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COSTS AND BENEFITS OF EU EASTERN ENLARGEMENT FOR AUSTRIA

According to WIFO's macroeconometric model simulations, eastern enlargement of the EU will have a positive effect on almost all aggregates of the Austrian economy in the medium and longer term. By 2010, real GDP is projected to be 1.3 percent higher than in a scenario without eastern enlargement. Also, employment figures are expected to rise by around 27,000 employees. The price level would be almost 1 percent lower, and public deficit would be down 0.4 percent of GDP.

With the Agenda 2000 in July 1997, the European Commission set the scene for eastern enlargement. It included an assessment of the 10 applicant countries on the basis of the accession criteria: democracy and protection of human and minority rights; functioning market economies; acceptance of the Union *acquis* and objectives (including economic and monetary union) plus implementation of the Schengen *acquis*. Although the Commission concluded that none of the applicants fully satisfies all the three criteria, five CEECs (Estonia, Hungary, Poland, the Czech Republic and Slovenia), alongside with Cyprus, were chosen as candidates for accession negotiations officially launched on 31 March 1998. Concrete bilateral negotiations on, first, seven comparatively undisputed chapters of the *acquis* have started on 10 November 1998. Meanwhile, the other five aspirants (Bulgaria, Romania, Slovakia, Latvia and Lithuania) have been involved in a pre-accession strategy aimed at guiding them towards eventual Union membership.

In 1995-96, WIFO already conducted an analysis of the costs and benefits of eastern enlargement for Austria's economy (Breuss – Schebeck, 1996). The study discussed both the consequences of eastern opening since 1989 and the likely effects of EU enlargement. The outcome of a recent reassessment (Breuss – Schebeck, 1998) of the impacts of eastern opening for Austria are summarised in Table 3. The extent to which eastern enlargement will affect EU countries will not least depend on their existing trade relations and interdependencies with the CEE countries. Here,

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Table 1: Trade relations of EU countries with the 10 CEECs

	Export		Import		Trade balance	
	1993	1997	1993	1997	1993	1997
	Percentage shares		Percentage shares		Million USD	
Belgium, Luxembourg	1.23	2.19	0.79	1.36	662.1	1,577.9
Denmark	2.40	3.71	2.59	3.13	99.7	417.2
Germany	4.78	7.26	4.73	7.01	1,992.9	6,550.4
Greece	6.01	6.29	2.33	3.47	75.6	- 419.1
Spain	1.03	1.92	0.61	1.15	143.4	592.4
France	1.46	2.42	1.21	1.67	567.2	2,411.2
Ireland	0.43	1.01	0.56	0.73	5.8	233.8
Italy	3.27	5.05	2.51	3.81	1,688.8	4,019.4
The Netherlands	1.81	2.18	1.64	1.89	463.0	867.0
Austria	10.28	13.55	5.79	8.61	1,316.5	2,362.5
Portugal	0.23	0.77	0.29	0.47	- 34.6	19.6
Finland	4.59	7.58	3.14	3.63	512.3	1,979.3
Sweden	2.22	3.86	2.08	3.55	213.3	906.6
U.K.	1.18	1.94	0.91	1.44	284.0	1,040.5
EU 15	2.83	4.23	2.35	3.34	7,990.0	22,558.7

Source: OECD, IMF.

Austria is among the top contenders together with Germany and the Scandinavian countries (Table 1).

Estimates on the possible overall economic impacts of eastern enlargement start out from the assumption that the first stage of enlargement (5 CEECs) is likely to come in 2002, the second one (5 CEECs) as from 2007. We have used WIFO's own macroeconomic model to project this scenario across a time horizon of nine years (2002-2010).

AGENDA 2000

With the Agenda 2000 in 1997, the European Commission defined the framework for eastern enlargement. 10 separate opinions (avis) assessed the extent to which each of the 10 CEECs was ready for accession. In addition, the Agenda 2000 defined the conditions to be met by the EU for eastern enlargement to succeed. They include Community policy reforms (CAP, structural policy) and institutional reforms. For the first time, the Commission also furnished concrete figures on the likely costs of eastern enlargement within a financial framework for the enlarged Union for the 2000-2006 period. The reformatory strides proposed by the Commission within its Agenda 2000 are to be adopted by a special summit meeting of the European Council in March 1999.

REFORM OF THE CAP

Eastern enlargement will increase the number of EU consumers by 100 million people (in the first round by 60 million people). The proportion of agriculture in some of the candidate countries is very high: Poland has approximately 27 percent of its workforce in agriculture, Estonia 13 percent, Hungary 8 percent, the Czech Republic and Slovenia 6 and 7 percent, respectively (EU 15: 5 percent).

To be competitive at all, agriculture in these countries is in need of urgent structural reforms. Although their agrarian price levels are low, the quality of their products (also in hygienic terms) is hardly competitive on western markets.

Agriculture Commissioner Fischler is determined to continue the CAP reform initiated in 1992. Attempts are being made at moving away from price pegging and towards direct subsidies. The suggested price reductions have to be seen within the context of expected further liberalisation moves in world agricultural trade in the wake of the forthcoming WTO Round. The Commission's proposal is to cut subsidised prices for grain by 20 percent now, those for beef by 30 percent in three stages till 2002, and those for milk by 15 percent in four stages. Cash handouts to farmers are likely to cover only part of their income losses (for grain farmers half of the losses, for beef and dairy farmers three quarters). Other proposed measures will be incentives for setting aside land (unfarming) and stepping up environmental protection. Despite these suggested reforms, the current member states' spending on CAP is going to increase slightly within the new 2000-2006 budget period. In the new financial perspective (*European Commission, 1998A; Table 2*), only a moderate sum is earmarked for integrating future members into the CAP (EUR 3.4 billion in 2006, measured in 1999 prices). The major portion is allocated to current member states (EUR 51.1 billion in 2006).

