7. Policy Implications for an Enlarged EU

In context with the Europe agreement and the Eastern enlargement of the EU, this research deals with the effects of pre-enlargement integration policies and post-accession effects on industry agglomerations and regional development in Hungary. The results for Hungary clearly show that there is a trade-off between the overall catching-up process at the country-level due to increasing trade and economic integration under the Europe agreement, on the one hand, and the increase of regional disparities in the pre- and post-accession phase, as shown by the results for industry agglomeration and regional specialization, on the other hand. This concluding chapter will summarize the main results of this research, derive policy implications and look at recent developments regarding European regional policy in the context of Eastern enlargement, and draw policy conclusions for future enlargement candidates.

Chapter 7 is structured as follows: section 7.1 will summarize the main results of this research regarding agglomeration and regional development in Hungary during the pre- and post-accession period up to 2008. Section 7.2 will derive policy conclusions regarding the role of agglomerations and specialization in the overall cohesion process going on. Given the academic debate with regards to cohesion in the EU, proposals for the next reform of European regional policy will be discussed given the new challenges after Eastern enlargement in Hungary and probably to a similar extent in the other CEEC. The concluding section 7.3 will derive policy recommendations for Hungary, the EU and future EU accession candidates with a perspective on the future economic geography of Europe.

7.1 Review of the main empirical results

Hungary as a transformation economy and the profound economic processes entailed by transition and restructuring have been examined over the time span of almost two decades, much longer than by previous studies on transition countries. Agglomeration in the manufacturing industries and regional development in Hungary’s 20 regions have been the focus of this research undertaken in context with increasing European integration. The exact timeframe chosen was 1992 to 2008, the first 12 years having been those governed by the institution of the
Europe agreement with Hungary,\textsuperscript{169} while the ensuing 5 year period spanned the
time since Hungary’s EU accession.

The theories of the NEG based on Krugman (1991a), which have been chosen as the
theoretical framework for this research, made certain predictions about the
agglomeration of industry and the degree of regional specialization in the course of
economic integration processes. A handful of models were singled out as relevant for the processes in Hungary analysed by this research, namely the
models by Ludema & Wooton (1997) - assuming (less than full) migration of
industrial workers between regions of a country - and by Puga (1999) - assuming
no interregional migration. These were considered jointly with models by Krug-
man & Venables (1996) and Livas-Elizondo & Krugman (1996) which modelled
integration with falling trade costs between multi-region countries. These 4 models predicted the formation and dispersion of industry agglomerations
during proceeding economic integration, going along with a rise and subsequent
decline of regional specialization.

Questions posed by this empirical research included: Did the Europe agreement
have direct effects on industry agglomerations and regional development in
Hungary? Which regional development took place in Hungary during different
stages of the European integration process? How did manufacturing industry
agglomeration evolve during the period, was there a certain pattern? Where in
space did the concentration of manufacturing industries take place? Which
influences were relevant for the degree of an industry’s concentration, variables
of increasing European integration or rather industry-specific characteristics, or
both? Which development pattern of regional specialization took place in
Hungary? Which influences played a role there? Was there a turning point - perhaps already prior to EU accession - at which the highest agglomeration and
specialization levels were reached?

These hypotheses were tested based on empirical analyses using regional sectoral
employment data from the Hungarian Central Statistical Office for 8 manu-
factoring sectors and the 20 Nuts-3 regions from 1992 to 2008: This is a relatively
long time series - as compared to previous studies on CEECs after 1989 - and was
the longest available and reliable at the time of writing.

With respect to industry agglomeration, most of the previous empirical research
on Central and Eastern Europe was based on the country-level for a group of
countries (CEECs), while the present research used regional-level data to analyse

\textsuperscript{169} The trade provisions of the Europe agreement, which this study is mainly interested in,
have indeed been in force for this entire period, from 1992 until 1994 under the provi-
sional name of “Interim Agreement between ... the EU.. and Hungary”.\[218\]
agglomeration for the country chosen, namely Hungary. With reference to the tools, a unique contribution of this research is that it applies six different concentration indices for measuring manufacturing industry agglomeration to the same set of data, thereby allowing for a comparison of them. Regression analysis on the influences working onto industry concentration and especially on regional specialization has rarely been performed before nor been based on data from Central and Eastern Europe.

Chapter 3 introduced the main characteristics of the 20 regions in Hungary, including the location and geographic situation, main economic sectors as well as structural problems of each region. By means of key indicators such as population, per-capita income, unemployment, internal net migration, and growth, the main winners have been identified as well as regions falling behind over the almost two decades. The analysis of Hungary as a transformation economy and the profound economic processes brought about by the transition entailed a changing role of economic centres over the country, some on the winner side and others on a declining path. Whilst in the pre-1989 period, the heavy industry in North Hungary and the metropolitan area around Budapest were the drivers of economic growth, since the mid-1990s, the former industrial regions have been in decline.

The new development divide in Hungary is rather an East-West axis, with the regions in the West near the border of Austria (EU-15) and the Centre advancing in terms of per-capita income, while the Eastern part including the agricultural Great Plain is in decline, as characterized by lower and declining income levels and persisting unemployment. New agglomerations of manufacturing industry have located in the Western part near the EU-15 markets, such as the automobile industry in Győr-Moson-Sopron and neighbouring regions. This pointed to a rise in specialization levels in those regions and to a shift in agglomerations towards the West. Alarmingly, regional disparities at Nuts-3 level based on per-capita GDP in purchasing power standards increased over the period from 31% to over 40% of the EU average; these disparities were the largest among large CEECs. This pointed to new challenges regarding the EU’s regional policy in bringing about cohesion, not just within Hungary but also with respect to the EU average, which will be discussed in section 7.2 of this chapter.

The analysis of the balances of internal-net migration per region showed that the Western regions as well as Pest tended to register positive balances, whilst regions in Northern Hungary, towards the Eastern border with Ukraine and in the

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170 The metropolitan area of Budapest had exceptionally high and still advancing per-capita income, 213% as compared to the country-average in 2005.

171 Data for Poland at Nuts-3 level were not available at the time of writing.
Great Plain area tended to have negative balances over the period 1992 to 2008. The level of migration was judged as rather low - whether due to housing market constraints or socio-economic attachments is not clear, except for Pest region with a high positive balance. These results left it somewhat ambiguous whether to prefer the NEG model by Krugman (1991a) based on no migration predicting the emergence of non-reversible agglomeration, or that by or Puga (1999) or Ludema & Wooton (1997) based on the assumption of partial labour migration, predicting agglomeration for intermediate levels of trade costs and dispersion during further integration.

The analysis of Hungary’s foreign trade with the EU countries for the period 1992 to 2008 - based on an own conversion matrix from SITC to the 8 Hungarian manufacturing sectors - showed that the machinery and equipment sector contributed a share of over 70% by the end of the period within the rising share of exports to the EU in total exports to the world. The contributions of the 8 manufacturing sectors to EU exports of Hungary corresponded broadly to their shares in manufacturing output. In the high stock of FDI in Hungary - the highest in any of the CEECs –, machinery and equipment again attracted the lion share of manufacturing FDI, followed by the chemicals industry and food, beverages and tobacco. This was taken as a first hint towards tangible effects of these two integration variables on concentration in these manufacturing industries.

With respect to the regional structure, five regions located mainly in the Western part of Hungary developed especially high shares of exports in sales of manufacturing industry over the period. The bulk of FDI was found to be concentrated in the Western part of Hungary and the capital region, indicating a geographical advantageous effect of proximity to EU-markets. The presence or enhanced formation of manufacturing agglomerations in this part of the country raised questions on whether regional specialization increased there at a certain time as well.

Further, in Chapter 4 the development of industry agglomeration was analysed empirically by means of 6 different concentration indices, the Krugman concentration index, the concentration rate CR₃, the (absolute) Herfindahl index, the relative Herfindahl index, the Hoover-Balassa index, and the entropy. For each of the 8 manufacturing industries, the degree of concentration was calculated based on sectoral employment data from the 20 regions in Hungary for the period 1992 to 2008. Interestingly, the results showed a common pattern best described as a “double hub”, with some variations for the sectors and depending on the index. From 1992 until 1999, concentration levels were rising to a peak, the highest over

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172 The Hungarian Central Statistical Office used TEÁOR, which summarizes several NACE sectors under one heading.
the 17 year period. This was followed by a decline in concentration levels until 2004.

The EU accession of Hungary spurred a new, but slighter increase in industry concentration which was already reversed from 2007 onwards. These empirical findings confirmed predictions of the Puga (1999) model about an Ω-shaped relationship between industry agglomeration and declining transport costs during economic integration processes as well as those modelled by Ludema & Wooton (1997) who predicted (less than complete) agglomeration to form at some intermediate level of trade costs, followed by dispersion as trade costs decline even further in the course of proceeding integration.

The highest absolute concentration levels - as measured by the Herfindahl index - prevailed in the chemicals industry, followed by the mineral products and basic metals sectors, the lowest in food, beverages, and tobacco. The machinery and equipment sector showed a decrease in overall concentration levels from the start to the end of the period. Regarding the spatial aspect of agglomeration, the calculations upon which the CR₃ measure was based revealed a prominent role for Budapest and Pest region, as they were among the 3 largest regions for each of the 8 manufacturing sectors. This indicated a high degree of diversification of these regions and pointed to a low specialization - which was confirmed by the analysis of chapter 5 (for detailed summary, please see below).

The comparative analysis of the six concentration measures revealed that the Hoover-Balassa index tended to overestimate changes in concentration levels, while CR₃ underestimated them. The Krugman concentration index was found to be a “conservative” measure of the development of industry agglomeration in Hungary and was therefore selected for the econometric analysis of chapter 6.

The empirical analysis of regional specialization in Chapter 5 was done based on the Krugman specialization index for regional manufacturing employment in the 8 sectors over the 17-year period. Interestingly again, the majority of regions taken individually as well as groups of regions exhibited a common pattern similar to that observed for agglomeration: a double hub with two peaks in the pre- and post accession periods. Regional specialization for the majority of regions first increased from 1992 to 1999, when a peak was reached, then decreased up to 2004 to levels below the start. A second slighter rise in specialization levels followed EU-accession, with a decline already setting in towards the end of the period. The same development was illustrated by Western regions versus Eastern regions, where Eastern regions showed a slightly higher degree of specialization overall.
Further, the development of border regions versus internal regions confirmed the double hub pattern of specialization levels during proceeding European integration. Among this group, internal regions showed higher specialization levels than border regions, the more so when leaving out Budapest. Finally, the analysisdifferentiating among three groups of border regions according to theirneighbouring countries — BEU, BEX and BCE - exhibited the double hub structure, with the peak in specialization around the year 1999, followed by a decline, and a second, slighter hub since the EU accession of Hungary having surpassed its climax in 2008 already. BCE showed the highest specialization levels among this group, while BEU was the most diversified on average.

The predictions made by the relevant NEG models (Livas-Elizondo & Krugman (1996), Puga (1999), Ludema & Wooton (1997), Venables (1996), Krugman & Venables 1996) are broadly confirmed by the results of the calculations on regional specialization in Hungary over the 1992 to 2008 period. The hypothesis of this research with respect to regional specialization in Hungary was confirmed, namely that under the Europe agreement, there was first an increase of specialization up to a peak, followed by a decline, and that the turning point - in 1999 - was reached prior to full EU-membership.

Regarding the econometric analysis, the first regression analysed influences of relevance for an industry’s concentration in Hungary, based on a set of integration variables and other industry characteristics. The results of the panel regression analysis showed that the integration variable export rate to the EU had a very significant (yet positive) influence on industry concentration. The export variable endorsed the strong influence which the Europe agreement had on agglomeration processes in Hungary. On the policy side, this showed that the strong export orientation pursued by Hungary towards the EU and the pursuit of FDI-attracting location policies - which increased productivity - turned out to be important factors for manufacturing concentration in Hungary. The importance of trade integration verified empirically the model of Livas-Elizondo & Krugman (1996) who predicted agglomeration to form within the multi-region country in the course of integration processes.

