### Fritz Breuss

# 15 Years of Austrian EU Membership

Austria has been a member of the EU for 15 years. An economic reassessment of the integration effects is carried out against the background of the change in Europe's integration history since the "opening" of Eastern Europe in 1989. Since that time, EU integration has become deeper, with the creation of the Internal Market and the subsequent introduction (albeit not yet in all member countries) of a common currency. In 2004 and 2007, a big step of enlargement was taken. 15 years of EU membership have been to Austria's economic benefit. Real GDP growth has thereby been raised by 0.6 percentage points per year. All integration steps since 1989 taken together (opening of Eastern Europe, EU accession, EMU membership, EU enlargement), the integration bonus amounts to additional 0.9 percentage points of real GDP growth and 20,000 jobs per year.

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15 years ago, on 1 January 1995, Austria became a Member of the European Union. Since that time, the geo-political landscape of Europe has changed substantially. The collapse of the communist planned economies in Eastern Europe led to the opening of these economies towards the West and finally to the re-unification of Europe. The European Community had just set as its goal the deepening of integration via the formation of a single market like in the USA, when in 1989 the upheavals in Eastern Europe turned political conditions upside down and compelled the EU to consider taking on the transition economies as new members. Austria, hitherto constrained in its approach towards the EU by the provisions of the State Treaty of 1955 and its declared status of political neutrality, began to seriously envisage a move towards the EU when the White Paper of 1985 set the goal of integrating the EU economies into an Internal Market (European Commission, 1985). As one of the first, Jan Stankovsky embarked on a comprehensive analysis of potential advantages and drawbacks of Austria's full membership in the Internal Market (Breuss - Stankovsky, 1988, Breuss – Schebeck, 1989). Not long thereafter, on 17 June 1989, Austria submitted a formal request for EU membership. After a favourable opinion by the European Commission ("Avis"), the accession negotiations together with Finland, Sweden and Norway, and the approval won in a popular referendum, Austria acceded to the European Union (EU) on 1 January 1995, together with Finland and Sweden.

In parallel with the deliberations in the EU of integrating the countries in East-Central Europe which as from 1989 ridded themselves from the dominance of the USSR, first via trade policy (Europe Agreements) and eventually through full membership in the context of the biggest EU enlargement in 2004 and 2007 to become EU 27, the process of deepening EU integration continued. In 1993, the Internal Market was formed; in 1999, Economic and Monetary Union (EMU) was established with the introduction of the euro as the common currency; the Schengen Agreement opened the possibility of travelling within the EU without passport (Schengen Area); in addition, institutional reform of the Union was undertaken until at last the Lisbon Treaty entered into force. These moves were a precondition for the appropriate functioning of an enlarged Union.

The present analysis in honour of Jan Stankovsky sets out to re-assess Austria's EU membership in the context of the wider integration process taking place in Europe

at the same time, i.e., the long period of transformation of the former communist countries to market economies since 1989, the deepening of EU integration with the formation of the Internal Market since 1993, the additional step of monetary integration in EMU in 1999 and the introduction of the euro in 2002, and finally the big enlargement round of 2004 that was concluded in 2007.

A membership of Austria in the EEC in the 1960s and after 1967 when the three Communities ECSC, EAC (Euratom) and EEC were unified into one institution, was not opportune due to political concerns about Austria's status of neutrality and the provisions of the State Treaty. It was only in 1985, when in the "White Paper" the EC set out to overcome "eurosclerosis" by forming an Internal Market as of 1 January 1993 that Austria faced the issue of an appropriate move towards the EU, beyond the Free Trade Agreements with the EC and the ECSC of 1972, in order to avoid economic disadvantages. The legal concerns about political neutrality were soon dissipated by a comprehensive expertise by Hummer – Schweitzer (1987). The economic aspects of membership versus non-membership (Breuss – Stankovsky, 1988), and subsequently of participation in the European Economic Area (EEA; Breuss – Schebeck, 1991) were investigated in several WIFO studies. In further analyses based on model simulations, WIFO compared the advantages and drawbacks of Austria's full participation in the EU Internal Market with those of non-participation, estimating the effect of participation at ½ percentage point additional GDP growth per year (Breuss - Schebeck, 1989).

While Austria moved closer to the EU (see box), the opening of Eastern Europe to the West got underway. In 1989, the communist planned economies collapsed, and in 1991 the USSR broke apart. The countries in Central and Eastern Europe (CEECs), hitherto tied to the USSR economically in the CMEA (Council for Mutual Economic Aid) and in the political/military alliance of the Warsaw Pact, liberated and transformed themselves politically (from dictatorship to democracy) and economically (from planned to market economies). In the course of transformation, the EU quickly approached the CEECs, in a first step via closer trade integration (Europe Agreements), thereafter in June 1993 at the European Council of Copenhagen by opening the door to EU membership, if countries met the "Copenhagen Criteria" (democracy, market economy, "acquis communautaire"). Before the transformation process in general and trade liberalisation by the Europe Agreements in particular, Austria benefited already in the run-up to EU enlargement and its own EU accession through new trade opportunities with the neighbouring countries in Eastern Europe.

Austria submitted its application for EU membership on 17 July 1989, thus at a time when Eastern Europe was in upheaval. In July 1991, the European Commission gave a broadly positive Opinion (Avis, 1991). Accession negotiations between the EU and Austria started on 1 February 1993, lasting for more than one year and leading to the Accession Treaty in April 1994 (European Commission, 1994)<sup>1</sup>. After approval in a popular referendum and ratification by the EU member countries, Austria joined the EU on 1 January 1995.

After the formation of the Internal Market in 1993, which has, however, not yet been fully implemented<sup>2</sup> and which was to receive new impetus by the Lisbon Strategy of 2000, progress towards deeper integration continued with the establishment of EMU in 1999 and the introduction of the common currency in 2002, economic integration thereby taking its final step. Austria, which automatically became part of the Internal Market with accession to the EU, was also among the 11 founding members of EMU. The economically highly integrated Union undertook in 2004 its fifth and biggest round of enlargement by 10 new members, motivated by both political (reunification of Europe after the ideological and political divide since World War II)

# Austria's way into an EU in transformation

<sup>&</sup>lt;sup>1</sup> For details on Austria's move towards the EU, see *Breuss* (1996); a documentation of the long history of Austria's way into the EU is offered by *Gehler* (2002).

<sup>&</sup>lt;sup>2</sup> Thus, e.g., the Services Directive entered into force only at the beginning of 2010.

and economic considerations; in 2007, that enlargement round was completed with the accession of Bulgaria and Romania.

