CENTRAL EUROPE AS AN ECONOMIC AREA?

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Klaus GUGLER, Heinz HANDLER, Manfred SCHEKULIN *

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* Heinz Handler is on temporary leave from WIFO, all three authors are currently with the Austrian Federal Ministry of Economic Affairs. The views expressed in this paper are personal opinions of the authors and not official positions of either WIFO or the Ministry of Economic Affairs.

1. Introduction

A century ago Austria and much of Central and Eastern Europe[1] were forming a political and economic area. The area collapsed when the Austro-Hungarian Monarchy dissolved during World War I as a result of political rather than economic forces. In the decades since, the economies of the former union members have evolved in distinctly different ways, particularly after World War II during the Communist regimes in Central and Eastern Europe. Following the breakdown of central planning in the region in 1989, most of the reforming countries have started to redirect their economies from their previous close links within the CMEA towards the West, in particular the EU.

All the eastern countries bordering the EU have initiated processes, though at different speeds, to eventually join the EU as members. These countries are, except for Poland, also bordering the new EU-Member country Austria. It seems natural, therefore, to learn from the Austrian experience for the integration process of Central and Eastern European countries (CEECs).

Already from the outset, the following questions come to ones mind:

(1) What special role has Austria played in the transformation process so far and, more importantly, what role could she play in the ongoing integration process of CEECs into the European Union?
(2) What kind of "economic area" could Austria possibly form with CEECs and which countries should be involved?
(3) What could be the meaning of a regional economic area in central Europe when the reforming countries involved are anyway striving for EU membership?

We have dealt with the first question in the empirical part of this study where we try to assess country characteristics and, accordingly, similarities and dissimilarities of the countries considered. It will be shown that Austria has developed, particularly in recent years, ever tighter economic relations with some of the CEECs and, therefore, seems apt to fulfill a catalystic role in the integration process of CEECs into the EU. The second question is analysed to some extent in the following Chapter 2,

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[1] Namely what is today Hungary, the Czech Republic, the Slovak Republic, Slovenia and parts of Croatia, Poland, Rumania, the Ukraine and Bosnia-Herzegovina.

along with other conceptional issues such as the dichotomy of inter- versus intraindustry trade and the effects on trade of economic distance. Chapter 3 investigates into the empirical characteristics of the countries compared in order to judge how suited they are for forming some kind of economic area. Chapter 4 then elaborates on the forces that could lead to convergence in foreign trade and also considers the third question from above. The paper concludes with some remarks on further integration of CEECs into the EU and the potential role of Austria in this process.

In comparing Austria with CEECs, many data problems arise. Some are resolved here by employing proximate definitions which are likely not to disturb the eventual conclusions drawn. In many instances, in particular for comparison with earlier periods, lack of data on the Czech Republic proper necessitates the use of information on the former CSFR.

2. The Notion of "Economic Area"

2.1 Degrees of Economic Integration

An "economic area" may be thought of as an agglomeration of nations which are distingiushed from third countries by their closer economic ties, their more homogenous structural characteristics or by their determination to attain similar policy goals. Depending on the number and the extent of such features, different **levels of integration**, apart from total economic and political unification, may be discerned (BALASSA 1961):

- *free trade area (FT):* abandoning restrictions on trade between member countries;
- *customs union (CU):* establishing common external tariffs and a common trade policy;
- *common market (CM):* harmonization of industrial and social policies;
- *economic and monetary union (EM):* concerted monetary and exchange rate policies (monetary stability zone).

In the first 3 models of integration (FT, CU, CM), economic policy remains exogenous, and governments interfere through trade policy only at the border. In the last model (EM), there exists a (more or less) fixed exchange rate and perhaps an institutional frame-

work linking government policies of participating countries together.

Given Austria's membership in the EU, and the trade agreements of the Visegrad countries with the EU as well as their attempt to join the EU as members, a potential **economic area** between Austria and her neighbouring CEECs should not be understood as a self-reliant integration area, but either

- as integral part of the Common Market, or
- as a regional integration area within the EU with more intense links than envisaged for the EU as a whole, or
- as a regional integration area anticipating the EU as long as the accession of CEECs is still pending.

The Community's "Europe Agreements"[2] envisage abolishing tariffs (except for agricultural and other sensitive products) and certain additional integration steps.[3] An economic area between Austria her neighbours in the East would thus resemble at least an FT, but more likely (through partial acceptance by eastern countries of the acquis communautaire) a CM. For the purpose of the following analysis, we will only deal with the case of CM (without fixing exchange rates). In this context we will also discuss some of the problems and approaches to integration.

Fixed exchange rates between the currencies of CEECs and the EU seem unrealistic for quite some time to come. To form an economic area of the EM type to the benefit of participating countries, the literature on **optimum currency areas** (OCAs) has developed various criteria,[4] in particular:

- *high bilateral trade shares* (McKINNON 1963) or openness in general with a high potential of incresing trade between the member countries;
- *high diversification of production* (KENEN 1969) which mitigates adverse external demand shocks;

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[2] Such agreements have been ratified with Hungary, the Czech Republic, Slovakia, Poland, Bulgaria and Romania. Negotiations have been concluded with the three Baltic states and are in preparation with Slovenia.

[3] In addition to the step-by-step reduction of tariffs and quotas for manufactured products, the agreements provide for the gradual liberalization of factor movements, payments and the harmonization of competition policies (STANKOVSKY 1992).

[4] See BAYOUMI (1994) for a recent discussion of the effects of OCAs, and for quotations of the relevant literature. BAYOUMI has linked together, by way of a small general equilibrium model, the major arguments in favour of an OCA.

- *factor mobility* (MUNDELL, 1961, for labour and INGRAM, 1969, for capital) to alleviate the rigidities following from fixed exchange rates in the face of asymmetric disturbances;
- *fiscal federalism,* i.e. the easy transfer of funds from richer to poorer regions within an economic area;
- *common economic policy preferences* (McKINNON 1963) which (under flexible prices) imply an equalization of inflation rates;
- *common external supply and demand shocks* which are likely to emerge when trade and production structures are similar between countries.

The main message of these criteria is that the benefits of integration will outweigh its costs the more, the more the countries concerned resemble each other and the more integrated an area already has been. In the following Chapter 3, the economic characteristics of the countries involved will be compared to see if they are conducive to forming an economic area.

2.2 Interindustry Versus Intraindustry Trade

The degree of integration already achieved in the past will crucially depend on the production, trade and price structures of the participating countries. Our further reasoning will therefore also rest on the type of trade prevailing between the countries considered.

Trade theory provides us with numerous models explaining the existence and growth of cross-border trade.[5] For the purpose of our analysis, it will be particularly useful to distinguish between interindustry and intraindustry trade.

Interindustry trade reflects comparative advantages in the production and trade of goods at constant returns to scale, which are based on country differences in factor endowments and technologies. According to the *RICARDO model,* trade structures are determined by technological differences: countries export goods which their labour produces rather efficiently, and import goods that labour produces rather inefficiently. Trading partners do not form an integrated economic area, there is no factor mobility, but mobility of goods. Based on this model, a case is made for free trade and specialization: As long as price ratios differ between

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[5] For a thorough treatment of trade models, see, e.g., KRUGMAN/OBSTFELD (1994).

countries, comparative advantage provides for gains from trade for all countries involved.

