The Effects of the EU's Eastern European Enlargement on Austria – Austria's Specific Position

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1 Introduction

Austria, a relatively small and open economy, feels the effects of regional integration more than the majority of other countries. Furthermore, Austria is currently facing the overlapping effects of several integration steps: the consequences of the opening up of Eastern Europe, of Austria's own accession to the European Union, of GATT liberalization and finally of other forms of globalization. The coming Eastern enlargement of the European Union is thus but one further step in this process. Nonetheless, it ranks prominently in the economic and political discussion in Austria. And indeed, after accession to the EU and the adoption of the common currency, this issue is likely to be the among the most important (institutional) determinants of Austria's economic development in the next decades.

This contribution provides a survey of the current stage of discussion in applied economics of the effects of the EU's Eastern enlargement on Austria. Notwithstanding many differences in methods and results, there is general agreement that the effects of this Eastern enlargement upon Austria would be largely positive in the long run, both according to economic theory and to applied analyses. The integration of the CEECs into the EU will allow resources to be allocated more efficiently both in Austria and in the CEECs. However, the reallocation of resources may cause short-term adjustment costs.

Trade liberalization between incumbent and new members is generally expected to be the most important channel of integration effects. The possible volume and the possible effects of migration (both on the CEECs and Austria) are hard to predict precisely. What is certain, though, is that foreign direct investment will contribute significantly to the catching up of the CEECs. Austria has a specific position in the process of Eastern enlargement of the EU. On the one hand, Austria can gain more than the other EU countries in the long run. On the other hand, adjustment costs, which are directly associated with integration gains, may also be higher in Austria than in other countries in the short run.

The following section of this article deals with the implication of economic theories of regional integration. Section 3 lists the available estimates of the overall effects the EU's Eastern enlargement will have on the CEECs and the Union as a whole. Section 4 describes the overall effects upon Austria. Section 5 reviews the issues of migration and of the effects of EU enlargement upon the various Austrian regions. Some conclusions are drawn in the final section.

2 Survey of Integration Effects

2.1 Theory of Regional Integration

Beside the issue of adjustment costs, we can relate the gains from the reduction of trade costs to lost tariff revenues or long-run growth gains to consumption reduction at the early stage of the integration process. Similarly, the welfare implications of increased competition could be outweighed by

1 *The authors gratefully acknowledge valuable comments by Wilfried Altzinger, Doris Ritzberger-Grünwald, Peter Backé, Franz Schardax and Cezary Wójcik.*

a possible waste of resources if newly entering firms have to make significant fixed cost investments. Despite this trade-off, there is nearly a uniform view that trade liberalization and the creation of free trade areas have largely positive welfare effects.

The current development of integration theory distinguishes between the *static effects* (also called *allocation effects*) and the *dynamic effects* of integration (see Baldwin, 1993; and Baldwin and Venables, 1995). The former are defined as effects which lead to more output from the same amount of broadly defined inputs. Dynamic effects are defined as those that influence the accumulation of broadly defined production factors.

2.1.1 Static Effects of Integration

The analysis of the static effects of integration concentrates on the trade creation and trade diversion effects of a customs union, which were originally introduced by Viner (1950). *Trade creation* refers to the replacement of domestic products by imports at lower import prices after the reduction (the abolishment) of tariffs in a customs union. Where trade creation forces countries to allocate resources more efficiently, according to their comparative advantage, it is welfare increasing. *Trade diversion* occurs when discriminatory tariff liberalization leads to the replacement of imports from a third country not participating in a customs union by purchases from less efficient producers within the customs union, whose products are less expensive after the reduction by tariffs than those of the most efficient producers outside the customs union. Therefore, the loss of tariff revenues leads to welfare losses if the trade diversion effect exceeds the trade creation effect.

The trade-off between trade creation and trade diversion has attracted a lot of attention in economic research and applied analysis on regional integration. This discussion (see for example Gandolfo, 1987) has concluded that the trade creation effect is likely to be high if the countries are important trading partners already before a customs union is formed. Such groups of countries are often called "natural" trading partners. In turn, trade diversion might be significant if some countries of a regional group are not included in a newly formed or enlarged customs union.

However, current research stresses that this approach is no longer fully appropriate for the current analysis of European integration. Breuss (1999) points out that European integration (including the Eastern enlargement of the EU) concentrates on the reduction of nontariff barriers. Nontariff barriers only waste available resources. Therefore, the reduction of those trade barriers is welfare increasing in any case. Kohler (1999) adds the point that tariff revenues are part of the EU's budget. Thus, the reduction of tariff revenues will not necessarily cause negative welfare effects in national states.

Nevertheless, the traditional issues of trade creation and trade diversion may be used to explain the pattern of the EU's Eastern enlargement. Despite the recent decision of the European Commission to start membership negotiations with all associated countries, Eastern enlargement is likely to occur in "waves" of enlargement. The Central and Eastern European countries located along the frontier of the EU-15 are generally expected to participate

in the first wave of the enlargement, while more distant countries will most likely follow in later waves. From the point of view of trade creation and trade diversion effects, it would be preferable if the waves of enlargement corresponded to the geographical regions in Central and Eastern Europe; otherwise, the accession of only a few CEECs could have adverse effects on the so-called left-outs.[1])

Under the small open economy assumption, the formation of a free trade area does not change supply prices. Then, static effects of integration consist only of trade creation and trade diversion effects. In turn, the increased demand for products within the customs union following tariff reduction could increase producer prices *(terms-of-trade effect).* These adverse price changes could be strengthened by the reductions of export subsidies. Kohler (1999) argues that Austria is likely to face terms-of-trade deterioration because possible demand effects in the EU are larger than those in the CEECs.

2.1.2 Dynamic Effects of Integration

The new trade theory concentrates on the dynamic effects of regional integration. Increasing returns to scale enable a reduction of average costs through increased sales to integrated markets *(scale effect).* The consumers also gain from the larger number of product varieties in enlarged markets *(variety effect).* Smith and Venables (1988) show that the reduction of trade barriers is likely to result in more competitive pricing under imperfect competition *(full market integration).*

Last but not least, regional integration affects factor prices, including the rate of return on capital. This should lead to increased investment and inflows of foreign direct investment *(accumulation effect).* In the case of constant returns to scale and the capital elasticity of the production function of one third as estimated for a broader set of countries, the total effects (including the capital accumulation effect) could be higher by a factor of 1.4 as estimated by Baldwin (1993). This factor is even higher for increasing returns to scale.

Baldwin (1993) shows that Spain experienced increased investment after its accession to the European Community. By contrast, EFTA countries suffered under the outflow of capital in the late 1980s when the EC became more integrated than EFTA. Fidrmuc and Pichelmann (1999) find increased inflows of foreign direct investment to Austria after accession to the EU in 1995. Some Central European countries are currently also experiencing a huge inflow of foreign direct investment (see Fidrmuc and Schardax, 1999).

The disparity in the economic size between the EU and the acceding countries is expected to result in a similar disparity of effects on both regions. On the one hand, CEECs are likely to gain more from East-West integration than the EU because the single market of the EU is larger than that of the individual CEECs. This causes a higher trade creation effect for

1 *See Fidrmuc (1999) for an analysis of the exclusion of Slovakia from the first wave of Eastern enlargement of the EU.*

CEECs than for their EU counterparts. More importantly, CEECs can also gain more through the dynamic effects (through access to new technologies, inflows of capital from other regions and the like). On the other hand, the CEECs will also face high adjustment costs, including those involved in the adoption of the body of EU laws, the *acquis communautaire*. By contrast to the CEECs, the EU could mainly gain from increased competition from the less expensive producers in CEECs.

However, the integration effects could be more important for Austria than for the other EU countries. First, Austria has the most intense trade relations with the first-wave CEECs within the EU. Therefore, trade creation effects may play a more important role for Austria's economy, which is also relatively more open than other EU countries. Second, the enlargement of the EU's market provides more opportunities to Austria, which is located directly at the EU's border with the CEECs. Austria is also likely to experience a surge of foreign direct investment oriented to the CEECs. After the Eastern enlargement of the EU, Austria stands to benefit more from its central location in Central Europe, while it currently suffers from its peripheral location within the EU.

The progress in theoretical research on economic integration has increased the expectations placed on the applied analyses. However, many effects cannot be estimated on the basis of the available data. Therefore, the application of a computable general equilibrium model (CGEM) dominates the recent discussion of integration effects. Alternatively, the aggregate effects of integration on basic macroeconomic variables are estimated by a macroeconomic model (MEM), which is obviously constructed for forecasting purposes. The major drawback of both approaches is that they apply the structure of an economy as estimated or calibrated for past periods to the future. This critique is especially important for assessments of policy actions that fundamentally change the structure of the economy.

Both methods have several advantages and disadvantages. The computable general equilibrium models provide a theoretically consistent analysis of integration effects in the long run. However, many parameters have to be inserted into the model without any sound (country-specific) econometric estimations. The results of a CGEM cannot be directly compared to macroeconomic data (welfare implications versus GDP deviations). Usually, only long-run comparisons of steady states corresponding to different scenarios are available with no or only little, and not very reliable, information about short-term developments.

