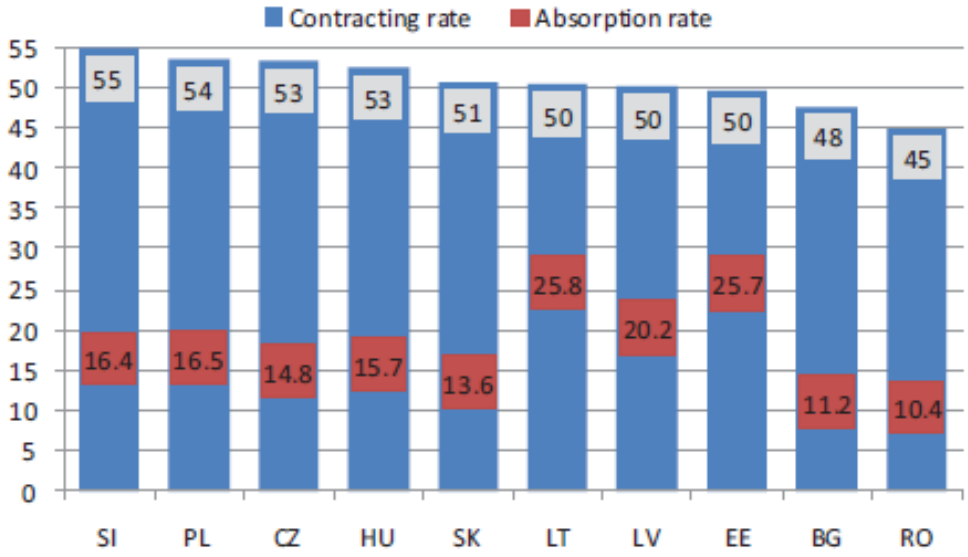


Source: OECD, World Bank (2010)

It is worthwhile to mention that the allocations are maximum amounts to be (efficiently) spent by EU member countries and the use of the funds depends on countries´ absorption capacity.

As of June 2010, the highest contracting rates (the ratio of committed amounts relative to the allocation) were recorded in Slovenia, Poland, the Czech Republic and Hungary (over 53% as depicted in Figure 11). On the other hand, in terms of absorption rates, i.e. the ratio of payments relative to the allocation, the Czech Republic posted below-average result of 14.8%, a value lower than in case of Baltic countries such as Latvia, Lithuania or Estonia (all exceeding 20% absorption rate). On the other hand, one might doubt the effectiveness and sustainability of the projects in Baltic countries regarding their poor economic performance and fiscal imbalances.

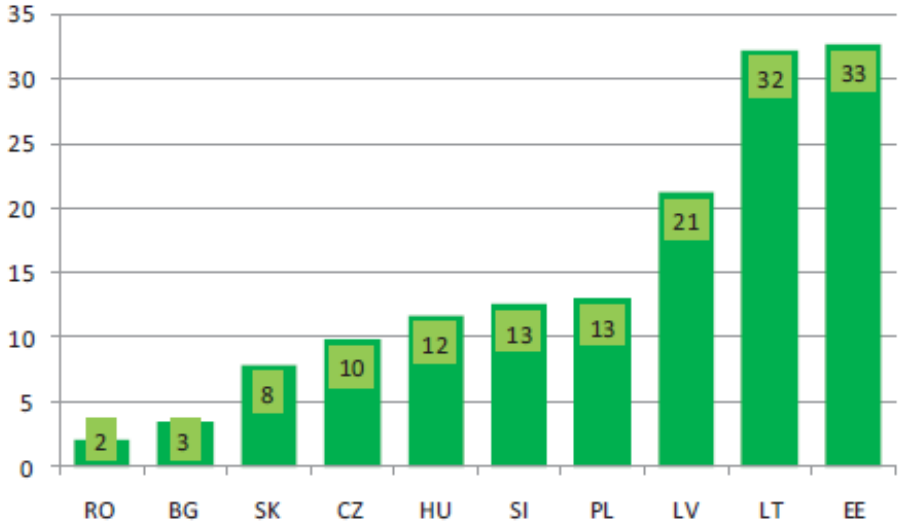
Figure 11: Contracting and absorption rates as of June 2010 (2007-2013 period)



Note: Contracting rate = the ratio of committed amounts relative to the allocation; Absorption rate = the ratio of payments relative to the allocation.
Source: European Commission, World Bank (2010)

The same picture can be seen in terms of implementation rates (the ratio of ex-post reimbursements relative to contracting), where Baltic countries report higher values than other EU-10 countries including the Czech Republic (Figure 12).

Figure 12: Implementation rate as of June 2010 (2007-2013 period)

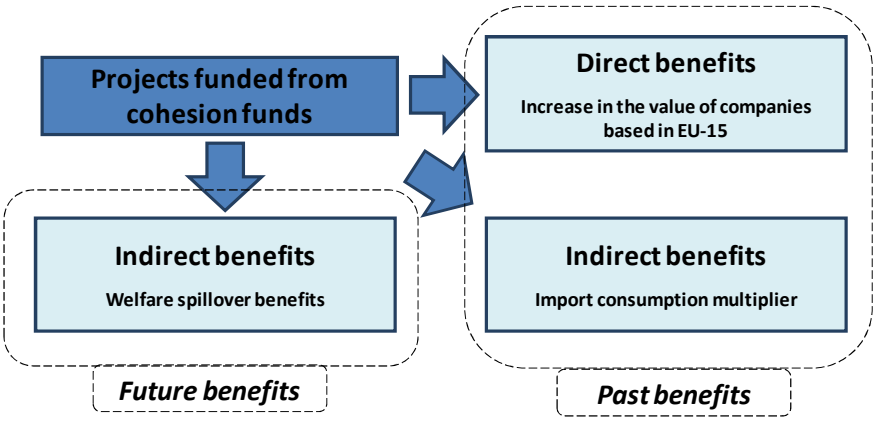


Note: Implementation rate = the ratio of ex-post reimbursements relative to contracting
Source: European Commission, World Bank (2010)

4 Typology of benefits

The benefits drawn by EU-15 from the implementation of cohesion policy in the Czech Republic are direct and indirect (Figure 13). **Direct benefits** emerge when companies or their subsidiaries from EU-15 countries become contractors in projects co-funded with cohesion policy measures, which are implemented in the Czech Republic. In such case, EU-15 countries directly receive money from the cohesion funds back through EU-15 companies or their subsidiaries in the Czech Republic. These benefits were calculated for the 2004-2009 period, so they might perceived as past benefits. Figure 14 demonstrates both direct and indirect benefits in more detail.

