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EU Regional and Cohesion Policy and Economic Integration of the Accession Countries

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'Many economic activities are concentrated geographically. Most people in advanced countries, and a growing number in developing countries , live in large, densely populated metropolitan areas. Many industries … are also concentrated geographically, and such clusters are an important source of international specialisation and trade …' (Paul Krugman)

1. Introduction

This paper deals with specific issues concerning the relationship of regional development strategies and EU integration of the Accession Countries' of Central and Eastern Europe (CEECs). In this context the specific role of pre-accession regional development support and the future structural and cohesion funding in enhancing intra-industry trade and market integration is of particular importance.

The completion of the European Monetary Union stipulates much more effort for adjustment and coordination of policies in the CEECs than for other European countries in former accession processes. As long as mobility of labour and flexibility of wages is limited across an enlarged EMU and no genuine fiscal equalisation scheme is available, the impact of asymmetric shocks could be vehement (and thus weakening Europe as a whole).

The question is whether the CEECs will be – apart from fulfilling the 'Maastricht' criteria - sufficiently integrated into the EU markets and thus well prepared for the participation in EMU. The idea examined in this paper is related to the possible role of European regional policy as a *quasi*-fiscal transfer scheme. So far, it has been the approach to employ regional policy to strengthen inter-regional convergence, and thus to offset market imperfections disturbing the *Solow* pattern of growth. But the choice of the strategy of regional policy during the pre-accession and post-accession phase in the CEECs has to consider the new quality of EMU and consequently needs to be linked to the aim of integration of these less developed transition countries into the highly developed EU markets. Especially in earlier stages of a development process, evidence suggests that inter-regional equalisation can be pursued only at the cost of national growth, thus revealing the well-known trade-off between growth and equity. The necessary process of catching-up, modernising, stabilising and adjusting industrial structures in order to withstand increasing competitive pressure raises the question whether regional policy ought to support backward regions in the CEECs or to support primarily the national growth poles.

[1] In this definition regional and cohesion policy comprises both, the different pre-accession instruments for regional development (like SAPARD, ISPA and specific projects within PHARE and MEDA) as well as the regular EU regional policy (Structural Funds), for which these countries will become eligible once joined the EU. The focus of this paper are the Central and Eastern European Accession Countries rather than Malta, Cyprus and Turkey.

In the paper the CEECs are subject to a brief comparative analysis of their respective level of integration, by looking at different variables like symmetry of business cycles, intra-industry trade, and level of FDI. Furthermore the possible strategy of EU regional and cohesion policy to strengthen the process of integration is discussed.

2 The modern European economy and integration

2.1 Determinants of successful economic integration of the CEECs into the EU

2.1.1 The Maastricht criteria

In order to become member of the EMU and thus to achieve full market and monetary integration, the CEECs, have to fulfil the so-called 'Masstricht Criteria', which have been at the outset of the Euro system:

(1) The average inflation rate (Reference value: 2.7%)

(2) Government deficit (Reference value: 3% of GDP)

(3) Government debt (Reference value: 60% of GDP)

(4) Average long-term interest rate (Reference value 7.8 %)

(5) Stable exchange rates within the ERM during the last two years (no major fluctuations)

(cf. EU Commission 1998)

Before introducing the Euro, however, the CEE Accession Countries – have to regard their exchange rate policy as a matter of community relevance (within the *Acquis Communautaire*) and have to participate in the Exchange Rate Mechanism (ERM II). (cf. European Central Bank: Monthly Bulletin 2/2000, pp. 48 ff.). Although the fulfilment of the Maastricht criteria is not obligatory for pure EU membership, there is the decision that for the future new member states the so-called 'opting-out clause' (i.e. non-participation within the third stage of the monetary union) will not be applied as in the case of UK and Denmark. Thus, basically the full integration level of the EMU is to be considered, when analysing the fundamental preparedness of the CEECs for European economic integration.

To link regional and cohesion policy to the aim of economic and monetary integration, a brief theoretical excursion is needed.

2.1.2 Structural prerequisites for integration

In 1961, Robert Mundell, Nobel Laureate in Economics in 1999, has comprehensively pointed out the relationship of space and the level of efficiency of a single currency. On the one hand, sharing a currency across borders can contribute to more transparency in prices, reduced transaction costs (due to the abolition of the exchange rate risk premium) and thus enhanced competition and a much improved certainty for investment. Moreover, a single and intependent central bank will be committed to price stability across the entire currency area. On the other hand, however, through a single currency there might accrue considerable benefits for one part of the sub-regions at one point of time but also considerable costs for other sub-regions, since changes like slumps in demand for specific products are affecting the economies in different ways; likewise interest rate changes might support and discriminate differrent economies of a single currency area simultaneously, just depending on the different business cycles which depend on a variety of variables. Moreover the loss of an independent exchange rate policy is to be mentioned. Losing an autonomous monetary and exchange rate policy can become critical for countries likely to be affected by asymmetric shocks – i.e. countries or regions deviating in economic structure and trade orientation from the rest of the single currency area (cf. Peet 1998; Eichengreen 1993).