By contrast, MEMs usually provide a sound forecast of integration effects in the medium run. As far as these models are obviously used for medium-term forecasts, an alternative scenario is available already prior to the simulations. These models also show short-term developments. Most importantly, we can test which effects are statistically significant by applying econometric methods. Finally, macroeconomic models may be constructed in such a way that they incorporate many aspects of microeconomic theory (forward-looking expectations, etc.). As a matter of fact, many authors try to find a compromise between both methods. For example, Allen, Gasiorek and Smith (1998) estimate the competition effects of the EC-12's industry. Then

they use these parameters in a CGEM to show the total impact of the single market in the long run.

2.2 Budgetary and Adjustment Costs

From the perspective of economic theory, the effects of regional integration are ambiguous. The positive trade creation, accumulation and competition effects have to be related to the negative costs of trade diversion, increased investment, and postponed consumption. Nevertheless, it is generally expected that trade liberalization is welfare increasing in the long run. This should be especially true for East-West integration, which will remove an artificial division of the European continent into two political and economic blocks.

Thus, the current discussion on the EU's Eastern enlargement takes into account the size rather than the character of economic effects. In particular, the total effects of the EU's Eastern enlargement are discussed in terms of the expected increase of budget expenditures, considering that the new members are likely to be net recipients from the EU budget. However, we should keep in mind that, first, this budgetary burden is not a part of the integration effects but of the distributional policy of the EU. Therefore, the transfers from the EU budget to the acceding countries will depend on the currently discussed institutional reform in the EU.

Second, the positive integration gains cannot be used directly to compensate the increased budgetary burden. The gains from the EU's Eastern enlargement will accrue to firms and consumers in the long run, while the European Commission will need to cope with the new burden on the EU budget mainly in the short run. This results in complex fiscal policy issues.

Kohler (1999) lists several forecasts of the additional budgetary burden of new Member States on the EU. Baldwin, Francois and Portes estimate budgetary transfers to the CEE-7 at between 0.111% and 0.211% of the EU's GDP. Breuss and Schebeck (1996) estimate a similar additional fiscal burden at 0.184% of GDP. The European Commission (1999) forecasts that the new Member States will receive an equivalent of 0.113% of the EU's GDP between 2000 and 2006.

Furthermore, Kohler (1999) compares how various changes of the EU budget will affect the individual countries. Given Breuss' and Schebeck's (1996) total estimate of 0.184% of the EU's GDP on average, Austria is likely to contribute slightly above the average (0.191% of Austrian GDP) if the EU's Eastern enlargement is financed by a simple increase of contributions. This reflects that Austria is a net payer to the EU budget. By contrast, Austria would contribute slightly below the EU's average to the budgetary costs of the EU's Eastern enlargement (0.133% of GDP) if the new budgetary transfers to the CEECs are financed by reducing agricultural subsidies. Finally, a reduction of structural funds would entail nearly no additional costs for Austria (0.071% of Austrian GDP).

Furthermore, Austria may be adversely affected by potentially high adjustment costs. In the short run, certain sectors stand to gain from trade liberalization, while other sectors will lose, as domestic producers are likely

to move their production towards sectors with higher efficiency according to factor endowments. Although this reallocation of production leads to higher income and also to lower prices in participating countries, the welfare-improving effects are valid only under the assumption of full sectoral mobility of factors.

Intraindustry trade, that is, trade in similar (differentiated or homogeneous) products, is generally seen to indicate relatively low adjustment costs during trade liberalization (see Hamilton and Kniest, 1991). Fidrmuc, Grozea-Helmenstein and Wörgötter (1999) demonstrate that the share of intraindustry trade in the trade of the CEECs with the European Union (computed for three-digit SITC commodity groups) has increased significantly since the opening up of Eastern Europe. However, the so-called vertical intraindustry trade (that is trade in products of different quality levels) could be responsible for a significant part of intraindustry trade between the EU and the CEECs. Aturupane, Djankov and Hoekman (1999) show that, first, the share of intraindustry trade remained relatively stable (as computed for six-digit CN products) between 1990 and 1995, and, second, that a substantial part of two-way trade between transition countries and the European Union was attributed to vertical intraindustry trade. Fidrmuc, Grozea-Helmenstein and Wörgötter (1999) also show that the intraindustry trade of selected EU countries with the CEECs differs significantly from the pattern of intraindustry trade within the European Union. The high share of vertical intraindustry trade in the EU's trade with the CEECs indicates that the adjustment costs are likely to play an important role during the accession of the CEECs to the European Union.

As far as the adjustment costs are directly related to the allocation effects of integration, it can be expected that Austria will be hit more by short-term adjustment problems than other countries. However, it is difficult to assess short-term developments, although there is a general belief that the EU's Eastern enlargement can be directly compared to the opening up of Eastern Europe at the beginning of the 1990s. Although this approach is not incorrect in general, it is completely misleading for the analysis of the adjustment costs. The shocks after the opening up of Eastern Europe consisted of two parts: On the one hand, the level of economic relations between East and West jumped from an artificially low level to its "normal" state. According to gravity models, Holzmann, Petz and Thimann (1994) estimate the growth of Austrian imports from CEECs at nearly 70%. Contrary to the development at the beginning of the 1990s, Breuss and Egger (1999) and Fidrmuc, Huber and Michalek (2000) argue that, given the Europe Agreements, the trade between Austria or the EU and the CEECs has already reached the "normal" level as predicted by gravity models. On the other hand, the reduction of trade barriers has also promoted trade between Austria and the CEECs since the opening up of Eastern Europe, but this effect was less important than the return of trade relations to a normal level. Only the second effect may be extrapolated on the EU's Eastern enlargement. In practice, however, it is nearly impossible to separate these two effects.

3 The Effects of the EU's Eastern Enlargement on Austria's Major Trading Partners

Eastern enlargement is the next ambitious integration step of the Union, which will decisively change the division of labor in Europe. However, the previous section showed that the effects of enlargement will concentrate on the acceding countries. CEECs will gain through the access to the large market of the EU. Because the EU's single market is a large market, both the static and the dynamic effects of integration may be significant in the CEECs. In turn, the CEECs represent relatively small markets for the incumbent EU countries. Hence, the positive effects on the current Member States will be much lower, and, in the short run, the direct demand effects will be most important.

Therefore, this section reviews the available analyses of the effects of the EU's Eastern enlargement on Austria's major trading partners (the CEECs and the EU). This comparison is summarized in table 1. Growth gains in these regions may be directly translated to export opportunities for Austrian firms. Breuss (1999) argues that, in general, we can expect a demand elasticity of exports of about 2. That means that 1 percentage point of additional output growth in the CEECs or in the EU should increase Austrian exports by two percentage points. These effects will be analyzed further in the next section.

3.1 The Effects of the EU's Eastern Enlargement on the CEECs

Turning to the economic consequences of the integration of Eastern Europe into the European Union, there is substantial evidence that in the long run integration will have small positive effects on the 15 Member States and large positive effects on the Central and Eastern European countries.

The Austrian Institute of Economic Research in Vienna (WIFO) in cooperation with the International Institute for Applied System Analysis in Laxenburg (IIASA) initiated a cooperation of several country experts on the CEE-5 (see Gacs, 1999) on the so-called Preparity Project. The methodology of these country studies differs from case to case. Nevertheless, all authors used the same international framework assuming that the CEE-5 will join the EU in 2004.

Rosati (1999) and Gacs (2000) use a simple macroeconomic model based on the export-led growth hypothesis. Aggregate output is forecast as a function of exports, which follow the development of the exogenous imports of the European Union. Fidrmuc and Fidrmuc (2000 a and 2000 b) solve the problems caused by the shortness of the macroeconomic time series in the Czech Republic and Slovakia after the dissolution of the former Czechoslovak federation by estimating panel data investment and consumption functions for all CEE-7 countries. The estimated parameters were used to forecast these two major components of GDP in both countries, while public consumption was driven exogenously. The trade balance is assumed to converge to zero in both scenarios; this adjustment would be faster in the non-accession scenario. Strmsnik et al. (2000) modeled parts of the Slovene accession to the Union by macroeconomic tools as well as by computable equilibrium analyses.

Despite many methodical differences, the Preparity Project provides a consistent and broad view of gains from the EU's Eastern enlargement in the CEECs. The various forecasts using different simulation methods expect GDP growth gains of between 4% and 6% in the long run in the accession scenario.[1]) Thus, the CEECs could gain about half a percentage point of GDP growth annually in the first decade after transition. Furthermore, a high share of this growth gain is likely to be absorbed already in the first years (let us assume the first five years) after the accession; therefore, the expected effects could likely increase the aggregate output in the new Member States by about 1 percentage point immediately after accession. Similar results are derived by other simulations of the effects of the EU's Eastern enlargement on CEECs (see Sujan and Sujanova, 1999; and Welfe et al., 1997).

Only Slovene forecasts exceed these figures significantly. Strmsnik et al. (2000) expects long-term growth gains of above 18%. However, the study does not seem to be too optimistic in the accession scenario, given the authors' forecast growth of a relatively moderate 5.0% on an annual average between 2001 and 2010. Rather, the Slovene study foresees more problems in the nonenlargement scenario. The authors' expectations of average annual growth of only slightly above 3% are significantly lower than those for other CEECs.