Figure 13: Typology of benefits



Source: EEIP

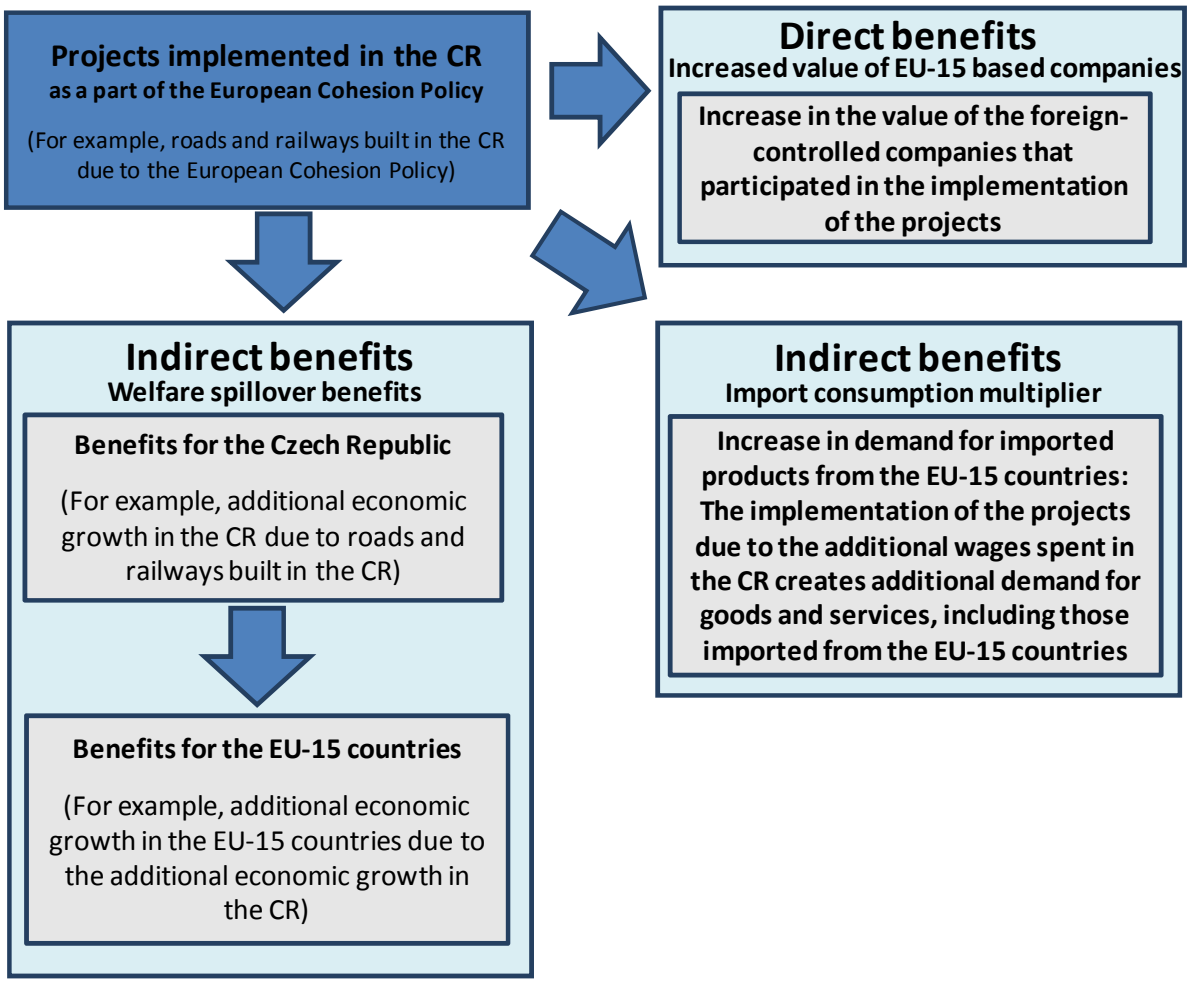
Indirect benefits can be divided into two categories. First, welfare spillover benefits occur due to an increased demand of the Czech economy for imported goods and services from EU-15 countries, emerging as spillover effects of cohesion funds spending. These benefits are expected to materialize in the future (in 2010 and beyond), so they might be viewed as future benefits.

Import consumption multiplier benefits that occur as a consequence of extra spending of Czech consumers on consumer goods and services due to implementation of cohesion policy, of which a substantial part is imported from the EU-15 countries. Since these benefits were calculated for

the 2004-2009 period, they do not overlap with welfare spillover benefits (calculated for 2010+).

Figure 14 demonstrates indirect benefits in more detail.

Figure 14: Detailed typology of benefits

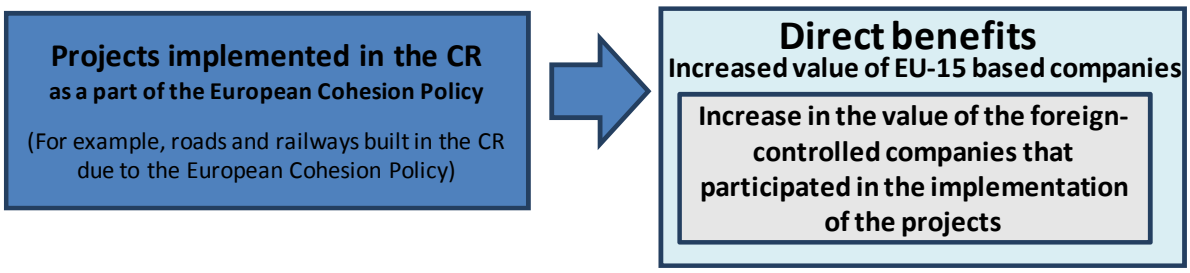


Source: EEIP

5 Direct benefits

In this chapter we provide estimates of the direct benefits incurred by EU-15 countries from the implementation of cohesion policy in the Czech Republic (based on data provided by The Ministry of for Regional Development (MMR)). Benefits arise because the demand for contractors, including the foreign ones, increases due to the implementation of co-funded projects in the Czech Republic (Figure 15).

Figure 15: Detailed typology of direct benefits



Source: EEIP

Due to the fact that the payments from co-funded projects to EU-15 contractors go straight back to EU-15 countries, we denote them as brutto direct benefits. However, these benefits should be adjusted, because they include the total value of the contracts, what do not mean real benefit for EU-15 contractors. As a result, we have calculated netto benefits (EUR 218.7 million) for EU-15 countries as a sum of total income from Czech subsidiaries to their parent companies resided in the EU-15. Moreover, we present a case study on money flow from Czech banks to their parent banks based in EU-15 countries.

5.1 Direct benefits: calculations

The direct benefits can be estimated as follows. Firstly, we calculate brutto benefits as aggregate value of contracts paid to companies based in the EU-15 countries within cohesion policy in the 2004-2009 period. Secondly, we adjust this value to netto benefits as a sum of total income from Czech subsidiaries to their parent companies in the EU-15 in the form of dividends, higher firms´ value and transfer pricing. At the end of this section we present two short cases from the construction sector to show that the calculated netto benefits might be quite conservative estimates of the actual direct effects.

5.1.1 Brutto benefits

The first step was to calculate aggregate value of contracts paid to companies based in the EU-15 countries within cohesion policy between 2004 and 2009. Our estimate is **EUR 2.28 billion**, approximately half of which comes from the EU funds and the other half is Czech public or private co-financing. This value accounts for 8% of the total financial flows received by the Czech Republic in the implementation process of the cohesion policy.

According to the MMR data companies from EU-15[1] countries participated only in **1% of implemented projects.** However, they took part in projects of above-average size (see e.g. construction sector case study described in the following subsection), which is emphasized by their **8% share in total value of contractors' deals**. Despite this number might seem relatively low, we should highlight that much EEIP´s effort has been done to indentify the suppliers from EU-15 countries (this data were missing in the MMR´s database)[2].

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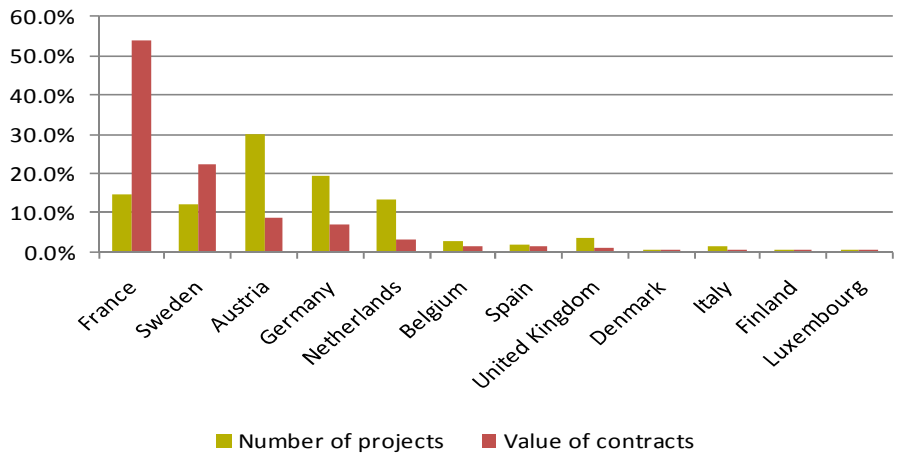
[1] This includes both firms located in the EU-15, and firms with a dominant shareholder from EU-15.