## Overview of EU integration moves with implications for Austria

- 1960 3 May: Austria's accession to EFTA
- 1972 Free Trade Agreement of EC and ECSC with EFTA
- 1985 European Commission White Paper on the formation of EC Internal Market
- 1987 1 July: Single European Act (SEA): revision of Founding Treaties (ECSC, EAEC, EEC). Goal: creation of Internal Market as from 1 January 1993
- 1989 9 November: fall of Berlin Wall, beginning of Eastern transformation

17 July: Austria submits application for EC accession

- 1990 3 October: German re-unification
- 1991 Collapse of USSR, liquidation of Warsaw Pact and CMEA
  July: Avis (Commission Opinion) on Austria's application for EC accession
- 1993 1 January: European Internal Market enters into force
  - 1 February: start of accession negotiations with Austria, Finland, Norway and Sweden

22 June: European Council of Copenhagen: invitation to CEECs to become EU members; formulation of Copenhagen accession criteria (democracy, market economy, adoption of EU legislation, enlargement capacity of EU)

Europe Agreements: asymmetric trade liberalisation between EU and CEECs

1 November: Treaty of Maastricht enters into force (EC Treaty and EU Treaty, Second revision of Founding Treaties); Goals: Internal Market and EMU

- 1994 EEA participation of Austria
  - 14 April: Accession Treaties of the EU with Austria, Finland, Norway and Sweden
  - 12 April: Referendum in Austria on EU accession: approval rate 66.6 percent
  - 24 June: Signing of Accession Treaties with Austria, Finland, Norway and Sweden in Corfu
- 1995 1 January: Fourth EU enlargement with Finland, Austria and Sweden (EU 15)
  - 28 April: Austria participates in the Schengen Agreement (1 December 1997: abolition of personal border controls "passport-free travel" within the EU)
- 1999 1 January: Third Stage of Economic and Monetary Union enters into force (EUR 11)
  - 1 May: Treaty of Amsterdam enters into force (Third revision of Founding Treaties); Goals: CFSP, employment policy, Schengen Area, EU enlargement
- 2000 Lisbon Strategy for the improvement of the Internal Market (since 2005 major goals of "growth and employment")
- 2001 Greece enters Monetary Union (EUR 12)
- 2002 Euro becomes legal tender in the Monetary Union
- 2003 1 February: Treaty of Nice enters into force (Fourth revision of Founding Treaties); Goals: reform of EU institutions, preparation for EU enlargement, declaration of "Charter of fundamental rights of the Union"
- 2004 1 May: Fifth EU enlargement by 10 countries (EU 25)
  - 29 April: Signing of the Treaty on a Constitution for Europe: entering into force per 1 November 2006 failed in 2005 due to negative outcome of referenda in France and the Netherlands
- 2007 1 January: completion of the Fifth EU enlargement by Bulgaria and Romania (EU 27)

Slovenia enters Monetary Union (EUR 13)

Extension of the Schengen Area to 24 countries (22 EU countries, Norway and Iceland): UK, Ireland: special status; Switzerland joins the Schengen Agreement on 12 December 2008, Liechtenstein and Cyprus as from 2010, Bulgaria and Romania as from 2011

- 2008 Malta and Cyprus enter Monetary Union (EUR 15)
- 2009 Slovakia enters Monetary Union (EUR 16)

Global financial market and economic crisis

1 December: Lisbon Treaty enters into force (Fifth revision of Founding Treaties); Goals: 2 Treaties (TEU: Treaty on European Union, TFEU: Treaty on the Functioning of the European Union);

"Community" or "European Community" henceforth named "Union"; Union receives own legal status; new provisions on allocation of responsibilities between EU and member countries; Charter of fundamental rights; no Union symbols; reform of institutions (Council President; High Representative for Foreign and Security Policy is Vice President of the Commission

14 July: European Parliament assembles after elections of 4-7 June for 5 years in new composition according to Lisbon Treaty (751 members; Austria 19)

2010 10 February: European Commission starts new function period of 5 years

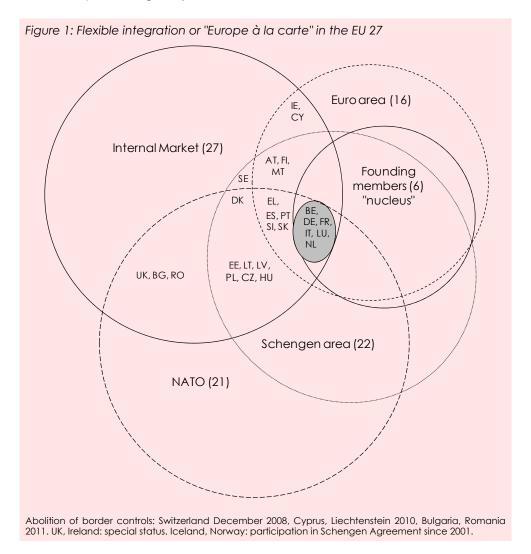
"Europe-2020" to follow-up on the Lisbon strategy for higher and sustainable growth

EAEC... European Atomic Energy Community (Euratom), ECSC... European Coal and Steel Community (abolished after 50-year function period on 23 July 2002), CFSP... Common Foreign and Security Policy, TEU... Treaty on European Union, TFEU... Treaty on the Functioning of the European Union, EEA... European Economic Area (Agreement between EU and EFTA).

Popular approval for the EU has not improved significantly since Austria's accession, being consistently below the EU average. While, according to the Eurobarometer (2009), 53 percent of the EU population judged membership positively, the corresponding ratio for Austria was only 42 percent (being still lower only in the Czech Republic at 40 percent, Hungary at 34 percent, the UK at 30 percent and Latvia at 23 percent). The peak within the last 15 years was reached in 2004 at 46 percent approval, the trough at 30 percent in 1997. The political measures of 14 EU members against Austria taken between February and September 2000 following the formation of a coalition government between ÖVP and FPÖ (Hummer, 2006, Strauß – Ströhle, 2010) had a negative impact on EU approval by the population.

The EU, comprising at present 27 member countries, has not yet finished its expansion. Accession candidates are at present the Balkan countries Croatia (next accession country) and Macedonia, crisis-ridden Iceland (application for membership of July 2009) and Turkey. Within the framework of the European Neighbourhood Policy, further countries in Eastern Europe are indirectly prepared for possible EU membership (Breuss, 2007A, 2007B). Eventually, an EU 40 is not inconceivable.