STRUCTURAL POLICY REFORM

Under its priority policy of strengthening economic and social cohesion (Article 130a of the Maastricht Treaty), the Union is committed to continue its cohesion efforts. The additional cost of EU enlargement will require savings to be made within existing subsidy programmes. This is to be achieved through efficiency improvements and a concentration of structural policies (streamlining the now seven categories of regions down to three: Objective 1, Objective 2 (new), Objective 3). Since the CEECs would be Objective 1 regions throughout their entire territories under today's definition (GDP per capita below 75 percent of the EU average), and in order to make co-funding of structural policies feasible for the CEECs, it is intended to introduce a general ceiling of 4 percent of national GDP in all structural funds. The current share of 0.46 percent of GDP in contributions to structural spending is to be maintained for the enlarged Union.

The new financial framework provides for a reduction of the amount available for structural operations (under both the Structural Funds and the Cohesion Fund in the current EU member states (down from EUR 35.7 billion in 1999 to EUR 31.4 billion in 2006, expressed in 1999 prices). EUR

12.1 billion are to go to the five new member states in 2006 for structural policy improvements (Table 2). However, this figure is below the ceiling of 4 percent of their respective GDPs. For Austria, there might be a more than proportional reduction (funds slashed by up to one third) in current for structural operations as in future allocation criteria will increasingly be geared to unemployment figures. And the latter are much better in Austria than on EU average (*Böheim*, 1998).

Set up for a limited period of time under Article 130d TEC and Protocol 15 on Economic and Social Cohesion (for member states with a per-capita GDP of less than 90 percent of the Community average; for financial contributions to projects in the fields of environment and trans-European networks; with the aim of attaining the EMU's convergence criteria), it is proposed that the *Cohesion Fund* dispose of a total of about EUR 3 billion per year for all its beneficiaries.

INSTITUTIONAL REFORM

The objective of reforming the EU's institutions, as discussed at the 1996 Intergovernmental Conference, has so far not been implemented. The Treaty of Amsterdam only includes a "Protocol on the Institutions with the Prospect of Enlargement of the European Union", which says that upon completion of the first stage of enlargement each member state will have one representative in the Commission (whereas now the large EU countries are each delegating two Commissioners). However, this relative scaling down of the Commission is linked to a new weighting or introduction of a double majority in the Council. For those (large) member states that are currently delegating two Commissioners some compensatory arrangement has to be found. In institutional and policy terms, the European Union is not yet prepared for eastern enlargement.

COSTS OF EASTERN ENLARGEMENT

COSTS OF EASTERN ENLARGEMENT FOR THE EU

Initial cost estimates as to eastern enlargement were made in 1993. The farther back these estimates, the higher their outcome¹. The most recent estimates of the costs of eastern enlargement are comparatively moderate for several reasons: there is the newly introduced ceiling on structural policy spending of 4 percent of the CEECs' GDP. Overall,

the EU is sticking to the aim of allocating 0.46 percent of the GDP of the enlarged Union to structural policies. In its most recent financial perspective, the Commission assumes that the new member states will agree to a gradual increase in transfer payments to the level they are entitled to. Moreover, the costs of eastern enlargement now discussed refer only to the "front five". But in the end, 10 CEECs (plus Cyprus) will join the European Union, although the costs for the 5 CEECs of the second round are likely to amount to a mere third of the costs for the 5 CEECs of the first round.

The cost estimates already take into account the CAP and structural policy reforms. The final level of costs will be determined within the forthcoming negotiations only. The economic growth of the current EU countries is projected to be 2.5 percent p.a. on average for the 2000-2006 period, whereas that of the CEE countries is expected to reach 4 percent. The Commission makes the technical assumption that the 5 CEECs of the first round (Estonia, Hungary, Poland, the Czech Republic and Slovenia) will join the Union in 2002. The costs in preparing the 5 CEECs of the second round for membership (Bulgaria, Romania, Slovakia, Latvia and Lithuania) are already included in the EU 15 budget. Hence the expenditures for eastern enlargement are calculated as the sum total of accession and pre-accession costs (Table 2).

Measured against the appropriations for commitments, the costs of eastern enlargement (accession and pre-accession) are expected to be EUR 80 billion (at 1999 prices; approximately EUR 16 billion annually) in the 2000-2006 period. EUR 58 billion have been appropriated for accession of the first 5 CEECs as from 2002 (EUR 12 billion for CAP, EUR 40 billion for structural policies, EUR 6 billion for internal policy areas and administration), whereas EUR 22 billion have been appropriated for preparations for the second accession round (they mainly include appropriations for structural improvements in agriculture and Phare funds). This amount corresponds, on average, to around 4 percent of the GDP of the 5 CEECs (by increments from 2 percent in 2002 to 5 percent in 2006), or approximately 0.2 percent of the GDP of the EU 15 in 2006. Currently, the cohesion countries Greece and Ireland are receiving 4 and 5 percent, respectively, of their GDPs net (with their own contributions to the EU budget deducted), Portugal is getting 3 percent and Spain 1.2 percent (*European Commission*, 1998B). That the above costs are not particularly high can also be seen from another comparison: since reunification, West Germany has paid between DEM 100 billion (1991) and DEM 140 billion (1997; approximately EUR 70 billion) net p.a. in transfers to East Germany – this amounts to 4 percent of West Germany's GDP or between 52 percent (1990) and 32 percent of East Ger-

¹ A comparison of existing expert estimates regarding the costs of eastern enlargement with those of the Agenda 2000 is offered by *Breuss* (1997).

