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Peter Havlik et al.

The New EU Member States and Austria: Economic Developments in the First Year of Accession

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# **Executive summary**

In their first year of EU membership, the new EU member states (NMS) recorded higher GDP growth (5% on average) than in the previous year, largely thanks to expanding domestic demand - in particular of investment and of private consumption. In 2004 GDP growth accelerated also in Austria, in line with the EU-15, yet both growth rates remained nearly 3 percentage points below that of the NMS. The NMS not only add a certain dynamism to the European economy but put some pressure on the EU reform agenda as well. On the downside, the situation on the NMS labour market remains precarious, robust economic growth notwithstanding. The average rate of unemployment is nearly twice as high as in the EU-15 whereas in Austria the unemployment rate is less than half the EU average. Austria and the NMS face numerous challenges regarding labour market developments in border regions, as well as with respect to the labour market position of different skill groups of workers. Overall, the most vulnerable group of employees are those with the lowest educational levels. There are little prospects for marked improvements anytime soon. The latter refers to industry in particular, which – despite a remarkable acceleration of output growth - continues to shed labour. This implies impressive gains in labour productivity and, given the general wage restraint, in unit labour costs as well. The international cost competitiveness of NMS has recently been eroded by appreciating domestic currencies whereas Austrian productivity and cost competitiveness have been continuously improving.

After a temporary increase in 2004 (largely caused by tax adjustments prior to EU accession and by rising energy prices), inflation resumed its downward trend in all NMS. The remaining inflation differential with respect to the eurozone, magnified by an appreciation tendency of NMS currencies (often stimulated by short-term capital inflows) may lead to competitiveness losses in the future. Given the ongoing productivity and quality improvements this danger is not yet imminent. Still the exchange rate developments should be watched closely, not least in the period prior to EMU accession, which in several NMS will probably extend beyond 2010. The need to reduce excessive budget deficits represents another challenge for a number of NMS in the coming years.

The outstanding feature of last year's economic developments was a boost in foreign trade. NMS exports grew by more than 20%, somewhat faster than imports (+17%), and their aggregate trade balance improved slightly. Yet foreign trade contributed positively to GDP growth in Poland only (as well as in Austria). The export sector of the NMS is strengthening – not least thanks to sustained reforms and large FDI inflows in the past couple of years – and their integration in the European and world economy is increasing. In 2004, 80% of NMS exports and 70% of imports already represented intra-EU trade. After the takeover of EU external trade policies upon accession, especially intra-NMS trade and extra-EU trade are booming. Altogether, the NMS enjoy a surplus in trade transactions with the EU, an achievement largely attributable to the high and growing surpluses of the Czech

Republic and Slovakia (and to a lower deficit in Poland). Austria's trade with the NMS displays above-average dynamism as well as steady surpluses in both goods and services trade. Austria's services trade has been more diverse with respect to NMS after accession. Travel services are declining in importance, while transport and other business services are on the rise. For the smaller services categories, some degree of trade diversion away from partners in the old EU to NMS can be observed. Trade with the EU may have had a positive effect on GDP growth in the Czech Republic, Poland and Slovakia in the first year of accession; the GDP growth effect of trade with the NMS was positive for Austria as well.

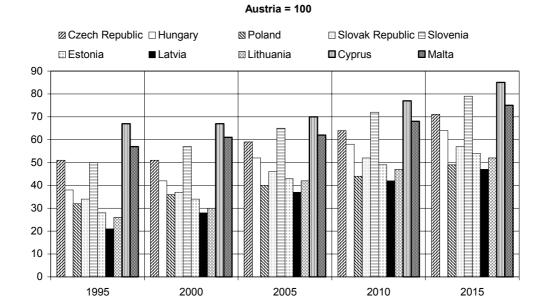
The EU's enlargement of May 2004 has brought few surprises and may generally be considered a success. The accession of the NMS was well prepared and managed. Earlier estimates of enlargement effects as a 'win-win situation' for both 'old' and 'new' member states seem to be confirmed. Still, the direct economic effects of accession on the NMS are difficult to identify: economic growth, especially of industry, had speeded up already before May 2004, a temporary increase of inflation was successfully contained and domestic currencies strengthened. Net transfers from the EU budget were negligible, yet foreign trade expanded strongly and inflows of FDI picked up again. The GDP growth outlook is fairly robust: barring major external shocks, the NMS are expected to grow by 4-5% annually in the coming years (the Baltic States will continue to enjoy even somewhat higher growth) thus maintaining their speed of convergence to the 'old' EU. The shadow side of this fairly upbeat economic forecast is the labour market where no substantial reduction of unemployment is expected. Estonia, Lithuania and Slovenia (all already participating in the ERM II) may adopt the euro in late 2006 or early 2007, with the remaining 'high-deficit' NMS following suit during 2008-2010.

**Keywords:** Central and East European new EU member states, Austria, GDP growth, industry, employment, productivity, foreign trade, FDI, exchange rates, inflation

**JEL classification:** O52, O57, P24, P27, P33, P52

Figure I

## Real per capita GDP in the new EU member states (NMS), 1995-2015

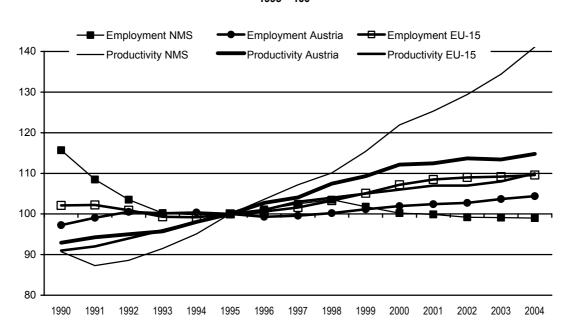


 $\textit{Note:} \ \ \text{Projection assuming a 2 percentage points growth differential to Austria after 2006}.$ 

Source: National statistics, Eurostat, wiiw estimates (see Table A/1).

Figure II

Employment and labour productivity in NMS, Austria and EU-15



1995 = 100

Note: Productivity defined as GDP per employed person.

Source: wiiw Database incorporating national statistics; AMECO; Statistics Austria; wiiw estimates.

Table I The European Union, NMS and Austria: overview developments 2003-2004 and outlook 2005-2006

	GDP real change in % against previous year				Consumer prices change in % against previous year				-	-	ased on al average		Current account in % of GDP				
	2003	2004	2005 fored	2006 cast	2003	2004	2005 forec	2006 ast	2003	2004	2005 fored	2006 ast	2003	2004	2005 fored	2006 cast	
Czech Republic	3.7	4.0	3.9	4	0.1	2.8	1.8	2.2	7.8	8.3	8.7	9	-6.2	-5.4	-5.0	-4.9	
Hungary	3.0	4.0	3.8	4.1	4.7	6.8	3.9	3.2	5.9	6.1	6.1	6.1	-9.0	-8.5	-7.9	-7.4	
Poland	3.8	5.3	4.5	4.5	8.0	3.5	3	3	19.6	19.3	19	18	-2.2	-1.8	-2.5	-2.5	
Slovak Republic	4.5	5.5	5.3	5.5	8.5	7.5	4	2.5	17.4	18.5	18	17	-0.8	-3.0	-4.4	-3.9	
Slovenia	2.5	4.6	3.9	3.9	5.6	3.6	3	2.7	6.7	6.3	6	6	-0.4	-0.7	-0.5	-0.5	
NMS-5 <sup>2)3)</sup>	3.6	4.8	4.3	4.4		•		•	15.1	15.1	15.0	14.5	-4.1	-3.9	-4.1	-3.9	
Estonia	5.1	5.8	6	5.7	1.3	3.0	2.8	2.5	10.0	10.0	9.5	9	-13.2	-15.1	-14.3	-13.4	
Latvia	7.5	8.5	6	6.5	2.9	6.2	5.5	4.5	10.6	10.4	9.8	9.5	-8.2	-12.5	-12.7	-11.3	
Lithuania	9.7	6.7	7	6.5	-1.2	1.2	1.5	1	12.4	11.4	11	10	-6.9	-8.3	-8.2	-7.3	
NMS-8 <sup>2)3)</sup>	4.0	5.0	4.5	4.6		•			14.7	14.6	14.5	14.0	-4.4	-4.5	-4.6	-4.3	
Cyprus	2.0	3.7	3.9	4.2	4.0	1.9	2.3	2.1	4.5	5.0	4.8	4.6	-3.0	-5.7	-4.9	-4.5	
Malta	-1.8	1.5	1.7	1.9	1.9	2.7	2.4	2.1	8.0	7.3	7.1	7.0	-5.8	-10.1	-9.9	-9.3	
Austria	0.8	2.0	2.2	2.3	1.3	2.1	2.5	1.8	4.3	4.5	4.5	4.5	-0.5	-0.5	-0.6	-0.4	
EU-15 3)	0.9	2.3	1.9	2.2	1.9	2.0	1.9	1.8	8.1	8.1	8.1	7.9	0.5	0.4	0.2	0.3	
EU-25 3)	1.1	2.5	2.1	2.4	2.0	2.1	2.1	1.9	9.1	9.1	9.1	8.8	0.1	0.2	0.0	0.0	

Notes: NMS: the New EU Member States. - 1) LFS – Labour Force Survey, refers to ILO definition. - 2) wiiw estimate. - 3) Current account data include flows within the region. Source: wiiw (March 2005); WIFO (April 2005); Eurostat; UN ECE; forecasts for EU-15, Cyprus and Malta: European Commission (Spring 2005).

The European Union, NMS and Austria: an overview of economic fundamentals, year 2004

	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Slovak Rep.	Slovenia	NMS-8 1)	Austria	EU-15	EU-25 <sup>2)</sup>
GDP in EUR at exchange rates, EUR bn	85.26	8.86	82.25	10.83	17.90	195.02	33.21	25.96	459.28	234.15	9720.11	10204.45
GDP in EUR at PPP, EUR bn	155.63	15.22	140.27	22.38	37.30	404.07	65.33	34.62	874.83	219.80	9306.40	10204.45
GDP in EUR at PPP, EU-25=100	1.5	0.1	1.4	0.2	0.4	4.0	0.6	0.3	8.6	2.2	91.2	100.0
GDP in EUR at PPP, per capita	15570	11280	13890	9670	10860	10580	12140	17350	12034	27041	24251	22288
GDP in EUR at PPP per capita, EU-25=100	70	51	62	43	49	47	54	78	54	121	109	100
GDP at constant prices, 1995=100	120.5	166.8	140.0	173.1	163.0	143.9	143.0	139.8	140.2	121.1	121.0	121.6
GDP at constant prices, 2000=100	112.1	127.4	115.0	133.2	132.8	112.0	119.5	113.3	114.5	104.8	105.9	106.2
Industrial production real, 1995=100	143.5	190.8	206.9	159.9	163.1	169.6	147.6	125.0	164.8	147.1	115.6	117.5
Industrial production real, 2000=100	129.9	140.4	122.8	130.4	153.2	122.8	126.3	112.0	125.4	111.2	101.2	102.3
Population - thousands, average	10207	1349	10097	2314	3436	38183	5382	1997	72965	8105	383759	457847
Employed persons - LFS, thousands, average	4707	595	3900	1020	1435	13707	2161	933	28490	3587	172410 <sup>4)</sup>	200900 4)
Unemployment rate – LFS, in %	8.3	10.0	6.1	10.4	11.4	19.3	18.5	6.3	14.6	4.5	8.1	9.1
Public sector expenditures, EU-def., in % of GDP	46.7	38.7	48.7	36.0	35.7	51.2	40.1	47.5	47.6	50.0	48.0	48.0
Public sector revenues, EU-def., in % of GDP	42.4	39.3	43.3	34.0	33.2	45.6	34.6	45.3	42.8	48.7	45.3	45.1
Price level, EU-25=100 (PPP/exchange rate)	54	58	59	48	48	48	51	75	52	108	104	100
Compensation per employee,5) monthly, in EUR	818	644	958	420	500	755	609	1515	780	3170	2900	2625
Compensation per employee, EU-25=100	31.1	24.5	36.5	16.0	19.1	28.8	23.2	57.7	29.7	120.8	110.5	100.0
Exports of goods in % of GDP	62.4	54.3	53.2	30.7	42.0	33.1	67.5	48.9	46.1 <sup>6)</sup>	38.1	27.9 <sup>6)</sup>	28.7 <sup>6)</sup>
Imports of goods in % of GDP	63.7	74.6	56.2	51.1	52.0	35.9	70.8	51.9	49.8 <sup>6)</sup>	38.2	26.8 <sup>6)</sup>	
Exports of services in % of GDP	9.1	25.5	9.0	13.2	10.8	5.3	8.7	10.7	8.0 6)	16.9	8.1 <sup>6)</sup>	8.1 <sup>6)</sup>
Imports of services in % of GDP	8.6	15.6	10.0	9.0	7.3	5.1	8.1	8.2	7.4 6)	16.1	7.7 6)	7.7 6)
Current account in % of GDP	-5.4	-15.1	-8.5	-12.5	-8.3	-1.8	-3.0	-0.7	-4.4 <sup>6)</sup>	-1.0	0.3 6)	0.1 6)
FDI stock per capita in EUR	4120	4680	4660	1470	1340	1230	1950	2760	2280	5800		

NMS-8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia. EU-15: EU up to 30 April 2004. EU-25: EU as of 1 May 2004. PPP: Purchasing Power Parity.

<sup>1)</sup> wiiw estimates. - 2) wiiw estimates, except: employed persons, budget and compensation per employee. - 3) 1989 = 100, which in the Polish case is the appropriate reference year. - 4) Employed persons aged 15-64, 2nd Qu. 2004. - 5) Gross wages plus indirect labour costs, whole economy, national account concept. - 6) NMS-8, Austria, EU-15 and EU-25 data include flows within the region. Source: wiiw, Statistics Austria, Oesterreichische Nationalbank (OeNB), AMECO, Eurostat.

