

## **ECONOMIC CONSEQUENCES OF EU FUNDS IN THE CZECH REPUBLIC - BONANZA OR MONEY HOLE?**

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### **Abstract**

The Czech Republic gets a chance to draw up to EUR 29.5 bn (almost 3% of average annual GDP) from the EU budget in the period 2007-2013. In relative terms to the nominal GDP, the Czech Republic is CR is the smallest beneficiary of EU cohesion policy among the CEE countries. But in absolute terms, the CR is going to receive the second largest amount of EU funds within CEE region just after Poland with a EUR 83.1bn bulk. EU funds are expected to affect the economy through both demand-side and supply-side channels. Demand-side effects are associated with short-term expenditure multipliers; supply-side gains materialize through the enhancement of production capacity via improved infrastructure, boosting innovation and developing of human capital. While demand-side effects might dominate in the short-term, boosting potential growth is far more important in a longer term perspective. The impact of EU funds might also be diminished by a number of factors. These include the potential crowding-out of public and private investment, an increase in the savings rate in anticipation of just temporary support, and an excessive appreciation of the real exchange rate (via inflation or the nominal exchange rate) that might deteriorate external competitiveness. This paper focuses on these issues and tries to identify the key economic impacts of EU funds on the Czech economy.

**Key words:** EU funds, cohesion and structural funds, crowding-out effects, supply-side and demand-side effects

**JEL Code:** E23, E60, H70.

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### **Introduction - EU funds and their economic importance**

The Czech Republic (CR) gets a chance to draw up to EUR 29.5bn (almost 3% of average annual GDP over 2007-13) from EU budget in the programming period of 2007-13. In relative terms to the nominal GDP, the CR is the smallest beneficiary of EU cohesion policy among CEE countries. But in absolute terms, the CR is going to receive the second largest EU

funds package within CEE region just after Poland with a EUR 83.1bn bulk. Since the most of the EU funds (particularly structural and cohesion funds) are intended to foster real convergence, the richer the country, the smaller the amount of EU transfers is in relation to a country's GDP. The only exception is Hungary where the EU funds might reach roughly 4 % of annual GDP, disproportionately more than other CEE countries.

For the CR 90.5% of EU transfers should come through structural funds (EUR 17.9 bn or 2.5% of average annual GDP): European Regional Development Fund (ERDF) and European Social Fund (ESF), and finally Cohesion Fund (EUR 8.8 bn). The rest is design for agriculture and rural development fund (EUR 2.8bn) and fisheries fund (EUR 27 mio). While in Poland less than 70% of EU budget commitments direct to structural and cohesion funds, in terms of average annual GDP the amount is almost similar: roughly 2.5 %.

If we take a look on the allocation of structural funds we can see distinguished differences. For example, Poland allocates a big portion of the funds (more than one-third) to regional development and in less extent (around 60%) it invests into programs of innovations, competitiveness and convergence. In the CR almost 80% of structural funds (72% of all committed EU funds) are targeted into infrastructure, environment, innovations, competitiveness, convergence and human resources. These numbers sounds favorable for the CR even if we take into account the share of above funds in average annual GDP over 2007-13: 2.2 % in the CR and 1.9% in Poland.

What makes a difference in economic benefits of EU funds is the efficiency not an amount of absorbing EU funds. Initially the CR did very poorly, but the absorptions have sharply improved recently. In the first months of 2010, the drawings almost doubled compared to the entire 2009 year and in mid-2011 32 % of the available EU funds were already allocated. The majority of it falls on transport infrastructure (mainly railways and public roads).

Structural and cohesion funds are supposed to be the EU's main instrument to increase country's growth potential. These funds should support investment in physical infrastructure and human resource development and are in other words design to permanently increase countries' productive potential and speed up real convergence. However, the EU funds are the public funds and as such are expected to play an auxiliary role as provider of better public goods, more suitable infrastructure and as catalyst of any kind of change raising economic potential. They cannot be used extensively for the productive purpose, since it could provoke crowding-out effects. Private capital both domestic and foreign should keep the major role in business development. These macroeconomic consequences of EU transfers in new European

member States including Czech Republic were covered by Rosenberg and Sierhej (2007) or Choueiri et al. (2008). Other authors, such as Pereira (1999) and Puigcerver-Penalver (2007), tried to develop the growth models that would capture the impact of EU funds. While Pereira simulated the effects of EU transfers on investment and economic growth (in Greece, Ireland, Portugal, and Spain) based on endogenous growth models, Puigcerver-Penalver used “structural hybrid” model of growth, where technological process in an economy evolves as a consequence of (i) the exogenous mechanism of technological diffusion across countries (so called catch-up effect), and (ii) an endogenous component representing public policy or expenses that enhance productivity. This paper has an ambition to cover the macroeconomic consequences of EU funds and their policy implications in broader range and review the theoretical hypothesis with the empirical evidence in the Czech Republic.