Table 2: Financial perspective for an enlarged EU 20: 2000-2006

	1999	2000	2001	2002	2003	2004	2005	2006	2000-2006 Total
	Billion euro at 1999 prices								
Appropriations for commitments (A)	100.1	101.5	103.8	110.6	113.2	116.0	119.0	122.0	786.1
As a percentage of EU 20's GNP	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
EU 15	100.1	98.4	100.7	101.0	101.1	101.3	101.7	102.1	706.2
As a percentage of EU 15's GNP	1.28	1.23	1.23	1.20	1.17	1.15	1.12	1.10	1.17
5 CEECs (accession) ¹				6.5	9.0	11.6	14.2	16.8	58.1
As a percentage of 5 CEECs' GNP				2.21	2.97	3.68	4.32	4.91	3.67
Pre-accession aid (5 CEECs) ²		3.1	3.1	3.1	3.1	3.1	3.1	3.1	21.8
As a percentage of EU 15's GNP		0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04
Agriculture (CAP, Heading 1) ³	45.2	46.1	46.9	49.4	50.8	52.1	53.6	55.0	353.8
EU 15	45.2	45.5	46.4	47.3	48.2	49.2	50.1	51.1	337.8
5 CEECs (accession) ¹				1.6	2.0	2.5	2.9	3.4	12.4
Pre-accession aid (5 CEECs) ²		0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.6
Structural operations (Heading 2) ⁴	35.7	36.6	37.5	40.4	41.4	42.4	43.4	44.6	286.3
EU 15	35.7	35.6	36.4	35.6	34.6	33.4	32.4	31.4	239.4
5 CEECs (accession) ¹				3.8	5.8	7.9	10.0	12.1	39.6
Pre-accession aid (5 CEECs) ²		1.0	1.0	1.0	1.0	1.0	1.0	1.0	7.3
Internal policies (Heading 3) ⁵	6.4	6.4	6.7	7.6	7.8	8.0	8.2	8.5	53.2
EU 15	6.4	6.4	6.7	6.9	7.1	7.2	7.4	7.6	49.3
5 CEECs (accession) ¹				0.7	0.8	0.8	0.8	0.9	4.0
External action (Heading 4)	6.9	6.9	7.1	7.3	7.4	7.6	7.8	7.9	51.9
EU 15	6.9	5.3	5.5	5.7	5.9	6.1	6.2	6.3	41.0
Pre-accession aid (5 CEECs) ^{2,6}		1.6	1.6	1.6	1.6	1.6	1.6	1.6	10.9
Administration	4.7	4.7	4.8	5.3	5.4	5.6	5.7	5.8	37.2
EU 15	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	35.1
5 CEECs (accession) ¹				0.4	0.4	0.5	0.5	0.5	2.1
Reserves (EU 20 = EU 15)	1.2	0.9	0.9	0.6	0.4	0.4	0.4	0.4	3.7
Appropriations for payments (B)	96.4	98.8	101.7	107.3	110.2	112.7	115.6	118.8	765.1
As a percentage of EU 20's GNP	1.23	1.24	1.24	1.23	1.24	1.23	1.23	1.23	1.23
EU 15	96.4	95.7	98.5	99.8	100.4	100.7	101.1	101.4	697.6
As a percentage of EU 15's GNP	1.23	1.20	1.20	1.19	1.17	1.14	1.12	1.09	1.16
5 CEECs (accession) ¹				4.4	6.7	8.9	11.4	14.2	45.7
As a percentage of 5 CEECs' GNP				1.51	2.21	2.82	3.48	4.16	2.89
Pre-accession aid (5 CEECs) ²		3.1	3.1	3.1	3.1	3.1	3.1	3.1	21.8
As a percentage of EU 15's GNP		0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04
Own resources ceiling (C) 1.27 percent of EU 20's GNP	99.1	101.6	104.1	110.4	113.3	116.1	119.1	122.2	786.8
EU 15	99.1	101.6	104.1	106.7	109.4	112.1	114.9	117.8	766.8
5 CEECs (accession) ¹				3.7	3.9	4.0	4.2	4.3	20.1
Margin total (C - B)	2.7	2.8	2.5	3.1	3.0	3.4	3.5	3.4	21.7
As a percentage of EU 20's GNP	0.04	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.04

Source: European Commission (1998A). – ¹ Assumption: Accession starts in 2002 with 5 CEECs: Estonia, Hungary, Poland, Czech Republic, Slovenia (+ Cyprus). – ² Pre-accession strategy concerns the 5 CEECs: Bulgaria, Romania, Slovakia, Latvia, Lithuania. – ³ The ceiling corresponds to the agricultural guideline. – ⁴ Less 3.294 billion EUR; this is the amount in respect of the EEA financial mechanism and the adjustment proposed by the Commission to take account of the conditions of implementation of the 1997 budget. – ⁵ Five financial priorities: TEN, research and innovation, general and job education, environment sustainable technologies, small and medium sized enterprises. – ⁶ Via increasing the funds for the Phare programs.

many's GDP. This means, that in relation to their economic performance, the 5 CEECs are likely to get only one seventh of the transfer payments East Germany is currently receiving from West Germany every year.