## Peter Havlik et al.\*

# The new EU member states and Austria: economic developments in the first year of accession

#### Introduction

On 1st May 2004, eight Central and East European countries (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia: NMS-8), together with Cyprus and Malta, became members of the European Union. This paper looks at the first economic effects of accession, from the point of view of both the NMS and Austria, focussing on GDP growth, the labour market and productivity, inflation and exchange rates, as well as on foreign trade and foreign direct investment (FDI). The size of the NMS economies is still fairly small: their combined real GDP amounts to less than 9% of that of the EU-25 (Table II). Nevertheless, the NMS not only add a certain dynamism to the European economy (the GDP of the enlarged EU-25 increased by 2.4%, as compared with 2.3% for the EU-15 – see Table I), but also put some pressure on the EU reform agenda (such as concerning the Stability and Growth Pact and the Lisbon Strategy) and even set new accents to the EU's external policies (e.g. regarding Russia and Ukraine). It will be exciting to watch how much their voice will be heard in the formulation of the next EU Financial Perspective for 2007-2013 with its potentially very important implications for their medium- and long-term economic growth.<sup>1</sup>

#### External conditions: somewhat better for NMS in 2004

The long-awaited recovery in the EU-15 has not been really impressive in 2004. Nonetheless, compared with the mediocre GDP growth rates of 2002 and 2003 (1.1% and 0.9% respectively), the 2.3% growth recorded by the 'old' EU in 2004 is generally considered to have had positive impacts on the NMS. Austria's GDP has been growing more or less in line with the EU-15 in the past couple of years. The growth acceleration in the NMS has also been fostered by the fast growth prevailing in other transition countries (particularly in Russia, Ukraine and Romania). Among other factors affecting the NMS economies in the recent past, the substantial weakening of the US dollar against the euro has on the whole had a positive impact in 2004. Both exports and imports of the NMS are transacted primarily in euro (which generally has remained quite steady vs. their national currencies), but prices of their oil and natural gas imports are quoted in US dollar. The

<sup>\*</sup> This report draws on wiiw's latest special issue on economic prospects for Central, East and Southeast Europe (P. Havlik et al., 'Accelerating GDP Growth, Improved Prospects for European Integration', wiiw Research Reports, No. 314, March 2005). In addition, M. Landesmann, R. Römisch, H. Vidovic and J. Wörz (all wiiw) contributed to sections on labour markets and foreign trade developments.

<sup>&</sup>lt;sup>1</sup> See also Richter (2005).

weakening of the US dollar thus helped to moderate the negative effects of high world market energy prices. Rising demand for other raw materials (steel in particular) – and the vigorous rise in their international prices observed in 2004 – may actually have been beneficial to several NMS which had managed to preserve sizeable steel sectors (Poland, Slovakia and the Czech Republic).

## Growth driven mainly by domestic demand in NMS, by exports in Austria

In the NMS-5 (the Czech Republic, Hungary, Poland, Slovakia and Slovenia) GDP growth was appreciably higher in 2004 – nearly 5% on average – than in the past several years. GDP growth in the three Baltic States accelerated slightly in 2004 as well (excepting Lithuania) and continued to be very high (see Table I). Austrian growth picked up as well,

Table 1

#### **Gross fixed capital formation**

change in % against preceding year

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 <sup>1)</sup>	2005 fore		Index 1995=100 2004	Index 2000=100 2004
Czech Republic	19.8	7.6	-3.4	-1.1	-3.6	4.9	5.4	3.4	4.8	10	8	7	130.6	125.6
Hungary	-4.3	6.7	9.2	13.3	5.9	7.7	5.0	8.0	3.4	10	7	12	194.2	129.0
Poland	16.5	19.7	21.7	14.2	6.8	2.7	-8.8	-5.8	-0.5	5.1	7		163.9	89.8
Slovak Republic	0.6	29.1	15.0	11.0	-19.6	-7.2	13.9	-0.6	-1.5	4.0	7	10	142.6	116.0
Slovenia	16.8	11.3	13.5	9.9	21.0	0.6	4.1	3.1	6.3	6.9	6.5	6	206.0	121.9
Estonia	4.1	11.4	17.6	11.3	-15.5	14.3	13.0	17.2	5.4	7.0	6	5.5	210.2	149.4
Latvia	8.7	22.3	20.7	61.4	-6.8	10.2	11.4	13.0	10.9	15.0	9	8	360.7	160.6
Lithuania		15.2	24.5	21.8	-6.1	-9.0	13.5	11.1	14.0	14.0	15	12	239.3	163.9
Cyprus	-0.6	7.2	-4.1	7.9	-1.0	3.8	3.2	8.1	-2.2	5.3	6.4	6.6	131.0	114.8
Malta		-8.3	-4.4	-3.7	4.1	17.7	-9.1	-11.7	19.0	7.0	2.8	1.2	105.7	102.3
Austria	-1.0	2.6	1.4	3.5	2.3	6.5	-2.1	-3.4	6.2	3.8	1.8	2.7	122.0	104.0

Note: 1) Preliminary.

Source: wiiw Database incorporating national statistics; AMECO; WIFO; forecast: wiiw, WIFO and EU Commission.

matching the pace of the eurozone. Expanding gross fixed capital formation (investment for brevity) was one of the sources of GDP growth in all NMS (see Table 1). Everywhere (except Lithuania where investment growth has been high for a couple of years) investment growth accelerated, and its previous contraction in Slovakia and Poland came to an end in 2004. The contribution of rising investment expenditure to total effective expenditure (effective demand) – and hence to actual GDP growth recorded – depends not only on the magnitude of the rate of growth of investment. One also has to allow for the

'base', i.e. the investment's share in the GDP. Of course this applies to other components of the GDP, i.e. consumption, exports and imports, as well. In particular a judgement on whether foreign trade in goods and non-factor services (with changing real volumes of both exports and imports) has contributed positively to the rise in GDP may easily be wrong if one abstracts from the shares of exports and imports in the GDP. (It is also worth remembering that even if the trade balance measured at current prices – e.g. at current euro – improves strongly, the actual contribution of foreign trade to real GDP growth may still be negative.)

To gauge the actual importance of the changes in the individual GDP components for GDP growth properly, one may calculate the *contributions* of those components to the overall GDP growth rates.<sup>2</sup> Table 2 reports these contributions to the recent GDP growth rates for NMS and Austria.

As can be seen, the sources of the recent growth are rather dissimilar across the individual countries. In the first three quarters of 2004 (latest available data), it was only total consumption (private and public combined) that contributed quite significantly to overall GDP growth in all NMS. However, even in this case there is an exception - the Czech Republic – where the contribution of consumption was marginal. The contributions of gross fixed investment were quite significant generally, but not in Poland and Slovakia given their relatively weak investment growth. Perhaps surprisingly (considering last year's strong nominal export growth - see below), the contributions of foreign trade were negative everywhere (except Poland), but varied widely across countries (from fairly low absolute negative values in Slovenia and Slovakia, through moderate in Hungary, the Czech Republic and Estonia, to very high negative values in Latvia and Lithuania). In other words, foreign trade apparently reduced real GDP growth in the first three quarters of 2004 (and thus most probably in the whole year of 2004) in the NMS (except in Poland, where it added to growth relatively little). Or, equivalently, GDP growth in all NMS was driven by domestic demand everywhere (including Poland) in 2004. Thus, the impression one may get from the data on NMS foreign trade (in goods), measured in current euro (see below) that foreign trade must have contributed to growth in 2004 - is probably not fully substantiated. This contrasts with developments in Austria where the contribution of foreign trade to GDP growth was clearly positive.<sup>3</sup>

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The contribution of a GDP component to the GDP growth rate in a given period equals its GDP share in the previous period times its real growth rate. If the original data on GDP, its structure and all growth rates involved are internally consistent, then the sum of the components' contributions must equal the overall GDP growth rate. This property allows the measurement of the contributions of foreign trade (in goods and services, which equals the contribution of exports minus the contribution of imports) or of changes in inventories (sometimes lumped together with the item called 'acquisition less disposals of non-financial valuables' and with statistical discrepancies). The contribution of changes in inventories (combined with other 'residuals') equals the GDP growth rate minus the contribution of total consumption minus contribution of total fixed investment minus the contribution of foreign trade.

NMS growth patterns contrast also with developments in the eurozone (and especially in Germany) where domestic demand was much weaker in 2004 and growth contribution of foreign trade was positive – see Havlik et al. (2005).

Table 2

Contributions (in percentage points) to the GDP growth rates in NMS and Austria

	2000	2001	2002	2003	1-3 Q 2003	1-3 Q 2004	2004
Czech Republic							
GDP growth rate (%)	3.9	2.6	1.5	3.7	3.6	3.7	4.0
Consumption	1.6	2.2	2.5	3.6	3.6	0.9	
Gross fixed investm.	1.5	1.6	1.1	1.5	1.4	3.1	
Trade balance	-1.1	-2.2	-2.7	-1.5	-1.3	-1.5	
Hungary							
GDP growth rate (%)	5.2	3.8	3.5	3.0	2.8	4.1	4.0
Consumption	3.2	4.1	6.3	5.6	6.0	2.2	
Gross fixed investm.	1.9	1.2	2.0	0.9	0.5	2.9	
Trade balance	0.5	2.1	-2.1	-2.6	-4.3	-1.2	
Poland							
GDP growth rate (%)	4.0	1.0	1.4	3.8	3.5	5.9	5.4
Consumption	2.0	1.4	2.2	2.0	1.8	2.9	
Gross fixed investm.	0.7	-2.2	-1.2	-0.1	-0.2	0.6	
Trade balance	1.0	2.7	0.6	1.2	1.0	0.7	
Slovenia							
GDP growth rate (%)	3.9	2.7	3.3	2.5	2.4	4.5	4.4
Consumption	0.7	2.0	0.5	2.0	1.8	2.2	
Gross fixed investm.	0.2	1.2	0.9	1.8	1.7	2.0	
Trade balance	2.4	1.8	1.0	-2.4	-2.4	-0.4	
Slovak Republic							
GDP growth rate (%)	2.0	3.8	4.6	4.5	4.2	5.4	5.5
Consumption	-0.1	3.5	3.8	0.4	-0.1	2.0	
Gross fixed investm.	-2.0	3.6	-0.3	-0.3	-0.3	0.8	
Trade balance	1.9	-3.7	0.0	6.4	5.2	-0.2	
Estonia							
GDP growth rate (%)	7.8	6.4	7.2	5.1	4.8	6.2	5.8
Consumption	5.2	4.0	7.1	4.5	4.4	4.3	
Gross fixed investm.	3.9	3.7	5.2	1.8	2.6	2.4	
Trade balance	-2.3	-2.5	-3.1	-6.2	-6.7	-1.8	
Latvia							
GDP growth rate (%)	6.9	8.0	6.4	7.5	7.4	8.5	7.8
Consumption	3.0	5.1	4.9	5.7	5.5	6.0	
Gross fixed investm.	2.6	3.0	3.5	3.1	2.8	4.7	
Trade balance	3.6	-4.3	-0.1	-5.1	-5.5	-5.1	
Lithuania							
GDP growth rate (%)	3.9	6.4	6.8	9.7	9.1	6.7	6.6
Consumption	4.7	2.4	4.2	8.6	7.8	7.9	
Gross fixed investm.	-2.7	3.5	3.1	4.0	4.1	4.2	
Trade balance	1.6	-1.5	-2.4	-4.4	-3.3	-10.6	
Austria							
GDP growth rate (%)	3.4	0.7	2.2	0.8	0.5	2.0	2.0
Consumption	2.2	0.3	0.1	0.4	0.3	1.1	1.0
Gross fixed investm.	1.4	-0.5	-0.7	1.3	0.9	0.9	8.0
Trade balance	0.4	0.9	1.9	-1.4	-1.4	1.6	1.4
Source: Ameco, Eurostat, w	viiw estimates.						

The absence of convincing statistical evidence of strong impacts of the 'EU-15 business climate' on what happens to the contributions of foreign trade to overall GDP growth in the NMS does not imply that no such impacts exist. It can be argued that, if growth in the EU-15 had been much lower in 2004, the foreign trade contributions to GDP growth in the NMS would have been even lower than actually observed. By the same token also EU membership itself may have been good for trade (and thus for overall GDP growth) of the NMS (see section on foreign trade below). Nonetheless, it is still certain that the recent developments in the individual NMS follow quite separate paths. This is understandable because, despite several common features, there are many important differences. The individual NMS do not yet share the same problems, and do not conduct the same economic policies. Moreover, their emerging 'business cycles' are also far from synchronized.

#### Industry gathers strength, growth accelerates again

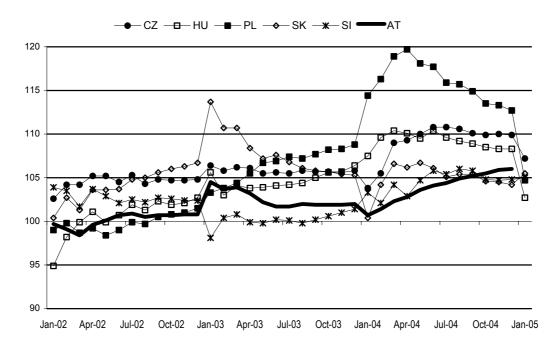
In the past few years, the NMS industrial sector underwent sweeping restructuring which was facilitated by both sustained reform efforts and considerable inflows of foreign direct investment (FDI, see below). Without doubt this has been related to the accession process. Production has been growing rapidly during the past decade while overall industrial employment has declined (or stagnated at best in some NMS such as Hungary), resulting in substantial productivity improvements. During the period 2000-2004, industrial output grew by 25% (and by more than 60% since 1995 – see Table II), and labour productivity in industry increased even more strongly in all NMS (Table 3). Industrial restructuring has been accompanied by large shifts in the sectoral structure within industry in the individual NMS; in particular, transport and electrical equipment in the NMS-5, wood products and furniture in the Baltic States (as well as textiles and clothing in the next entrants Bulgaria and Romania) emerged as new specialization patterns in the respective countries.