## **1 EU transfers - Engine of the growth**

The committed amounts of total EU funds are large – ranging from 2.7% of GDP on an annual average for the CR to 4% for Hungary. Of course, expectations regarding their positive effects are correspondingly high especially if one involves also second-round positive effects of EU transfers on long-term economic growth and positive externalities of investment into infrastructure and human capital, or the synergy effect of merged national and international sources of capital. Generally, EU funds are expected to affect the economy through both demand-side and supply-side channels. Demand-side effects are associated with short-term expenditure multipliers; supply-side gains materialize through the enhancement of production capacity via improved infrastructure, boosting innovation and developing of human capital. While demand effects might dominate in the short-term, investment into supply side affects potential growth and takes time to materialize. However, the impact of EU funds might be diminished by a number of factors. These include (1) potential crowding-out of public and private investment that would have taken place without the support, (2) an increase in the savings rate in anticipation of just temporary income support, and (3) an excessive appreciation of the real exchange rate (via inflation or the nominal exchange rate) that might deteriorate external competitiveness of the country. On the other hand, the theory does not ignore indirect - secondary – effects that come from long-term benefits of higher economic growth or positive spillover effects of investments in human resources, infrastructure (such as lower transportation costs, lower accident rates) and possibly synergies from the merger of domestic and foreign capital increasing the quality and profitability of the investment.

According various studies, the EU funds might augment annual GDP growth rate by 0.5 to 2 percentage points (pp) on average over the “spending period” of 2009-15<sup>1</sup>. Some studies rank Hungary and Poland with a gain of around 1pp in annual average GDP growth ahead of the CR with just 0.5 pp gain (see Rosenberg, 2007). Other (European Commission, 2007) estimate a bigger increase for the CR by slightly more than 1pp compared with Hungary, Poland or Slovakia (less than 1 pp). Moreover, according to the Commission’s estimates, more than three-fourth of the expected GDP gains for the CR should come in the form of improvements of supply-side, and increase employment by 7 pp over the spending period. The differences in the results demonstrate the great uncertainties surrounding these estimations that differ in applied methods (model-based simulations or econometric analysis) and underlying assumptions. Model with strong crowding-out effects show small impact of transfers; those including positive externalities show large ones.

The experience of the Czech Republic with EU funds is still short and the absorption of available funds has just recently accelerated. Nevertheless, the short-term demand effects already took place in 2009 (with an estimated impact of a roughly 1 pp of nominal GDP under conditions that the multiplier of EU funds equals 0.6<sup>2</sup>). In 2010, thanks to visibly more intensive drawing of EU funds, the effects are estimated to reach slightly more than 1.5 pp of nominal GDP. It is possible that the Czech economy was able to sustain the 80% of the EU-27 average level in GDP per capita, the highest economic level in the region, in this turbulent period, thanks to the EU transfers. In 2011, the demand effects of EU transfers might again exceed 1 pp of the Czech nominal GDP.

Looking into the future, there are various leakages that might limited the full development of pro-growth effects of EU transfers. First, a high share of structural funds is allocated into costly programs of traffic infrastructure construction with relatively low multiplier effects and likely negative second-round effects on national trade balance. Second, a very high share of EU funds is drawn by public sector, which might lead to a less efficient use of the funds and to crowding out of private and public investments. Third, the acceleration in the spending of EU funds spending might be a source of additional appreciation pressures for the Czech koruna, again with a negative impact on trade balance and economic expansion. Due to a possible combination of these leakages, the growth multipliers of the EU funds for the Czech economy is likely below one, i.e. lower than the European Commission estimated.

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<sup>1</sup> According to “n+2” rule the spending of EU funds might be carried over two-year period.

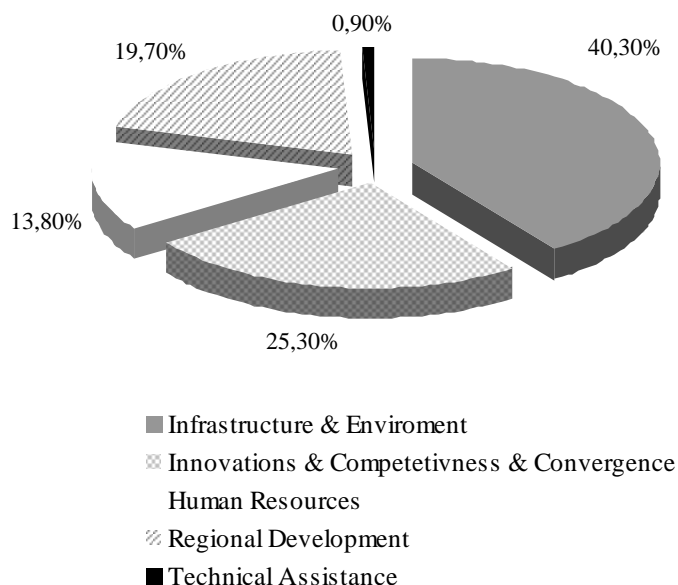
<sup>2</sup> Rosenberg & Sierhej (2007) assumed the multiplier of EU transfers between 0.55-0.66.

