

First Draft!

**European Regional Science Association
40th European Congress
Barcelona, Spain
29. August - 1. September 2000**

Andreas P. Cornett
University of Southern Denmark
Grundvigs Alle 150
DK-6400 Soenderborg
Phone: 0045 6550 1000
Fax: 0045 65501292
e-mail: CORNETT@sam.sdu.dk

**REGIONAL COHESION IN AN ENLARGED EUROPEAN UNION
- AN ANALYSIS OF INTER REGIONAL SPECIALIZATION AND
INTEGRATION**

Abstract: In a period of globalization of business and industry economic analysis often focuses on international transactions and organizational changes. Competition between key-regions of the world becomes a major topic in international economics and business. A thorough treatment of the subject requires also an investigation of the internal impacts of globalization in the regions considered.

The purpose of this paper is to analyze the consequences of the increasing global orientation of key-sectors of the European economy concerning regional cohesion in the European Union. Regional cohesion can be defined in several ways, and the results of investigations of cohesion depends on a wide range of factors. Apart from the indicators chosen the size of the region are the most important. The first part of the paper provides a brief theoretical introduction to the notions of regional coherence.

This project concentrates on a certain - in some respects unusual concept of cohesion. The notion of cohesion applied is based on an investigation of patterns of interregional specialization and the spatial division of production systems. The central hypothesis is that increased intra-industry trade (absolute and relative) indicates a formal and qualitatively integration into the global and regional production system. Inter-industry trade reflects differences in factor endowment of the countries studied.

Based on the historic experience from previous enlargements, the cohesion of the European economies is investigated with point of departure in international trade statistics of the European Union member states. The results and trends are compared with findings in traditional studies of regional cohesion in the European Union. Finally a tentative assessment of economic cohesion in an enlarged European Union - depending on different scenarios of enlargement and economic performance of the EU area - is sketched.

Key words: Regional economic integration - specialization of production systems - intra- and inter-industry trade, FDI

1. Introduction

In a era of globalization of business and industry economic analysis often focuses on international transactions and organizational changes. Competition between the key-regions of the world is a major topic in international economics and business. Behind the shell of smart business concepts and self-promotion of metropolitan districts and regions, these tendencies raise the question of national and regional coherence. Particularly in a period of redistribution of economic and political power from the traditional nation-state toward supranational actors like the EU or through privatization to non-governmental bodies the problem of interregional disparities has been highlighted. The issue of cohesion in regional economic associations like the EU becomes a decisive issue for further integration. Particularly in the more advanced forms of economic integration the issue of re-distributive instruments becomes crucial (Molle 1999, p146ff).

The purpose of this paper is to analyze the consequences of the increasing global orientation of the key-sectors of the European economy concerning regional cohesion in the European Union. In particular the challenge of new enlargements with East and Central European highlights the problem of economic and political cohesion and a social balanced development in all parts of the Union. Therefore, a thorough treatment of the subject requires an investigation of the internal impacts of globalization in the regions and counties in question.

2. The Concept of Cohesion

Regional cohesion can be defined in several ways, and the results of investigations of cohesion depend on a wide range of factors. Apart from the chosen indicators the size of the region are the single most important factor. The first part of the paper provides a brief theoretical introduction to the notions of regional coherence and the concepts applied in this analysis.

This project concentrates on a certain - in some respects unusual concept of cohesion. The notion of cohesion applied is based on an investigation of patterns of interregional specialization and the spatial division of production systems. As a consequence the first step of the analysis has to concentrate on the national level, focusing on the investigation of intra-regional trade of the EU countries and the distribution on intra-and inter-industry trade. The central hypothesis is that increased intra-industry trade (absolute and relative) indicates a formal and qualitatively integration into the global and regional production system. Inter-industry trade reflects differences in factor endowment of the countries studied. Preliminary results based on a study of the Baltic Rim countries are reported.