Growth of industrial production accelerated in 2004 again, to nearly 10% on average for all NMS, in most countries already prior to EU accession (Poland, Hungary and the Czech Republic recorded the highest growth rates – see Figure 1). Austria's industry gathered strength in 2004 as well: production increased by nearly 6%. Disregarding the high growth of output, NMS industrial employment remained flat (and declined again in Poland, nearly 12% growth of output notwithstanding; there was a slight decline of industrial employment in Austria as well). Labour productivity is thus improving and, given only modest growth of wages, unit labour costs in industry (ULCs) declined. Gains in international (labour) cost competitiveness could not be prevented even by sizeable currency appreciations (with the exception of Slovakia where unit labour costs measured in EUR increased by about 9% in 2004). In the course of the year 2004, the growth of labour productivity slowed down markedly and unit labour costs (exchange-rate adjusted) started to rise in the NMS (in restructuring and continuing inflows of FDI, the robust growth of industrial output is forecast

Figure 1

## Gross industrial production, 2002-2005

annual growth, previous year = 100, cumulated



Source: wiiw Monthly Database incorporating national statistics; Eurostat New Cronos.

Table 3

## Labour productivity in industry

change in % against preceding year

1995	1996	1997	1998	1999	2000	2001	2002	2003	<b>2004</b> 1)	Index 1995=100 2004	Index 2000=100 2004
10.6	8.6	9.2	3.7	1.7	9.5	5.5	5.8	9.5	10.4	183.9	134.3
10.2	9.4	13.7	11.9	10.5	17.7	4.8	4.6	8.8	11.2	243.0	134.2
6.3	9.1	11.2	4.7	11.8	13.6	4.6	6.6	11.5	13.2	222.6	138.0
4.0	2.5	4.8	9.1	0.4	11.9	6.5	6.5	4.8	3.8	163.4	124.1
6.3	9.2	4.4	5.4	3.1	8.4	3.5	5.6	3.7	5.7	160.5	120.2
8.4	5.8	15.4	2.2	4.2	17.6	15.3	10.3	-			
							-		-		
-	11.3	3.2	13.4	-6.6	5.5	19.3			•		
				•	•	•	-	-	-		
							-		•		
6.1	3.4	7.7	9.8	5.8	7.6	3.2	3.5	5.6	6.5	167.3	120.1
	10.6 10.2 6.3 4.0 6.3 8.4	10.6 8.6 10.2 9.4 6.3 9.1 4.0 2.5 6.3 9.2 8.4 5.8 	10.6 8.6 9.2 10.2 9.4 13.7 6.3 9.1 11.2 4.0 2.5 4.8 6.3 9.2 4.4 8.4 5.8 15.4 	10.6 8.6 9.2 3.7 10.2 9.4 13.7 11.9 6.3 9.1 11.2 4.7 4.0 2.5 4.8 9.1 6.3 9.2 4.4 5.4 8.4 5.8 15.4 2.2 	10.6     8.6     9.2     3.7     1.7       10.2     9.4     13.7     11.9     10.5       6.3     9.1     11.2     4.7     11.8       4.0     2.5     4.8     9.1     0.4       6.3     9.2     4.4     5.4     3.1       8.4     5.8     15.4     2.2     4.2       .     .     .     .     .       .     11.3     3.2     13.4     -6.6	10.6       8.6       9.2       3.7       1.7       9.5         10.2       9.4       13.7       11.9       10.5       17.7         6.3       9.1       11.2       4.7       11.8       13.6         4.0       2.5       4.8       9.1       0.4       11.9         6.3       9.2       4.4       5.4       3.1       8.4         8.4       5.8       15.4       2.2       4.2       17.6         .       .       .       .       .       .       .         .       .       .       .       .       .       .       .         .	10.6       8.6       9.2       3.7       1.7       9.5       5.5         10.2       9.4       13.7       11.9       10.5       17.7       4.8         6.3       9.1       11.2       4.7       11.8       13.6       4.6         4.0       2.5       4.8       9.1       0.4       11.9       6.5         6.3       9.2       4.4       5.4       3.1       8.4       3.5         8.4       5.8       15.4       2.2       4.2       17.6       15.3         .       .       .       .       .       .       .       .         .	10.6       8.6       9.2       3.7       1.7       9.5       5.5       5.8         10.2       9.4       13.7       11.9       10.5       17.7       4.8       4.6         6.3       9.1       11.2       4.7       11.8       13.6       4.6       6.6         4.0       2.5       4.8       9.1       0.4       11.9       6.5       6.5         6.3       9.2       4.4       5.4       3.1       8.4       3.5       5.6         8.4       5.8       15.4       2.2       4.2       17.6       15.3       10.3         .       .       .       .       .       .       .       .       .       .         . <td>10.6       8.6       9.2       3.7       1.7       9.5       5.5       5.8       9.5         10.2       9.4       13.7       11.9       10.5       17.7       4.8       4.6       8.8         6.3       9.1       11.2       4.7       11.8       13.6       4.6       6.6       11.5         4.0       2.5       4.8       9.1       0.4       11.9       6.5       6.5       4.8         6.3       9.2       4.4       5.4       3.1       8.4       3.5       5.6       3.7         8.4       5.8       15.4       2.2       4.2       17.6       15.3       10.3       .         .</td> <td>10.6       8.6       9.2       3.7       1.7       9.5       5.5       5.8       9.5       10.4         10.2       9.4       13.7       11.9       10.5       17.7       4.8       4.6       8.8       11.2         6.3       9.1       11.2       4.7       11.8       13.6       4.6       6.6       11.5       13.2         4.0       2.5       4.8       9.1       0.4       11.9       6.5       6.5       4.8       3.8         6.3       9.2       4.4       5.4       3.1       8.4       3.5       5.6       3.7       5.7         8.4       5.8       15.4       2.2       4.2       17.6       15.3       10.3      </td> <td>1995         1996         1997         1998         1999         2000         2001         2002         2003         2004         10         2004           10.6         8.6         9.2         3.7         1.7         9.5         5.5         5.8         9.5         10.4         183.9           10.2         9.4         13.7         11.9         10.5         17.7         4.8         4.6         8.8         11.2         243.0           6.3         9.1         11.2         4.7         11.8         13.6         4.6         6.6         11.5         13.2         222.6           4.0         2.5         4.8         9.1         0.4         11.9         6.5         6.5         4.8         3.8         163.4           6.3         9.2         4.4         5.4         3.1         8.4         3.5         5.6         3.7         5.7         160.5           8.4         5.8         15.4         2.2         4.2         17.6         15.3         10.3         .         .         .           .         .         .         .         .         .         .         .         .         .         .         .</td>	10.6       8.6       9.2       3.7       1.7       9.5       5.5       5.8       9.5         10.2       9.4       13.7       11.9       10.5       17.7       4.8       4.6       8.8         6.3       9.1       11.2       4.7       11.8       13.6       4.6       6.6       11.5         4.0       2.5       4.8       9.1       0.4       11.9       6.5       6.5       4.8         6.3       9.2       4.4       5.4       3.1       8.4       3.5       5.6       3.7         8.4       5.8       15.4       2.2       4.2       17.6       15.3       10.3       .         .	10.6       8.6       9.2       3.7       1.7       9.5       5.5       5.8       9.5       10.4         10.2       9.4       13.7       11.9       10.5       17.7       4.8       4.6       8.8       11.2         6.3       9.1       11.2       4.7       11.8       13.6       4.6       6.6       11.5       13.2         4.0       2.5       4.8       9.1       0.4       11.9       6.5       6.5       4.8       3.8         6.3       9.2       4.4       5.4       3.1       8.4       3.5       5.6       3.7       5.7         8.4       5.8       15.4       2.2       4.2       17.6       15.3       10.3	1995         1996         1997         1998         1999         2000         2001         2002         2003         2004         10         2004           10.6         8.6         9.2         3.7         1.7         9.5         5.5         5.8         9.5         10.4         183.9           10.2         9.4         13.7         11.9         10.5         17.7         4.8         4.6         8.8         11.2         243.0           6.3         9.1         11.2         4.7         11.8         13.6         4.6         6.6         11.5         13.2         222.6           4.0         2.5         4.8         9.1         0.4         11.9         6.5         6.5         4.8         3.8         163.4           6.3         9.2         4.4         5.4         3.1         8.4         3.5         5.6         3.7         5.7         160.5           8.4         5.8         15.4         2.2         4.2         17.6         15.3         10.3         .         .         .           .         .         .         .         .         .         .         .         .         .         .         .

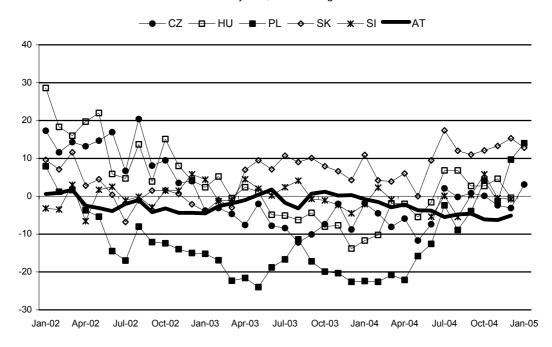
Notes: 1) Preliminary. - 2) Enterprises with 100 and more, from 1997 with 20 and more employees. From 2001 calculated with sales. - 3) Enterprises with more than 10, from 1999 more than 5 employees. - 4) From 2003 enterprises with more than 9 employees.

Source: wiiw Database incorporating national statistics; Eurostat; Statistics Austria; WIFO.

Figure 2

# Unit labour costs in industry, 2002-2005

EUR-adjusted, annual change in %

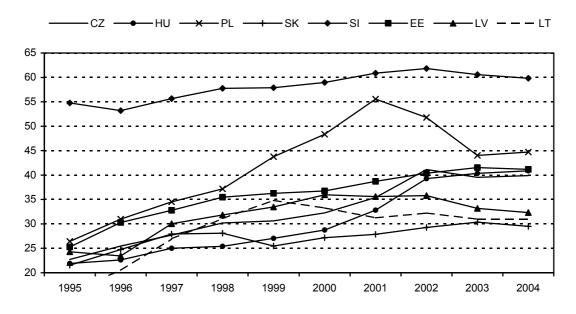


Source: wiiw Monthly Database incorporating national statistics; Eurostat New Cronos.

Figure 3

International comparison of aggregate ULCs (at GDP level)

Austria = 100



Source: wiiw estimates based on national statistics - see Appendix Table A/2.

to last, albeit at a slightly slower rate than in 2004, at least for the next two years. Given the fact that no major change in NMS employment policies and wage setting is expected in this period, a further strengthening of industrial competitiveness and rising attraction of investors to the region are likely. It seems that the only major risk that may jeopardize the competitive cost position of NMS industry would be an excessive appreciation of their currencies (see below). On the whole – and disregarding rapid ULC growth in the past couple of years in most NMS (except Slovenia) – their ULC levels are still substantially lower than in Austria. However, the competitive cost position of the Austrian economy has strengthened relative to the NMS (see Figure 3 and Appendix Tables A/2-A/3).<sup>4</sup>

# Labour market situation remains precarious: 'jobless growth' in NMS

The economic performance of the NMS over the recent past has been characterized by fairly high growth of GDP and productivity (in both cases higher than either in the 'old' EU or in Austria, implying some catching-up) but little or no growth of employment (Figure II). The productivity growth recorded in most NMS in the period after 1995 has been associated with some increases in employment in the services sector only, and with considerable job losses in agriculture and industry. The overall elasticity of employment to GDP growth has been low in all NMS.5 The developments in the NMS may thus be characterized as 'jobless growth' (in Austria, and even more so in the EU-15, employment increased between 2000 and 2004; Austrian productivity growth has been slightly faster than that in the EU-15 – see Figure II). In the context of the EU Lisbon Strategy, which aims at both improved competitiveness and high employment growth, the NMS thus face an even greater challenge than the EU-15. Focusing on both targets simultaneously (i.e. fast productivity growth and employment growth) may be conflicting. Taking into account that the NMS are confronted with a situation of low productivity levels (about half the EU average) and, at the same time, of high unemployment (on average nearly twice the EU-15 level), they need to foster both productivity and employment growth simultaneously. Seen from this angle, and considering the expected rates of economic growth and evolving economic structures, the prospects for rising NMS employment (outside of the services sector) are not very encouraging. Without a substantial acceleration of their economic growth and/or significant job creation in the services sector, the NMS seem to be condemned either to remain substantially less productive than EU-15 member states, or to face the challenge of even higher unemployment in the future.<sup>6</sup>

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See also Havlik (2005b).

During the past couple of years, the only sectors where additional jobs were created in the NMS are trade, hotels and restaurants, real estate, public administration and other activities; for more details see Landesmann, Vidovic and Ward (2004).

Regression estimates covering a sample of all NMS-8 for the time period 1995-2003 show that the average *critical rate* of GDP growth which would prevent a further employment decline has been nearly 6% per year, which is much more than GDP growth actually achieved during that period – see Havlik (2005a). Alternative estimates yield nearly the same discouraging results (a critical rate of GDP growth of more than 4%) – see Havlik and Landesmann (2004).

An additional challenge is represented by the significant differences in employment rates (employment as a proportion of working-age population, taken as those aged 15-64) between Austria and the NMS. In contrast to Austria (and the EU-15 as a whole) where employment rates have shown a steady increase over recent years, those rates have fallen steadily in Poland, while there has been a recovery in Hungary from 1997 and in the Baltic States from 2000 onwards. After declining in the second half of the 1990s, employment rates in the Czech Republic and Slovakia remained nearly unchanged from 2000 onwards. The rate in Slovenia fluctuated over the period, though together with Hungary, this was the only country with a higher employment rate in 2003 than in 1996. By 2003 the employment rate was below the EU-15 average (64%) in all NMS except the Czech Republic. In Estonia and Slovenia it was similar to the EU-25 average (62.9%); in Poland, by contrast, the rate was lower than in any of the other EU-25 member states (Table 4).