[2] EEIP has done a similar analysis of an updated sample of data provided by the MMR to make the obtained results more robust. However, the results of the analysis did change significantly.

Figure 16: The structure of contracts with contractors from EU-15 countries (100% = all contracts with contractors from EU-15 countries; value of these contracts).



Source: EEIP based on MMR and other sources

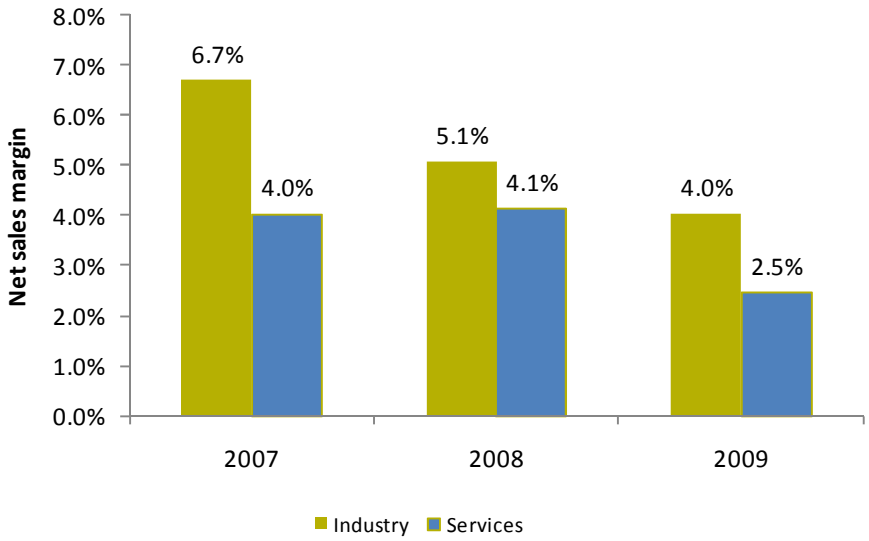
Figure 16 shows that companies from **France and Sweden** were the most successful contractors with over 50% and 20% shares of total EU-15 contract value, respectively. In terms of number of contracts cohesion policy projects, the most active contractors were **Austria and Germany**, the two EU-15 countries neighboring the Czech Republic, with around 20% and 30% shares, respectively. Many important contractors in Czech EU-funded projects are also based in **Netherlands**. Other countries' contractors are less important in terms of numbers, but all EU-15 countries - except for the relatively very distant Greece, Portugal and Ireland – did receive directly part from cohesion policy funds from projects realized in the Czech Republic.

5.1.2 Netto benefits

The second step was the adjustment of brutto benefits to netto benefits for EU-15 countries. Since we calculated extra sales for EU-15 contractors worth EUR 2.28 billion, we needed to adjust this value to netto benefits as a sum of total income from Czech subsidiaries to their parent companies in the EU-15 in the form of paid dividends, higher firms´ value (in the form of retained earnings) and income from transfer pricing (stemming for supplies of Czech subsidiaries from their parent companies).

We used data from the Ministry of Industry and Trade for our analysis and divided contractors into two groups: industry contractors and services contractors. For simplicity we assumed that a ratio between these contractors reflects the real situation of contractors in the Czech industrial sector, i.e. 60% share of industry and 40% of services on total sales. In absolute terms, we computed extra sales for industry contractors worth EUR 1.4 billion (60% from EUR 2.28 billion) and for services contractors worth EUR 0.88 billion (40% from EUR 2.28 billion). When applying net sales margins (defined as net profit/sales) as depicted on Figure 17, we calculated extra net profit for both industry and services contractors worth EUR 104.9 million (= a weighted average of net sales margin and corresponding sales).

Figure 17: Net sales margin in the Czech industry in the 2007-2009 period



Source: EEIP based on data from The Ministry of Industry and Trade

The first part of direct benefits is **the EUR 104.9 million net profit** of both industry and services contractors. From the view of benefits it is not important if this money has been paid to shareholders as dividends (immediate cash flow to EU-15) or kept in the company as retained earnings (an increase in firm´s value, i.e. additional notional income for EU-15).

The second part of direct benefits is transfer pricing, i.e. money resulting from supplies for Czech subsidiaries from their parent companies based in the EU-15. For instance, a Czech contractor buys some services from its parent company for higher-than-market prices, what negatively affects the Czech contractor´s performance but simultaneously it influences positively the parent company´s performance. According to experts´ estimates, this transfer pricing might bring another **EUR 113.8 million** (approx. 5% of total sales worth EUR 2.28 billion) to EU-15 countries. To conclude, **direct netto benefits are estimated at EUR 218.7 million in the 2004-2009 period** (approx. 10% of indirect brutto benefits) as shown in Table 2.

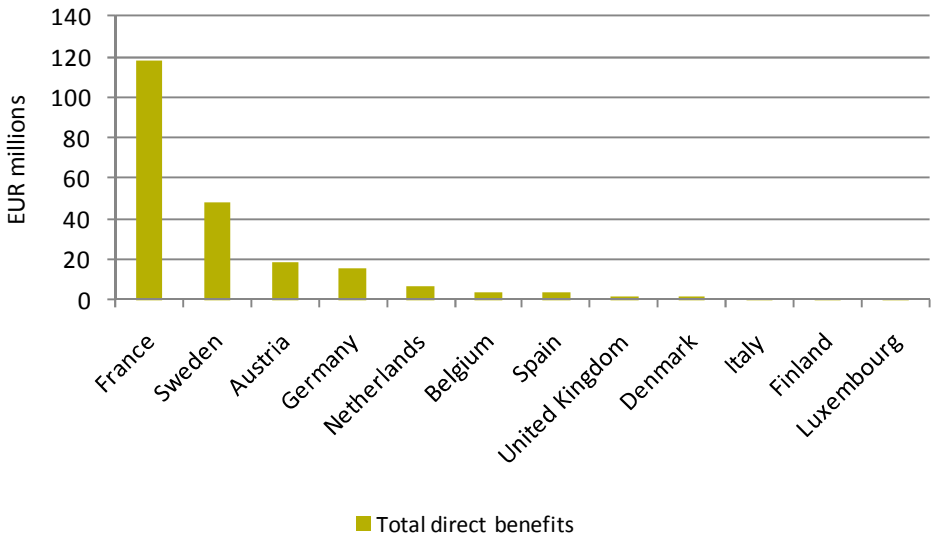
Table 2: Structure of direct benefits

Benefit	Base for calculation	Amount (EURm)
Net profit	net sales margin	104.9
Transfer pricing	total sales	113.8
TOTAL		**218.7**

Source: EEIP

Since we assume the same geographical distribution of netto benefits as in terms of total EU-15 contract value (compare with Figure 16), we conclude that companies from France and Sweden recorded the highest direct benefits with over EUR 118.2 million and EUR 48.4 million respectively (Figure 18).