2.1 Traditional concepts - an overview

Cohesion and disparities are central concepts in regional policy as well as in the literature on economic integration. In particular integration beyond the level of customs unions is often considered to have crucial impacts on regional disparities and as a consequence on regional cohesion - economical as well as societal. The process of integration, and especially the accession of countries and regions on a lower level of economic performance, has major implications not only on equity policy measures (see section 4 below) but also with on the theoretical concepts employed:

- “(1) it must take account of intra-union factor movements;
- (2) it must address the implications of integration or harmonization of instruments of national economic policy other than commercial ones;
- (3) it must address the evolution of integration by reference to criteria that go beyond that of efficiency in resource allocation.” (Robson 1987, p.3)

In particular the first aspects are important, since the patterns of intra-union factor movement will be decisive for the future of the union with regard to coherence and regional (in)equity. Out-

migration will leave the remote parts of the union as depressed low-growth areas. Heavy inflow of capital and infrastructure investments can probably solve the efficiency problem of particular industries, but the German experience after the reunification has shown that also very huge capital-inflows and transfer payments are not able to solve the inequity problems within a reasonable time. Economic coherence is still unsolved despite of the fact that certain parts of East-German business and industries are integrated in the German system of production. Social and political cohesion seems to have become an issue of increasing relevance after the honeymoon of reunification ended¹⁾.

In a study of the long term development of regional disparities between European regions by Molle and Boeckhout (1995) the concept of coherence tentatively was delimited as:

“The concept of cohesion is a rather vague one. It is probably best explained as the degree to which disparities (imbalances) in economic welfare between countries or regions within the European Union are socially and politically tolerable. In practice, indicators like income per capita are used to measure disparity. We assume that an increase in disparity is detrimental for cohesion and vice versa” (Molle & Boeckhout 1995, p. 106)

This delimitation of cohesion - well knowing that it suffers from a lack of specification - will be used in the discussion of the impacts of future enlargements on disparities and (societal) equity in the EU. In this regard the notion of ‘socially and politically tolerable’ is of considerable importance. If larger disparities are acceptable and if longer transitional periods are accepted, the smoother the process of enlargement will be. Experiences with re-distributional policy in countries with very small regional disparities like Denmark has shown that not the absolute level of differences but the relative position matters. From a policy perspective the implication is that major attention has to be given to the communication of realistic expectations - both in the applicant countries and in the EU.

2.2 Interregional specialization - an alternative indicator of coherence?

A more complex measure of coherence within the system of production can be obtained by an analysis of specialization of international trade. In this paper a simple estimation of an index

1. For a brief survey see Cornett 1999a

measuring the degree of intra-industry trade (here defined as trade in similar product groups) as a percentage of total trade is used²⁾.

The idea behind this approach is to identify some of the fundamental trends of cooperation and integration of the international system of production in a regional framework. It's well known that geographic proximity is one, if not the most, important factor behind international trade. Intra EU trade has dominated the foreign trade of the member states, just as trade with the EU dominated the foreign trade of most non EU countries in Western Europe before they became members. In particular business to business trade - an indicator of the integration of the production system - is of increasing importance. In this perspective growth of intra-industry trade can be seen as an indication of convergence of at least the production system of the involved economies.

An analysis of intra-industry trade based on Grubel-Lloyd type of index' is very sensitive to the level of dis-aggregation of the data chosen for the analysis. If the dis-aggregation is very high, i .ex. 4 or 5 digit level of the SITC (Standard International Trade Classification), the analysis provides detailed insight into the nature of bilateral trade and in particular in the nature of the distribution of competitive advantages between countries. In any case also a less specified analysis can provide useful insight in the development and direction of integration and specialization process' within the EU, and between EU and the candidate countries. Table 1 below reports preliminary results based on figures for the Baltic Rim Region, indicating a

2. The degree of Intra Industry Trade for a particular industry according to Grubel and Lloyd is:

$$GL_i = \left(1 - \frac{|X_i - M_i|}{X_i + M_i} \right) * 100 \quad [1]$$

Average degree of Intra Industry Trade for all industries can be defined as:

$$GL_i = \frac{\sum(X_i + M_i) - \sum |X_i - M_i|}{\sum(X_i + M_i)} \quad [2]$$

$GL_i = 0$ (all trade inter-industry)

$GL_i = 100$ or 1 in equation 2 (all trade intra-industry)

For further elaborations of the topic see standard textbooks on international trade or international economics in general. This section is based on Nielsen et al., 1995 and Lüthje 1997. For a discussion of the Grubel & Lloyd index and probable modifications see Lüthje, 1997. The analysis in this chapter is based on the simple version of the index for all industries, equation [2]. It is important to stress that this analysis does not provide insight with regard to whether the specialization takes place on the import or export side (Lüthje 1997, p. 290).

moderate pattern toward convergence of foreign trade toward a higher share of intra-industry trade indicating the integration into the western, market based system of production³⁾.