The Commission's proposal for funding eastern enlargement is as follows: on the one hand, the new members will have to make their respective contributions to the EU budget (with a ceiling of 1.27 percent of GNP, the same as for current member states). These own resources would amount to around EUR 20 billion within the 2002-2006 period. As a rule, the funds actually available for payments are always fewer (approximately 1.15 percent of GNP). Moreover, a margin for manoeuvre of around EUR 22 billion (between the ceiling on own resources and the appropriations for payments) can be used. On the other hand, the remaining costs of eastern enlargement by 5 CEECs of

around EUR 40 billion (including pre-accession expenditures) are to be raised by cutting back existing entitlements – especially in the structural policy area. Whereas the CAP expenditures of 44 percent of the overall budgetary commitments of the EU 15 in 1999 will move up to 49 percent in 2006 (+2 percent p.a.), structural policy spending will drop from 38 percent in 1999 to 31 percent in 2006 (almost –3 percent annually). This is where we have to expect a discussion on the allocation formula to be used between cohesion countries and "richer" member states. The net costs of eastern enlargement will thus amount to approximately EUR 60 billion within the 2002-2006 period for the EU 15. Rising constantly throughout these years, they will reach EUR 16 billion in 2006, which is equivalent to around 0.18 percent of the EU 15 GDP; of these, 0.15 percent will be spent on the first accession round and 0.03 percent on preparations for the second round.

COSTS OF EASTERN ENLARGEMENT FOR AUSTRIA

The projected costs of eastern enlargement for Austria are derived from the financial framework of the European Commission (Table 2). They are based on the assumption that Austria will have to bear the same level of net costs as the EU average², and that all EU countries will contribute to the costs under the currently applied allocation base. In other words, Austria would have to bear 2.6 percent of the additional burden at most (this would correspond to the Austrian share in the EU's GDP and total own funds). For the entire 2002 to 2006 period, WIFO estimates are based on the Commission's financial perspective. The net costs of eastern enlargement (gross costs arising from commitments of EUR 58 billion towards the "front five" between 2002 and 2006 minus contributions of these five to the EU budget) and the costs for preparing the other 5 CEECs for the second round over the same period (approximately EUR 22 billion) have been converted into Austrian schillings. The assumption has been that net accession costs will be funded by slight cutbacks in transfers (i.e., funds flowing back from the EU budget to Austria) within the CAP and major cutbacks in structural funds, and pre-accession costs by increases in the funds for payments (from an initial 1.15 percent of GDP to an eventual 1.22 percent). Hence one third of the costs of eastern enlargement would be financed by higher payments to the EU, and two thirds by cutbacks in the monies received out of the EU budget.

For estimating the costs of the second round of eastern enlargement, the pre-accession costs have been replaced by pure accession costs for the period from 2007 to 2010. As the economic performance figures (GDP level) of the second group amount to only one third of those of the "front five", the costs of the second round of eastern enlargement have been updated accordingly. This will result in an additional net burden for Austria of 0.18 percent of GDP till 2006 and of 0.20 percent of GDP till 2010, the year in which all 10 CEECs are likely to have joined the Union. Taking as a point of departure the 1997 net burden of 0.48 percent of GDP, we have projected Austria's burden to move up to 0.66 percent of GDP by 2006 and to 0.68 percent of GDP by 2010. If under the most optimistic scenario all of the Commission's ideas on how to relieve the burden for four major net contributors – Germany, the Netherlands, Austria and Sweden – were to come true, eastern enlargement for Austria would even be

² In its most recent considerations on EU funding (*European Commission, 1998B, p. 29*), the Commission estimates that Austria, Germany and Sweden may reckon with underproportional costs.

neutral in budgetary terms (*European Commission, 1998B*).

THE ECONOMIC BENEFITS OF EASTERN ENLARGEMENT AS EVALUATED IN PREVIOUS STUDIES

To date, three studies are available which ascertain the benefits of eastern enlargement with due consideration of the costs involved (a comparison is provided by *Breuss, 1998*). Two of them discuss the impacts of eastern enlargement on the Austrian economy: (*Breuss – Schebeck, 1996, 1998*) by using a macroeconomic model to analyse both the effects of eastern opening up to date and the potential economic implications of enlargement. Thus the effects of eastern opening up on real incomes (measured against the additional real GDP) amounted to a cumulative 2.4 percent within the 1989-1994 period and a cumulative 3.6 percent within the 1989-1997 period (+3.3 percent without migration effects); those of eastern enlargement by 10 CEECs are projected to amount to 1.7 percent after nine years (*Breuss – Schebeck, 1996*). *Keuschnigg – Kohler (1997, 1998)* arrive at similar conclusions using a dynamic CGE model. They estimate the real GDP effect of eastern opening to amount to +0.6 percent (long-term effect in steady state) and that of eastern enlargement by 10 CEECs to +1.5 percent (Table 3). *Baldwin – Francois – Portes (1997)* use a CGE world model to determine the global effects of eastern enlargement – especially the impact it may have on EU incumbents and potential new member states (the CEECs). Under a "conservative" scenario (i.e., eastern opening has trade-generating effects only via a reduction in trade costs), they assume the enlargement-induced long-term increase in real incomes (enlargement by 7 CEECs) to reach 0.2 percent for the European Union and 1.5 percent for the Central and Eastern European countries. Under an "optimistic" scenario (EU accession would result in investment barriers being removed, i.e., risk premiums for domestic and foreign capital), they expect the CEECs' real incomes to soar by 18.8 percent in the long term and those of the EU countries to remain almost unchanged.