As a consequence of eastern enlargement, the EU has become even more heterogeneous than before. In several regards there is a situation that may be labelled as "graded" integration or Europe "à la carte": not all member countries take part in all integration steps (Internal Market, Monetary Union, Schengen Area, Common Defence Policy/NATO; Figure 1).



The economic effects of Austria's EU membership will hereafter be re-assessed on the basis of simulations with an integration model developed for that purpose (see annex); at the same time, the other integration moves that have taken place in parallel are also taken into account<sup>3</sup>. The relevant theoretical integration effects will be explained in the light of the integration moves that have actually occurred.

With the opening of Eastern Europe in 1989, the Austrian economy found new markets in its close neighbourhood. The countries in Central and Eastern Europe which have transformed from planned to market economies still have a large potential of catching up with the West. Both the geographical vicinity and historical ties offered ample opportunities which the Austrian economy took up early and to a large extent. Austria's good starting position was further reinforced by the liberalisation of trade between the EU and the CEECs under the Europe Agreements. Early model calculations (Breuss - Schebeck, 1996, 1998) suggested substantial gains for Austria, i.e., acceleration of GDP growth by some ½ percentage point and some 10,000 additional jobs created per year.

For the present re-calculation of the integration effects generated by the eastern European transformation since 1989, two elements were allowed for in the integration model. Firstly, the trade and FDI equations include dummy variables taking up the effects of eastern transformation in general and the changes in the trade regime between EU and CEECs in the context of the Europe Agreements of 1997 (asymmetric East-West trade liberalisation through the abolition of tariffs by the EU as from 1997 and by the CEECs as from 2002). Secondly, the overall growth effect of the enlargement of the EU market has been captured. Real GDP of the EU 27 grew by 0.1 percentage point faster on average than before.

The isolated effect of Eastern transformation raises in the simulations (Table 3) real GDP in Austria by 0.2 percent per year, and employment by around 4,000. The current account balance improves, since exports rise faster than imports. Austria's net exports rose mainly between 1989 and 2003, while the trend has turned around since the last enlargement round. The share of wages in national income has come under downward pressure due to stronger competition from low-cost countries.

Accession to the EU in 1995 enabled Austria to fully participate in the Internal Market, with all implicit integration effects: dismantling of border controls, reinforced competition, liberalisation and privatisation of formerly nationalised sectors (telecommunication, transportation, infrastructure networks, etc.), efficiency and thereby productivity gains, full exploitation of the "four freedoms". The fact that the Internal Market did not yield entirely the expected (Cecchini Report: Catinat - Donni - Italianer, 1988) integration effects on economic growth (forecast for GDP +3/4 percent, inflation rate -1 percentage point per year) and employment (forecast of 1.9 million additional jobs after 6 years) is largely due to two reasons: first, not all projects have been implemented (the Internal Market for services was created by a dedicated Services Directive that took effect only in 2010)4, and second, the consecutive enlargements added to heterogeneity and not all of the new EU member countries participate fully in the Internal Market (Europe "à la carte"). Thus, already in 2000 there was the attempt to give greater momentum to the Internal Market with the "Lisbon Strategy for growth and jobs". These efforts came to a temporary standstill with the current financial market and economic crisis. The strategy of "Europe 2020" is to carry the goals of the Lisbon Strategy forward (Breuss, 2008, 2009C).

Linked to participation in the Internal Market is the entry into the EU Customs Union with a common external tariff (CET). In the case of Austria, this implied a slight reduction in the average tariff from 10.5 percent to the CET level of 5.7 percent before the cut in the context of the Uruguay Round (Breuss, 2006B, p. 307). Apart from the

Re-assessment of the economic effects of **Austria's EU** membership

Opening-up of Eastern Europe

Austria's EU membership

<sup>3</sup> An overview of the existing calculations of the integration effects of the different integration moves for Austria is presented by Breuss (2006A, 2009D).

<sup>&</sup>lt;sup>4</sup> According to calculations by Badinger - Breuss - Schuster - Sellner (2008), full implementation of the Services Directive could raise the level of EU GDP by ½ percent to 1 percent in the long run and make for an increase in employment by around 400,000.

Common Tariff and Trade Policy (CTP), the EU conducts the Common Agricultural Policy (CAP) and applies common rules for competition and regional policy<sup>5</sup>. The very assumption of the responsibility for competition and regional policy has led to greater transparency and contributed to the catching-up of formerly poor regions<sup>6</sup> (like Burgenland) due to privileged access to subsidies (Target 1; Mayerhofer – Fritz, 2009). Nominal gross regional product per capita increased from 1995 to 2007 in Burgenland by 3.8 percent per year as compared with the national average of 3.3 percent Tyrol und Upper Austria by +3.7 percent each, other Länder +3.5 percent, Vienna +2.6 percent).

EU membership is also coupled with the integration into the EU budget which aims for "solidarity between the member countries" according to Art. 3 (3) of the Lisbon Treaty. This implies a redistribution of income from the richer to the poorer member countries via the funds for structural and regional policy.



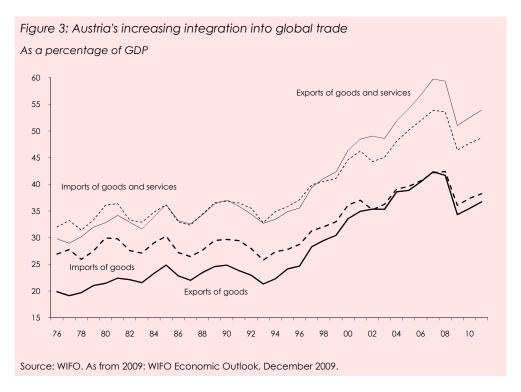
As the fourth-most-wealthy member country of EU 27 (Figure 2), Austria is a net contributor to the EU budget. The highest net contributions were recorded in 1995 (0.44 percent of GDP) and 1997 (0.43 percent). Since 2001, the net contribution has been consistently below 0.2 percent of GDP. On the one hand, Austria has learned how to claim more resources (notably under the heading of "rural development"), on the other the net contributors benefited from higher refunds for customs duties collection etc. Also in the larger EU 27, Austria remains a net contributor to the tune of 0.3 percent of its GDP per year. The Ministry of Finance expects that EU enlargement will "cost" Austria 0.1 percent of GDP, an estimate resulting from the increase in net payments from the financial period 1999 to 2006 to the one of 2007 to 2013.

 $<sup>^{5}\,</sup>$  The responsibilities of the EU member countries are defined in the Lisbon Treaty (TFEU, Title I).

