# The Role of EU Cohesion Policy in the Catching-Up Process of the New Member States between 2007 and 2013: A Case Study for Hungary

-Research project-

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Introd	duction		3		
1.	1. Economic Transition in Hungary				
	1.1 Struct	tural Changes	6		
	1.2 Regio	onal Developments in Hungary	9		
2.	The Nev	W Hungary Development Plan and Structural Policy between	en		
	2007 and	d 2013	12		
3.	Evaluati	on of Structural Policy	19		
	3.1 Exam	ination of Thematic Operational Programmes	19		
	3.1.1	Economic Development Operational Programme (EDOP)	19		
	3.1.2	Transport Operational Programme	20		
	3.1.3	Social Infrastructure Operational Programme	21		
	3.1.4	Electronic Administration Operational Programme	22		
	3.1.5	Implementation Operational Programme	22		
	3.1.6	State Reform Operational Programme	23		
	3.1.7	Social Renewal Operational Programme	23		
	3.2 Ex-an	te evaluation of Regional Operational Programmes	25		
	3.2.1	South Great Plain Operational Programme	25		
	3.2.2	South Transdanubia Operational Programme	25		
	3.2.3	North Great Plain Regional Operational Programme	26		
	3.2.4	North Hungary Operational Programme	27		
	3.2.5	Central Transdanubian Operational Programme	28		
	3.2.6	West Pannon Operational Programme	29		
	3.2.7	Central Hungary Operational Programme	30		
	3.3 Priori	ties and growth effects	31		
	3.4 Evalu	ation of the SP by our method	33		
4.	Other A	nalysis of the Development Policy	37		
	4.1 HERN	MIN-Model	37		
	4.2 The C	GMR-Model	39		
5.	Experier	nces on the Implementation until Now	43		
	5.1 Diffic	culties in the Implementation	45		
6.	Conclusi	ion	48		
7	Anney		51		

#### **GLOSSARY**

ARDOP - Agrarian and Rural Development Operational Programme

CHOP – Central Hungary Operational Programme

CSF – Community Support Framework

CTOP - Central Transdanubia Operational Programme

ECOP - Economic Competitiveness Operational Programme

EDOP – Economic Development Operational Programme

EEOP- Environment and Energy Operational Programme

EPAOP – Electronic Public Administration Operational Programme

EPIOP – Environmental Protection and Infrastructure Operational Programme

GA – Governing Authority

HRDOP - Human Resources Development Operational Programme

IB – Intermediate Body

IOP – Implementation Operational Programme

NDP – National Development Plan

NDA – National Development Agency

NHDP – New Hungary Development Plan

NSRF - National Strategic Reference Framework

OP – Operational Programme

OPPCC - Operational Programme Planning Coordination Committee

NGPOP- North Great Plain Operational Programme

NHOP – North Hungary Operational Programme

RDOP- Regional Development Operational Programme

ROP – Regional Operational Programmes

SGPOP – South Great Plain Operational Programme

SROP – Social Renewal Operational Programme

SIOP – Social Infrastructure Operational Programme

SROP- State Reform Operational Programme

STOP – South Transdanubia Operational Programme

TA – Technical Assistance

TOP - Transport Operational Programme

WPOP – West Pannon Operational Programme

# 1. Introduction

In our study, we would like to give an evaluation of the second Hungarian National Development Plan, the (NHDP), with a focus put on the contribution of the NHDP to the catching-up process of Hungary to the European Union.

In *the first chapter*, we give a brief overview of the Hungarian transition in the period 1990 to 2004, the year of EU accession, to see, how the country's economy was changed, and which factors of growth had the most important role in this period. The *second chapter* presents the NHDP and its main objectives, the priority axes of the development programme, and the financial sources available for its implementation. In the *third chapter* we begin the evaluation of the NHDP by a detailed ex-ante evaluation of the Operational Programmes followed by a more focused analysis of the OP priorities and measures, how far they support the economic growth needed for a real convergence to the more advanced EU member countries. To do this, we apply a calculation method developed by Erdődi (2008) in order to compare the different OPs. The *fourth chapter* provides a short insight in some other models assessing the growth impacts of the Hungarian development plan. In the *fifth chapter* we present up-to-date data on the implementation of the Programme, and try to reveal some difficulties related to the implementation of the development policy.

The study was finished in January 2009, midst of the deepest economic crisis hitting the world and Europe since the 1950's. Although it is quite obvious right now, that several of the projections on the economic growth and convergence of Hungary stated in the models we mentioned will not be fulfilled, we have neither the capacity, nor the intension to modify or correct these model results.

# 2. Economic Transition in Hungary

The Hungarian model of transition was characterized by a political and economic opening that started already in the late 1980's, earlier than in other countries in the region except Poland. The early opening gave the country a relatively better position in the transition process related to other eastern block countries, the transformation of the monolithic and extremely centralized economic system was under way.

In the 1990-93 periods Hungary's economic activity shrank by a cumulative 19% compared to the level seen in 1989. This phenomenon can be explained by several factors. The liberalization of prices and trade in connection with the collapse of the COMECON system resulted in a major shock for companies. The structural change in the composition of output led to a sudden decrease in the weight of some economic branches: mainly mining and heavy industry. There was a chronic shortage of domestic capital to finance the necessary upgrading of techniques and to provide economic actors with fresh capital to start-up new businesses. These developments drove unemployment rate from 1.4% at the end of 1990 to 12.3% in 1992.

Foreign investors and debt-holders lost confidence regarding the unfavourable trends in the macroeconomic data in 1993-94, which made the conditions worse at which Hungary could have renewed its debt. The country had to face the possibility of a debt crisis – international investors ranked Hungary on the first place for the next debt crisis following the Mexican crisis. These conditions made it inevitable for Hungarian government to come up with radical fiscal and monetary measures.

Partly due to these measures, in the period from 1995 to 2005 Hungary's position improved substantially in European comparison, the country began its catching up process to the more developed countries of the EU (see Table 1).

Table 1

GDP per capita in purchasing power parity (EU25=100)

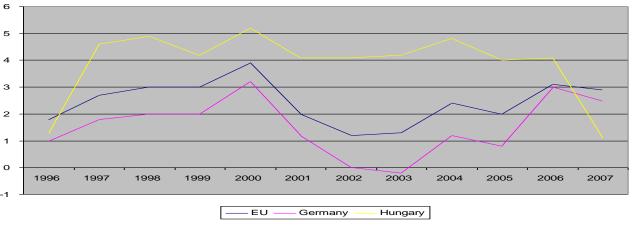
	1995	2000	2005
Czech Republic	70	64	73
Hungary	49	53	62
Poland	41	46	48
Slovakia	44	48	54
Slovenia	68	73	79

Source: Eurostat

At the end of 2000 the government accepted the so-called two-year budget plans for 2001-02, which on one hand was composed of measures significantly boosting household incomes (100% hike in minimum wage, significant increase in the wages of civil servants, higher welfare expenditures) and on the other hand enabled the government with an opportunity for more discretionary spending. This policy became even more intensified during the 2002 elections when both the incoming and the outgoing government spent even more money on pumping up households' income (50% wage hike for public employees, several additional increases of pensions).

Figure 1

Real GDP growth in EU-27, Germany and Hungary, 1996-2007, %



Source: Eurostat

The effect of higher wage costs caused problems in the competitiveness of private companies. In the period 2004–2005, as a result of extensive motorway construction,

education reform and other large-scale state development programmes, the level of public development expenditure became even higher.

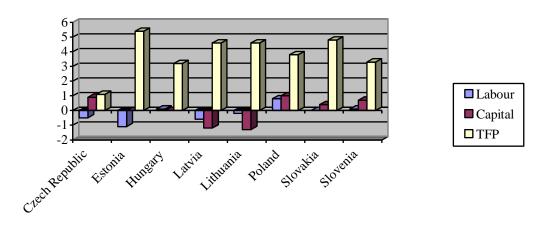
The situation of the Hungarian public finances has been a matter of serious concern since Hungary joined the EU in 2004, but it has worsened extremely by 2006. Due to general and local elections, the deficit in 2006 peaked at 10.1%, the highest rate in Europe. A tremendous adjustment – over 6 percentage points – was to be achieved in 2007 and 2008. The debt-to-GDP ratio rose to 72.3% in 2008, well above the 60% reference value, and is expected to grow further in 2009.

#### 2.1 Structural Changes

As Gács and Halpern presented in their study(Gács – Halpern, 2006), in the second half of the 1990's, the growth of transition countries (and especially that of Hungary) was due mainly to the increase of Total Factor Productivity (TFP), while the role of capital and labour was less significant in this period. The reasons behind the phenomenon were the institutional changes required during the transition period, accompanied with the indispensable modernization of the stock capital, the better allocation of resources, and the increasing economies of scale in the business sector.

Figure 2

The contribution of labour, capital and TFP to GDP growth in NMCs, 1995-1999, annual average growth rate (%)

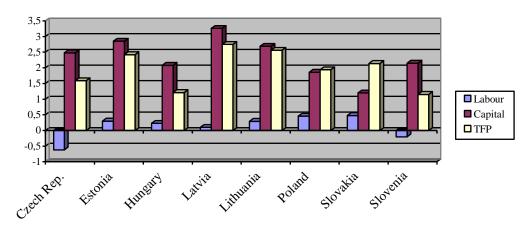


Source: Gács-Halpern (2006)

After the Millennium, however, the composition of factors behind growth has changed substantially. Looking at the situation in the new Member States, data on sources of growth show that economic convergence has been driven more by investment (and to a lesser by TFP), while underutilisation of labour has acted as a brake. A scenario of the EC<sup>1</sup> for 2006 to 2010, based on a broad continuation of recent experience, shows that the contributions of capital and TFP may be expected to moderate somewhat in the future, while labour is likely to make a positive, though limited, contribution to growth. However, these projected growth rates are below 5 %, except for the Baltic countries, representing only limited progress in catching up to the EU average.

Figure 3

The contribution of labour, capital and TFP to GDP growth in NMCs, 2006-2010, annual average growth rate (%)



Source: Gács-Halpern (2006), based on EC projections

#### Foreign investment

Due to a radical privatization process the share of state owned enterprises decreased from over 80% in the late 1980's to 20% by 2000. The inflow of foreign capital in the country helped in the restructuring of the economic system. Between 1990 and 2004 the 47 billion euros was invested, mainly in sectors like machinery, commerce, telecommunication, logistics, tourism, real estate and finance. At the beginning, FDI was concentrated in low value-added sectors, but labour-intensive production soon fell back, while several companies (GE, Ericson, Nokia, Knorr-Bremse, Audi, and Sanofi-Aventis) brought its R&D departments

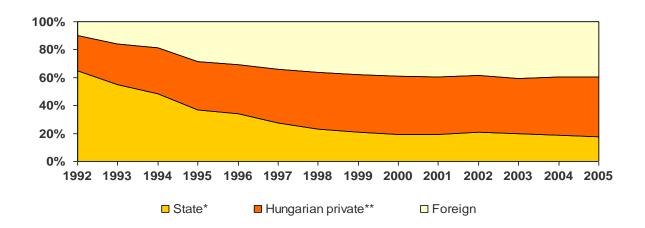
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<sup>&</sup>lt;sup>1</sup> European Commission (2004): The EU Economy. 2004 Review, Luxembourg, p.

to Hungary. The share of R&D expenditures in GDP is still around 1%, however, well under the EU-average, and even farther from the Lisbon-targets.

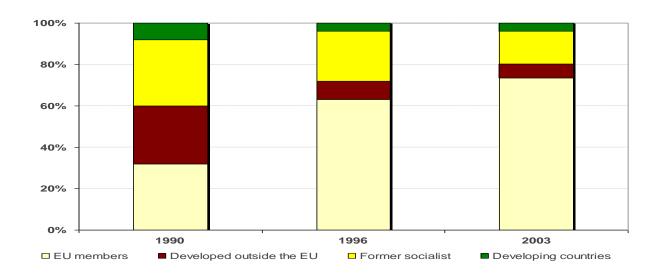
Figure 4

Ownership of the capital in enterprises, 1992-2005



The dynamic export activity of foreign owned companies became the engine of the Hungarian economy in the past 15 years, the volume of export rose 4.5 times, faster than in any other Visegrad-countries. The destination of export shifted rapidly towards EU countries, their share exceeded the 75% by the EU-accession of Hungary.

Figure 5
Structure of export by destination, 1990-2003



The transformation of the Hungarian agriculture was marked by radical shift in land ownership, which resulted in an undesirably fragmented land structure with numerous dwarf holdings, several large-scale farms, and totally lacking medium sized family farms. Foreign capital was not allowed to own land in Hungary.

### **Employment**

The unemployment rate remained relatively low (around 6-7%during the early 2000's), especially compared to under transition countries like Poland, Slovakia or the Baltic states. At the same time, the employment rate is one of the lowest in Europe. Both rates are due to the fact, that almost 1.5 million people left the labour market in the early 1990's by escaping to pension, to the household (mainly women) and a very large percentage having turned into self-employed - so called "forced entrepreneur" - from being unemployed. A considerable restructuring took place in the Hungarian society in this period. While in the late eighties three-quarter of the population lived in households headed by active earners and only one quarter in households with inactive earner as head, in 1995 the latter proportion increased to 43% and among them almost 8% lived in households with unemployed head. The composition of incomes by sources also changed significantly. The share of social benefits in cash increased, incomes from entrepreneurship and self-employment more than doubled amounting to nearly 13% of national income in 1995, while the share of incomes from agriculture decreased from 17 to 8%.

#### 2.2 Regional Developments in Hungary

Considering the regional tendencies in the country in the last one and a half decade, it is Budapest and the Western regions bordering Austria that were able to benefit from the transition process and the relocation of manufacturing activity and investment: bulk of the new companies and of the foreign investments and relatively low unemployment rates can be found in these areas. It is not a surprise, however: these regions are characterised by good infrastructure links (e.g. the M1 motorway), dynamically growing private sector activity and by a great number of international joint ventures which act as connections to international networks.