According to the *HECKSCHER-OHLIN (HO) model,* in a competitive world a country tends to export goods which use the factor more intensively that is abundant in the country concerned. Trade structures then reflect factor endowments of countries. With free trade, factor prices should be equalized over time, even if factor mobility is less than perfect. The conclusions of the HO model are valid under restrictive assumptions only, particularly under (a) perfect competition, (b) constant returns to scale, (c) identical preferences of consumers and (d) identical technologies across countries.

Some of the HO assumptions are obviously at variance with empirical observations, particularly concerning East-West trade. First, production functions and consumer preferences are certainly not identical in CEECs and in the West. Second, neither in CEECs nor in the West have market structures and production technologies been characterized by perfect competition and constant returns to scale. Still, the HO model may be used, as shown in Section 3.2 below, to evaluate changes over time in the structure of trade.

The growing importance of **intraindustry trade** ("manufactures traded for manufactures") has led to mounting skepticism against models just dealing with interindustry trade ("manufactures traded for food"). By abandoning the assumptions of perfect competition and allowing for product differentiation and economies of scale (EOS), the *"new trade theory"* helps explain intraindustry trade. In a world of product diversification and EOS, international trade possibly contains a large random component of specialized products based on cost asymmetries, country-specific concentration of firms, country size and preferences of demand. Through the larger market created by trade, a country can reduce the number of goods produced, increase the scale of production for the remaining goods and reap off the resulting EOS. Simultaneously, the variety of goods available to domestic consumers can be maintained or even raised by imports, and prices can be reduced due to lower unit costs.

Intraindustry trade will occur between open countries that are similar in their relative factor supplies and production structures (so that not much interindustry trade will take place). The larger intraindustry trade is, the more will demand shocks exert symmetric effects on all trading partners. Since these are also

preconditions for forming an economic area, the amount and growth of intraindustry trade between two countries may be a useful indicator for an existing or emerging economic area. If countries abandon economic borders between them (and perhaps even unite their currencies), full mobility of goods and production factors is secured, and prices of goods and factors tend to equilibrate. However, competition is not any more perfect in this model, as large companies dominate over small ones and countries specialize on a limited range of products which can then be produced at larger scale and exported to other countries.

One can conclude therefore that, given the assumptions of the "new trade theory", Austria and the CEECs will profit from intraindustry trade in an integrated area. If, on the other hand, relative factor endowments (and production structures) remain distinct, these countries may not be suited to gain much from integration, except under perfect competition and constant returns to scale.

EOS, as we have used the term thus far, would occur within the firm *(internal EOS)*. In addition, EOS may also happen between firms, in particular when clusters of firms make efficient use of an existing infrastructure of a given production location *(external EOS)*. They not only tend to reinforce such locations, but also existing production structures. In contrast to internal EOS, external EOS are not necessarily linked to imperfect competition, but they may also not be beneficial to all trading partners.

2.3 The Geography of Trade

As argued above, intraindustry trade may foster disturbances to become more symmetric. However, the exploitation of EOS may also necessitate **regional concentration** of production, so that sector-specific shocks will translate into country-specific shocks (DE GRAUWE 1994). *Locational differences* within an economic area can be the result of comparative advantages as well as of economies of scale.

Another form of imperfect competition is expressed by the **gravity model** of trade. Instead of firm or industry size (as in the EOS model), it is *economic distance* that determines the structure of trade. Economic distance, which may also be interpreted as resistance to trade, is a function of geographical distance as well as of behavioural, institutional and cultural (including language)

differences between trading partners. Geographical distance is chiefly important because of transport costs.

3. Country Characteristics: Similarities and Dissimilarities

As we have argued at the outset, current relations between Austria and the CEECs are propped up by a common political and economic history of some sort. Will this suffice to speak of an economic area, or can additional similarities between these countries be unveiled? Prima facie they are similar to some extent, as virtually all of them are land-locked small open economies which are not well endowed with raw materials. They have also in common their strive for improving relations with the Common Market,[6] with Austria having already been accepted as a Member state. Dissimilarities between these countries obviously exist as regards their market structure and institutions, although some of the reforming countries are catching-up rapidly with western standards.

3.1 Income, Productivity and Production Structure

Since the onset of the transformation process in 1989, real GDP and industrial production in the CEECs have declined drastically (Tables 1 and 2). The recession was severest in 1991 with a slump in real GDP of up to 15 percent in some countries, e.g. the Czech Republic and Slovakia. Poland was the first country to overcome the transformation-induced output decline and restart growth by 1992. Slovenia followed suit in 1993 and the Czech Republic, the Slovak Republic and Hungary simultaneously resumed growth in 1994. While forecasts[7] indicate dynamic growth for most of the CEECs, the economic situation in Bulgaria and Romania seems to remain rather weak. In Hungary restrictive policies, required to cope with the huge external imbalances, have depressed growth in recent years and are likely to do so in the years ahead.

The fall in industrial production was even stronger, and in 1993 the production level corresponded to only some 65 per cent of that in 1989 (Table 2). This suggests that important structural changes have already taken place. Poland appears to have managed the transformation process best: by 1996 industrial production is projected to return to its previous peak level of 1989.

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[6] Hungary and Poland have formally applied for EU membership.

[7] E.g. from the Vienna Institute for Comparative Economic Studies (WIIW).

Table 1: Gross Domestic Product
Table 2: Industrial Production

With regard to real income and productivity levels, CEECs are of course substantially lagging behind the EU in general and Austria in particular. **GDP per capita** at purchasing power parities (PPPs) in the most advanced reforming countries (the Czech Republic and Slovenia) in 1994 amounted to less than half of the EU average and some 45 per cent of Austria (Table 3). Slovakia and Hungary reached about one third of Austria, Poland, Bulgaria and Romania even less. However, the figures for the Czech Republic and Slovenia come close to Greece, the bottom country within the EU.

Table 3: GDP per Capita at Constant 1994 PPPs (1994 and 2010)

Assuming, as in BALDWIN (1994), a *catch-up scenario* of zero population growth and a CEEC lead over average EU growth rates of 3 percentage points p.a., some remarkable changes are envisaged by the year 2010: The Czech Republic and Slovenia would have reached an income level which comes close to that of Spain. Slovakia would almost catch up with Portugal, and Poland with Greece, while Hungary would lie somewhere between Portugal and Greece. However realistic such a scenario may be, it helps evaluate the chances of an early EU membership of the more advanced eastern countries.

