# THE IMPACT OF STRUCTURAL FUNDS IN CENTRAL AND FASTERN FUROPEAN COUNTRIES.

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Abstract: Structural funds are one of the most used instruments of the European Regional policy to promote regional convergence among the member states of the European Union. Nevertheless, because there are theoretical and empirical differences in literature regarding their capacity to promote economic growth in disadvantaged areas, we want to show the way in which central and eastern-European countries, which are subjects of our study (Bulgaria, Poland, Czech Republic, Hungary, Slovenia, Slovakia and Romania), managed to use the funds made available to them in the 2007-2013 budget through three mechanisms: European Development Fund (ERDF), Cohesion Fund (CF) and the European Social Fund (ESF). This paper's aim is to demonstrate statistically that the funds made available by the European Union were a catalyst for long run economic growth for the central and eastern-European member states.

JEL classification: M41, M42

Keywords: Structural Funds, Central and Eastern European Countries, contracting ratio

#### 1. Introduction

In the process of E.U. development, central and eastern-European countries had to cope with the institutional transition that was supposed to ensure the premise of an economic growth destined to stabilize the gap between these countries and western countries. The 7 central and eastern-European countries subject to our study have adhered to the European Union at different stages and attracted E.U. funds that amount to 174 billion euro which represents 16% of the region's GDP. Our paper aims to analyze this entire period trying to show the ways in which each of these countries managed to sign financing contracts, showing payments made by the European Comission based on data from Eurostat.

#### 2. LITERATURE REVIEW AND EMPIRICAL STUDIES

In spite of the abundence of papers that analyze the mechanisms of structural funds's allocation, the number of papers that aim to measure the real impact of these funds is limited. In a recent study, Dall'erba et al. (2007) indicates that actually only 12 studies examined the way in which structural funds have influenced the development

of central and eastern-European countries. This is surprising, due to the fact that almost a third of the E.U.'s budget is dedicated for cohesion policies, but there are problems regarding the availability of data regarding structural funds. Papers on this subject can be divided in two: those that consider that funds have a positive impact over regional economic growth, and those that consider that they have an insignificant impact or worse, no impact at all. This amiguity regarding the impact of E.U. funds is reinforced by fundamental differences between theoretical growth approaches that stay at the base of empirical studies.

The neoclassical approach claims that capital investments in poor countries lead to short run growth, while the endogenous approach claims that these investments don't have a significant short run impact, and much less in the long run (Aschauer, 1989; Barro, 1990). Among the studies that fiind a positive impact of structural funds on growth are the research papers of Beugelsdijk and Eijffinger (2005). They've found that structural funds have had a significant impact on the economy of the countries that contracted these funds and raised the problem of the regionalization effect in the distribution of funds. This problem was developed earlier by Ederveen et al. (2002), who assumed that some regions should not benefit from structural funds because governments are not using the funds efficiently due to the generalized corruption they face, thus proving the lack of a positive effect of using structural funds.

The results of Garcia-Solanes and Maria Dolores (2001) totally support the allocation of structural funds according to the size of the region or country, emphasizing a significant positive impact of these funds over growth. An observation in favour of a negative impact over growth is found in the study made by Fagerberg and Verspagen (2007), which analyzes the way in which the European Fund for Regional Development is used. This finding is similar to Dall'erba and Gallo's papers (2007;2008) which measure the impact of the structural funds on growth. They have adopted an approach based on the observation that the level of regional growth (Le Gallo and Ertur, 2003; Gallo and Dall'erba, 2006) and the allocation of funds (Dall'erba 2005) are correlated according to regions. Their 2008 study concluded that the implementation of funds according to regions has a negative impact.

Still, some of the funds have a significant impact but a lower impact in peripheral regions. The same conclusion was obtained for the total cost of community projects (which combine funds allocated by the Commission and the supplementary aid from the regional or internal market). An interesting approach on the influence of structural funds is found in a study by Fayolle and Lecuyer (2000). They have reached the conclusion that developed countries benefit the most from structural funds. By analyzing the papers published on this topic we aim to show in this paper the positive effects generated by the absorbtion of structural funds by the CEE countries in 2007-2013, together with the difficulties faced by them and their objectives for 2014-2020.