Baldwin, Francois and Portes (1997) simulated the economic effects of Eastern enlargement on the European Union by seven associated countries (excluding the Baltic states). Their computable general model consists of nine regions (CEE-7, EU-15, EFTA-3, the former Soviet Union, NAFTA, Asia-Pacific, North Africa and Middle East, Sub-Saharan Africa, and the rest of the world) and 13 sectors. In 7 of the sectors (textiles, nonferrous metals, iron and steel, chemicals, metal products, transport equipment, and other machinery), scale economies and imperfect competition (Dixit-Stiglitz monopolistic competition model with differentiated products) are assumed, while the other sectors (agriculture, mining, foods, apparel, other manufactures and services) are characterized by perfect competition and constant returns to scale.

The enlargement of the EU is simulated by following policy changes:

– elimination of tariffs and quantitative restrictions on all trade between the CEECs and the EU (including agriculture), simulated as a 10% reduction in the real cost of trade between the CEECs and the EU; and
– adoption of the EU's common external tariffs, which are generally more liberal than the CEECs' current tariffs against non-Western imports.

This set of assumptions has been generally accepted as a reference point for the technical modeling of the EU's Eastern enlargement. Many other studies define their scenarios in the same way. In addition, Baldwin, Francois and Portes (1997) discuss the effects of increased investment in the CEECs, which is modeled by two other assumptions in what is referred to as the less conservative scenario:

1 *In macroeconomic models, the "long run" obviously refers to a horizon of about ten years, of which, however, only a subperiod (about five years) is forecast after the accession. In computable general equilibrium models, in turn, the long-run effects are computed for an infinite time horizon.*

– a risk premium effect, that is, a reduction of the interest rate by 0.45 percentage points, and
– an upward shift in the capital demand curve caused, for example, by the expansion of the market for capital-intensive products (according to Neven, 1995, CEECs are expected to concentrate on capital and simultaneously on labor-intensive products in the EU).

According to the conservative scenario (assuming only trade effects), the CEECs will gain "only" 1.5% of real output growth in the long run. Thus, trade liberalization alone can hardly help the CEECs to catch up with the welfare level of the current EU Member States. Conversely, Baldwin, Francois and Portes (1997) present a very optimistic development in the less conservative scenario. Both the reduction of the risk premium and the upward shift of the capital demand curve cause the capital stock to increase by 68%. Consequently, real output will increase by 18.8% in the CEECs in the long run.

Neck, Haber and McKibbin (2000) look at the robustness of the results of Baldwin, Francois and Portes. Like the authors of the latter study, they assume a reduction of the interest premium by a total of 0.5 percentage point as compared to the baseline scenario. In addition, Neck, Haber and McKibbin assume that total productivity will improve by 1.0 percentage point. However, this relatively moderate productivity improvement cannot be directly compared to the massive investment expansion in the less conservative scenario of the previous study. Neck et al. analyze the impact of both productivity and interest rate shocks separately and together. The authors expect the enlargement of the EU to occur by 2006, but the shocks are introduced already from 2003 onward in annual steps.

In their study, Neck, Haber and McKibbin use a computable general model of the world economy, which allows a comparably detailed look at spillover among the regions (U.S.A., Japan, Germany, UK, France, Italy, Austria, the rest of the EU, the CEECs, the former Soviet Union, and two blocks of developing countries). The CGEM is based on a mixture of microeconomic and macroeconomic considerations. Thus, the authors foresee both intertemporarily optimizing economic actors with rational expectations and rigidities on the labor market leading to periods of unemployment.

According to Neck, Haber and McKibbin, the reduction of the risk premium by 0.5% alone increases the long-term growth of CEECs by only 0.15%. To some extent, this contradicts the less conservative scenario as presented by Baldwin, Francois and Portes (1997). A possible explanation is that the difference has to be attributed mainly to a larger inflow of foreign direct investment (the upward shift of capital demand), which was emphasized more in the results of Baldwin et al.

The relatively slow process of catching up in the CEECs is driven by productivity growth. The improvement of total factor productivity together with the reduction of the risk premium allows the CEECs to increase long-run aggregate output by 1.6%. This result corresponds to the main scenario in the simulations by Baldwin, Francois and Portes (1997).

Piazolo (2000) adopts a relatively restrictive assumption for simulations of Poland's accession to the EU in a Ramsey-type dynamic CGEM. He

assumes a reduction of real trade costs by a comparatively low 1.3% and an additional reduction of technical barriers to trade by 0.8% on average for total trade. More obviously, the scenarios of the EU accession of Poland are accompanied by a reduction of tariffs by half and, according to Baldwin, Francois, and Portes (1997), by a net annual transfer from the EU budget of 1.5% of Polish GDP. The effects on Poland of the accession to the EU are driven mainly by the increased transfers. The consumption, which is used by the author to proxy the development of aggregate income, increases by above 12% in the scenario assuming only the change of net transfers. All in all, Polish consumption, standing for aggregate income, could increase by 17.5% in the long run.

However, Piazolo (2000) shows that the welfare effects are much smaller due to high investment (increase by 37.6% in the long run) which has to be made at the beginning of the EU accession. Overall, the welfare gains are only 0.8% in the long run. Thus, the welfare implications are even smaller than the transfers from the European Union. This documents nicely that, due to necessary adjustment costs during the accession to the EU, the welfare effects of the EU's enlargement on the CEECs may be relatively moderate despite the relatively high simulated income effects.

Table 1

The Effects of Eastern Enlargement on Selected Countries

(Long-Term Effects as Percentage Deviation of GDP Compared to the Nonenlargement Scenario)

Country/Region	Method	Output Gain	Source
Eastern Europe (CEE-7)	CGEM	1.5[1]), 18.8[2])	Baldwin, Francois and Portes (1997)
Eastern Europe (CEE-7)	CGEM	0.15–1.6	Neck, Haber and McKibbin (2000)
Poland	MEM	10.5	Welfe, Welfe and Florczak (1997)
Poland	MEM	2.4–7.9	Rosati (2000)
Poland	CGEM	17.5[3])	Piazolo (2000)
Hungary	MEM	6.3	Gacs (2000)
Czech Republic	MEM	3.9	Sujan and Sujanova (1999)
Czech R./Slovakia	MEM	5.9	Fidrmuc and Fidrmuc (2000 a, 2000 b)
Slovenia	CGEM, MEM	18.3	Strmsnik et al. (2000)
EU-12			
(industrial output)	CGEM	0.5–0.8	Gasiorek, Smith and Venables (1994)
EU-15	CGEM	0.2	Baldwin, Francois and Portes (1997)
EU-15	Indices, CGEM	0.1[4])	Kohler (1999)
EU-15	CGEM	0.0	Neck, Haber and McKibbin (2000)
Austria	MEM	1.6[5])–1.7[6])	Breuss and Schebeck (1995)
Austria	MEM	1.3	Breuss and Schebeck (1998)
Austria	static CGEM	1.1–3.6	Schneider (1998)
Austria	CGEM	1.4–1.5[7]); 3.6–3.7[8])	Keuschnigg and Kohler (1997)
Austria	CGEM	1.1[5])–1.3[6])	Keuschnigg and Kohler (1999)
Austria	CGEM	0.0	Neck, Haber and McKibbin (2000)

Notes: CGEM – computable general equilibrium model, MEM – macroeconomic model.
[1]) Conservative scenario.
[2]) Less conservative scenario.
[3]) Total income as proxied by consumption. See text for detailed description of assumptions, methodology and results.
[4]) Average of effects on industrial branches.
[5]) Enlargement by five CEECs.
[6]) Enlargement by ten CEECs,
[7]) Baseline scenario assuming various adjustments of contributions to the EU budget.
[8]) Optimistic scenario assuming various adjustments of contributions to the EU budget.

3.2 The Effects of the EU's Eastern Enlargement on the European Union

As a part of the first available assessment of the EU's Eastern enlargement, Gasiorek, Smith and Venables (1994) estimated the impact of the integration of the CEECs (excluding Slovenia) on seven countries/regions in the European Union: France, Germany, Italy, UK, Benelux, Denmark together with Greece, and Ireland with the Iberian countries. The CEECs as well as former EFTA countries and other world regions together constitute the rest of the world. Although this disaggregation is not satisfactory for dealing with East-West integration, the authors applied it for lack of statistical data in other regions.

The integration of CEECs is simulated by a growth of trade according to Hamilton and Winters (1992) projections. Therefore, the authors did not make any explicit assumptions concerning the time schedule and shape of integration (transition periods, timing of waves of enlargement).

Within a general equilibrium framework, intermediate goods and five primary factors are used in production: capital; professional, scientific and related labor; managerial, clerical and other nonmanual labor; skilled manual labor; unskilled manual labor. Capital is assumed to be perfectly mobile internationally and available at a constant price. Although perfect capital mobility is assumed, all labor types are assumed to be internationally immobile (also within the European Union). Therefore, wages have to adjusted to equilibrate supply and demand in each country.