Table 4 shows **monthly earnings** in manufacturing in CEECs as compared to Austria and other Western countries. In 1992, monthly earnings in CEECs did not exceed one fifth of the level prevailing in Austria. Although the low wage level appears to be the single most important comparative advantage of CEECs, average **productivity,** as measured by GDP per capita, is also much lower, eliminating some of the wage-cost advantages. Nevertheless, **unit labour costs** (ULCs) in CEECs are tentatively less than half of those in Austria (with the exception of Slovenia, where they amount to 71 per cent of the Austrian level). ULCs in Poland and Hungary are approximately as high as those in Portugal, they are significantly lower still in the Czech Republic.

One interesting fact is revealed when the change in ULCs between 1990 and 1994 is analyzed: Countries having experienced in this period a real depreciation of their currencies (Slovenia, Bulgaria and Romania) gained in international competitiveness as indicated by falling ULCs relative to Austria. All other countries in Table 4 were facing real appreciations and rising relative ULCs. Of

Table 1

Gross Domestic Product

1989 = 100

	1989	1990	1991	1992	1993	1994	1995	1996
Czech Republic	100	98.8	84.8	79.3	78.9	81.1	84.3	88.5
Slovak Republic	100	97.5	83.4	77.5	75.0	78.6	81.8	84.2
Hungary	100	96.5	85.0	81.4	79.5	81.1	81.9	83.5
Slovenia	100	95.3	87.6	82.9	83.9	88.1	92.5	97.2
Poland	100	92.0	85.6	87.8	91.1	95.7	101.4	106.5
Bulgaria	100	90.9	80.3	75.7	72.5	72.1	73.6	75.8
Romania	100	94.4	82.2	70.9	71.8	74.2	76.5	78.8

Minima in the transformation process

Source: WIIW data base

Table 2

Industrial Production

1989 = 100

	1989	1990	1991	1992	1993	1994	1995	1996
Czech Republic	100	96.5	75.5	69.5	66.0	67.5	70.2	73.7
Slovak Republic	100	96.0	71.6	61.7	55.2	58.7	61.4	63.8
Hungary	100	89.8	74.9	67.6	70.3	76.8	79.1	83.1
Slovenia	100	89.5	78.4	68.1	66.1	70.4	74.6	79.1
Poland	100	75.8	66.8	69.4	74.4	83.3	92.5	102.6
Bulgaria	100	83.3	64.8	54.5	50.7	49.7	52.7	56.4
Romania	100	81.0	65.1	50.8	51.2	52.9	54.0	55.6

Minima in the transformation process

Source: WIIW data base

Table 3

GDP per Capita at Constant 1994 PPPs

	1994	1994	2010
	US$	EU15 average = 100	EU15 average = 100
Germany[1]	18936	103	103
Austria	19664	107	107
EU average	18437	100	100
Spain	13537	73	73
Portugal	12073	65	65
Greece	8885	48	48
Slovenia	8606	47	74
Czech Rep.	8155	44	70
Slovak Rep.	7043	38	61
Hungary	6527	35	56
Poland	5366	29	46
Bulgaria	4002	22	35
Romania	3222	17	28

Notes: Projections for 2010 assume a 2 per cent annual growth of GDP in EU countries and a 5 per cent annual growth in CEECs. It is further assumed that population remains stagnant.
[1] Including former East Germany.

Source: WIIW data base.

course, the ongoing catch-up process also contributes to rising labour costs.

Table 4: Monthly Earnings and Unit Labour Costs

Although by Western standards, labour costs have remained quite low in CEECs, wage differentials are widening rapidly in the course of the transformation process. Higher wages are typically paid in certain service sectors which have remained sheltered from competition (e.g. banks), for qualifications which are in excess demand (business management, language skills) and in booming areas (like Prague).

Besides income levels, a rough indicator of country differences in development is the **structure of employment** according to major production sectors. With increasing development, one would expect that countries move from the production of basic goods to manufacturing and further on to services. This view is mirrored in the data of Table 5. Although the figures may not completely be comparable, it is by and large revealed that dependent employment and self-employment in agriculture is more important in eastern than in western countries (especially so in Poland, Bulgaria and Romania), the possible exception being Slovenia. The share of manufacturing is rather high in the East (except for Hungary and Poland), while the services sector seems generally more important in the West, with Hungary serving as counter-example. The share of agriculture bears much weight with respect to possible EU transfers to the East once the eastern countries have attained EU membership.

As regards the development of sectoral employment between 1990 and 1994, countries which are more advanced in the transformation process (Hungary, the Czech and the Slovak Republics, Slovenia and Poland) have shifted employment from agricultural and industrial production to the services sector, while the services sectors in Bulgaria and Romania do not come close to the dynamics required to absorb the transformation-induced industrial lay-offs. In these two countries the agricultural sector carries the adjustment burden, contributing to an unsustainably high employment share of agriculture (in view of a future EU accession).

Table 5: Sectoral Structure of Employment in 1990 and 1994

Table 4

Monthly Earnings and Unit Labour Costs (1992)

	Monthly earnings		Unit labour costs
	US$	Austria=100	Austria=100
Austria	2073	100	100
Germany[1]	2292	111	98
Portugal	508	25	42
Slovenia	374	18	43
Poland	225	11	41
Hungary	238	12	34
Slovak Rep.	172	8	23
Bulgaria	90	4	21
Romania	64	3	21
Czech Rep.	166	8	19

Notes: Monthly earnings in manufacturing.
[1] Excluding former East Germany.

Source: STANKOVSKY (1994)

Table 5

Sectoral Structure of Employment in 1990 and 1994

(In per cent of total employment)

	Agriculture[1]		Industry		Other sectors	
	1990	1994	1990	1994	1990	1994
EU15	6.5	5.2	32.4	31.3	61.1	63.5
Austria	7.9	7.1	36.8	35.6	55.3	57.3
Hungary	15.8	9.9	29.5	28.7	54.7	61.4
Czech Rep.	11.8	7.0	37.8	33.7	50.4	59.3
Slovak Rep.	13.2	12.0	32.9	29.6	53.9	58.4
Slovenia	2.4	2.0	46.1	41.6	51.5	56.4
Poland	26.6	26.2	28.4	25.3	45.0	48.5
Bulgaria	18.5	22.1	36.6	29.6	44.9	48.3
Romania	29.0	35.9	37.9	30.1	33.1	34.0

(1) including forestry

Source: WIIW data base; OECD Labour Force Statistics, WIFO data base.

3.2 Trade Relations

Trade relations within the Austro-Hungarian Monarchy were intense. In 1913 some 37 per cent of Austrian trade was conducted with Hungary. After the collapse of the Habsburg Monarchy in 1918, Austro-Hungarian trade was substantially reduced in importance, while Austria retained close trade relations with Czechoslovakia which in 1920 absorbed some 25 per cent of Austrian exports and delivered some 38 per cent of Austrian imports. Poland and former Yugoslavia have not been of great importance in the trade with Austria, and over the years their shares in total Austrian trade have further declined. There has been a strong concentration of Austrian trade vis-à-vis Germany. Export to Italy and Switzerland have lost and imports from these two countries have gained in importance. Overall, Austria has diversified her trade away since 1920 from the seven countries mentioned in Table 6.