In order to understand the way in which structural funds work we will present their functioning principles as shown by the literature on this topic (Gherghinescu, O., Rinderu, P., Neagoe-Bacanu, D. 2008):

- The concentration of measures on the priority objectives for development
- Programming, which results in multi-annual development programmes, the result of a process leading to a decision taken thorough partnership. The process has a number of stages. The adopted measures then become the responsibility of the managing authority.
- Partnership, which implies the closest possible co-operation between the Commission and the appropriate authorities at national, regional or local level in each Member State from the preparatory stage to the implementation of measures.
- Additionality, which means that Community assistance, complements the contributions of the Member States rather than reducing them. Except for special reasons, the Member States must maintain public spending on each Objective at no less than the level reached in the preceding period.

## 3. THE RESULTS AND PROGRESS RECORDED BY CENTRAL AND EASTERN EUROPEAN COUNTRIES

In this paper, starting from data obtained from Eurostat regarding the available budgets for each of the analyzed countries, we will show the number of signed contracts, the payments made by the European Commission for each country together with the absorbtion rate recorded between 2007-2013. Our analysis will highlight the way in which central and eastern-European countries managed to attract structural funds in order to reduce the economic delay between them and the western democracies.

Table 1: BULGARIA- European funds Progress Report 2007-2013

Available budget(EUR billion)	6.67
Contracted grants(EUR billion)	7.46
Contracting ratio	112%
Paid grants(EUR billion)	3.62
Payment ratio	54%
Certification(EUR billion)	3.26(49%)

Source: EUROSTAT data, 2013

In the 2007-2013 period Bulgaria's main programming document, the National Strategic Reference Framework (NSRF), included seven OPs with a EUR 6.67 billion contribution from EU Structural and Cohesion Funds (CSF). The seven programmes addressed the country priorities and challenges of socio-economic development, targeted at reducing the differences with other EU countries and overcoming the negative effects of the global financial and economic crisis. SCF contribution mainly addresses public and private physical and human capital. By the end of 2013 Bulgaria

had contracted 112% and paid 54% of the total budget allocated for the 2007-2013 period.

Overall, there is a tendency of accelerated absorption and project prioritisation in order to increase potential growth. Continuous support is provided in the area of strengthening the administrative capacity of the managing, certifying and audit authorities, and further steps have been planned to prevent significant loss of funds.

Recently, Bulgaria has made much effort to increase the absorption rate. Specifically, significant improvements have been achieved in terms of faster verification and payment processes, simplification of procurement rules, preparation of major infrastructure projects, introduction of electronic submission of applications and reporting through the EU Funds information portal, as well as use of innovative financial instruments. At the beginning of the 2007-2013 programming period, the financial management and control systems of the SCF were not operating effectively enough. Administrative staff and beneficiaries needed to go through the learning and developing phases of the process. Many of the initial problems have been overcome, but there are still challenges related to the programming and design of aid schemes, further simplification of procedures, clear rules and implementation of financial corrections, and better prioritisation based on cost-benefit analysis.

In the next programming period, 2014-2020, there should be a greater focus on better strategic planning, retention of expert staff in management and control systems, and simpler rules and procedures. More funding should be secured for major infrastructure projects and there should be more use of EU funds in the areas of e-Government and e-justice, R&D and innovation, education, health and social care.

Table 2: Czech Republic- European funds Progress Report 2007-2013

Available budget(EUR billion)	26.30
Contracted grants(EUR billion)	24.17
Contracting ratio	92%
Paid grants(EUR billion)	16.85
Payment ratio	64%
Certification(EUR billion)	12.61 (48%)

Source: EUROSTAT data, 2013

In the 2007-2013 period the defined priorities and goals of the Czech Republic are set out in the National Strategic Reference Framework 2007-2013. The Convergence Objective is implemented through eight thematic operational programmes with a total allocation of EUR 21.23 billion and seven regional operational programmes with a total allocated amount of EUR 4.66 billion. Individual Operational Programmes show significant differences regarding the amounts of financial support already paid to the beneficiaries. By the end of 2013 the Transport Operational Programme had reached an outstanding payment ratio of 80.6%. Also, the

regional Operational Programmes have retained a high payment ratio ranging 66 – 80.4% for the entire programme period. The worst payment ratio was shown by the OP Environment at 44% followed by OP Technical Assistance (45.4%) and Integrated Operational Programme (47.4%).