Table 4 Employment rates in NMS, Austria and EU-15 employed in % of working-age population 15-64 1996 1997 1998 1999 2000 2001 2002 2003 Czech Republic 69.3 68.7 67.3 65.6 65.0 65.0 65.4 64.7 52.1 52.2 53.7 55.6 56.3 56.2 56.2 57.0 Hungary Poland 58.4 58.9 59.0 57.6 55.0 53.4 51.5 51.2 Slovakia 61.9 8.00 60.6 58.1 56.8 56.8 56.8 57.7 Slovenia 61.6 62.6 62.9 62.2 62.8 63.8 63.4 62.5 Estonia 64.9 65.4 64.6 61.5 60.4 61.0 62.0 62.9 60.4 61.8 Latvia 57.1 59.8 59.9 58.8 57.5 58.6 Lithuania 60.3 62.6 62.3. 59.9 61.1 61.7 59.1 57.5 Austria 67.8 67.8 67.9 68.6 68.5 68.5 68.7 69.0 EU-15 60.3 60.7 62.5 63.4 64.1 64.2 64.3 61.4 EU-25 60.6 61.2 61.9 62.4 62.8 62.8 62.9

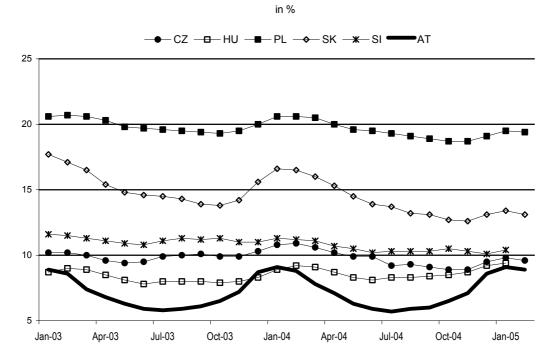
For the NMS as a whole, the youth employment rate (that of those aged 15-24) has been declining since the late 1990s and in 2003 it reached only around 28%, compared with 40% in the EU-15. While part of the decline is attributable to an extension in education, it was probably due to a greater extent to the difficult transition from school to work because of mismatches between the skills acquired and those demanded by the labour market. Austria, on the other hand, shows declining employment rates of young people too, but the reported rate is still higher than 50% (Table B/1). Regarding older workers (those aged 55-64) we observe a diverging picture: while the employment rates are significantly higher than the EU-15 average in the Czech Republic and the Baltic States, they are below the

Source: European Commission, 'Employment in Europe 2004'; Eurostat.

EU level in Slovenia, Slovakia, Hungary and Poland. The developments in the latter countries can be explained by the lower statutory retirement age, but also by the early retirement schemes implemented in the 1990s in order to combat open unemployment. It is interesting to note that Austria also reports a substantially lower employment rate of older workers than the EU-15 average, reflecting the low effective pension age.

Figure 4

Unemployment rates, registered, 2003-2005



Source: wiiw Monthly Database incorporating national statistics; Statistics Austria.

The situation on the NMS labour market remained precarious in 2004 as well. Robust GDP growth (by nearly 5%) notwithstanding, overall employment remained flat and the average rate of unemployment stayed close to 15% on the NMS average (Table I), nearly twice as high as in the EU-15 (8.1%). Extremely high unemployment rates persist in Poland and in Slovakia (though here the registered unemployment declined somewhat in the course of 2004 – see Figure 4).<sup>7</sup> In the Czech Republic, Hungary and Slovenia, unemployment rates are close to (or even below) the EU average (though employment rates are usually also lower – see above).<sup>8</sup> Given the above-mentioned low elasticity of employment to growth in the NMS, one cannot expect any marked improvement on the labour market in the medium (and possibly even in the long) run.

Unemployment rates according to LFS (Table I) and registration (Figure 4) are not directly comparable.

Needless to say, there are important regional differences in the development level and labour market situation in both Austria and NMS (see Box 1), as well as in effects on individual labour market segments – see below.

Box 1

#### Comparison of Austrian and NMS border regions

The differences in economic prosperity and employment opportunities observed in Austria and the NMS (Table II) are generally even more pronounced at the regional level. Looking first at regional GDP per head, it is much higher in Austrian border regions than in the NMS (excepting the Bratislava region, which has a higher GDP per head than neighbouring Lower Austria – see Table B/1). Apart from capital city regions, the NMS border regions are the most prosperous regions within their respective country while the Austrian regions bordering the NMS have lower GDP per head than the regions bordering the EU-15 (i.e. Salzburg, Tyrol and Vorarlberg). Differences in regional prosperity levels are in part also reflected by differences in the development of the regions over time. As a rule, between 1995 and 2002 the average real GDP per head in the NMS border regions grew much faster than in Austrian border regions (except for the Czech border regions).

The above differences are also associated with regional differences in the sectoral structure. As the development of the services sector depends largely on the (regional) income level, the share of services is considerably higher in the Austrian border regions than in the NMS (except for Bratislava). In 2003, the services sector in the Austrian border regions accounted for 59-64% of total employment, while its share in the NMS border regions was only 50-55% (Bratislava: 74%). In contrast, the manufacturing industry is more prominent in the NMS border regions, contributing about 30-32% to total employment, but only 17-26% in the Austrian border regions. However, the large share of manufacturing industries in the NMS border regions is not necessarily due to the relative underdevelopment of the services sector. It is much more due to the fact that over the past decade virtually all NMS border regions have developed a strong and modern industry thanks to their proximity to Western markets, low labour costs and relatively large inflows of FDI. This is also illustrated by the important role that advanced industries (such as engineering) play within these regions. The shares of these modern industries in the NMS border regions are not only higher than in most other regions of the respective countries, but also considerably higher than in the main industrial regions in Austria.

The strong development of the manufacturing industry in the NMS border regions has also a positive impact on the regional labour markets. Whereas in Austrian border regions the services sector is the major source of employment, especially in the regions with a particularly weak industry (Burgenland and Carinthia), the manufacturing sector in the NMS regions compensates for the lack of jobs in services. Thus, despite the differences in the sectoral structure between Austrian and NMS border regions, overall employment opportunities are quite similar. Consequently, the employment rates (for the population aged 25-64) in both sets of regions are around 69-73%, only the Czech Jihozápad and the Slovak Bratislava region perform slightly better. Moreover, the positive impact of the manufacturing sector in the NMS border regions becomes even more evident when comparing these regions with the other regions in the respective NMS. Given the general underdevelopment of the services sector in NMS (outside the capital cities), the uneven distribution of the manufacturing sectors across the NMS regions (especially in Hungary, to a lesser extent also in the Slovak and the Czech Republics) leads to significantly higher employment rates in the NMS border regions than in other NMS (non-capital city) regions.

In contrast to the roughly equal overall employment opportunities in the Austrian and NMS border regions, differences exist as far as specific segments of the labour force are concerned. The main difference is the job availability for the young age cohort of the labour market (population aged 25-29), where the Austrian border regions show higher employment rates than the NMS border regions. Although there are some disparities amongst the Austrian regions as well (Carinthia and Styria having lower youth employment rates than the other three Austrian border regions), youth employment rates in Austrian regions are generally higher than in the NMS. As far as the low-educated segment of the labour market (i.e. those with only basic schooling) is concerned, the picture is even more differentiated. Thus, while employment rates for the low-educated (aged 25-64) are relatively high in Lower and Upper Austria and in Slovenia (about 54-55%), employment rates especially in Carinthia and Styria are comparable to the low levels prevailing in the NMS border regions (about 43-49% – except the Západné Slovensko region, which has a much lower employment rate).

As far as the development of employment opportunities is concerned, experience is mixed in both Austrian and NMS border regions. Austrian and Hungarian regions showed an increase in employment rates (by 0.8 to 10.8 percentage points between 1998 and 2003), employment rates in Czech and Slovak border regions declined, while in Slovenia there was hardly any change. A major reason for this was the general decline of agricultural employment throughout all NMS and Austrian regions (with the worst effects for the low-educated), whereas employment in industry remained more or less constant in the NMS border regions, but contributed negatively to the overall employment developments in most Austrian border regions (except Carinthia and Styria). Though services employment rates increased in most East and West border regions, growth rates were high enough only in Austrian and Hungarian regions to raise the overall employment rates.

Table B/1

#### Main indicators for Austrian and NMS border regions

		GDP	per he	ad at PPP	Shares of sectors in employment, 2003, in %								Emp	ı %									
		1995	2002	real growth in % p.a.	Agricul- ture	Mining& Utilities	Manufacturing Services								25-6	64	2	5-29	50-54				
		EUR	EUR	1995-2002			Total	Basic Industry	Fuels, Chemicals	Engi- neering s	Con- struction	Total	Basic Serv.	Tourism	Advanced	Health& I Education I		lotai	,	ducati		otal	Total
					l															ledium			
at	Austria	19670		2.2	5.3	1.2	19.5	13.1	1.3	5.1	8.3	65.7	27.5	5.7	12.0	14.9		71.8 5					
	Wien	28437		1.9	1.0	0.9	11.6	6.8	1.5	3.3	6.2	80.3	31.9	6.1	19.9	16.2	6.2	69.7 5			84.2 7		75.3
	Salzburg	22219		1.9	4.4	1.1	16.5	11.4	0.5	4.6	6.9	71.1	29.4	10.1	12.3	14.8	4.5	75.1 5			84.3 8		76.9
	Vorarlberg	20139		2.4	2.3	0.6	30.1	23.1	0.6	6.4	8.9	58.2	25.7	4.6	10.2	14.2	3.6	72.0 5			85.7 7		
	Tirol	20284		2.2	4.3	0.9	16.6	11.7	1.6	3.3	8.6	69.6	30.3	9.9	9.5	15.5	4.4	72.5 5					
	Oberösterreich	18205		2.4	5.8	1.3	26.2	17.0	2.1	7.2	8.0	58.6	24.5	4.2	9.1	15.4	5.4	73.3 5			87.7 8		76.6
	Steiermark	16230		2.6	8.1	1.5	21.7	14.8	0.3	6.6	9.9	58.8	25.1	5.2	8.9	14.8	4.8	70.6 4			83.7		
	Kärnten	16481		2.0	6.9	1.9	19.4	13.2	1.2	5.1	9.0	62.7	26.0	6.8	10.6	12.7	6.6				83.3 8		
		16079		2.1	7.8	1.2	20.0	13.5	1.7	4.7	8.8	62.2	26.6	3.8	11.1	14.4	6.3	73.4 5			84.1 8		80.7
BR at11	Burgenland	12340	17631	3.3	5.2	1.1	16.8	12.4	0.6	3.8	12.7	64.1	27.1	4.6	9.8	13.4	9.2	71.2 4	8.4	77.9	88.3 8	84.9	74.9
cz	Czech Republic	10660	1/215	1.8	4.5	2.8	28.0	19.2	1.0	7.8	9.5	55.2	25.0	3.5	8.1	12.4	6.3	73.3 4	15 .	75.6	86.6 7	74.0	21.2
		19569		4.9	0.4	1.7	10.5	6.6	0.7	3.3	10.0	77.4	33.9	4.3	18.8	13.8	6.6	80.5 5			87.8 7		85.7
	l Jihozápad	10139		1.1	6.3	2.0	<b>30.0</b>	19.6	0.7 <b>0.4</b>	10.1	9.4	52.3	22.8	3.6	6.1	12.5	7.4	75.7 5			84.7 7		86.1
	i Jihozapau i Jihovýchod	9525		1.7	6.5	2.2	29.9	21.2	0.7	8.0	9.4 9.4	52.0	23.1	2.3	7.4	13.0	6.2				85.2 7		
	Moravskoslezko	10051		0.1	3.2	6.4	30.9	23.1	1.0	6.8	8.7	50.9	22.5	4.0	5.1	12.9	6.3	66.2 3			86.0 7		
	Severovýchod	9190		1.4	5.3	1.7	34.4	23.1	1.1	10.2	8.9	49.7	22.4	3.0	6.6	11.8	5.8	74.6 4			86.9 7		84.0
	Strední Cechy	8231		2.6	5.5	1.7	26.9	23.1 15.9	1.1	9.2	9.3	56.8	27.6	3.0 3.5	8.0	10.9	6.7	75.5 5			87.5 7		83.2
	Severozápad	10133		-0.7	3.5	6.4	24.4	18.2	1.0 1.9	9.2 4.4	9.3 11.0	54.7	26.3	3.5 4.5	6.6	11.4	5.9	68.2 4			85.7		
	Strední Morava	9032		0.7	5.0	1.5	35.8	25.0	0.9	9.9	9.1	48.6	21.7	3.4	5.8	12.6	5.2	72.9 4			87.7 7		
6207	Streum Morava	9032	11095	0.5	3.0	1.5	33.0	23.0	0.9	3.3	9.1	40.0	21.7	3.4	5.0	12.0	J. Z	12.5 4	2.5	73.4	01.1 1	70.1	10.9
hu	Hungary	7548	12398	4.2	5.4	2.1	23.8	15.3	1.3	7.2	7.8	61.0	26.4	3.7	8.6	15.1	7.1	64.4 3	7.6	71.5	83.1 7	70.3	67.2
hu10	) Közép-Magyarország	10899	20323	6.1	1.7	1.1	17.2	10.0	1.8	5.4	7.8	72.3	32.9	3.5	14.7	14.5	6.7	68.7 3	8.8	72.8	83.2 7	74.1	74.5
BR hu2	2 Nyugat-Dunántúl	7774	12867	4.3	4.6	2.2	32.5	19.1	1.2	12.2	6.9	53.8	23.1	5.4	6.3	13.6	5.4	69.4 4	6.3	75.6	86.1	72.9	75.1
BR hu2	1 Közép-Dunántúl	6833	10964	3.8	4.6	3.4	30.9	17.6	1.4	11.9	8.9	52.2	23.3	3.7	7.1	12.7	5.4	70.9 4	8.5	77.7	83.7	76.8	75.1
hu23	B Dél-Dunántúl	6163	9061	2.5	9.3	2.3	21.5	14.9	0.3	6.3	7.4	59.6	23.5	4.6	5.7	16.5	9.2	60.4 3	3.6	69.7	84.2 6	68.1	59.3
	B Dél-Alföld	6280	8547	1.4	11.4	2.1	24.1	19.1	0.8	4.2	8.3	54.1	23.9	2.9	5.1	15.2	7.0	60.4 3	5.8	69.0	81.3	68.2	63.7
hu32	? Észak-Alföld	5383	7988	2.7	7.6	1.6	25.7	18.2	1.0	6.5	7.5	57.6	22.9	3.0	6.2	17.7	7.8	59.5 3			83.2	65.8	56.3
hu31	Észak-Magyarország	5495	7899	2.2	4.7	3.5	24.6	15.9	1.6	7.2	7.9	59.3	24.7	3.9	5.2	16.5	9.0	58.2 2	9.8	67.9	79.6	61.4	60.0
BR si	Slovenia	10423	15937	3.9	6.8	1.6	30.3	21.1	1.7	7.5	6.0	55.3	24.7	4.1	8.6	12.5	5.3	71.0 5	3.4	73.1	85.5 7	78.7	67.6
sk	Slovakia	6780		3.8	6.0	2.9	26.4	18.2	1.3	6.9	9.0	55.6	23.6	3.6	6.9	14.2	7.3	67.6 2			87.9 7		72.0
	Bratislavský	14367		5.2	1.7	2.6	14.9	9.6	1.3	4.0	7.0	73.8	28.4	5.0	17.7	13.3	9.5	78.3 4			89.6 8		86.2
	Západné Slovensko			2.8	7.1	3.4	30.5	19.7	1.5	9.4	8.7	50.3	22.0	3.4	5.0	12.4	7.4	68.3 3			88.7 7		72.9
	Stredné Slovensko		8991	3.9	7.2	2.8	27.1	20.7	0.7	5.7	9.5	53.3	22.7	3.2	5.2	15.6	6.7	64.9 2			88.3		70.9
	Východné Slovensko			3.7	5.9	2.6	26.2	18.5	1.7	6.0	10.1	55.2	24.0	3.7	5.0	16.0		64.5 2			84.7		