Figure 18: Geographical distribution of net benefits of EU-15 countries



Source: EEIP based on MMR and other sources

5.2 Case studies on direct benefits: construction sector

At the beginning we should highlight that these case studies serve as illustrative examples of direct benefits for EU-15 countries. The direct benefits stemming from the cohesion policy to the EU 15 countries can be well demonstrated on the case of the Czech construction sector. In this part we present two case studies proving evidence on the issue. Firstly, we demonstrate the importance of Czech construction companies for their parent companies in EU-15 countries (primarily focused on Skanska, a Czech subsidiary of a Swedish company). Secondly, we use an example of a Czech construction consortium led by a company AQUATEST, a.s. that serves as a main supplier in a project funded from EU funds and used a Tier 1 German supplier (UIT, GmbH) for part of its supplies.

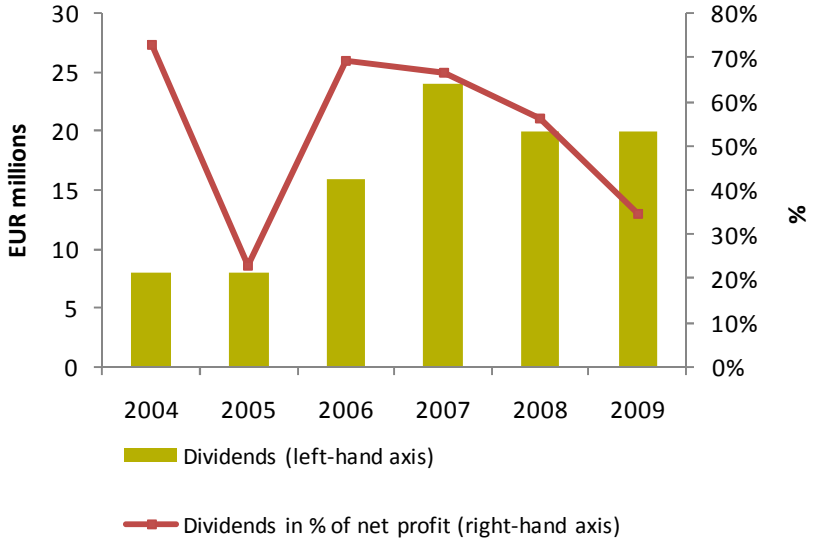
5.2.1 Case study on direct benefits: Skanska

The first example is the following. Out of five largest construction companies in the Czech Republic, four are subsidiaries of companies from EU-15. **Skanska is a Swedish company** that established its subsidiary in the Czech Republic in 2000. In 2009, nearly 70% of all its revenues

stemmed from public contracts from state administration and municipalities, co-funded from cohesion funds, what boosted Skanska´s profits in the Czech Republic. According to experts estimates, in the past years Skanska made return on equity (ROE) around 30% on public contracts while only 5% on residential construction.

To support this evidence, Figure 19 shows that Skanska paid almost **EUR 100 million** in dividends to its parent Swedish company in the 2004-2009 period. On the other hand, a question remains whether such high money outflow resulted from high construction costs is beneficial for the Czech Republic in terms of effective allocation of available sources.

Figure 19: Dividends paid from Skanska, a.s. to its Swedish parent company in 2004-2009

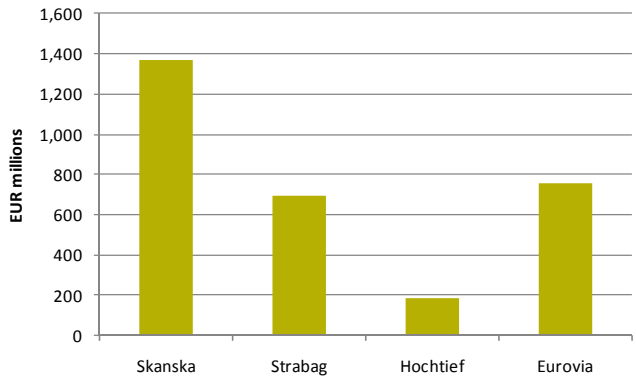


Source: EEIP based on annual reports of Skanska,a.s.

Another major player, focused on the railways and tramways, **Eurovia, is a subsidiary of a French company**. More than 95% of its revenues come from public authorities – mainly from the Ministry of Transport, Directorate of Roads and Highways and State Administration of Railways (significant parts of these investments are financed by cohesion funding with an approx. 85% share). The shares of public contracts on total revenues of **Strabag (Austria)** and **Hochtief (Germany)** also by far exceed 60% in the Czech Republic. All of these companies purchase

substantial amounts of goods and services from their parent companies and thus transfer their benefits from the Czech market back to the EU-15.

Figure 20: Volume of public contracts co-financed from EU funds and obtained by construction companies owned by companies from EU 15 (EUR mil.; contracts between years 2006 – 2010)



Source: EEIP based on www.isvzus.cz

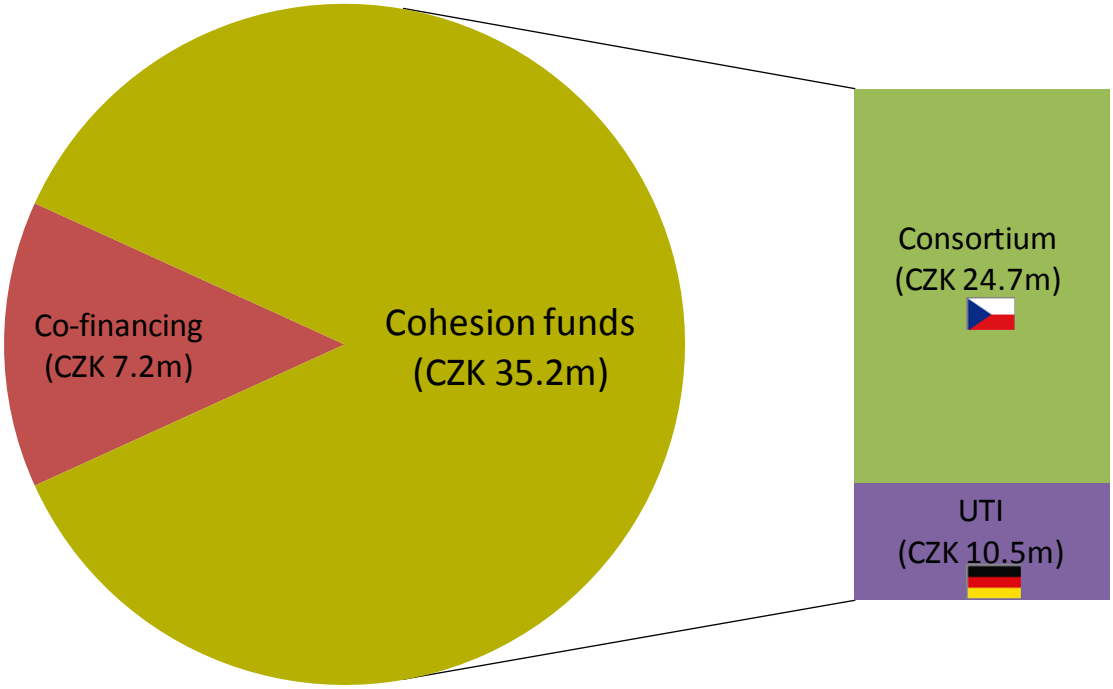
Apart from the above named companies, there are many specialized construction companies owned by subjects from EU 15 (e.g. engineering companies, machinery producers such as Austrian Swietelski and other specialized construction companies such as German Berger Bohemia that takes part on large construction projects).