Table 1 Intra-industry trade in the Baltic Rim

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<i>Denmark:</i>									
WORLD	68	68	69	70	69	70	69	70	72
BALTIC RIM	67	70	71	71	70	70	69	70	72
BALTIC EAST	14	21	26	28	26	31	27	28	31
<i>Germany:</i>									
WORLD	68	68	72	75	75	73	74	74	73
BALTIC RIM	49	50	52	57	53	49	49	49	48
BALTIC EAST	27	29	33	38	30	27	28	31	31
<i>Finland:</i>									
WORLD	52	54	57	57	61	59	61	62	61
BALTIC RIM	59	59	61	67	69	65	65	68	70
BALTIC EAST	15	17	18	58	29	21	26	28	30
<i>Sweden:</i>									
WORLD	69	70	69	68	68	67	69	69	68
BALTIC RIM	71	70	71	73	73	75	75	73	74
BALTIC EAST	26	38	41	44	28	35	33	36	39
<i>Norway:</i>									
WORLD	41	40	40	40	37	38	38	38	37
BALTIC RIM	46	51	46	46	44	44	46	46	47
BALTIC EAST	37	37	32	33	34	33	35	36	35
<i>Poland:</i>									
WORLD	...	...	...	...	54	49	50	53	52
BALTIC RIM	...	...	...	...	45	42	43	45	46
BALTIC EAST	...	...	...	...	20	10	11	13	13

Note: Data according to Harmonized System Rev.1 1988-1997, Grubel Lloyd index estimated on 2 digit level 100 (100 commodities)

Source: OECD, ITCS 1998,

If the analysis is conducted on a rather modest level of dis-aggregation, the results have to be interpreted carefully. In this case a high level or increasing share of intra-industry trade is only an indication of sectoral convergence of the considered economies foreign trade sector. The

3. Data for the whole EU will be available at the Barcelona conference, see also Cornett 2000 (forthcoming for further details of the study).

figures reported in table 1 have to be seen in this perspective.

Table 1 provides a brief overview of the level of intra-industry trade of the 6 OECD member countries in the region. Apart from Germany the level of intra industry trade for the old market economies in the Baltic Rim area as a whole is higher compared to the total of foreign trade. The considerable low level of intra-industrial trade in the case of Norway is caused by the high share of crude oil and fuel in Norway's exports. With regard to East-West trade, intra-trade is significant lower, but generally increasing during the period reported. The latter can be seen as an indicator of increasing integration of the transition economies into the regional system of production and specialization. An examination of non-agricultural trade confirms the pattern reported in table three, generally with slightly higher scores on the Grubel Lloyd index⁴).

The figures of the Baltic rim countries as a whole shows a high degree of coherence of the production system defined as high shares of intra-industry trade⁵).

The next section will shed some light on the coherence issue in a more traditional perspective, using figures for GDP per capita. Since the focus of this paper is on coherence and enlargement all analysis will stick to the national level not going into details with changes in the interregional balance of individual EU-countries.

4. For details see Cornett (2000) (forthcoming). For a technical discussion of the Grubel-Lloyd index, see Lüthje (1997).

5. The figures reported here underestimate the intra-industry trade of the EU countries in the region due to the fact that the lower level of intra-trade of the transition economies (and Norway) are included.

3. Regional Disparities before and after an East European Enlargement

3.1 A simple scenario of convergence

Regional disparities can be found in all societies independent from the size of the country and the wealth of the nation. The saliency of the problem has usually more to do with the perception of relative differences than the absolute level of disparities. In a European perspective perceived disparities have been effected by real economic differences (like differences in economic growth), statistical measures (first of all the delimitation of the regions) and finally the increasing number of countries in the EU. In particular the last factor will become decisive if and when the eastward enlargement takes place, see table 2 below and table 4 in the next section with regard to potential impacts on regional and structural policy measures.