CALCULATION OF THE EFFECTS OF EASTERN ENLARGEMENT USING WIFO'S MACROECONOMETRIC MODEL

Both the Agenda 2000 (*European Commission, 1997*) and the state of play in negotiations imply that new members are going to join the Union in two consecutive groups. The first to accede as from 2002 would be Estonia, Hungary, Poland, the Czech Republic and Slovenia

Table 3: EU accession, eastern opening, eastern enlargement of the EU

Effects of Austria's integration into Europe

		GDP, real	Welfare ¹	Consumer prices	Employment	Unemployment rate	Current account	General government financial balance	
		In percent	As a percentage of GDP, per year	In percent	In percent	In 1,000	Percentage points	As a percentage of GDP	
		Deviations from baseline scenario or from steady state							
<i>Accession to the EU</i>									
Macro-Input-Output model ²	1995-2000 (cumulative)	2.8	–	–3.3	1.3	42.3	–0.3	–1.7	–0.9
CGE model ³	Long-term effects	1.6	1.1	–1.4	–	–	–	–	–
<i>Eastern opening</i>									
Macro model ⁴	1989-1994 (cumulative)	2.4	–	–0.9	1.9	56.3	1.8	0.2	0.5
Macro model ⁵	1989-1997 (cumulative)	3.6	–	–0.2	2.6	76.9	2.9	0.6	0.9
CGE model ³	Long-term effects	0.6	0.3	0.1	–	–	–	–	–
<i>EU's eastern enlargement</i>									
Macro model ⁴	2000-2008 (cumulative)	1.7	–	–0.1	1.1	34.3	–0.4	–0.1	0.4
CGE model ³	Long-term effects	1.5	0.9	–0.1	–	–	–	–	–

¹ Welfare is calculated from total wealth discounted over the whole period. – ² Breuss – Kratena – Schebeck (1994). – ³ Keuschnigg – Kohler (1997), pp. 36-37: Eastern enlargement with 10 CEECs. Accession of the first round of 5 CEECs (Estonia, Poland, Slovenia, Czech Republic, Hungary) would result in a slightly lower GDP (+1.4 percent) and welfare effect (+0.8 percent of GDP per year); see Keuschnigg – Kohler (1998). – ⁴ Breuss – Schebeck (1996). Accession of the four countries Slovakia, Slovenia, Czech Republic, Hungary would result in a slightly higher GDP (+1.5 percent). – ⁵ Breuss – Schebeck (1998, Table 3.11); without migration, real GDP would have increased by 3.3 percent and dependent employment by 1.9 percent (+57,300).

plus Cyprus. The second round would involve the remaining five CEECs (Bulgaria, Romania, Slovakia, Latvia and Lithuania). For assessing the aggregate effects of eastern enlargement for Austria, we have used WIFO's macro-econometric model to conduct various simulations in which the transactions with the EU have been specified in great detail. The effects refer only to the economy as a whole and are not differentiated by sectors (as done by Keuschnigg – Kohler, 1997, 1998). All the produced effects mirror the difference between simulated scenario and baseline scenario; this baseline scenario is an update of the medium-term WIFO forecast till 2010.

ASSUMPTIONS FOR MODEL SIMULATION AND PARTIAL RESULTS

The hypothesis that the first round of eastern enlargement will take place in 2002 corresponds to the approach adopted by the European Commission in its financial perspective. For political reasons, the first accessions could well take place a bit later. The second round of accessions is expected to take place in 2007. Starting out from these assumptions, we have simulated the effects of gradual eastern enlargement by 10 CEECs across the 2002-2010 period.

Essentially, integration theory is based on three major groups of effects depending on the respective stage of integration achieved (for an overview see Breuss, 1996):

- In case of a *customs union* (EEC in the 1960s) trade creation effects will be generated among the members of such a customs union and exclusion effects among those outside it (trade diversion).

- In case of a *single market* (EU since 1993) the integration effects will be more complicated. The elimination of border controls will result in lower trade costs (similarly to the abolishment of customs duties), while keener competition will reduce price segmentation (less monopolistic competition). The creation of a uniform market through greater efficiency (better use of the economies of scale) is likely to trigger additional growth momentum (growth effects).
- The creation of an *economic and monetary union* (EU in 1999) is expected to produce its own set of integration effects (elimination of transaction costs as there are no more currency conversions, keener cross-border competition in the banking sector, overall efficiency improvement within the internal market – growth effects).

Initially, the CEECs will enter the Union at the single market stage. This is the perspective for viewing forthcoming integration effects. Participation of the candidate countries in the EMU will not be possible for some time still. Within the above scenario, the following effects have been considered:

- Participation in the internal market will have trade creation effects. As well as in Austria directly, they will be felt indirectly via the positive effects produced in other EU countries.
- In addition, special assumptions have been made regarding the development of tourism.
- Elimination of border controls will have similar effects as the reduction of trade costs; it may result in an improvement of terms of trade. Once the Central and Eastern European countries join the EU, direct investments in the new member countries will be subject to fewer risks.

DIRECT TRADE EFFECTS

The CEECs' accession is likely to accelerate real growth in these countries by around 1 percentage point annually. This assumption is consistent with the estimates of *Baldwin – Francois – Portes* (1997) within their "optimistic scenario". It takes into account both the reduction of trade costs and the removal of investment barriers. Stumbling blocks on the way towards greater growth impulses could be current account problems and/or measures to fight inflation. Using a standard income elasticity of 2 for import demand, we would arrive at an annual additional growth of CEEC imports of around 2 percent. If market shares were to remain unchanged, this would result in an additional total export growth of some 0.33 percent in real terms for Austria. A differentiation between the first accession round beginning in 2002 (and involving countries that account for around 84 percent of Austrian exports into this region) and the second round beginning in 2007 (and involving countries that account for 16 percent of Austrian exports into this region) reveals that the respective input for additional export growth in Austria will result from the direct "trade-generating effects" of eastern enlargement.

By 2010, Austria would have benefited from this development in that its real GDP would have risen by a cumulative 0.9 percentage point more than under the baseline scenario without eastern enlargement.