sk04 Východné Slovensko 5127 8198 3.7 5.9 2.6 26.2 18.5 1.7 6.0 10.1 55.2 24.0 3.7 5.0 16.0 6.4 64.5 23.2 69.2 84.7 65.4 64.7 Notes: BR denotes border regions; Agriculture refers to the NACE rev. 1 groups A+B, Mining & Utilities to C+E, Manufacturing to D, Basic Industries to DA+DB+DC+DD+DE+DH+DI+DJ+DN, Fuels, Chemicals to DF+DG, Engineering to DK+DL+DM, Construction to F, Services to the groups G-Q, Basic Services to G+I+O+P, Tourism to H, Advanced Services to J+K, Health and Education to M+N and Public Services to L+Q. Source: Eurostat; wiiw calculations.

## Booming foreign trade, especially outside the 'old' EU

The year 2004 was exceptionally dynamic for NMS external trade. The accession to the EU and the related changes in the trade regime have apparently provided an additional stimulus for both exports and imports. NMS-8 exports jumped by more than 20% in 2004 (in current EUR terms), somewhat faster than imports (+17%), and the region's trade integration with the European and the world economy thus increased even further. The two biggest exporters among the NMS, Poland and the Czech Republic, recorded the highest export growth (about 25% each) and their trade balances improved. On the other hand, exports from other NMS increased at a somewhat slower pace and their trade balances deteriorated (except Hungary – see Table 5). The summary NMS-8 trade deficit slightly decreased (by EUR 1 billion, to EUR 25.8 billion in 2004) and the more pronounced growth of exports over imports is an achievement. It indicates a further strengthening of the NMS export sector which is all the more remarkable given the fact that import prices increased (especially of energy and metals, which represent an important part of imports), the import content of NMS exports is still rather high, and the NMS currencies appreciated. To

The first estimates of the regional composition of NMS trade and a tentative assessment of EU accession effects (based on preliminary data for 2004)<sup>11</sup> indicate that, after EU accession, more than 80% of NMS exports (and 70% of their imports) represent intra-EU trade (the Czech and Slovak Republics, due to their intensive mutual trade, have the highest shares of intra-EU exports – see Table 6). Due to this exceptionally high degree of trade integration and openness of the NMS economies (for shares of exports and imports in GDP see Table II above), developments in the EU (and in the eurozone in particular) have a significant impact on the NMS. NMS exports to the EU-25 increased by 19% (imports by 21%), with the Czech Republic and Poland (as well as Lithuania) recording again the fastest growth.

The overall trade surplus of the NMS-5 with the EU-25 slightly increased in 2004, reaching more than EUR 6 billion. As concerns trade with the EU-15 – the main trading partner for all NMS – the growth of NMS exports exceeded 17% in 2004, twice as much as in 2003 (yet somewhat less than overall NMS exports). NMS exporters thus gained further market

In terms of export growth, the NMS also outperformed the 'old' EU: according to Eurostat, eurozone trade increased by some 8-9% in 2004. At the same time, the eurozone recorded a trade surplus of EUR 74 billion – see *Eurostat News Release* 24/2005, 22 February 2005.

The less pronounced growth of imports was facilitated by the depreciation of the US dollar with respect to the euro, which had a dampening effect on rising (USD-denominated) energy prices.

Due to EU accession, NMS foreign trade statistics underwent important methodological changes and data are not fully comparable over time. Since May 2004, data on NMS trade with the EU stem not from customs declarations but are estimated using the Intrastat system of dispatches and arrivals. However, not all countries use the same methodology and the comparisons with periods prior to EU accession have to be treated with extreme caution.

Table 5

# Foreign trade of the NMS and Austria, EUR million

(based on customs statistics)

		1998	1999	2000	2001	2002	2003	2004 <sup>1)</sup>	2003 chan	2004 <sup>1)</sup> ge in %
Czech	Exports	23068	24640	31483	37251	40726	43051	53182	5.7	23.5
Republic	Imports	25287	26386	34876	40675	43025	45243	53828	5.2	19.0
	Balance	-2219	-1746	-3393	-3424	-2298	-2192	-646		
Hungary 2)	Exports	20477	23491	30545	34082	36523	38041	44079	4.2	15.9
	Imports	22871	26288	34856	37654	39939	42189	47933	5.6	13.6
	Balance	-2394	-2797	-4312	-3572	-3417	-4149	-3854	•	
Poland	Exports	25145	25729	34383	40375	43400	47511	60015	9.5	26.3
	Imports	41539	43151	53122	56223	58307	60288	71606	3.4	18.8
	Balance	-16394	-17422	-18739	-15848	-14907	-12777	-11592		
Slovakia	Exports	9541	9602	12880	14115	15270	19359	22352	26.8	15.5
	Imports	11635	10628	13860	16488	17517	19924	23525	13.7	18.1
	Balance	-2094	-1025	-980	-2372	-2247	-565	-1039		
Slovenia	Exports	8052	8037	9505	10349	10966	11288	12539	2.9	11.1
	Imports	8999	9482	10996	11345	11578	12242	13701	5.7	11.9
	Balance	-947	-1445	-1491	-997	-612	-954	-1162		
NMS-5	Exports	86283	91499	118795	136172	146885	159250	192167	8.4	20.7
	Imports	110331	115935	147709	162385	170367	179886	210592	5.6	17.1
	Balance	-24049	-24436	-28915	-26213	-23481	-20636	-18426		
Estonia	Exports	2232	2238	3445	3698	3638	3995	4753	9.8	19.0 <sup>I-XI</sup>
	Imports	3499	3224	4615	4798	5079	5734	6997	12.9	22.0 I-XI
	Balance	-1266	-985	-1171	-1101	-1441	-1739	-2244		
Latvia	Exports	1616	1617	2020	2233	2418	2560	3127	5.8	22.2 <sup>I-XI</sup>
	Imports	2844	2764	3453	3913	4287	4635	5561	8.1	20.0 I-XI
	Balance	-1228	-1147	-1433	-1680	-1868	-2076	-2434		
Lithuania	Exports	2881	2579	3837	4775	5524	6158	7523	11.5	22.2
	Imports	4776	4333	5644	6762	7941	8526	10229	7.4	20.0
	Balance	-1895	-1754	-1807	-1987	-2416	-2368	-2706		
NMS-8	Exports	93012	97933	128096	146877	158466	171963	207569	8.5	20.7
	Imports	121451	126255	161422	177858	187673	198781	233379	5.9	17.4
	Balance	-28439	-28322	-33326	-30980	-29207	-26818	-25810		
Austria	Exports	56302	60266	69692	74252	77400	78903	89131	1.9	13.0
	Imports	61200	65316	74935	78692	77104	80993	89421	5.0	10.4
	Balance	-4897	-5050	-5243	-4440	296	-2091	-289	•	•
Notes: 1) Prelimina	ry 2) Includ	ing trade of	firms with	customs fr	ee legal st	atus.				

Source: wiiw Database incorporating national statistics; Statistics Austria.

Table 6

# Foreign trade of the NMS and Austria with the EU-25, EUR million

(based on customs statistics)

		2000	2001	2002	2003	2004 1)	2003	2004 1)	2003 share of	2004 <sup>1)</sup> EU-25	
							chang	e in %	in % of total		
Czech	Exports	26765	31804	34477	37153	45729	7.8	23.1	86.3	86.0	
Republic	Imports	25825	29858	31069	32303	38855	4.0	20.3	71.4	72.2	
	Balance	940	1946	3409	4850	6874		•			
Hungary <sup>2)</sup>	Exports	24832	27586	29885	30877	34936	3.3	13.1	81.2	79.3	
	Imports	22637	24368	25444	26613	34209	4.6	6.5	63.1	71.4	
	Balance	2195	3217	4441	4263	728	•	•	•		
Poland	Exports	27668	32415	34822	38383	47451	10.2	23.6	80.8	79.1	
	Imports	36462	38958	40591	41694	48639	2.7	16.7	69.2	67.9	
	Balance	-8795	-6543	-5769	-3312	-1188	•	•	•		
Slovakia	Exports	11401	12593	13449	16375	19039	21.8	16.3	84.6	85.2	
	Imports	9632	11769	12683	14681	17713	15.8	16.7	73.7	73.6	
	Balance	1769	823	766	1694	1722	•	•	•		
Slovenia <sup>2)</sup>	Exports	6767	7858	7402	7551	8286	2.0	9.7	66.9	66.1	
	Imports	8347	9449	8840	9258	10241	4.7	10.6	75.6	74.7	
	Balance	-1580	-1591	-1438	-1706	-1956		•			
NMS-5	Exports	97432	112254	120035	130339	155441	8.6	19.2	81.8	80.9	
	Imports	102903	114402	118626	124550	149260	5.0	14.6	69.2	70.9	
	Balance	-5471	-2148	1409	5789	6181	•	-	-		
Estonia <sup>2)</sup>	Exports	3033	3006	2974	3293	3817	10.7	15.9	82.4	80.3	
	Imports	3249	3177	3485	3717	4989	6.7	34.2	64.8	71.3	
	Balance	-216	-170	-511	-424	-1173		-	-		
Latvia <sup>2)</sup>	Exports	1631	1754	1879	2030	2409	8.0	18.7	79.3	77.1	
	Imports	2555	2965	3310	3494	4175	5.5	19.5	75.4	75.1	
	Balance	-924	-1210	-1431	-1464	-1765		-	-		
Lithuania <sup>2)</sup>	Exports	2863	3498	3822	3849	4800	0.7	24.6	62.5	63.8	
	Imports	3534	4306	5258	5561	6260	5.8	12.6	65.2	61.2	
	Balance	-670	-808	-1435	-1712	-1460		•			
NMS-8	Exports	104959	120513	128711	139511	166467	8.4	19.3	81.1	80.2	
	Imports	112241	124849	130679	137321	164684	5.1	19.8	69.1	70.6	
	Balance	-7282	-4337	-1969	2190	1783		-	-		
Austria	Exports	51315	54296	56211	57159	63825	1.7	11.7	72.4	71.6	
	Imports	56693	59163	58465	61462	68877	5.1	12.1	75.9	77.0	
	Balance	-5378	-4867	-2253	-4303	-5053		•	•		

Notes: 1) Preliminary. - 2) After 2003 dispatches and arrivals according to Intrastat methodology.

Source: wiiw Database incorporating national statistics; Statistics Austria.

shares on the EU market and their products enjoy rising demand – despite continuously mediocre economic growth in the eurozone. Notwithstanding an even stronger acceleration of import growth (imports from the EU-15 increased by 18% as compared to 4% in 2003), the NMS still enjoyed a (small) trade surplus with the EU-15. This can be attributed mainly to the (rising) trade surpluses of the Czech Republic and Slovakia, as well as to the declining trade deficit in Poland and a (declining) surplus of Hungary. Apart from Hungary and Slovenia, the goods trade with the EU thus might have had a growth-stimulating effect on other NMS-5 (although the changes in trade balances between 2003 and 2004 are not directly comparable).

The takeover of EU trade rules after accession brought about not only lower import tariffs for most NMS (the Baltic States were largely an exception), but resulted also in a complete removal of barriers in intra-NMS trade. Indeed, preliminary data suggest that these regime changes had the expected trade-creation effects: NMS trade outside the 'old' EU (where tariffs had been largely scrapped already earlier), and in particular trade among the NMS themselves, recorded the most dynamic growth in 2004 (Table 7 and Figure 5). As far as extra-EU-25 trade is concerned, this is more or less in line with overall developments since EU trade with China, Russia, South Korea and Turkey (but not with the USA and Japan) boomed in 2004 as well. But intra-NMS exports and imports – which are now fully liberalized – shot up by about 30% in 2004 (Table 7). The Czech Republic and Poland report again the best export performance among the NMS-5, both with respect to export growth rates and regarding the fact that they both have an export surplus in trade with other NMS.<sup>13</sup>

Austria's foreign trade with the NMS has been more dynamic than with partners in the EU-14 in the past decade. During 1995-2004 Austrian exports to the EU-14 increased by 98% (imports: +81%), yet exports to the NMS grew by 154% (imports: +220%). And despite faster growth of imports than of exports, the NMS represent the only region with which Austria enjoys a trade surplus. Among the NMS, the most important trading partners are the neighbouring countries: Hungary, the Czech Republic, Slovakia and Slovenia. These developments continued in 2004 as well: although Austria's export growth surpassed the growth of imports in total, imports from NMS grew on average more than exports to those countries. Nevertheless the Austrian trade surplus with the NMS increased from EUR 1300 million in 2003 to EUR 1420 million in 2004 (Table 6). Thus,

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There is some evidence that also agro-food exports to the EU, in particular exports from the Czech Republic, Poland and Slovakia, rose faster than average in 2004 – see Lukas (2005).