As the instrument of exchange rate adjustments is no longer available, other active or passive policy tools, like flexibilisation of wages and prices, increase of labour mobility and the use of fiscal equalisation schemes are needed to offset asymmetric shocks. It is evident that these tools only work properly in very homogenous currency areas (also regarding cultual aspects like language and habits) and where there are already well established intergovernmental fiscal relations. Although the major EU-European economies are already largely integrated (similar economic structures, high level of intra-industry trade) there are still strong arguments that in the European Union itself these preconditions have not yet been fulfilled and that it is still likely that the Euro Zone will suffer from asymmetric shocks in future. Taking into account the accession of 10 Central European plus 3 Southern European countries within the next 10 to 15 years, the structural heterogeneity of the EU will much deepen, making Europe even more vulnerable to shocks unless cohesion among the nations and integration of economic structures will be strongly supported in advance.

Moreover, also according the theory of economic integration, positive welfare effects are only expectable where there are regions and countries with a similar level of development and where, prior to the formal integration, a dense net of trade relations had been already established. Too large differences in the achieved level of development would imply a different production and services profile, so that economic integration would foster trade diversion rather than trade creation. That is already relevant for a customs union. Regarding the next step of economic integration, the common market, the supply of labour (quantity and qualification level) should not differ too much in order to avoid larger migration flows and also larger capital moves. Finally, a monetary union can only create positive welfare effects, if a coordinated economic policy can be applied to reduce inflation and arising shocks behave symmetrically, i.e. affect the entire area. According to Wagner (1998), these preconditions are even insufficient within the European Union of today. Only a minor part of the EU countries (or better: regions), can be regarded as sufficiently integrated, e.g. the transnational region of the so called 'Blue Banana'.

Here the important structural fundamentals (real convergence criteria) like market integration, balance of payments and unit labour costs are addressed, which are also considered as important criteria for EMU, but not as the central ones. But these are of particular importance for the CEECs, as they are much less easily to achieve than short-term fiscal and monetary targets. Just as Köhler and Wes (1998) say:'… Even if some east European countries meet the Maastricht targets early in the next century, their economic fundamentals are unlikely to be in line with those of the euro zone…' (Köhler and Wes 1999, p.14).

One of these above mentioned fundamental criteria has a direct and important relevance for the role of regional and structural policy and all the corresponding preparatory support measures for the CEECs offered by the EU: Market integration. Evidence of market integration is basically revealed by (i) the trade patterns, (ii) foreign direct investment and (iii) mergers and acquisitions.

To measure the degree of integration, several methodological approaches and indicators could be considered. Worth mentioning are simple correlations of business cycles, indices of intra-industry trade (Grubel-Lloyd-Index), the revealed comparative advantage (Balassa) and others. In the following it is aimed at comparing some of the different approaches by reviewing available studies and statistics.

2.2 Business cycles

A crude, however illustrative and often used measure, is the comparison of business cycles between countries over time, as the following table shows.

Table 1: Correlation of annual GDP growth rates between Germany and other European countries 1989-1998 (1965-1990 in parentheses)

Rank	Country	*r*
0	Germany	1,00
1	Austria	0,91 (0,66)
2	Belgium	0,75 (0,67)
3	Portugal	0,74 (0,48)
4	Spain	0.70 (0,55)
5	Italy	0,69 (0,55)
6	Netherlands	0,68 (0,76)
7	France	0,64 (0,68)
8	Malta	0,55
9	Sweden	0,27 (0,39)
10	Cyprus	0,30
11	Greece	0,15 (0,58)
12	Ireland	-0,01 (0,35)
13	Estonia	-0,10
14	Finland	-0,11 (0,41)
15	Czech Republic	-0,23
16	Luxemburg	-0,23
17	Bulgaria	-0,26
18	Denmark	-0,39 (0,60)
19	United Kingdom	-0,39
20	Hungary	-0,40
21	Romania	-0,52
22	Poland	-0,72

Sources: World Bank Macro Data 1960-1998 (www.worldbank.org), Deutsche Bundesbank, Monatsberichte 1991 (Germany), Popular Bank and CYSTAT (Cyprus): Calculations by the author, source for the period 1965-90: Gruber 2000

Interesting is on the one hand a diverging trend in symmetry across the EU area compared to the time 1965-90. The recent World Bank data on GDP growth rates reveal a high level of symmetry of business cycles among the continental EU members (France, Italy, Germany) and completely deviating patterns for the UK, some smaller and peripheral EU members (Luxemburg, Ireland, Denmark etc.) as well as most of the Accession Countries.This may be attributable to the fact of the economic peculiarities of Germany's re-unification and the shorter period of measurement suggesting a higher threshold of significance of *r* compared to the period 1965-90[2]. However, Gruber's comparative analysis of the periods 1965-79 and 1965-90 also suggests a diverging trend in symmetry, especially between participants and non-participants of the ERM in the 1980s. A further interesting fact is the relatively high correlation coefficient (admittedly at the threshold of significance) for Malta as a non-Phare accession country and the extremely high negative correlation of the major Phare accession countries Hungary, Romania and Poland suggesting vulnerability to shocks under the theoretical conditions of a monetary union. But this development is a particular feature of the 1990s and does not say much about the situation when these countries will join the EU, the ERM and later on the EMU.