Although the programming period 2007-2013 has finished, there is still a considerable proportion of the allocation that has not yet been contracted. The current government endeavours to face up to this situation. The current trend in the Czech Republic is the improvement of effectiveness and transparency of the implementation and audit systems. These improvements should be reflected in the implementation structure for the upcoming programming period. Important improvements during this programming period 2007-2013 were the restructuring of the audit system and an increase in the efficiency of the implementation system, as well as the way in which the Czech Republic was able to deal with the difficulties caused by the suspension of payments and the subsequent effort it put into their renewal.

During this programming period the Czech Republic has faced several problems and challenges that complicated implementation of EU Funds. One of the complications was an absence of measures regulating the stability of the employees of the implementation structure that affected public administration personnel fluctuation, especially in the beginning of the programming period. Other issues included shortcomings and a lack of transparency in the area of public procurement which led to the suspension of payments in some cases. A complicated implementation system and difficult administrative procedures were other causes for slower implementation of EU funds.

For the programming period 2014-2020 there are fewer operational programmes, simplified procedures and unified methodologies for all programmes in order to achieve higher efficiency and transparency. The total budget of EUR 21.6 billion is allocated for eight operational programmes, supported from three EU Funds corresponding to the subsidised areas (ERDF, ESF, CF). A major change regarding operational programmes is the integration of seven regional operational programmes into one Integrated Regional Operational Programme (IROP).

Table 3: Hungary - European funds Progress Report 2007-2013

Available budget(EUR billion)	24.92
Contracted grants(EUR billion)	26.52
Contracting ratio	106%
Paid grants(EUR billion)	15.55
Payment ratio	62%

Source: EUROSTAT data, 2013

In the 2007-2013 programming period the use of the Structural Funds (ERDF, ESF, CF) in Hungary was outlined by the National Strategic Reference Framework "New Hungary Development Plan", whose focus was partly shifted in 2010 by the

"New Széchenyi Plan". These plans covered 15 operational programmes: seven sectoral, six regional, one Objective 2 and one technical assistance OP. The plans involved EUR 24.92 billion in community co-financing, and, accordingly the available EU-funding per capita figure amounted to approx. EUR 2,500. For the period 2014-2020 the overall available amount will decrease slightly, to EUR 21.49 billion. By the end of 2012, in respect to the Structural Funds, Hungary reached EUR 20.5 billion in contracted grants, amounting to an 82% contracting ratio; this was accompanied by a payment ratio of 42%. Following a government commitment to withdraw as much of the available EU funding as possible, intense efforts were mobilised in 2013: by the end of the year contracted grants reached EUR 26.5 billion, meaning a 106% contracting ratio (a 24% increase within one year).

The payment ratio reached 62%. For the use of the EARDF funding Hungary launched in 2007 the "New Hungarian Rural Development Plan" with EUR 3.9 billion of available EU funding. The plan showed significant progress in recent years, with the payment ratio reaching an outstanding 88.5%.

Although the overall EFF funding for the period is much smaller, its EUR 34.84 million in community funding enabled the Hungarian fisheries industry to achieve significant developments. In 7 years of implementation, altogether EUR 26.52 billion in grants have been contracted from the Structural Funds, which means that the beneficiaries have signed contracts for more than 100% of the total available budget. In 7 years of implementation, altogether EUR 26.52 billion in grants have been contracted from the Structural Funds, which means that the beneficiaries have signed contracts for more than 100% of the total available budget.