The extraordinarily high growth rates of intra-NMS trade reported by Estonia and Latvia have to be treated with caution – especially since the change of the trade regime after EU accession should not have a too large effect in these countries.

<sup>&</sup>lt;sup>14</sup> Since 1999, there has been a trade deficit with Slovakia and, recently (since 2003) also with the Czech Republic.

Austrian trade with the Baltic States is very small (EUR 346 million of exports in 2004), with Cyprus and Malta negligible (EUR 59 million of exports).

trade with the NMS is beneficial for Austria, especially in the following categories: manufactured goods, machinery and transport equipment, electrical machinery and chemicals, where Austria enjoys large surpluses. Austria runs a trade deficit with the NMS only in the following categories: mineral fuels, crude materials, miscellaneous manufactures, and food products (see Box 2).

Box 2

#### Austrian trade with NMS and EU-14 by commodities

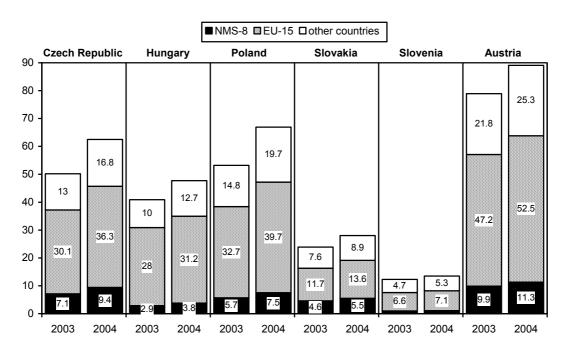
The year 2004 brought about also some changes in the commodity structure of Austrian foreign trade with the NMS (Table 8a). On the export side (and apart from mineral fuels, which experienced the greatest increase due to price developments), the second largest export growth was recorded for pharmaceuticals, where trade with the 'old' members is on the decline. Here, trade flows into the NMS increased by approximately 25% on average. Within the group of NMS, the developments were very diversified: pharmaceuticals exports to Hungary declined by about 10%, in contrast to an 85% increase to Slovenia. The respective figures for the Czech Republic, Slovakia and Poland are a 29%, 36% and 25% year-on-year change in 2004. Considerable increases were also recorded in exports of metals (here again related to international price developments), and – in sharp contrast to trade developments with the EU-14 – in food products. Food exports to the NMS increased by about 20%, which was to be expected following the elimination of the remaining tariff and other barriers to trade in this category. Again, developments differ among the individual countries: in particular trade with Hungary, Slovakia and Slovenia increased notably (by roughly 30%), while export growth to the Czech Republic and to Poland was at 7-8%. Exports of machinery and transport equipment also experienced great increases (20%), however, exports in this category to Western European partners increased even more (by 27%). In the following categories Austrian export growth to the NMS markedly surpassed the growth rate with the EU-14: electrical machinery, scientific and optical equipment (however, not for trade with the immediate neighbours), and commodities n.e.s. On the other hand, exports of crude material and oil and fat exports grew less in trade with the new members than in trade with the EU-14.

On the import side, the most striking feature is the sharp rise in imports of pharmaceuticals from the NMS. This increase averaged nearly 80% (albeit from a low level), and especially imports from Poland surged (+180%), but also from Hungary (+73%), the Czech Republic (+72%), Slovenia (+55%) and Slovakia (+50%). This is again in contrast to the situation with respect to partners in the EU-14 (imports of pharmaceuticals from these countries increased by only 2% in 2004). Also food imports from the NMS rose by almost 25%, compared to a 7% increase from the EU-14. The tremendous rise of imports under the heading 'commodities n.e.s.' is difficult to interpret, since this represents a residual category. High import growth, especially in comparison to import growth from the EU-14, was further recorded for oils and fats, plastics, and scientific and photographic equipment. In two commodity groups the developments with respect to old and new EU member states differed: imports of beverages and tobacco as well as of manufactured goods from NMS decreased, while imports from old member countries increased in these categories. Again, the world-wide price increases of mineral fuels and metals caused imports from new members in these categories to increase strongly in line with the developments vis-à-vis the EU-14.

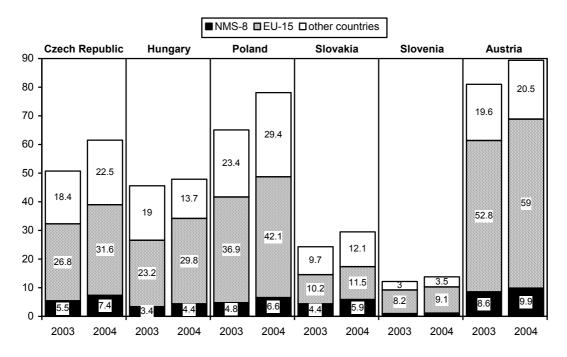
Figure 5

Foreign trade of selected NMS and Austria by regions, EUR billion

#### Exports by regions



#### Imports by regions



Source: wiiw estimates based on national statistics; Statistics Austria.

Table 7

# Intra-NMS foreign trade (trade among the NMS), EUR million

(based on customs statistics)

		2000	2001	2002	2003	<b>2004</b> 1)	2003	<b>2004</b> 1)	2003 share of	2004 <sup>1)</sup> NMS-8	
							chang	e in %	in % of EU-25		
Czech	Exports	5177	6121	6620	7086	9390	7.1	32.5	19.1	20.5	
Republic	Imports	4188	4719	5166	5498	7220	6.4	31.3	17.0	18.6	
	Balance	989	1403	1454	1588	2169		-	•		
Hungary <sup>2)</sup>	Exports	1892	2270	2444	2869	3773	17.4	31.5	9.3	10.8	
	Imports	2283	2607	2977	3407	4383	14.4	20.2	12.8	12.8	
	Balance	-391	-337	-533	-538	-610	•	-	•		
Poland	Exports	3630	4473	5002	5711	7755	14.2	35.8	14.9	16.3	
	Imports	3968	4446	4619	4832	6505	4.6	34.6	11.6	13.4	
	Balance	-338	27	382	879	1250		-	•	•	
Slovakia	Exports	3799	4143	4202	4635	5409	10.3	16.7	28.3	28.4	
	Imports	2955	3695	4001	4599	5858	14.9	27.4	31.0	33.8	
	Balance	844	448	201	36	-449		-	•	•	
Slovenia <sup>2)</sup>	Exports	707	1427	893	956	1159	7.1	21.2	12.7	14.0	
	Imports	896	1775	969	1023	1171	5.6	14.5	11.1	11.4	
	Balance	-189	-347	-76	-67	-12	•		•		
NMS-5	Exports	15205	18435	19161	21258	27486	10.9	29.3	16.3	17.7	
	Imports	14289	17242	17733	19359	25137	9.1	29.8	15.5	16.8	
	Balance	916	1193	1428	1899	2349					
Estonia <sup>2)</sup>	Exports	398	438	501	561	845	12.1	50.6	17.0	22.2	
	Imports	361	465	544	646	1025	18.6	58.8	17.4	20.6	
	Balance	37	-27	-44	-84	-180					
Latvia <sup>2)</sup>	Exports	325	387	419	447	696	6.6	55.7	22.0	28.9	
	Imports	744	908	1040	1132	1544	8.8	36.5	32.4	37.0	
	Balance	-419	-521	-622	-685	-849	-	-	-	•	
Lithuania <sup>2)</sup>	Exports	934	1106	1082	1197	1532	10.6	28.0	31.1	31.9	
	Imports	880	1065	1325	1453	1786	9.6	23.0	26.1	28.5	
	Balance	55	41	-243	-256	-254					
NMS-8	Exports	16862	20366	21163	23462	30559	10.9	30.2	16.9	18.4	
	Imports	16273	19680	20643	22558	29493	9.4	30.6	16.4	17.9	
	Balance	589	686	520	874	1066					
Austrian trade	Exports	8687	9087	9568	9919	11273	3.7	13.7	17.4	17.7	
with NMS-8	Imports	7108	7696	7772	8623	9854	10.9	14.3	14.0	14.3	
	Balance	1579	1391	1796	1295	1418					

Notes: 1) Preliminary. - 2) After 2003 dispatches and arrivals according to Intrastat methodology.

Source: wiiw Database incorporating national statistics; Statistics Austria.

Box 3

#### Austrian services trade with NMS and EU-14

In contrast to declining services trade with the EU-14, Austrian exchange of services with the NMS increased in January-September 2004 (latest available data), in particular regarding exchanges with immediate neighbours (the Czech Republic, Slovakia, Hungary and Slovenia). Services exports to these four countries rose by 7%, while imports increased by 6%. Trade growth with the NMS-8 was 1.3% in services exports and 3% in services imports (Table 8b). As a consequence, the Austrian services trade balance with neighbouring NMS improved by EUR 30 million, while the trade balance with all NMS slightly deteriorated on account of Poland. Still, Austria's trade surplus in services with the NMS amounted to nearly EUR 400 million in January-September 2004 (which is 40% of the services trade surplus with the EU-14). <sup>16</sup>

In individual items of services trade, developments with regard to NMS and EU-14 differ as well. This suggests that the EU accession resulted in more trade diversion in services than in commodity trade. This is in line with the fact that accession brought about considerable changes in services trade, while trade in commodities was already liberalized earlier. The major items for Austrian services exports are travel, transport and other business services. The share of travel services in Austrian services exports has been declining continuously and represents currently 34% of all services exports. This decline has carried on through the first three quarters of 2004, both in trade with the EU-14 and the NMS. With a share of 20%, transport services are further gaining importance for Austria's services exports. These exports increased by roughly 20% in 2004 in trade with the NMS and slightly less in trade with the EU-14 (Table 8b). The picture is more differentiated in trade in other business services (which account for 16% of total Austrian service exports). Exports to the EU-14 declined (by roughly 3%) while exports to the NMS increased and their share exceeded 20% (nearly EUR 500 million). On the import side, travel services represent the most important category for Austria, followed by transport services and other business services. Similar to the changes in exports, travel imports declined in 2004 while imports of transport services increased in trade with both the EU-14 and even more so from the NMS (by more than 40%). Likewise, imports of computer and information services, as well as other business services, grew faster in trade with the NMS.

In the smaller service categories developments have often been rather diverging in the individual NMS. The most striking observation relates to trade in construction services where Austrian exports to neighbouring NMS increased four times compared to the first three quarters of 2003 (to EUR 120 million, which amounts to half the value of exports to the EU-14), but declined by 50% in the most important Polish market (to EUR 130 million). Also Austrian imports of construction services from neighbouring NMS more than doubled (and reached a value of EUR 50 million for the first three quarters of 2004, equal to some 25% of the value of imports from the EU-14), but declined by half with respect to Poland again (to EUR 125 million). Consequently, trade in this category with the NMS as a whole has declined (as has trade with the EU-14), yet this resulted from the specific situation on the (large) Polish market.

The picture may change again as soon as the figures for the last quarter of 2004 have become available. Traditionally, Austria realizes a large surplus in travel services in the fourth quarter with partners in Western Europe, in particular Germany.

Exports of financial services to NMS rose by 140%, largely owing to an increase to neighbours, whereas they stagnated with respect to Poland (and declined with the EU-14). Exports of insurance services to NMS increased by 50%, compared to a 3% decline in trade with the EU-14 (the rise in exports to NMS exceeded the decline with the EU-14 in absolute terms). Finally, exports of royalties and licence fees rose by 9% in trade with the NMS-5 and fell by 34% in trade with the EU-14. Taken together, these three categories amount to 6% of Austria's services exports. Imports in the same services categories evolved quite differently again: while imports of financial services from NMS increased substantially (mostly due to the rise in imports from the Czech Republic), imports from the EU-14 dropped. Imports of insurance services rose moderately in trade with both old and new EU members, however, imports from the four neighbouring NMS declined (and from Poland increased). Also computer and information services exhibit interesting dynamics, despite their low share in Austrian services trade (they represent just 1% of total imports and about half a per cent of total exports): exports to NMS increased considerably and reached nearly a quarter of exports to the EU-14. Also imports from the NMS increased more strongly, but the absolute numbers (EUR 235 million from the EU-14 in contrast to just EUR 10 million from the NMS) suggest that Austria emerges as a platform for the transmission of such services from West to East or from old to new EU member states.

To sum up, Austria's services trade in 2004 evolved rather differently with respect to old and new EU members (and with Poland in particular). The institutional changes after EU accession affect services trade considerably more than trade in goods; this finds some reflection already in the preliminary data for 2004. The major categories in Austrian services trade show similar developments with respect to old and new EU partners: travel services are declining in importance while transport and other business services are on the rise. Construction services focused on neighbouring NMS. For the smaller services categories, some degree of trade diversion away from partners in the old EU to the NMS can be observed. For example, trade in financial services becomes increasingly reoriented towards NMS partners in the immediate neighbourhood where Austrian banks are already strongly represented.