2.3 Foreign direct investment

The patterns of foreign direct investment (FDI) play a crucial role and are a widely applied indicator for market integration. According to the EU Commission, '…Investment flows between member states are becoming increasingly important, providing 65% of the Community's total foreign investment between 1992 and 1996 as against 57% between 1986 and 1991…'(EU Commission 1998: Euro 1999 ibid., p.250). But also the CEECs have attracted a major volume of FDI from EU countries. The differences of EU originated FDI per capita are enormous. The Czech Republic, Hungary and Slovenia belong to the CEE countries with the highest volume of FDI influx, suggesting an already rather advanced level of integration into the EU markets.

Table 4 EU – FDI stock per capita in 1998 (in Ecu)

Bulgaria	42.16
Romania	33.26
Czech Republic	745.29
Hungary	804.60
Slovenia	409.00
Poland	185.30
Estonia	275.90
Latvia	72.57
Lithuania	105.38
Slovak Republic	239.20
Cyprus	405.73 (excl. Northern part)
Malta	n.a.
Turkey	54.99

Source: own calculations, Piazolo (2000)

[2] With a confidence level of 2 $\alpha = 0.05$ (2 $\alpha = 0.1$), all $r \leq |0.63|$ (all $r \leq |0.54|$) are not significant

2.4 Intra-industry trade (IIT)

As already mentioned above, the trade patterns are of key importance in the context of market integration. In fact the level of intra-industry trade is regarded as the major indicator of ‘asymmetric shock-risk’ within a monetary union (Wagner ibid., pp.104 f.). High IIT values reflect the similarity and relatively high level of development of two countries (Kaitila 1999, p.22). Since the countries of the EU belong to the most developed countries and are characterised by a high share of IIT, this index should be taken as a core measure for the CEECs. The index of intra-industry trade (The so-called Grubel-Lloyd-Index) is formulated as:

$$GL = 1 - \frac{|X - M|}{X + M}$$

Where X means exports and M means imports within any industry. It implies that for a given industry the index of inter-industry trade, B, is at its maximum of 1, when exports in the industry k exactly equal the imports. On the other extreme, when an industry k either has exports but no imports or vice versa, the index becomes zero. Taking this on the level of the national economy, the following general index (in percentage) is used:

$$GL_{ij} = [\, 1 - \frac{\sum_k |x_{ij}^k - m_{ij}^k|}{X_{ij} + M_{ij}}] \cdot 100$$

Where i and j represent the countries engaged in mutual trade (cf. Grubel H. and P J Lloyd 1975). Since 1985, intra-EU-trade volumes have grown by 20-30%. Within the European Union the share of intra-industry trade in all trade is more than 55% (except for Greece, Ireland, Portugal and Finland). Turning to the Accession Countries, it is to be repeated that the more similar the export production structures are (compared to the EU), the more the country will be integrated into the EU markets. In their catching-up process the CEECs differ considerably as the figures estimated by Aturupane at al. (1997) and Kaitila (1999) (for the Czech Republic and Hungary) reveal:

Table 2: EU-third-countries intra-industry trade in 1995 (3-digit NACE sectors)

Country	*Index*
Bulgaria	24.57
Slovak Republic	29.41
Poland	29.69
Romania	25.74
Slovenia	37.35
Hungary	33.09
Czech Republic	43.68
Estonia	28.79
Latvia	29.04
Lithuania	28.08
Turkey	29.05
Israel	33.14
Tunisia	24.68
Morocco	18.71
United States	48.10
Switzerland	52.31

Source: Aturupane, C. et.al. 1997

Table 3: European Intra-industry trade: Hungary, Czech Republic and Intra-EU in 1997 (4-digit NACE sectors)

Country	*Intra-EU*	*Czech Republic*	*Hungary*
France	74.7	43.9	26.4
Belgium/Luxemburg	66.8	32.7	24.2
Netherlands	59.9	33.1	22.9
Germany	70.0	59.0	43.2
Italy	53.0	26.6	32.3
UK	65.5	39.8	27.8
Ireland	39.9	19.8	13.5
Denmark	52.9	15.3	17.6
Greece	20.1	4.9	6.1
Portugal	40.5	22.0	4.1
Spain	58.9	20.8	11.6
Sweden	55.0	19.0	20.3
Finland	38.2	9.0	17.5
Austria	59.1	33.9	41.2
Total EU	…	56.6	44.5

Source: Kaitila (ibid.)

Out of the CEE countries, the Czech Republic seems to be the country with the highest integration level in terms of intra-industry trade, followed by Hungary and Slovenia[3] (thus the same top three ranking as the results for FDI per capita). These three countries have already

[3] Fidrmuc (1999), using UN world trade data and calculating the Grubel-Lloyd index by 4-digit SITC commodity groups, finds even higher values for the Czech Republic (>60%), Hungary and Slovenia, while the values for Romania and Bulgaria do not much differ from the results by Aturupane (1997).

surpassed IIT levels of some EU countries like Greece, Ireland, Portugal or Finland. Only the poorer CEE countries, like Bulgaria, Romania and Lithuania display much lower indices comparable with Mediterranean countries like Tunisia and Turkey.