Figure 6

NUTS2 regions in Hungary



There is a difference of sectors in the composition of new activities, while Budapest has attracted basically tertiary activities (mainly financial services), the West and Central Transdanubian region have become centres of industrial mass-production

Table 2

GDP in Regions

	Share in GDP %		GDP per capita in % of GDP in % of		GDP in % of
			country average		EU-27
	1994	2006	1994	2006	2006
Western Transdanubia	10,0	10,0	101	100	62,9
Central Transdanubia	9,3	10,0	86	91	57,2
Central Hungary	41,6	47,2	146	166	104,4
of which Budapest	34,5	37,3	180	221	139,0
Northern Hungary	8,7	8,0	70	64	40,2
Northern Plain	11,0	9,6	74	63	39,6
Southern Plain	11,2	8,8	83	66	41,5
Southern Transdanubia	8,2	6,5	84	68	42,8
Total	100,0	100,0	100	100	62,9

Source: KSH

In the North Hungary region, the declining heavy industrial activity presented serious difficulties. The privatisation process in the areas dependent on heavy industry started late or didn't start at all, and consisted essentially of investors picking out the (very few) big companies that were viable.

Meanwhile, the Eastern and Southern regions of the country, dominated by rural and "old" industrial activities have suffered from the closure of outdated, inefficient firms and from the deteriorating economic situation in the neighbouring regions of Ukraine, Romania and Ex-Yugoslavia. The crisis in the manufacturing and agricultural industries which had been producing for the Soviet market had a tremendous impact on the three Eastern Hungarian industrial counties, account for around 35 percent of the country's total unqualified and unemployed workers. The service sector was far too weak to absorb those who lost their jobs due to the change. The Southern border regions, especially the South Plain have been negatively affected by the Balkan crisis and the economic embargo towards Serbia. Another major factor behind the modest economic potential of the Eastern and Southern part of the country has been the poor infrastructure connections (e.g. lack of motorways) to the centre (Budapest) and to the Western European countries. In general, Hungary's Southern, Northern and (North-) Eastern border regions are all peripheries, their economic sources and potential are still moderate and limited.

As a consequence, the economic role of Budapest and its agglomeration area is more decisive today than it was in the previous decades, although its share in the real sphere and in the industrial production has begun to decrease. Despite more robust economic development of cities selected to be the "antipodes" of Budapest (Győr, Miskolc, Debrecen, Szeged, Pécs), the gap dividing them from Budapest – with the exception of Győr – has not decreased.

# 3. The New Hungary Development Plan and Structural Policy between 2007 and 2013

The new Hungary Development Plan has been formulated as a strategy based on the most important findings of developmental policy with regard to the requirements for community and domestic strategic documents. This strategy is the Hungarian National Strategic Reference Framework for the use of funds from Structural Funds and the Cohesion Fund of the European Union between 2007 and 2013.

Stakeholders from the society could join the preparation of the New Hungary Development Plan from the earliest phases. The concept was introduced in several dozens of fora and events when compiling for the plan.

The Strategy is built on the elimination of the problem and deficiencies defined by situation analysis and with the exploitation of existing opportunities, it serves the complex – environmental, intellectual, cultural, demographic and economic – development of the country thus strengthening its competitiveness. Comprehensive and specific development objectives have been defined in it and thematic and regional priorities implement them. The intervention areas of the priorities content-wise belonging together will be implemented in separate development programmes.

The social –economic situation analysis defines the main problems such as:

- The development of the country is strongly determined by international trends;
- Economic growth has structural risks;
- Low level of activity, stagnating employment;
- The dual nature of economic structure;
- The transport system requires development;
- The change of market economy has required substantial social sacrifices;
- Unfavourable demographic trends;
- Unequal access to knowledge and cultural values;
- Environmental problems;
- Increasing regional differences between Budapest and the rest of the country;
- Needs re-thinking the role of the state.

The New Hungary Development Plan could use the experiences of the First Hungary Development Plan. The most important problems were:

- Communication between the various levels of the institutional system were deficient;
- Implementation was uncertain;
- Experiences of earlier programmes had not been processed;
- Impact mechanisms were unknown.

One of the most important lessons was that implementation and planning should co-operate more closely in the future in order to implement concepts according to plans, and ensure that experiences are integrated into subsequent plans through adequate feedback.

The New Hungary Development Plan declares the two most important objectives to remedy the most acute problems:

- 1. the expansion of the employment
- 2. the establishment of the conditions of sustained economic growth

The specific objectives of increasing employment is to be achieved therefore by

- improving the **employability** and activity of individuals on the labour market, through coordinated actions adjusted to regional conditions,
- increasing labour force demand, that is promoting the creation of more and better jobs (especially in disadvantaged regions) and
- the development of a **labour market environment** that ensures the balance between supply and demand.

The New Hungary Development Plan is also **growth oriented.** Long term **growth** is planned to be achieved by:

- The improvement of competitiveness, including
  - strengthening knowledge economy and innovation,
  - increasing productivity
- Broadening the **foundations of the economy**, involving
  - reduction of regional differences,
  - development of the capacities for capital involvement,
  - market extension,

- connection to a higher level of market integration,
- wider spread of modern technologies

#### • Developing the business environment, including

- improvement of accessibility,
- improvement of the regulatory environment and of the efficiency of the services and operation of the state.

For this purpose it launches co-ordinated state and European Union developments in six **priority areas:** the economy, transport, for the renewal of the society, environment and energy, regional development and state reform.

#### Priority 1: Economic development

The following groups of interventions serve the promotion of the economy:

- Creating innovative, knowledge based economy
- Improve the income generating ability of small and medium sized business
- Developing the business infrastructure and services with planned tools

### Priority 2: Transport development

The following groups of interventions serve the objective of developing transport:

- Improving the international accessibility of the country
- Improving regional accessibility
- Connection of transport modalities, development of the inter-modality and transport infrastructure of economic centres the elements.
- Developing urban and suburban community transport

#### Priority 3: Social renewal

The following groups of interventions promote the renewal of the society:

- Improving employability
- Improving adaptability
- High quality education and availability for all
- Developing human resources necessary for research and development and innovation
- Conservation of health, social inclusion and participation
- Developing the human infrastructure

#### Priority 4: Environment and energy development

The following groups of interventions serve environmental and energy developments:

- Environmental improvement
- Environmental friendly energy development

#### Priority 5: Regional development

The following groups of interventions take the country towards balanced regional development:

- Co-operative and competitive urban network based primarily on the establishment of developmental poles.
- Renewing country side: integrated and sustainable development of villages and rural areas.
- Sustainable development of the region of Lake Balaton, and additionally the regions of the rivers Danube and Tisza.

These interventions are included in seven regional operational programmes, for the seven NUTS2 regions in Hungary.<sup>2</sup> The NHDP determine the most important objectives in the regional operational programmes that include:

- Strengthening regional competitiveness
- Increasing tourism attractiveness of regions
- Developing regional transport infrastructure and community transport, improving the status of local alignment
- Promoting energy efficiency and saving as well as the use of renewable energy sources
- General integrated development of settlements
- Reducing social and regional disparities within the regions
- Developing social infrastructure

The Central Hungary region's OP, with the capital Budapest and the surrounding Pest county is **of priority importance with regard to the implementation of the Lisbon objectives**, since Budapest and this region provides the two-thirds of Hungary's innovation performance

<sup>&</sup>lt;sup>2</sup> These are: South Great Plain OP, South Transdanubia OP, North Great Plain OP, North Hungary OP, Central Transdanubia OP, Central Hungary OP, West Pannon OP.

and one third of its population lives here. The main goal is to increase the competitiveness, employment and attractiveness of the region in addition to implementing the aspects of sustainability.

#### Priority 6: State reform

The aim of state reform priority is to coordinate the reforms taken in different sectors, furthermore the renewal of public administration.

- Renewal of governance and thus improvement of social success of policy makingespecially legislation – and implementation.
- Strengthening civil society participation in public affairs
- Transforming public administration to a service oriented way, spreading electronic case handling
- Higher organizational performance and more cost effective operation of institution.
- Improvement the human resources skills.
- Strengthening the decision making on integrated micro-regional and regional level for the sake of implementation the subsidiarity principle.

Hungary is entitled to receive to receive EUR 22.4 billion euros founds for development from the cohesion policy of the EU between 2007 and 2013, which is supplemented by domestic co-financing and private capital, and by a further EUR 3.9 billion from the European Agricultural and Rural Development Fund and 34.3 million from the European Fisheries Fund. The size of expenditures is considerable as it is compared to Hungarian GDP. Total CSF expenditures (including both EU resources and Hungarian co-financing) account for about 4 percent which is a relatively high percentage compared to international experiences.

Table 3
Funding of Operational Programs

Operational programmes	Total billion HUF	%
Economic Development OP	690.0	10,0
Transport OP	1703,2	24,8
Social Renewal OP	966.0	14,1
Social Infrastructure OP	538.9	7,8
Environment and Energy OP	1140.0	16,6
West Pannon OP	128.3	1,9
Central Transdanubia OP	140.5	2,0
South Transdanubia OP	195.0	2,8
South Great Plain OP	207.1	3,0
North Great Plain OP	269.6	3,9
North Hungary OP	249,9	3,6
Central Hungary OP	419.0	6,1
State Reform OP	40.9	0,6
Electronic Public Administration	99.8	1,5
Implementation OP	87.2	1,3
The New Development Plan in	6875.4	100,0
total		
European Territorial	106.8	
Cooperation		

Source: New Hungary Development Plan

A funding of 1600 billion HUF will be available within the framework of the operational programme of development regions, whilst 5300 billion HUF will be available within the framework of the sectorial operational programmes. The highest number of developments can be implemented through funding granted within the framework of the Transport Operational Programme (24,8%), the Environment and Energy Operational Programme (16,6%) and the Social Renewal Operational Programme (14,1%).

During the realisation of the development objectives the enforcement of the horizontal policies has to be priority:

- Ensuring the conditions for sustainability
- Strengthening cohesion.

These **horizontal policies** have to be enforced in the development of both the sectors and regions. The New Hungary Development Plan pays attention:

"Sustainability, adjustment and equal opportunities between regions and within a region, including the requirement of equal treatment of women and men and non-discrimination—as specified EU requirements—have to be taken into consideration while concentrating on the two aspects in the planning, implementation, monitoring and evaluation of the Operational Programmes and interventions."<sup>3</sup>

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<sup>&</sup>lt;sup>3</sup> New Hungary Development Plan: 61

# 4. Evaluation of Structural Policy

There are several possible ways to evaluate the New Hungary Development Plan and its Operational Programmes. Before using a specific method to analyse the SP, we found it useful, to give a short overview of the ex-ante evaluation of each Operational Programmes. The ex-ante evaluation makes it possible to analyze the expected effects of the operational programmes through programme strategy, order of priorities, and at the same time to optimalize the external and internal coherence of the programme.

Ex-ante evaluations being huge and detailed documents cannot be thoroughly introduced and analyzed within the frameworks of the present study, so we will focus only on the main elements of the thematic Operational Programmes as well as of the regional Operational Programmes.

# **4.1 Examination of Thematic Operational Programmes**

#### **4.1.1** Economic Development Operational Programme (EDOP)

Regarding the achievement of the competitiveness objectives of the NHDP, EDOP has the most importance role of the operational programmes. The strategy of the EDOP is in accordance with the foregoing development policy practice and experience, the policy related intentions of the planners, the expectations and absorption potential of the players of the economic life. The objectives related to the priorities are under the current circumstances well-defined.

According to the ex-ante evaluators in relation to priority 1 there is a threat that higher education and research institute R&D capacities that are restrictedly responsive to market needs will be financed by the organizations.

Regarding priority axis 2, it might cause a problem that based on the experience, the application of relatively restricted resources are inadequately focused. In priority axis 3 it is not clear enough, to what extent the mainly supply-oriented interventions will match real

needs, and through their multiplicator effect to what extent they will be able to encourage economic growth.

At the same time the achievable effects will depend on the internal (market) environment, the supportive macro-economic policy, or the consequences of the Convergence Programme, the adequate regulation system, and the further effects of the investments carried out in the frames of other OPs.

The priorities of the OPs are based on the Community Strategic Guidelines, the New Hungary Development Plan, as well as the Lisbon National Reform Programme. Accordingly, the strategy is consistent enough with the relevant community and national policies. In terms of the Lisbon employment objective, as well as the territorial (regional and sub-regional level) cohesion, as EDOP can contribute to these to a limited extent, only moderate effects are expected.

# **4.1.2** Transport Operational Programme

What made it difficult to define the strategy was that the designers had to leave behind their Hungarian departmental thinking and project focused attitude. In addition, high political interest also made it difficult to make changes.

It can be claimed that in many places the demand responsive approach and the analysis of the possible future utilization of the realized developments are missing. On the level of the OP's planned interventions the growth and employment objectives defined in New Hungary Development Plan and the support of the Lisbon Action Programme are not represented sufficiently.

Some remarks regarding the consistency of aim hierarchy and priorities. It is not clear why it should be reasonable to present the 'Development of European Transport' as an individual goal. Both Priority axes 2 and 3 include elements regarding the accessibility of the regions and these elements are not defined clearly.

Horizontal principles: According to the relevant guidelines of the EU the specific problem fields related to transport are of high priority. Some examples: minimizing negative effect on the environment, equal opportunities in access to public transport means, rationalisation of energy consumption, increasing transport security, applying intelligent systems, ensuring the rights of users.

During realization some difficulties occur in connection with the OP as too difficult institution system, or irrational preparation, approval, payment and control processes. Unless the aforementioned problems are sorted out, these can block the use of the subvention being risk factors.

# **4.1.3** Social Infrastructure Operational Programme

The priority axes of the SIOP are basically acceptable, and follow form the objectives and from the Analysis of the situation. The analysis of the situation of the SIOP is primarily focused on the urgent deficiencies, and spends less time on describing the existing best practice, and the results worth propagating. This is an unfortunate approach, as the development activities of the SIOP will have their effects felt primarily in the long run, that is processes influencing the human axis in the longer run should also be made a proportionate part of the assessment.

In the Strategy, the subject of risk analysis is presented in broader outlines than desirable.

It is important to ensure the realization of the infrastructure and technological developments in order to increase the number of students majoring in engineering and other related nature sciences. It primarily means laboratories and research facilities and not IT developments. It is also important that apart from IT developments this intention should not be forced in the background during the implementation phase.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Social Infrastructure Operational Programme ex-ante evaulation

#### **4.1.4 Electronic Administration Operational Programme**

The EAOP is a generally good operational program; the technical content, workmanship, work-out of the OP and the logic of the interventions are appropriate, only minor deficiencies can be found in it.

In the situation analysis or the analysis of previous experiences it would be advisable to give a more detailed overview on the experiences of Client Portal. Its results and often criticised capabilities both reflect the approach leading to present situation which may prove instructive regarding consequences.