<sup>&</sup>lt;sup>6</sup> With a total of € 347.41 billion for the financial programme period 2007 to 2013, cohesion policy claims 35.6 percent of the entire EU budget and represents the second-largest budget item behind the Common Agricultural Policy of 42.4 percent. In the context of the phasing-out of Burgenland (€ 177 million) and for the targets of "regional competitiveness and employment" (€ 1,207 billion) and "European territorial cooperation" (€ 257 million), Austria will call a total of € 1.46 billion in subsidies of cohesion policy and spend a substantial amount on co-financing (inforegio factsheet Austria, October 2006, <a href="http://ec.europa.eu/regional\_policy/atlas2007/index\_en.htm">http://ec.europa.eu/regional\_policy/atlas2007/index\_en.htm</a>). Overall, Austria receives over the period of 2007 to 2013 a share of 1.4 percent of total EU expenditure amounting to € 944.77 billion (commitment obligations), i.e., € 13.6 billion at current prices (<a href="http://ec.europa.eu/budget/prior\_future/fin\_framework\_de.htm">http://ec.europa.eu/budget/prior\_future/fin\_framework\_de.htm</a>).

The Internal Market programme is rather complex. In the present context we try to capture in the simulations the key elements of the integration effects to be expected from the theoretical perspective (Breuss, 2006B, p. 367ff, 2007C, pp. 254-258). The results obtained are therefore, like in the numerous ex-ante studies (for a summary see Breuss, 2006A, 2006B, chapter 12), only some points of reference for the potential magnitude of the integration effects. In addition, ex-post estimates are blurred by the fact that the results obtained include many other effects (e.g., overlapping integration moves).

- Increase in competitive pressure: higher intensity of competition, while exerting downward pressure on prices, has hardly any effect on real GDP, as confirmed by detailed studies on the impact of Internal Market participation on competition at the aggregate level (Badinger Breuss, 2005). In the present context, the impact on competition is captured by the dummy variable "markup".
- Increase in research and development activities: Boosting the R&D ratio raises total factor productivity and has a direct impact on real GDP. Among others, the possibility to participate in the EU Framework Programmes has boosted markedly the R&D ratio since the mid-1990s. At 2.66 percent of GDP, it reached a peak in 2008, edging down thereafter under the impact of the economic crisis. The goal of the Lisbon strategy of the R&D ratio reaching 3 percent of GDP will not be attained by 2010. The increase in the R&D ratio after EU accession is modelled by an accession dummy variable.

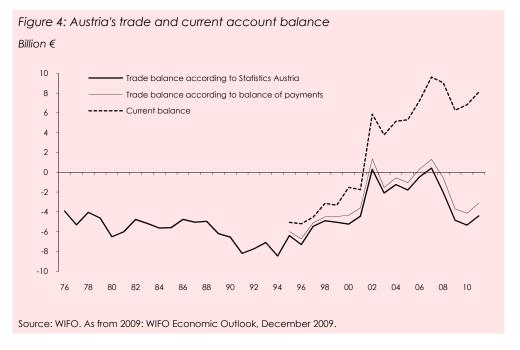


• Trade and FDI effects: Participation in the EU Internal Market offers the possibility of a customs-free exchange of goods without border controls (Figure 3, Table 1). In Austria, however, this led to higher imports rather than to an increase in exports to the EU. As a consequence, the trade and current account balances with the EU 15 weakened (Figures 4 and 5). It was only with the transformation in Eastern Europe and even more with EU enlargement that Austria's net exports improved markedly. Harmonisation of legal provisions in the EU is also conducive to higher foreign investment. In the wake of EU accession, inward foreign direct investment increased much more strongly than FDI exports. With EU membership, Austria has become significantly more attractive for foreign investors (Figures 6 and 7). Only Eastern transformation and EU enlargement enabled the Austrian corporate sector to raise FDI exports more than FDI imports. The model simulations capture the trade and FDI effects by means of dummy variables for EU accession.

Simulation of the integration effects of Internal Market participation

Table 1: Growing eastern orientation of Austria's foreign trade										
	1980	1985	1990	1995	2000	2005	2008	2009 January to October		
	As a percentage of total exports									
EU 27 <sup>1</sup>	71.6	67.6	75.3	77.2	74.7	73.2	72.2	71.3		
EU 15	61.0	60.1	67.9	65.9	61.1	58.5	54.6	55.0		
12 new EU members <sup>1</sup>	10.6	7.5	7.4	11.3	13.6	14.6	17.6	16.3		
CEEC 101	10.5	7.4	7.3	11.2	13.5	14.5	17.5	16.2		
CEEC 29	14.0	12.1	10.4	14.2	16.5	19.3	23.7	21.8		
Bulgaria	0.7	8.0	0.3	0.3	0.3	0.5	0.8	0.6		
Romania	1.1	0.3	0.2	0.4	0.7	1.5	2.0	1.8		
Poland	2.7	1.2	0.9	1.4	1.6	2.0	2.8	2.7		
Hungary	2.2	2.6	2.2	3.6	5.0	3.4	3.6	3.1		
Former CSFR	1.4	1.1	1.9	3.7	4.0	4.8	5.8	5.6		
Czech Republic <sup>1</sup>	1.1	8.0	1.4	2.7	2.9	3.1	3.7	3.6		
Slovakia <sup>1</sup>	0.4	0.3	0.5	1.0	1.1	1.7	2.0	2.0		
Former Yugoslavia	3.3	2.3	2.7	2.8	3.3	3.9	4.5	4.4		
Slovenia <sup>1</sup>	2.3	1.3	1.7	1.7	1.8	1.8	2.2	2.2		
Baltics (Estonia, Latvia, Lithuania) <sup>1</sup>	0.1	0.1	0.1	0.1	0.2	0.5	0.4	0.3		
Malta and Cyprus <sup>1</sup>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Other countries (world – EU 27)	28.4	32.4	24.7	22.8	25.3	26.8	27.8	28.7		
BRIC			2.4	2.9	2.3	3.7	5.2	5.5		

Source: WIFO calculations. CEEC 10... Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Czech Republic, Hungary, CEEC 29... CEEC 10 + CIS + Balkan countries, BRIC.. Brazil, Russia, India, China. – 1 1980 to 1990: WIFO estimates.



Due to more intense competition, greater efforts at research and development as well as to the trade and FDI effects, the rate of annual GDP growth was 0.1 percentage point higher than in the baseline scenario.