The 2007-2013 period started off well, with respectable contracting ratios reached for the funds by 2009 (including 38.7% for ERDF and 42.1% for CF), however, the progress slowed down in 2010 and 2011. From 2012 on, contracting and payment accelerated again, but still, by the end of 2012, a considerable gap between the contracting ratio and the payment ratio was experienced (78% and 40%, respectively). To minimise the risk of low absorption contracting was accelerated in 2013 and for the two largest funds overcommitment was reached (104.1% contracting ratio for ERDF, 114.9% for CF). As the payment ratio for the Structural Funds is still 55-68%, implementation faces further challenges for the programme closing years of 2014 and 2015. (http://ec.europa.eu/eurostat)

Hungary managed to contract more than 100% of the resources coming from the largest funds, and if it can keep up the payment rate experienced in 2013, it should be able to withdraw most of the available funding by the closing settlements at the end of 2015. The largest gap between the contracted and paid amounts is exhibited in the Transport OP (ERDF and CF), which has a 126% contracting ratio accompanied by an only 60% payment ratio. This can be bridged until programme closing as the OP mainly includes large projects; however, this also bears challenges for the institutional system and risks for absorption. A similar gap is found within the Environment and Energy OP, which has a 106% contracting ratio and a 48% payment ratio – the latter even below the Transport OP's figure. The Social

Renewal and Social Infrastructure OPs also had rather low payment ratios (61% and 53%, respectively) by the end of 2013.

As in the case of all funding periods, Hungary learned several lessons in the 2007-2013 period. The implementation of the funds experienced setbacks; however, the process was able to accelerate in the later years and it is hoped to keep up this pace until programme closing. Thus it is clear that focus has to be put on programme implementation (both contracting and absorption) from the very early stages on, otherwise, when nearing the end, the institutional system will face immense challenges: there is a good chance for not having enough time and resources for thorough planning and appropriate allocation of the funding. In addition, a programme closing, which requires additional focus from the institutional system, draws away resources from the programming process of the upcoming, new programme period, for which it is key to build on the lessons learned from past programme implementation.

Table 4: POLAND- European funds Progress Report 2007-2013

Available budget(EUR billion)	67.19
Contracted grants(EUR billion)	63.75
Contracting ratio	95%
Paid grants(EUR billion)	42.92
Payment ratio	64%
Certification(EUR billion)	42.59 (63%)

Source: EUROSTAT data, 2013

In 2007-2013 period, Poland's main programming document, the National Strategic Reference Framework (NSRF) covered 21 operational programmes . These OPs were established on the basis of three main Structural Funds which exist at the EU level: the European Regional Development Fund, the Cohesion Fund and the European Social Fund. The EU funds available for the framework programme are the equivalent of EUR 67.19 billion, which is the biggest amount for development among the CEE countries. In the 2007-2013 financial budgeting period, the vast majority of EU funds in Poland were spent on infrastructure. Whether they be roads, rail, airports, sewage water treatments plans, improvement of hospital buildings or the development of city biking routes, all such investments aim at bringing the quality of life in Poland up to Western standards.

The EU funds have been a useful instrument to reduce the impact of the economic crisis. Well invested European funds have also had a positive effect on GDP growth in Poland and increased the competitiveness of the Polish economy. EU funds have helped in the development of entrepreneurship and creation of new workplaces. Additionally, more and more people have gained better access to modern roads and broadband Internet access.

Looking back to 2007, the challenge is how to improve the system of distribution of EU funds, so they can be contracted and paid in a more equalised way. Contracting and spending EU funds is an important element of the national economy, hence it impacts the GDP of Poland. More equalised contracting and spending will impact more than just the economic data, especially in long-term infrastructure projects.

Prolonged project preparation phases lead to peaks in contracting and spending that may result in a low quality of delivery of some projects and increased their risks. In planning the programming period 2014-2020, it would be wise to analyse and discuss the portion of the investment going into infrastructure and its future costs of operations and long-term economic impact, versus R&D and ITC investments – in people, technologies and research. The real competitive advantage for Poland may lie in the area of developing new skills for the younger generations, to became also a knowledge outsourcing centre, as well as a low-cost production hub. The precedent of numerous automakers moving production to Poland might spur thoughts on what the country can do to attract development facilities for engines, suspension systems, future fuels or social attitudes on safe driving into Poland.