The FDI stock, the second integration variable, was not significant as such, but indirectly decisive for the increase in productivity, an industry variable which turned out to be highly significant and positive with respect to industry concentration. Of the industry characteristics, the majority was very significant for the degree of industry concentration: the presence of economies of scale (yet negative sign), and being a high tech sector (also negative signs), although contrary to what would be expected from NEG theories, these two characteristics on average rather encouraged industry dispersion. With respect to the wage level,
being a low wage sector had a strong centrifugal influence on industry location, while being a high-wage sector had a strong agglomerating influence. These empirical results confirm the predictions by NEG theories, where higher real wages reinforce industry agglomeration (Krugman (1991a), Ludema & Wooton (1997), Livas-Elizondo & Krugman (1996)).

The second panel regression analysed influences on regional specialization in Hungary, based on a set of integration variables and region-specific characteristics. The results of regression 2 showed that of the two integration variables - a region’s FDI stock and its export share - only the FDI stock was significant, reducing regional specialization and allowing for a broadening of the manufacturing industry base. With respect to the influence of a region’s location on specialization - being an internal region, and being in the (economically less developed) Eastern part - only the first was significant for regional specialization. An internal region on average had a higher specialization than a border region, controlling for other variables.

Of the three region-specific characteristics related to population, a region’s active population was very highly significant for regional specialization, the negative sign is indicating a diversification on average with respect to the industrial structure. Internal net migration was very highly significant and had a negative influence on regional specialization. In Pest region, the region with the largest internal net migration (even in absolute terms), regional specialization decreased by -35% from 1993 to 2008, while the cumulative internal net migration was +242,000\(^{173}\). This points to the NEG-model by Ludema & Wooton (1997) as the relevant model for the specialization of Hungary’s regions during the observation period, as inter-regional migration did play a significant role for the degree of regional specialization, perhaps working through a whole chain of other influences such as the local housing markets. Finally, the gross manufacturing wage of a region did not have a significant influence on regional specialization, unlike the importance the wage level is generally given in NEG models based on the original Krugman (1991a) model.

The results of regression 1 - agglomeration - and regression 2 - regional specialization - allow the following general statement: Regional specialization is an attribute of a region which is more transitory in nature than the degree of concentration of an industry is. Regional specialization of a given region changes over time, and the direction for a given region can rarely be predicted (see Figure 45 of section 6.2.1). What can be predicted, however, is the average degree of specialization for a group of regions during proceeding integration processes, based on

\(^{173}\) This corresponds to about 20% of the region’s population in 2005.
the framework provided by NEG models (Livas-Elizondo & Krugman (1996), Ludema & Wooton (1997), Puga (1999), and Krugman & Venables (1996)). The predictions for the future development of regional specialization in Hungary are made in the following section 7.3. (The past development of the specialization of groups of Hungarian regions has been analysed empirically in Chapter 5, section 5.4 and subsections).

Overall, the results of this research on manufacturing agglomeration and regional specialization in Hungary contribute an empirical confirmation for one of the key propositions emerging from NEG called for by Head & Mayer (2004): That trade induces agglomeration - a reduction in trade impediments from relatively high initial levels will promote greater spatial concentration. And further, regarding the spatial aspect of concentration, some empirical evidence was added towards the idea of NEG that a temporary shock to economic activity in a location can permanently alter the pattern of agglomeration, as was the case for the 3 regions of Northern Hungary, flourishing due to the concentration of heavy industry in the socialist era, but in decline after the break-down of the CMEA (the shock) from the early 1990s onwards (see sections 3.3. and 3.4).

Policy implications ensuing from the results of this research will be derived in section 7.2 and subsections in context with regional policy in an enlarged EU, and policy recommendations for Hungary, the EU and future accession candidates will be formulated in section 7.3.

## 7.2 Policy implications

In context with the Europe agreement and the Eastern enlargement of the EU, this research deals with the effects of pre-enlargement integration policies and post-accession effects on industry agglomerations and regional development in Hungary. The results for Hungary have shown that there is a trade-off between the overall catching-up process at the country-level due to increasing trade integration under the Europe agreement, on the one hand, and the increase of regional disparities in the process, as shown by the results for regional specialization and other indicators, on the other hand.

The field of potential policy implications is wide. Therefore, one policy, namely European regional policy was chosen as the focus here, notably for three reasons: Firstly, the results of this research identified a trade-off between pre-accession policies and increasing regional disparities, which points to a need for reform of European regional policy after Eastern enlargement. Secondly, regional policy has considerable resources with a financial envelope amounting to one third of the EU.
budget. And thirdly, future regional development in Hungary has a chance to be (substantially) influenced by interventions co-financed by the European Structural Funds, given the sizable amount of transfers from the EU which will amount to about 4% of Hungary’s GDP.¹⁷⁴

The remainder of section 7.2 will proceed as follows: Section 7.2.1 will get a view on the role which agglomerations and regional specialization can play in concepts for regional growth, with a view to the results of chapters 4, 5 and 6. Agglomerations in this chapter will be understood in the brought sense of the term, including the concentration of population in towns, cities and metropolitan areas, not mere concentration of manufacturing industry, as in the previous chapters. Some interesting concepts regarding the role of agglomerations for regional development and the chances lying in a certain way of specialization will be brought forward. Given the increase of regional disparities in Hungary over the period 1992 to 2008, namely in the pre-and post-accession periods, the economic rationale for a European cohesion policy will be recalled in light of empirical evaluations of the cohesion process in the EU. Section 7.2.2 will point to the main economic challenges regarding regional policy in Hungary, review regional policy in Hungary in its past and present institutional set-up as well as present the current strategies for the period up to 2013; this is done exemplary for other CEECs which exhibit similar challenges with respect to regional disparities in the post-accession period. Section 7.2.3 will describe areas for improvement of European regional policy, taking into account the current political developments at the European level concerning ideas for the next reform of European regional policy for the period beyond 2013.

7.2.1 Rationale for a European regional policy and role for agglomerations and specialization

The results of this research on agglomerations and regional development in Hungary have shown that there is a trade-off between the overall catching-up process at the country-level due to increasing trade integration, on the one hand, and the increase of regional disparities in the process, as shown by the results from regional specialization and other indicators, on the other hand. While Hungary has been able to catch-up with average EU income at the country level

¹⁷⁴ In addition, the author Cordula Wandel has previous work experience in the field, namely in the Cabinet of Commissioner Dr. Monika Wulf-Mathies, the Commissioner in charge of Regional Policy, from May 1997 until December 1999, a period during which the Agenda 2000 was designed, the third Cohesion Report published, a reform of the Regional Policy brought forward, the new Financial Perspective for 2000-2006 with the Structural Funds budget negotiated, and the new regulations governing the implementation in the new period passed.
under the Europe agreement, regional disparities in Hungary have widened not only during the pre-accession phase, but also in the first five years since full EU membership. This development is exemplary for the growth of regional disparities in other CEECs. It points to new challenges for European cohesion policy after Eastern enlargement. This section shall discuss these in light of the empirical results obtained for Hungary and of the current academic and political debate regarding European regional policy.

There is agreement among economists and policy makers about what is needed to reduce regional disparities, as for example Baldwin & Martin (2001), Barrios & Strobl (2005), Giannetti (2002), Tondl & Vuksic (2003), namely an appropriate stimulus for economic growth, both for country-level and for regional growth. Commonly agreed drivers of growth include: Physical capital (including FDI), human resources, agglomeration and concentration of industry in clusters, a suitable environment (business, institutional, natural, and physical), innovation and the importance of a favourable macroeconomic context - the latter is stressed even more in the face of the current world economic crisis.

Summarizing the most recent debate regarding economic growth with a policy perspective, economists and policy-makers have become more cautious as regards both the explanations for growth and for disparities between places and about which measures can or should be taken to stimulate growth. The experience of the last two decades has frustrated the expectations of policy advisers who thought they knew which policy ingredients promote growth, according to Rodrik (2005). There is a strong consensus on one aspect, however, namely that “agglomeration” is one of the key drivers of growth and development. A policy of strategic specialization, which will be defined later in this section, can also contribute to regional growth strategies. These two are relevant with regards to the subject of analysis of this research.

In the context of European integration, cohesion means a catching-up process of poor regions with average per capita income in the EU. So-called “beta-convergence” is required for a reduction of regional disparities. This term refers to a process in which poor regions grow faster than rich ones and therefore catch-up on them in terms of per-capita income. The concept of beta-convergence is directly related to neo-classical growth theory based on Solow. Perroux (1970) has added the concept of “growth poles” and stressed their importance for the overall development of a country. Growth poles in the EU of today are often associated with agglomerations and networks of smaller towns and cities.

175 See Rodrigues-Posé & Fratesi (2004) for a critical view based on their economic evaluation of past cohesion.
Scholars of NEG (Krugman (1991a), Fujita et al. (1999), Thisse 2000\(^{176}\)) and endogenous growth (Romer 1986) have in common the idea that there are local economies of scale and increasing rates of return. In such context, economic growth will tend to concentrate in a few places in a self-sustained, spatially selective and cumulative process. Under these assumptions, economic growth fosters regional divergence rather than convergence. Several of these theories also argue, however, that beyond a certain level, due to congestion or social effects, agglomeration can reduce efficiency, that is increasing returns come to an end.

Agglomerations - in the broad sense - are defined as the concentration of consumers, workers and businesses in a place or area, together with the formal and informal institutions that make an agglomeration cohesive, which has the potential to produce externalities and increasing returns to scale\(^{177}\) (Fujita et al. 1999). In Europe which is highly polycentric, the growth of the metropolitan region around the capital city has often exceeded growth elsewhere, as is the case of Budapest for example. Agglomerations are initiated by chance and by natural events or by supra-local public action. The prevailing distribution at any given point in time is not necessarily superior to other possible distributions in terms of efficiency. Nor does the existence of an agglomeration necessarily mean that it is efficient, due to limits after which diseconomies rise.\(^{178}\) A concentration of activity is neither a necessary nor a sufficient condition for growth. The limits to agglomeration lead to adverse effects such as congestion, pollution, and price increases, the latter effects are manifested in Budapest in 2009. The OECD (2006) argued that for metropolitan regions of over 6 million people, the relationship between income and population size is negative.

Regarding the role of trade as growth driver for agglomerations, Martin & Ottaviano (2001) showed that trade integration-driven agglomeration lowers the cost of innovation in one region and thus favours innovation and growth. They see a circular causation arising between growth and agglomeration: where two regions are initially identical (no agglomeration), when the aggregate economy starts growing, the only steady state outcome is one in which one of the two regions gets all the innovation activity and most of the industrial production (an agglomeration). The positive correlation between agglomeration and aggregate growth of economic activities comes as a natural consequence of the economic forces at

\(^{176}\) The title of Thisse (2000) may serve as an indication of his message: “Agglomeration and regional imbalance: Why? And is it bad?”.

\(^{177}\) An overview of economies of scale based on Pratten (1988) has been presented in Chapter 2, section 2.1 of this research.

\(^{178}\) This is inferred from a model by Puga (2002) which explicitly takes account of the (un-intentional) side-effects of firms’ decisions to move.
work. Ottaviano et al. (2002) broadly endorse these findings regarding the important role played by trade for the process of agglomeration.

Opportunities for growth also exist in areas where there is less concentration of economic activity, however (e.g. European Commission 2007). Thus, although agglomeration is a driver of growth and development, it is not the only one. In particular, growth for a region often requires “network effects” to be at work, i.e. enabling it to benefit from the growth occurring elsewhere because of transport, energy, ICT and other connections. In Europe where space for large agglomerations is limited and polycentrism is high, economies of scale and growth can best be generated by networking between major agglomerations and their hinterland and by dense networks of big or middle sized cities (this is commonly agreed among policy makers in the field, see for example Hungarian Development Agency 2007).