Table 2 Economic cohesion in the EU measured by GDP per capita

	EU-6	EU-9	EU-12	EU-15	EU-21	EU-27	EU 6	EU 9	EU 12	EU 15	EU 21	EU 27
	GDP at current market prices EURO						Number of countries below 75 % of EU average					
1961	1188						1					
1971	2875						1					
1973	3758	3503					1	3				
1981	8896	8701					1	2				
1986	13123	12453	11218				0	1	4			
1991	17179	16608	15462				0	1	4			
1995	19661	18704	17292	17514			1	2	3	3		
1998	21655	21581	19987	20201	17872	16456	0	0	3	3	9	14
1999	22360	22548	20930	21135			0	0	3	3		

Note: Tentative estimations converted from national currencies according to average annual exchange rates for EURO/ECU. Figures for non EU-members converted from US-\$

Source: European Economy no 69.1999, table 1, 4, 54, Spiegel Almanach 2000, Danmarks Nationalbank (2000) EBR D(1999)

If 1998 figures are used to estimate future disparities, the result is disappointing. In the EU-21 scenario all new applicants are below the 'objective 1' threshold (see next section) of the EU

structural policy. The EU-27 scenario is even more depressing. In spite of the lower threshold only one of EU-21 scenario will be above the 75 % level.

3.2 Regional integration and long run convergence

As mentioned earlier regional disparities and regional coherence are complex concepts, and empirical measurement often depends on the indicators chosen. Nevertheless a slight trend toward convergence has been reported in several studies based on income per capita figures:

“The next approach is to check whether there has indeed been a reduction of disparities. In other words to what extent regional wealth levels measured as income per capita) have converged. there has recently been a revival of interest in the issue of convergence, ... All these studies find a long-term convergence of regional income levels, although they differ in their conclusions as to the speed of the process and the causal factors. In recent years the trends towards convergence, that is lower disparities, has leveled off (Molle et al. 1980, Molle and Boeckhout 1995; CIC 1996). However, the aggregate figures hide important developments for individual countries. Particularly interesting is the case of Ireland. The growth of this country has been so substantial that it is no longer eligible for objective 1 status (it’s GDP/head is now higher than 75 % of the EU average). (Molle 1999, p.154)

Long run chances in the geographical distribution of economic activity are unavoidable, in particular in countries engaged in regional economic integration. Some regions will gain, others will loose economic activity and employment. This was already foreseen in the Treaty of Rome, and will be discussed further in the remaining part of the paper. Speed and intensity of the process of integration has revitalized the issue of regional disparities. Nevertheless it is hard to estimate a conclusive overall picture⁶). What really matters are the relative disparities within and between countries and the access to EU structural fund grants, see section 4 below. Table 3

6. In a survey of studies of the development of regional disparities in the postwar period Molle and Boeckhout summarized:

- “(a) There is much disparity in wealth between the regions of richer, northern member states and those of the poorer, mostly southern states.
- (b) This disparity decreased considerably and consistently during the study period
- (c) The decrease in disparities was due mostly to the convergence of the development levels between EU countries, for the national developments determined to a large extent the growth of the constituent regions.
- (d) The national GDP figures converged because the industrial structures of the European countries became more alike, as manufacturing and services were developing faster in the poorer member states than in the richer ones, while agriculture was being phased out” (Molle & Boeckhout 1993, p.113 f.)

(The conclusions were based on: Molle, W. (with Holst, B. van, and Smit, H. 1980. *Regional disparity and regional development in the European Community*. Farnborough: Saxon House; Haselen, H: van, and Molle W.T.M. 1980. *Regional disparity and assisted areas in a European Community of twelve*. Nederlands Economic Institute, *Foundation of Empirical Economic Research*, 22. Rotterdam; Commission of the European Communities. 1991. *The regions in the 1990's - Fourth periodic report on the social and economic situation and development of the regions of the Community*. Brussels: OOEPEC, and Barro, R.J., and Sala-i-Martin, X. 1991 *Convergence across states and regions*. Brooking Papers of Economic Activity 1991-1:107-182.)

provides a deeper insight into the level and trends of regional disparities between states in Europe.

The figures of table 3 prove a tendency toward reduced disparities between the countries who have been members of the EU since the beginning or have entered the Community early (the 1973 enlargement). This tendency has been reversed by most of the previous enlargements and will be the most important result of the planned eastward enlargements. If Luxembourg is omitted from the analysis the gap in 1998 (2000+ scenario) is reduced to less than 25 % of the average for the original 6 EU members. Reduced disparities - measured by GDP per capita - on the national level do not necessary mean a more equal development if the analysis is made on a more disaggregated level⁷⁾.