This would suggest that - in contrast to the poorer CEECs - the advanced CEECs are already well integrated into the European markets and that there should be no major risks for them to join the Euro zone once the Maastricht criteria are fulfilled. However, it is important to bear in mind that, on the one hand, intra-industry trade between the CEECs and the EU is predominantly of vertical nature, and that, on the other hand, it is not only dependent on the production structure but also very much on factor price levels and GDP growth in the EU. Presently, the relatively low level of wages in the CEECs is a major engine for IIT (Fidrmuc 1999, pp.19 ff.). After accession, however, the risk of strong upward pressure on wages will become likely, notably in order to prevent larger migration flows (Puga 1998, p. 28). Increasing factor costs will lessen the competitive power and would thus cause trade diversion and decreasing IIT levels. Due to this fact the above IIT figures - especially for the advanced CEECs - might be overestimated to some extent.

In order to maintain the achieved level of integration there might be therefore the need to offset the rising factor costs, either by exchange rate devaluation or by reducing transaction costs for the private sector (in terms of improved infrastructure, more effective institutions etc.) and improving productivity (human resources). Major changes in the exchange rate should be avoided under the compulsory participation in ERM II, otherwise the accession to EMU will be further postponed; thus the only way to maintain competitiveness would be a reduction of transaction costs and improvement of human resources in the industries with a high share of intra-industry trade.

2.5 Conclusion

To sum up, the different applied measures indicating the level of economic integration of the CEE countries are fairly homogenous. The level of IIT and the per-capita volume of FDI are strongly correlated, since in both cases the Czech Republic and Hungary are most advanced on the one hand, and Bulgaria and Romania the least advanced countries on the other hand. In between, variation is also very little.[4] It is thus fairly evident that countries such as Bulgaria and Romania are still insufficiently integrated into EU markets. However, the above analysis does not allow to determine, whether and which of the other countries are already sufficiently integrated. This would require further in-depth empirical research for each of the countries.

The growth and sustainability of industries with a high share of intra-industry trade are critical factors in the integration process. In the poorer CEECs there is still a big need in catching-up in these sectors; in the advanced CEECs the situation is less clear but there seem to be risks. It is more than obvious, that these industries rely on conducive frame conditions, not only at the macro level, but also at meso- and institutional level. European regional policy could be of paramount importance in this respect. But the question is, whether the prevailing volume, thrust and shape of EU Structural Funding (including pre-accession support) are effective and compatible with the aim of maintaining competitiveness of strategic industries

[4] By the way, the same ranking can be observed by indicators related to the political economy like openness, good government, management and labour and institutions (Sachs et.al. 1999).

(not in terms of direct subsidies but in terms of regional concentration of funding). This is to be discussed in the next chapters.

3. The orientation of regional policy in the EU

The rationale and purpose of regional policy has been controversially discussed for a long time. From the pure neoclassical viewpoint, any policy to strengthen lagging regions remains futile, as according to the assumption of decreasing returns to scale, there will be an automatic process of convergence, because the lagging regions grow faster than the more advanced (Solow). Of course this ideal model has proven realistic only under (modelled) perfect market conditions. In practice one finds major market imperfections and particularly a considerable inequality of opportunity. Inherent regional disadvantages and insufficient fiscal capacity have forestalled to turn the neoclassical model into the real world. Therefore, there has been a major justification to subsidise regional development of lagging or declining regions and thus to pursue active regional policy fostering convergence of the regions across the EU. This is the underlying rationale for the EU Structural Funds. The additional EU Cohesion Fund was introduced in 1993 to support the poorer member states in upgrading their transport infrastructure and the environment. This was considered as an indirect budgetary aid in order to facilitate process of integration into the EMU and to cope with the demanding fiscal and monetary criteria.

However, the desired effects have varied considerably among the member countries since – apart from Structural and Cohesion Funds - there are many more exogenous variables determining a process of convergence and cohesion (e.g. institutional behavior, macro- and microeconomic management, locational issues etc.)[5].

4. Preconditions of regional policy in the CEEC

In the CEECs the preconditions for regional policy are peculiar. Under communist rule the countries were organised under a strictly centralist administration and could not acquire the above mentioned preconditions. Besides the central government, in most cases only a communal level was established, however solely in its function of representing the central government. These local authorities were not entrusted to formulate or even implement public policy at subnational level. Their role was restricted to supervision. Regional or social disparities were not existent – at least officially – thus there was no need for a bottom-up policy targeting regional strengths and weaknesses and fostering economic convergence and cohesion among the regions. Although there was a regionalisation of production, it was not market-led and there were no accompanying institutional support structures.