5.2.2 Case study on direct benefits: AQUATEST

The second example reveals links between Czech and German suppliers and shows that some projects funded from cohesion funds might bring money back to EU 15 countries. AQUATEST, a.s. is a Czech company providing consulting and engineering services in the field of environment protection and water management. In 2009 of a Czech construction consortium led by a company AQUATEST, a.s. was selected as a key supplier of a CZK 42.4 million (EUR 1.7 million) project related to anti-flooding protection in North Bohemia. The project was funded partly from the Operational Program Environment, i.e. from cohesion funds, (85% of total costs or CZK 35.2 million) and partly from the Association of North Bohemian municipalities (15% of total costs or CZK 7.2 million). The consortium has used a Tier 1 supplier from Germany (UIT,

GmbH) for rendering part of its services and supplies. UIT primarily specializes in consulting, engineering, plant construction and project management (e.g. as a prime contractor from plant conception to implementation or a provider of integral solutions by combining various technologies). According to experts´ estimates, UIT supplies might be worth up to 30% (approx. CZK 10.5 million in absolute terms) of the cohesion funds' value as depicted in Figure 21.

Figure 21: The role of UTI, GmbH in a project supported from cohesion funds

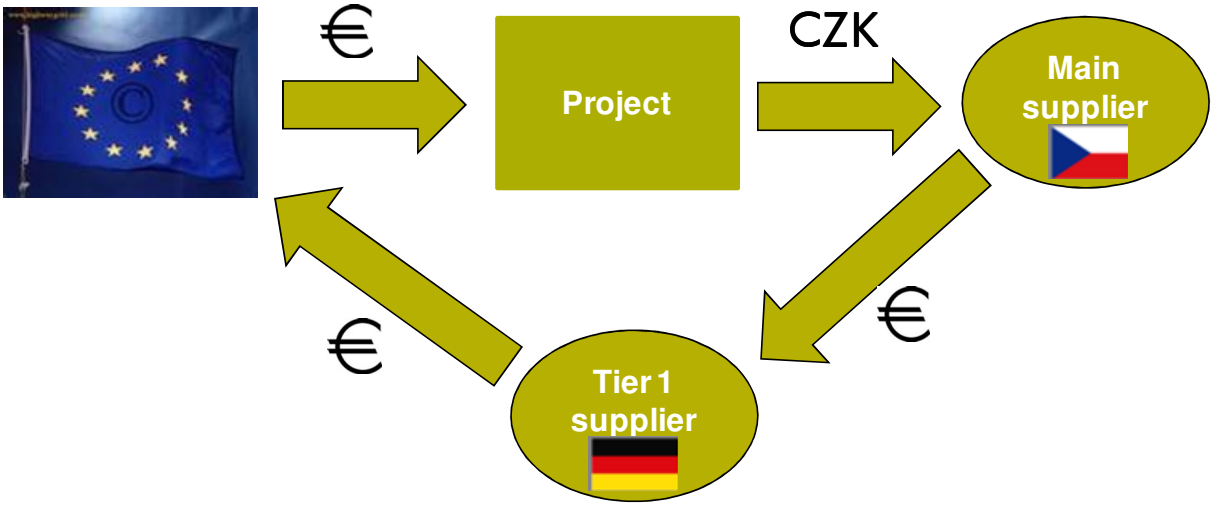


Source: EEIP based on various sources

This example might be generalized in the following way. Since the Czech Republic is a small foreign-trade economy, it has a close trade relationship with neighbor countries such as Germany or Austria (i.e. EU-15 countries). Some projects supported from cohesion funds cannot be undertaken solely from the Czech Republic because these projects require technologies or knowledge not available in the Czech Republic (or available but for high prices). Therefore

supplies from Germany or Austria are needed and as a result, the cohesion funding goes back to EU-15 countries (Figure 22).

Figure 22: Money flow from cohesion funds back to EU-15 countries



Source: EEIP

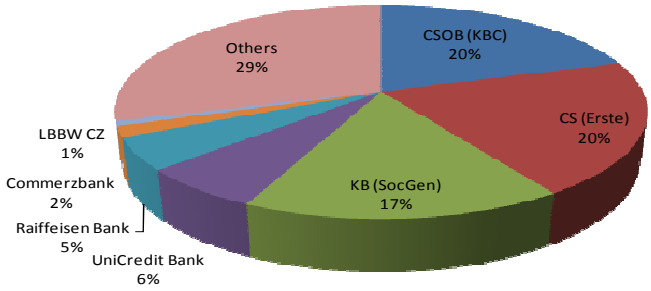
Due to the fact that Czech contractors do not have to publish information on their subcontractors, it is not possible to estimate completely the direct benefits flowing from Czech projects financed from cohesion funds. Nevertheless, we may expect that they would, if included to this study, substantially further increase the volume of estimated direct benefits stemming from the implementation of EU cohesion policy in the Czech Republic.

There are also other benefits than the direct ones and we call them indirect. In the next chapter of this study, we describe two of these indirect benefits based upon import consumption multipliers and long-term modernization effects that increase the potential of Czech economy, and that, as a consequence, has positive impacts on EU-15 countries.

5.3 Case study of additional benefits: EU15-owned banks in the Czech Republic

EU-15 countries also benefit from the EU funds provided to the Czech Republic indirectly through its banks that are key owners of the Czech banking sector. top 4 Czech banks - Ceska sporitelna (owned by Erste Group, Austria) CSOB (KBC Group, Belgium), Komercni banka (Société Générale, France) and UniCredit Bank (UniCredit, Italy)- controlled over 63% of the sector's assets as of the end of 2009 (Figure 23).

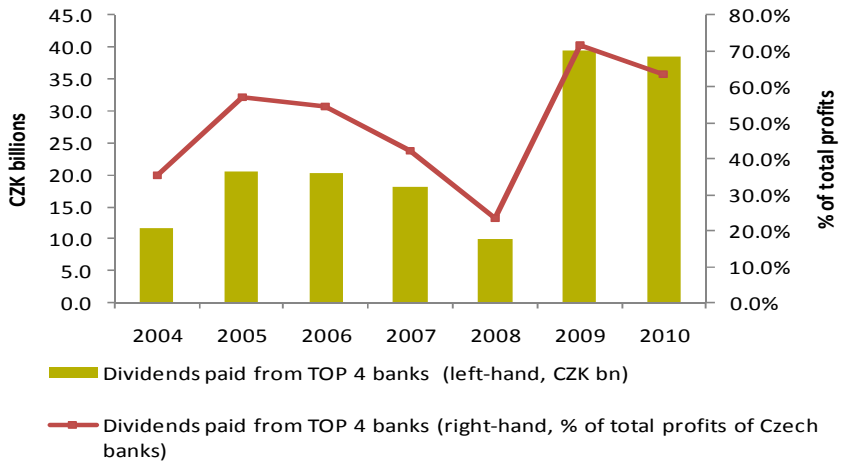
Figure 23: Market shares of key EU-15 bank groups in the Czech Republic



Note: Per cent of total banking assets; data as of year-end 2009;
Source: EEIP based on Raiffeisen RESEARCH and Czech National Bank

This ownership structure of the Czech banks results in two positive facts for the EU-15 banks. Firstly, the top 4 Czech banks provided emergency liquidity support to their parent banks during the 2008-2009 global financial turmoil. Secondly, these Czech banks have paid hefty dividends worth CZK 156.6 to their EU-15 shareholders in the 2004-2010 period (Figure 24), while their CZK 47.2 billion net profit in 2009 representing amazing 86% of total profits earned by Czech banks in the same year.