Table 6: Regional Shares of Austrian Foreign Trade

Since the breakdown in 1989 of eastern Europe's central planning systems, Austria's trade links with neighbouring reforming countries have evolved very favourably. From 1989 to 1994, the value of Austrian exports to Hungary and the former CSFR rose by 138 and 173 per cent, respectively. In the same period, Austrian imports from these countries increased by only 76 and 79 per cent. This can be traced back to two main reasons: Firstly, the substantial growth of Austrian export markets after the collapse of the former centrally planned economies (with a huge pent-up demand for both consumer and investment goods and consumer preferences directed towards Western-style products. And secondly, the relative competitiveness of Austrian exports manifesting itself in market share gains in all CEECs. This development was of course supported by the traditionally close historical links and the proximity of markets.

Austria has expanded her markets predominantly in manufactures, while CEECs have additionally delivered raw materials and agricultural products. FIDRMUC et al.(1995) have shown that about one half to three-quarters of the overall growth of Austrian trade with selected Eastern countries can be attributed to interindustry trade.[8]

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[8] The Eastern countries included in the calculations are former Czechoslovakia, Hungary, Poland, Romania, Bulgaria and Albania. The evaluation is based on a decomposition of trade growth between 1988 and 1994 into interindustry and intraindustry trade with the help of Grubel-Lloyd-indexes (GRUBEL/LLOYD 1971) for double-digit SITC groups 1, 6, 7 and 8.

Table 6

Regional Shares of Austrian Foreign Trade

(In per cent)

		1920	1937	1960	1988	1994
Germany	X	17.0	14.8	28.6	36.5	38.1
	M	36.6	16.1	41.3	45.0	40.0
Italy	X	27.8	14.0	16.6	10.4	8.1
	M	3.6	5.5	8.0	8.9	8.8
Switzerland	X	7.5	5.1	4.8	7.2	6.4
	M	1.1	3.2	4.3	4.4	4.1
Hungary	X	8.1	9.1	2.4	1.8	3.9
	M	3.2	9.0	1.9	1.4	2.0
Czechoslovakia	X	24.8	7.1	2.6	1.2	3.5
	M	37.6	11.0	1.6	1.3	2.5
Poland	X	3.9	4.3	1.8	1.0	1.2
	M	5.7	4.6	2.2	0.9	0.8
Yugoslavia	X	3.7	5.4	3.5	2.0	2.6
	M	3.5	7.9	2.0	1.0	0.9
Sum of above	X	92.8	59.8	60.3	60.1	63.8
	M	91.3	57.3	61.3	62.9	59.2

Note: Regional shares of Austrian exports (X) and imports (M) in per cent of total Austrian exports and imports, respectively. German figures for 1960 and 1988 include the former GDR.

Source: HOCHREITER (1993), WIFO data base.

Austria in general has followed a **liberal trade policy** vis-à-vis CEECs in line with trade liberalization of the EC and of eastern countries. However, Austria has not been considerably more liberal than other western countries, and there have been noticable exceptions from trade liberalization. They concern in particular agricultural products, machinery for agriculture, and formerly also cement, where import quotas or self-restraining trade agreements were in place (STANKOVSKY 1994).

The trade matrices in Tables 7 and 8 reveal that, from an **Austrian point of view**, trade shares with CEECs are still small in spite of the dynamics of recent years. In 1993 Hungary absorbed 3.5 per cent of Austrian exports, the Czech Republic 2.4 per cent, the shares of other eastern countries are even lower (Table 7). In terms of import market shares in Austria, eastern countries exports are even less important: The share in total Austrian imports of Hungary and the Czech Republic was 1.8 and 1.6 per cent, respectively, other eastern countries again remaining below these marks (Table 8).

Table 7: Trade Matrix: Export Shares 1993
Table 8: Trade Matrix: Import Market Shares 1993

In contrast, **Austria** has become a **major trading partner for some of the CEECs:** The share of exports to Austria in total exports exceeds 10 per cent in Hungary, and lies between 5 and 6 per cent in the other three of the CEE4 countries (Hungary, the Czech and the Slovak Republic, and Slovenia). Imports from Austria amount to 11.4 percent of total imports in Hungary, 9 per cent in Slovenia, 7.8 per cent in the Czech Republic and 5.6 per cent in the Slovak Republic. Trade with Poland has remained much smaller in both directions.

Attempting a more integrated view of the figures in Table 7, one could look at the **weighted average** of all *export shares* in a particular submatrix. Taking, e.g. the six bilateral export shares in the submatrix covering Austria, Hungary and the Czech Republic, the weighted average would be 3.9 per cent (see the bold italic figures in the main diagonal). When this set of countries is extended by Slovakia, the average export share rises to 5.2 per cent; this is due to the large bilateral trade share between the Czech and Slovak Republics. Further including Slovenia still yields a weighted average export share of 4.1% which falls to 3.3 per cent if Poland is also considered. Thus, from a trade-oriented

Table 7

Trade matrix: Export Shares 1993

(Percentage shares of exports to a particular country in total exports)

Exports of	Importing Country												Total	
	Austria	Hungary	Czech Rep.	Slovakia	Slovenia	Poland	Bulgaria	Rumania	Germany	Switzer.	Italy	Other	Percent	Mill. US$
Austria		3,5	2,4	0,9	1,5	1,4	0,3	0,4	39,0	6,2	7,9	36,5	100,0	40.159
Hungary	10,1		3,3	0,5	1,9	1,8	0,3	1,9	30,6	1,6	9,1	38,9	100,0	8.907
Czech Republic	6,1	3,9	***3,9***	20,1	1,2	2,7	0,3	0,3	30,4	0,8	4,3	25,9	100,0	12.774
Slovakia	5,0	4,4	41,1	***5,2***	0,6	3,0	1,0	0,4	16,5	0,5	3,9	18,4	100,0	5.439
Slovenia	5,0	1,4	1,4	0,5	***4,1***	1,4	0,7	0,2	29,7	0,8	11,9	42,8	100,0	6.083
Poland	2,4	1,2	2,4	1,2	0,1	***3,3***	0,2	0,2	36,7	0,5	6,2	45,5	100,0	14.143
Bulgaria	1,3	0,6	0,3	0,5	0,6	0,5		1,8	9,2	0,3	5,4	79,5	100,0	3.721
Rumania	1,5	2,4	0,2	0,1	0,2	0,4	2,1	***2,3***	16,8	0,4	10,0	63,4	100,0	4.892
Germany	5,5	0,9	1,3	0,2	0,4	1,6	0,1	0,3		5,6	7,3	76,8	100,0	365.255
Switzerland	3,1	0,4	0,4	0,1	0,1	0,4	0,1	0,1	23,1		7,8	64,3	100,0	63.185
Italy	2,5	0,6	0,4	0,2	0,7	0,9	0,1	0,4	15,0	3,3	***2,9***	73,1	100,0	178.579

Note: Bold italic figures in main diagonal, X_{ii}, are "integrated" export shares, i.e. weighted average export shares of all countries to the upper left, including country i.