Table 3 Variations in GDP per capita, current prices, lowest and highest country score (EU=100)

		1961	1973	1986	1995	'2000+'
EU-6	'highest'	152 (117)	142 (120)	125 (113)	173 (117)	184 (108)
	'lowest'	69	66	84	69	85
EU-9	'highest'		152(135)	132 (135)	182 (145)	178 (136)
	'lowest'		54	64	72	85
EU-12	'highest'			147 (149)	197 (152)	192 (147)
	'lowest'			32	48	50
EU-15	'highest'				195 (150)	190 (145)
	'lowest'				48	50
EU-21	'highest'					215 (164)
	'lowest'					18
EU-27	'highest'					233 (178)
	'lowest'					7

Note: () Figures without Luxembourg, 1986 without Denmark
'2000+': Calculation based on 1998 figures.

Source: See table 2

7. See f.x. Dunford (1994), Molle (1999), Armstrong (1995)

4. Organizational and Structural preparations of the EU - Agenda 2000

Regional policy as an area of policy for the EU is close related to the issue of economic and monetary integration. In many respects the introduction of a common regional policy in the aftermath of the first blueprints for an economic and monetary union 1975 represents a classical example of the spill-over mechanism originally formulated in the neo-functionalistic approach to political integration by Ernest B. Haas⁸⁾. The crucial argument with respect to our topic is that the introduction of the EFRD, the *European Fund for Regional Development* can be seen as the first step to establish a common instrument to solve the problems of regional disparities on the community level.

As mentioned the EU has been dealing with the problems of cohesion and in certain periods of time increasing regional disparities for a long period. The common instruments for regional and structural policy has always been marginal compared to the size of the problem in spite of rise of budgets by absolute and relative figures according to the Agenda 2000 budget plans (see European Commission 2000c). The political support for structural measures has always been powered by two sources, the intensification of integration (i.e. the various attempts to form an Economic and Monetary Union) and the political support for enlargements⁹⁾. Contrary to previous enlargements the new entrants have to deal with a much more complex Union than earlier new members. The single market is implemented to a considerable extent, and 11 of the 15 members have embarked on a single currency with huge commitments toward the coordination of economic policy. This will limit the unilateral use of certain instruments of traditional economic policy for the EURO members as well as for countries who have decided

8. For an introduction to the field see Pentland 1973 pp.100 - 146. The core essence of the spill-over notion is: "This term refers to 'the process whereby members of an integration scheme - agreed on some collective goals for a variety of motives but unequally satisfied with their attainment of these goals - attempt to resolve their dissatisfaction either by resorting to collaboration in another related sector (expanding *scope* of the mutual commitment) or by intensifying their commitment to the original sector (increasing the level of mutual commitment) or both.'" (Schmitter, here quoted from Pentland 1973, p.118). That spill-over from one sector to another is not an automatic process was early admitted by Haas and his collaborators. The most specified elaboration of the concept can be found in Lindberg, L.N. & S.A. Scheingold 1970, p.134-140.

9. Basically we are dealing with the classical dimensions of political integration, deepening and widening of the regional framework of integration. Sometimes the latter includes the enlargement with new members. Otherwise we have a third mainly empirical dimension dealing with enlargement. For a brief introduction to the field with special attention to the process of integration of East and Central European Countries, see Cornett 1999b, pp. 256 - 66).

to peg their currency toward the Euro-bloc. National government will lose their ability to create favorable conditions for economic growth through depreciation of their currencies, and the Masstricht criterias on fiscal policy will limit the range of deficit spending, as well as the common competition policy already limits the use of industrial and regional policy measures in the Union¹⁰⁾.

Table 4 The impact of successive enlargements of the EU

	Increase in area	Increase in population	Increase in GDP (PPP)	GDP per capita	
				Change	Average (EU=100)
EU-12/EU-9	48 %	22 %	15 %	- 6 %	91
EU-15/EU-12	43 %	11 %	8 %	- 3 %	89
EU-26/EU-15	34 %	29 %	9 %	- 16 %	75

	Eligible population in 1000	Eligible population as %	Objective 1 population in 1000	Objective 1 population as % (EU=100)
	(EU=100)			
EU-12 1989	140.6	43,3 %	69.7	21,4 %
EU-15 1995	185.6	49,8 %	94	25,2 %
EU-26 2000+	291.4	60,9 %	199.8	41,7 %