Table 5: Romania- European funds Progress Report 2007-2013

Available budget(EUR billion)	19.18
Contracted grants(EUR billion)	17.99
Contracting ratio	94%
Paid grants(EUR billion)	7.03
Payment ratio	37%
Certification(EUR billion)	5.09 (27%)

Source: EUROSTAT data, 2013

Since joining the EU in 2007, Romania has had access to Structural Funds (ERDF and ESF), Cohesion Funds of around EUR 33.5 billion in total. In 2013, Romania reached an absorption level of EU funds of about 34%, with reimbursements in the same year of EUR 2.88 billion from the European Commission. In comparison, during the entire 2007-2012 period, only EUR 2.2 billion were drawn. While 2013 saw a significant improvement in the absorption rate of EU funds, Romania is still behind other EU member states in the overall "absorption rate" picture, despite exhibiting positive trends to recover the gap during the period 2007-2013. (http://ec.europa.eu/eurostat)

By end of 2013, the main challenges faced by the responsible public authorities on EU Funds absorption and implementation were:

• Major delays on evaluation of financial/reimbursement applications due to lack of resources within MAs/IBs;

- Lack of project management skills with EU funds beneficiaries, which led to numerous financial corrections of a high percentage (in many cases 25%) during the projects' implementation phase;
- Long and cumbersome public procurement procedures, applied even for private sector beneficiaries which led in many cases to significant delays in the project implementation cycle;
- Challenges regarding projects' viability and efficiency, due to the low capacity of beneficiaries to elaborate projects and business plans.

As main benchmarks for preparing the ground for the next programming period, a Partnership Agreement was officially submitted to the EC at the end of March 2014 after addressing two rounds of comments from the Commission representatives, while the Operational Programmes are under elaboration or public consultation with interested stakeholders. It is important for the next programming period to reflect the lessons learned from the first period, and to include: Better design of EU funds implementation mechanisms and procedures within the forthcoming Operational Programmes; Better use of technical assistance funds by recommending the responsible authorities outsource the most cumbersome assistance support services; Improve public procurement procedures; Focus on strategic national/regional projects by promoting an integrated approach for projects design and implementation among responsible local and central public authorities.

Table 6 : Slovakia- European funds Progress Report 2007-2013

Available budget(EUR billion)	11.65
Contracted grants(EUR billion)	11.39
Contracting ratio	98%
Paid grants(EUR billion)	6.12
Payment ratio	53%
Certification(EUR billion)	4.93 (42%)

Source: EUROSTAT data, 2013

Slovakia is implementing EU funds through various programmes. Priorities of the National Strategic Reference Framework (NSRF) are implemented through 11 operational programmes. The beginning of the programming period 2007-2013 was marked by delayed management and control mechanism settings for each operational programme. The low rate of contracting and withdrawal in the initial years for some operational programmes became an urgent issue. Slovak implementing bodies took crucial measures to improve the state of

implementation. Several revisions of operational programmes as well as transfer of funds to areas more attractive for the beneficiaries assisted in this improvement. EU funds have been a useful instrument to reduce the impact of the economic crisis, to slow growth of unemployment and to secure contracts, especially

for domestic suppliers. One of the major successes was the partial modernisation of infrastructure in the area of education, social services, culture, non-commercial rescue services and other civil infrastructure in towns and municipalities, creating the necessary precondition for increasing benefits to citizens and entrepreneurs from services linked to supported infrastructure as well as the implementation of a number of "major projects" whose total cost exceeds EUR 50 million, which could not have been achieved without the support of the EU.