The text of the OP does not show clearly which planned developments are to be realized prior to fulfilling the compatibility and cost-effectiveness related objectives – though developments were identified adequately. It will turn out to be a problem if key elements will be realised with delay and other developments – which should be theoretically based on previous ones – will start too soon because of the lobby-power of other industries.

There are risks in realising too many developments in the Central Region. Though the document refers to the advantages of the developments away from the capitol, it finds these developments to be possible "in the long run" only. It may even raise issue concerning eligibility; therefore this issue should be a key element of the forthcoming evaluations.

#### **4.1.5 Implementation Operational Programme**

In general it can be claimed that the OP meets the criteria of the EU in terms of formal and content requirements. IOP is basically coherent to the Economy Development Operational Programme. In EDOP the coherence between EDOP and human OPs is introduced emphasizing one of the specific objectives of EDOP, namely that growth in research-development and innovation are top priorities of IOP.

Priority of the IOP Intelligence School is connected to the intervention referring to the electronization of the EDOP and the Electronic Administration Operative Programme. Priority called 'Modern University Infrastructure Development' is similarly linked to the

priority axis ROP K+F and innovation for competitiveness, the K+F infrastructure development of higher education institution, common research and industrial projects with organizations priorities <sup>5</sup>

The theory of equal opportunity of sexes is not fully involved in the OP. OP pays special attention to sustainable development (environmental / economical / financial). OP is harmonized with the National Lisbon Action Programme and Hungary's Convergence Programme.

# **4.1.6 State Reform Operational Programme**

According to the evaluation report, the Operational Programme is basically a successful program document, its professional content, technicality, elaboration, the logic of the interventions are sufficient; nevertheless, there are smaller deficiencies in it.

The objectives of the Operational Programme make structural changes necessary in the public sector. The strategy of the Programme does not describe the targeted new structure. The operational program focuses primarily on the operation through a change of culture both at the individual and organisational level. This does not mean automatically structural changes in the public sector. Structural changes need to rest on social demand, thus requiring a political decision, which the program has no desire to address.

It's a deficiency that the risk management is carried on at level of generality only. Environmental aspects are included in the Operational Programme in the suitable way.<sup>6</sup>

# **4.1.7 Social Renewal Operational Programme**

The main goals of SROP are education, training and creation of work positions. SROP is a professional programme giving the possibility to achieve real goals in which the strategic objectives, priorities and the planned operations are harmonized.

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<sup>&</sup>lt;sup>5</sup> Implementation Operational Programme ex-ante evaulation

<sup>&</sup>lt;sup>6</sup> State Reform Operational Programme ex-ante evaulation

The interventions of the SROP also include the elements of several flagship programmes, which ensure harmonised, integrated implementation of related development projects of the various operational programmes. Flagship programmes provide the basis of coordinated use of several available resources (domestic resources, Structural Funds, other Union resources, interim assistance, the Norwegian Fund, the Swiss Fund, etc.) in order to develop specific strategic fields.

The SROP attaches to the under mentioned flagship programmes:

- "Knowledge is Chance"
- "Chance for Children"
- "21st Century School"
- "No one left behind" Chance for people living in most disadvantaged small settlements"
- complex regional development programme
- "Competitiveness Poles Programme"
- "Hungarian Genius"
- "Flexible Training"
- "Healing the health care system"
- "Equal Opportunities in Access in Hungary"

SROP is strategically based on the Lisbon Strategy (2000) and the Lisbon Strategy-based National Action Programme, as well as the NHDP and it is also coherent to EDOP. SROP pays special attention to the employment of the Gypsy and the disabled and also to the forms of atypical employment.

According to the investigation it can be claimed that there is coherence between the sector operative programmes, they are well-thought-out and are suitable to fulfil their role which is to give chance for developments without precedent. Nevertheless, the economical crises and the lack of the appropriate level partnership mean a real risk regarding realization.

#### 4.2 Ex-ante evaluation of Regional Operational Programmes

#### 4.2.1 South Great Plain Operational Programme

The 2nd system of objectives for the South Great Plain OP is relevant to the Analysis, and is typical for there to be consistency among objectives and priorities. Furthermore, the system of objectives and strategy of the South Great Plain OP are coherent with the relevant documents. Coherency with the NRDC has been sensitively enforced by the programme planners. According to the General Analysis and the SWOT, it is clear that the basic criteria of the system of objectives are the improvement of regional competitiveness, halting the process by which the regional is falling behind and mapping out a new path for growth<sup>7</sup>

All in all it can be laid down that the description and definition of the priority axes and the respective operations is mainly appropriate. But the region has needs for external sources to find the way out of the present situation and such subventions can be reached in form of capital expenditures. Nevertheless, the interconnection of the external sources is not harmonized. It is still a question whether the correction of competitiveness necessary to close up, strengthening of the regional coherence and mitigating differences can be realized at the same time and from the same sources. One of the main goals is to increase the GDP in the region by 26% until 2016. This means that the expected growth in the region between 2007 and 2015 is 6% behind the national value, what means a growing gap regarding national economy. Sustainability and environmental aspects are presented the appropriate way in the Operational Programmes.

### 4.2.2 South Transdanubia Operational Programme

The strategy can be considered relevant on the basis of the relation between the strategic intervention areas specified by the Operational Programme. The strategic objective of this programme (up to 2013) is to halt the lagging tendency in the South Transdanubia Region, i.e. to maintain the region on the same growth trajectory as the country, with a view to launching a process of catching up in future. The lack of correspondence between specific objectives

<sup>&</sup>lt;sup>7</sup> South Great Plain ROP ex ante evaluation

and priorities makes the transparency of the target system's operational model somewhat difficult.

The specific objectives may be regarded as relevant to attainment of the strategic objective, and the STOP's objectives are consistent in terms of their logical relationships. However, the interrelationships among the strategic objectives are not of homogeneous strength. Where the second, economic objective has a clear link to the overall objective, the first specific objective only indirectly supports growth (and increase in jobs, although it directly supports better jobs). However, the third specific objective, relevant in itself as regards regionality and the competence of the operational programme, disrupts the internal balance of the objectives by supporting the area dimension in what is otherwise a sectorially constructed programme. Since the aims formulated for this objective are desirable in every element of the programme its hierarchical relationship with the present overall objective is not clear.

The flagship project of Pécs 2010 "European Capital of Culture" will definitely have a great effect on the development of the region. This project is also described in the Operational Programme, but not in the desirable way as economical calculation and the introduction of the execution is missing.

The assessment finds that the objectives and priorities expressed in the STOP are coherent with the higher-level strategic objectives of the EU (Lisbon objectives, CSG) and Hungary (NHDP, NDC, NRDC). The description of STOP's executive institutions is effectively comprehensive and the description of horizontal aspects is satisfactory.<sup>8</sup>

#### 4.2.3 North Great Plain Regional Operational Programme

The evaluation of the hierarchy of objectives presented in the document was, rather difficult because there were two strategies underlying the North Great Plain Programme: Neither the Region's comprehensive strategy, serving as a basis for all developments, nor the narrower strategy underlying the ROP interventions, nor the document was able to uncover how the two were interrelated.

<sup>&</sup>lt;sup>8</sup> South Transdanubia Operational Programme ex-ante evaluation

Major identified problems with the concentration can be summarised as follows:

- a partial absence of the territorial focus is evident in the case of practically all priorities;
- in the case of interventions related to the economy and enterprises, sectorial concentration features only in according high priority to tourism;
- the wording of most indicative activities is, in its current form, too vague, failing to identify the focus of intervention.

Major deficiency is that the way in which the individual interventions are interconnected is not described satisfactorily. Thus, it is no clear how they reinforce each other. Nor does the description offer at least a glimpse into the likely impacts of the interventions. Most priority axes fail to accord proper importance to territorial focus; in terms of content the priorities are focussed, except Priority 4 where the internal consistency can be called into question from a number of perspectives.

The dilemma of "strengthening of competitiveness or decreasing of territorial imbalances?" also appears at the level of specific and operative objectives. The objectives, although properly defined and their relation to the rather general overall objective is straightforward, may only partially fulfil them. <sup>9</sup>

#### 4.2.4 North Hungary Operational Programme

The strategy set forth in Regional Operational Programme of the Region of North Hungary unambiguously provides opportunity for the Region to continue to come abreast with the EU average in terms of both economic and social issues. The development priorities determined in the Operational Programme suitable for implementing the strategy. The greatest danger is posed by the first priority: "Creating a competitive local economy". The reason for that, as it is apparent from the analysis of the situation, is that it intends to "convince" entrepreneurs to perform activities that they are currently averse to; that is, to perform research-development and cooperation. Furthermore, it intends to support the establishment and operating conditions of new businesses in areas where the business and economic environment is typically

<sup>&</sup>lt;sup>9</sup> North Great Plain Regional Operational Programme ex-ante evaulation

difficult. In this respect, however, efforts should be made to avoid forcing more 'involuntary entrepreneurs' to go into business.

The priority called "Strengthening tourism potential" intends to increase the weight tourism fulfils in the economy of the region based on the region's traditions. The funds for the priority called "Settlement development" will not cause any problems. It will give assistance to solve problems ignored for several decades through the rehabilitation of town districts, which, among others, are in bad condition and the development of towns fulfilling the role of microregional centres.

The priority "Development of the human community infrastructure" deals with three fields: certain areas of health care, social, and educational infrastructure which is needed for the region to converge.

The next priority of the Regional Operational programme is "Development of regional transport" but the OP not handling the problem of cul-de-sac settlements. The strategy pays due attention to creating sustainable development and equal opportunities.

#### 4.2.5 Central Transdanubian Operational Programme

With view to the scope of the Programme, the strategic objective identified seems to be appropriate, and the consistency of goals adequate. Clear matching of specific goals and respective priorities is strength of the operational programme.

Examining the mode of actions it can be claimed that more than one third of the effects focuses on cohesion what reflects the success of the horizontal objectives of the decentralized programmes. In the average of the five priorities a bit more than one forth and one fifth of the effects focuses on growth and employment. Priority 3, 4 and 5 support cohesion with more than 50%, amongst furthermore priority 4 focuses on the environment, whilst priority 5 in similar proportion on employment. Except for priority 4 the effect on the environment are negligible, 8 intervention fields out of 15 do not have such effect. Altogether it can be established that the programmes are suitable to reach the goals and they conduce the planned results.

The goals and priorities identified in the CETOP are consistent with EU objectives (such as Lisbon goals, and CSG) and higher-level Hungarian objectives (including those set out in NHDP, NDC, and NRDC). The discussion of horizontal aspects applicable to the whole Programme uniformly is considered acceptable.<sup>10</sup>

### 4.2.6 West Pannon Operational Programme

The strategy in the operational programme of the West Pannon region makes it clearly possible for the region to continue its convergence with the EU average from both an economic and a social point of view. This is due to the fact that the strategy reflects the specific attributes of the region, taking the better than average economic situation into account, along with the potential for tourism, as well as the need for to mitigate social differences. Development priorities defined in the operational programme may be suitable for implementation of the strategy.

- 1. Priority: Regional economic development: Evaluators note a lack of support for and focussed promotion of R&D activities; although the situation analysis provides a detailed description of the region's poor performance in this field.
- 2. Priority: Tourism development: A logical and useful step by the region is to further strengthen this process and to "professionalize" supply, by the use of measures also intended to increase demand.
- 3. Priority: Urban development: In areas where the programme takes into account a "significant mobilization of private capital", special attention needs to be paid to intensive provision of follow-up information and the key significance of partnership.
- 4. Priority: Environmental protection and infrastructure development: The priority provides a professional approach to the needs for and methods for environmentally-friendly development, which can manage wastewater for small municipalities

<sup>&</sup>lt;sup>10</sup> Central Transdanubian Operational Programme ex-ante evaulation

5. Priority: Development of local and regional public services: This priority axis encompasses several areas: healthcare, social infrastructure, public education infrastructure and information society and also provides a high number of support options based on this, but demand cannot be adequately met from the resources available.

The strategy gives appropriate weight to sustainable development and equal opportunities, but these horizontal considerations also need to be described on the level of priorities and enforced consistently during implementation.<sup>11</sup>

On the whole it can be claimed that the significant part of the developments in the programming time between 2007 and 2013 will be realized in the towns and micro-regional centres. Regarding the country region it contradicts overall aims like sustainable development and the reduction of the territorial imbalances. The majority of the developments focus on the regional centres, so the territorial imbalances should be mitigated by the dynamic effect of these towns and centres.

# **4.2.7** Central Hungary Operational Programme

Until 2006, the Region was covered by Objective no. 1 of Council Regulation no. 1260/1999. This, and the outcome of talks with the European Commission, afforded it special treatment as a 'phasing in' region.

The overall objective of the operational programme is to improve the international competitiveness of the Central Hungary Region, observing the principle of sustainable development. With an eye to achieving the overall objective, two specific objectives have been set: to develop factors influencing the Region's competitiveness, and to develop the Region's internal cohesion and the harmony of its spatial structure.

The Central Hungary Region's development objectives directly support growth and the expansion of employment, in line with the main objectives of the Lisbon National Reform Programme and the New Hungary Development Plan. To achieve the above specific objectives, the operational programme has targeted the following priorities:

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<sup>&</sup>lt;sup>11</sup> West Pannone Operational Programme ex-ante evaulation

- 1. Innovation- and enterprise-oriented development of the knowledge economy
- 2. Development of the preconditions for competitiveness
- 3. Development of the Region's attractiveness
- 4. Development of the system of human service institutions
- 5. Development of settlement areas

To strengthen geographical and social cohesion, it assigns preference to developing the Region's depressed areas and promotes equal opportunities for disadvantaged social groups. KMOP includes little information about the risks.

Regarding priority 3 the complete financing of the aims in a wider sense is not expected to be ensured, at the same time partly achieving these mentioned goals does not mean substantial change in the process of reaching all the objectives. This can be defined as a significant risk. In accordance with the horizontal principles defined in the New Hungary Development Plan, the Programme lays special emphasis on enabling sustainability, particularly the sustainability of the environment and of socio-economic processes.