Moreover, political decisions with spatial effects are simultaneously taken with private agents’ decisions on whether to invest capital and whether or not to move. Public and private decisions go together and reinforce each other. Whether there is too much or too little agglomeration in the absence of regional policy interventions is not clear. This means, that - given the lack of relevant information - any public action with spatial effects needs to be cautious, whether promoting, mitigating or forestalling an agglomeration process. Such caution is very necessary because of inter-dependencies between regions. The movement of labour and capital away from regions with untapped resources, often rural areas on the periphery, to thriving agglomerations - the “centre” in NEG theories - could reduce the potential output of the former region by more than they raise the potential output of the latter.

Further, mass movement away from rural areas can have negative consequences on the sustainability of overall growth at the country-level by depriving certain landscapes of the people taking care of it, warned the European Commission (2007). The resulting impoverishment of rural areas might reduce the capacity of the overall economy to react to changes and shocks, including the effects for migrant workers then deprived of a place to return to and of alternative sources of income there.

Nevertheless, there are certain risks involved in any attempt to “balance” the spatial distribution of economic activity by investing in the peripheral regions. The supposed “untapped potential” of the periphery might turn out not to exist, as was the case for certain regions in Greece, as past regional policy experience has shown since the mid-1990s. Furthermore, interventions might end up constraining an efficient agglomeration process while failing to achieve results in the peri-
phery. Along the line of these arguments regarding areas of agglomeration, what would be required in my view is taking a country-wide perspective on economic development and growth, singling out growth poles, agglomerations and networks of cities making a positive contribution to overall development, and then making visible policies by all government levels working towards this strategy locally to all actors in a place potentially concerned by them.

Turning towards the second issue of relevance for this research, that of specialization, Romer (1987) modelled a scenario of endogenous growth based on increasing returns due to specialization. Under the notion of “smart specialization” in the narrow context with innovation, the Barca (2009) report, which is discussed in detail in section 7.2.3 of this chapter, brings forward an aspect of interest with respect to the topic of this research. Regions should embark in a “smart specialization”, that is for each region, a limited number of sectors should be selected in which innovation can most readily occur and a knowledge base built up, in accordance with the concepts for a European Research Area. To avoid that local actors - such as universities, firms, or research centres - benefit unduly from public intervention, member states should create incentives along the lines sketched out in the policy paper by Foray & Van Ark (2007) in order to ensure the reaching of the objectives, and public funding should be made conditional upon the commitment to using these incentives.

The relevant policy question which should be posed with regards to the results of this research regarding regional specialization in manufacturing industries is the following: Would it make sense for policy makers to pursue a strategic specialization with respect to single industries as a development and employment strategy for a region? For example, in my view it would make sense for the region Győr or the Nuts-3 region Győr-Moson-Sopron to favour the location of firms in the automobile sector, including manufacturers of components; or for Borsod-Abáuj-Zemplén in Northern Hungary to favour the location of the electrical machinery industry in the effort to build on previous strengths of the region, namely a large manufacturing workforce, yet to enhance a future-looking orientation.

Strategic specialization as a regional development strategy, when targeted at a growing, future-oriented sector, is better than diversification, which in turn is a better strategy than specialization in a declining sector (such as heavy industry for Northern Hungary up to the early 2000s). Given that Hungary has pursued a policy favouring the electrical machinery and engineering sector successfully at the national level, a policy of strategic specialization at the regional level would very well make sense in my view. Examples of concrete measures could include

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179 See also Hildebrandt & Wörz (2004) on this.
the provision of industrial park sites especially opened for firms from the favoured industries, or the construction or renewal of other infrastructure essential for that industry, or the facilitation of research centres, programmes and other innovation sites of importance for that industry.

Given the increase of regional disparities in Hungary over the period 1992 to 2008, the economic rationale for a European cohesion policy shall now be recalled in light of economic evaluations of the past cohesion process. In the EU, inequalities in GDP per capita as measured by a Gini index are over 60% higher across EU regions than across US States (Puga 1999). Only 7% of the overall EU population lives in cities of over 5 million inhabitants, as against 25% in the United States. Europe maintains a relative balance between urbanisation - including polycentric urban structures - and rural areas, which contributes to the European way of life.

Eastern enlargement of the EU has led to a widening of the economic development gap, a geographical shift in the problem of disparities towards the East, increasing disparities within the CEECs - as illustrated for Hungary in this research - and a more difficult employment situation. The average GDP of the EU has decreased by 12.5% upon Eastern enlargement, while socio-economic disparities have doubled (see for example Monfort 2009). At the same time, the whole of the EU faces challenges arising from an acceleration in economic restructuring as a result of globalisation, trade opening, fast technological progress, an ageing population, the development of the knowledge economy and society, and a growth in immigration. The consequences of the economic downturn resulting from the world economic crisis and the turbulences on the financial markets since autumn of 2008 have to be added to that list.

The EU is the suitable level for such a regional policy because it responds to expectations of EU citizens to deliver results tangible for them, it is the best suited level to tackle externalities spanning beyond national borders, and it is able to redistribute resources collected from all member states to benefit the poorest regions - cohesion - and those parts of the population the most in need.

The main rationale for regional policy measures is to provide public goods in response to market failures such as incomplete information and externalities. This expression also includes public goods in the sense of goods from whose benefits it is costly to exclude an individual and it is also undesirable since there is no marginal cost of an additional individual to enjoy it. Examples for public goods in

180 This number refers to the EU-15, thus it would even be higher for the EU-27 after the increase in regional per-capita income labels due to Eastern enlargement.
response to market failures are environmental care and contract enforcement as well as other goods like education, health care, and transport.

Regional policy interventions in the sense of "public goods" take the form of providing integrated bundles of goods and services. Examples for these are infrastructure such as bridges, motorways, water sewage systems, as well as innovation and the research that can lead to it. The latter in particular tends to be under-produced by society due to well-recognised market failures, or due to asymmetries of information. Climate change is also an extraordinary example of market failure. Meanwhile, despite controversy and persistent uncertainty about the exact magnitude of the potential effects, a broad consensus has emerged about the need for public action, though there is disagreement about what nature and size this should be and who should bear which share of the cost.

Furthermore, there is a rationale for encouraging cross-border cooperation as part of EU cohesion policy, as the most meaningful economic regions can span beyond local, regional and national borders of several member states (see Di Giacinto & Pagnini 2008). The border regions in the EU represent 40% of the territory and account for 25% of its population.\footnote{Regions are defined at the Nuts 3 level here; figures according to the European Commission (2007).} Many of the cross-border economic areas can be meaningfully targeted only by European actions coordinated at a wider EU level and with the entire perspective in view.

Regional policy in this section does not have the same meaning as industrial location policy. Regional policy has as content the inter-regional redistribution of resources which could either be production factors or income. Regional policy can meaningfully be conducted by administrative levels which have an influence both on benefiting as well as on charged regions. Industrial location policy, on the other hand, aims merely at strengthening the advantages of one location as compared to another, while its instruments are limited to its own location.\footnote{For a discussion of these two policy strands, see also Lammers & Stiller (2000).} This chapter shall discuss only regional policy in the former sense.

Regional policy could also be used with the aim to increase the political acceptance of proceeding economic integration (e.g. Krieger-Boden 1995). This was of particular relevance in winning the endorsement by referendum for the EU accession treaty in several CEECs during the Eastern enlargement in 2004 and 2007, and it will certainly play a role for future enlargement candidates. This effect is achieved by measures dampening the adjustment processes painful to some regions or population groups. Regional policy in this case is using distributive instruments in order to support an economy-wide efficiency goal, namely the

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\footnote{Regions are defined at the Nuts 3 level here; figures according to the European Commission (2007).}

\footnote{For a discussion of these two policy strands, see also Lammers & Stiller (2000).}
better provision with goods due to proceeding economic integration. Examples from EU regional policy include support to declining textile regions in Portugal suffering from the liberalisation under the Multifibre agreement of the Uruguay Round.

The tasks conferred to European regional policy by the EC Treaty are threefold (see Table 29): to promote "harmonious development", to tackle "disparities of regions", and to deal with "regional backwardness" by means of cohesion policy. This section will look in particular at disparities. The basis is in the treaty which calls for a reduction in disparities between "the levels of development of the various regions and the backwardness of the least favoured regions or islands, including rural areas" (art. 158 of the EC Treaty). It is certain that the reduction of the disparities following Eastern enlargement will require long-term sustained efforts in the form of exogenous, spatially aware public interventions.

**Table 29: Tasks conferred to European regional policy by the EC Treaty**

<table>
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<th>Tasks conferred to European regional policy by the EC Treaty are threefold:</th>
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<td>(i) to promote &quot;harmonious development&quot;,</td>
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<tr>
<td>(ii) to tackle &quot;disparities of regions&quot;, and</td>
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<tr>
<td>(iii) to deal with &quot;regional backwardness&quot; by means of cohesion policy.</td>
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Source: Art. 158 of the EC Treaty.

Which lessons can be drawn from economic evaluations of the cohesion results under European regional policy for the particular challenges present in Hungary? Evaluation of the performance or outcome of European cohesion programmes is often a question of indicators (macro, micro). Although the European Commission provided some practical guidance regarding the use of some indicators for measuring the success of EU cohesion policy, there is no common set of micro indicators agreed among all member states. With respect to macro indicators, GDP per head is still the most commonly used for allocating funds (at the Nuts-2 level), although perhaps not the best one. Eurostat currently has the mandate to develop new indicators suitable for evaluation of regional policy. Which ever they
will chose, it will be difficult to find a consensus among member states, as each country looks at them with the perspective of how it can benefit for their regions the most.

An illustration shall be given based on a recent evaluation by Monfort (2009). When looking at the Nuts-2 level, namely GDP per head and growth levels in the EU-27 from 1995 to 2005 - taken relative to the EU-27 average, he found evidence for a catching-up process. Based on these figures, where poor regions tended to grow faster than rich ones, convergence was taking place. When the figures were taken relative to member states’ average GDP per head, however, instead of the EU-27 average, there was no longer a significant relationship between the two variables. This left the conclusion that convergence is much less likely within a country as - most often in the new EU member states - the poorest regions seem to be left out of a rapid development process.

Summarizing academic evaluations of past cohesion, one common finding is that a convergence process is taking place among EU regions (at least when considering EU-15 or EU-27), but that the process is rather slow. More recent contributions introduced a spatial dimension in the formulation of the problem. The proximity and numerous linkages between neighbouring regions imply that regional economic variables are likely to be inter-dependent. In general, the inclusion of spatial effects is found relevant and tends to reduce the estimated speed of the global convergence process while highlighting that the speed of convergence is higher for the poorest regions of Europe. Straubhaar (1998) discussed convergence processes in context of relevant theory and the economic policy context, identifying a meaningful role in context with globalisation and proceeding European integration. He points out that the motives of regional policy need to be set out clearly and the instruments well-targeted, as otherwise the economic results could be mixed, which is a clear hint towards Hungary which currently has a rather mixed regional policy line (see summary in section 7.2.2). Bräuninger & Niebuhr (2005) found a lower steady state income for urbanised and rural areas of the EU than for highly agglomerated regions. Their findings are in line with newer models which combine endogenous growth models with an NEG framework. These state that there might be convergence “clubs”, agglomerations and rural peripheral regions possibly converging towards different steady state equilibria.

Getting a more global perspective, the World Bank (2008a) recently recognised that specialization and trade - facilitated by fewer international divisions - are central to economic development, which goes along with spatial transformations. Geography matters greatly in deciding what is needed, what is unnecessary, and

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184 The relationship was found to be significant and negative, with an $R^2$ of 0.2009, and an equation of $y = -0.0001x + 0.014$ (Monfort 2009).
what will fail. By calibrating the blend of these policies, developing nations can, according to the World Bank (2008b), "reshape their economic geography, much as today’s high income economies did in the past. Economic growth is seldom balanced, and efforts to spread it out prematurely will jeopardize progress. If, however, developing nations blend this policy mix well, their growth will still be unbalanced, but their development will be inclusive".