TOURISM

Austria's tourism exports to the Central and Eastern European countries are projected to grow more than to date owing to the improved earnings situation there. As early as in 1988-89, revenue from tourist travel from CEECs was twice as high as in 1987. If we assume a catch-up effect, tourism exports may rise substantially. The share of revenues from CEEC tourists will increase from currently 2.5 to 6 percent in 2001 under our model assumptions, and proceeds will rise at the same rate as goods exports (by 0.33 percent a year). Thus, the "trade creation effects" relate to both merchandise exports and tourism exports.

At a cumulative additional 0.1 percent of real GDP increase by 2010, the total economic effect of this development will be minimal. There will just be some easing of the strain on the current account (by 0.1 percent of GDP).

IMPROVEMENT IN THE TERMS OF TRADE

Most studies (such as the one compiled by *Baldwin – Francois – Portes*, 1997) start out from the assumption that entry into the EU's internal market system will result – owing to the abolishment of border controls – in a 10 percent

decrease of trade costs in real terms; this applies symmetrically to both trading partners. However, in Austria such a 10 percent dampening of trade costs is expected to cause a similarly great reduction in import prices (although only prorated to the share of CEEC imports in total imports, i.e., 13.5 percent for the first group of CEECs and 2.5 percent for the second group). In all, import prices in Austria are thus projected to drop by 1.35 percent as from 2002 and by additional 0.25 percent as from 2007. Austrian export prices will remain unchanged, only the import prices of Central and Eastern European states will change.

This improvement in the terms of trade may have various implications. The drop in import prices is likely to dampen inflation at home. This, in turn, will lead to a stimulation of export demand due to a slight reduction in export prices. However, the shock-like decline in import prices in the first year will cause a number of domestic goods to be substituted with imported ones. Hence domestic production will be sagging, and with it real GDP and employment. Unemployment is likely to rise at first. But low prices at home will gradually cause real demand to grow and stimulate real GDP (till 2010 by a cumulative 0.4 percent).

But this terms of trade shock can be considered a general market phenomenon of eastern opening. Although model simulation may seem to exaggerate the shock, it reflects the burden of adjustment for a rich economy confronted with the direct cut-price competition of a low-wage country.

INDIRECT TRADE EFFECTS

The trade-generating momentum eastern enlargement is projected to produce for the EU 15 (OECD Europe) will also affect Austria. Since the share of the 10 CEECs in EU 15 exports is only one third of their share in Austrian exports, the growth impulse for the EU 15 (and thus for OECD Europe) is estimated to be one third of the GDP stimulus calculated for Austria as a result of direct trade effects. Real GDP is expected to grow by an additional cumulative 0.3 percent in OECD Europe until 2010³. This indirect trade effect will cause Austria's aggregate production to expand by 0.3 percent by 2010.

FOREIGN DIRECT INVESTMENTS

The CEECs' entry into the European Union will facilitate access to these emerging markets for current EU members and will thus favour foreign direct investments (FDIs) in the new member states. According to *Baldwin – Francois –*

³ *Baldwin – Francois – Portes* (1997) estimate that eastern enlargement will result in a growth in real incomes by 0.2 percent in the EU 12.

Table 4: Macroeconomic effects of the EU's eastern enlargement 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	Deviations from baseline scenario ¹								
Private consumption, volume	+ 0.2	+ 0.4	+ 0.6	+ 0.8	+ 1.0	+ 1.1	+ 1.3	+ 1.5	+ 1.6
Public consumption, volume	+ 0.1	+ 0.2	+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3
Gross fixed investment, volume	- 0.7	- 0.0	+ 0.1	+ 0.0	+ 0.0	+ 0.0	- 0.1	- 0.1	- 0.2
Exports of goods and services, volume	+ 0.4	+ 1.0	+ 1.2	+ 1.4	+ 1.9	+ 2.2	+ 2.4	+ 2.9	+ 3.2
Goods	+ 0.5	+ 1.0	+ 1.3	+ 1.6	+ 2.1	+ 2.4	+ 2.7	+ 3.3	+ 3.7
Imports of goods and services, volume	+ 0.5	+ 1.0	+ 1.2	+ 1.3	+ 1.7	+ 1.9	+ 2.1	+ 2.6	+ 2.8
Goods	+ 0.5	+ 1.1	+ 1.4	+ 1.6	+ 2.0	+ 2.3	+ 2.5	+ 3.0	+ 3.3
GDP, volume	- 0.1	+ 0.3	+ 0.5	+ 0.6	+ 0.8	+ 0.9	+ 1.0	+ 1.2	+ 1.3
Current balance	as a percentage of GDP		+ 0.3	+ 0.3	+ 0.3	+ 0.5	+ 0.5	+ 0.6	+ 0.6
Deflator of private consumption	- 0.3	- 0.6	- 0.7	- 0.8	- 0.8	- 0.8	- 0.9	- 0.9	- 0.9
Deflator of GDP	+ 0.1	- 0.1	- 0.3	- 0.3	- 0.3	- 0.3	- 0.3	- 0.3	- 0.3
Terms of trade: goods	+ 1.0	+ 0.9	+ 0.8	+ 0.8	+ 0.8	+ 1.0	+ 1.0	+ 1.0	+ 1.0
Household disposable income, volume	+ 0.4	+ 0.8	+ 0.9	+ 1.1	+ 1.2	+ 1.4	+ 1.6	+ 1.7	+ 1.9
Wage ratio	- 0.2	- 0.3	- 0.4	- 0.4	- 0.4	- 0.5	- 0.5	- 0.6	- 0.6
Dependent employment	in 1,000		+ 0.2	+ 0.3	+ 0.4	+ 0.5	+ 0.6	+ 0.7	+ 0.8
	- 1.1	+ 1.8	+ 5.3	+ 9.0	+12.9	+16.2	+19.7	+23.7	+27.5
Unemployment rate	+ 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.1	- 0.1
Labour productivity	- 0.1	+ 0.2	+ 0.3	+ 0.3	+ 0.4	+ 0.4	+ 0.4	+ 0.5	+ 0.5
General government financial balance	as a percentage of GDP		- 0.1	- 0.0	+ 0.0	+ 0.1	+ 0.1	+ 0.2	+ 0.3
	billion ATS		- 1.7	- 0.5	+ 0.8	+ 2.5	+ 4.5	+ 6.7	+ 9.7
								+13.2	+16.9