Some actions indirectly contribute to equal rights and socio-regional cohesion as being part of horizontal policies, for example the development of nursery provision improves employment chances for women. The operations for the access for the disabled similarly have a positive effect on the everyday life of the disabled and the people with changed working abilities.<sup>12</sup>

### 4.3 Priorities and growth effects

One of most interesting problems related to the structural policy is how the different operative programs and their priorities generate an impact on economic growth. In *Annex 1*, we can see through which decisive factors the priorities influence growth. To sum it up briefly, in case of the Social Infrastructure (SIOP) and Transport (TOP) programs, it is clearly the investment in physical infrastructure that counts; by the Social Renewal OP (SROP), where the stress is put on social activities, it is through labour and human capital (or employment and

<sup>&</sup>lt;sup>12</sup> Central Operational Operational Programme ex-ante evaulation

employability), while in case of the Economic Development (EDOP) additional growth is generated mainly through Total Factor Productivity. ROPs are obviously eclectic, there are more relevant factors here. In case of EAOP investments, by StaROP human capital are dominant. The Environment and Energy OP (EEOP) has no conventional growth effect, although it may have indirect effect on growth, both positive and negative. Or, partly based on the above factors, we re able to group the different priorities, and see, what kind of impacts the given types of measures on economy may have (*see Annex 2*).

In a TÁRKI study<sup>13</sup>, three types of Operational Programme have been identified according to their long-term effect mechanisms: (i) the institution-building Operational Programmes definitely induce long-term expenditure, but they do not necessarily represent an additional expenditure burden on top of the (baseline) case in which there are no interventions. On the contrary, in the case of successful institution-building, some savings can even be made, thanks to the lower need for live labour and lower operational costs, but these are not expected to be significant; (ii) the infrastructure-developing Operational Programmes may induce significant long-term cost determinations. Here the question is what proportion of the operational costs has to be covered by the central budget and the local governments, and what proportion can be collected from usage fees; (iii) the Operational Programmes that support private investment do not generally result in additional operational costs for the state.

The main objective of EU regional policy is to stimulate growth in the less developed regions to achieve convergence (in output or income per capita), so special efforts have to be made to associate CSF interventions to their long-run impacts on output and productivity respectively. Another important goal of EU regional policy is to increase employment and reduce unemployment. It is a priori uncertain whether this target can be achieved with the investment programs of CSF even if they are successful with regard to the growth goal. If technology or efficiency of production is improved by the CSFs, a desired effect, less labour will be employed at any given level of output. Therefore, it depends on the magnitude of the growth effect of output whether the employment target can also be reached or not. However, if labour costs are low relative to the cost of capital (as it is still the case in Hungary), such growth effects could be labour intensive and create plenty of employment. To evaluate CSF impacts correctly, therefore, it is necessary to take care of these effects properly. (Varga, 2007)

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<sup>&</sup>lt;sup>13</sup> TÁRKI (2007)

# 4. 4 Evaluation of the SP by our method<sup>14</sup>

As it was mentioned earlier, the long-term effects of the CSP are those which have an impact on the supply-side of the economy. To be able to evaluate the potential supply-side effects of the measures, we need a set of criteria according to which we will examine the measures of the different OP's. Based on the theoretical background analysed in Erdődi (2008), these are the followings:

*Production externalities (PE):* Does the volume of input factors increase? Are there any additional domestic or foreign investment attracted? Will the competitiveness of the region or of the whole national economy strengthen?

*Productivity externalities (WE):* Does the quality of the input factors increase? Are any further productivity gains created?

*Complementarity (K):* Are there any additional measure reinforcing the intervention? Are any synergy-effects created by the combination of measures?

Efficiency (E): Does the measure back the stronger? Is there any real competition for the resources?

As it was presented earlier, the OP's consist of several priority axes. Within the priority axes the measures show through which the instruments the given priority woks. In our evaluation:

- each measures will be evaluated according to the 4 criteria mentioned above;
- the criteria will be measured from 1 to 3, with the meaning:

1 = low;

2 = middle;

3 = high;

- an arithmetic average of the four points will be counted for every measures;
- the points for the priorities will also be counted by an arithmetic average form the points of measures; 15

<sup>14</sup> For the assessment of the SP measures we use the methodologie elaborated by Endre-Sánor Erdősy (2008):

- these averages will be weighted by the financial proportion of the given priority; to count the index for the given OP;
- the weighted average of the OPs gives as the Index for the whole NHDP.

According to our calculations, the NHDP Index was 2.01. It means that the measures and priorities of the operational programmes have a slightly over-the average (middle = 2) value. So we assess a medium impact of the NHDP on growth, so it is still under the possible potential.

By analysing the single operational programmes, it is the Economic Development OP which had the highest supply-side effect among the OP's with an average value of 2.73. It is far from being surprising, the EDOP's priorities and measures are planned to give a direct impetus on the supply-side of the economy, and even indirect synergy effects were taken into account by the evaluation.

The 2<sup>nd</sup> and 3<sup>rd</sup> place went to the Central Hungary and the Transport OPs, with a 2.38 and 2.36 point index, respectively. In case of the Central Hungarian region, the position of the region (Budapest and its agglomeration) made it possible and necessary as well to focus on the improvement of the regions attractiveness, and on the increase of its economic potential. By the Transport OP, the extension of the TEN-expressway gave a positive impetus to the index, followed by the urban agglomeration development projects.

Table 4

The index point and ranking of the Operational Programmes<sup>16</sup>

	Financial	Index	Rank	Percentage of NHDP
	weight	point		index
Economic Dev. OP	10.0	2.73	1.	136
Social Renewal OP	14.1	1.92	14.	96
Social Infrastr. OP	7.8	1.98	12.	99

<sup>&</sup>lt;sup>15</sup> Neither in the NHDP nor in its Operational Programmes or in any other relating documents were we able to find any finantial data on the expenditures planned for a given measure; these were given only on a priority level.

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<sup>&</sup>lt;sup>16</sup> Detailed table see in Annex 3

Transport OP	24.8	2.36	3.	117
State Reform OP	0.6	2.06	8.	102
Energy and Env. OP	16.6	1.78	15.	89
Electronic Admin. OP	1.5	2.01	10.	100
Implementation OP	1.3	2.00	11.	100
South Great Plain OP	3.0	2.03	9.	101
South Transdan. OP	2.8	1.94	13.	97
North Great Plain OP	3.9	2.30	4.	114
North Hungary OP	3.6	2.21	6.	110
Central Transdan. OP	2.0	2.25	5.	112
West Pannon OP	1.9	2.14	7.	106
Central Hungary OP	6.1	2.38	2.	118
NHDP	100.0	2.01		100

Source: New Hungary Development Plan, own calculations

Overall, 10 OPs out of 15 were over the average, and all but one regional OPs (the exception being the South Transdanubian OP), while from the thematic OPs the Environmental, the two Social were clearly under the average (the Electronic Administration and the Implementation were just on the average).

In case of the lowest rated Energy and Environment OP (1.78), there are several priorities, which have a low overall effect on economic growth – such are e.g. P6: Sustainable lifestyle and consumption patterns (1), or P3: Wise management of natural assets (1.25), and P2: Proper treatment of living waters (1.3). On the other hand, priorities like P4: Increase of the use of renewable energy sources (2.5) or P5: Efficient energy use (2.25) are improving the value of the index, but their weights in the total OP are quite low (5.2% and 3.1% respectively).

In the Social renewal and Social Infrastructure OPs there are different elements mixed, related to economic growth effect – while the development of human resource required for R&D (SROP4) has a positive impact on growth, in case of several other social and civil society supporting measures, it is difficult to find any direct (or even indirect) connection to the supply-side growth factors.

Although the priorities of regional OPs are quite similar, the index we got from our calculations are more heterogeneous, with the Central Hungary region's OP (2.38) on the top and the South Transdanubian's (1.94) at the bottom. The relatively bad result on the STOP came from the high share of environmental and social priorities in the OP, while competitive economy (STOP1) has only a 10.5% share in the programme.<sup>17</sup>

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 $<sup>^{17}</sup>$  In case of Central Hungary, the economic priorities share is 27.7%, and the by all other ROPs, it is over 14%.

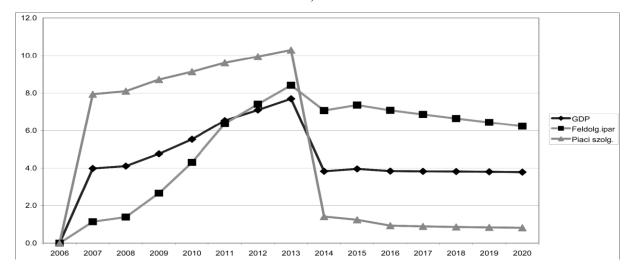
#### 5. Other Analysis of the Development Policy

#### **5.1 HERMIN-Model**

The results of a HERMIN-model analysis of the Hungarian Cohesion policy was published in Bradley et al. (2004) and Gács-Halpern (2006). Based on the experiences of other cohesion countries, Gács-Halpern (2006) underlines, that in the first phase of the program, the demand-side effects are dominating, while in the second phase, the supply-side effects will prevail, but only in a case if the programs were successful. Another important factor that has to be considered is the different effect the programs will have on the internationally competing manufacturing sector and on more protected business services.

Figure 7

Difference in GDP (and value added) due to Cohesion Policy funds in the period 2007-2020, %



Notes: Feldolg. ipar = Manufacturing; Piaci szolg. = Business services

Source: Gács-Halpern (2007)

We can see on the above graph the effects of EU-funded development programs on the GDP and on manufacturing and business service sector value added. The rapid increase of GDP after 2007 is characterised by even faster growth in business service activities and in other more protected sectors (like construction industry). After the end of the development period,

the higher GDP growth is due almost entirely to the higher supply of internationally competing sectors, which was generated by the programs in the previous period.

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Figure 8

GDP growth in Hungary with and without EU-resources

Source: Gács

The Bradley et al. (2004) study presents the so called "cumulative" multiplier which shows us how the CP and the CF policy shocks impact on an economy. The cumulative CP/CF (or CSF) multiplier attempts to capture the continued (if modest) semi-permanent increase in the level of GDP that should persist after the policy is terminated after the year 2013. Its definition is as follows:

Cumulative CSF multiplier= Cumulative increase in GDP (%) / Cumulative CSF share in GDP (%)

The cumulative *CP/CF* multipliers of the EU Cohesion countries for the full period 2007-2020 are shown on the following graph. These are considerably larger than conventional investment multipliers, mainly due to the long-tailed output and productivity-enhancing effects induced by the higher stocks of physical infrastructure and human capital that are brought about by the *CP/CF* programmes.<sup>18</sup>

The 1.6 cumulative GDP multiplication value for Hungary in 2020 is the lowest among the New Member Countries, only Italy (Mezzogiorno), East Germany and Greece have a lower value.

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<sup>&</sup>lt;sup>18</sup> In case of Hungary, the model used the following assumption on th distribution of EC financial allocations: physical infrastructure 63%, human capital 17%, productive sector 20%.

Czech Republic Estonia 2.5 Greece East Germany 2 Hungary 1.5 Latvia Mezzogiomo 1 Portugal Poland 0.5 Romania Spain Slovenia

Figure 9

Cumulative GDP-multiplier of Structural Funds

Source: Bradley et al. (2004)

#### 5.2 The GMR-Model<sup>19</sup>

Another model, the GMR-Hungary (Geographic Macro and Regional model for Hungary) has been developed by an international consortium<sup>20</sup>. The main purpose of the complex macro and regional model was to serve as a tool for ex-ante evaluating the likely economic effects of different scenarios for spending Structural and Cohesion Funds resources as part of the New Hungary Development Plan. As the description of the model states, GMR is built on four strands of recent economic literatures: the new economic geography, the endogenous growth theory, the systems of innovation school and the geography of innovation field.

According to the complex nature of the problem GMR is a coherently built system of three sub-models: the TFP sub-model (responsible for calculating static productivity effects) the

<sup>&</sup>lt;sup>19</sup> The presentation of the GMR model is based entirely on Varga (2007)

<sup>&</sup>lt;sup>20</sup> The Consortium's main contributores were *Center for Research in Economic Policy* (GKK, University of Pécs, Faculty of Business and Economics) as project coordination, *Center for Applied Economic Research Münster* (CAWM, University of Münster) and *TNO* (Delft).

SCGE sub-model (with the task of simulating long run dynamic effects on the spatial distribution of technology, labour, capital, wages and output) and the MACRO sub-model (which is incorporated into the system to generate likely macroeconomic effects of development policy interventions).

The model is the extension of EcoRET – a macroeconomic model used for ex-ante impact analyses during the design of the 1<sup>st</sup> National Development Plan for Hungary – into the regional and the sectorial directions. For the regional extension EcoRET was integrated with RAEM-Light – a spatial computable general equilibrium (SCGE) model that have already been used for policy evaluations in the Netherlands, Japan and South Korea.<sup>21</sup>

The sectorial detail of the complex model is as follows: industry, agriculture, services and government. As far as the spatial detail of the model is concerned, for the macroeconomic sub-model it is the national level, while for the regional TFP and SCGE sub-models, it is the NUTS 3 level (in Hungary, the counties)

The model has a strong *supply side orientation* besides having a well developed demand side block. *Modelling technological change* is at the heart of the supply side block. The reason for this is that most of the development policy instruments (R&D support, infrastructure investment, education/training promotion) aim towards improving firms' productivity.

The instruments of CSF policy can be classified into three broad categories, according to their different effects on relevant economic variables: (i) CSF support for infrastructure; (ii) CSF support for human resources (education/training and R&D); (iii) CSF support for productive structures (private investments). They are intended to influence the supply side of an economic system primarily, but, intended or not, they also have effects on the demand side. The support for private investments e.g. may stimulate the productive capacity and investment demand simultaneously. Thus, in order to catch mutual and feedback effects between both sides of the economy the GMR considers their impacts both on the supply and the demand side and their interdependencies as well. The distinction between demand side and supply side

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<sup>&</sup>lt;sup>21</sup> As it is stated by the model-constructors, current econometric models widely used in development policy analysis such as the HERMIN model in Europe or the REMI model in the United States have moved into the direction of incorporating geography and technological change into their basically demand-driven systems,

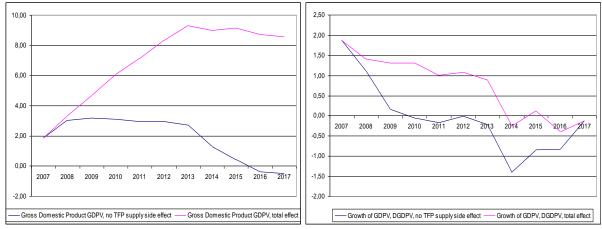
effects is also important, because the former impacts are normally transitory while impacts of the latter are enduring.