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[5] Furthermore, the new Economic Geography has spelled out a number of puzzling facts related to the preconditions of successful regional policy because there are big autonomous forces that affect geographic concentration. These are related to (1) the centripetal forces (market size effects, thick labour markets and pure external economies, i.e. the Marshallian sources of external economies) and (2) to the centrifugal forces (immobile factors, land rents and pure external diseconomies). Furthermore, the 'putty-clay' behavior of geographic activity – i.e. an a priori flexibility of the locational choice and a fixation of activity once a certain location is established – is to be mentioned. These geographic forces create preconditions, which make it sometimes difficult to act or react with any policy. (P. Krugman 1998; D. Puga 1997)

Consequently, the political change end of the 80s had far reaching effects of the regional economies. The incapability to cope with market forces and the dire need of painful micro-economic adjustment largely materialised in the heavily industrialised regions. The sudden exposure to competitive markets, the resulting enormous redundancy of labour and the lack of qualified regional institutions entailed a rapid slump in the regional levels of income and the social welfare. Being once priviledged regions under the communist rule, the opening up of the economies immediately converted the old industrial centers into social and economic problem zones. The impacts of the transformation were highly different among the regions, thus rapidly increasing the regional disparities and threatening the social and political stability. In contrast to declining industrial regions in Western Europe (e.g. Ruhr Area, Greater Manchester) in the CEEC the structural decline could not be alleviated by established markets and a reliable regional institutional setting. Due to the political history there was a lack of entrepreneurial culture and capacity capable to effectively deal with restructuring and privatisation and to create an innovative and sustainable SME sector.

A further important issue distinguishing the CEECs from the EU countries is the organised inter-industry trade pattern inherited from the communist times. A high degree of specialisation among the countries within the Council on Mutual Economic Assistance (CMEA) was practised. Since the product and service profiles among the former CMEA countries were highly different, there was a planned division of production rather than intra-industry trade and market integration. As Hallet (1997) points out: ‘Consequently, dissolving the CMEA required a principal reorientation of trade and production of the CEECs and their regions shifting trade from the eastern to the western countries which was one of the reasons for the recession in the CEECs in the first half of the 1990s.’ (Hallet 1997, p.4)

The ensuing collapse of the old heavy industries and the geographical market shift (from the east to the west) represents one of the major asymmetric shocks in Europe during the 1990s. Although some countries have been surprisingly successful in adjusting trade patterns and orientation (Hungary, Czech Republic and Slovenia), the socialist heritage has created specific preconditions for regional development policy which are considerably different from these in the EU countries.

In contrast to the so-called ‘EU-Cohesion Countries’ where large areas and regions are still considerably lagging behind and which absorb the major share of Objective-1 and the entire Cohesion funding, the CEEC are faced with both, a collapsed industrial production potential and large backward areas. Thus, former regional development strengths (i.e. the areas with old industial production facilities) more or less vanished and weaknesses (e.g. interregional disparities) increased. Hallet (1997) distinguishes between three different areas in the CEEC: (1) the old industrial zones, (2) the backward regions and (3) regions with development strengths and potential. Development potentials can be found in both, the former strong industrial regions (since there is still a higher level of technical infrastructure and human resources) and in regions with a good access to Western markets (these are the western regions and mostly the capital region). Existing strengths (growth poles) are mostly around the capitals or in cities with higher FDI influx. Here the export oriented production is concentrated (fuelling intra-industry trade with the EU). Apart from this, there might be also a limited number of rural regions with some potential of tourism and recreation. A big part of the CEE area, however, is backward and poorly endowed with endogenous potentials. This together has far reaching consequences for the right regional policy with a view to enhancing growth and integration of the CEEC countries.

First of all there is no realistic assumption that the budget for the Structural Funds will be dramatically increased once the Accession Countries have obtained EU-membership. This has been already agreed in the AGENDA 2000. The budget remains pegged at 0.46% of the EU GNP, and the funds for any country may not exceed 4% of its national GDP (EU Commission: Agenda 2000; D. Puga 1997, p. 26-27). For the pre-accession phase only around 20 billion Euro are allocated between 2000 and 2006[6]. For instance, the ISPA Fund (with a similar thrust as the Cohesion Fund) will contribute with about 7 billion Euro, not at all suggesting a critical mass to sustainably relieve budgetary deficits of the ten CEE Accession Countries[7]. Despite the large differences of volume between pre- and post-accession structural aid, the challenges of integration imply to regard all these funds in the context of scarcity and thus allocation efficiency. Regional allocation will therefore strongly depend on choice. Moreover, it is unlikely that the EU will introduce an intergovernmental fiscal transfer system or an insurance scheme to offset asymmetric shocks (Buti and Sapir 1998: *Economic Policy in EMU*, Oxford). The above mentioned funds will remain the only intra-EU fiscal transfer schemes; but as these funds address specific long-term structural problems like remoteness, poor infrastructure or declining monoindustrial structures, they cannot be flexibly applied in absorbing adverse shocks. They are just *quasi*-fiscal transfer schemes. Moreover, as long as their strategic thrust is associated with inter-regional equalisation (as in most cases), they might hardly contribute to the economic integration of the national states. So far, most of the CEECs seem to emphasise the needs of the regions and thus favor a policy supporting inter-regional equalisation (also due to political considerations). A stronger national orientation of regional policy could possibly be superior for these countries[8].