Note: EU-15 including German reunification, based on 1995 data

Source : European Commission (1997)

On the operational level the embarkment into the Agenda 2000 is the most important precondition to enable the EU to include new member states. Mainly in the field of the Common

10. In many respects the judgement of Kevin Allan from 1990 is more relevant than ever: "... Under the EMS, it will even be difficult for nations to devalue: the development of regions is probably more dependent on national growth than on regional development strategy or policy per se: The fact that nations will become like regions must, in turn, give rise to concern for the regions" (Allan 1990, p.45). The argument is also relevant with regard to many transition economies due to the fact that they have chosen so-called currency board arrangement to maintain a stable exchange rate for their currency, see Bie & Hahnemann (2000)

Agricultural policy and the Structural policy reforms were inevitable¹¹⁾. Table 4 below summarizes the impacts of an eastward enlargement with an unchanged structural policy, and underlines the need for the 2000 reform.

With regard to the structural policy reform the alterations necessary, if the enlargement takes place according to the planned schedules, has been included in the preparation of the 2000 - 2006 program period. (European Commission 2000). The 'Second Report on Economic and Social coherence' will for the first time review the issue for a Union of 27 member states:

"The Report will analyse the situation and trends in cohesion at three levels of national, regional and social cohesion, particularly in the fields of income, employment/unemployment, demography, infrastructure provision and other factors underlying competitiveness. For the first time, cohesion will also be reviewed for a Union of 27 Member States.... The Second Report will concentrate on policies which have moved on significantly (CAP, structural policy) and on topics not broached or barely touched upon in the first one (trade taxation, budget) The impacts of the structural policies on the eligible regions will be evaluated" (European Commission 2000a, p. 5)

The core essential is the integration of the specific problems of the enlargement process into the program provisions of the regional policy. The most important features are the reduction of objectives from 7 to 3, and fewer Community Initiatives, 4 instead of 13¹²⁾. Finally, a reduction of the share of population of the EU-15 covered by the core elements of regional policy is proposed. Central elements of the new structural policy are the structural fund (European Commission 2000b, p.2f) with its main objective:

- to promote the development and structural adjustment of lagging regions, defined as GDP below 75 % of EU average (Objective 1)
- contribute to social and economic conversion of regions in structural difficulties outside the objective 1 regions (objective 2)
- measures in the fields of human resource development outside objective 1 region. The new objective 3 covers activities according to the title of employment in the Amsterdam treaty and the European Employment strategy.

11. Reforms were partly required for external reasons as a consequence of the ongoing negotiations within the WTO with regard to the subsidization of the farm sector in the EU, partly for internal reasons due to financial constraints the prolongation of the existing policy would reinforce after an eastward enlargement. For details, see Galloway 1999, in particular pp.19ff.

12. To some extent objectives and Community Initiatives are merged into one new heading, which at least seems to reduce the effects of the restructuring. This tendency is reinforced by the long phasing out period for areas and activities not covered by the new program period.

The reformed structural policy is still based on the ERDF, ESF, the EAGGF and the Cohesion Fund. The latter counts approximately for 10 % of the Structural Funds budget (European Commission 2000b, p.5).

‘Structural Policy toward the new member states’ will become a major target of the overall structural measures of the EU due to the very serious problems of social and economic coherence an enlarged union has to face (compare table 2). The European Commissions underlined in their statement on structural reforms that:

“Several conditions need to be met if the structural policy is to cope efficiently with enlargement. To achieve this, the candidate countries must have time to adjust to the workings of structural measures. The pre-accession strategy must therefore be strengthened so that, from 2000 and on, pre-accession assistance is available.” (European Commission 2000b, p.5)

The major instruments are the reformed Phare-program and the ISPA, the *Instrument for Structural Policies for Pre-accession*¹³. The central elements of the continued efforts of the commission (European Commission 2000b, p.5f.) to prepare a regional policy for the applicant countries includes

- the above mentioned socio-economic analysis of the applicant countries in the second report on coherence,
- the analysis of national legislation with regard to the readiness to adopt to the ‘acquis communautaire’, the whole body of legal framework of the EU with special attention to the structural policy
- analysis of the negotiating position of the applicant countries.