The structure of expenditures especially taking into account the TFP-related ones is also worth detailing. Compared to 2003 spending (the last year with no CSF intervention in Hungary) expenditures in infrastructure are 36 percent higher annually on average during the period of 2007-2015 whereas the corresponding figures for education and R&D are 11 and 25 percents. On average with CSF support Hungary spends 22 percent more on TFP-related instruments than without the planned interventions.

To measure the effects on output impacts on GDP level and GDP growth rate are presented in the figure below. According to GMR-Model scenario, the difference to baseline GDP level constantly increases until 2015 then it seems to be stabilized at the value of nearly 9 percent. On average the increase in GDP level is about 7 percent. This is a two times higher effect than was calculated in the first planning period (2004-2006) for Hungary (Schalk and Varga 2004) which is understandable as the share of expenditures in GDP is about doubled in the second period. The 7 percent average impact figure comes also quite close to the German 1996-2000 experience when the 5 percent GDP share of CSF support resulted in a 6.5 percent average output effect.

It becomes clear from the model scenario that most of the output effects come from the supply side. The demand side effect is strong in the beginning of the period than it stays at about 3 percents until the expenditures decrease in 2014 and 2015. In contrast to the demand side effect from the supply side a more prevalent and lasting impact is experienced. Productivity growth resulting from TFP increase and investment support exerts significant effects on output. The impact increases with a constant rate until 2014 (mainly due to the constant level of spending on productivity-related policy instruments) then it seems to reach a stable level of nearly 9 percent. While demand side effects decrease and almost vanish after the support is stopped supply side impacts prevail as the influence on productivity stays for longer time.

Figure 10
Estimated effects of CSF on the GDP



Source: Varga (2007)

The sharp increase of GDP growth rate change to 1.87 percentage point in 2007 is due to the demand shock. The demand effect on the growth rate then strongly decreases after 2008 and becomes even negative after 2010. This pattern perfectly repeats the one detailed when the demand side effect is explained. The same is true for the total effect on GDP growth rate. It remains around 1 percent during most of the planning period then it tends to fade away after 2015. Thus the almost zero growth effect from the supply side after the end of CSF support is in accordance with the stable level effect. The average total effect on GDP growth rate is 0.75 percentage point.

#### 6. Experiences on the Implementation until Now

Hungary is in the leading position out of the 12 new European Union member States in terms of source indicators of the EU Funds utilization in the period of 2004 - 2006, which is a very good result.

The table below shows the results, which have already been realized as part of the approved Operational Programmes, within the framework of the National Development Plan I.

Table 5

Implementation 2004 - 2006

	Received	Requested support	Supported	Approved support	
	Applications	(HUF)	by GA	(HUF)	Paid amount (HUF)
<u>Total</u>	42 435 pcs	1 604 485 235 580	19 959 pcs	727 010 420 643	677 650 710 620
ARDOP	11 171 pcs	199 504 256 368	6 871 pcs	116 350 894 459	107 302 588 094
ECOP	21 390 pcs	350 594 384 942	8 909 pcs	160 921 686 542	151 623 420 011
HRDOP	7 103 pcs	427 046 263 104	3 197 pcs	203 363 267 811	181 232 230 937
EPIOP	461 pcs	272 532 971 443	221 pcs	121 255 418 938	117 592 635 980
RDOP	2 310 pcs	354 807 359 723	761 pcs	125 119 152 893	119 899 835 597

Source: www.nfu.hu

Most of the applications were received within the Economic Competitiveness Operational Programme (21 390), it was followed by the Agrarian and Rural Development Operational Programme (11 171). The highest amount of the support was requested within the Human Resource Operational Programme, and the highest amount of support was also approved within this Operational Program, although it is only less than 50% of the requested amount. This ratio is valid for the other Operational Programmes too.

Within the Framework of the New Hungary Development Plan, Hungary will receive 22.4 billion HUF support in the period of 2007-2013, which is a great chance for the country to close up to the developed States. Together with the rural development supports it amounts to a total of over 8000 billion HUF. It is essential to utilize this amount as effective as possible. The results realized until today are listed in the next table according to the data updated on 20/12/2008.

Table 6

Implementation 2007 - 2013

	Received	Requested support	Supported	Approved support	Paid amount
		(HUF)	by GA	(HUF)	
Total	21 190 pcs	3 073 232 467 146	8316 pcs	1 851 081 242 029	1 188 259 510 259
SROP	455 pcs	16 608 177 319	184 pcs	11 011 942 868	8 197 790 724
SGPOP	1 302 pcs	112 889 473 200	306 pcs	40 457 899 464	17 294 289 696
STOP	563 pcs	85 186 410 757	210 pcs	36 396 229 259	21 747 390 771
NGPOP	1 428 pcs	94 786 729 973	292 pcs	25 804 361 137	14 965 393 011
EPAOP	22 pcs	39 267 976 000	16 pcs	34 609 284 046	33 623 074 146
NHOP	1 714 pcs	78 573 680 158	335 pcs	14 858 752 947	5 459 675 165
EDOP	5 982 pcs	406 584 678 368	3 722 pcs	270 650 002 263	246 761 058 646
СТОР	816 pcs	55 439 631 972	161 pcs	13 128 958 539	8 003 636 292
EEOP	1 156 pcs	256 873 272 818	392 pcs	183 812 560 920	130 321 696 520
СНОР	3 210 pcs	344 157 141 730	1 543 pcs	170 615 068 057	79 056 457 345
TOP	88 pcs	1 170 264 213 090	48 pcs	835 189 283 583	458 770 387 234
WPOP	624 pcs	38 207 521 877	203 pcs	22 470 324 925	14 690 149 174
SROP	2 073 pcs	225 619 671 025	717 pcs	117 331 829 263	93 749 385 083
SIOP	1 705 pcs	119 488 662 366	135 pcs	52 177 781 857	23 745 375 279
IOP	52 pcs	29 285 226 392	52 pcs	22 566 962	31 873 751 173

Source: www.nfu.hu

The above data shows that most of the applications were received within the Economic Operational Programme. The second largest number of applications was sent to the Central Hungary Operational Programme. The highest amount of support was requested within the Transport Operational Programme, and the highest amount of support was also approved within this Operational Programme, followed by the Economic Operational Programme. Out of the Regional Operational Programmes the Central Hungary Operational Programme was supported with the highest amount.

Comparing the results of the two above mentioned periods, it is visible that Hungary has been given significantly more chances of supports for the second period.

#### **6.1 Difficulties in the Implementation**

Based upon the experiences of the National Development Plan, during the implementation there are lots of potential barriers. It is essential to provide synergy between the planning and implementation phases. There were observable delays in organization structure at the launch of programmes realized within the National Development Plan. The second big barrier - which was blocking the implementation – was the lack of goals definitions. The NDP I. had not defined the corrective actions precisely which would have helped in defining goals.

The partnership had also not been established effectively along the projects. Difficulties occurred in the collaborations several times which threatened the implementations. The same problem can be projected to the current program cycle too.

It is still an actual problem, that many of the applicants consider the applications only as possibility to gain some money. Their approach is not that they have a promising development idea and they look for resources for the implementation, but quite the opposite. They try to create an idea which they would get the money for. The not properly planned and implemented projects are generated due to this wrong mind set. In Hungary many people prepare and submit their application in a supply driven approach instead of being demand driven.

The other problem is that people very often do not have the necessary amount of money as self contribution to start the project. According to the applications core principle the applicant has to posses certain percentages of the total amount of the project cost, however very often the applicants cannot present the required self contribution. The EU projects are often so called post-supported, thus the applicants with liquidity difficulties can not assure the financial conditions for the project implementation. Due to the economic crisis situation the bank loan conditions became stricter which also does not help the applications.

In the previous Programme period sometimes it happened that the applicants did not receive the support on time, or due to deficit of public finances delayed the project implementations.

Many of the potential applicants are scared by the bureaucracy of the application process. The processes seem to be complicated, and many people think they would not be able to fulfil the requirements. It is true that the administration related to an application is quite heavy. It is

highly appreciated that the European Union plans to achieve a 25% administration cost reduction by 2012. <sup>22</sup>

It is unbelievable, but many people are still not aware of the information necessary for a successful application submission. They do not know where to check the possibilities, and what kind of supports can be requested. On the other hand they are not able to set up an application document in high quality and in the appropriate format. They are lacking trust to turn to professional agency or person and ask for help in the preparatory work. Therefore the information sharing/distribution is an area which needs special attention.

In the previous programme period it was observable that a large portion of the EU support was given to regions which were already higher developed.<sup>23</sup> It is well represented by the success story of Central Hungary Region, while in other regions -where the support was really needed – the support was not properly realized. Thus the differences in terms of development levels are further increasing, and Hungary strengthens its Budapest centralization. This threat is valid for the New Hungary Development Plan too, as it was explained in details at the first part of this study.

The corruption and the political impact unfortunately influence the applications approval process. Obviously there is no official report on that. However some cases became public in the recent years such as the so called Zuschlag case. Janos Zuschlag (politician of the Hungarian Socialist Party) and his partners are suspected in "fraud causing significant losses". It is suspected that he contributed to mishandling about 50 million HUF EU support by various organizations and foundations.

Cases like the one mentioned above and the corruption known by the public have negative impact on people's intention towards applications. Many of them think if they do not have appropriate network, they will not win with their application anyway.

The question is what will be the impact of the economic crisis - generated by the financial crisis - on the realization of the development programmes? The Government decided to boost

<sup>&</sup>lt;sup>22</sup> www.delalfold.hu

<sup>&</sup>lt;sup>23</sup> The difference in GDP per capita between the Central Hungary and the least developed region – North Hungary in 2004 and the North Great Plain in 2006 – increased from 2.4 to 2.63.

granting the EU supports in order to reduce the losses. As part of the measures package the applicable advance payment amount is increased from 25% up to 40% in order to foster the projects implementations. This increased advance payment which can reach 40% of the approved support (maximum 300 million HUF) is applicable in the sectors impacted the most by the financial crisis. <sup>24</sup>

In order to obtain the financial supports provided by the EU, it is important that the above mentioned problems are handled properly.

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<sup>&</sup>lt;sup>24</sup> www.operativprogram.hu

#### 7. Conclusion

It is not easy to give a correct estimate on the growth effects of the EU-funded OPs. The empirical findings based on international experience, primarily ex-post studies on former cohesion countries clearly indicate that, at both country and regional level, the actual growth effects are smaller than what macro-simulation models assume, mainly because the imperfection in institutional factors. In the case of investments, the crowding-out effect can be much more characteristic than the increase of productivity assumed by the models. On top of all that, in the period between 2007 and 2013, Hungary has to carry out a severe fiscal adjustment. And under such circumstances, even by assuming an effective bureaucracy allocating the resources, economic additionality will fail to be fulfilled, and the structure of investments will shift in a suboptimal direction. On the other hand, the adjustment might result in removal of institutional barriers slowing down economic development.

The NHDP will rather have a positive effect on investments, innovation and R&D, than on the elements of human capital and employment. Experts<sup>25</sup> estimate the additional growth effect of the Operational Programmes to be between 0.3 and 0.4 percentage points annually, compared to the average figure for the period 2007–2013, and the effect is likely to be rather stronger in the second half of this period. The effect of OPs on capital and on total factor productivity is expected to be more significant, while that on labour will be marginal. The impact of measures concentrating on increasing employment and employability may be coupled with decreasing employment due to growing productivity. The probable strengthening of the agglomeration has a positive effect on the aggregated growth, but in may wider differences in development between agglomerations and rural areas.

To be able to use the external resources successfully it is necessary that the participating institutions co-operate in a positive, mutually supportive way, and do not lose sight of the development policy's original objectives. The mismanagement of external development resources may produce controversial impacts, influencing the regulatory process in a way that is beneficial for a few players only; state control may be unnecessarily strict in sectors where it is not justified; development policy-makers may falsely believe that they know better than the individual actors on the market where the resources are best targeted; or, they may use the

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<sup>&</sup>lt;sup>25</sup> Gács-Halpern, 2006

resources for their own purposes.<sup>26</sup> So there is a real risk that part of the development resources could become loss-making, or used ineffectively.

A rent seeking mentality may reduce the effectiveness of development policies, especially in case of investments in infrastructure, i.e. resources are not necessarily directed to the most useful purposes, or the investment is not implemented by the actor who guarantees the most favourable conditions, and that productive resources are wasted.

Regarding larger investment, they should be preceded by a cost-benefit analysis, to determine which investment is likely to be most effective. A cost-benefit analysis should be a compulsory element in all proposals for funding, and acceptance must be tied to achievement of the results calculated. Especially in the case of large-scale investments, not only compliance with the formal criteria should be examined, but also whether the particular development does not squeeze out other investments, and whether it does not distort the structures of communal investments in a suboptimal direction.