• Productivity shock: in all ex-ante assessments of the integration effects of the Internal Market, productivity growth plays an important role. The basic simulations in the Cecchini Report (Catinat – Donni – Italianer, 1988) assume that in an early stage the adjustment to more intense competition leads to lower productivity gains than in the baseline scenario and that the dynamic integration effects boosting productivity and output growth will kick in only later. Such a pattern has been retained also in the present context, starting from the fact that total factor productivity in Austria has been rising faster by about ½ percentage point p.a. since 1995 than on average in the EU. Indeed, the productivity shock provides the strongest impulse to real GDP growth, i.e., around 0.4 percentage points per year.

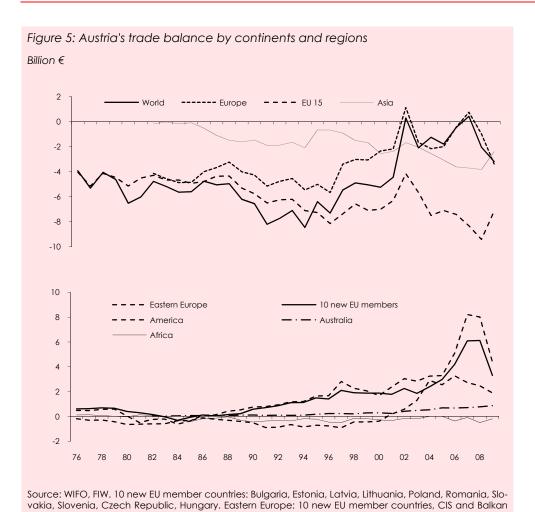
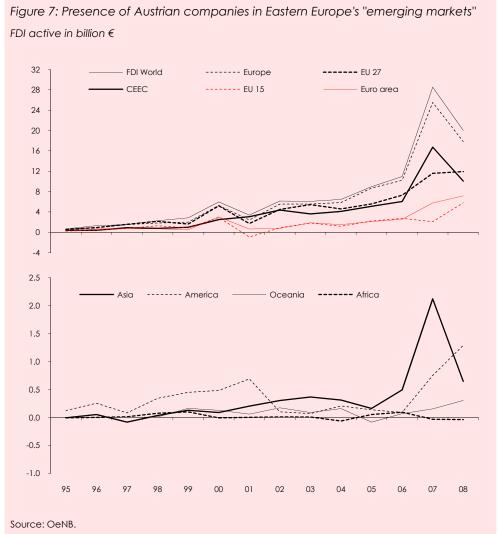


Figure 6: Austria's increasing international integration through foreign direct investment As a percentage of GDP FDI active FDI passive Source: OeNB. FDI active  $\dots$  direct investment from Austria abroad, FDI passive  $\dots$  foreign direct investment.

• Net contributor position: In the present model, allowance has been made for the actual development of Austria's position as net contributor to the EU budget

since 1995. This variable does not affect GDP, but only the budgetary situation. The impact of subsidies from the regional and structural funds is deemed on the whole positive by Mayerhofer – Fritz (2009); in the present calculations, this impact is implicitly included in the effects on productivity.



Overall, Austria's EU membership has boosted real GDP growth by around 0.6 percentage points per year. Over the 15 years since accession to the EU, some 14,000

additional jobs per year have been created in Austria (Table 3).

With the formation of EMU in 1999 and the introduction of the common currency in 2002, the EU has reached its highest stage of integration so far. Further steps would be a still greater harmonisation or centralisation of all policy areas up to the creation of the "United States of Europe". Such a move appears utopian for the time being, as witnessed by the negative attitude in most EU member countries towards a Federal European State as well as by the rejection of the draft Treaty for a European Constitution in France and the Netherlands in 2005, where the population suspected elements of such a Federal European State. Thus, the Lisbon Treaty could only be ratified once all indications of a Federal State (down to the "symbols of Europe") had been eliminated.

After the predominantly micro-economic steps of harmonisation (e.g., common competition policy), the establishment of EMU implies a partial centralisation of macro-economic policy (monetary policy through the ECB) and an obligation of close co-ordination (fiscal policy through the Stability and Growth Pact; Breuss, 2009A, 2009B). With currently 16 out of 27 EU countries, the euro area has fewer members than the Internal Market of the enlarged EU.

Membership in EMU and the common currency

In a similar way as in the calculations by *Breuss* (2009A, p. 64) with the global macro model of Oxford Economic Forecasting, the EMU integration effects for Austria are herewith simulated with the integration model (see Annex) for the period from 1999 to 2010. Three influence factors are taken into consideration:

- Fiscal policy: Entry into EMU obliged Austria (as all other candidates for EMU participation) to restore sound public finances according to the convergence criteria and to reduce the general government deficit below 3 percent of GDP. Had the deficit ratio, without such constraint, remained 1 percentage point higher, consolidation due to the imminent EMU participation would have dampened GDP initially, but would have had a positive impact on income growth thereafter. On average over the last ten years, fiscal consolidation has raised GDP growth by 0.1 percentage point per year (compared with a scenario without EMU), since it reduced crowding-out effects for private investment and thus exerted a positive influence on capital formation.
- Exchange rate effect: Before entry into EMU, the Austrian schilling appreciated steadily and markedly vis-à-vis the ECU and also in real-effective terms vis-à-vis the trading partners, implying a weakening competitive position. With the start of Monetary Union, this effect disappeared and Austria gained in price competitiveness (some 6 index points on the real-effective exchange rate). On the cautious assumption that the depreciation effect since 1999 would have been smaller, i.e., the real-effective exchange rate would have fallen by 1 percentage point less, there is virtually no impact on real GDP (+0.01 percentage point per year), though an improvement in the current account balance.
- Productivity effect: Both labour productivity and total factor productivity (TFP) have increased faster in Austria since 1999 than the euro area average (TFP since 1995 by around ½ percentage point vis-à-vis the EU-15 average). This positive gap has been maintained until now and has been included in the simulation of the effects of Austria's EU membership. We now allow for the additional EMU effect that resulted from a stronger increase in R&D spending since 1999 (dummy variable in the R&D equation) and indirectly influences also the TFP trend in the model. The result is an additional increase in real GDP growth by around 0.4 percentage points p.a. since 1999. The productivity effect is thus, like in the simulations of the impact of EU membership, the single most powerful growth effect of EMU formation. It may, however, exaggerate in the simulations the actual impact somewhat.
- Overall effects: Over the 11-year period since 1999, Austria's GDP growth averaged 1.8 percent p.a. The three simulated effects of EMU membership yield a growth impulse of 0.4 percentage points per year (Table 3). EMU participation and euro introduction are estimated to have led to the creation of some 10,000 new jobs. Yet, such simulations can reproduce the complex EMU effects only with a certain margin of uncertainty. A dampening effect to be considered is the real interest rate which on the basis of the centralised monetary policy by the ECB has been higher in Austria by almost ½ percentage point than the euro area average, albeit hardly above the EU-15 average and lower than in Germany (+0.6 percentage points above the euro area average). Whether developments in Austria would have followed a similar pattern even without EMU participation is an open question.