Source: UN data base; and own calculations

Table 8

Trade matrix: Import Market Shares 1993

(Imports from particular country in total imports)

Market share of	Imports of										
	Austria	Hungary	Czech Rep.	Slovakia	Slovenia	Poland	Bulgaria	Rumania	Germany	Switzer.	Italy
Austria		11,4	7,8	5,6	9,0	2,9	2,3	2,5	4,8	4,1	2,0
Hungary	1,8		2,4	0,8	2,5	0,9	0,5	2,6	0,8	0,2	0,5
Czech Republic	1,6	4,0	***3,3***	40,7	2,3	1,9	0,9	0,6	1,2	0,2	0,3
Slovakia	0,6	1,9	17,8	***4,4***	0,5	0,9	1,1	0,4	0,3	0,0	0,1
Slovenia	0,6	0,7	0,7	0,5	***3,5***	0,5	0,9	0,2	0,5	0,1	0,5
Poland	0,7	1,4	2,7	2,6	0,2	***2,7***	0,6	0,5	1,6	0,1	0,6
Bulgaria	0,1	0,2	0,1	0,3	0,3	0,1		1,0	0,1	0,0	0,1
Rumania	0,2	0,9	0,1	0,1	0,2	0,1	2,0	***1,9***	0,2	0,0	0,3
Germany	41,5	24,9	36,8	13,4	22,9	31,2	10,8	16,7		33,6	16,9
Switzerland	4,1	2,2	2,1	0,8	1,5	1,4	1,2	1,1	4,4		3,1
Italy	9,0	8,4	5,3	4,7	19,0	8,5	5,0	10,3	8,1	9,8	***3,1***
Other	39,8	44,0	20,9	26,1	38,1	48,9	74,7	62,2	78,0	51,9	72,4
Total: Percent	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Mill. US$	48.561	12.530	12.556	6.307	6.501	18.783	5.058	6.522	329.538	60.828	156.843

Note: Bold italic figures in main diagonal, M_{ii}, are "integrated" import market shares, i.e. weighted average import market shares of all countries to the upper left, including country i.

Source: UN data base; own calculations

angle Austria and her immediate neighbours seem to carry some potential for forming an "economic area" as discussed above.

A similar picture is obtained when analyzing the weighted average of *import market shares* (Table 8): It is higher for Austria and the CEE4 countries (3.5 per cent) than for any other region with the exception of the CEE3-area, but again there is a bias stemming from the interwovenness of the Czech and Slovak Republic.

On the other hand, **trade shares** of CEE4 countries[9] in Austrian foreign trade (5.0 per cent in 1993) are larger than for any other western country, though Germany follows suit with 4.4 per cent, Italy being third with only 2.2 per cent. It is an expression of the **geography factor of trade** that trade tends to be concentrated on neighbouring countries. Commenting on the large share of Austria's trade with eastern markets, BALDWIN (1994: 96) has remarked that "considering only geography, Austria itself is a Central European nation".

Based on BALDWIN's linear catch-up scenario mentioned above, dramatic changes in the intra-European trade pattern could occur by the year 2010: Austrian exports to the CEE4 countries would amount to 32.5 per cent of total Austrian exports to Europe (1994: 10.0 per cent), while the export share of EU12 would shrink to 38.4 (1994: 73.3) per cent (see also LANDESMANN 1995). According to the Baldwin catch-up scenario, 54.7 per cent of Austrian exports to European countries would be absorbed by Eastern Europe (from 13.7 per cent in 1989) and only 45.3 per cent by Western Europe. These shares are considerably higher than those for e.g. Germany and Italy (Table 9).

Table 9: Projected Intra-European Export Pattern 2010

In order to shed light on the development since 1989 of inter- and intraindustry trade between Austria on the one hand and Poland, Hungary and the former CSFR on the other, AIGINGER et al. (1994) empirically **tested the HECKSCHER-OHLIN approach** in its commodity version.[10] In spite of the methodological flaws (including multi-collinearity), and of data deficiencies, the results nevertheless point at the rapid transformation of trade and production structures.

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[9] Exports to and imports from the CEE4 region of a particular western country in per cent of the western country's total exports plus imports.

[10] The factor content version would have required reliable input-output data.

Table 9

Projected Intra-European Export Pattern 2010

(Shares of exports to geographical areas)

	a) 1989 income-level scenario			b) Income catch-up scenario[1]		
	Eastern Europe	Visegrad Countries[2]	Western Europe	Eastern Europe	Visegrad Countries[2]	Western Europe
Austria	21.7	13.2	78.3	54.7	34.6	45.3
Germany	7.3	3.2	92.8	25.2	11.4	74.8
Italy	13.1	4.2	86.9	39.7	13.3	60.3
Czech Rep.	17.6	7.2	82.4	56.8	25.4	43.2
Hungary	26.7	10.0	73.3	75.4	28.8	24.6
Slovak Rep.	22.9	11.6	77.1	68.3	36.4	31.7
Slovenia	19.8	7.5	80.2	56.5	23.3	43.5
Poland	28.5	6.7	71.5	73.6	19.0	26.4
Bulgaria	26.3	7.3	73.7	70.4	18.9	29.6
Romania	31.1	8.3	68.9	82.8	24.1	17.2

(1) Assuming a CEEC lead over average EU growth rates of 3 percentage points p.a.
(2) Hungary, Czech and Slovak Republics, Poland

Source: LANDESMANN (1995); calculated from BALDWIN (1994)

The dependent variables were expressed as changes between 1988 and 1992 in the revealed comparative advantages (RCAs) of bilateral trade between Austria and a specific eastern country[11]. Since no data on factor endowments were available either for CEECs or for Austria, the changes in RCAs were explained by measures of relative factor intensities of production and trade (3-digit sectors) in Austria and in certain EU countries. They were seen to provide information about the characteristics of industries, regardless of the country of trade.[12] The following equation for changes in each of the three bilateral RCA series was estimated across more than 170 industries:

$$[RCA(1992) - RCA(1988)] = f(CI, LI, RI, SI, EI)$$

Although only 10 to 15 per cent of total variation in RCA changes could be explained by factor intensities, the results support the hypothesis that relative competitiveness of CEECs has switched from rather capital intensive to labour intensive industries. This is in line with the factor-proportions model, given the high capital intensity of key industries in the East before transition and capital shortages thereafter. Interestingly, skill intensity also turned out a significant determinant of (absolute) RCAs for all three eastern countries. In case of Hungary and the CSFR, the signs of the coefficients imply that these two countries have redirected their skill and R&D intensive exports from the former CMEA to Austria (and, of course, to other western countries). As to be expected, Austria imports energy intensive products from all three eastern countries.

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[11] $RCA = \ln[(X_i/M_i)/(X/M)]$, where X_i and M_i are Austria's exports and imports in the SITC 3-digit sector i, and X and M are Austria's total exports and imports, respectively.

[12] The explanatory variables were defined by the authors as follows:
- CI (capital intensity): investment as a share of output (value added), average 1980-1988
- LI (labour intensity): wages and salaries as a share of output (value added), average 1980-1988.
- RI (R&D intensity): expenditures on research and development in relation to sales in 1988.
- SI (skill intensity): white collar and qualified blue collar workers as a share of total employment in 1988.
- EI (energy intensity): energy costs as a share of total costs, average 1980-1988.