In particular the second issue is of importance which previous enlargements have proved, i.e. with regard to the regional policy traditions of the nordic countries not belonging to the EU before 1995 (see Aalbu 1998). To some extent this process has been less complicated in the applicant countries since the overall societal transformation after 1989 took EU principles into consideration from the very beginning. Nevertheless they constitute limits on national policy making, and recent developments in CEEC’s have shown that not all political groups are willing to carry the heavy adaptation burden without questioning.

13. Phare will have a budget of 10.92 billion EURO between 2000 and 2006. ISPA of 7.28 billion and a special financial instrument for agriculture will have 3.64 billion EURO, a total of approx 21 billion EURO. (European Commission 2000b)

According to the figures reported in the Agenda 2000 (European Commission 2000c), the EU has reserved approximately 21 bill. EURO for pre-accession support to East and Central European countries. An amount that will almost be doubled if the traditional co-financing framework also takes place in this case. In any case a crucial issue will be to what extent the CEEC's will be able to absorb the support available.

As stated by Molle (1999, p.158), the CEES's have to make a number of strategic choices regarding the available internal and external resources. These choices are not necessarily mutual in accordance with each other. The most important question is probably the target-issue: equity vs. efficiency of allocation. Related to this issue the question has to be solved whether support to endogenous development of the attraction of Foreign direct investment should have priority. The last argument made by Molle deals with spatial development, i.e. balanced development, growth poles or growth corridors. In particular this issue requires a certain amount of interregional c-ordination within and between the countries involved¹⁴).

14. An attempt to provide an overall assessment of spatial development in a context of European Integration can be found in Niels Boje Groth (ed.) Urban System and Urban Networks in the Baltic Sea Region (forthcoming)

5 Concluding remarks

Based on the historic experience from previous enlargements, the cohesion of the European economies has been investigated in this paper with point of departure in traditional measures of GDP per capita. As supplement a proposal of an alternative indicator of coherence of the European economic system has been sketched based on the concept of intra-industry trade as an indicator for the integration of the European production system based on international trade statistics. The latter can indicate more specific trends toward the integration of the systems of production between the EU and the countries of Central and East Europe.

Preliminary results based on the Baltic Rim countries indicate a moderate tendency toward adaptation of the transition economies toward the pattern of international sharing of production facilities and exploitation of competitive advantages developed within the European Union member states. The results and trends seem to be in accordance with findings in traditional studies of regional cohesion in the European Union, but further analysis is needed.

As a tentative conclusion the following assessment of economic cohesion in an enlarged European Union can be made:

- The figures of the Baltic rim EU countries show a high degree of coherence of the production system defined as high shares of intra-industry trade, and similar results are expected for the whole of the EU.
- For the original EU countries a slight tendency toward coherence measured by GDP per capita was found, in particular when the smallest economy, Luxembourg, is excluded.
- Scenarios for EU-21 and EU-27 based on 1998 GDP figures obviously show a tremendous increase of disparities.

The survey of coherence based on economic figures indicates that the convergence problem in an enlargement perspective cannot be solved by economic means, but requires a political and

social accept of differences in an enlarged European Union. The historic analysis of the current EU countries has shown that real convergence seems to be possible, but at a very low speed.

The obtained results for the 6 or 9 oldest EU members can only to a limited extent be used as blue-prints for the future. Among the reasons are:

- The increasing global orientation of the European economy makes an internal equity oriented policy less feasible, due to international competitiveness.
- The economic centers of EU compete global rather than continental, leaving the (European) periphery behind as less favored regions.
- The potential conflicts between equity (regional policy) and efficiency (R&D policy) will become more manifested.

To solve at least some of the negative effects of the above mentioned trends cooperation and integration of the European system of production is necessary. The exploitation of competitive and comparative advantages within the enlarged EU seems to be an appropriate instrument to improve economic growth and equity in the long run. The above sketched analysis based on foreign trade seems to provide a first analytical tool to identify targets for new initiatives. Further analyses of the regional cohesion, of the systems of production, and the division of labor are required, both on the national and regional level.

References

Aalbu, Hallgier (1998): "The Pendulum of Regional Policies in Norway and Sweden", pp. 7-10 in *North, The Journal of NordREGIO*, Vol 9, 1998.

Allan, Kevin (1990): "International Forces and Regional Policy" pp.37-46 in *Nord-REFO* 1990:2.

Armstrong, Harvey W. (1995): "Convergence Among Regions in the European Union 1950-1990" pp. 143-152 in *Papers in Regional Science*, Vol. 74, Number 2.