¹ The figures for aggregate demand, GDP, deflators, household disposable income, dependent employment and labour productivity indicate the cumulative deviations of the simulation scenario (which takes into account the effects of the CEECs' accession to the EU) from the baseline scenario (an update of the medium-term WIFO forecast till 2010) in the *n*-th year in percent, whereas the figures for current balance, terms of trade, the wage ratio, the unemployment rate and general government financial balance are shown as percentage point deviations.

Portes (1997) EU membership will make investments in the new EU states less risky (lower risk premium), i.e., it will reduce the user cost of capital. This, in turn, will create new investment incentives, accelerate the accumulation of capital in the CEECs and encourage greater economic growth⁴. Not all FDIs to be expected of Austrian enterprises seem to be of an additional nature; there may also be genuine "shifts in investment" based on mixed cost calculation (high-wage production in the current EU countries versus low-wage production in the CEECs). Assuming that one third of the additional FDI is of a substitutive nature, i.e., at the expense of investments in Austria, we have reduced the growth in real gross fixed investment in Austria by 0.2 percent p.a., or by a cumulative 1.8 percent till 2010. In cumulative terms, this assumption means that real GDP will drop by a mere 0.2 percent by 2010 and the jobs lost will be just under 5,000.

OVERALL MACROECONOMIC RESULTS OF THE MODEL SIMULATION

The integration effects detailed above add up to the aggregate effects of eastern enlargement as summarised in Table 4. Their pattern is as follows: with the CEECs' accession to the EU, and given their potential as low-price com-

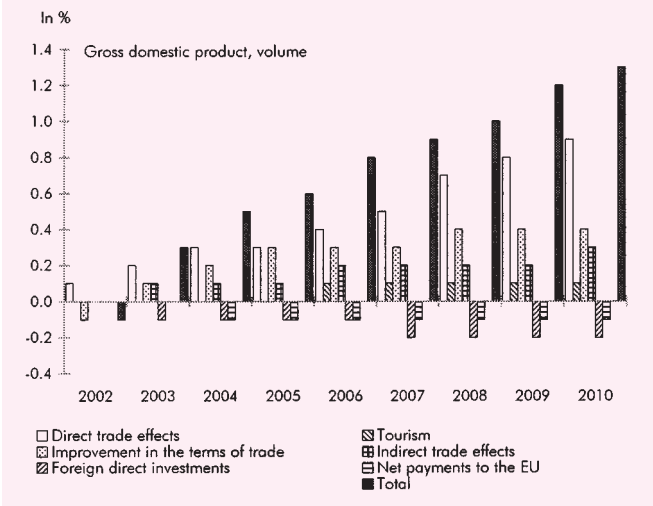
petitors, we have to reckon with a slight adjustment shock in the form of a real decline in GDP in 2002 (-0.1 percent). The above effect will mainly result from the immediately improved terms of trade due to lower-priced imports (elimination of border controls): cheaper imports will replace a number of domestic products. This shock is likely to be accompanied by a reduction in consumer prices (-0.3 percent) and in the number of dependent employment (-1,100). Alongside with the costs of financing eastern enlargement, this signifies a rise in the government's new borrowing by 0.1 percent of GDP.

In the course of time, however, positive integration effects will outweigh the negative ones. More net exports to the new members will push up real GDP by an additional 0.8 percent by 2006, whereupon the EU's enlargement by the other 5 CEECs will continue to raise real GDP. Owing to the sequential accession of a total of 10 CEECs, Austria's real GDP would thus increase by a cumulative 1.3 percent by 2010. The 5 CEECs of the second round have – if measured against their respective GDP levels – a weight of only one third of the "front five". This is true for both the costs and the economic benefits of enlargement. With the second accession round, i.e., as from 2007, the positive growth effects will begin to outnumber the negative cost effects (costs of eastern enlargement are projected to amount to 0.2 percent of GDP by 2010). New borrowings of the government will drop by 0.4 percent of GDP till 2010. The trade creation effects will also be reflected in an improved balance of current account, which

⁴ Using a general equilibrium model, Breuss – Tesche (1994, p. 544) demonstrate that a 2.5 percent shift of the Austrian capital stock to Hungary might raise Hungary's real GDP by 1.3 percent in the long term.

Figure 1: Components of the aggregate growth effects of the EU eastern enlargement

Deviations from baseline scenario



will be up 0.6 percent of GDP by 2010. As a result of the terms of trade effects, the upward trend in prices will be dampened by 0.9 percentage point. Dependent employment is likely to increase by 27,500 in the wake of eastern enlargement. Functional income distribution is projected to slightly shift at the expense of wage earners for the benefit of employers (Table 4).