Turning back to Europe, what should European cohesion policy aim at regarding regional development from a future-looking point of view? The challenges after Eastern enlargement have grown larger, as illustrated by the decline in average GDP in the enlarged EU, by -12.5% upon enlargement, and the dramatic growth of regional disparities at the Nuts-3 level, which was experienced between regions in Hungary and similarly in other CEECs in recent years (as shown in section 3.4.2). The formation of industry agglomerations in Hungary during the almost two decades analysed in this research, influenced by the institution of the Europe agreement in the pre-accession period, has contributed to a non-deniable extent to this development. The rise and decline in regional specialization which occurred among the Nuts-3 regions in Hungary between 1992 and 2008 illustrated the challenges posed at the regional level by proceeding European integration.

In this context, European cohesion policy should aim to achieve primarily efficiency, given the relatively large but limited financial means it can dispose of in the foreseeable future. Efficiency for a region can be defined as the achievement of full capacity or potential, meaning the value of output that, given the immobile resources of a place, would be achieved if all the economic and institutional opportunities were exploited and every feasible agglomeration or network effect was at work (Barca 2009). Full capacity is the result of private and public action which either increases the utilisation of current capacity at a given point in time, the static aspect, or expands capacity itself over time, the dynamic aspect. Full capacity is determined not by given technological conditions but through the interaction of economic and political decisions and institutions.

A second conceivable objective for European regional policy - apart from the primary goal of achieving efficiency - could be about equity of such a policy, meaning that regional policy should reach a person’s well-being irrespective of where they live. This would include various aspects making a life worth living, comprising opportunities to achieve what an individual considers relevant and to widen their set of options regarding labour skills, health, education, housing, security, income, working conditions, self-respect, a role in decision-making and so on. The political notion for this policy objective is “social inclusion”. This can be defined as “the extent to which, with reference to multi-dimensional outcomes, all individuals and groups can enjoy essential standards, and the disparities
between individuals and groups are socially acceptable, while the process through which these results are achieved is participatory and fair” (definition according to Barca 2009).

Cohesion can - in a certain sense - be called an aspect of the social dimension of European integration, as Wagener, Eger & Fritz (2006) pointed out. Indeed, the tasks conferred to the EU include a social policy with a European Social Fund (Art. 3 EC Treaty). The goals formulated for that policy are: fostering employment, improvement of the living and working conditions, adequate social protection, social dialogue, improvement of the potential labour force, and combating exclusion. There are, however, clear limits to what the EU can do in this field. Social policy is usually associated with budget-consuming redistribution schemes. Indeed, the size of national welfare expenditures reached between 15% and 31% of GDP for 6 of the EU-15 member states in 2001. Therefore, the welfare supporting and demand-side policy functions of the welfare state remain in the domain of the member states, while the EU concentrates above all on the improvement of the supply side.

A concrete example of such a policy target would be the social inclusion of children. Faced with the situation of increasing child poverty, several EU member states do not have a policy specifically aimed at children, but seek to reduce their risk of social exclusion through policies on education, housing, childcare, and health. Since Eastern enlargement of the EU, social discrepancies have increased, not only in the CEECs but also in the old member states. My view on such demands shall be expressed in section 7.2.3., in context with the discussion of the Barca (2009) report.

Given these remarks on the current academic debate regarding the empirical results of European cohesion policy so far, about the rationale for a regional policy at the EU level, and about suitable goals for European regional policy, the next section 7.2.2 shall deal with concrete challenges for regional policy in Hungary for the coming years.

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185 Family circumstances matter for childhood deprivation. Children in large families (with 3 children or more) have a risk of poverty rate of 25%, as opposed to 19% for all children, and those in lone parent households a rate of 34%, an alarming figure, given that the share of children not living with both their parents increased from 14% to 19% during the 1990s. In these households too, as in others, the risk of poverty of children is strongly affected by the education level of parents and their labour market situation. On average across the EU, for over 30% of children at risk of poverty, neither of their parents had an upper secondary level of education as opposed to 16% in the case of all children; Barca (2009).
7.2.2 Current challenges for regional policy in Hungary

Which is the track record of Hungary regarding regional policy? Which are the current challenges regarding regional development? And what are the priorities set by the policy makers for using the funds of the EU regional policy up to 2013? Which role is foreseen for agglomerations, which for regions specialised in certain sectors or industries? This section shall provide answers to these questions.

Whilst still being a relatively centralized state - also due to the weight of the capital Budapest relative to the rest of the country\footnote{Budapest has a population of just under 2 million, thus roundabout one fifth of the 10 million inhabitants of Hungary.} -\footnote{For an account of the history of regional policy in Hungary prior to 1989, see Dreyhaupt-von Speicher (2002), pp. 250-251.}, Hungary has an experience in regional policy prior to 1989 and starting earlier than in most other CEECs. A tradition of regional development policy started in the early 1970s, although it was dominated mainly by sectoral interests then. In the year 1985, the Hungarian national parliament passed a decree on longer-term regional policy goals and tasks, although policy measures were restraint to only two of the 20 regions up the year 1989. Due to the limited financial and institutional means (a rather bureaucracy-shaped regional policy), they remained without any remarkable influence on the economic structures of the regions concerned.\footnote{Budapest has a population of just under 2 million, thus roundabout one fifth of the 10 million inhabitants of Hungary.} While a separate ministry for environmental and regional policy was set up in 1990 and a regional development fund was started in 1991, it took until the mid-1990s for Hungarian regional policy to be reshaped. In 1993, a “resolution” defined goals and instruments of regional policy for the first time since the break-down of communism. Regional crisis management and economic reorientation as well as the implementation of selected infrastructure projects in peripheral regions were enumerated as key tasks for the Hungarian regional policy.

The “law on regional development and spatial planning” passed in the year 1996, the first law of its kind in any of the EU accession countries, was the starting point for a greater decentralisation in Hungarian regional policy - an orientation at the principles prevailing in EU structural funding which Hungary then started to prepare for. The law set up the territorial units for regional policy which are the 20 planning-statistical regions as the Nuts-3 level in Hungary as well as 7 Nuts-2 regions comprised by between 2 to 3 Nuts-3 regions. The new, rather centrally-steered concept aimed at economic restructuring saw as key goals the support of a market-orientated development in all regions of the country, the establishment of the prerequisites for a lasting and self-supporting economic growth in the regions, the reduction of income differences between Budapest and the rest of the country, as well as of economic differences between well advanced and less developed
regions, but also the favouring of regional and local initiatives in line with the national development goals. The "national regional policy concept" passed by the national parliament in 1998 added the missing main strategy line to the 1996 law (Horváth 2000).

Regional governments have an important role to play in ensuring the successful implementation of European regional policy, which is based on partnership between the EU level and the national, regional and local level. While Hungary is the country among CEECs in which local authorities enjoy the largest independence from the national level and the most far-reaching competences (such as the provision of public services), the level of Nuts-3 regions has been substantially constrained in their influence after 1990. There are no exclusive competences at the level of Nuts-3 regions. Among shared competences at the Nuts-3 level are land use planning, environmental issues and tourism. The Nuts-3 level has no own tax revenues, only transfers from the central government budget.

The Nuts-2 level of the 7 regions - which is the level at which funds from the European regional policy are allocated - are merely "planning-statistical regions" for which no administrative structure existed prior to their design, neither did they have the right to self-government. Regional policy experience in the EU shows that the administration of funds under the objective-1 is typically done better and more efficiently at a larger regional level (although this is not a prerequisite for receiving EU funds at all). The example of Greece - where objective-1 regions exist merely as statistical planning units - shows, that the EU Regional funds were used by far not as efficiently and successfully there as in those countries where objective-1 regions and administrative levels handling the EU funds corresponded.

The pre-accession aid received first in the context of the PHARE programme since 1991, later on specifically under the pre-accession instruments ISPA (for regional policy) and Sapard (for agricultural policy) shall not be described here for lack of space. The first funds under the 2004-2006 regional policy budget shall also be left out here for that same reason. The current situation in Hungary shall rather be given attention regarding the main economic challenges and the role foreseen for agglomerations and specialization in the context of regional development.

The current situation in Hungary with regards to regional development is still characterized by increasing regional disparities at the Nuts-3 level relative to the EU-average which have not been diminished in the past two decades, in spite of the efforts of the national regional development policy.
The spatial differences are pervasive at different levels:

- between Budapest and the rest of the country;
- between the regions in the Western part of the country, and those lagging behind in the Eastern part, Northern Hungary and some regions in South Transdanubia (bordering with Serbia);
- at the level of micro-regions, where the rise or decline of industries - sometimes of individual firms - and geographic endowments shape the situation;
- at the local level between city agglomerations and the country side;
- and between central regions and border regions in a peripheral situation.

The majority of the territory of Hungary is rather rural in nature. More concretely, of Hungary's 20 Nuts-3 regions, 6 can be classified as predominantly rural, remote regions, and 5 more as predominantly rural, close to a city. While only Budapest is a predominantly urban region, 7 regions are classified as "intermediate" regions, according to the European Commission (2008b).

Apart from the above weaknesses, the main driving force of regional growth in Hungary has recently been stemming from the growth of county seats (i.e. the administrative seat of the country administration) and some medium-sized cities, which are the most dynamic parts of the Hungarian urban system. There is a well-developed system of cities between Budapest and the Lake Balaton, thus along a development axis from the North-East to the South-West, and also along the axis between Budapest and Vienna, while a few other well-developed cities are more island-like (National Development Agency 2007).

The empirical results of this research on agglomeration have shown that industry is relatively concentrated in Hungary, as compared to the EU-15, and that agglomerations are located primarily in the Western part of the country and around the capital of Budapest. Moreover, while the degree of agglomeration has increased and decreased again in a double hub over the 1992 to 2008 period, the start and the end levels in context with proceeding European integration were more or less the same. Given the relatively strong concentration of production and

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188 This is defined in that study as “at least 50% of the population of the region lives at less than 45 minutes road travel time from a city of at least 50,000 inhabitants”.

189 County seats are the administrative seat of the Nuts-4 regions; the 20 planning-statistical regions of the Nuts-3 level are comprised each by between one and up to three Nuts-4 regions, called counties. Only these counties have a grown administrative structure. The smaller organisational structures for the Nuts-3 regions – data collecting and policy implementing - were created in Hungary to comply with the requirements for receiving EU Regional Policy funding.
services in agglomerations and the disadvantages of remote rural areas, a balancing out between regions is therefore what is needed in Hungary.

Investments as well as research and development expenditures are concentrated in Budapest and surroundings. Due to the good accessibility of the markets of Western-Europe, advanced infrastructure and skilled labour, the Northern and Western parts of Transdanubia and the county seats, especially Pécs, Szeged, Debrecen and Miskolc, are functioning as regional and economic knowledge centres and growth poles. On the side of weaknesses, the growth rate of the majority of the most disadvantaged micro regions is far below the average and with a negative trend. If the current tendencies remain, these regional differences can increase and result in significant social tensions, according to the Hungarian authorities (National Development Agency 2007). Well-developed regions of the country have a relatively good infrastructure whereas the lack of infrastructure in peripheral regions far away from Budapest hinders development to a large extent. A special problem of these regions is that available jobs (in country centres or major towns) cannot easily be accessed by public transport.

Furthermore, significant inequalities persist between the development of traditionally industrialized regions, on the one hand, and agriculture-oriented regions, on the other. Most of these previously leading industrial regions (mainly in Northern Hungary) have not recovered from the transitional shock after the collapse of heavy industries, which is manifested in high unemployment, thus high inactivity persists, combined with a bad health status of the population. The situation of rural areas is dull as the agricultural sector has lost its major markets, therefore the profitability of agricultural production has dramatically decreased.