**Tab. 1: Effects of EU transfers on GDP and employment in 2015 (percentage gains)**

	GDP gain	Employment gain
	(% above baseline)	
<b>CZ</b>	<b>9,1</b>	<b>7,1</b>
<b>PL</b>	5,4	2,8
<b>HU</b>	5,4	3,7
<b>SK</b>	6,1	4

Source: European Commission (2007) adapted from IMF, April 2010.

**Fig. 1: Structure of EU transfers in the Czech Republic**



Source: NOK-MMR, 2011.

## 2 Fiscal implication

Under EU rules, countries are required to co-finance every project from national sources at least at a rate of 15%. While the EU transfers could end up with either the government or the private sector, the national co-financing is booked as government expenditure. In CR, according to my roughly estimate, the national co-financing of structural and cohesion funds is going to weaken fiscal balances in the period of 2007-13 by EUR 4-5bn (CZK 100-130bn). Annual contribution of public budget should be count in tens billions of Czech koruna over

the programming period. But in the case of the acceleration in the spending of EU funds, demands on government budgets might exceed easily three time amount, i.e. more than CZK 30bn annually. In the ongoing fiscal consolidation, these financial obligations might make the deficit reduction even more painful and costly. And at the same time, co-financing might crowd out public spending elsewhere, thereby affecting the structure of public spending (see below the crowding-out factor). The seriousness of this problem confirms the recent decision of the Ministry of Finance to limit the share of the central government budget on the co-financing of the national projects<sup>3</sup>.

### **3 Do EU funds boost domestic demand?**

According to IMF estimations (2007), the net inflow of all funds involved from EU to the CR (i.e. EU transfers, national co-financing, contribution paid and advances received) could reach roughly 2% of GDP in average between 2007 and 2013, up from 0.1% of GDP in period of 2004-06. But how much might the EU transfers effect the national aggregate demand? The answer is not trivial since the calculation need to take into account many issues such as advance payments with no relation with economic activity, or timing of the payments, or crowding-out of domestic spending etc. To make the issue less complicated, one might assume that the official additionally guidelines on EU transfers are strictly followed. These guidelines require the expenditures financed with structural, pre-accession, rural development funds do not replace domestic spending while other EU transfers (e.g. cohesion and common agriculture policy) could do so. Under such conditions, the crowding-out factor, a measure of substitution between EU transfers and domestic spending, range between 0.55 and 0.65 (the value 1 means there is no substitution). In this case, the EU funds might, according to IMF estimations (2007), generate extra annual spending of 0.5% of GDP on average over the 7-year spending period.

### **4 EU transfers – bonanza for current account**

The EU transfers have already had a visible impact on the Czech balance of payments. While at the early beginning of the budget period, the net inflow of EU funds (inflow minus total transfer to the EU budget) was CZK 9.5bn (or 0.3% of nominal GDP), in 2010 it exceeded CZK 40bn, i.e. 1% of nominal GDP. And if the Czechs accelerate the spending of EU funds

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<sup>3</sup> For more detail see “The rules for securing EU funding from national public sources”, 15th February 201. [http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/eu\\_fondy\\_60561.html](http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/eu_fondy_60561.html).

in coming years, the net inflow of EU funds might exceed 3% of GDP in a single year. Nevertheless, the ultimate impact on the country balance of payments won't be most likely the equivalent of 3% of annual product (GDP) because of the second-round effects, namely the import propensity of EU funded projects and real appreciation pressures. On the other-side, the strong non-debt-creating flows are going to support the external sustainability of the country in the coming years. So, if the foreign direct investment (FDI) inflows were to remain low due to protracted economic weakness in Western Europe, the EU transfers might offset their drop. In such case, the EU transfers would not boost appreciation pressures on the Czech koruna (CZK), but would help the CZK to sustain its moderate long-term appreciation trend. However, taking into account the proven strong pro-growth effects of FDI (see e.g. Neuhaus (2006), Stancik (2009) or Zamplinerova (2007)), the potential compensation of diminishing FDI inflows by EU (public) funds is not desirable, since it might decrease long-term potential growth of the Czech economy. We should rather wish the EU funds to attract new FDI.

### **Conclusion - policy implications or new growth model**

EU accession and the strong FDI inflow into the productive sectors have boosted the Czech economic growth in the period of 2004-2007. In that time the annual net FDI inflow reached 5% of GDP on average. The annual inflow of EU funds is expected to reach 2.7% of GDP. It is clear that the pro-growth effects from EU funds will not be similar to the FDI ones. At the same time, the Czech economy cannot count on a continuation of huge FDI inflows in the future. The old growth model based on foreign investment into factories has already been running out as the global crisis struck. The new growth model should focus on higher value added production, the service sector, human capital and innovation. The EU transfers can support this development, but only partially and if they are used wisely.

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