The model contains 13 imperfectly competitive industries, the financial sector and a perfectly competitive composite that is taken as the numéraire. The behavior of the oligopolistic firms in the integration follows Dixit and Stiglitz (1977). National income is the factor income accruing to the five factors, plus the profits of imperfectly competitive firms, and the tariff revenue.

Gasiorek, Smith and Venables (1994) model the effects of the integration of CEECs into the EU in three scenarios. First, the CEECs' exports to the EU-12 were assumed uniformly across countries and sectors according to the Hamilton and Winters (1992) projections of trade between the EU and the CEECs. That implies a total increase of the EU-12's exports to the CEECs by 408% and a corresponding growth of imports from the CEECs by 492%. Second, both exports and imports by EU countries and sectors were increased in the same way as actual trade between 1985 and 1992, while the total growth of the EU's trade was the same as in the first scenario. Finally, the growth rates assumed for France, Germany, Italy and the UK are those predicted by Hamilton and Winters (1992). Where the small EU countries were not listed in that source, their growth rates were set at levels implied by the difference between Hamilton's and Winter's projections of EU trade.

Surprisingly, the effects of all described scenarios are very similar. All sectoral output effects are in the range of $\pm 11\%$, with most effects clustered in the middle of the range. The national effects are reduced if we aggregate them for the EU-12 to a range from -2% to $+5\%$. The nonweighted average growth of industrial production was between 0.5 percentage point (scenario 3) and 0.8 percentage point (scenario 2), with scenario 1 being close to the lower bound of this interval (0.6 percentage point).

Germany faces the most significant sectoral changes; however, no simulations are available for Austria. The role of Germany further increased in the second and the third scenario. The second scenario implies a slightly higher variance of sectoral output change. On the other hand, the effects on the so-called sensitive industries are less important, due to lower-than-average growth of EU imports of textile and steel between 1985 and 1992. The surprisingly low output changes can be attributed to the significant increase of intraindustry trade. Therefore, even high export and import changes imply low output changes by main industries. Moreover, trade between the EU and the CEECs remains low relative to the size of the EU, despite significant growth. Besides, the negative impact on some sectors of the predicted range can be easily absorbed in the relatively long periods generally predicted for the full integration of the CEECs into the European Union.

Last but not least, Gasiorek, Smith and Venables (1994) used the sectoral output changes for the EU countries in the first two scenarios to calculate changes in regional output. The regional effects are based on the assumption that a particular sector expands or contracts at a particular country's rates in all regions of the country. The most striking feature of regional projections of both simulations is that there are no substantial differences between the nationwide development and that of the regions of a particular country. In particular, all German regions show significantly higher output changes than regions in other EU Member States.

According to Baldwin, Francois and Portes (1997), all European regions will gain by the enlargement. Except for the CEECs, the two scenarios do not differ significantly. The countries of the EU-15 will gain 0.2% in both scenarios, the remaining EFTA-3 countries even less (0.1% in both scenarios). Only the countries of the former Soviet Union will perform slightly better in the less conservative scenario (0.6%) than in the conservative scenario (0.3%). In turn, the absolute gain of the European Union is about four times higher than the gain of the CEECs within the conservative scenario. That means that the net costs of enlargement (transfers less benefits) for the incumbent Member States of the EU are negligible. They are estimated at between zero and ECU 8 billion (0.01% of the EU-15's GDP). As Baldwin, Francois, and Portes (1997) note, this cost is extraordinarily low, given the historic nature of the challenge in Central Europe. A small magnitude of the long-run spillovers is also supported by Neck, Haber and McKibbin (2000), who use a similar CGEM and similar assumptions of scenarios.

Kohler (1999) concentrates on the static effects of the EU's Eastern enlargement (including only the first-wave countries). He computes several indices representing the welfare implication of trade creation, trade diversion and the terms-of-trade effect. Then, these effects are compared to the budget burden for the Member States as estimated by Breuss and Schebeck (1996) at 0.184% of the EU-15's GDP on average. However, as the author notes, these indicators are not fully comparable.

Kohler's indices of the static effects of EU's Eastern enlargement confirm relatively small gains for the EU. Furthermore, his estimations underline significant problems related to the distribution of gains and costs of the Eastern enlargement within the EU. In particular, the countries at the southern and

western periphery are likely to lose in the process of East-West integration, while Austria and Germany will turn out to be net winners. This distribution is caused by the concentration of the EU's trade with the CEECs on a few neighboring countries, while the budget costs will be distributed more or less evenly within the EU.

According to Kohler (1999), trade creation effects remain moderate in the EU's Eastern enlargement. Growth gains based only on trade creation are significantly below the budgetary burden of nearly all states. Only in Austria are trade creation effects significantly higher than the costs of Eastern enlargement.

Furthermore, the static effects of the EU's Eastern enlargement are unevenly distributed in the European Union. Therefore, it may be difficult to find a "fair" key to finance the integration of CEECs. For example, Austria and Germany are the net winners of the Eastern enlargement of the EU if the Common Agricultural Policy (CAP) is reduced. If structural subsidies are cut, the net effects are positive also on Sweden. All other Member States have to face net welfare losses. In general, the reduction of the EU budget increases the asymmetry between the gains and the costs of Eastern enlargement.

However, the negative terms-of-trade effect is also heavily concentrated on countries with high trade creation effects. Therefore, the differences within the European Union are slightly reduced if we consider also changes of the terms of trade. Nevertheless, the hierarchy of Member States remains the same.

Kohler (1999) concludes that the trade creation effect is not large enough to provide an economic incentive for the European Union (except for Austria) to integrate the CEECs. However, he argues that the so-called "new" effects based on increased returns to scale, product variety, competition gains and accumulation effects (see section 2.1) are likely to be high enough to provide such enlargement incentives for the majority of EU countries. To test this hypothesis, he first assumes that the ratio between the static and the dynamic effects of integration is constant in all EU countries. Second, he estimates this ratio for Austria, using Kohler and Keuschnigg's (1999) CGEM, which involves both types of integration effects (see below). Finally, he extrapolates the total effects of the EU's Eastern enlargement for current Member States of the EU.

Actually, these results show a much more optimistic picture of East-West integration. Austria is again likely to gain more (about 0.6 percentage point of the long-run welfare gain) than other EU countries, followed by Germany (about 0.2 percentage point). Finland, Sweden, Belgium, Italy and the Netherlands are likely to face small but positive long-run welfare gains, while integration effects and the budgetary burden are nearly balanced in Denmark and the UK. Contrary to this, France, Portugal and Spain could lose slightly, and welfare losses may be dramatic in Greece (welfare reduction by about 0.6 percentage point in the long run) and even more in Ireland (between –0.8 and –1.0 percentage point). All in all, this could result in a slight positive effect for the EU. If we average these effects weighted by GDP in U.S. dollars in 1998, we obtain an overall welfare effect of 0.1 percentage point on the

EU. This result is similar to that of Baldwin, Francois and Portes (1997) if we keep in mind that Kohler (1999) computes welfare gains instead of real output gains.

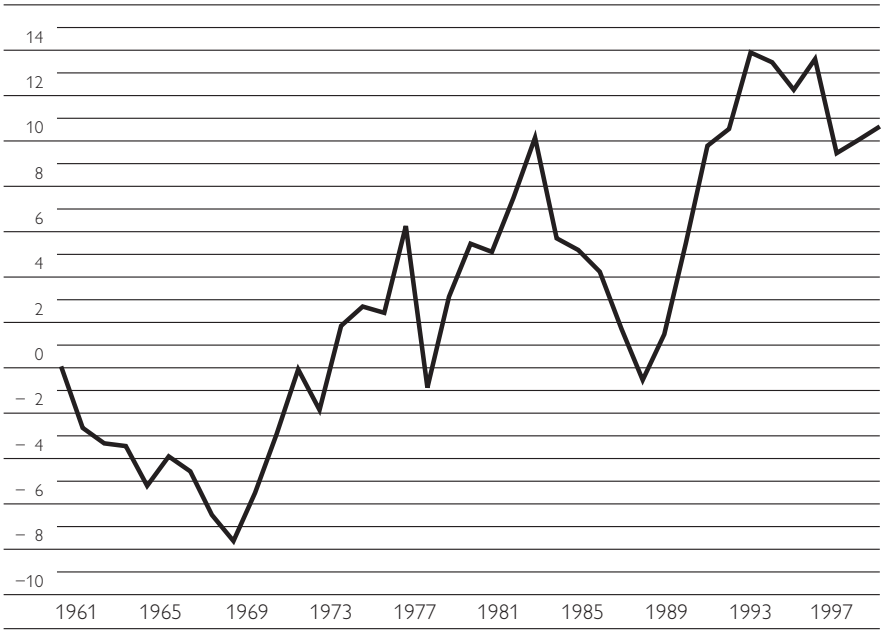
4 The Specific Position of Austria in the Process of the EU's Eastern Enlargement