The labour demand of agriculture is seasonal, and falling: most of the previously rural production facilities have gone bankrupt, and there has not been any re-organisation. Thus, unemployment in rural areas is extremely high. Regarding North Hungary and parts of South Transdanubia, the least developed micro regions are such regions which are peripheral, border regions and regions without urban centres and with small villages, which cannot easily be accessed by public transport. The development of these regions is also hindered by their geographical setting, as they are situated in hilly regions, with poor transport capacities. Most of their population does not have legal employment which means no legal income, therefore they need social support from city councils, or low-level, pension-type income from the national level.

With respect to higher education and research institutions, regional centres have developed such facilities, yet the most advanced knowledge intensive businesses still operate in Budapest agglomeration. The majority of people with a diploma
graduating from institutions in rural areas move away from there - most of them to Budapest because they cannot find an appropriate job in line with their qualification or if they could, they would earn less otherwise. Looking at regional differences in terms of employment, the greatest disparities exist at the level of micro regions which function as local labour markets (Fazekas 2003). Regions with high unemployment are typically characterised by a bundle of problems: the rate of low-skilled people is higher than average, the proportion of long-term unemployed is higher, and the inactive population is marginalised from the labour market as are those receiving social assistance. This has lead to an increase of the regional concentration of inactive and marginalised people.¹⁹⁰

Against this background of weaknesses and opportunities in Hungary, two key challenges of regional development policy are seen for 2007 to 2013¹⁹¹:

- to sustain long-term growth, and
- to increase employment.

Sustained long-term growth is to be achieved through a widening of the economic base, measures to improve competitiveness, and the development of the business environment. Increasing employment shall be attained mainly by improving employability and labour market activity in order to increase labour supply.

Hungary has been allocated 25.3 billion Euro from the EU budget for the 2007 to 2013 period, the Hungarian contribution (co-financing) will be 4.4 billion Euro. The EU-transfers amount to an equivalent of 4% of the GDP of Hungary. Six of the seven Nuts-2 regions fall under the convergence objective¹⁹², while Central Hungary (with Budapest) is a phasing-in region for competitiveness and employment funding¹⁹³. The industrial sector is continuing to undergo restructuring processes which were analysed in this research for almost the past two decades. The decline of heavy industries located primarily in Northern Hungary affects the economic base of these regions. Similarly, the decline of the textiles sector brings challenges to certain local labour markets. The entire country qualifies for the

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¹⁹⁰ A particular minority problem is seen by the National Development Agency (2007) with regards to the Roma population which make up 1.86% of the population in Hungary. According to the 2001 population census, there were 189,984 Roma (gipsy) living in Hungary; HCSO: Statistical Yearbook of Hungary 2004, Budapest 2005. Their employment rate fell back from 75% in 1980 to 30% in 2007 indicating their social marginalisation, and the few regions in which this population is concentrated, Cserehát, Ormánság, or Budapest slums, are underdeveloped micro-regions with deep poverty.

¹⁹¹ This timeframe is due to the timeframe of funds under the Financial Perspective of the European Community 2007 to 2013, which had been finalised by the European Council in December 2005.

¹⁹² Objective I regions, those receiving the highest support under EU Regional Policy.

¹⁹³ Former Objective 2, funded by the European Social Fund (ESF).
cohesion fund financing project in the environmental protection, energy and transport sectors.

Which development can be forecast for Hungary concerning industry agglomerations and regional development in the nearer future, based on the empirical results of chapters 4 and 5 and on the predictions of NEG theories? The process of decreasing agglomeration in manufacturing industries, which started in 2007, looks set to continue for some years. Similarly, overall declining regional specialization, which has begun in 2007, will prevail for several years more.

As regards regional development, support under the “New Hungary” development strategy is planned to be given to regional growth poles, rural development and the realignment of disadvantages micro-regions. These objectives were translated into six thematic and territorial priorities (National Development Agency 2007):

1. Economic development;
2. Regional development;
3. Transport development;
4. Social renewal;
5. Environment and energy development; and

Examples of concrete projects are the partnerships in 112 industrial parks, the industrial grass project for the paper industry in the Southern Great Plain, and green energy provision for modernisation of Szeged hospital. Projects funded by the European Cohesion fund include the reconstruction or construction of 500 km of roads and 500 km of railroads, the improvement of waste water management in 10 major towns (including Debrecen, Szeged, Pécs, and Győr) and the creation of a complex waste management system for more than 1,000 settlements. All counties of Hungary are involved in at least one environmental project funded by the Cohesion Fund. These projects affect almost 6.5 million people (of the total population of 10 million).

Furthermore, Hungary is benefiting from funds for cross-border cooperation among EU-member states, namely for its border regions with Austria, Slovakia, Romania, and Slovenia. In addition, the co-operation instrument for

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194 The details were taken from the Website for Regional Policy of the European Commission, under the Heading “Success Stories”, date of download: 23.4.2009.
195 The operational programme for Hungary-Romania for 2007 to 2013 was endorsed by the Commission on 24 April 2009. It encompasses 4 Hungarian Nuts-3 regions and 4 Romanian regions and has a budget of 224 million Euro, representing approximately 2.6% of the funds for cross-border cooperation under the Cohesion Policy budget for 2007 to 2013. MEMO/09/196 of the Spokesmen Service, http://europa.eu.
pre-accession assistance is benefiting Hungary's border regions with Croatia and Serbia-Montenegro. Border disparities in terms of the quotient of GDP per head were greater than 2.5 at Hungary's border with Serbia, between 1.25 and 2.5 at its borders with Ukraine and Austria, and less than 1.25 at the other borders (European Commission 2008b).

The expected impact of the new cohesion policy is to achieve an increase of more than 10% in the added value generated by enterprise and a 4% increase in the number of employees outside the public sphere by 2015 (EU Regional Policy 2008a). Hungarian spending on the ear-marked Lisbon categories is expected to increase by another 10% in the 2007 to 2013 period (46% during 2004-2006). This seems much too optimistic in my view, given the lack of experience of most actors involved in the implementation of regional policy. The very low portion of funds paid by invoice for the 2004-2006 period - only 21.37% by May 2007, according to the National Development Agency (2007) – to my mind clearly indicates that Hungary is experiencing coordination problems of the kind explained above. Part of the slow use of funds could be due to little experience of the administrative staff in handling the implementation of programmes and projects of European regional policy, as the scope of the pre-accession instrument ISPA in Hungary - although certainly a useful preparatory tool - was very limited and so was the training effect for administrative staff.

Further, the lack of a coordinating administrative structure at the Nuts-2 regional level is likely to raise serious coordination problems. The fact that the New Hungary Development Plan 2007-2013 foresees objectives to be implemented at the level of micro-regions goes in line with the lack of any capable administrative structure at the Nuts-2 or Nuts-3 level. Last but not least, the current economic crisis and severe fiscal constraints on the Hungarian government budget in the wake of the IMF conditionality agreement signed in October 2008 could seriously endanger these goals, expressed in the difficulty to raise the required national co-financing.

**7.2.3 Reforming regional policy after Eastern enlargement**

This section will look at European cohesion policy with respect to present or past weaknesses and suggest solutions for improvement, in particular for tackling the

196 It should be recalled that these projections were made prior to the world economic crisis which has lead the state of Hungary to the verge of insolvency in October 2008. This situation and the IMF Conditionality agreement signed then required the new government under G. Bajnai in power since April 2009 to take austerity measures reducing public spending (FAZ 18.4.2009).
challenges due to the new realities after Eastern enlargement to an EU of 27 member states, as illustrated in this research at the example of Hungary. This will be done taking account of the current political debate at the European level. Recent proposals for reforming European regional policy for the period after 2013 will be discussed, with an attention given to the role foreseen for agglomerations and the policy option of strategic specialization as a regional development strategy.

Cohesion is about overcoming distance, division and inequality. A suitable regional policy needs to address the three dimensions of cohesion:

1. Economic cohesion;
2. Social cohesion; and
3. Territorial cohesion.

The first notion, economic cohesion, implies a convergence of the regions in terms of GDP per capita, a narrowing of the disparities between the richest and the poorest regions in these terms. The second notion, social cohesion, includes a balanced labour market, and avoiding people from being marginalised from the labour market and from access to social services. And the third notion, territorial cohesion, calls attention to themes such as sustainable development and access to services. This underlines that many issues do not respect administrative boundaries and may require a response from several regions or countries, while others need to be addresses at a local or neighbourhood level.¹⁹⁷

The EU’s cohesion policy for the period 2007 to 2013 has a total budget of 347.410 billion Euro¹⁹⁸. These sizeable transfers correspond to 0.3% of the GDP of the EU-15 member states¹⁹⁹, and to 3% of the GDP of the new Member States (CEECs) in 2013. From 2011 onwards, the funds earmarked for the new member states will be higher than those for the EU-15²⁰⁰. The Community Strategic Guidelines for the period 2007 - 2013 set out three priorities for regional policy: (i) improving the attractiveness of regions and cities in the member states;

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¹⁹⁷ To give an example from remote rural areas, in the EU on average 40% of people live further than a 30-minute drive from a hospital and 43% live more than one hour’s drive from a university.

¹⁹⁸ In prices of 2007.

¹⁹⁹ The entire budget of the European Union corresponds to about 1% of the GDP of the EU; the Cohesion budget is about one third of the EU budget, agricultural policy takes about 45%.

²⁰⁰ Planned cohesion expenditure in the 12 new member states will exceed that in the (old) EU-15 from 2011 onwards during the 2007-2013 programming period, according to European Commission (2007), Forth Cohesion Report, p. xxxviii.
(ii) encouraging innovation, entrepreneurship and growth in the knowledge economy; and (iii) creating more and better jobs. The first of these explicitly foresees a role for agglomerations, including various dimensions of urban policy: the role cities can play as motors of regional development and centres of innovation; the need to improve the internal cohesion of urban areas; and the need to promote a more poly-centric regional development and a balanced development of urban and metropolitan areas.

The overall priorities of the EU regional policy are to be achieved through three objectives in 2007 to 2013: the convergence objective (former objective 1, the regions whose GDP is less than 75% of the EU average) which gets 81.5% of the funds; the regional competitiveness and employment objective (former objective 2), with 16% of the funds; and the European territorial cooperation objective (cross-border cooperation\textsuperscript{201}) receiving 2.5% of the funds.

This section in this study primarily deals with the design of regional policy in “normal” times from a forward-looking perspective. Nevertheless, in the face of the severe economic recession since the fall 2008, the contribution by European regional policy towards alleviating the financial tensions of member states and supporting their counter-cyclical fiscal policy efforts shall not pass unnoticed. In the so-called “European Recovery Plan” passed by the European Commission in December 2008, the most important contribution of regional policy is the increase in the advance payments to member states for the 2007 to 2013 programmes. These additional advance payments will provide immediate cash injections of 6.25 billion Euro in 2009 for investments, within the financial envelope agreed for each member states for the 2007 to 2013 period.\textsuperscript{202} This change would bring the total of advance payments to 11.25 billion Euro in 2009 (for all member states), or from 671.3 million Euro to 996.8 million Euro in the case of Hungary. Other measures include the extension of the deadline for use of funds from the 2000 to 2006 operational period\textsuperscript{203} - this benefits especially the new member states little

\textsuperscript{201} The main Community Initiative is INTERREG with three different strands; PEACE also goes under this heading, it is the Community initiative for cooperation between the border regions of Northern Ireland (UK) and the Republic of Ireland.

\textsuperscript{202} The EU budget – which is not allowed to run deficits - is financed by contributions of the member states paid in at the beginning of the year. The advance payments provide up-front liquidity to member states. The remainder of the amount is paid out only after satisfactory documentation – including for the amount of the advances - about the implementation and actual costs of the projects has been provided to the payment authorities and approved by the European Commission.

\textsuperscript{203} This means a relaxation of the n+2 rule, under which funds decay (cannot be used any more) if no satisfactory documentation about the implementation of the programmes is presented by the end of the second year after the programming period, which would have been 31 December 2008 for the 2000 to 2006 period.
experienced with European regional policy, including Hungary - and a relaxation of state aid rules, although this benefits all economic branches to some extent.