With the EU enlargement of 2004 by ten and 2007 by two more member countries, the Internal Market has been extended and the scope for free trade enhanced. In relative terms, Austria benefited most among the EU-15 countries from this enlargement. Ex-ante model calculations (Breuss, 2001, 2002) yield an additional GDP growth effect of approximately 0.2 percent per year. The distribution of the integration effects between the EU 15 and the new EU member countries is estimated at about 1:10, i.e., GDP growth in the new EU member countries is about 1 percentage point higher after EU accession than before, in the EU 15 the respective increase is 0.1 percentage point. For the accession of Bulgaria and Romania (Breuss, 2009E) integration effects have been estimated at around ½ percentage point per year re-

Fifth round of EU enlargement

spectively, while EU-15 countries hardly benefited (Austria +0.05 percentage points p.a.).

In the re-calculations with the integration model (see Annex), the integration effects of EU enlargement 2004 to 2007 enter as additional trade and FDI impulse (abolition of border controls, entry into EU customs union, adoption of the acquis communautaire and thus legal certainty for direct investment) through dummy variables in the equations for exports and imports or for FDI exports. The effects of the larger Internal Market, materialising up to now, have already been captured in the simulations for Eastern transformation.

The results suggest that the EU enlargement of 2004 triggered an increase in Austria's growth rate of real GDP by 0.4 percentage points per year (Table 3), associated with the creation of about 9,000 additional jobs per year. Unlike with the isolated simulation of the effects of Eastern transformation, the impact on exports is now smaller than that on imports, though FDI exports show a relatively stronger increase. While Eastern transformation contributed towards the downward trend in the wage ratio, no further decline has been observed in the short period since the EU enlargement of 2004 to 2007. While Austria has, for political reasons, militated actively in favour of restrictions on the mobility of labour via a 7-year transition period (and has in this regard convinced many other member countries, notably Germany), unrestricted mobility would have been economically more beneficial. According to a study by the European Commission (D'Auria - Mc Morrow - Pichelmann, 2008) which includes in the simulations with the QUEST model the actual number of 26,000 immigrants (0.5 percent of total employment) into Austria from the new EU member countries between 2004 and 2007, real GDP would thereby be boosted by 0.35 percent in the medium-term; at the same time, however, GDP per capita would edge down by 0.1 percent.

As a small economy, Austria depends to a greater extent than large countries on access to wider markets without trade barriers or other restrictions. The economy has therefore drawn sizeable benefits from the steady increase in trade opportunities with Eastern Europe after transformation and from participation in the growing EU Internal Market. Over the entire period since the beginning of Eastern transformation in 1989, annual real GDP growth in Austria has exceeded the EU-15 average by 0.4 percentage points. Compared with Germany and Switzerland, the growth advantage has been as large as 0.8 percentage points. Only the USA have recorded somewhat stronger growth. A similar growth advantage has been observed for the sub-periods (EU membership, EMU participation and EU enlargement; Table 2). The financial market and economic crisis of 2009 was a major setback for economic performance not only in the EU 15, but even more in the new member countries (Table 2).

Overall effects

Table 2: Trend of real GDP in different integration periods										
	Eastern transformation		EU membership Average		EMU participation year-to-year percentage		EU enlargement		Economic crisis	
	1989-2010	1989-2007	1995-2010	1995-2007	1999-2010	1999-2007	2004-2010	2004-2007	2008-2011	2009
Austria	+ 2.2	+ 2.5	+ 2.0	+ 2.5	+ 1.8	+ 2.4	+ 1.7	+ 3.0	+ 0.4	- 3.4
EU 27	+ 1.9	+ 2.4	+ 1.9	+ 2.5	+ 1.6	+ 2.4	+ 1.1	+ 2.6	- 0.3	- 4.1
EU 15	+ 1.8	+ 2.2	+ 1.8	+ 2.4	+ 1.5	+ 2.3	+ 1.0	+ 2.4	- 0.4	- 4.1
12 new EU members	+ 1.9	+ 2.2	+ 3.5	+ 4.3	+ 3.4	+ 4.5	+ 3.3	+ 5.8	+ 0.9	- 3.9
Germany	+ 1.4	+ 1.8	+ 1.1	+ 1.6	+ 0.9	+ 1.5	+ 0.7	+ 1.9	- 0.2	- 5.0
Switzerland	+ 1.4	+ 1.7	+ 1.5	+ 1.9	+ 1.5	+ 2.1	+ 1.6	+ 3.1	+ 0.1	- 2.4
USA	+ 2.6	+ 3.0	+ 2.5	+ 3.1	+ 2.1	+ 2.9	+ 1.6	+ 2.9	+ 0.5	- 2.5
Source: WIFO calculation										

Due to massive fiscal policy intervention (Breuss – Kaniovski – Schratzenstaller, 2009), the recession struck less severely in Austria. The new EU member countries do not have the necessary resources for such intervention, some of them even had to resort to support from international organisations (IMF, World Bank, EBRD).

Since the processes of Eastern transformation, EU accession, EMU and EU enlargement largely took place over the same period, the effects of the different integration moves partly overlap. For this reason, the different integration effects may not be simply added up. The present re-calculation therefore identifies separately the effects of the different integration steps with one and the same integration model, also simulating an overall result including all integration impulses.