To this end, Hallet (1997) recurs to the well-known *Williamson*- Hypothesis to support his argument: In all CEECs, there are both, big development gaps at national and regional level related to the EU (insufficient external cohesion) as well as major development disparities among the regions (insufficient internal cohesion). According to Williamson, national development follows a pattern of interregional divergence in early stages shifting to interregional convergence in more mature stages. This implies an inverted U relationship over the national development path. Basically, the relatively lower absorptive capacity of investment in lagging regions and the budget constraint suggest a concentration of growth in capital centers and urban areas with comparably higher development potential. The simple underlying assumption is, that internal returns of investment (and subsidies) are higher in the more progressing and better endowed regions (in terms of infrastructure, institutional capacity, agglomeration and human resources). Later, the higher growth in booming areas anyway creates an interregional cost gradient which entails a factor flow - at the beginning in form of labour from the poor to the booming region and later in form of capital from the booming to the poor region - both to be regarded as automatic positive spillovers. Under these conditions, a regional policy pursuing interregional equity can only be implemented at the cost of a reduced national growth rate.

Owing to the positive spillovers, at a later stage of development (and with higher levels of income) there is a reversal of the diverging trend. Thus, in the course of economic development, the trade-off between growth and equity will lessen and eventually disappear, as revealed by the Northern and Western EU countries. At this stage of national development, the preconditions for increasing returns to scale are also realised in the formerly lagging

[6] In contrast, 213 billion Euro will be available for the member states (from the Structural Funds and the Cohesion Fund).
[7] The Cohesion Fund is endowed with 18 billion Euro allocated for only three or four member countries.
[8] Interesting and positive experiences are revealed by Ireland with a stronger emphasis on the national orientation of its Objective 1 CSF.

regions. These are nothing else than public goods and positive externalities that effect increasing returns to scale - not understood as economies of large-scale production but as result from economic growth itself (Kaldor 1970, p. 340).

For the CEECs however – even after some years of stable growth – the trade-off between regional equity and growth is still considerable. As Hallet concludes [for the CEECs]: '… Confronted with high needs and scarce means, poorer countries often have a preference for promoting national development and creating good conditions for private investment by a concentration of public investment on a few growth poles rather than spreading a low level assistance all over the country and in this way loosing relative attractiveness for private investment in the whole country …' (p.19)

In Hallet's paper there is no well proven empirical evidence for this statement, since the availability and quality of data from the CEECs was still insufficient at the time of this writing. But in a more recent empirical study (funded under the Phare-ACE programme), George Petrakos has examined the patterns of inequality and convergence in Poland, Hungary, Romania and Bulgaria. One important measure applied in this paper is the estimation of the b-convergence by the following linearised regression equation:

$$ln(y_t/y_0) = a + b \cdot lny_0 + e$$

where y can be any variable such as income, value added, wages or investment. Values of b>0 suggest tendencies of divergence, while negative values might reveal convergence. Though also Petrakos' empirical results are neither very actual nor sufficiently robust, one finds nevertheless interesting differences between Poland and Hungary on the one hand and Romania and Bulgaria on the other hand, by taking y as 'average wages'. The b-estimates for Poland are +0.21 and for Hungary +0.22 while only +0.02 for Bulgaria and –0.17 for Romania (Petrakos 1999, p 17). This could suggest that Poland and Hungary are already in the middle of the process of increasing regional disparities, while Bulgaria and Romania are still at the very beginning of this period of the *Williamson* development path. All four countries are located on the left part of the inverted U curve and thus revealing an increasing trade-off between growth and equity (cf. annex).

With a view to market integration it is important to see that not the regions of the CEECs will join the EU (and the EMU) but the national states; and the national economies depend on their growth poles which are mostly concentrated in few regions. This is of particular importance in the process of market integration. As the economic power of these few regions with a high potential of EU market integration is either still insufficient or faced by the risk of considerably rises of labour cost in future, there should be justification to direct major shares of the relatively scarce structural and cohesion funding to the improvement of infrastructure and human resources just in these strong regions.

This leads to the following policy conclusion which is also illustrated by the figures in the annex.

5. Policy Conclusion

In cases where the level of market integration is largely insufficient (Romania, Bulgaria etc.), the attempts to channel regional subsidies to poorer regions would most probably cause a relative or even absolute slackening of the sprouting integration process (in terms of opportunity costs). But whether an equalisation-oriented regional policy can be borne by more advanced countries like the Czech Republic or Hungary, without jeopardising the achieved level of economic integration, remains even more questionable, as the marginal opportunity costs of spatial equalisation increase with the progress in development (cf. annex).

That means, that on the one hand, the more the single CEE economies are assessed as vulnerable within a common EU market with one single currency, the more a national orientation of regional policy (targeting the regional growth poles) would be suggested by empirical evidence. On the other hand, the risk of more advanced CEE countries in increasing spatial equity is strongly associated with the loss of competitiveness, as the opportunity costs (in terms of reduced growth) are higher here. This would likewise imply a concentration of structural funding in regions with a higher absorptive capacity (notably in the major urban nodes and border regions along the neighboring EU countries with bigger EU market potentials)[9]. Funding to rural and remote regions would not be prioritised, as in these regions the absorptive capacity is lower and the important preconditions for emerging intra-industry trade within the European market are still insufficient.

[9] In the figures 1 and 2 of the annex the maximum effect of increasing national growth by regional policy is displayed at the points ($Y_{i2,}G_{i2}$)and ($Y_{k2,}G_{k2}$) respectively.