3.3 Foreign Direct Investment

Besides intensifying trade relations with the West and some migration of labour, inward direct investments have been an important source of eastern transformation. Although average capital intensity in the East was high under the previous regime, much of the capital accumulated became obsolete by the opening up to market forces. As a consequence, capital turned scarce, and foreign direct investments (FDI) were encouraged to speed up the transformation and privatization processes.

In mid 1994 the level of FDI accumulated in Eastern Europe[13] amounted to 23.4 bn US$, 58 per cent (or 13.6 bn US$) of which were invested in the CEE4 region.

In contrast to her modest share of 1 per cent in worldwide FDI stocks, Austria now maintains some 8 per cent (or 2 bn US$) of the foreign-owned capital stock in Eastern Europe as defined above. 72 per cent of that amount is absorbed by the CEE4 countries where Austria maintains an average market share of 13 per cent (in Slovenia and Slovakia that share exceeds 20 per cent). Among the western industrial countries, Austria is the third largest investor in the region, outperformed by Germany and the USA only (Table 10). Furthermore, Austria ranks first in the Slovak Republic, second in Slovenia, third in Hungary and fourth in the Czech Republic.

Table 10: Foreign Direct Investment: Stocks and Market Shares in the CEE4 Countries (mid 1994)

The impact on the Austrian economy of outward direct investment to the CEE4 region has been considerably higher than for any other western country: Expressed as a percentage of GDP, accumulated FDI to CEE4 countries amounted in mid-1994 to 0.60 per cent for Austria, followed by Belgium (0.20 per cent), Germany (0.13 per cent), Switzerland (0.08 per cent) and France (0.07 per cent).

Investment flows to CEE4 countries contributed significantly to the internationalization of the Austrian economy: Between 1989 and 1994 total Austrian FDI flows[14] increased from 16.8 bn ATS to 76.7 bn ATS. In the same period investments in Eastern Europe rose from 0.8 bn ATS to 23.9 bn ATS. At the end of 1994 Eastern Europe con-

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[13] Encompassing also the former Soviet Union, data based on partner country statistics.

[14] Nominal capital flows according to balance of payments statistics.

Table 10

Foreign Direct Investment: Stocks and Market Shares in the CEE4 Countries

(Mid 1994)

	Czech Rep. FDI	%	Slovak Rep. FDI	%	Hungary FDI	%	Slovenia FDI	%	CEE4 FDI	%
Total	**2490**		**408**		**6383**		**647**		**9928**	
Austria	169	6.8	103	25.2	888	13.9	131	20.2	1291	13.0
Germany	745	29.9	87	21.3	1760	27.6	134	28.7	2726	27.5
France	326	13.1	39	9.6	447	7.0	61	9.4	873	8.8
Belgium	155	6.2	1	0.2	300	4.7	3	0,5	459	4.6
Switzerld.	120	4.8	4	1.0	172	2.7	35	5.4	331	3.3

Note: FDI in millions of US dollars.
Source: Bundesministerium für wirtschaftliche Angelegenheiten (1995).

tributed some 31 per cent to the total stock of Austrian capital abroad, after just 5 per cent in 1989 and a mere 1 per cent in 1985 (Chart 1).

Chart 1: Development of Austrian FDI stocks in Eastern Europe

4. Perspectives for Integration and Convergence

The analysis thus far has revealed a large potential for East-West trade to exploit comparative advantages in the production of goods and services to the benefit of both, East and West. Another result has been that differences between both regions in the structure of production and trade have been narrowing, and that intraindustry trade is gaining in importance.

The question remains open, however, whether, in a reasonable period of time, this development will suffice the **convergence** of production structures and income levels of CEECs towards those achieved in the West.

As far as trade convergence is concerned, theoretical models are not conclusive in this respect. The *RICARDO theory* per se has no strong implications concerning the convergence of regions. Only if one combines it with modern trade theory, technological spillovers could benefit the backward regions and lead to convergence of productivity and real growth rates. The *HO theory* would predict, under the strong assumptions mentioned above, that free movements of goods and services will equalize factor prices, factor returns and living standards. Thus, the allocative benefits of interregional trade and better exploitation of comparative advantages could foster the convergence of regions.

Other authors, e.g. SCITOVSKI (1958), expect that economic integration will lead to greater divergence of regions as the attractiveness of highly industrialized centres for the location of new activities increases *(agglomeration EOS)*. CLARK (1969) stresses the importance of input availability and the proximity of markets for increasing the economic potential of developed central areas while leaving further behind the periphery. Thus, agglomeration EOS, externalities and low transport costs result in further deepening of already existing regional disparities.[15]

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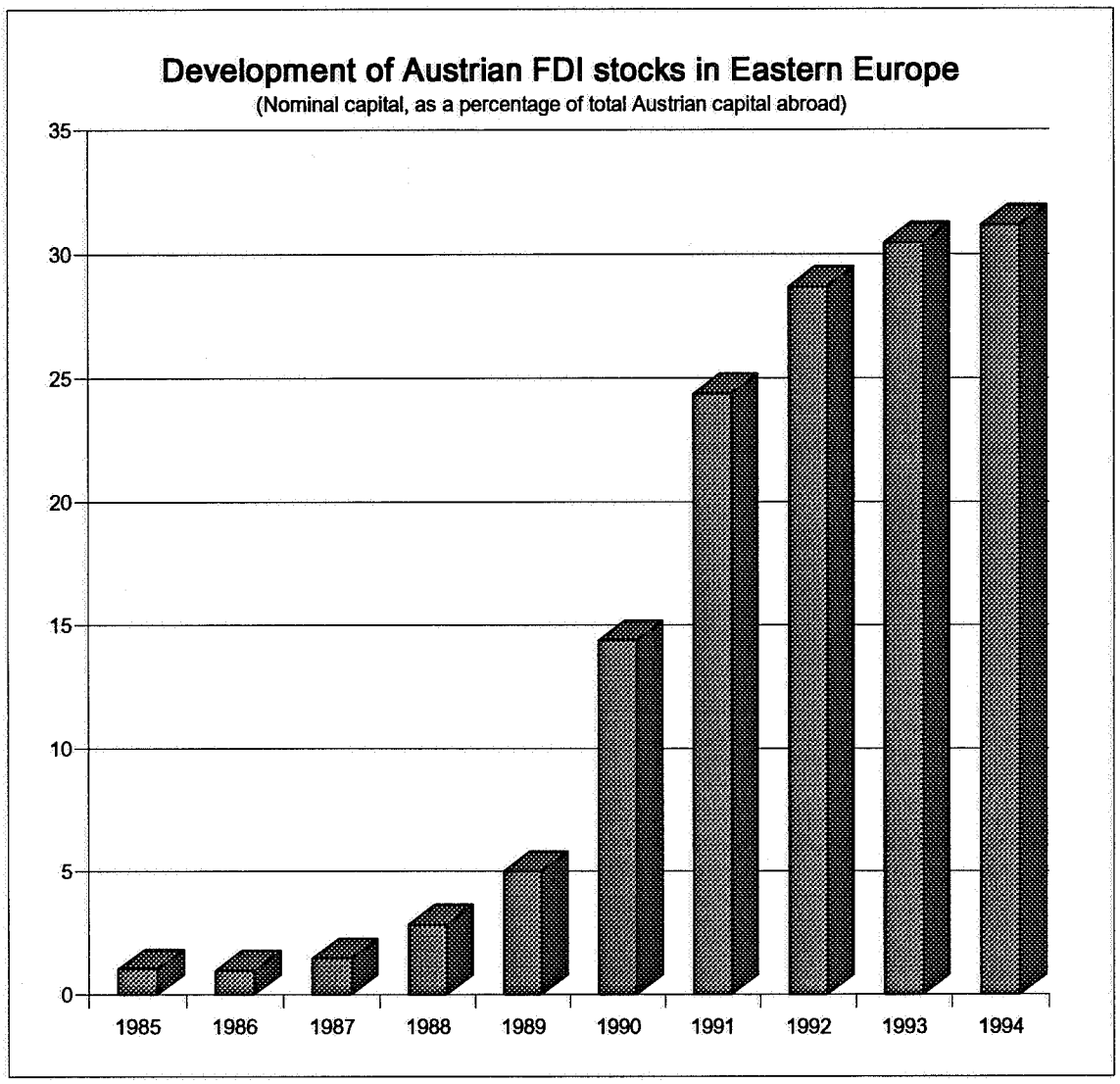
[15] For further discussion of these issues, see EMERSON et al. (1992).