Table 3: Impact of different integration steps on the Austrian economy formation of FU total Eastern EU accession transformation enlargement 1989-2010 1995-2010 1999-2010 2004-2010 1989-2010 Average additional change in percent p.a. GDP, volume + 0.2 + 0.6 + 0.4 + 0.4 + 0.9 Total factor productivity (TFP) 0.1 0.2 0.2 0.2 0.4 0.1 + 0.3 + 0.3 0.2 + 0.5 Capital stock 0.1 + 0.4 **Employment total** + 0.2 0.2 + 0.5In 1.000 3.8 + 14.1 + 9.8 9.1 +19.0Dependent employment, in 1.000 + 8.7 8.1 + 17.0 3.4 + 12.6 Inflation rate (HICP), in percentage points 0.0 0.3 0.0 0.0 - 0.2 + 0.0 + + + 0.0 0.0 Unit labour costs 0.0 0.0 Exports, volume 0.5 0.1 0.0 1.3 09 Imports, volume 0.6 0.9 2.0 2.8 1.3 Personal disposable income, real + 0.2 + 0.6 + 0.4 + 04 + 0.9 + 02 + 06 + 0.5 + 0.41.0 GDP per capita, volume Inclusive net contribution to EU budget + 0.2 + 0.6 0.5 0.4 1.0 Relative to EU-15 average + 0.3 + 0.7 + 1.1 0.5 0.4 Average additional change in percentage points - 02 Unemployment rate -04-0.3-0.2-0.7Export ratio, as a percentage of GDP + 3.1 - 0.6 - 1.4 + 2.7 + 3.1 + 3.7 Import ratio, as a percentage of GDP 2.3 1.4 3.9 6.1 Current account balance, as a percentage of GDP 0.9 4.3 2.8 1.2 3.0 + 00 + 0.0 + FDI exports, as a percentage of GDP 0.424 0.8 FDI imports, as a percentage of GDP 0.1 1.0 0.11.0 09 Short-term interest rate 0.0 0.1 0.0 + 0.0 0.1 + + General government financial balance, as a percentage of GDP 0.3 0.7 1.0 0.4 0.5

0.3

- 0.5

0.5

+ 1.3

1.0

0.8

0.4

0.2

Overall, the integration steps have led to an increase in the annual growth rate of Austria's real GDP by 0.9 percentage points and to the creation of approximately 20,000 jobs. The unemployment rate was reduced by 0.7 percentage points each year, the rate of inflation by 0.2 percentage points. For the whole period, the import ratio rose more than the export ratio. The entire integration process led to a weakening in the current account balance that was mainly driven by EU membership and EMU participation, while the transformation in Eastern Europe worked in the positive direction. Eastern transformation and EU enlargement offer new opportunities for Austria to actively participate in the globalisation process (in Eastern Europe the "mini globalisation" process). The level of welfare in Austria has increased faster by 1 percentage point per year than on average for the EU 15.

Inclusive net contribution to EU budget, as a percentage of GDP

Source: WIFO calculations with the integration model (see Annex).

Wage ratio (gross wages and salaries), as a percentage of GDP

During the 15 years since Austria joined the EU, the political and economic land-scape of Europe has changed in the wake of the transformation in the Eastern part of the continent since 1989. EU integration progressed with the formation of EMU and the introduction of the common currency. After the collapse of the communist planned economies in 1989, the EU had to assume the risk of Eastern enlargement. The process of EU enlargement continues, although another option is available with the setting of the "European neighbourhood". Among the Balkan countries, Croatia and Macedonia are accession candidates, the others (Albania, Bosnia-Herzegovina, Serbia and Kosovo) are potential candidates, like most recently Iceland. Turkey is also an accession candidate.

**Conclusions** 

0.4

0.6

In order to separate the integration effects generated by Austria's EU membership from those arising from other integration moves occurring in parallel (Eastern transformation, EMU participation, EU enlargement), a dedicated integration model has been developed. As expected, the largest single integration effect derives from Austria's EU membership which implied changes and adjustments in many respects. Participation in the Internal Market and hence in the EU Customs Union (Common Trade Policy), harmonised rules of competition policy, the Common Agricultural Policy, the harmonisation of regional and structural policy all contributed toward greater efficiency and trade expansion and substantially increased the opportunities to benefit from globalisation. These effects were further reinforced by participation in EMU and the introduction of the common currency. The expansion of the Internal Market through the fifth round of EU enlargement including neighbouring countries of Austria was an additional driver for the country's opening to foreign trade and investment. Austria, previously cut off from markets in the East by the Iron Curtain, has now moved into the centre of unified Europe, fully involved in the "mini globalisation" triggered by eastern transformation and EU enlargement.

The first 15 years of Austria's EU membership have been a success story. They provided the Austrian economy with an additional growth impulse of 0.6 percentage points per year and enabled the creation of 14,000 new jobs. Despite these economic advantages, the population still appears less than enthusiastic about EU membership. The approval rate amounts to only 42 percent, as compared with the EU average of 53 percent. Still, even the EU sceptics acknowledge that the "protective shield" of the euro and the integration into co-operative EU policy framework associated with EMU participation have been largely responsible for Austria having weathered the financial market and economic crisis without falling into a severe recession. As a result, EU scepticism in Austria has abated somewhat of late.

#### **Equations**

Production function (Cobb-Douglas):

 $BIP = TFP K^{\alpha} L^{1-\alpha}$ 

Total factor productivity (TFP):

 $d \log (TFP) = f \left( d \log (AP), d (F \& E), d (XQ), d (FDIX), d \log TFP_{-1} \right)$ 

Expenditure on research and development (F&E):

 $F \& E = f (Trend \ 1960/2011, DEU95, DEURO99, F \& E_{-1})$ 

Domestic price (private consumption deflator):

 $d \log (PK) = f (d \log (VPI))$ 

Domestic price (consumer prices, national definition, VPI):

 $d \log (VPI) = f(DMU, d \log (ULC), DMU, d \log (PM), d \log (HVPI_{-1}))$ 

Domestic price (consumer prices, harmonised, HVPI):

 $d \log (HVPI) = f (DMU, d \log (VPI))$ 

GDP deflator:

 $d \log (PBIP) = f \left( d \log (VPI), d \log (PX), d \log (PM) \right)$ 

Per-capita wages (Phillips curve):

$$d \log (WB) = f \left( d \log (VPI), d \log (AP), \frac{1}{U} \right)$$

Wages and salaries:

$$WN = \frac{WB B}{1,000}$$

Taylor rule for the euro area:

$$RK_{EA} = f(2 + d \log (HVPI_{EA}), 0.5 (d \log (HVPI) - 2.7), 0.5 (d \log (BIP_{EA}) - 2.5)$$

Short-term interest rate:

Annex: The integration model

 $RK = f(RK_{EA}, d \log(HVPI))$ 

Long-term interest rate:

$$RL = f(RK, d \log(HVPI), RL_{-1})$$

Demand for capital (private sector):

$$d \log (K) = f \left( d \left( BUD \right), d \log \left( BIP \right), \left( d \log \left( WB \right) - RL \right), d \log \left( K_{-1} \right) \right)$$

Labour demand total:

$$d \log \left(L\right) = f\left(d \log \left(BIP\right), d \log \left(WB_{-1}\right), d \log \left(L_{-1}\right)\right)$$