Bie, Ulrik & Niels P. Hahnemann (2000): "Currency boards" pp. 85 - 102 in *Danmarks Nationalbank, Kvartalsoversigt 2.kvartal*, København.

Cornett, A.P. (2000 forthcoming) "Economic Links in the Baltic Rim" *Workingpaper USUN-project*, Sønderborg.

Cornett, Andreas P. (1999a): "Fra transformation til integration - Hvad kan der læres af den tyske genforening" pp. 12-15, in *Vindue mod øst*, Number 2, 1999, Odense University Press.

Cornett, Andreas P. (1999b): "The Problem of Transition and Reintegration of East and Central Europe - Conceptual remarks and empirical problems" pp. 255-279 in Fischer, M.M. & P.Nijkamp, eds. (1999), *Spatial Dynamics of European Integration Regional and Policy Issues at the Turn of the Century*, Springer-Verlag Berlin/Heidelberg 1999.

Danmarks Nationalbank (2000), *Beretning og Regnskab 1999*, København 2000.

Dunford, Mike (1994): "Winners and Losers: The New Map of Economic Inequality in the European Union" pp.95-114 in *European Urban and Regional Studies* 1994 Vol 1, No. 2.

European Bank for Reconstruction and Development (EBRD) (1999): "Transition report 1999 Ten years of transition", London 1999.

European Commission (2000a): Directorate-general for Regional Policy Work Programme for 2000, Brussels 2000, (http://europa.eu.int/comm/regional_policy/document/radi/radi_en.htm)

European Commission (2000b): "Agenda 2000 Structural policy reform" (<http://europa.eu.int/scadplus/leg/en/lvb/160013.htm>) 26-05-00.

European Commission (2000c): "Europas Agenda 2000 på vej mod et større og stærkere EU", Luxembourg.

European Commission (1997): "Agenda 2000 The Effects on the Union's Policies of Enlargement to the Applicant Countries of Central and Eastern Europe. Impact Study, Part II - Analysis 3. Structural Politics". (<http://europa.eu.int/comm/sg/aides/en/p4ch2.htm#>)

European Economy (1999), *The EU Economy: 1999 Review*, No 69, 1999, European Communities 2000, Luxembourg.

Galloway, David (1999): "Keynote article: Agenda 2000 - Packaging the Deal" pp. 9-35 in *The European Union Annual Review 1998/1999* edited by Geoffrey Edwards and Georg Wiessala, *Journal of Common Market Studies*, Blackwell Publishers, Oxford.

Groth, Niels B. (2000, forthcoming): "Urban system and Urban Networking in the Baltic Sea Region", *Danish Forest and Landscape Research Institute*, Hoersholm.

Lindberg, Leon N. & Stuart A. Scheingold (1970), *Europe's Would-Be Polity. Patterns of Change in the European Community*, Prentice-Hall Englewood Cliffs, New Jersey.

Lütje, Teit (1997): "Om opgørelsen af den danske intra-industrielle handel" pp. 273 - 290 in *Nationaløkonomisk tidsskrift*, 1997, Vol. 135, No 3.

Molle, Willem (1999): "The Dynamics of Economic Integration and the Cohesion in the EU: Experience from the Past and Challenges for the Future" pp. 145 - 162 in Fischer, M.M. & P.Nijkamp, eds. (1999) , *Spatial Dynamics of European Integration Regional and Policy Issues at the Turn of the Century*, Springer-Verlag Berlin/Heidelberg 1999.

Molle, Willem with Sjaak Boeckhout (1995): "Economic Disparity under Conditions of Integration -A Long Term View of the European Case" pp. 105 - 23 in *Papers in Regional Science*, Vol. 74, Number 2 .

Nielsen, Jørgen Ulff-Møller, E.S. Madsen & K. Pedersen., *International Economics The Wealth of Open Nations*, McGraw-Hill Company, London 1995.

OECD (1998): "International Trade By Commodities Statistics" ITCS Edition 1998, Paris 1998.

Pentland, Charles (1973), *International Theory and European Integration*, Faber and Faber London.

Robson, Peter (1987), *The Economics of Regional Integration*, Allan & Unwin, London 1987.

Spiegel Almanach (1999) "Weltjahrbuch 2000", Spiegel Buchverlag, Hamburg 1999.