In 1959, Austria decided to participate in the EFTA, whose integration aims were less ambitious than those of the EU. But several of Austria's major trading partners, among them the two most important trading partners, Germany and Italy, were members of the EU. In addition, other potential trading partners in Central Europe had been forced to curtail trade with the West in favor of trade with the other members of the CMEA. This resulted in significant trade diversion losses until a free trade agreement with the EC was signed in 1972 (see Fidrmuc and Pichelmann, 1999). This enabled Austria to catch up during the 1970s (see chart 1). However, Austria still did not participate fully in European integration, which was one of the reasons for the slowdown in its economy in the early 1980s. This unfavorable position ended with Austria's EU membership on January 1, 1995. As an EU member Austria was also better placed to promote, and profit from, the opening up of Central and Eastern European countries. As a result of both developments, Austrian GDP grew by a total of 14 percentage points more than the average of the 12 former EC countries in the first half of the 1990s, although a reduction of this growth difference was observed again in the following years. Trade with the CEECs can be seen as a significant source of this additional growth. Austria's trade surplus with the four CEECs (the

Chart 1

Cumulated Growth Difference between Austria and the EU-12

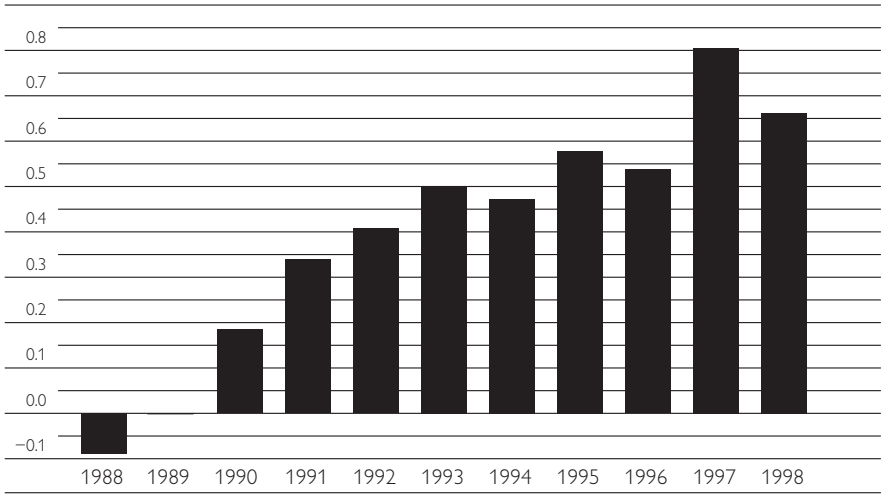
Growth difference in percentage points



Source: OECD.

Chart 2

The Austrian Trade Balance with the CEE-4 as a Share of GDP



Source: Statistics Austria.

Czech Republic, Hungary, Poland and Slovakia) reached about half a percentage point of Austrian GDP in the 1990s (see chart 2).

The macroeconomic development in the past decades shows the immense importance of integration effects on the Austrian economy. After the completion of Austria's accession to the EU and the adoption of the common currency, the EU's Eastern enlargement is likely to be the most important (institutional) determinant of economic development in the next decade(s).

Breuss and Schebeck (1995 and 1998) use the WIFO macroeconomic model of the Austrian economy to assess the impact of the opening of Eastern Europe on Austria as well as simulations of the Eastern enlargement of the EU. For this purpose, the WIFO macroeconomic model was linked with an input-output model used to analyze the sectoral changes of the simulated events. Breuss and Schebeck compare the positive effects with the induced budgetary burden of the EU's Eastern enlargement.

According to Breuss and Schebeck's (1995) backward analyses of the years 1989 to 1994, the economic impact of the opening of Eastern Europe on Austria was clearly positive. Between 1989 and 1994, the difference of GDP growth in comparison to the basic scenario accumulated to 1.3%, leading to an increase in employment by 20,000 persons. In addition, German reunification and migration[1]) led to further growth effects on the Austrian economy. In total, Austrian GDP exceeds the GDP according to the basic scenario by 2.4% between 1989 and 1994.

1 *Migration increases the resources of the target country. Therefore, it is expected to have positive aggregate welfare and output effects in the target country. However, the effects on output per capita in the target country and those on total output in the source and the target country may be ambiguous.*

Keuschnigg and Kohler (1997) see slightly lower effects of the opening up of Eastern Europe accumulating to 0.6% of GDP (comparable to welfare gains by 0.3%) in the long run. The difference between the two studies may be partially explained by the geographical scope of the analysis. Breuss and Schebeck (1995) look at trade with the entire former CMEA area, while Keuschnigg and Kohler consider only ten associated countries. Furthermore, Keuschnigg and Kohler already see the trade liberalization introduced by the Europe Agreements as a part of the accession to the EU.

Breuss and Schebeck (1995) assume that the CEECs might join the EU as early as 2000. This optimism might also be due to technical reasons. The authors use budgetary flows according to Breuss (1995) and available forecasts of WIFO as a basic scenario. The later entrance of CEECs would either need the construction of a model (including the basic scenario) for more than 15 years or it would leave no room for assessing the first years of membership of the CEECs.

Breuss and Schebeck (1995) show that Austria largely stands to gain when its neighbors (the Czech Republic, Hungary, Slovakia, Slovenia) join the European Union. In the long run (from 2000 to 2008), Austrian GDP will increase by 1.5% as compared to the nonenlargement scenario. The accession of Poland further improves the long-run gains to 1.6% in Austria. By contrast, the integration of the five remaining CEECs will leave the results nearly unchanged (1.7%).

Breuss and Schebeck (1998) update their results with respect to the changed discussion of the EU's Eastern enlargement. Most importantly, the authors expect two waves of Eastern enlargement in 2002 and 2007, respectively. Accordingly, they adjust their assumptions on budget implications of the Eastern enlargement. In comparison to their earlier simulations, Breuss and Schebeck (1998) expect slightly lower long-run (from 2002 to 2010) growth gains for Austria (1.3%).

More recently, Keuschnigg and Kohler (1997 and 1999) have analyzed the effects of the Eastern enlargement of the European Union on Austria in a framework of a general equilibrium model with 18 sectors and overlapping generations. Their work continues the authors' previous analysis of Austria's accession to the EU (see Keuschnigg and Kohler, 1996).

The earlier study compares two different scenarios. The baseline scenario assumes that the opening up of Eastern Europe has reduced the real trade costs by 5%. Then, the EU's Eastern enlargement reduces the real trade costs by an additional 5%. For comparison, Keuschnigg and Kohler (1996) assumed that Austria's accession to the EU resulted in a relatively smaller reduction of the real trade costs by 2.5%. In addition, the CEECs have to abolish their tariffs on Austrian products. With those tariffs currently set at 6.5% on average, the CEECs stand to lose more than Austria, whose average tariffs on imports from CEECs are relatively smaller (3%). Furthermore, the abolishment of nontariff barriers in agricultural trade lowers the price of Austrian imports from the CEECs by 23% for farm products and 5% for food products. Finally, the authors consider two possibilities of how to finance the budgetary costs of Eastern enlargement: First, a reduction of the Common Agricultural Policy, implying a reduction

of net contributions to the EU budget by 0.18% of GDP for Austria; and second, a rise in contribution payments by 0.22% of GDP. The optimistic scenario assumes both a larger reduction of the real trade costs (by 10%) and a slightly lower budgetary burden for Austria.

Keuschnigg and Kohler's simulations confirm the positive effects of the Eastern enlargement of the European Union on Austria. The baseline scenario envisages additional long-run GDP growth of 1.4% to 1.5%, while growth gains in the optimistic scenario are almost more than double (3.6% to 3.7%). These effects are clearly larger than the additional budgetary burden for Austria resulting from the Eastern enlargement. Furthermore, the size of this effect does not significantly depend on the shape of the reform of the EU budget.

In addition to the trade-off between positive output effects and the negative budgetary burden, Keuschnigg and Kohler (1997) look at the welfare effects of the EU's Eastern enlargement. This approach takes into account possible welfare losses caused by postponing consumption in order to increase investment during the stages of integration. Nevertheless, the welfare effects still remain positive. The simulated long-run welfare gains are between 0.6% and 0.8% of GDP in the baseline scenario and between 1.9% and 2.2% of GDP in the optimistic scenario.

According to Keuschnigg and Kohler (1997), these effects are significantly higher than the effects of Austria's accession to the EU (simulated long-run gains of 1.6% of GDP or 1.1% welfare gains) or the opening up of Eastern Europe (long-run gains of 0.5% of GDP or 0.3% welfare gains).

Keuschnigg and Kohler (1999) use a set of assumptions similar to those in the less optimistic enlargement scenario of their earlier study. In addition, the authors differentiate between the first-wave countries (the Czech Republic, Estonia, Hungary, Poland, and Slovenia) and the second-wave countries (other associated countries). Therefore, the results are largely comparable to those of the previous paper. The first wave of Eastern enlargement is simulated to increase Austria's long-run GDP by 1.1% (welfare gain of 0.5%). The extension of the Eastern enlargement to all associated countries has similar effects for Austria (including the effects of the enlargement by the first-wave countries): there will be a long-run output gain of 1.3% and a welfare gain of 0.6%.