The results of the individual simulation steps and the effects of the enlargement-induced cost burden for Austria are demonstrated in Figure 1 in terms of their contribution to GDP. Thus, after nine years, there will be the by far greatest positive impact caused by “direct trade effects” (+0.9 percent) followed by the “terms of trade effect” (+0.4 percent). The “indirect trade effect” is projected to total 0.3 percent. If tourism were added, this would cause a very slight rise in real GDP (+0.1 percent). Two effects will dampen real GDP growth: the costs of eastern enlargement (-0.1 percent) and the increase in direct investments in the CEECs (-0.2 percent).

The EU’s eastern enlargement will thus have a positive effect on almost all aggregates of the Austrian economy in the medium and longer term. True, the magnitude of these effects will depend on the assumptions adopted for model calculation and may vary within a certain range. What cannot be simulated by the tools used in the present model are the structural changes in foreign trade, employment, wages and domestic demand.

There is great uncertainty as to the *migration* effect of eastern enlargement. It is still unclear whether and what agreement will be reached on transitional arrangements prior to granting full freedom of movement of labour. The

WIFO macroeconomic model is poorly suited for simulating the potential migration effects. For this purpose general equilibrium models would be more to the point⁵. The results of a detailed study of the effects of eastern enlargement on the Austrian labour market are summarised by *Walterskirchen* (1998).

CONCLUSIONS

The costs and benefits of the EU’s eastern enlargement are very hard to predict in terms of both integration theory (*Tichy*, 1997) and politics (forthcoming EU discussions on a new financing formula for sharing the burden of eastern enlargement). While, on becoming members, the CEECs must implement the entire Union *acquis* and objectives (e.g., EMU), all of them will have the status of cohesion countries (integration of poor with rich states; a similar problem arises in conjunction with the integration of the USA and Mexico into NAFTA). They are economies in transition, i.e., changing from planned economy regimes to functioning market economies. How fast this transition will proceed, and whether it will be sustainable, are among the question marks surrounding the “eastern enlargement project”. Still, or precisely for this reason, the Central and Eastern European countries are “emerging markets”: because of their low per-capita income levels their growth potential is substantial and they will do their utmost to rapidly catch up with the highly developed EU states.

When quantifying the costs and benefits, we arrive at different magnitudes depending on the methods employed (macroeconomic models, computable general equilibrium models, gravity models, etc.). That these magnitudes differ only within a comparatively small range in the various estimates on the economic benefits of eastern enlargement is somewhat surprising. Recalculation of the effects of eastern opening and enlargement has become necessary due to the changed political and economic framework. In its Agenda 2000, the Commission provides a first framework regarding the magnitude of funds needed for eastern enlargement. This very agenda also calls for reforms of important Community policies (CAP, structural policy) and institutions on the threshold to eastern enlargement.

The benefits of eastern opening have certainly not been of negligible proportions for Austria: since 1989, its GDP has grown by 3.3 percent more in real terms (i.e., by around $\frac{1}{3}$ percentage point per year) owing to a growing pres-

⁵ *Breuss – Tesche* (1997) simulate the impacts of migration to Austria (labour force +100,000).

ence on the new markets. Eastern enlargement will – in contrast to the purely advantageous opening up of eastern markets – also generate costs. Taking into account any likely integration effects and the costs of sequential accession of 10 CEECs, we expect Austria's real GDP to be 1.3 percent higher after nine years than without eastern enlargement (i.e., around +0.15 percentage point annually). The effects of eastern opening across a comparable time horizon have thus been twice as strong as the future effects of eastern enlargement are projected to be. However, these projections cover a nine-year period only. In the longer term, the integration effects could be much greater owing to the expansion of the EU's internal market – as a rule, integration effects are more likely to encourage longer-term economic growth.

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Costs and Benefits of EU Eastern Enlargement for Austria – Summary

With the adoption of the Agenda 2000 in July 1997, the European Commission initiated the enlargement of the European Union to the east. Ten Central and Eastern European countries (CEECs) were evaluated as candidates for membership in the EU. Five countries (Estonia, Hungary, Poland, the Czech Republic, and Slovenia) and Cyprus were chosen as candidates for accession negotiations, which officially started on 31 March 1998. The bilateral negotiations began in earnest on 10 November 1998. The other five CEECs (Bulgaria, Romania, Slovakia, Latvia, and Lithuania) will be involved in the preaccession strategy. Whether Slovakia and Latvia will be included in the first group of prospective members on the basis of the favourable Commission's progress report on these two countries remains an open question.

The Agenda 2000 and the negotiation procedure established so far indicate that the accession of new members will take place in two waves. Given these perspectives, the financial costs and benefits of the eastern enlargement of the EU for Austria were again evaluated on the basis of the WIFO macroeconomic model (the first analysis of this question was carried out in 1995-96).

The model simulations for the period of 2002 to 2010 are based on the assumption that the first group of five CEECs will join the EU in 2002 (this assumption corresponds to the budget projections of the EU Commission), and that the other CEECs will accede to the EU in 2007. The assumptions underlying the model simulations are derived from integration theory and the budget framework of the European Commission for the period 2002-2006. In several steps, the direct and indirect trade effects as well as the effects of improvements in the terms of trade, changes in tourism, the increase in direct investment, and the financing costs imposed on Austria were calculated. The simulations do not take into account the effects of migration, which will strongly depend on the length of transition periods, which are likely to be agreed upon.

In sum, the eastern enlargement of the EU may have a positive impact on almost all aggregates of Austria's economy. By the year 2010, real GDP is projected to be 1.3 percent higher than in a scenario without enlargement. This increase will be accompanied by an employment gain of 27,000 persons. The price level is expected to be 1 percent lower, and the general government deficit is calculated to be lower by 0.4 percent of GDP.

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