Figure 24: Dividends paid by TOP 4 Czech banks to EU-15 banks



Note: Data for 2010 are estimates
Source: EEIP based on annual reports of banks and Czech National Bank

Since the Czech banks provide co-financing loans to the projects supported from EU funds, EU-15 banks have indirectly participated on this extra banking income since 2004. According to expert estimates**, the EU-15 banks through its Czech subsidiaries have earned approx. EUR 120 million (CZK 3 billion) on both interest and fee income resulted from co-financing loans in the 2004-2010 period.**

6 Indirect benefits

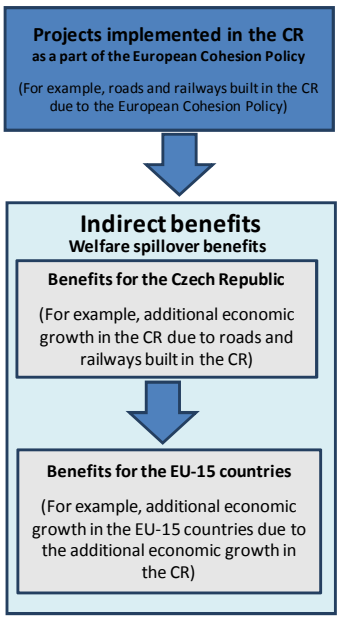
This section deals with the indirect benefits drawn by EU-15 countries as a result of cohesion policy implementation in the Czech Republic. In this report we focus on estimation of two types of indirect benefits (calculated based on data provided by the MMR):

- Welfare spillover benefits
- Import consumption multiplier.

6.1 Welfare spillover benefits

The first group of indirect benefits that we consider in this report includes the welfare spillover benefits (Figure 25). These benefits to EU-15 countries occur due to an increased demand of the Czech economy for imported goods and services from EU-15 countries as a consequence of Czech welfare-improving cohesion policy implementation.

Figure 25: Detailed typology of welfare spillover benefits



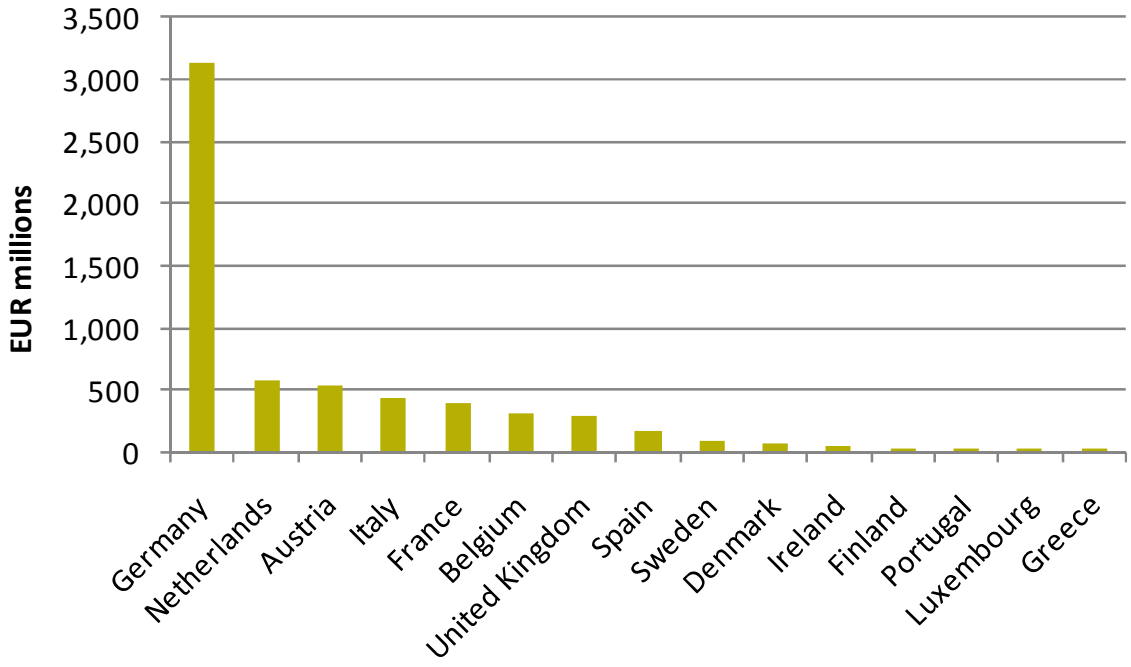
Source: EEIP

There are three main categories of those imports: investment and production imports (imports of goods and services used as intermediates in production processes) and private consumption, which is estimated in the following subchapter. The estimates are based upon a model, which also takes into account the extreme openness of the Czech Republic to imports from the EU-15. This for example implies that **import openness to EU-15 countries is approximately two times higher than in Poland**.

It takes some time for the indirect benefits to have an impact. There is usually a time lag between the implementation of the cohesion policy and the positive effects on the exporting EU-15 countries. To allow for this time difference, it would be necessary to extend the estimation period into the future. For the sake of simplicity, we do not follow this path in this report, but it is important to keep in mind that by doing so we underestimate the positive benefits to EU-15 countries.

The value of welfare spillover benefits for the EU-15 countries as a result of the overall welfare improving implementation of cohesion policy in the Czech Republic in 2004-09 was estimated at the minimum of **EUR 6.15 billion**. Figure 26 describes how these welfare spillover benefits are distributed among the EU-15 member states; our largest trading partner, Germany, receives most welfare spillover benefits from the implementation of cohesion policy in the Czech Republic.

Figure 26: Welfare spillover benefits among the EU-15 countries

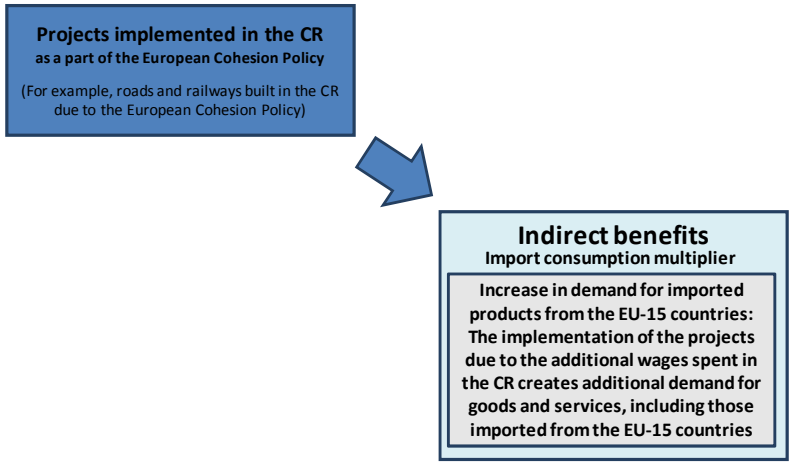


Source: EEIP based on MMR and other sources

6.2 Indirect benefits: import consumption multiplier

The import consumption multiplier benefits occur due to an increased private consumption in the Czech Republic as a result of money inflow from the implementation of cohesion policy. Given the extreme openness of Czech economy to imports, this increased consumption is partly covered by the imports from EU-15 countries that therefore benefit from the cohesion policy in the Czech Republic.

Figure 27: Detailed typology of import consumption multiplier benefits



Source: EEIP

The model used to calculate the import multiplier effects is based on the idea that the companies use part of the money from cohesion funds to cover the staff costs. The average share of staff costs in the companies using the cohesions funds was estimated[3] to be in the Czech Republic about 8%.