Like Kohler (1999), Schneider (1998) simulates the static effect of the EU's Eastern enlargement on Austria in a CGEM. Unlike the previous study, the static effects (as computed for long-run real income) could reach 1.1% (under the assumption of flexible real wages, which ensure a full adjustment of the labor market to the new steady state) and 3.6% (fixed real wages) if the CEECs catch up with the EU. This scenario is modeled as an increase of trade between Austria and the CEECs by a factor of five. According to the author, such an increase of the trade volume implies a time horizon up to 2010 or 2020. This trade growth is much higher than Kohler's (1999) assumptions. Under less optimistic assumptions, Schneider's (1998) results are also much lower (real income effects of between 0.1% and 1.7% in the long run).

By contrast, Neck, Haber and McKibbin (2000) find no positive effects of the EU's Eastern enlargement on Austria. However, this is likely to be caused by the authors' formulation of a policy scenario which stresses the role of productivity growth. Unlike in the previous studies, Neck et al. does not assume a reduction of real trade costs. Therefore, trade creation effects and spillovers to the trading partners of the CEECs are insignificant.

5 Migration and the Regional Effects of the EU's Eastern Enlargement

The most prominent concern in Austria is raised by the prospect that the future new EU citizens are permitted to take up employment in any of the EU countries. This issue is therefore the one that has been most present in the political discussion. It has also been studied closely. The majority of studies agree that this concern is not ill-founded, that the migration of labor into Austria would indeed cause difficulties, that transitional periods plus various kinds of control mechanisms would be required to lessen the burden on the Austrian labor market, and that besides such "defensive" strategies, a positive forward strategy would also be called for so as to adapt labor demand to the expected consequences of an inflow of workers from the new member countries.

The studies differ in the coverage of the countries the future immigrants are supposed to originate from. All Austrian studies ignore the Baltic Republics (for the good and evident reason that not many Balts can be expected to come to work and settle in Austria). All such studies cover the countries that are among the first group of the most advanced applicants for EU membership (that is the Czech Republic, Hungary, Poland and Slovenia). All of them, too, have a scenario that would include Slovakia in this group of early EU members. Some studies also cover Romania and Bulgaria. None of these studies considers the fact that Croatia[1]) might eventually also start membership negotiations and might quickly move up to the rank of those closest to membership. The reason for this neglect is evident. The prospect of Croatian EU membership only opened up in 2000 after the changes in the Croatian political system brought about by the end of the Tudjman era.[2]) Should Croatia become an EU member, it would certainly also be a prominent source of labor emigration into Austria (as is confirmed by Wallace, 1998).

Before taking a closer look at these studies it needs to be mentioned that all of them – without exception – expressly caution against too great a confidence in their findings. These warnings should be heeded. The methods employed simply do not permit any precise predictions.

Broadly speaking, two methods can be used. One can either ask a representative sample of the population in the respective countries if and under which conditions it would emigrate into EU countries (Fassmann and

1 *The exception is the study by Wallace (1998). But this study is much wider in its coverage, as it not only covers the countries that are negotiating for EU membership at present, but also others that have not applied for EU membership (like the Ukraine, Belarus or the Federal Republic of Yugoslavia).*

2 *Croatia is likely to start negotiations on a Stability and Association Agreement with the EU in the autumn of 2000. It is generally expected that it will submit a formal application for EU membership later on.*

Hintermann, 1997; Wallace, 1998); or one can look at past instances of labor migration, try to evaluate and weigh the factors that prompted them, and then investigate whether and to what extent the same factors are also present in the future CEEC members of the European Union (Fassmann and Münz, 1996; Winter-Ebmer and Zweimüller, 1996; Walterskirchen and Dietz, 1998; Brückner et al., 1999).

Both of these methods have serious drawbacks. Frequently, a respondent's reply to an interviewer does not correspond to his later decision in real life. The gap between the two levels might be very substantial. Some early estimates on potential migration, which were based on such simple questioning of intentions, were thus clearly inflated: The mass migration of 20 million Central and Eastern Europeans predicted in the early 1990s (Fassmann and Hintermann, 1997), simply did not take place. It is for this reason that specific questions were inserted so as to test whether the declared intent to emigrate is a genuine one.

5.1 Survey Analysis

In a survey done in 1995, Fassmann and Hintermann (1997) install two such additional hurdles to arrive at a realistic assessment of what the persons questioned would actually do: In a sample of 4,392 persons, they first identified those who have thought about emigration (and arrive at an "overall potential of emigration"), they then isolate those who have already sought information on their contemplated move abroad ("likely potential of emigration"); and in the latter group they finally single out those that have already applied for either a work or residence permit in the country they wanted to move to ("actual potential of emigration"). They find that in the four countries investigated (the Czech Republic, Hungary, Poland, Slovakia),

the *overall potential* of emigration is 10 million, of which 2 million considered emigrating into Austria;

the *likely potential* is 4 million, of which 870,000 would tend to choose Austria as place of work and residence;

the *actual potential* is 700,000 persons, 150,000[1]) of whom have chosen Austria as their preferred destination.

A survey done by Claire Wallace for the International Organisation for Migration (Wallace, 1998) covers not only the countries negotiating for EU membership at present, but also other CEECs – like the Ukraine, Croatia or the Federal Republic of Yugoslavia – that are sources of potential emigration to the EU. Wallace, too, is not content with simply asking whether someone would like to migrate. Like Fassmann and Hintermann, she poses additional questions to gauge whether such a desire is serious and has already translated into concrete preparations for emigration. She also asks about the countries the persons questioned would like to migrate to. Austria is of course among them, and rather prominently so.

1 *These are the numbers of migrants. They include the numbers for dependent family members. The numbers of potential entrants into the Austrian labor force would be smaller at – roughly – 50% of the number of migrants.*

The figures Wallace provides on potential migrants into Austria are much higher than the figures provided by Fassmann and Hintermann: 24% of Poles, 3% of Czechs, Hungarians and Slovaks, and 2% of Slovenes stated that they had already applied for a work and/or residence permit in an EU country. Austria is a target country for 3% of the Poles and for 6% of the Czech, the Hungarians and Croatians. That would imply, for instance, a potential, permanent immigration into Austria of about 250,000 Poles alone.

To these figures one would have to add the figures of migrants who wish to move to EU countries for a limited period only, very often just as commuters while retaining their permanent residence in the CEECs. Like Walterskirchen and Dietz (1998), Wallace finds their numbers to be higher than the number of permanent emigrants. 26% of the Czech respondents, for example, said that they would wish to seek such temporary sojourn in Austria, as compared to the abovementioned 6% who would wish to move to Austria on a permanent basis.

5.2 Estimates of Migration Flows

Juxtaposed with such estimates based on surveys are estimates that are based on models derived from earlier migratory movements. By necessity, they have to rely on just a limited number of quantifiable elements that influence migration. Thus they ignore many of the events and motives that have prompted migratory movements in the past. Also, they have to assume that factors they do consider (as for instance gaps in wealth and income) will have the same relevance for new EU members as they had for countries joining earlier. In addition, they have to rely on some strong assumptions on the events that will shape these factors,[1]) for instance, the development of income in the prospective new member countries. In two different scenarios, Walterskirchen (1998) assumes it to be either 3.5% or 2.5% above the growth of the present EU countries. By now, even this latter scenario seems fairly optimistic. With the possible exception of Slovenia, none of the CEECs has reached a point of economic transformation and reform after which a crisis-free, steady and rapid economic catching up seems guaranteed.

Which factors should be chosen for a model? Their relevance in past migrations can, of course, be checked by a multi-variate analysis. Fassmann and Münz (1996) perform such an analysis. They find geographic distance and the income differential to have the greatest value in explaining past migrations from the CEECs in the period 1990 to 1995. Surprisingly, unemployment in the country of origin counts for very little.

Walterskirchen and Dietz (1998) therefore mainly rely on the geographic distance and the income differential in their projection of future migratory movements from the new EU memberstates into Austria. Depending on the moment of the presumed opening of the Austrian labor market to migrants from the new EU memberstates, either in 2005 or in 2015, they calculate this annual immigration at either 18,000 persons or at 12,000 persons. The total over time would be about 150,000 persons.

1 *To quote Alecke et al. (2000), "previous studies omit a number of important variables … estimates of potential migration are highly unreliable … more research is needed …"*

Like Wallace (1998), Walterskirchen and Dietz (1998) also highlight the special relevance of a further group that would impact upon the Austrian labor market from the moment the neighboring CEECs become EU members. This is the group of persons that would retain their residences while commuting across the frontier to work in Austria. The authors assume that this movement would be affected by the income differentials the same way the (then existing) income differential between Germany and Austria affected the movement of Austrians commuting to jobs across the frontier into Germany.[1]) This group of workers commuting from the new EU members into Austria would be sizeable for the following reason:

About 5 million Central and Eastern Europeans live within commuting distance (that is a 90-minute car ride) from major Austrian urban agglomerations like Vienna, Linz or Graz. As they would retain their residence, their living expenses would be low (being calculated in the undervalued local currency), while their wages would be paid in euros. A person considering emigration, that is a change of permanent residence, will make his calculations in purchasing power parity. He will compare what he can purchase with his low local wages at low local prices with what he could purchase with high Austrian wages at high Austrian prices. Someone contemplating commuting to work in Austria will, however, compare what he can purchase at present wages at low local prices with what he could purchase – again at low local prices – with the high wages earned in Austria. The welfare gain of commuters is thus much higher than the welfare gain of migrants.