Factors which delay implementation include repeated deficiencies associated with the public procurement, its realisation by the beneficiaries, changes to the Public Procurement Act and insufficient verification of public procurement processes by the managing authorities. Based on the problems identified with implementation, several recommendations/measures have been received by the responsible Slovak authorities. One of these was drawing up action plans to accelerate fund absorption, which clearly sets out the tasks, responsible bodies and deadlines necessary to make progress in the implementation. One of the main challenges is the transfer of best practice, know-how and lessons learned from the programming period 2007-2013 to the 2014-2020 period and ensuring the implementation of ongoing projects in parallel with project development of the programming period 2014-2020. (http://ec.europa.eu/eurostat)

The Slovak Republic is taking steps to increase the transparency of fund management, process simplification, such as simplified submission and evaluation of project applications, and smooth preparation and implementation of projects with reduced administrative burden for applicants. Strict rules need to be set on controls and audits while ensuring that these procedures are adequate and do not pose an unnecessary burden. In planning the programming period 2014-2020, Slovakia must respect the recommendations of the European Commission as outlined in a position paper for the development of a partnership agreement and future operational programmes, as well as according to experiences and lessons learned from the previous programming period. As a result, Slovakia has reduced the number of operational programmes compared to the previous programming period.

The main funding priorities of the Slovak Republic in the programming period 2014-2020 are the promotion of science and innovation, and their interconnection, investment in infrastructure, the promotion of human resources, the fight against unemployment, education and inclusion of marginalised communities, public administration reform, and investment in environmental protection, including antiflood measures and investment in the region (for municipalities, cities and other relevant partners).

Table 7 : Slovenia- European funds Progress Report 2007-2013

Available budget(EUR billion)	4.1
Contracted grants(EUR billion)	3.8
Contracting ratio	93%
Paid grants(EUR billion)	2.6

Payment ratio	62%
Certification(EUR billion)	2.4 (59%)

Source: EUROSTAT data, 2013

System implementation of EU funds policy in Slovenia was set up so that the payment from the state budget is first disbursed from national resources, which are only subsequently repaid through dedicated sub-accounts on which receive funds from the EU budget On the basis of a decision taken by the government of the Republic of Slovenia, the managing authority adopted a measure on so-called additional entitlement spending with which they allocated more resources than were available with entitlement spending under the applicable operational programme. This decision, based on the possibility of the realisation of projects or cancellation of some projects, enables that EU funds be absorbed at a rate of 100%.

The Government has also decided that for the implementation of the cohesion policy it needs to ensure establishment of autonomous government agencies. Due to the specificity of tasks in the field of European funds policy and the clear view between the participants, and to avoid conflicts of interest, a special government department as the managing authority for the implementation of cohesion policy will be established. In this way Slovenia is improving the conditions for absorption of EU funds.

A system of implementation of EU funds policy has been in place in Slovenia which embodies many authorities at various levels. Difficulties in implementation are exhibited by the multiple changes of responsible persons and the changing structure of system and implementation procedures. In Slovenia these phenomena apply to the implementation of EU funds policy in addition to European regulations as well as numerous Slovenian regulations, both for the general funds of the state budget as well as specific European funds. These regulations are not always mutually consistent; the same types of tasks are determined by various procedures and use a variety of terminologies. Staff involved in the implementation of the EU funds policy, therefore, have encountered many problems, and it is not always clear which procedures should be used.

One of the key problems in the implementation of EU funds policy is the Information System ISARR. Data supplied from this system (from the managing authority) are inadequate and in some cases inaccurate.

The number of payments in the years 2014 and 2015 must further increase. In the year 2013 Slovenia recorded the maximum payout thus far. In the years 2014 and 2015 the payments from the EU budget need to increase by 60%. In view of this it will be necessary to monitor this closely and react quickly in case of a lag in the monthly dynamics. (http://ec.europa.eu/eurostat)

### 4. CONCLUSIONS

Through this paper we have established the positive impact that european funds have had over the central and eastern-European countries, at least in the analyzed period (2007-2013), an impact that is found in the development of human capital, the development of infrastructure and the improvement in the legislation gaps from the field of public purchases. Together with the positive aspects of structural funds we must highlight the problems faced by some CEE countries while attracting these funds; the lack of authorized personell in the state structures meant to ensure a high absorbtion compared to the given budget on different operational programs, the contradictions between the internal and european legislation and corruption.

However, this paper has some limitations determined by the lack of a percentage to show the real contribution of these funds to the economic growth registered by central and eastern-European countries.

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