Chart 1



Source: Until 1991: BELLAK (1995), 1992-1994: BUSCH et al. (1995).

KRUGMAN (1991) also views EOS (a function of the size of firms) as an important factor to concentrate economic activity in specific areas, while higher transport costs aid decentralization of production. GROSSMAN/HELPMAN (1993) derive some kind of a "convergence effect" from trade: as a vehicle for the diffusion of knowledge, it ensures that reseach contributes internationally to the stock of knowledge capital, compared to a situation where all information is preserved locally. However, the GROSSMAN/HELPMAN model also provides for a dynamic "divergence effect": trade liberalization between differently endowed economies induces labour-rich countries to shift production from high-technology goods to traditional goods, thus dampening the long-run growth potential.

Based on such considerations, the transformation of Eastern Europe is envisaged here to result in the following *convergence pattern:* In the early phases of transition, when some of the old production technologies become obsolete and average income declines, RICARDO trade (driven be different technologies) as well as HECKSCHER/ OHLIN trade (driven by different factor endowments) largely explain the trade flows with the West. As transformation proceeds and income growth resumes, KRUGMAN-type trade (EOS and product differentiation) as well as GROSSMAN/HELPMAN trade (technological spillovers) are likely to gain in importance.[16]

The *empirical results for Austria* of AIGINGER et al.(1994) seem to confirm such a development, as Austria has lost competitiveness in R&D industries pointing to a catch-up process of the Visegrad countries concerning more sophisticated products.

The experience of Austria also shows that consecutive movements of ever closer *integration into the Common Market* have resulted in a step by step reorientation of trade flows and structures and, above all, have pushed GDP growth up relative to EU15 average growth (Chart 2). Between 1960 and 1972, when Austria was excluded from EC integration, trade diversion dampened GDP growth in Austria by some 0.12 per cent p.a. which was three times higher than the positive effect of intra-EFTA integration. In the period of 1973 to 1991, Austria profited from the association agreements between the extended EC and the remaining EFTA countries:[17] ad-

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[16] A similar convergence pattern is also developed by LANDESMANN (1995), though he finds it premature to already strike a balance between catching-up and falling-behind forces.

[17] Free trade for manufactured products had already been achieved by 1984.

ditional growth attributable to this movement amounted to 0.24 per cent p.a. (BREUSS 1992).

Chart 2: Austria's Cumulative Growth Differential vis-à-vis EU15

In the period since, Austria has been subject to a series of further integration steps: The completion of the internal market (beginning of 1993), the start of the European Economic Area (EEA) one year later, and the accession to the EU as a Member state (beginning of 1995). The belated entry into force of the EEA cost Austria 0.3 per cent of potential gains in GDP growth in 1993 (BREUSS 1995, SCHEBESCH/WÖRGÖTTER 1995). Full membership gains (as compared with an EEA scenario) are estimated at 0.46 per cent p.a. for the period up to the year 2000 (WIFO 1994).

Following the opening up of Eastern Europe in 1989, Austria, due to her substantial trade gains in this region, has been able to maintain a positive growth differental vis-à-vis the EU15 as a whole. The dynamics of this trade were interrupted when the "Europe Agreements" between the EU and CEECs went into force, and part of Austria's trade became discriminated. The trade diversion resulting from these agreements caused Austria losses of export market shares in CEECs both in 1992 and 1993.[18] The expected Austrian gains from EU membership may partly be attributed to the ending of this discrimination.

5. Concluding Remarks

The paper has attempted to shed light on the prevailing economic links between Austria and her neighbours of Central and Eastern Europe. It was shown that, in spite of the still existing economic differences and disparities, Austria and her neighbouring countries in the East (CEE4) could, in the not too distant future, approach some form of an "economic area" as circumscribed above.

Since the opening up of the CEE4 economies to market forces, trade with Austria as well as Austrian FDI in these countries have increased exceptionally and have revived traditional links. On the other hand, the EU has become the major trading partner of CEECs