Therefore, as the disposable income of Czech households' increases, the private consumption of goods imported from EU-15 companies increases. The propensity to consumption of households in the Czech Republic is estimated to be around 80% of the disposable income.[4] Increased consumption results not only in increased demand-driven production within the Czech Republic, but also in the augmented imports from other countries. The imports of consumption goods from EU-15 states accounts for about 50% of the overall imports of consumption good to the Czech Republic.[5]

[3] Based on sample of several randomly selected companies from the list of cohesion funds recipients

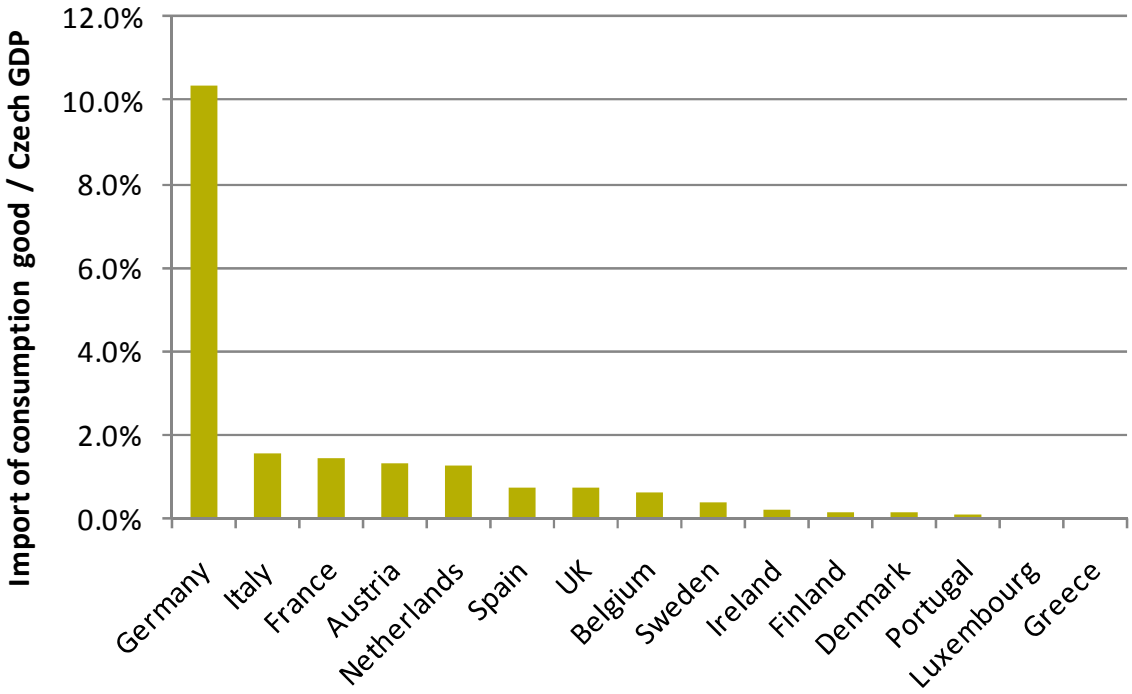
[4] www.czso.cz

[5] SITC 0 (food),1 (beverages and tobacco),3 (fuels),6 (manufactured goods), 7 (transport equipment)

The calculation is based on the multiplier of openness of the Czech Republic to imports of consumption goods, which is different for each EU-15 country (Figure 28). This multiplier is calculated as import of consumption good from particular country/Czech GDP. Thus the disposable income spent on consumption good multiplied by this multiplier shows how much additional money stemming from cohesion funds is spent by Czech consumers on imported goods from EU-15 countries.

The model estimates the additional profit of EU-15 countries stemming from the allocated EU funds to Czech companies. The estimates are based upon a model, which takes into account the openness of the Czech Republic to imports of consumption goods from the EU-15 countries.

Figure 28: Openness of the Czech Republic to imports of consumption goods from the EU-15 countries



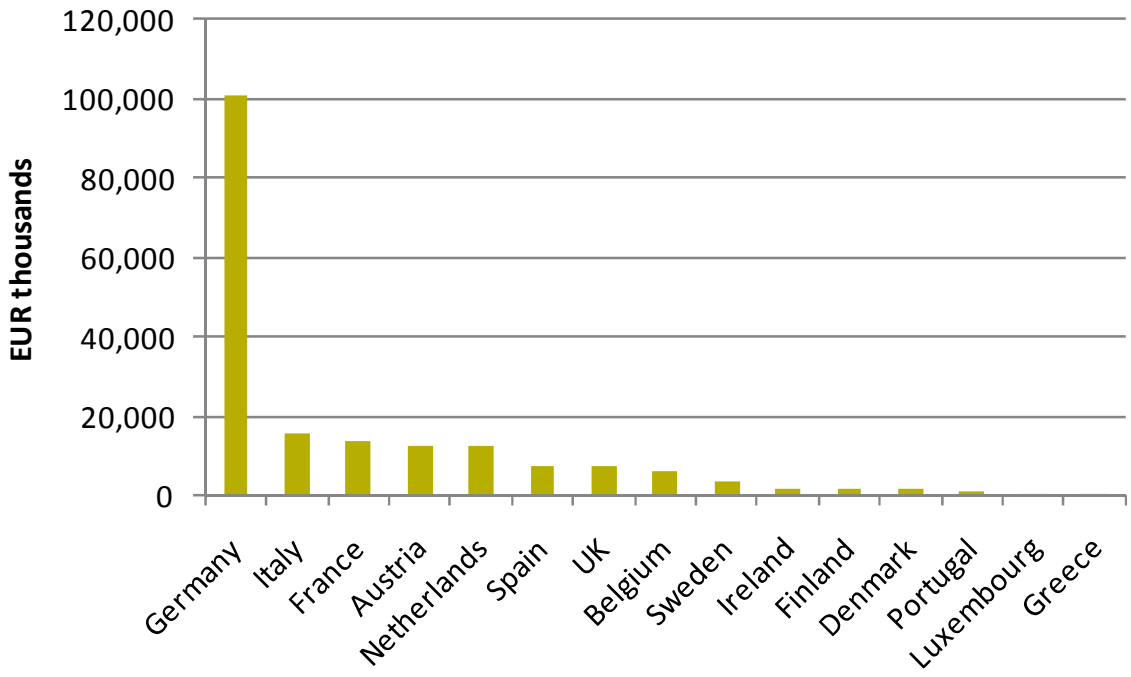
Source: EEIP´s estimates based on MMR data

This multiplier shows, how increased private consumption in the Czech Republic influences import of consumption goods from other countries. As we can see in the graph, the indicator is

highest in case of Germany (it is over 10 %). Thus the major part of the multiplier effects can be seen in increased demand for German consumption goods.

Following figure shows the import multiplier effects of the cohesions funds on the EU-15 countries in absolute value (thousands of EUR). As expected, the multiplier effect is major in case of Germany. However, it is also significant for Austria, France, Italy, the Netherlands and Spain (Figure 29).

Figure 29: Import multiplier effects



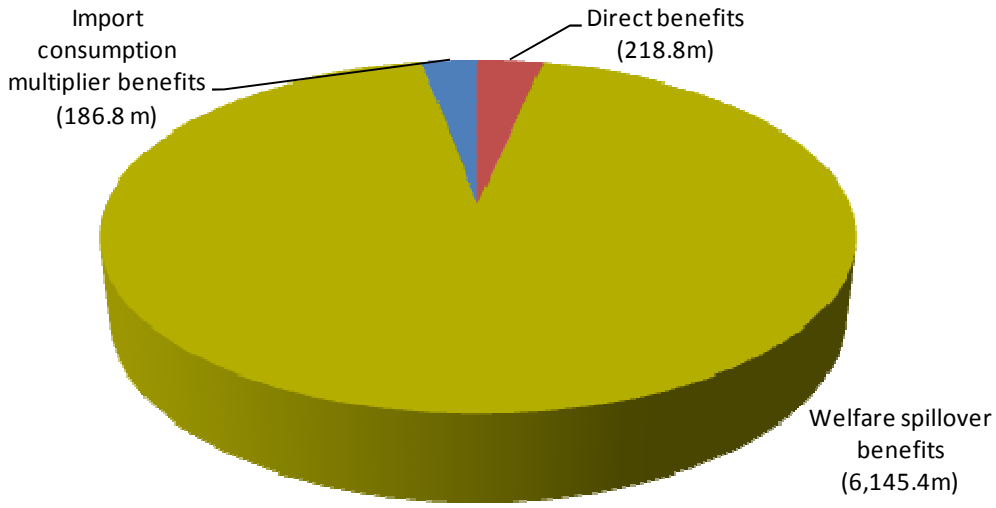
Source: EEIP´s estimates based on MMR data

The total amount for EU-15 benefits stemming from the private consumption multiplier of cohesion funds granted to the Czech companies is estimated to be EUR 186.8 million.