The regional development policies consider urban development a priority, based on the higher absorption capacity in agglomerations. Programmes and elements that boost employment and help local enterprises are regarded as a priority. But work seekers living in deprived areas, where there are few job opportunities, will still have to resort to migration or commuting to gain access to income. This, however, will result in the further impoverishment of out-of-town settlements, which suffer from the urban concentration of both enterprises and state or local government-financed institutions, and it will result in extreme disadvantage for microregions with no urban centres, unless there is a dramatic improvement in the accessibility of peripheral areas.<sup>27</sup>

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<sup>&</sup>lt;sup>26</sup> TÁRKI (2007)

<sup>&</sup>lt;sup>27</sup> TÁRKI (2007)

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Annex 1
Operative Programs and growth factors

Operative programs, priorities	Decisive growth factor(s)
EDOP	
R&D and innovation for competitiveness	Physical capital
•	Human capital
	Total Factor Productivity (TFP)
Complex development of SMEs	Human capital (?)
	TFP (?)
Strengthening of modern business climate	TFP
JEREMIE-type financial measures	TFP
SROP	
Improving employability	Labour
Improving adaptability	Human capital
	Labour
High quality education and availability for	Human capital
all.	Labour
Developing human resources necessary for	Human capital
research and development and innovation	
Conservation of health, social inclusion and	Human capital
participation	
SIOP	
Developing education infrastructure	Physical capital
Developing health infrastructure	Physical capital
Development of infrastructure helping labour	Physical capital
market participation and social acceptance	
TOP	
Improving the international accessibility of	Physical capital
the country	
Improving regional accessibility	Physical capital
Connection of transport modalities,	Physical capital
development of the inter-modality and	
transport infrastructure of economic centres.	
Developing urban and suburban community	Physical capital
transport	
StaROP	
Higher organizational performance and more	TFP
cost effective operation of institution.	
Improvement the human resources skills.	Human capital
Renewal of governance	TFP
ROP	
Strengthening regional competitiveness	Labour
	TFP
Increasing tourism attractiveness of regions	Physical capital

	Labour		
Developing regional transport infrastructure	Physical capital		
Improving accessibility and energy	Physical capital		
efficiency	TFP		
Developing human infrastructure	Physical capital		
	TFP		
General integrated development of	Physical capital		
settlements	Labour		

Based on TÁRKI (2007)

Types of measures	Measures (priority axes)	Impact on economic			
Enhancement of	EDOP1: R&D and innovation for the	growth Agglomeration effects			
competitiveness	enhancement of competitiveness;	in the development			
	SROP1: enhancement of	centres (resource-			
	competitiveness; CHOP1: the	concentration in the			
	innovation and enterprise-oriented	development poles)			
	development of the knowledge based	T I			
	economy				
Enterprise development	EDOP2: the complex development of	The competitiveness of			
	enterprises	small enterprises is			
		likely to improve, but at			
		the macro level,			
		significant deadweight			
		losses and crowding-out			
		effects must be			
		expected.			
Business environment	EDOP3: strengthening of a stat-of-art	The removal of			
development	business environment	endogenous barriers			
	CHOP2: development of the framework	may lead to			
	of competitiveness	agglomeration effects;			
	CHOP3: strengthening the	local regional activity			
	attractiveness of the region	and tourism may be			
Davidament of SMEs	EDOD4. IEDEMIE tyma financial	enhanced. Enhancement of			
Development of SMEs,	EDOP4: JEREMIE-type financial				
micro-programmes	products	investment activity in small enterprises.			
Tourism development	ROP3: strengthening the potential of	The enhancement of			
Tourism development	tourism	tourism and			
	tourism	employment, with the			
		effects differing by			
		region			
Employability	SROP1: the development of	The development of			
	employability, incentives for entering	human capital broadens			
	the labour market	the available workforce,			
		thus generating			
		supplementary added			
		economic value.			
Development of public	SROP2: improvement of adaptability;	The development of			
education and life-long	SROP3: securing quality education and	human capital broadens			
learning	access to all	the available workforce,			
		thus generating			
		supplementary added			
		economic value.			
Health promotion and	SROP5: health promotion and	The development of			
social integration	strengthening of social integration and	human capital broadens			

	participation	the available workforce, thus generating supplementary added economic value.
Development of physical preconditions of human infrastructure	SIOP1: development of educational infrastructure; SIOP2: development of the healthcare infrastructure, SIOP3: developing infrastructure supporting participation in the labour market	The direct growth effect of investments is uncertain, and the direct effect is difficult to measure. There may be an intensification of agglomeration effects.
Supporting the human conditions of R&D and quality education	SROP4: development of human resources in the field of quality education, research, innovation	The growth effect is uncertain, and difficult to measure
The development of regional centres by improving accessibility and public transport	TOP1: the international accessibility of the country and its regional centres; TOP3: integrating the modes of transport, development of the integration and the transport infrastructure of economic centres; TOP4: development of the public transport of cities and suburban areas; ROP2: development of regional and local transport infrastructure	Physical mobility and a possible improvement in the conditions of commuting in regional centres may lead to the growth of output.
Regional accessibility	TOP2: improvement of regional accessibility; ROP2: improvement of regional and local transport infrastructure	Physical mobility and a possible improvement in the conditions of commuting in regional centres may lead to the growth of output. The improvement in mobility in small areas may have a significant positive effect on the economic growth opportunities of the given area.
Development of areas and settlements	ROP4: development of settlements and areas; CHOP5: urban renewal	Improvement of investment opportunities in marginalized areas.
Environmental protection programmes	EEOP 1 – EEOP 6	Generically non- interpretable growth effects; possibly an improvement in energy efficiency.
Development of state administration and organizations	StaROP 1-3; EAOP 1-3	Uncertain, difficult to measure growth effects; EKOPs may reduce the administrative time

	burdens of enterprises	

Based on TÁRKI (2007)

 $\label{eq:continuous} \textbf{Annex 3}$  Index of priorities and Operational Programmes based on own calculation

<i>OPs</i>	Priorities	% of OP	% of NHDP	Priority index	OP index
EDOP		01	10	macx	2,73
EDOP1	R&D and innovation for competitiveness	33,7		2,92	
EDOP2	Complex development of SMEs	31,1		2,8	
EDOP3	Strengthening of modern business climate	7,7		2,63	
EDOP4	JEREMIE-type financial measures	23,9		2,5	
EDOP5	TA	3,6		2	
SROP			14,1		1,92
SROP1	Improving employability	17,66		1,92	Ź
SROP2	Improving adaptability	17,66		1,75	
SROP3	High quality education and availability for all.	21,71		2	
SROP4	Developing human resources necessary for research and development and innovation	10,93		2,75	
SROP5	Social inclusion and participation	10,83		1,46	
SROP6	Conservation of health	5,4		1,25	
SROP7	TA	3,05		2	
SROP8	Implementation of the OP's priority axes in the Central Hungary region	12,3		2	
SROP9	TA in Central Hungary region	0,45		2	
SIOP			7,8		1,98
SIOP1	Developing education infrastructure	27,8		2,08	
SIOP2	Developing health infrastructure	50,1		1,92	
SIOP3	Development of infrastructure helping labour market participation and social acceptance	18,5		2	
SIOP4	TA	3,6		2	
TOP TOP1	Improving the international road accessibility of the country	19	24,8	3	2,36
TOP2	Improving the international rail and waterway accessibility of the country	27,7		2,13	
TOP3	Improving regional accessibility	24,5		2,25	
TOP4	Connection of transport modalities, development of inter-modality	2,4		1,75	
TOP5	Developing urban and suburban community transport	25,1		2,31	
TOP6	TA	1,3		2	
StaROP			0,6		2,06
StaROP1	Higher organizational performance and more cost effective operation of institution.	54,32		2,13	
StaROP2	Improvement the human resources skills.	14,39		1,92	
StaROP3	Development to be attained in the Central Hungary Region	29,16		2	

StaROP4	TA	2,13		2	
EEOP			16,6		1,78
EEOP1	Healthy, clean settlements	53,06	<u> </u>	2	
EEOP2	Proper treatment of our living waters	28,7		1,3	
EEOP3	Wise management of natural assets	2,75		1,25	
EEOP4	Increase of use of renewable energy sources	5,15		2,5	
EEOP5	Efficient energy use	3,14		2,25	
	= -				
EEOP6	Sustainable lifestyle and consumption patterns	1,58		1	
EEOP7	Project preparation	4,01		1,5	
EEOP8	TA	1,61		2	
<b>EAOP</b>			1,5		2,01
EAOP1	Renewal of the internal procedures	35,7		2,13	
EAOP2	Developments aimed at improving access to public	41,5		1,92	
	services				
EAOP3	Project preparation	20,9		2	
EAOP4	TA	1,9		2	
IOP			1,3	_	2,00
IOP1	Operation and development of central and horizontal institutions	68,9		2	
IOP2	Tools required for the high-standard utilisation of support	31,1		2	
SGPOP			3		2,03
SGPOP1	Regional economic development	17,4		2,57	, , , , ,
SGPOP2	Tourism development	18,3		2	
SGPOP3	Transport infrastructure	21,1		2,31	
SGPOP4	Human infrastructure development	18,8		2,13	
SGPOP5	Settlement development actions	20,8		1,25	
SGPOP6	TA	3,6		2	
STOP			2,8		1,94
STOP1	Competitive economy based upon development of urban areas	10,5		2,54	
STOP2	Strengthening the region's tourism potential	18,6		2,08	
STOP3	Development of human public services	18,3		1,9	
STOP4	Integrated urban development	22,6		2,17	
STOP5	Improving accessibility and environmental development	26,4		1,43	
STOP6	TA	3,6		2	
NGPOP			3,9		2,30
NGPOP1	Regional economic development	14,3		3	
NGPOP2	Tourism development	18,17		2,58	
NGPOP3	Improving transport conditions	17,42		2,75	
NGPOP4	Development of human infrastructure	20,59		2,25	
NGPOP5	Urban and regional development	25,83		1,5	
NGPOP6	TA	3,6		2	
NHOP			3,6		2,21
NHOP1	Creating a competitive local economy	14,5		2,94	
NHOP2	Strengthening potential for tourism	20,8		2,38	
NHOP3	Settlement development	28,5		2	
NHOP4	Development of human community infrastructure	22,6		1,94	

NHOP5	Development of regional transport	10,1		2,08	
NHPOP6	TA	3,6		2	
CTOP			2		2,25
CTOP1	Regional economic development	15,5		2,88	
CTOP2	Regional tourism development	22,7		2,5	
CTOP3	Sustainable settlement development	14,3		2,13	
CTOP4	Development of local and regional environment and transport infrastructure	29,84		2,19	
CTOP5	Development of human infrastructure	14,06		1,5	
CTOP6	TA	3,6		1,5	
WPOP			1,9		2,14
WPOP1	Regional economic development	15,38		3	
WPOP2	Tourism development	23,63		2,45	
WPOP3	Urban development	19,04		1,92	
WPOP4	Environmental protection	20,07		1,65	
WPOP5	Infrastructure development for local and regional public services	18,29		1,81	
WPOP6	TA	3,6		2	
СНОР			6,1		2,38
CHOP1	Innovation- and enterprise-oriented development of the knowledge economy	27,7		2,9	
CHOP2	Improving the preconditions for competitiveness	22,2		2,83	
CHOP3	Development of the region's attractiveness	12,7		1,83	
CHOP4	Development of system of human service institutions	19,1		2	
CHOP5	Development of settlement areas	14,7		1,75	
CHOP6	TA	3,6		2	
NHDP					2,01

# Annex 4

# Own calculations of Indices of priorities and Operational Programmes

Economic Development OP

Priority Axes/Measures	PE	WE	K	E	Average				
		Ec	conomic I	Developm	ent OP				
P1: R&D ans innovation for competitiveness									
M 1.1: Support of applied R&D activities	2	2	3	2	2.00				
M 1.2: Promotion of the innovation activities of	3	3	3	3	3,00				
enterprises	3	3	3	3	3,00				
M 1.3: Promotion of the innovation activities and co-operations of enterprises and higher education	3	3	3	3	3,00				
M 1.4 Encouragement of the establishment of thechnology intensive (spin-off) small businesses	3	3	3	3	3,00				
M 1.5 Promotion of technology transfer	2	3	3	3	2,75				
M 1.6 Strengthening of bridge building and incubation activities	2	3	3	3	2,75				
P1 average	2,67	3,00	3,00	3,00	2,92				
P2: Improv	·					rises (esp	pecially S	MEs)	
M 2.1 Improvement of capital provision for enterprises	3	3	3	3	3,00				
M 2.2 Spread of entrepreneurial culture	2	3	3	2	2,50				
M 2.3 Organisational development	2	3	3	2	2,50			The application of relatively restricted	
M 2.4 Technological modernisation	3	3	3	3	3,00			resources might be inadequately focused	
M 2.5 Support of employment creating investments in disadvantaged regions	3	3	3	3	3,00				
P2 average	2,6	3	3	2,6	2,80				
	P3: Dev	elopmen	t of busin	ess infras	structure a	nd servic	es		
M 3.1 Development of industrial parks	3	3	3	2	2,75			It is not clear, to what extent the	

M 3.2 Spreading modern ICT and improvement of physical infrastructure	2	3	3	2	2,50	orie inter mate and	nly supply- nted rventions will ch real needs, through their tiplicator effect	
M 3.3 Establishment of the network of logistic parks	2	3	3	2	2,50	to w will enco	that extent they be able to ourage nomic	
M 3.4 Establishment of broad band IT networks	3	3	3	2	2,75	grov	vth.A30	
P3 average	2,5	3	3	2	2,63			
			P4: J	EREMIE	E			
M 4.1 Micro-financing	3	2	3	2	2,50			
M 4.2 Garancy tools	3	2	3	2	2,50			
M 4.3 Developing capital market	3	2	3	2	2,50			
P4 average	3	2	3	2	2,5			
P5: Technical assistance								
TA average	1	3	3	1				

# Social Renewal OP

Priority Axes/Measures	PE	WE	K	E	Average						
	S	Social Rei	newal OF	)							
	P1: Impi	rovement	of emplo	oyability							
M 1.1 Development of the											
employment services	2	3	2	2	2,25						
M 1.2 Labour market activation,											
prevention and training	2	2	2	2	2,00						
M 1.3 Social economy,											
innovative and local					4.70						
employment initiatives and pacts	1	2	2	1	1,50						
P1 average	1,67	2,33	2	1,67	1,92			<u> </u>			
	P2: Imp	provemen	t of adap	tability							
M 2.1 Facilitation of access to											
training	2	2	2	1	1,75						
M 2.2 Development of the institutional system promoting											
adaptability on the labour market	2	2	2	1	1,75						
M 2.3 Enhancement of											
adaptability of organisations	2	2	2	1	1,75						
P2 average	2	2	2	1	1,75						
P:	P:3 Ensuring access to quality education for all										
M 3.1 Supporting the dissemination of											
competence.based education	2	3	2	2	2,25						

					T			1
M 3.2 Improving efficiency of								
the public education system:								
development of innovative								
solutions and cooperation	2	3	2	2	2,25			
M 3.3 Decreasing the								
segregation of severely								
disadvantaged and Roma pupils	2	2	2	1	1,75			
M 3.4 Supporting the education					,			
of groups with different								
education needs	2	2	2	1	1,75			
P3 average	2,00	2,50	2,00	1,50	2,00			
P4: Development of h	,	,		,		and innov	ation	l
	imun resoure	cs requir	ca joi re.	scar cri/ac	Vetopment		unon	
M 4.1 Improving the quality of								
tertiary education in accordance	2	2	2		2.50			
with lifelong learning	2	3	3	2	2,50			
M 4.2 Expansion of the								
capacities of R&D&I&E of		_	_	_	2.00			
tertiary education	3	3	3	3	3,00			
P4 average	2,5	3	3	2,5	2,75			
	itenance of he	ealth, soc	ial partic	ipation a	ind inclusio	n		
M 5.1 Developing the human								
capacities of the most								
disadvantaged territories	2	2	2	1	1,75			
M 5.2 Investment in our future:								
child and youth programmes	1	2	2	1	1,50			
M 5.3 Impovement in access of								
increasingly disadvantaged								
groups to social services	1	2	2	1	1,50			
M.5.4 Development of social					1,00			
care system, improvement in								
access to services	1	2	2	1	1.50			
	1	2	2	1	1,50			
M 5.5 Development of local								
communities and the civil	1	2	2	1	1.50			
society M.5. Carboning against	1	2	2	1	1,50			
M 5.6 Enhancing social								
cohesion through crime								
prevention and reintegration	1	1	1	1	1,00			
programmes	1	1	1 02	1 100				
P5 average	1,17	1,83	1,83	1,00	1,46			
	P6: Develop	ment of l	numan in	frastruci	ure			
M 6.1 Improving health and								
encouraging health-conscious								
behaviour	1	2	1	1	1,25			
M 6.2 Development of human						T	_	
resources and services to support								
restructuring of health care	1	2	1	1	1,25			
P6 average	1	2	1	1	1,25			
	*		al assista			<u> </u>		I
	1	2	2	1	2,00			
DO. 71	ting the OD!	nwi owit	awaa : 41			wagiar.		
P8: Implemen	ung ine OP's	priority o			u Hungary	region		
	2	2	2	2	2			
P9: Te	echnical assic					Т		
	1	3	3	1	2			