References:

ATURUPANE, CHONIRA et.al. 1997: *Determinants of Intra-industry Trade between East and West Europe*, Working Paper: World Bank, Washington

BACHTLER, JOHN AND IVAN TUROK (ed.) 1997: *The Coherence of EU Regional Policy*, London and Philadelphia

BUTI, MARCO UND SAPIR, ANDRÉ 1998, *Economic Policy in EMU - A Study by the European Commission Services*, Oxford: Oxford University Press

EICHENGREEN, BARRY 1993: 'The European Monetary Unification', in *The Journal of Economic Literature* XXXI/3

EUROPÄISCHE KOMMISSION 1996: *Europa fördert die regionale Entwicklung*, Luxemburg

EUROPEAN CENTRAL BANK: *Monthly Bulletin* 2/2000

EUROPEAN COMMISSION 1997: *Agenda 2000: For a Stronger and Wider Europe*, Brussels

EUROPEAN COMMISSION 1998: *Euro 1999-Report on the Progress towards Convergence*, Part 2, Luxemburg

FIDRMUC, JARKO 1999: *The Political Economy of Restructuring of East-West Trade: Economic Winners and Losers in the CEECs and EU*, working paper: Robert Schuman Centre, European University Institute, San Domenico di Fiesole (Florence)

GRUBEL, HERBERT AND P.J. LLOYD 1975: *Intra-industry Trade: The Theory and Measurement of International Trade in Differentiated Products*, London

GRUBER, LLOYD 2001: *Ruling the World – Power Politics and the Rise of Supranational Institutions*, Princeton: Princeton University Press

HALLET, MARTIN 1997: *National and Regional Development in Central and Eastern Europe: Implications for EU Structural Assistance*, EU-DG-2 Economic Paper 120, Brussels

KAITILA, VILLE 1999: *Trade and Revealed Comparative Advantage: Hungary, the Czech Republic and the European Union*, Discussion Paper: Bank of Finland-Institute for Economies in Transition (BOFIT), Helsinki

KALDOR, NICHOLAS 1970: 'The Case for Regional Policy', in *The Scottish Journal of Political Economy*, November 1970

KÖHLER HORST AND MARTINA WES 1999: *Implications of the EURO for the Integration Process of the Transition Economies in Central and Eastern Europe*, EBRD Working Paper 38, London

KRUGMAN, PAUL 1998: The Role of Geography in Development, in *World Bank Annual Conference on Development Economics*, Washington, p.90 f.

MUNDELL, ROBERT 1961: ‘The Theory of Optimum Currency Areas’, in *The American Economic Review* 51, pp. 657-664

PEET, JOHN 1998, EMU: 'An Awfully Big Adventure'. In *The Economist*, April 11, 1998

PETRAKOS, GEORGE 1999, *Patterns of Regional Inequality and Convergence or Divergence Trends in Transition Economies*, Paper: Department of Planning and Regional Development, University of Thessaly, Volos

PIAZOLO, DANIEL 2000, *Eastern Europe between Transition and Accession: An Analysis of Reform Requirements*, Working Paper: Kiel Institute of World Economics, Kiel

PUGA, DIEGO 1999: *European Regional Policy in Light of Recent Location Theories*, Working Paper: University of Toronto and CEPR, London

SACHS, JEFFREY ET AL. 1999, *Benchmarking Competitiveness in Transition Countries*, Discussion Paper: Harvard Institute of International Development (HIID), Cambridge (MA)

WAGNER, HELMUT 1998[2]*, Europäische Wirtschaftspolitik - Perspektiven einer Europäischen Wirtschafts- und Währungsunion*, Springer: Berlin, Heidelberg, New York

WILLIAMSON, JEFFREY G. 1965, ‘Regional Inequality and the Process of National Development: A Description of the Patterns’, in *Economic Development and Cultural Change* 13, pp.1-84

WORLD BANK 2000, *Macro Time Series*, Washington (downloadable from www.worldbank.org)

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Annex: Increasing marginal opportunity costs of spatial equalisation

Figures 1 and 2 display the context of the trade-off between spatial equity and national growth according to Williamson (and Hallet respectively). Y means income, and G means disparity (for instance the spatial Gini-index). Both countries i and k are in a development process of catching-up. Country i is more advanced than k. The tangent U_0 represents in both cases the preference representing the optimum combination of growth and equity (under perfectly competitive markets and without need to intervene with transfer payments), while the secant U_1 represents the effect of any intervention of the state to increase the level of either spatial equity or growth (the point of intersection $(Y_{1,}G_1)$ represents maximum increased equity, $(Y_{2,}G_2)$ increased growth). The parallel shift of the tangent (arrow) is limited by the budget constraint. It can be easily seen that in the more advanced country i the marginal opportunity cost of spatial equalisation is higher than in country k:

$\Delta Y_i/\Delta G_i > \Delta Y_k/\Delta G_k$, thus $dY_i/dG_i > dY_k/dG_k$

The function of the marginal costs of spatial equalisation is revealed by Figure 3. The point of discontinuity Y_0 is where the gradient of the tangent U equals 0. Here the trade-off between growth and equity is infinite and any additional transfer will reduce inequality. On the right side of the *Williamson* curve, growth and equity are determined by a positive relationship with decreasing marginal growth benefits.