Walterskirchen and Dietz (1998) thus arrive at the conclusion that the number of commuters would be significant and higher than the number of migrants, with annual increases (depending on the date of the opening of the Austrian labor market) of either 23,780 or 19,570 persons. Here, too, the total over the years is assumed to be about 150,000.[2])

The most recent, complex and methodologically refined of these model studies was commissioned from the German DIW by the Bundeskammer für Arbeiter und Angestellte in Vienna. This study was performed by Brücker et al. in 1999, but was not released until June of 2000. Unlike the other studies mentioned above, it is not based upon aggregates, but on time series on the migration into a few major northern European countries.[3]) The purpose is to evaluate those factors that prompted this earlier South-North migration, to establish a model with the salient variables, and then to substitute for these variables the ones found in an analysis of the Central and Eastern European countries that have applied for EU membership. The model is developed in two steps. First, only a few standard variables, like wage differentials and the supply of and demand for labor are taken into account. In a second step, the

1 *It should be noted, though, that they had to cross a legal, but not a linguistic frontier: language was not a barrier for Austrian commuters in Germany.*

2 *Sajdik (1999) raises some serious questions about the relevance of the assumption underlying the commuter numbers estimates. Were geographic distance that relevant, many commuters would come from Bratislava (which is an hour's drive from Vienna). But according to the opinion surveys quoted, only very few inhabitants of Bratislava actually contemplate such a move. Also, no account would be taken of the fact that Slovenes, for instance, might prefer to commute into Northern Italy instead of crossing the Alps into Carinthia.*

3 *Exact data are available only for a few of these countries, and also only for the time from the 1960s.*

model is refined through the addition of other variables that are generally expected to have an impact upon migration.

One finding – important for policy reasons – is that the opening of the labor market through EU accession does indeed promote immigration from the newly acceding countries. But the effects are weaker than those of earlier administrative measures that facilitated migration, like the international agreements negotiated by Germany (and Austria) on the hiring of the foreign labor known as guest workers. The wars on the territory of former Yugoslavia were a very powerful extra factor which promoted migration. Migration is also very much facilitated by the knowledge of the language of the new home country.

No meaningful times series on past immigration are available in Austria. To arrive at estimates of the future immigration from the CEECs to Austria, the authors therefore extrapolate. They assume that in the future, too, immigration from the CEECs into the European Union will divide among its present members at the same ratio as it has until now. The study deals with true migrants exclusively. No estimates are provided for the number of persons that would commute to work into Austria.[1])

The result is a downward revision of earlier DIW estimates (DIW, 1997) on the likely number of immigrants from the CEECs. In the beginning, this number would be substantial nonetheless, with an annual inflow of 218,000 CEE migrants into Germany and 42,000 into Austria in 2002. The numbers would, however, shrink quite rapidly. The number of such potential immigrants into Austria would have declined to 18,600 by 2010 and to 11,000 by 2025. The net inflow would have come to an end by 2035.[2]) The numbers of CEEC citizens residing in the EU will then have risen from 0.9 million to 3.9 million.

How would such an inflow affect the Austrian labor market? Would the incoming labor replace the existing workforce and drive it into nonemployment (substitution effect), or would it fill new jobs without replacing labor already employed (complementarity)? Would the increased supply of labor depress wages, and, if so, in which sectors? The most frequently quoted study dealing with these questions is the one conducted by Winter-Ebmer and Zweimüller (1996). They base their forecasts upon the results of one vast "experiment" in the Austrian past, when in the period between 1988 and 1991 the Austrian labor market was opened to no less than 100,000 new foreign workers.[3])

They find that an increase of labor immigration by 1% would drive up unemployment of male manual labor by 0.3%. Female employment is little affected, as is white collar employment. It is assumed, however, that in the same period between 1988 and 1991 as many undocumented

1 *As the authors concede, the numbers of such commuters could be substantial indeed.*

2 *It should be pointed out that the DIW authors too strongly and repeatedly warn against taking these findings as predictions. They reflect the mechanics of a model. Reality is murkier.*

3 *They trace the development and reaction of the Austrian labor market via a representative sample taken from data collected by the Association of Austrian Social Security Institutions (Hauptverband der Sozialversicherungsträger).*

aliens as documented immigrants entered the Austrian labor market. Thus, the formula has to be revised. An addition of one percentage point of foreign workers would raise the nonemployment of male manual labor by only 0.15%.[1])

Higher wages would rise; lower wages would shrink. The wage differential would increase somewhat, but the median of wages would remain unchanged.

These findings are confirmed and refined in further studies.[2]) Most, though, add a caveat: All effects on the labor market are highly dependent on the professional qualifications of the migrants and commuters, and, more importantly, on the kind of employment they will find.

At present, workers from the CEECs form still a relatively minor[3]) part of the quite substantial population of foreign workers residing in Austria. Immigrants from former Yugoslavia and from Turkey still predominate. However, on the average, the educational and professional qualification of the CEEC newcomers is superior by far to the qualification of this earlier and more dominant group of immigrants. Notwithstanding their competitive advantage, when they first came in greater numbers in 1988 to 1991, the immigrants from the CEECs did not get jobs that would have befitted their superior qualification (a case of so-called brain waste). Most of them had to enter the job market at a level even below the one achieved by the earlier and less qualified immigrants. As mentioned, in doing so, they partly replaced labor already employed, above all foreign workers who had already established themselves in Austria.

Membership negotiations with the most advanced group of countries are just about to touch upon this thorny issue of the freedom of movement. The poker game of negotiation has started.[4]) Its outcome is uncertain. One should surmise, nonetheless, that in the end, the parties are likely to agree on simply phasing in the freedom of movement. There would be transitional periods and some sort of control mechanism to smooth the impact of the adhesion of the new EU members on the EU labor market, specifically on the Austrian labor market. Such controls and regulations will be the factor that, more than any other, will actually determine the volume of migration.

What is completely uncertain is the duration of any such transitional regime. We do not know whether such measures will effectively bridge the time until 2010, when the Austrian labor force will start to shrink quite

1 *On the other hand, the figures have to be interpreted in light of the fact that this was a phase of a cyclical economic upturn. For France, Gross (1999) finds that the large number of documented and undocumented immigrants would have raised unemployment only marginally, and in the short run only, whereas the medium- and long-term effects on employment would have been positive. These effects would have led to an increase of employment also among the native population.*

2 *The most recent DIW study (1999) does not provide independent estimates on the impact of immigration upon the labor market. But it concurs with other studies that the medium- to long-term impact would be minor. It does concede, however, that this does not apply to the first phase, when immigration might surge quite rapidly.*

3 *In the EU at large, their share is smaller still. Immigrants from the CEECs represent less than half a percent of the 19 million foreigners living in EU countries.*

4 *The European Commission is keeping its hand fully covered. In the paper it submitted on this chapter, it did not mention any transitional regimes or safety-valve mechanisms, evidently wishing others to move first.*

substantially for demographic reasons,[1]) thus giving ample room for higher immigration. In view of this outlook and much other uncertainty surrounding the issue, it is nonetheless fair to assume that in the period up to 2010 the Austrian labor market would become overburdened, were total freedom of movement granted to the citizens of the new EU countries immediately after accession. Over the period of the next few years, the annual additions of 50,000 new workers that most studies predict simply could not be absorbed without major dislocations and tensions.[2])

In fairness, it should be mentioned that one Austrian author arrives at quite different conclusions in several studies. Gächter (1995) claims that the mainstream methods to predict migration are rather useless. Answers given to interviewers in panel surveys provide no clue at all on what would actually happen. Models are equally useless. They emphasize economic factors like income differentials and unemployment, which in practice are of no great relevance in prompting and sustaining migration. For actual migration, the main motives are less such narrowly economic ones. What counts are general expectations about the overall life situation and noneconomic factors like a history of emigration and the existence of "bridgeheads" of former emigrants that can help newcomers to find their way in the new surroundings.[3])

Indeed, most Austrian "model studies" seem to ignore some factors that might also help to explain the volume of migration.[4]) Important opportunity costs of "nonimmigration" are neglected, too, like the cost to Austria of a sinking birthrate that will have effects even before 2010 (when the native workforce will start to shrink dramatically).[5]) Also, there are long-term benefits to immigration that are difficult to calculate but that are generally recognized by economic historians. The continuing economic vitality of the mature U.S. economy is certainly due – at least to some extent – to the fact that the U.S.A. remains a country of massive immigration.