Which weaknesses of European regional policy have been identified in the recent academic and political debate? Which initiatives have been taken by the European institutions, and which views brought forward by other actors? How are these to be judged in the context of agglomeration and regional specialization in Hungary? The next paragraphs will deal with these issues.

At their recent informal Council under the Czech Presidency (2009), the Ministers in charge of regional policy shared the view that the major increase of inter-regional disparities within the EU following the recent Eastern enlargements has emphasized the relevance of the cohesion policy. Ministers believed that the primary focus should be put on the convergence of less prosperous areas. The funds of the regional policy - one third of the EU budgetary resources - should stimulate public investment and leverage additional public and private resources, which is particularly relevant during the current global economic crisis. Furthermore, the Ministers endorsed the core principles of cohesion policy: multi-annual programming, partnership, concentration, co-financing and additionality, monitoring and evaluation. As preconditions for the success on the ground, they recalled: subsidiarity and multi-level governance, partnership, including public-private partnerships, shared management, and proportionality. Ministers also called for significant improvements towards real simplification and reduction of the administrative burden for the current and the next programming period, including more alignment in the rules of the different cohesion policy funds involved, in order to ensure a greater effectiveness, while maintaining sound financial management.

As to the European Commission, its Collège adopted a “Green Paper on Territorial Cohesion” in October 2008, aimed at achieving a better and shared under-

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204 This refers to the proportionality of effort and benefit (also in reference to programme and project size). The principle of proportionality regulates the exercise of powers by the European Union, seeking to set within specified bounds the action taken by the institutions of the Union. Under this rule, the institutions' involvement must be limited to what is necessary to achieve the objectives of the Treaties. In other words, the extent of the action must be in keeping with the aim pursued. This means that when various forms of intervention are available to the Union, it must, where the effect is the same, opt for the approach which leaves the greatest freedom to the member states and individuals. The principle of proportionality is laid down in primary law under Article 5, third paragraph, of the Treaty establishing the European Community (TEC). A Protocol on the application of the principles of subsidiarity and proportionality, annexed to the TEC by the Treaty of Amsterdam, sets out the criteria for applying both of these principles.
standing of territorial cohesion and its implications for the future of the EU’s regional policy, and opened a public consultation on this.205

The Commission stressed three main territorial challenges, the first of which deals with the role of agglomerations:

(i) Overcoming differences in density. Agglomerations can foster both positive and negative effects. For instance, there can be increased focus on innovation and productivity and at the same time, more pollution and deeper social exclusion. The Green Paper suggests that better coordination is key to enabling cities and their surrounding regions to complement their strengths to ensure that each territory can maximise its contribution to the prosperity of the European Union as a whole.

(ii) Overcoming distance. Access to public services, efficient modes of transport, reliable energy networks, and broadband Internet remain unevenly distributed across the European Union. In remote rural areas, on average 40% of people live further than a 30-minute drive from a hospital and 43% live more than one hour’s drive from a university. And

(iii) Overcoming administrative borders in order to cooperate on common issues such as environmental problems, associated with climate-change, flooding, biodiversity loss, or commuting do not respect borders and better cooperation is needed to meet these challenges. Although cohesion policy already promotes cooperation through the INTERREG programmes, the Green Paper underlines that much needs to be done, for instance in the Baltic Sea Region and Danube River Basin cooperation areas, where stronger cooperation is seen as crucial to tackle environmental problems and to boost competitiveness.

The Committee of the Regions (CoR) of the EU206 in its opinion on the subject (CoR 2008) judged the Green Paper as showing lack of ambition, as a clear definition of territorial cohesion is missing in it. The issue of territorial cohesion is seen all the more urgent given the additional costs generated by the lack of territorial cohesion in Europe: additional environmental costs mainly due to congested urban areas and climate change; additional social costs created by the spatial concentration of social problems, and hampering effects towards the smooth functioning of the European Single Market. On the operative side, the

205 The debate on territorial cohesion began in the early 1990s and led to the adoption by Member States of the European Spatial Development Perspective (ESDP) in 1999.

206 This is an institution of the EU in which the regional governments of the EU are represented (for large member states such as Germany only a selection of them) and which is consulted in the EU legislative process on issues of relevance for the regional level.
CoR believed it to be necessary to broaden the political scope of the concept of territorial cohesion at the Community level, and called on the Commission to specify the means of implementing the objective (in a White Paper); at the same time the Commission should develop relevant indicators for specific types of regions, where necessary, at sub-regional level.

Taking position on the Commission’s Green Paper on Territorial Cohesion, the Academy for Spatial Planning and Research (ARL) in Hannover called for emphasis to be given to development dynamics, on the one hand, and to different types of territories, on the other hand (ARL 2008). Unlike the Green Paper, the ARL called for a broadening of the scope to all territories and their fragilities, not just the territories disadvantaged by geological factors. The new kind of cohesion policy would require two types of indicators: indicators describing the need for support, and indicators identifying the best way of making use of resources available (including support), taking into account territorial potentials. The issue of solidarity within the EU would need to be further stressed, while maintaining what the ARL describes as a “bottom-up top-down” way of handling the regional policy in practice. Finally, the ARL called for lean bureaucracy in an environment of shared competences and for a lightening of the complexity of multi-governance processes.

A specific policy issue arises with respect to rural areas, agriculture and territorial cohesion. It should be recalled that half of Europe is predominantly rural, home to around 20% of the population, with CEECs being characterised by an even higher share of rural areas. These have to face the challenges of migration and modernisation at the same time. Throughout the EU, rural regions display the greatest variations in GDP per capita. According to Commission forecasts, 5 million farm jobs will be lost by 2014 (EU Regional Policy 2008b). The Common Agricultural Policy (CAP) has an undeniable territorial dimension, particularly when considering the Less Favoured Area status, agro-environmental measures, and various types of production strongly linked to geography. Complications experienced by the member states are probably due in part to an unclear distribution of the objectives and scope between cohesion and rural development policies. Rural areas face multiple challenges, some of which are at the heart of the CAP and

207 In place since 1975, the aid to farmers in Less Favoured Areas (LFA), it is a long standing measure of the Common Agricultural Policy. In areas designated as "less-favoured", agricultural production or activity is more difficult because of natural handicaps, e.g. difficult climatic conditions, steep slopes in mountain areas, or low soil productivity in other less favoured areas. Due to the handicap to farming, there is a significant risk of agricultural land abandonment and thus a possibility of loss of biodiversity, desertification, forest fires and the loss of highly valuable rural landscape. To mitigate these risks, the LFA payment scheme is an important tool, implemented by all the member states although it is not a compulsory measure.
cohesion policies. That being the case, the central question regarding the right policy for rural areas is: Should there be one European policy solely devoted to rural issues? Or should the territorial dimension of the CAP be reinforced, in order to explicitly contribute towards the cohesion goal?

A further issue is that of an increase in cross-border cooperation in the context of cohesion policy, given the important share of EU population living there, namely 39.4%, which would be desirable in my view. The aim should be to work on a symmetric, multi-polar and balanced Europe. New cross-border regions have been added after Eastern enlargement, including borders between countries which have been political enemies and subject to differing economic systems for decades. In addition, new entities of regional development, so-called “meta-Regions” like the Baltic Sea region, start playing a role. In the face of these new challenges, the rapporteur from the European Parliament, van Nistelrooij, proposed to boost this objective. The leverage of interregional and cross-border co-operation is huge, and should be more profiled.

Another issue is that of measuring the success of such co-operations while economic indicators are nearly missing in this area. A successful example, according to Bedoya Vega, an actor from the ground, is transnational cooperation in the South-West Europe area, where more than 500 organisations set in motion common cooperation projects, even when no previous experiences of cooperation were recorded. He posed the question: How can trans-European cooperation be strengthened to facilitate connectivity and territorial integration?

An impediment for advancing the role of cross-border cooperation is the political economy side of it in my view. While member states are primarily interested in the extent of their own influence (see also Bindseil & Hanke (1997) on this), they may find it difficult to believe that cooperation between regions can improve competitiveness and the lives of their citizens. For those policymakers already convinced, the problem is rather about how to assess the impact on the ground which cross-border cooperation is having. The most frequently used indicator, GDP, is not capable of describing the situation in fine enough detail. Indicators may have normative or descriptive functions. In the first category, GDP is and will remain central because of its robustness. In the second category, the European

208 Mr. Bedoya Vega is Deputy Director-General of Economy in the Cantabrian Regional Ministry of Economy and Finance, and head of the Managing Authority of the cooperation region South-West Europe, interview in: EU Regional Policy (2008b).

209 The article of Bindseil & Hanke (1997) deals with the power distribution in decision making among EU member states using a game-theoretic approach to policy making in the Council of the European Union, modelling various enlargement scenarios and determining thereby the influence in decision making which each member state can exert.
Commission is working with Eurostat to improve understanding of the dynamics. Whatever they will come up with will not please every one; indicators are a real problem, because every member state tries to work out what is in it for them.

A further problem in cross-border cooperation is about how to maintain financial accountability and to control for sound financial management. Finding a new modus vivendi in this field would be particularly beneficial for Hungary which has 13 border regions among the 20 Nuts-3 regions. As European tax payers' money is involved, the EU has allocated a certain amount of money from the cohesion policy budget to each member state (this is typically done at the European Council which decides on the financial perspectives), and has transferred oversight for the execution to the managing authorities, monitoring committees and the national courts of audit. In cross-border programmes, this responsibility is blurred due to the blend of funds and the cross-border nature of projects. Therefore, the European Commission and most EU member states have an interest to limit money spent in cross-border cooperation. This is quite unfortunate for Hungary which has a large proportion of border regions and 7 neighbouring countries. Thus, while consent is rising among policy makers on the desirability of enhanced cross-border cooperation, an increase of funds is hindered by the institutional structure of the EU for the time being.

With respect to policy coordination, an issue playing a role in current developments is the interaction between cohesion policy and the targets of the Lisbon process with respect to research, communication and information technologies. The cohesion policy as a whole, with its objectives and tools, supports the Lisbon strategy (see also Wandel (2004) on this) which was renewed at the March 2005 European Council with the adoption of the partnership for growth and jobs and the corresponding national action plans. In the New Hungary Development plan (the programming document for cohesion policy in Hungary from 2007 to 2013), for example, an entire section deals with the coherence between the National Action Plan drafted in context of the Lisbon process with the New Hungary Development Plan (National Development Agency 2007).

A further issue raised in this context is the notion of “smart investment”. Smart investment includes investing in energy efficiency, clean technologies, environmental services, infrastructure and interconnections, broadband networks, to develop forecasting regarding future labour market needs and matching skills with future demand, or opening up new finance for SMEs especially, as research-intensive and innovative SMEs would be considered to fall in this field of “smart investment”.210 The EU’s new scheme regarding energy efficiency in the residence...
tial sector also goes into this direction. The questions arising in this context of improving regional policy with regards to the Lisbon goals are: Which innovation policies need to be put in place in order to avoid a technological divide between territories with potential and those which are less advanced? And how can more money be allocated to “smart investments”?

The ex-post evaluation of cohesion policy programmes of the period 2000 to 2006 identified certain weaknesses while finding mixed success of programmes at the macro level (Evaluation Network 2007). Among these weaknesses were an only limited concentration of expenditure in many cases - contrary to the agglomeration recommendation; and only limited expenditure on research, technological development and innovation, contrary to the Lisbon targets. Compliance of regional development strategies with recommendations was found difficult to determine because of lack of advice on which of the various drivers of growth to focus on and the relative priority to be given to each. Further difficulties arose because of insufficient recognition of differences in regional characteristics and circumstances. The issues with respect to agglomeration which are emerging in the evaluators’ view are: How can the importance of agglomeration and a concentration of expenditure be reconciled with to goal of balanced regional development? And how can the innovation capacity be strengthened in lagging regions?