## Social Infrastructure OP

Priority Axes/Measures	PE	WE	K	E	Average							
		Social Infr	astrucutr	e OP								
	P1: De	elopment e	ducation	nfrastructi	ıre							
M 1.1 Development of the		•		J								
infrastructure of the school-												
based education	2	2	2	2	2,00							
M 1.2 Development of												
Infrastructure Promoting Co-												
operative between Education												
and Cultural Institutions	2	2	1	1	1,50							
M 1.3 Development of the												
Infrastructure of Services and												
Research Activities in Higher												
Education	2	3	3	3	2,75							
P1 average	2,00	2,33	2	2,00	2,08							
P2: Developing health infrastructure												
M 2.1Development of Regional		1 0										
Out.patient Care Network	2	2	2	1	1,75							
M 2.2 Preparation of the												
Institutional System of In-												
patient Care For Restructuring	2	2	2	1	1,75							
M 2.3 IT Development in the					,							
Health Care System	2	3	2	2	2,25							
P2 average	2	2,333333	2	1,333333	1,92							
P3: Development of infra	structure	supporting	labour n	narket pene	tration and	l social a	cceptanc	$\overline{e}$				
M 3.1 Development of the												
Infrastructure of Services												
Supporting Labour Market												
Participation	2	3	2	2	2,25							
M 3.2 Development of the				_								
Infrastructure Supporting Social												
Inclusion	2	2	2	1	1,75							
P3 average	2	2,5	2	1,5	2,00							
		P4: Techn	ical assis	tance								
	1,00	3,00	3,00	1,00								

# Transport OP

Priority Axes/Measures	PE	WE	K	E	Average			
			Transport	OP				
P1: Improvement of the international road accessibility of Hungary								
M 1.1 Extension of the expressxay network on TEN routes	3	3	3	3	3,00			
P1 average	3	3	3	3	3,00			
P2: Improv	ement of th	e internati	onal rail an	id waterway	v accessibil	ity of Hung	gary	
M 2.1 Modernisation of main railways	2	3	2	2	2,25			
M 2.2 Improvement of infrastructure of river transport	2	2	2	2	2,00			
P2 average	2,00	2,50	2,00	2,00	2,13			

	P3	: Improven	ent of regi	onal access	sibility					
M 3.1 Development of road networks, improved loading capacity of main roads	3	2	2	2	2,25					
M 3.2 Establishment of										
regional transport										
associations	1	3	3	2	2,25					
P3 average	2,00	2,50	2,50	2,00	2,25					
P4: Connection of transport means, development of inter-modality and transport infrastructure of economic centres										
M 4.1 Connecting various transport means	1	2	2	1	1,50					
M 4.2 Connecting logistic centres and industrial parks into main transport network	2	2	2	2	2.00					
P4 average	1,5	2	2	1.5	2,00					
	5: Developn			,-		snort				
M 5.1 Track-bound public	. Developii	iem oj urvi	an ana agg	iomeration	public trais	isport				
transport development, intermodal connections	3	3	3	2	2,75					
M 5.2 Development of suburban railways and their connection to local public transport	3	3	3	2	2,75					
M 5.3 Construction of bicycle roads	1	2	1	2	1,50					
M 5.4 Reduction of	1		1		1,50					
congestion in city centres	2	2	3	2	2,25					
P5 average	2,25	2,50	2,50	2,00	2,31					
		P6: T	echnical a	ssistance						
	1	3	3	1						

# State Reform OP

Priority Axes/Measures	PE	WE	K	E	Average					
		State Ref	orm OP							
P1: Renewal of processes and organisation development										
M 1.1 Improvement of the capacity for self-governance and the quality of legislation	1	2	2	1	1,50					
M 1.2 Renewal of procedures and work processes as well as organisation development	1	2	2	1	1,50					
P1 average	1	2	2	1	1,50					
P	2: Improving	the quali	ty of hun	nan resoi	urces					
M 2.1 Establishment of open recruitment and an efficient intarnal replacement	1	2	1	2	1,50					
M 2.2 Performance-based career pathways	1	2	1	2	1,50					
P2 average	1	2	1	2	1,50					
P3: Develo	pments to be	attained	in the Ce	entral Hu	ıngary regi	on				

M 3.1 Renewal of the processes and organisational development	2	2	2	2	2,00					
M 3.2 The improvement of the quality of human resources	1	2	1	1	1,25					
P3 average	1,5	2	1,5	1,5	1,63					
P4: Technical assistance										
	1	3	3	1	2,00					

# Energy and Environment OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar				
	Ener	rgy and l	Environn	nent OP							
	Р1: Не	althy an	d clean	settleme	nt						
M 1.1 Waste management	3	2	2	2	2,25						
M 1.2 Wastewater treatment	3	2	2	2	2,25						
M 1.3 Improvement of drinking											
water quality	1	2	2	1	1,50						
P1 average	2,33	2,00	2,00	1,67	2,00						
	P2: W	ise mand	agement	of water	rs						
M 2.1 Formation of good flood											
protection practices	1	2	1	1	1,25						
M 2.2 Complex river catchment											
development	2	1	2	1	1,50						
M 2.3 Recultivation of											
municipal solid waste landfills	2	1	1	1	1,25						
M 2.4 Remediation of polluted											
areas	2	1	1	1	1,25						
M 2.5 River basin management	2	1	1	1	1,25						
P2 average	1,8	1,2	1,2	1	1,30						
P3: Wise management of natural assets											
M 3.1 Restoration, preservation											
and development of protected											
natural assets and areas	2	1	1	1	1,25						
M 3.2 Creation of the											
infrastructure basis for habitat-											
conserving agriculture and forestry industry	2	1	1	1	1,25						
M 3.3 Developing of the forest		1	1	1	1,23						
school network	1	2	1	1	1,25						
P3 average	1,67	1,33	1	1	1,25						
-	Increase of		france			<u> </u>	<u> </u>				
P4 average	3	ine use d	y renewa 2	ubie ene. 2	2,50						
1 i uvoiugo	-	5: Efficie			2,30		<u> </u>				
P5 average	2	<b>э: Е</b> јјіси 3	ni energ 2	y use 2	2,25						
	: Sustainable						l				
M 6.1 Promotion of sustainable	Susumusic	ijesiyte	ana cor	ышрш	paneins						
consumption	1	1	1	1	1,00						
M 6.2 Developments targeting	1	1	1	1	1,00						
e-environment protection	1	1	1	1	1,00						
P6 average	1	1	1	1	1,00						
		7: Projec			1,00		I				
	1	2.	<i>γι εραι</i> γ	1	1,50						
	PS	: Techn	ical assis	stance	1,50		l .				
	10	. 1001111	cui ussi								

1	3	3	1	2,00		

## Electronic Administration OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar				
	E	lectronic	Adminis	stration OP	•						
	P1: Re	newal of	the inte	rnal proced	dures						
M 1.1 Electronization of the											
process of public administraton											
services	2	3	2	2	2,25						
M 1.2 Establishement of the											
central electronic services	2	3	2	1	2,00						
P1 average	2	3	2	1,5	2,13						
P2: Developments aimed at improving access to public services											
M 2.1 Provision of service											
interface for clients	2	2	2	2	2,00						
M 2.2 Development of the											
Central Electronic Service											
System and IT security											
infrastructure	3	2	2	2	2,25						
M 2.3 Electronic authentication											
of citizens	1	2	2	1	1,50						
P2 average	2	2,00	2,00	1,666667	1,92						
	<b>P</b> 3	3: Prefer	ential de	velopments	S						
M 3.1 Renewal and											
electronization of administrative											
procedures	2	2	2	2	2,00						
M 3.2 Developments for											
improving access to public											
services	2	2	2	2	2,00						
P3 average	2	2	2	2	2,00						
		P4: Tec	hnical a	ssistance							
	1	3	3	1	2,00						

# Implementation OP

Priority Axes/Measures	PE	WE	K	E	Average		Index	Kommentar		
		Im	plementati	on OP						
P1: Opera	P1: Operation and development of central and horizontal institutions									
M 1.1 Providing the capacity										
of acentral and horizontal										
institutions	1	3	3	1	2,00					
M 1.2 Elaboration and										
implementation of educational										
and organisational										
development measures										
designed to assist the										
continuous development of										
the institutional system as a										
whole	1	3	3	1	2,00					
P1 average	1	300%	300,00%	100,00%	2,00	68,9000				
P2: To	P2: Tools required for the high-standard utilisation of support									

M 2.1 Development of an IT							
system to comply with EU							
requirements and to actively							
support the execution of the							
duties of those working within		_	_	_	• • •		
the institutional system	1	3	3	1	2,00		
M 2.2 Evaluation of							
programmes, operate a system							
of on-going evaluation	1	3	3	1	2,00		
M 2.3 Provide contunuous							
and comprehensive							
information to potential							
beneficiaries, carry out							
publicity activities	1	3	3	1	2,00		
M 2.4 Operation of a locally							
accessible network of advisers							
assisting (potential)							
beneficiaries in their efforts to							
generate and implement							
quality projects	1	3	3	1	2		
P2 average	1	3	3	1	2,00	31,1000	

## South Great Plain OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar			
		South	Great Pla	ain OP						
	P1: 1	Regional	economi	c develop	ment					
M 1.1 Development of cooperation of regional economic networks and clusters	2	3	3	3	2,75					
M 1.2 Development of business infrastructure	2	3	3	3	2,75					
M 1.3 Business and market- development consulting, stimulating investments	2	3	3	2	2,50					
P1 average	2,00	3,00	3,00	2,67	2,67					
P2: Tourism-related developments										
M 2.1 Development of health tourism	2	2	2	2	2,00					
M 2.2 Tourism built on cultural and intellectual values	2	2	2	2	2,00					
M 2.3 Establishment of tourist destination management	2	2	2	2	2,00					
M 2.4 Support of infrastructural developments and of services for active tourism	2	2	2	2	2,00					
M 2.5 Quantitative and qualitative development of accomodations connected to										
tourist attractions	2	2	2	2	2,00					
P2 average	= 1				2,00   structure		<u> </u>			

M 3.1 Infrastructural							
investment for improving							
conditions of public road	2	2	2		2.00		
accessibility of micro-regions	3	3	3	3	3,00		
M 3.2 Modernization of							
community transport	2	2	2	2	2,00		
M 3.3 Construction of cycle							
path network	2	2	2	2	2,00		
M 3.4 Development of the road							
network within municipalities	3	2	2	2	2,25		
P3 average	2,50	2,25	2,25	2,25	2,31		
	P4: H	uman Inf	rastructu	re Develo	opment		
M 4.1 Modernization of							
healthcare services	2	2	2	2	2,00		
M 4.2 Development of the							
infrastructure of public							
education institutes	2	2	2	2	2,00		
M 4.3 Infrastructure							
development to support social							
inclusion and participation	2	2	2	2	2,00		
M 4.4 Further professional/					•		
vocational training	2	3	3	2	2,50		
P4 average	2,00	2,25	2,25	2,00	2,13		
-	P5:	Regiona	l develop	ment acti	ons		•
M 5.1 Integrated urban		J	1				
rehabilitation with a social							
focus	2	1	2	1	1,50		
M 5.2 Protection of our							
environmental values,							
environmental safety	1	1	1	1	1,00		
P5 average	1,5	1	1,5	1	1,25		
		P6: Tec	hnical as	sistance			
	1	3	3	1	2,00	 	

### South Transdanubia OP

Priority Axes/Measures	PE	WE	K	E	Average		Index	Kommentar
		South T	Transdani	ubia OP				
P1: Compe	titive ecor	ıomy bui	lt upon th	ie develoj	pment of u	rban area	ıs	
M 1.1 The formation and development of co-operation between economic and sector clusters, and companies	2	3	3	3	2,75			
M 1.2 Improvement of the consultancy system supporting small and medium-sized enterprises	2	3	3	3	2,75			
M 1.3 Development of incubator houses	3	3	3	3	3,00			
M 1.4 Development of industrial parks	2	3	3	2	2,50			
M 1.5 Brownfiled developments	2	2	2	2	2,00			

NA CE LA							
M 1.6 Experimental actions and							
programmes for supporting regional innovation	2	2	2	2	2.25		
	2	3	2	2	2,25		
P1 average	2,17	2,83	2,67	2,50	2,54		
	2: Streng	thening t	he region	ı's tourisi	m potentia	<u>l</u>	
M 2.1 Developing propulsive							
tourism products, and							
formulating complex regional							
tourism products in the core tourism areas	2	2	2	2	2,00		
M 2.2 Expanding the tourism					2,00		
services offering, and the							
development of the							
infrastructure	3	2	2	2	2,25		
M 2.3 The setting-up of a		_					
destination management							
organisation that implements an							
efficient marketing strategy	2	2	2	2	2,00		
P2 average	2,33	2,00	2,00	2,00	2,08		
1 2 average							
M 2 1 Establishing into anotad	P3: Dev	elopmen	t of huma	in public	services		
M 3.1 Establishing integrated micro regional level human							
services networks and their							
centres	2	3	2	2	2,25		
M 3.2 Healthcare related		3			2,23		
development efforts	2	2	2	2	2,00		
					2,00		
M 3.3 Development of social services	1	2	2	2	1 75		
	1	2	2	2	1,75		
M 3.4 Accessibility of public							
places for people with							
disabilities, information technology improvements			_	_	• 00		
	2	2	2	2	2,00		
M 3.5 Strengthening the							
employment of socially							
disadvantaged	1	2	2	1	1,50		
P3 average	1,6	2,2	2	1,8	1,90		
	P4:	Integrate	ed urban	developn	nent		
M 4.1 Assistance for function-							
expanding integrated urban							
rehabilitation operations	2	2	2	2	2,00		
M 4.2 Assistance for social							
integrated urban rehabilitation							
projects	2	2	2	1	1,75		
M 4.3 Development for the	_	_			,,,,		
Pécs European City of Culture							
2010	3	3	3	2	2,75		
P4 average	2,33	2,33	2,33	1,67	2,17		
				-	ntal develo	pment	
M 5.1 Developing the four and							
five digit marked sub-road							
network significant for the							
network	2	2	2	2	2,00		
M 5.2 Formulating a							 
harmonised regional public							
transit transport system	2	2	2	2	2,00		
		I			, , , , ,	i	