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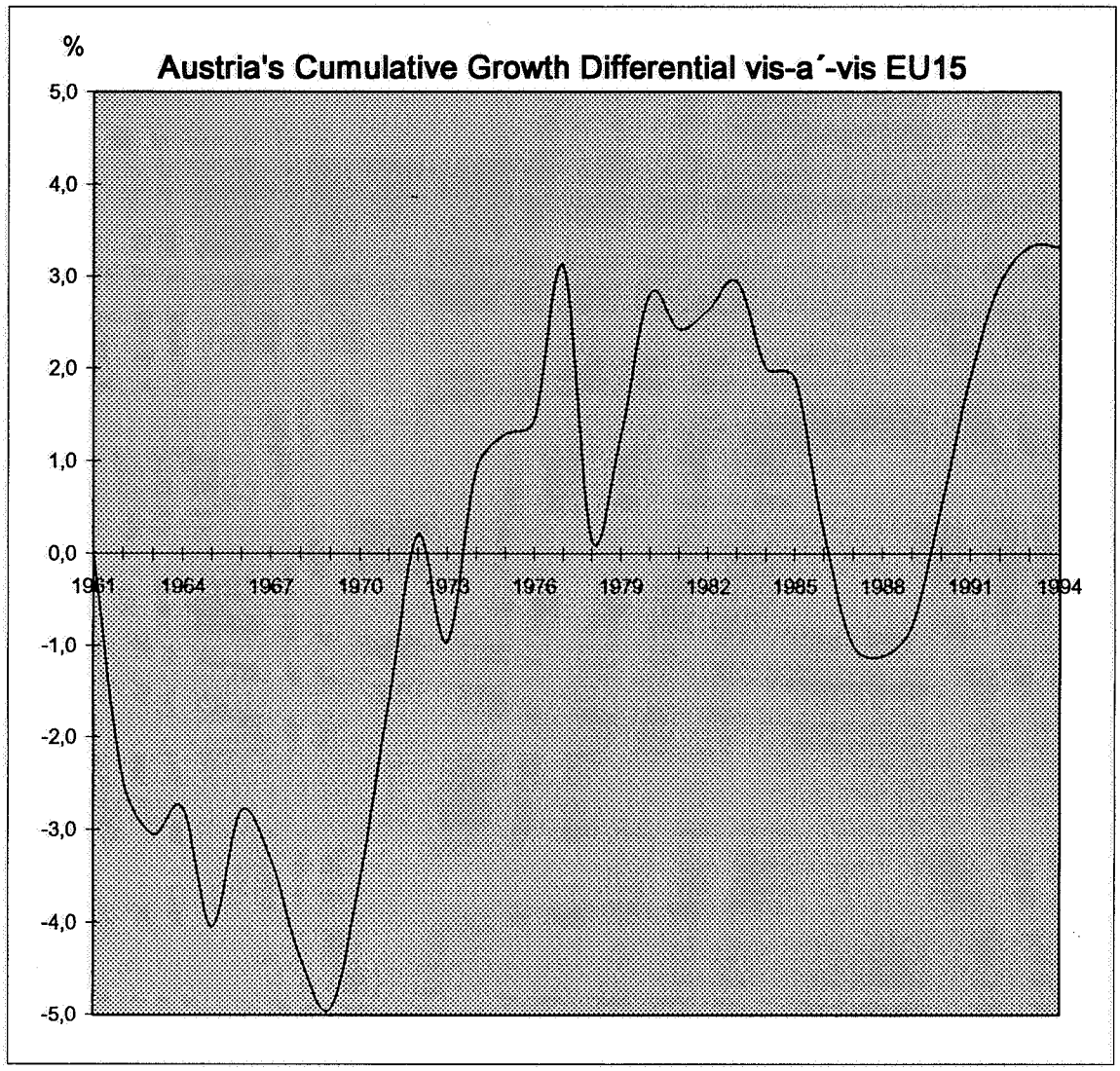
[18] STANKOVSKY (1994) reckons that Austrian exports equivalent to 1 per cent of GDP were seriously affected by these agreements.

Chart 2



Source: FELDERER et al. (1995) and own calculations.

and, consequently, they devote absolute priority to further integration into the EU.

However, several problems arise: The countries considered remain heterogenous in their economic structures, and convergence is unlikely to be achieved for many years raising the question whether the CEECs are already apt for full scale integration into the EU. From an Austrian perspective the neighbouring countries and also Poland seem to be natural candidates for the first round of Eastern enlargement. However, as not even the former CSFR was viewed a sustainable optimal currency area, the accession to the European Monetary Union (EMU) seems far off.

Economic integration has been one of the cornerstones of Austrian economic policy in the last decades. Growth-enhancing effects of integrating markets through trade liberalization (static effects) and integration-induced higher investment and capital accumulation (dynamic, endogeneous effects) were shown to have been substantial. Taking into account the intensity of Austrian economic relations with CEECs, Austria has to be vitally interested not only in ever tighter integrating Western European markets but also in the continuation of the integration process of the EU with Central and Eastern Europe.

Within the EU, given the political will to commence with EMU as early as possible, the speed of integration may not abate soon. This can aggravate the chances for convergence of CEECs. Additional political and economic measures will thus be required to narrow the economic gap between East and West. Only then will both regions benefit in an optimal way from the growth of intraindustry trade as enhanced economic integration is likely to facilitate the intra-European division of labour. Likewise, extending internal market conditions to CEECs would reduce economic uncertainty, thus fostering investment and improving the allocation of entrepreneurial know-how.

The "bilateral" character of the Europe Agreements has hampered the optimal allocation of resources in Europe and has kept CEECs from exploiting their comparative advantages. As far as Austria is concerned, this discrimination ended with EU membership which can thus be seen as a catalyst for further intensification of economic relations in Central and Eastern Europe. Given the importance of economic relations between Austria and CEECs, they have probably been hurt even more than Austria.

Nevertheless, a truly "multilateral" European trading system has not yet been accomplished and should rank high on the economic policy agenda. In this respect, the European Economic Area could serve as a conceptual model allowing to reap most of the economic benefits of integration without the economic and political problems associated with immediate full membership of CEECs.

A controversial issue has been whether it would be reasonable for CEECs to form a multilateral group of potential accession countries in order to represent a single negotiating partner for the Community. On the other hand, it has been argued that because of their heterogeneity it would seem easier to incorporate them into the EU in more than one step, as emphatically suggested by BALDWIN (1994).[19] This holds all the more as the EU seems quite hesitant to have its budget wrecked by enormous transfers to the East.[20]

To facilitate convergence, the CEECs would be well advised to revive some of the traditional trade links among themselves. They should recognize the necessity of intraregional integration as a strategic complement to wider European integration. In such a regionally differentiated integration scenario much will depend on the future development of the Central Economic Free Trade Area (CEFTA). The planned accession of Slovenia to CEFTA at the beginning of 1996 is an important step in this direction.

What is Austria's potential role in this process? Besides her current political and economic "bridgehead function" between the EU and the neighbouring countries in the East, Austria could in the long run serve as an economic gravity center along the lines envisaged by HOCHREITER (1993): "At such a time (i.e. when CEECs have caught up economically) it will be more appropriate to see Austria as a hub, i.e. a regional center from which rays of economic activity spread to similarly developed areas." The geographical location of Austria in the heart of Europe, her close historical ties and intense economic relation with the other countries of the region make Austria an obvious candidate for the role of a "central point of interest" in Central Europe.

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[19] The consequences of low-income countries joining the EU all at once are evidently visable in the German Neue Bundesländer.

[20] Low per capita incomes and large agricultural sectors would under current rules necessitate transfers estimated by Baldwin for the CEE4 countries plus Poland at 11.9 bn ECU per year which amounts to one fifth of EU total budgetary outlays.

In order to earn this position and to fully participate in the exploitation of the huge growth potential offered by the catch-up process of the transition economies, it will be inevitable for Austria to play an active role in the ongoing formulation of EU-policy towards CEECs. Likewise, Austria has to further invest in her (transport, telecommunications, energy,...) infrastructure to foster an efficient and frictionless integration of markets.

All this should be embedded in a new and innovative approach towards future cooperation within the region with the aim of creating a prosperous and highly integrated zone of economic activity in the center of the continent ("Economic Area Central Europe"). Only such a symbiotic relationship with equal inputs from all partners in the west and in the east will be considered mutually beneficial and therefore sustainable in the long run.

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