Exports	EU-14 change in %	NMS-5 change in %	NMS-8 change in %	NMS-8 EUR mn
Food products	2.0	21.0	20.4	354.5
Beverages/Tobacco	13.3	18.9	16.3	80.1
Crude materials	11.7	0.7	0.7	210.1
Mineral fuel	43.8	34.7	34.6	566.4
Oil/Fats	19.4	-5.1	-3.8	18.5
Pharmaceuticals	-7.5	27.3	25.0	285.6
Plastics	9.4	14.5	14.3	349.7
Chemicals	-1.3	0.6	0.5	596.0
Metals	12.4	21.3	20.6	1337.4
Manufactured goods	0.3	2.7	3.1	1460.8
Electrical machinery	-0.2	15.9	16.0	1865.2
Mach./transport equipment	26.8	20.6	20.2	2828.8
Scientific/photographic equip.	-1.0	5.3	7.2	234.1
Misc. manufactures	0.5	0.4	0.7	1046.7
Commodities n.e.s.	6.5	12.2	12.9	38.9
Total trade	11.3	13.8	13.7	11272.7
Imports	EU-14 change in %	NMS-5 change in %	NMS-8 change in %	NMS-8 EUR mn
Food products	7.2	23.7	24.3	399.9
Beverages/Tobacco	7.1	-25.1	-25.1	22.8
Crude materials	8.7	-0.1	0.2	637.5
Mineral fuel	41.2	46.8	48.3	1361.5
Oil/Fats	13.3	31.4	31.4	5.2
Pharmaceuticals	2.4	70.1	78.3	29.8
Plastics	8.0	18.7	18.6	139.4
Chemicals	-1.2	-4.7	-4.6	234.9
Metals	15.1	23.0	23.0	1083.0
Manufactured goods	2.0	-10.3	-9.3	799.3
Electrical machinery	3.7	4.6	4.6	1462.3
Mach./transport equipment	21.7	24.4	24.4	2281.7
Scientific/photographic equip.	3.3	8.4	8.5	88.0
Misc. manufactures	1.4	3.1	2.8	1288.8
Commodities n.e.s.	0.1	496.8	787.4	20.3

Table 8b <b>Austrian tra</b>	ade in services	with NMS ar	nd EU-14, 1st to	o 3rd Qu. 2004	ı
Exports	EU-14 change in %	NMS-5 change in %	NMS-8 change in %	NMS-8 EUR mn	NMS- shares in %
Transportation	17.4	20.6	21.1	459	19.
Travel	-1.5	-2.0	-1.9	151	6.
Communications	-11.6	-21.9	-21.9	25	1.
Construction	-9.7	-13.8	-13.7	259	11
Insurance	-3.3	54.4	54.4	122	5
Financial	-32.8	125.6	141.0	94	4
Computer and Information	4.4	150.0	150.0	25	1
Royalties and Licence Fees	-34.4	9.1	0.0	13	0
Other business services	-3.2	0.9	3.8	495	21
Pers., cult. and recr.	3.1	0.0	0.0	1	0
Government	145.2	50.0	50.0	3	0
not allocated	-16.7	-16.4	-16.6	664	28
Total	-2.2	0.4	1.3	2316	100
Imports	EU-14 change in %	NMS-5 change in %	NMS-8 change in %	NMS-8 EUR mn	NMS- shares in <sup>o</sup>
Transportation	17.5	41.8	44.0	445	23
Travel	-9.1	-9.2	-9.0	553	28
Communications	-22.2	71.4	85.7	26	1
Construction	-5.9	-31.6	-31.6	180	9
Insurance	5.3	0.0	2.2	47	2
Financial	-39.4	216.7	233.3	20	1
Computer and Information	20.5	42.9	42.9	10	0
Royalties and Licence Fees	13.0	-100.0	-100.0	0	0
Other business services	4.3	19.3	32.4	192	9
Pers., cult. and recr.	16.9	33.3	33.3	4	0
Government	-26.9	0.0	0.0	2	0
not allocated	-0.7	-0.9	-1.1	452	23
		1.1			

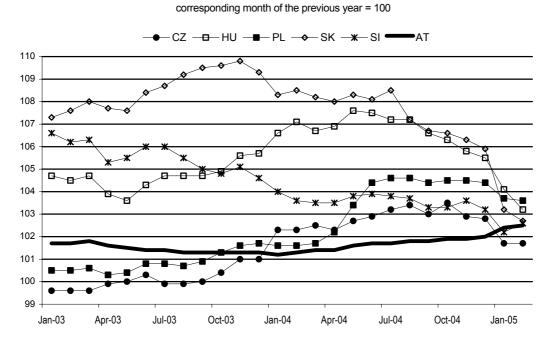
## Inflation, monetary policy and the exchange rates

Inflation, both in consumer and in industrial producer prices, was generally low and falling in most NMS during 2003 (except Slovakia – see Figure 6). But in 2004 the yearly inflation was higher in many NMS (Table I). In part this was the result of fiscally motivated hikes in regulated prices and/or changes in indirect (VAT) taxes and excises (e.g. on tobacco) prior to EU accession (e.g. in Hungary and the Czech Republic; Slovakia did it partly already in 2003) in order to comply with EU regulations. Higher international prices of energy and other raw materials also added to inflation. Finally, the liberalization of trade in agro-food products pulled up the relatively very low domestic prices of some food items (e.g. sugar, some dairy products).

Overall, inflation in 2004 lost its momentum shortly after the EU accession. In the second half of the year inflation was falling very fast – and some signs of recurring deflation could be detected (see Figure 6). Falling inflation in the second half of 2004 went hand in hand with some easing of the monetary policy in Hungary, Slovenia and Slovakia, despite the fact that the monetary policy in Hungary has remained very restrictive. The responses of the Czech and the Polish central banks, which raised their interest rates just as inflation started to fall on its own, are more difficult to understand. The monetary authorities of the Baltic States apparently did not do anything about higher inflation – a consequence of their being on currency-board regimes and their reliance on fixed nominal exchange rates for the control of inflation.

Figure 6

Annual changes in consumer prices, 2003-2005



Source: wiiw Monthly Database incorporating national statistics; Statistics Austria.

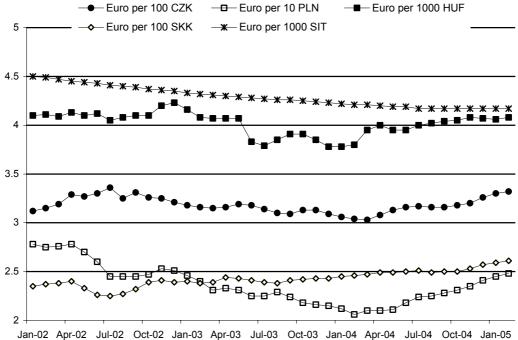
NMS exchange rates with respect to the euro have been fairly stable during the past few years. However, throughout much of the year 2004 the currencies of all NMS-5 countries (excepting Slovenia) were strengthening in nominal terms vs. the euro (Figure 7). Generally, the strengthening of the national currencies might be explained by a relative 'oversupply' of foreign exchange on the domestic markets. However, the current accounts of all NMS are negative (in Hungary and the Baltic States highly negative – see Table I). Moreover, inflows of FDI were rather moderate in 2004, at least compared to the period 2000-2002 – see Table 9 below.

Figure 7

Nominal exchange rates, 2002-2005

EUR relative to NCU, monthly average

ZK —<del>□</del> Euro per 10 PLN —



Source: wiiw Monthly Database incorporating national statistics.

The 'oversupply' of foreign exchange, which has been a material force behind the rising strength of NMS currencies, has taken the form of inflows of portfolio investment and/or foreign credits in 2004. It is easy to understand what has been motivating such inflows in the cases of Hungary and Poland. With high interest rate differentials (vs. the international markets) and the remarkable predictability ('consistency') of the monetary policies in these two countries, relatively large gains can be made in Hungary and Poland (at relatively low risk). Of course, the nominal appreciation (once set in motion, for whatever reason) is capable of initiating further, purely speculative inflows motivated by the expectation of continuing nominal appreciation. Despite the much lower official interest rates of the central banks, the fact that the currencies of Slovakia and the Czech Republic have been

appreciating as well may also reflect the presence of some speculative expectations. Otherwise, the interest rates on credits charged by the domestic commercial banks and/or their lending practices may in fact have continued to be restrictive despite the relaxed official monetary policies.

One problem with high inflows of portfolio investment is that they tend to be inherently unstable – and essentially unpredictable. A reversal in the market sentiment (in this case of expectations of further appreciation) may trigger sudden outflows and abrupt devaluation, with the well-known negative effects for e.g. domestic banks and, ultimately, also for GDP growth. Of course, an early bursting of the bubble is perhaps the best possible outcome because it reduces the size of mismatches in the balance sheets of banks and firms which unduly accumulate over longer periods of time. But experience indicates that the self-sustaining nominal appreciation may go on even for years (as happened in Poland in the early 2000s, and more recently again in the Czech Republic, Hungary and Slovakia). While a certain degree of currency appreciation is plausible for NMS in the medium and long run (when backed by 'strong' fundamentals, e.g. productivity growth and not too large current account deficits), it will still be one of the key challenges of exchange rate policy prior to EMU accession to avoid 'excessive' appreciation and the possible subsequent currency crisis.

The risks and potential costs of the sudden outflows of portfolio investment with ensuing devaluation do not yet seem large in most NMS: compared with earlier periods of intensified nominal appreciation, the current one has not been long. Nonetheless, the continuing nominal appreciation can hardly be good for foreign trade. Arguably, the relatively low speeds of (real) appreciation in 2004 (in Hungary), and the relatively low levels of real exchange rates (in Poland and the Czech Republic) were conducive to the quite good trade performance in 2004 (e.g. lower trade deficits). No doubt the impressive recent gains in labour productivity in industry, and in unit labour costs in particular, were also of importance since they could compensate the effects of real appreciation. The latter has been substantial during 2004 – especially in the Czech Republic, Poland and Slovakia – and potentially also dangerous.

Nonetheless, the overall trade balances of the NMS were again negative in 2004, and in most cases actually worse than earlier on (see Table 6 above). And as already mentioned, the contribution of foreign trade to overall GDP growth was apparently also generally negative. Should the exchange rates of the NMS continue to appreciate, their overall trade performance may worsen even more visibly than in 2004, especially if the gains in labour productivity and unit labour costs turn out lower than in recent years. Under such conditions GDP growth is likely to slow down in 2005 – a possibility facing nearly all NMS, although Poland and Hungary appear most vulnerable in this respect.

# FDI flows recover, profit repatriation increases

wiiw estimates FDI inflows to NMS-8 in 2004, based on 9-11 months balance of payments data, at about EUR 15 billion (after EUR 10 billion in the previous year – see Table 9a). Despite the remarkable recovery, this amount still fell short of the EUR 24 billion record sum registered by NMS in 2002. The increasing FDI in new EU members as opposed to a falling trend in the 'old' EU may indicate some preference of investors seeking for new locations. FDI increased in all NMS with the only exception of Estonia. The leading FDI targets in terms of FDI inflow per capita in 2004 were, just as in the previous year, Estonia, the Czech Republic and Hungary. These are also the countries with the highest FDI stock per capita. Over the past 15 years, these three countries have received two times more FDI per capita than either Slovakia or Poland. A catching-up of the latter two countries can be expected in the near future.

An important feature of FDI in the more mature FDI host countries such as the Czech Republic and Hungary is the fact that it is growing more by way of reinvested profits rather than owing to new projects. Profit re-investment registered as FDI on the capital account has its current account counterpart as an outflow of foreign earnings.<sup>17</sup> Also the repatriated part of the FDI earnings is significant and shows the cost of such imported capital. In more recent FDI host countries such as Slovakia, Latvia and Lithuania, equity investments in new projects and privatization sales are still the dominant forms of FDI. In these countries, there are still relatively small amounts of profits reinvested or transferred abroad.

Services, including real estate development, retail trade and financial services, comprise about 60% of the FDI stocks in NMS. Investors in these sectors are mainly attracted by the local market. A novelty of 2004 was the appearance of FDI in export-oriented services. Some important European service centres were transferred to the NMS, such as DHL to the Czech Republic and Avis to Hungary. Accounting services, the software industry and call centres are further examples of off-shoring.

Manufacturing FDI in Central Europe is undergoing structural change due to increasing wages and declining transaction costs in the wake of EU accession. Labour-intensive production such as the clothing and footwear industries is leaving. In other industries, such as food processing, there is increasing regional concentration. Meanwhile, the region's importance increases as a production site for EU-15 manufacturing companies. Examples for direct relocation of production lines from West to East are rare, but capacity expansions in the automotive industry and the household appliances production take place mostly in the NMS, and a scaling-down of production at the 'old' locations may follow soon.

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<sup>&</sup>lt;sup>17</sup> The double booking of reinvestments may give an undue negative image of the size of the current account deficit.

Table 9a

# Foreign direct investment inflow

based on the balance of payments, EUR million

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Czech Republic	1982	1140	1152	3317	5933	5404	6296	9012	2289	3800	4000
Hungary	3696	2625	3681	2988	3106	2998	4391	3185	2018	3200	3500
Poland	2831	3592	4343	5676	6824	10334	6372	4371	3660	4400	4500
Slovak Republic	209	305	205	629	402	2089	1768	4397	636	800	2000
Slovenia	117	138	295	194	99	149	412	1750	299	400	200
NMS-5	8835	7800	9676	12805	16364	20974	19240	22716	8902	12600	14200
Estonia	156	120	236	511	284	425	603	307	797	700	800
Latvia	138	305	462	317	325	447	147	269	267	500	500
Lithuania	56	122	313	824	457	412	499	772	160	800	700
NMS-8	9185	8348	10686	14457	17430	22258	20488	24063	10125	14600	16200

Remarks: Czech Republic: equity capital + reinvested earnings from 1998 + loans from 1998.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Poland: equity capital + reinvested earnings + loans from 1991.

Slovak Republic: equity capital + reinvested earnings from 1995 + loans from 1995.

Slovenia: equity capital + reinvested earnings from 1994 + loans from 2001.

Estonia: equity capital + reinvested earnings + loans.

Latvia: equity capital + reinvested earnings from 1996 + loans from 1996.

Lithuania: equity capital + reinvested earnings from 1995 + loans from 1997.