In summarizing the debate up to this point, the following elements should be retained for a forward-looking European regional policy taking account of the new challenges after Eastern enlargement:

- More concentration of resources on the less prosperous member states and regions in order to enhance solidarity and advance with cohesion;

whether priorities could be modified in order to include more “smart investment” than initially planned.

211 Regarding energy efficiency, the Commission has launched a scheme allowing for European co-financing of national programmes targeted at low-income households national, regional or local schemes for insulation of walls, roofing and windows (double-glazing), solar panels, and replacement of old boilers for more energy-efficient ones. As the residential sector is responsible for a quarter of energy consumption and 40% of greenhouse gas emissions in the EU, this additional policy line is a “win-win measure”, according to Commissioners Danuta Hübner, Regional Policy, and Andris Piebalgs, Energy; IP/08/1874 press note of the Commission’s Spokesmen Service (2008).

212 Planned cohesion expenditure in the 12 new member states will exceed that in the (old) EU-15 from 2011 onwards during the 2007-2013 programming period, according European Commission (2007), Forth Cohesion Report, p. xxxviii.
• A polycentric and balanced policy for agglomerations and networks of towns and cities, as agglomeration is acknowledged to be one of the key drivers of growth and development;
• Tailor-made regional strategies based on a diagnosis of strengths and weaknesses at the regional level, including the option of a strategic specialization as a regional development policy;
• Better integrated strategies for rural areas; and finally
• A stronger accent on performance and quality, coupled with new and better indicators for evaluating results.

The Barca report published by the European Commission on 27th of April 2009 was intended as a starting point for reflections towards the next reform of European regional policy for the period beyond 2013.213 The report suggests for the next period of regional policy that around 55-65% of the funding should be concentrated on three or four core priorities. Criteria for the allocation of funding would remain much as now, i.e. based on GDP per capita. One or two core priorities should also address social inclusion.

This proposal of a 55-65% allocation means a dramatic watering-down of funds destined towards the cohesion process of the poorest regions in the EU. The share of funds concentrated on the convergence objective, the poorest regions with a per-capita GDP less than 75% of the EU-average, amounts to 81.5% in the current period 2007 to 2013. The regional competitiveness and employment objective, covering basically the remainder of the EU territory, currently receives 16.0% of the funds. Its share would go up to 35-45% if the Barca (2009) proposals were followed, taking account of whatever share would be left for territorial and cross-border cooperation (currently 2.5% of the funds).

It is a fact that regional disparities have grown in the pre- and post-accession phase, for the EU-27 as a whole and especially in the CEECs. Another fact is that personal income inequalities have increased largely since the Eastern enlargement of the EU. This has led to rising demands towards an added social dimension of European regional policy. Moreover, in the face of dwindling scope in strained government budgets due to the current severe economic recession, demands for a European social policy coupled with the redistribution scheme of European cohesion policy emerge more and more. While all these are plausible causes which could have led to the drastic proposals by Barca (2009), they are unjustified and in the wrong place in my view. This would mean to give the richer regions

213 The report was written by Fabrizio Barca, an external expert, upon request of Commissioner Danuta Hübner, in charge of Regional Policy, and is based on the current debate and a series of policy hearings and seminars.
making up the larger territory and population in the EU more of the funds than now, while reducing the help for the poorest and problem regions. European regional policy should be concentrated on convergence of the poorest regions, in my view, providing them with integrated bundles of public goods and services to enable them to grow appropriately. Social policy should be left to national governments and their budgetary resources, as in line with the principle of subsidiarity, the bulk of it – apart from the coordinating tasks foreseen by the Treaties - is clearly not an issue for the EU level.

Apart from that, Barca (2009) called above all for a “place-based approach” to regional policy. The notion of “place-based” is more or less a synonym for the term “with territorial aspects” used by the European Commission in context with the third dimension of cohesion - the territorial one - and the Green Paper on Territorial Cohesion. The two main objectives of such a “place-based” cohesion policy that are singled out by the Barca report are “efficiency” and “social inclusion”, which should be pursued by separate measures or instruments. The efficiency objective is about realising the full utilisation of the potential of every place or region. The social inclusion objective is about ensuring equal opportunities for individuals irrespective of where they live.

Such a placed-based policy would be more expensive to implement - higher management costs - than the current policy, as the Barca (2009) report admitted. These higher costs could only be justified if they delivered better results, such as a more equitable outcome regarding social inclusion and sustainable growth. The relevant unit for allocating funds of the EU regional policy under such a “place-based” approach could still continue to be the Nuts-2 level - as Nuts-2 regions are the closest approximation to places for which homogeneous and reasonably updated economic data are available for an allocation to be made ex-ante. But the measures and programmes should be focussed and targeted to smaller places within the Nuts-2 regions.

214 By choosing the term "place-based" rather than “region-based”, the author wanted to make the statement that in some circumstances, the most meaningful spatial unit for a targeted action can either be smaller and more localised than a region, or else spanning beyond regional or even national borders, such as in the case of economic agglomerations in border regions of several member states.

215 For any progress made by pursuing the efficiency objective might help the pursuit of the equity objective, but this need not be the case.

216 Barca report (2009), p. 113: “The present arrangement by which resources are pre-allocated to NUTS 2 Regions (and, for the cohesion fund, to member states), leaving the lower level of government to allocate it internally, is thus coherent with the policy model.” This sentence has been inscribed into the report by the Commission official (Eric van Bresca) or the Cabinet of the Commissioner in my view in order to ensure the feasibility of the reports’ conclusions regarding the future operability of EU Regional
Beyond that the *Barca* report postulated that every policy, whether at national or regional level and in what field so ever, should be made with a territorial perspective in view, i.e. policy makers should make a territorial impact assessment at the stage of its design and well ahead of its implementation. Many policies even at the national level are said to be made with specific locations or problems in mind. For example, a national labour market policy in Hungary targeted at long-term unemployed miners would primarily benefit the 3 regions Nógrád, Heves, and Borsod-Abauj-Zemplén in Northern Hungary where heavy industry was concentrated under the CMEA socialist planning system.

Moreover, the implementation of a reform of regional policy along the lines proposed by the *Barca (2009)* report would require a strong political compromise to take place during 2010. It would also require some changes to be anticipated in the current programming period and, more difficultly, changes to the structure of the budget negotiation on cohesion policy in order to allow for simultaneous agreement on resources, governance and goals\(^{217}\). Whether such a major political concession would come about in the face of the deep economic crisis prevailing since the autumn of 2008 is extremely unlikely, in my view.

A final word shall evaluate the relevance of the *Barca (2009)* report with respect to the results of this research on industry agglomerations and regional specialization in Hungary. Agglomerations are acknowledged to be among the “key drivers” of economic growth and development. A country-wide perspective to economic development should be taken because of the strong inter-dependences between regions, as the movement of labour and capital away from regions with untapped resources to thriving agglomerations can reduce the potential output of the former region by more than they raise the potential output of the latter\(^{218}\). Public actions intervening in the agglomeration process should therefore take the form of a transparent process for private and business actors.

The notion of “smart specialization” for regions is a second concept of interest for this research. The notion as used in *Barca (2009)* alludes to a specialization of a region with respect to innovation policies. Along the lines and in accordance with the research results of this research, it would rather make sense to broaden the concept to strategic specialization as a regional development strategy. Policy

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217 This would mean a simultaneous agreement on 3 relevant documents: the financial framework, the European strategic development framework, and the regulation on cohesion policy (rules for use of the grants).

218 See also the main statement of *World Bank (2008a)* on this, discussed more in detail earlier in this chapter.
makers should then pursue a policy of "strategic specialization" with respect to specific manufacturing industries as a development and employment strategy at a regional level.

Hungary and its regions are clearly on the recipient side of EU regional policy, in need of solidarity by the more prosperous member states, given that six of the seven Nuts-2 regions in Hungary need support under the convergence objective, and that the country has almost the largest personal income disparities among CEECs. In this respect, Hungary would rather benefit from a further concentration of funds on the cohesion goal than from the watering down of funds which the Barca (2009) proposals seem to imply. Given the large economic disparities in the Central and East European member states, more means should go towards this objective rather than less. The equity objective referred to as "social inclusion" could also be reached as a side objective, but not as a binding objective within the European regional policy. Social policies ought to be left to national member states in my view, as the national context with regards to the composition and needs of the population as well as the social systems vary greatly from country to country.

A word of caution shall conclude, namely that it should not be forgotten that Hungary still struggles with the implementation of current programmes according to the EU rules, as administrations handling the regional policy interventions are often little experienced in this field - despite the attempt of preparation made by ISPA and the phasing-in during the 2004-2006 period. In addition, a coordination problem among micro-regions, which are implementing the actions, seems to exist due to the lack of an administrative structure at the Nuts-2 regional level in Hungary, as indicated by the low portion of funds paid by invoice (only 21.37% for 2004-2006). Thus, despite the potential benefits which European cohesion policy may bring for Hungary, the advancement on the ground is slow and in need of further institutional improvements, training efforts, information, and exchange of good practice.

7.3 Conclusions, forecast for Hungary, and policy recommendations for further EU enlargements

In context with the Eastern enlargement of the EU, this research dealt with the effects of pre-enlargement integration policies on industry agglomeration and regional development in Hungary. In the framework of NEG models, the development of manufacturing industry agglomerations as well as specialization of the 20 Hungarian regions were analysed empirically and by means of regression analysis for the period 1992 to 2008. The regression results for agglomeration and regional
specialization show that the integration variables exports and FDI had a significant influence, and that regions have succeeded to different degrees to cope with structural transformations and the additional adjustments required by the accession process. The results for Hungary clearly show that there is a trade-off between the overall catching-up process at the country-level due to increasing trade integration under the Europe agreement, on the one hand, and the increase of regional disparities in the pre- and post-accession phase, as shown by the results from regional specialization and other indicators, on the other hand.

Agglomeration went through certain phases during the process of proceeding European integration. The results with respect to manufacturing industry concentration in Hungary can best be described as a double-hub, a first peak around 1999 in the pre-accession phase, and a second slighter hub since the EU-accession. A similar development could be observed in the regions. Periods of high industry concentration tended to go along with a rise in specialization, and dispersion processes of industry with a diversification at the regional level. The double-hub structure of regional specialization also held for groups of regions. Internal regions tended to have higher specialization levels than border regions and a thinner industrial base than in border regions. Among border regions, those next to the EU-15 countries were the most diversified and also performed better. This coincided with the fact that most agglomerations were located in the Western part of the country and around the capital.

A particular strength of this research was that it combined concrete empirical research with policy relevance in light of practical work-experience gained in European policy making. With respect to the empirical analysis of industry agglomeration, most previous research was based on the country-level for a group of countries (EU or CEECs), while the present research used regional-level data to analyse agglomeration for the country chosen, namely Hungary. With reference to the tools, a unique contribution of this research is that it applied six different concentration indices to the same set of manufacturing data, thereby allowing for a comparative analysis. Regression analysis on the influences working on industry concentration and especially on regional specialization had rarely been performed before nor been based on data from Central and Eastern Europe.

The theories of the NEG chosen as theoretical framework made certain predictions about the formation and development of agglomeration as well as about regional specialization during an integration process. The results of this research on manufacturing agglomeration and regional specialization in Hungary contributed an empirical confirmation called for regarding a key proposition of the NEG: that trade induces agglomeration.
Which future development can be forecast for Hungary concerning the areas of this research - agglomeration and regional development - in context with European integration? The process of on average decreasing agglomeration in manufacturing industries which started in 2007 looks set to continue for some years. Similarly, overall declining regional specialization, which has begun in 2007, will prevail for several years more. The border regions will benefit from a further deepening of integration in the EU, in particular the Western border regions due to the location of agglomerations there and due to their proximity to the high-income markets Austria and to a lesser extent Slovenia.