Figure 1

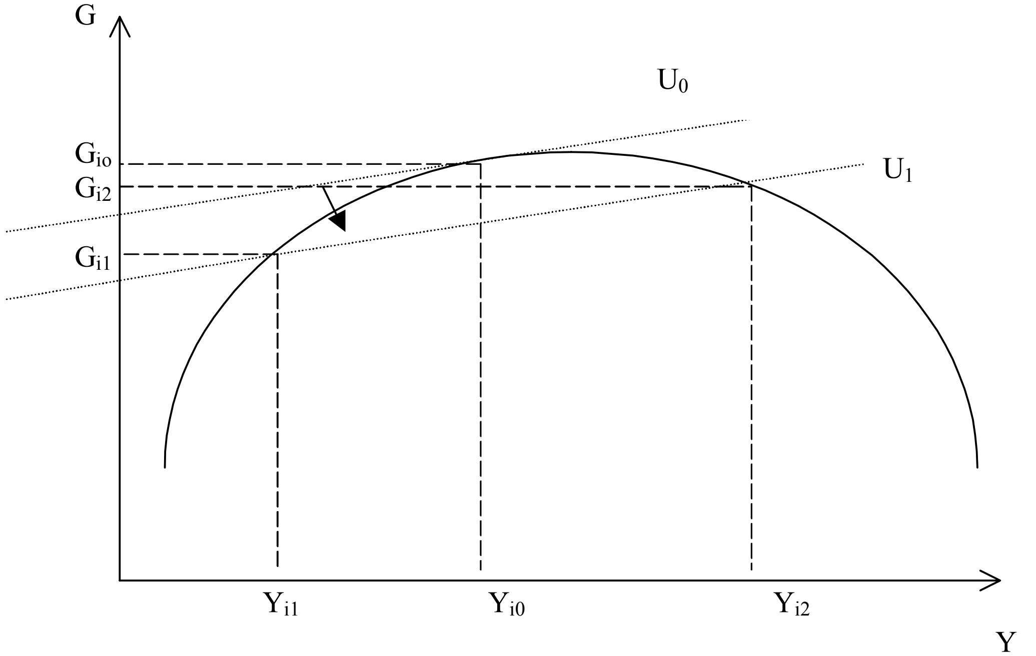

Figure 2

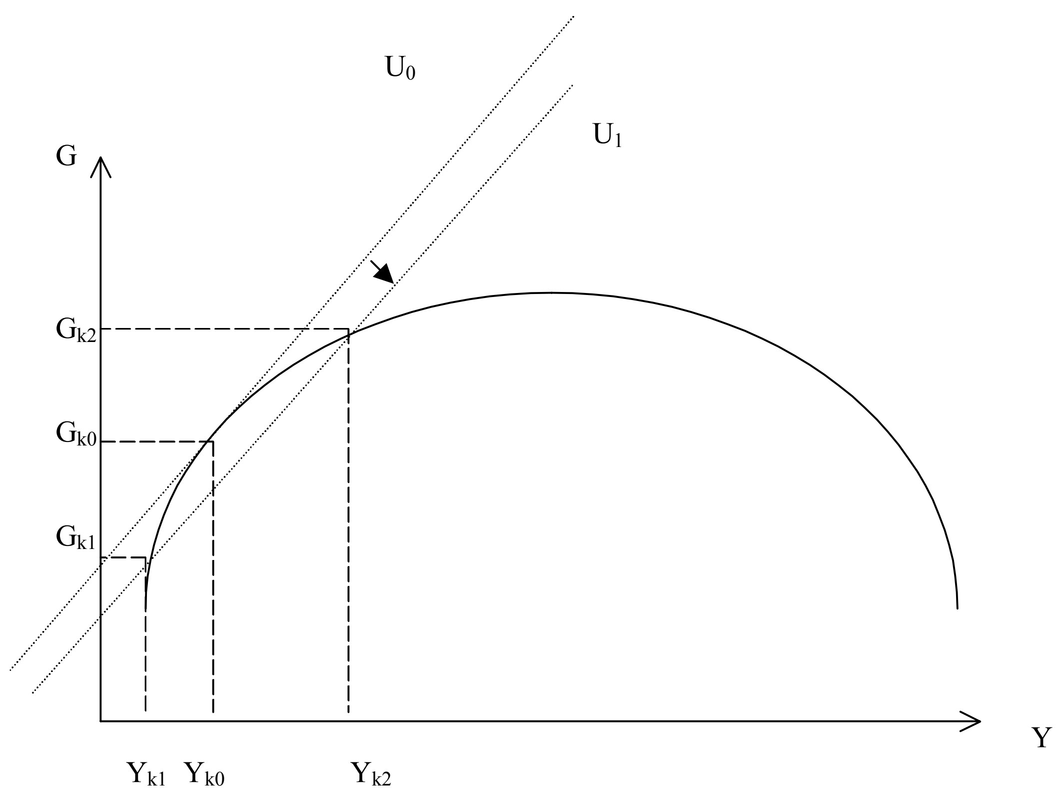

Figure 3