5.3 Regional Impact of Migration in Austria

The labor market, but also the structure of the economy in various and especially in the Eastern regions of Austria, will also be affected by a further privilege implied in EU membership: the freedom to provide and to

1 *Between 2010 and 2030, the Austrian labor force will shrink by no less than 650,000 persons (Walterskirchen, 1998), according to Biffl and Hanija (1998) by 400,000.*

2 *This is not a unanimous conclusion, not even among experts. Huber and Pichelmann (1997) interpret the findings as implying just a minor impact on the Austrian labor market. But the experience gained with the influx of foreign workers from 1988 to 1991 cannot be transferred directly to the situation that would arise after the accession of the CEECs. 1988 to 1991 was marked by a cyclical economic upswing. Also, the effects of a more massive and longer-lasting influx would differ from those caused by a short-term surge.*

3 *The survey by Wallace (1998) tends to support such a view. It points to a stark difference, for instance, in the number of Slovenes on one hand, and Croats on the other, who indicate a desire to emigrate. The number of Croats giving a positive response is very large; the number of Slovenes is minimal. Croats have a history of emigration, but Slovenes do not.*

4 *A certain defensive or pessimistic bias is also evident from the fact that no consideration is given to the possible Austrian emigration into the CEECs. According to the Ministry of Foreign Affairs, about 10,000 Austrians are working in Hungary already now, even before Hungary has become an EU member.*

5 *Such costs include e.g. the closing of primary and secondary schools in the absence of demand.*

consume services in all of the EU. Studies of that problem measure the developments at the level of political districts. They do so by breaking down the economic activity of these districts by various branches of economic activity[1]) and by projections about how these activities in the political districts will be affected by the competition of Eastern service providers once the borders are open. Of course, the reverse effect has to be taken into account, too, with Austrian service providers then being able to operate freely in the CEECs.

The liberalization of trade with industrial products brought about by the Association Agreements with the CEECs has already had some impact on the economic structure of these political districts. Such changes provide clues about what can be expected from the liberalization of the commerce in services.

In the Eastern part of Austria, the districts beyond the confines of the metropolitan agglomerations had a disproportionately large share of their productions in areas that used either much labor or much energy. It thus seemed reasonable to assume (Gassler and Rammer, 1995) that these productions would quickly succumb to the competition of industries in the CEECs, which could use even cheaper labor and cheap energy. In the meantime, such fears have proved misplaced, as the effects of the new competition from the CEECs were more limited. The Austrian industries concerned held up quite well (Mayerhofer et al., 1998). On the other hand, there was hope that the trade liberalization brought about by the EU Association Agreements would suffice to lift from the Eastern parts of Austria the onus of being "peripheral."[2]) This hope was not misplaced. With the opening up of the CEECs, the periphery seems to have moved further to the East (Delapina and Krajasits, 1997). While the economic potential of Lower Austria, for example, stood at a mere 87% of the EU average in 1989, Lower Austria has since moved up the ranks by 7 percentage points to 94% of the European average. The easternmost Austrian province of Burgenland profited from a similar development (Winter-Ebmer and Zweimüller, 1996).

The Eastern regions, especially those in the immediate vicinity of the frontiers, have also experienced a relatively strong inflow of both documented and undocumented CEEC labor – to a large extent mere commuters. The overall economic impact of this inflow and of this substantial expansion of the labor force in border regions was quite neutral, but at least higher unemployment (or higher nonemployment) was not one of the consequences (Palme, 1999). These effects of the EU Association Agreements already point towards the effects that full EU membership will have on the economic structure of various Austrian regions. The impact of EU enlargement will vary among the three types of regions: urban agglomerations, bands of denser

1 *A better and more exact gauge would be provided by a breakdown of Austria's trade statistics along the lines of such districts so that one would know precisely the share of that district in the goods and services that are imported to, and exported from, Austria. Such statistics have just become available and have not yet been used for such studies.*

2 *These parts of Austria became peripheral already when the Austro-Hungarian empire was dissolved, that is, even before the iron curtain was raised (Fidrmuc et al., 1999).*

settlement and economic activity along some major transport axes, and peripheral, mainly rural regions.

In the long run, the second type of region is set to profit most from the further opening of the East and from the EU membership of the CEECs. At first, the urban agglomerations will profit as well. But they will come under stronger competitive pressure once the productivity in the CEECs has grown, and with it the competitiveness of these countries' goods and services. The peripheral rural regions will be the ones to suffer most, as they have to compete over prices mainly, and as their price advantage will have been eroded by the competition from the East across the then open frontiers.

We cannot deal at this instance and at length with the future of European agriculture and the future of the EU's Common Agricultural Policy. But they will certainly have an impact on the development of regions, on differences between regions, and especially on the prospects of these peripheral and mostly rural regions. Two trends will converge to depress future agricultural incomes. One of them is independent of the accession of new EU members, for even without them, the CAP will have to change. It seems inevitable that price floors for various standard products will be lowered again. The other trend is that the new members will become serious competitors for Austrian farmers. The CEECs are "dormant agricultural giants" with comparatively low prices, abundant cheap labor and ample unused or underutilized fertile land. In fact, the accession of the CEECs would increase the EU's arable surface by 42%.

Many questions in this field are still open. Also, it is difficult to discern even the outlines of the final agreement in the negotiations on the agricultural chapter of accession. It is not clear, for example, whether the EU will really be able implement its plan to exclude the new members from benefiting from direct subsidies to the farmers. Nonetheless, one has to assume that in the purely agricultural area Austrian incomes are very likely to fall, with consequences that are heavy mainly in rural regions, which have few alternative sources of revenue.

Austria will certainly aim to negotiate some exceptions from the immediate and full introduction of the freedom to provide services in and from the new member countries. Such exceptions would be, e.g., measures to curtail the shopping of Austrians in the adjoining CEECs. But such measures would have to be limited both in time and scope. All studies suggest that the emphasis should not be on defensive measures, but on forward looking measures. Everything points to enhanced transfrontier cooperation[1]) as a vehicle to improve the economic prospects especially of border regions.

1 *Special emphasis is put on the EU INTERREG program to facilitate transfrontier cooperation and on the LEADER program for the development of rural regions. Much will also depend upon how the latest, profound revision of the EU structural programs will translate into concrete Austrian policies. Clearly, Austria will have to accord greater prominence to its border regions in the East.*

6 Conclusions

A variety of methods are used to arrive at estimates about the effects of the EU's Eastern enlargement on Austria. The overall effects are computed either by macroeconomic forecasting models or within the framework of computable general equilibrium models. Different assumptions underlie the choice of variables that impact especially on the dynamic effects of the further expansion of the European Union. Notwithstanding such differences, the different authors converge in some essential conclusions on these overall effects.

The acceding countries in Central and Eastern Europe will gain relatively more than the incumbent countries of the European Union. This is explained by the simple fact that the existing EU market is of course much larger than the combined market of the new members. Also, as new members, the CEECs will come to benefit more fully from access to the EU budget, and to the technology and the capital markets of the EU. According to various simulations, this will add one percentage point to their annual GDP growth during the first years of their membership. Some authors are even more optimistic. Baldwin, Francois and Portes (1997) argue that the increased investment could lead to a cumulative gain of about 18% of GDP in the long run. By contrast, in their projections for Slovenia, Strmsnik et al. (2000) forecast more sluggish growth of an annual rate of a mere 3% should EU membership not materialize.

As mentioned, the effects of the enlargement to the East on the existing EU members will be much smaller, but positive overall. Some of the existing members will be negatively affected, though, as the reduction of structural and agricultural subsidies could lead to some moderate welfare losses in southern EU countries in the long run.

While still rather moderate, the overall effects on Austria will be more strongly positive, as Austria is likely to gain more from East-West integration than any other EU country. This reflects the intensive trade between Austria and the CEECs and the resulting potential for both the trade creation effect and the benefits from the dynamic effects of integration. Keuschnigg and Kohler (1999) have estimated these benefits to amount to a cumulative, additional GDP growth between 1.1% and 1.3%. Breuss and Schebeck (1998) also put this figure at the upper bound of this interval (1.3%).

Several studies deal with the impact on various Austrian regions, and with the variation of this impact across these regions. Evidently, it will be most strongly felt in the Eastern part of the country. The areas which will profit most in the long run are the belts of greater economic density beyond the immediate urban agglomerations. The urban agglomerations themselves – Vienna, Linz, Graz – will benefit in the short and medium run, while the long-run effects of the EU's Eastern enlargement will be neutral. The rural border regions will be affected negatively.

Political controversy surrounds the issue of future migration into Austria that might be triggered by the citizens of the new EU members being granted the freedom of movement. Yet the volume of such movements is difficult to predict. This is emphasized in all the relevant studies. These studies are based either on opinion surveys which investigate the willingness and readiness to

migrate to the "West" or on models of various complexity that build upon experience with past flows of migration. Notwithstanding these different methods of inquiry, all of the studies converge in assuming a relatively high number of potential migrants to Austria. Most of these studies also point to the fact that a sizeable number of CEE citizens would remain resident in their respective countries, but would commute to work into Austria on a weekly or even daily basis. All studies point to the demographic developments in Austria, which will necessitate substantial immigration from 2010 onwards.

Austria will thus incur some costs in adjusting its labor market and its regional policies to these prospects. But this cost will be smaller than the overall benefits that will accrue to Austria as a consequence of enlargement.

Over and above these costs, the opportunity costs of nonenlargement have to be borne in mind. The EU accession of the CEECs offers the historical chance to put a final end to the divisions of Europe and to extend an area of prosperity and stability to a further 100 million inhabitants of the continent. Were these chances ignored, the consequences could be dire indeed, and very, very costly.

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