The empirical results regarding the effects of pre- and post accession policies on Hungarian manufacturing industries and regional development have certain policy implications. Policy conclusions which emerge from the Ludema & Wooton (1997) model with partial inter-regional migration - a realistic assumption in the case of Hungary - include the following. To counter growing regional disparities during integration processes, policy makers should lower transport costs between regions in a country. And they should seek to increase the degree of (partial) mobility of industrial workers by mobility-supporting and encouraging measures.

Agglomerations are acknowledged to be among the “key drivers” of economic growth and development. In Hungary where space for large agglomerations is limited and polycentrism is high, economies of scale and growth can best be generated by networking between major agglomerations and their hinterland and by dense networks of big or middle sized cities. Based on the empirical results regarding agglomerations in Hungary and along the line of the academic discussion, the following policy should be recommended with regards to agglomeration: Taking a country-wide perspective on economic development and growth, identifying growth poles - either certain agglomerations by themselves, or networks of cities and towns - which are giving a positive contribution to overall economic development, and then making policies in a coordinated fashion among all government levels, which are working towards this strategy, making them visible to all actors potentially concerned at the local level.

The tool of strategic specialization for a region seems to be an interesting option for policy makers interested in regional development based on this research. In particular, it might make sense to pursue a strategic specialization of a region with respect to growing, future-oriented manufacturing industries as part of a development and employment strategy for a region. This implies building on the strengths and taking account of the weaknesses of a region. Through such an approach, the most could be made of the present diversity of industrial agglomerations and networks, while their openness beyond regional or national boundaries would be promoted.
The pre-accession policy perspective should now be opened up towards further enlargement candidates of the EU such as Croatia in the nearer future and Ukraine further away on the horizon.\textsuperscript{219} The challenges are threefold, firstly at the level of pre-accession policies, secondly at the institutional and policy side within the current EU, and thirdly at the level of the accession candidates.

The results of this research have underlined the positive role of integration policies – namely the instrument of the Europe agreement - on agglomeration and regional development. The regression results for agglomeration and regional specialization have shown that the integration variables exports and FDI - both of which increased sizeably over the period (see sections 3.7 and 3.8) - had a significant influence, and that some industry- and region-specific characteristics were relevant factors as well.

Taking an overall picture, the empirical results for Hungary derived in chapter 3 clearly show that there is a trade-off between the overall catching-up process at the country-level due to increasing trade integration under the Europe agreement, on the one hand, and the increase of regional disparities at the Nuts-3 level in the pre- and post-accession phase, on the other hand. Pre-accession policies based on trade liberalisation, as the Europe agreement with Hungary, are nevertheless beneficial for both sides. Hungary’s share of exports to EU markets rose from one third to over 80% over the entire period, while trade volumes have tripled in the enlarged EU from 175 billion Euros to 500 billion in the 5 years since the Eastern enlargement. The westward re-orientation of Hungary after the break-down of communism was only possible due to early political integration policies by the EU, the Europe agreement, PHARE aid as well as the ISPA and Sapard pre-accession instruments. Without these integration policies, social unrests at a large scale due to the effects on manufacturing industry adjustments and regional restructuring processes would have interrupted the overall economic growth of Hungary over the period in my view.

Therefore, similar pre-accession instruments - Europe agreements and ISPA-type instruments, or by whatever name they will be called - should continue to be part of any EU strategy towards future accession candidates. Based on the profound

\textsuperscript{219} The accession of Turkey to the EU is seen as unlikely to ever take place for multiple economic, political and socio-cultural considerations. These include the fact that the application for membership was deposited long ago in 1975, that the economic disparities are enormous, making the extension of European regional and agricultural policies not fundable by EU budgetary means, that Turkey is not a European country except for 5% of its territory, and the fact that the majority of the citizens of the current EU and at least one member states (Greece) are against the accession, because of the general feeling that a mainly Islamic country would not fit into the set of ideals and values by which the Christian Occident is ruled since two millennia.
side-effects which the Europe agreements had on agglomerations and on the regional development processes in the accession countries, namely a widening of regional disparities - as proved by the empirical results of this research-, free trade agreements should be complemented by appropriate policies counteracting this tendency, both at the level of national governments in candidate countries and at the EU level.

Furthermore, European regional policy - as one of the EU’s core policies taking up one third of the EU budget - should be reformed in the face of the new realities after Eastern enlargement, as illustrated by the increased regional disparities among Hungarian regions in this research. The economic development gap has widened, the problem of disparities has shifted geographically towards the East, and the employment situation has become more difficult, namely socio-economic disparities have doubled, while the average GDP of the EU decreased by 12.5%.

Cohesion is about overcoming distance, division and inequality. Cohesion policy must be focused on promoting sustainable growth, competitiveness and jobs. A reformed regional policy should result in tailor-made strategies for regional development, taking into account the territorial perspective of cohesion. Means should be more concentrated on a limited number of targets and actions than now. The bulk of funds should continue to go towards the provision of public goods and services in the poorest regions, similar to the percentage in the current period. Furthermore, cross-border cooperation should be given a more prominent role than in the current period. Efficiency in the sense of realising the full utilisation of the potential of every place or region should be one overall goal, while ensuring fair opportunities for individuals irrespective of where they live should gradually become a second objective.

In addition, institutional reforms in the EU are a necessary pre-condition for further enlargements. This includes the ratification of the Lisbon Treaty as one building block. At the same time, the whole of the EU faces challenges arising from acceleration in economic restructuring as a result of globalisation, trade opening, technological progress, and an ageing population, the development of the knowledge economy and society, and a growth in immigration. The consequences of the economic downturn resulting from the world economic crisis since autumn 2008 have to be added to that list. Ensuring the European way of life, including sustainable environmental standards, and aiming at the goals in the area of research, communication and information technologies set by the Lisbon process are viable strategies for a strong EU.

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220 At the time of writing, the ratification by Ireland was still outstanding.
More generally, the question should be posed whether the model of integration which the EU has followed in the past – keeping the same level of integration for all, but proceeding at the pace of the slowest member state\textsuperscript{221} – will be suitable to cope with future challenges. Concepts discussed in this context include those of “flexible integration” and possibilities of “opting out”, as was the case for the Euro. The nature of the political integration will have to evolve in order to take account of new economic challenges and of the method of working and decision making in an EU of 27 or more member states which is necessarily different from than of an EU of 15. As \textit{Bruha \& Straubhaar (2000)} pointed out, rigid forms of integration should belong to the past; optimal integration instead of a maximum of it should be the future path for the EU to go, meaning that those areas which are reap for a common policy should be integrated as soon as possible, leaving aside those areas where the interests of member states diverge too far. This could be a viable concept for Hungary and the other new member states as well as for future CEECs in order to participate meaningfully in the project of proceeding European integration.

The EU also needs a strong competition policy including the control of national champions in order to ensure a level playing field for firms and consumers in the now larger European market. The current remarked laxity in face of the economic crisis cannot be continued for long without a lasting damage to the credibility of the European Commission in this field. Single market policies including market liberalisation and further measures for free movement of workers (mutual recognition of degrees and professional qualifications) face new challenges with the accession of new member states. A liberal policy for the migration of qualified workers should continue to form part of such a strategy to create one labour market among EU member states. Fears about mass-migration from East to West following Eastern enlargement have not materialised, less than 1% of the population in working age in the EU-15 countries are working or work-seeking migrants from the new member states\textsuperscript{222} whilst most EU member states have already completely liberalised their labour market for all EU citizens (except for Austria and Germany\textsuperscript{223}). In a time-span of about two decades, about 1 to 1.5

\textsuperscript{221} See \textit{Reichenbach et al. (1999)} for an account of this process and a political analysis of the reasons for phases of fast and of slow progress of European integration.

\textsuperscript{222} An exception to the less than 1% general figure are the UK with 1.2% and the Republic of Ireland with 5%; according to the communication: „Five years of an enlarged EU”, \textit{European Commission (2009b) and (2009c)}. 

\textsuperscript{223} The recent decision by the German government is contrary to this line; they decided to prolong the restrictions on the migration of workers from the new member states in Central and Eastern Europe for another two years until the last date, 30 April 2011. This was done mainly for jobs requiring low qualifications and certainly in the face of rising unemployment during the current severe economic crisis expected to top 4.5 million in 2010, more than during the Great Depression which started in 1929.
million people from the CEECs are expected to migrate to the EU-15 countries, taking into account remigration. This corresponds to about half a percent of the EU population, no reason for concern, according to Straubhaar (2004).

This touches also on industrial policy at the EU level, which should continue to gradually eliminate the possible causes of product market malfunctioning in the EU, along the lines sketched in Ilzkovitz et al. (2008). The role of entrepreneurship in the EU should generally be promoted at the national and EU levels, given the important role played by SMEs in employment growth, innovation and jobs.

Secondly, from the example of Hungary lessons can be drawn for policies which a country can usefully pursue prior to EU accession. The Hungarian policy of free trade zones, the majority of which are located in the Western part of the country, has added significantly to the positive effects of trade liberalisation of the Europe agreement. Further, the policy of industry specialization at the country level led by the Hungarian government, namely to favour the machinery and equipment sector, has contributed to this sector’s taking the lead in manufacturing output, employment and exports to the EU. Furthermore, the industrial parks policy has fuelled the emergence and growth of new centres of agglomeration in the Western part of the country, benefiting the overall economic development of Hungary. Such location and industrial policies seem fruitful policy lines for further EU accession candidates. Last but not least, Hungary’s policy of creating an investor-friendly economic climate and legislative framework and of attracting foreign direct investors - imbedded in privatisation and other schemes - has contributed to the largest stock of FDI in any of the CEECs by the year 2000. The positive roles played by FDI for productivity as well as process and facility renewal in manufacturing and in employment strongly speak in favour of FDI-friendly policies.

Finally, a few words shall be said about the future architecture of Europe. Enlargement of the EU depends always not only on economic considerations, but also on the political will in the current EU and the accession candidates, and to a certain extent on the overall geopolitical climate as well. The Europe of tomorrow will still have the EU as a motor of economic and political stability. Modified

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224 For a study on the role of SMEs in national growth, see Nijkamp & van Hemert (2007) for example.
225 SMEs, i.e. enterprises with a number of employees between 1 and 249, have accounted for 67.3% of jobs in the EU-27 as in 2008; EU-Nachrichten (7.5.2009).
226 The favourable geopolitical climate following the fall of the Berlin Wall in 1989 and the break-down of the communist regimes in the former Soviet Union and Eastern Europe enabled the Eastern enlargement of the EU.
forms of Europe agreements, or whatever they will be called, will continue to link the EU and its European neighbours in an effort to ensure political stability beyond the EU’s external borders - the “wider Europe” process of which the new Neighbourhood Policy and the new Eastern partnership inaugurated in May 2009 are building blocks. There will be further, yet smaller rounds of enlargement of the EU-27, such as by Croatia in the nearer future, or by Ukraine and Macedonia in the more distant future.

Yet the nature of the political integration will change from one of equal to one with differing speeds - concentric circles and flexible integration. A core group will continue to be linked under the common currency, the Euro, the other old member states in the next-nearest circle being already well-integrated into the European Single market, while the new member states (CEECs) are still in the process of defining their place in the new division of labour in the enlarged European market. In the participatory democratic and economic process which European integration has been in the past, the future still opens up multiple opportunities for actors from the research community as well as private, public and business fields to participate in shaping the architecture of an ever wider and larger Europe.

227 The European Neighbourhood Policy towards Russia, the Western Newly Independent States, and the Southern Mediterranean disposes of a new financial instrument operating on both sides of the border (EU member states and external countries) which builds on the experience of the PHARE, TACIS and INTERREG programmes; European Commission (2008c).

228 The summit meeting of the EU on 7th of May 2009 in Prague inaugurated a new form of cooperation with a diversified group of countries: Ukraine, Moldova, Byelorussia, Georgia, Armenia, and Azerbaijan. In an effort to foster political stability in the area and to secure access to energy resources, the EU intends to create deep and comprehensive free trade zones with these countries.