5.3 Developing of the community transport system for the urban agglomerations and the Balaton region	2	2	2	2	2,00		
M 5.4 Creating the conditions for job-related bicycle transport	1	1	1	1	1,00		
5.5 Developing wastewater management in small settlements	1	1	1	1	1,00		
5.6 Environmental emergency response - neutralisation of geological risk points, and protecting water quality	1	1	1	1	1,00		
5.7 Strengthening protection against damage from domestic waste	1	1	1	1	1,00		
P5 average	1,43	1,43	1,43	1,43	1,43		

### North Great Plain OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar
		North	Great Pl	ain OP		·	
	P1:	Regional	economi	c develor	ment		
M 1.1 Infrastructure development of the regional business environment	3	3	3	3	3,00		
M 1.2 Development of regional and inter-regional co-operation	3	3	3	3	3,00		
M 1.3 Development of information and innovation services	3	3	3	3	3,00		
P1 average	3,00	3,00	3,00	3,00	3,00		
		P2: Tou	rism deve	elopment	T T		1
M 2.1 Development of tourism products and attractions	3	2	3	2	2,50		
M 2.2 Development of commercial accomodations	3	3	3	3	3,00		
M 2.3 Development of destination management	2	3	2	2	2,25		
P2 average	2,67	2,67	2,67	2,33	2,58		
	P3:	Improvin	g transpo	ort condi	tions	·	
M 3.1 Infrastructure development of public road and transport	3	3	3	3	3,00		
M 3.2 Development of community transport	2	3	3	2	2,50		
P3 average	2,5	3	3	2,5	2,75		
	P4: Dev	elopment	t of Hum	an Infras	tructure		
M 4.1 Development of infrastructure of human public services	2	3	3	2	2,50		
M 4.2 Improvement of equal accessibility to public services	2	2	2	2	2,00		
P4 average	2	2,5	2,5	2	2,25		
	P5: U	Urban an	d regiona	ıl develop	ment		

M 5.1 Urban development	2	2	2	2	2,00				
M 5.2 Regional and settlement- level nature and environmental protection developments	1	2	2	1	1,50				
5.3 Increased social involvement of and co-operationbetween NGO's and religious organisations in the region	1	1	1	1	1,00				
P5 average	1,33	1,67	1,67	1,33	1,50				
P6: Technical assistance									
_	1	3	3	1	2,00				

# North Hungary OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar
		Nort	h Hungar	y OP			
	P1: Cr	eating a c	ompetitiv	e local e	conomy		
M 1.1 Improving businesses' competitiveness	2	3	3	3	2,75		
M 1.2 Encouraging the		3	3		2,73		
establishment of new							
businesses	3	3	3	3	3,00		
M 1.3 Development of							
industrial areas and industrial							
parks with regional significance	3	3	3	3	3,00		
M 1.4 Supporting innovative							
experimentation projects	3	3	3	3	3,00		
P1 average	2,75	3,00	3,00	3,00	2,94		
	P2: St	trengthen	ing poten	tial for to	ourism		
M 2.1 Sustainable development							
of regional tourist attractions							
and products	3	2	2	2	2,25		
M 2.2 Developing commertial							
accomodations and their		_	_				
services	3	3	2	3	2,75		
M 2.3 Regional destination		_	_	_			
management organisations	2	2	2	2	2,00		
M 2.4 Innovative service centre							
to promote research and		_	_	_			
investment in tourism	3	3	2	2	2,50		
P2 average	2,75	2,50	2,00	2,25	2,38		
N 2 1 X		P3: Settle	ement dev	elopmen	t	Г	1
M 3.1 Integrated, action area							
based regeneration of deteriorated urban areas and							
estates threatened by							
degradation	2	2	2	2	2,00		
M 3.2 Development of central					,		
settlements of micro-regions	3	2	2	2	2,25		
M 3.3 Infrastructural					, -		
development of rural settlemets							
supplementing the rural							
development programme	3	2	3	2	2,50		

M 3.4 Protection of our								
environment assets,								
environmental safety	1	2	1	1	1,25			
P3 average	2,25	2,00	2,00	1,75	2,00			
P4:	Developn	ent of hi	ıman con	nmunity	infrastruct	ure		
M 4.1 Modernising health care								
services	2	2	2	2	2,00			
M 4.2 Developing social								
services to strengthen social								
adoption	1	2	2	1	1,50			
M 4.3 Organising public								
education adjusted to regional								
peculiarities and developing its	2				2.25			
infrastructure	2	3	2	2	2,25			
M 4.4 IT development of								
regional public administration								
and public services	2	2	2	2	2,00			
P4 average	1,75	2,25	2,00	1,75	1,94			
	P5: D	evelopme	ent of reg	ional tra	nsport			
M 5.1 Developing, renovating								
and making accident free low								
category road connecting		_	_		• 00			
settlements	2	2	2	2	2,00			
M 5.2 Developing public								
transport between towns	2	2	2	2	2,00			
5.3 Developing water transport								
management, river crossing	2				2.25			
points	2	2	3	2	2,25			
P5 average	2,00	2,00	2,33	2,00	2,08			
	ı		hnical as	sistance		<u> </u>	ı	
	1	3	3	1	2,00			

## Central Transdanubia OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar
		Central	Transdar	ubia OP			
	P1:	Regional	economi	c develop	ment		
M 1.1 Augmentation of the Region's economic attractive force	3	3	3	3	3,00		
M 1.2 Promotion of network and co-operation of businesses	2	3	3	3	2,75		
M 1.3 Improvement of an innovative economic milieu	3	3	3	3	3,00		
M 1.4 Development of existing training and consultancy systems	2	3	3	3	2,75		
P1 average	2,50	3,00	3,00	3,00	2,88		
	P2:	Regiona	l tourism	developn	nent		
M 2.1 Development of health tourism	2	2	3	2	2,25		
M 2.2 Tourism built on cultural and intellectual values	2	2	2	2	2,00		
M 2.3 Establishment of tourist destination management	2	2	2	2	2,00		

	I	1	1				
M 2.4 Support of infrastructural							
developments and of services							
for active tourism	3	2	2	2	2,25		
M 2.5 Quantitative and							
qualitative development of							
accomodations connected to							
tourist attractions	2	3	3	2	2,50		
P2 average	2,2	2,2	2,4	2	2,20		
-	P3: Deve	elopment	of transp	ort infra	structure		
M 3.1 Infrastructural							
investment for improving							
conditions of public road							
accessibility of micro-regions	3	3	3	3	3,00		
M 3.2 Modernization of							
community transport	2	2	2	2	2,00		
M 3.3 Construction of cycle		_	_		2,00		
path network	1	1	1	1	1,00		
M 3.4 Development of the road	1	1	1	1	1,00		
network within municipalities	2	2	2	2	2.50		
	2 00	3	3	2 22	2,50		
P3 average	2,00	2,25	2,25	2,00	2,13		
	P4: H	uman Inf	rastructu	re Develo	pment		_
M 4.1 Modernization of							
healthcare services	2	2	2	2	2,00		
M 4.2 Development of the							
infrastructure of public							
education institutes	2	3	2	2	2,25		
M 4.3 Infrastructure					,		
development to support social							
inclusion and participation	2	2	2	2	2,00		
					2,00		
M 4.4 Further professional/ vocational training	2	2	2	2	2.50		
	2 00	3	2 2 22	3	2,50		
P4 average	2,00	2,50	2,00	2,25	2,19		
	P5:	Regiona	l develop	ment acti	ons	1	
M 5.1 Integrated urban							
rehabilitation with a social	_	_	_	_			
focus	2	2	2	2	2,00		
M 5.2 Protection of our							
environmental values,							
environmental safety	1	1	1	1	1,00		
P5 average	1,5	1,5	1,5	1,5	1,50		
		P6: Tec	hnical as	sistance			•
	1	3	3	1	2,00		
					,,,,		l .

## West Pannon OP

Priority Axes/Measures	PE	WE	K	E	Average	Index	Kommentar			
West Pannon OP										
	P1:	Regional e	conomic a	levelopmei	nt					
M 1.1 Improvement of services related to the regional cluster and the use of enterpreneurial consulting										
activities	3	3	3	3	3.00					

	1	Ī	Ī	Ī	ı	1	ı	T	
M 1.2 Development of the									
investment environment	3	3	3	3	3,00				
P1 average	300,00%	300,00%	300,00%	300,00%	3,00				
P2: Tourism development									
M 2.1 Expanding the Pannon									
thermal programme	3	3	3	2	2,75				
M 2.2 Pannon Cultural Route	2	3	3	2					
		3	3		2,50				
M 2.3 Development of									
regional eco-tourism (active)		2	2	2	2.50				
programme	2	3	3	2	2,50				
M 2.4 Development of									
commercial accomodation	2	2	2	2	2.50				
and services	2	3	3	2	2,50				
M 2.5 Creation and									
development of local and									
regional tourist destination									
management organisation and		2	2	2	2.00				
tourist clusters	2	2	2	2	2,00				
P2 average	2,2	2,8	2,8	2	2,45				
		P3: Urb	an develop	ment				•	
M 3.1 Renewal of urban									
centres to safeguard values	2	2	2	2	2,00				
M 3.2 Integrated urban									
rehabilitation activities in									
impoverished urban									
residential areas or housing									
estates threatened by									
impoverishment	1	2	2	2	1,75				
M 3.3 Improvement of the									
infrastructural criteria of local									
and regional community									
transport	2	2	2	2	2,00				
P3 average	1,67	2,00	2,00	2,00	1,92				
_	Environm					0	<u> </u>	1	
M 4.1 Wastewater	Environn	ені ріосесі	ion ana ir	инѕрон т	rusiruciui	e			
management for small									
municipalities	2	2	2	2	2,00				
-	2				2,00				
M 4.2 Rehabilitation of			•		2 00				
municipal waste deposits	2	2	2	2	2,00				
M 4.3 Improvement of the									
quality of surface waters and									
mitigation of risks caused by					1.00				
surface water	1	1	1	1	1,00				
M 4.4 Establishment and									
development of services									
related to safeguarding the									
environment	1	1	1	1	1,00				
M 4.5 Development of									
regional transport links	3	2	2	2	2,25		<u> </u>		
P4 average	1,8	1,6	1,6	1,6	1,65				
P5: Development of local and regional public services									
M 5.1 Development of health									
infrastructure and services	2	2	2	2	2.00				
	2	2	2	2	2,00				
M 5.2 Development of social									
infrastructure and services	1	2	2	1	1,50				

M 5.3 Development of public education infrastructure and services	1	2	2	1	1,50				
M 5.4 IT developments facilitating the evolution of the regional information society	2	3	2	2	2,25				
P5 average	1,50	2,25	2,00	1,50	1,81				
P6: Technical assistance									
	1	3	3	1	2,00				

# Central Hungary OP

<b>Priority Axes/Measures</b>	PE	WE	K	E	Average	Index	Kommentar		
		Cent	tral Hungar	y <i>OP</i>					
P1: Innovation- and Enterprise-oriented Development of the Knowledge-based Economy									
M 1.1 R&D and			-						
innovation development,									
dissemination of									
accomplishments	3	3	3	3	3,00				
M 1.2 Development of									
enterprises,									
encouragement of their									
technological									
modernisation	3	3	3	3	3,00				
M 1.3 Development of									
access to finance for	_	_	_	_					
SMEs	3	3	3	3	3,00				
M 1.4 Development of the									
business environment	2	3	3	3	2,75				
M 1.5 Development of the									
local economy	2	3	3	3	2,75				
P1 average	2,6	3	3	3	2,90	27,70			
I	2: Improve	ment of the	Preconditi	ons for Co	npetitivene	ess			
M 2.1 Development of									
intra-regional transport									
connections	3	2	3	3	2,75				
M 2.2 Development of the									
transport infrastructure to									
improve external access		_			• • • •				
to the region	3	3	3	3	3,00				
M 2.3 Development of the									
operational conditions for									
public transportation	3	2	3	3	2,75				
P2 average	3,00	2,33	3,00	3,00	2,83	22,20			
P3: Development of the Regions''s Attractiveness									
M 3.1 Development of the									
Tourism Attractiveness	2	2	3	2	2,25				
M 3.2 Development of the					,				
Environment Protection									
Services	2	2	2	2	2,00				
M 3.3 Nature									
Conservation,									
Rehabilitation of the									
Natural Environment	1	2	1	1	1,25				
P3 average	1,67	2,00	2,00	1,67	1,83	12,70			

P4: Development of the system of human service institutions								
M 4.1 Development of the								
Infrastructure Supporting								
Labour Market								
Participation	2	2	2	2	2,00			
M 4.2 Development of								
Higher Education								
Infrastrucute	3	3	3	3	3,00			
M 4.3 Development of								
Health Care Infrastrucute	2	2	2	2	2,00			
M 4.4 Development of								
Infrastructure to Support								
Social Inclusion	2	2	2	1	1,75			
M 4.5Development of the								
Infrastructure of								
Population-focused Social								
Service	2	2	2	1	1,75			
M 4.6 Development of the								
School Infrastructure	2	2	2	2	2,00			
M 4.7 Development of								
Local Electronic Local								
Public Administration								
Infrastructure	1	2	2	1	1,50			
P4 average	2	2,14	2,14	1,71	2,00	19,10		
P5: Development of settlement areas								
M 5.1 Integrated Social								
Type Rehabilitation	2	1	2	1	1,50			
M 5.2 Urban Centre								
Developments	2	2	2	2	2,00			
P5 average	2	1,5	2	1,5	1,75	14,70		
P6: Technical Assistance								
	1	3	3	1	2,00	3,6		