7 Total benefits

The total benefits combines the direct and two types of indirect benefits. The shares of the direct and indirect benefits on total benefits are shown in Figure 30 (based primarily on data provided by MMR supplemented by other sources such as Eurostat and EEIP´s internal databases). **The total volume of benefits stemming to EU-15 countries from the implementation of cohesion policy in the Czech Republic is estimated to be EUR 6.55 billion.**

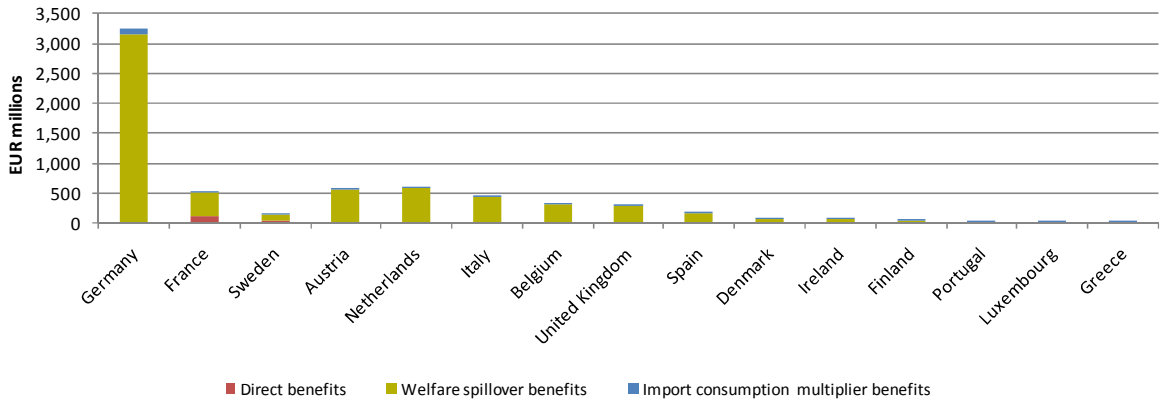
Figure 30: The shares of benefits among the EU-15 countries (100% = total benefits to EU-15 countries)



Source: EEIP based on MMR and other sources

Figure 31 displays the structure of total benefits and shows that the indirect benefits (EUR 6.33 billion) are much larger that direct benefits (EUR 0.22 billion). The reason is that welfare spillover benefits are relatively high thanks to broad openness of Czech economy and to close business relations among the Czech Republic with neighboring EU-15 countries – Germany and Austria. This holds for all countries.

Figure 31: The shares of benefits among the EU-15 countries (100% = total benefits to EU-15 countries)

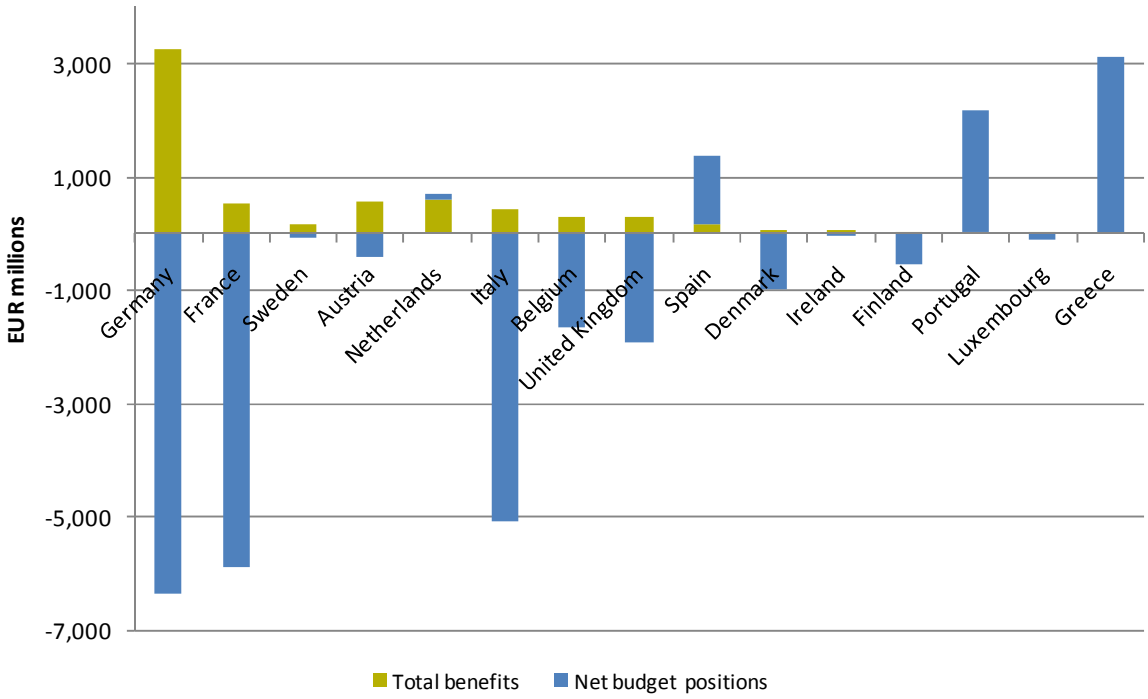


Source: EEIP based on MMR and other sources

7.1 Adjustment for net positions

As an interesting case, we would like to depict how the total benefits to the EU-15 countries compare with their net contribution to the EU budget. We are aware of the fact that such a comparison suffers from few weaknesses (for instance, this comparison lacks of time inconsistency, because the period of 2004-2009 period is considered for the benefits while the 2011 year for the budget position). Despite the shortcomings our analysis shows interesting result: the countries, which pay more to the EU budget, benefit more from the implementation of the cohesion policy in the Czech Republic (Figure 32).

Figure 32: Relationship between total benefits and net contribution to the EU budget of EU-15 countries



Source: EEIP based on European Commission (2010)

8 Conclusion

The objective of the study was to estimate the magnitude of benefits drawn by the EU-15 countries from the implementation of EU cohesion policy in the Czech Republic. The research was based primarily on data provided by MMR supplemented by other sources such as Eurostat and EEIP´s internal databases. We distinguished the benefits as direct and indirect ones. **Direct gains emerged when companies or subsidiaries from EU-15 countries became contractors in projects co-funded with cohesion policy measures**, which were implemented in the Czech Republic. In such case, EU-15 countries directly receive money from the cohesion funds back through the hands of their citizens or companies. In this study, the benefits were estimated to be **EUR 0.22 billion**.

Indirect benefits can be divided into two categories. First, **welfare spillover benefits** occur due to an increased demand of the Czech economy for imported goods and services from EU-15 countries, emerging as spillover effects of cohesion funds spending.

The total welfare spillover benefits to EU-15 countries were estimated to be around **EUR 6.15 billion**. Second, there are **import consumption multiplier benefits** that occur as a consequence of extra spending of Czech consumers on consumer goods and services due to implementation of cohesion policy, of which a substantial part is imported from the EU-15 countries. These multiplier benefits account for almost EUR 0.19 billion. Since these benefits are perceived as past benefits in contrast to welfare spillover benefits considered as future benefits, these benefits do not overlap with each other. **The total benefits drawn by EU-15 countries from implementation of the cohesion funds in the Czech Republic are estimated to amount to EUR 6.56 billion**.

Furthermore, the report presented case studies from the construction sector as well as presented **additional case studies on further benefits for EU-15 countries** that include higher profits

and wages of certain EU 15 companies, as well as additional taxes paid by enterprises and households in their home countries.

9 Data sources

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