Demand for dependent labour:

$$d \log (B) = f \left( d \log (L) \right)$$

Labour productivity:

$$AP = \frac{BIP}{I}$$

Unit labour costs:

$$ULC = \frac{WN}{RIP}$$

Unemployment rate (Okun equation):

$$dU = f(d \log(BIP), d \log(POP_{-1}))$$

Export total, volume:

$$\log(X) = f(\log(BIP_{EU}), \log(RWK_{-1})), FDIX, DEU95, DEU97, DENL04)$$

Export total, value:

$$XN = X \frac{PX}{100}$$

Export ratio:

$$XQ = \frac{XN}{BIPN} 100$$

Import total, volume:

$$\log(M) = f(\log(BIP), FDIM, DEU95, DEA97, DENL04)$$

Import total, value:

$$MN = M \frac{PM}{100}$$

Import ratio:

$$MQ = \frac{MN}{BIPN} 100$$

Current account balance:

$$LB = XN - MN$$

Current account balance as a percentage of GDP:

$$LBY = \frac{XN - MN}{BIPN} 100$$

Direct investment from Austria abroad:

$$FDIX = f(X, DEA97, DENL04, DENL07)$$

Foreign direct investment in Austria:

$$FDIM = f(M, DEU95, DENL07)$$

Personal disposable income, nominal:

$$YDN = f(BIPN, YDN_{-1})$$

Personal disposable income, real:

$$YD = \frac{YDN}{\frac{PK}{100}}$$

GDP, nominal:

$$BIPN = BIP \frac{PBIP}{100}$$

Welfare indicator 1 (GDP per capita, real):

$$BIPPC = \frac{BIP \cdot 1,000,000}{POP}$$

Welfare indicator 1A (GDP per capita, purchasing power standards):

$$BIPPCKKS = f(BIPPC, BIPPCKKS_{-1})$$

Welfare indicator 2 (GDP per capita, real, including net transfers to EU budget):

$$BIPPCNZ = \frac{\left(BIP + \frac{NZ}{PBIP}\right) \cdot 1,000,000}{POP}$$

Welfare indicator 2A: GDP per capita, purchasing power standards, including net transfers to EU budget:

$$BIPPCKKSNZ = BIPPCKKS + \frac{\frac{NZ}{PBIP}}{100} \cdot 1,000,000$$

$$POP$$

GDP per capita, purchasing power standards, Austria as a percentage of EU 15:

$$BIPPCATEU = \frac{BIPPCKKS}{BIPPCKKS_{EU}} \cdot 100$$

General government financial balance as a percentage of GDP:

$$BUD = f \left( d \log \left( BIP \right), DELEC, BUD_{-1} \right)$$

General government financial balance including net transfers to EU budget:

$$BUDEU = BUD + NZY$$

Fiscal relations Austria-EU

$$NZ = \frac{NZY \ BIPN}{100}$$

Wage ratio:

$$LQ = f((XQ - MQ), d(FDIX - FDIM), LQ_{-1})$$

#### **Variables**

 $\alpha$  factor shares in net national income,

AP labour productivity (GDP per employment, real)

B dependent employment,

BIP real GDP,

 $BIP_{\!E\!A}$  real GDP, euro area

 $BIP_{EU}$  real GDP, EU 27, BIPN nominal GDP,

welfare indicator 1 (GDP per capita, real),

BIPPCATEU GDP per capita, purchasing power standards, Austria as a per-

centage of EU 15,

BIPPCKKS welfare indicator 1A (GDP per capita, purchasing power stan-

dards,

BIPPCKKS<sub>EU</sub> GDP per capita, purchasing power standards, EU 15,

BIPPCKKSNZ welfare indicator 2A (GDP per capita, purchasing power stan-

dards, including net transfers to EU budget),

BIPPCNZ welfare indicator 2 (GDP per capita, real, including net trans-

fers to EU budget),

BUD general government financial balance as a percentage of

GDP,

BUDEU general government financial balance as a percentage of

GDP, including net transfers to EU budget,

d changes from previous year, absolute
d log changes from previous year in percent,
DEA97 dummy variable for Europe Agreement,
DELEC dummy variable for parliamentary elections,
DENL04 dummy variable for EU enlargement 2004,
DENL07 dummy variable for EU enlargement 2007,

DEU95 dummy variable for EU accession,
DEURO99 dummy variable for EMU participation,

DMU dummy variable for price competition (mark-up),

F&E research & development expenditure, as a percentage of

GDP,

FDIM direct investment imports, as a percentage of GDP,
FDIX direct investment exports, as a percentage of GDP,

HVPI harmonised consumer price index,

HVPI EA harmonised consumer price index, euro area,

K capital stock, real, L total employment,

LB current account balance,

LBY current account balance as a percentage of GDP,

LQ wages and salaries in relation to nominal GDP  $\left(\frac{WN}{RIPN}\right)$ ,

M imports total, real,MN imports total, nominal,

MQ import ratio (total imports as a percentage of GDP),

NZ net transfers to EU budget,

NZY net transfers to EU budget, as a percentage of GDP,

PBIP GDP deflator,

PK private consumption deflator,

PM total imports deflator,

POP population,

PX total exports deflator,
RK short-term interest rate,

 $RK_{EA}$  short-term interest rate, euro area,

RL long-term interest rate,

*RWK* real-effective exchange rate,

TFP total factor productivity (technical progress),

Trend1960/2011 linear time trend,

U unemployment rate (Eurostat),

ULC unit labour costs (compensation of employees as a percent-

age of real GDP),

VPI consumer price index (national definition),WB per-capita wages of dependent employees,

WN wages and salaries,X exports total, real,XN exports total, nominal,

XQ export ratio (total exports as a percentage of GDP),

YD personal disposable income, real,
YDN personal disposable income, nominal,

-1 lagged by one period.

Econometric estimates with EViews 6.0 OLS

Source: Annual data 1960-2011 from AMECO database of the European Commission, autumn 2009 forecast (where available), Eurostat.

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#### 15 Years of Austrian EU Membership – Summary

Austria's 15-year EU membership has been a success story. It gave Austria an additional growth impulse of 0.6 percentage points and facilitated the creation of 14,000 new jobs. The main difficulty in estimating these integration effects consists in taking account of several simultaneous events: after the political upheaval of 1989 and the transformation of Eastern Europe, new market opportunities emerged for Austrian exporters. At the same time, EU integration deepened further. After the Internal European Market, Monetary Union with a common currency was created. Finally, the EU was enlarged to 27 member countries. In total – for all integration steps since 1989 (transformation of Eastern Europe, EU accession, participation in EMU, EU enlargement) – the integration bonus in Austria amounts to an additional real GDP growth of 0.9 percentage points per year and the creation of an additional 20,000 new jobs.