Table 9b

## Foreign direct investment inward stock

based on international investment position (IIP), EUR million

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	5741	6910	8367	12255	17479	23323	30717	36884	37626	42000
Hungary	8817	10692	16296	17771	23161	24734	31375	36608	41977	47000
Poland	6121	9228	13205	19231	25947	36792	46686	46139	43827	47000
Slovak Republic	1013	1650	1888	2464	3174	5112	6327	8185	9504	10500
Slovenia	1376	1612	2000	2370	2675	3110	2952	3968	5070	5500
NMS-5	23068	30091	41757	54090	72435	93071	118057	131784	138004	152000
Estonia	574	665	1040	1561	2454	2843	3573	4035	5164	6300
Latvia	480	754	1140	1325	1782	2241	2648	2679	2634	3400
Lithuania	274	564	942	1384	2050	2509	3023	3818	3968	4600
NMS-8	24396	32073	44879	58359	78720	100664	127301	142316	149769	166300

Remarks: Czech Republic: equity capital + reinvested earnings from 1997 + loans from 1997.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Poland: equity capital + reinvested earnings + loans.

Slovak Republic: equity capital + reinvested earnings + loans.

Slovenia: equity capital + reinvested earnings + loans.

Estonia: equity capital + reinvested earnings + loans.

Latvia: equity capital + reinvested earnings + loans.

Lithuania: equity capital + reinvested earnings + loans from 1996.

Source: National Banks of the respective countries according to international investment position (IIP); wiiw estimates.

Box 4

# Austrian foreign direct investment (FDI) in NMS<sup>7)</sup>

According to OeNB (Oesterreichische Nationalbank, Austria's central bank), Austrian total FDI stocks in NMS amounted to EUR 14.1 billion as of end-2003, nearly as much as the country invested in the EU-14. Austrian FDI in NMS concentrated on Hungary (EUR 4.2 billion), the Czech Republic (EUR 3.4 billion), Poland (EUR 2.9 billion) and Slovakia (EUR 2.4 billion). About 36% of Austrian outward FDI went to NMS (another 37% to the EU-14) and Austria's market share in all NMS FDI stocks reached 9.5% in 2003; it was especially high in Slovenia (31%) and in the Slovak Republic (26% - see Table 10). As far as FDI flows to NMS are concerned, Austria doubled its share in 2003 from 11% to 23%. In 2002, Austrian subsidiaries in the NMS employed more than 250 thousand workers and achieved a total net annual result of EUR 2.3 billion (2001: EUR 1.1 billion). Austrian establishments in NMS operate predominantly in the services sector. Of the 997 CEE subsidiaries, 604 companies (61%) belong in this category (246 in trade, 172 in enterprise services and 112 in the credit sector). Services also contribute 60% to the investment capital. In manufacturing, investments concentrate on the chemical, metal, paper and food industries. The ten biggest Austrian investors in the NMS represent a mix of financial and industrial companies – these are OMV, Erste Bank, Bank Austria Creditanstalt, Raiffeisen Zentralbank, Wienerberger, Brau Union, Wiener Städtische Versicherung, Mondi Packaging, Siemens Österreich and Agrana. After a difficult adjustment period in the mid-1990s, the majority of Austrian subsidiaries in the NMS is now generating high profits. Profitability (annual result in per cent of equity capital) of all Austrian NMS subsidiaries reached 12.5% in 2001, which marks a significant improvement over 2000 (10.9%). Most successful in this respect were subsidiaries in Slovakia and Hungary with a profitability of some 20%; enterprises in the Czech Republic earned 10% of the invested capital in 2001. Still weak was the profitability of subsidiaries in Poland (5.4%) and Slovenia (2.5%). In the meantime, a major part of profits of Austrian companies is generated in the NMS.

\*) See wiiw-WIFO FDI Database (July 2004) for more details.

There is a general tendency among NMS and accession countries to lower the statutory corporate income tax rate and increase promotion efforts to attract FDI. But as their labour costs and tax burden are lower compared to the more advanced EU member states, NMS would attract more medium-skilled and labour-intensive industrial capacities anyway. Thus competition can intensify only among the NMS. Countries with more similar cost levels can compete by lowering the marginal cost on investment and operation. The statutory corporate income tax is just one of those cost factors. In fact the amount of capital intending to move into the region may be high enough to benefit them all.

Table 10

Austria's market share in FDI stocks in NMS (share of Austria in total FDI stocks)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech Republic	11.9	16.2	12.1	12.3	11.9	9.1	7.4	9.0	8.3	9.4	9.1
Hungary	24.6	22.8	13.2	12.5	9.3	8.1	7.2	7.5	8.7	8.8	11.1
Poland	3.2	2.5	2.0	2.1	2.6	2.0	2.2	2.5	2.7	4.2	5.9
Slovakia		16.6	15.0	14.9	21.1	18.5	18.1	24.9	28.0	25.4	26.1
Slovenia	12.2	11.8	14.7	17.5	17.8	19.2	20.9	20.6	27.7	28.0	30.9
New EU-members 5	16.7	15.6	10.1	9.7	8.6	7.1	6.4	7.3	7.7	8.9	10.3
Baltic countries	1.7	0.4	0.5	0.4	0.3	0.4	0.2	0.1	0.2	0.2	0.3
New EU-members 8	16.2	14.7	9.6	9.1	8.1	6.6	5.9	6.8	7.2	8.3	9.5
Albania							2.5	1.7			
Bulgaria	0.9	-0.5	1.5	2.2	2.5	1.3	4.7	5.6	10.1	32.7	25.0
Croatia	3.7	30.5	20.1	8.3	13.9	18.1	14.9	12.7	11.3	16.7	15.9
Romania	1.6	0.3	0.5	0.0	2.0	3.1	3.2	4.3	5.0	5.7	5.2
Serbia and Montenegro					0.2	0.1	0.2	0.2	5.0	13.0	10.8
South Eastern Europe	1.8	6.8	4.5	3.0	4.6	5.3	5.6	6.0	6.9	12.8	11.3
Belarus										2.0	2.5
Russia	2.6	3.4	0.4	0.4	1.5	-0.1	0.6	0.7	2.0	1.8	1.7
Ukraine	2.3	0.9	0.6	0.5	0.9	1.0	0.8	1.4	1.7	1.7	2.4
European CIS	1.3	1.5	0.3	0.2	0.8	0.0	0.3	0.5	1.3	1.2	1.2
Eastern Europe	14.2	12.9	8.2	7.4	6.5	5.3	5.0	5.4	5.9	7.1	7.9

Source: wiiw-WIFO FDI Database (July 2004).

Slovakia has become the chosen location of new automotive industry investment projects started by Volkswagen and recently followed by Hyundai (Kia) and PSA (Peugeot) as well as by Ford. The large pool of relatively cheap and skilled unemployed workforce, as well as the good image Slovakia has created by its business supporting reform policy (including tax reforms) made the country win the race ahead of its neighbours such as Hungary and Poland. These investments will stretch over 2005 and 2006. If the electricity network sale is finalized in 2005 as well, a jump of FDI in Slovakia can be expected (the respective deal with the Italian company Enel, worth EUR 840 million, was signed in February 2005).

## East-West integration and adjustments in the labour markets

It has been pointed out in the previous sections that the NMS underwent a dramatic process of economic restructuring over the 1990s; they have reached a reasonable degree of macroeconomic stability by the late 1990s/early 2000s and have embarked upon a growth path which is roughly twice as fast as in the EU-15. On top of that, the NMS have undergone a massive process of industrial structural change which manifested itself in very high productivity growth rates in manufacturing, a process of up-grading also in product quality and in the structure of exports. All this was massively helped (in parts initiated) by strong FDI inflows which opened up new markets, initiated the integration of production sites in NMS into cross-border international production networks and made use of the availability of a well-trained industrial work-force. Overall, we judge that the NMS will also in future be attractive locations for industrial production and a division of labour will be further enforced in which the Western European countries (including Austria) have net export advantages in a wide range of business and financial services, while the NMS will become (and are, in parts, already) net exporters of industrial intermediate and final products. In this section we shall discuss the implications of these developments for labour markets. The emphasis here will be on the changing structure of demand for differently qualified segments of the labour force (different 'skill groups').<sup>18</sup>

Let us start with an assessment of the educational structure of the labour force. Figure 8 shows the breakdown of the labour force for four groups of countries<sup>19</sup> and Austria. The interesting issue from Austria's perspective is the similarity to the NMS in terms of the skill (educational level) breakdown of the available labour force. Austria has a relatively low share of those with only 'low' educational attainment levels and, similarly to NMS, a low share of those with tertiary educational attainment levels. This is in contrast with the EU-15 (and EU-S) which have a significantly higher share of both these two groups of (potential) employees. Figure 9 shows the unemployment rates for these three groups: as one would expect, the unemployment rates are the highest for the low, then for the medium, and lowest for the highest qualified. The interesting point here is that, for both the NMS-4 and Austria, the unemployment rates of those with highest educational levels are particularly low, reflecting their relative scarcity, i.e. the relatively high demand for these groups of workers compared to the available supply. On the other hand, and here is the main 'structural problem' visible in the labour markets of both the NMS and Austria, the

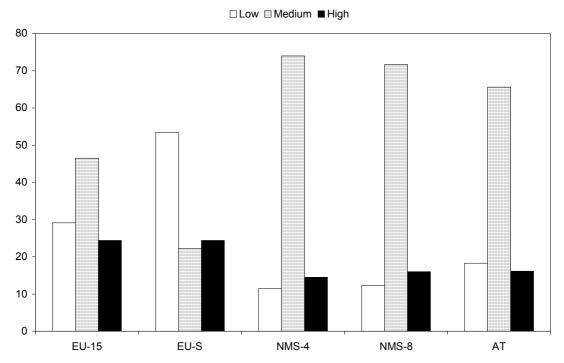
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We rely in this analysis on Labour Force Survey (LFS) data, which provide a breakdown of the labour force by educational attainment levels (according to an international classification standard, ISCED). We use here only a rough (3-tier) breakdown of the labour force by education, namely: 'low' educational attainment level, i.e. people who have not achieved the completion of a degree in secondary schooling); 'medium', which includes people who have completed some type of secondary schooling including a technical or apprentice training degree or high school; and the 'high' group with people who have completed some type of tertiary degree (college or university level).

These are the EU-15; the group of Southern 'cohesion' countries (EU-S: weighted average of Greece, Portugal and Spain); the new members states surrounding Austria (NMS-4); and the NMS-8, which further include Poland and the Baltic States.

unemployment rates are particularly high for the 'low-educated' (especially in the NMS – see Figure 9). While the unemployment rates for this group of workers were declining in the EU-15 in general over the period 1999 to 2003, they were rising in both the NMS and in Austria (this points towards a particularly vulnerable position of this group of workers).

Figure 8 Educational structure of total labour force, aged 15-64, 2003



Source: Eurostat, Statistics Austria.

Let us now look at the allocation of these workers across sectors of the economy. Figure 10 shows the expected much stronger presence of the low-educated in the industrial (secondary) sector in the NMS compared to the EU-15 (and Austria) as well as in the primary (agricultural) sector. On the other hand, they are less strongly represented in the market services sector in the NMS reflecting the still relatively low share of market services in these economies (and, symmetrically, the still high shares of industry and agriculture). Within the market services sector the low-educated are mostly employed in the low skill types of service activities (wholesale and retail trade, hotels and restaurants, transport services). If we now look at the sources of employment decline (Figure 11) we can see that, overall, Austria and the NMS experienced a dramatic loss of jobs for the low-educated over the period 1999 to 2003 (about 11% in the NMS-4 and 13% in Austria), while the EU-15 had a very small loss of jobs of this group of workers over this period. Furthermore, the bulk of job declines took place in agriculture and industry (in Austria more in industry, in the NMS in agriculture) while the other two sectors (market and community

services) accounted for a much smaller portion of the job declines for this group of workers. Concerning the employment developments for the other two groups of workers: they both experienced positive employment growth over this period in all three groups of countries. Particularly impressive is the very strong growth of employment of the 'highly' educated (i.e. those with tertiary degrees). Employment for this group of employees grew at about 13% in the EU-15 and the NMS-4 over this period, but only just below 6% in Austria.

The relative responses to the differential demand for labour is also clearly visible in the labour supply adjustment processes. Figure 12 shows the strong decline in the supply of 'low' educated (particularly strong in the NMS and Austria) and the relatively strong rise in the supply of those with higher educational attainment levels; Austria seems to be a relative laggard in this respect both compared to the EU-15 and the NMS.

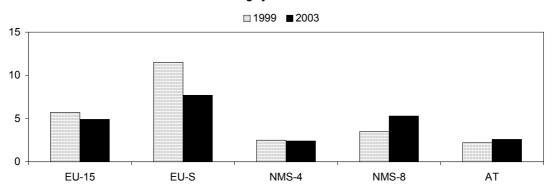
Let us summarise the picture which emerges with regard to the structural aspects of the labour market situation in the NMS, Austria and the EU-15, as regards the different skill groups of workers. It was shown that the most vulnerable group of employees are those with lowest educational attainment levels. While this is true for all three country groupings, it is much more dramatic for Austria and the NMS. Furthermore, the pressure is particularly strong in Austria in the industrial sector which is consistent with the picture drawn earlier regarding the strong performance of industry in the NMS and some relocation of industry across the border. Another interesting feature, noticed in a number of international studies, is the low share of 'highly' educated in the Austrian labour force (those with university or college degrees) and also the relatively lower jobs growth for these people in Austria than it is visible in the EU-15 as a whole or in the NMS. In terms of growth, this segment of the labour force is also not expanding as strongly in Austria as compared to the NMS or the EU-15.

Figure 9

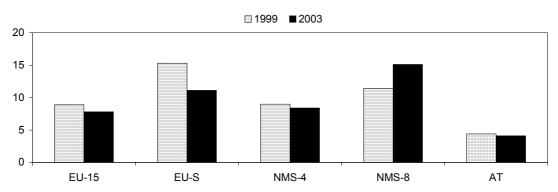
# Unemployment rates, aged 15-64, 1999 and 2003

in %

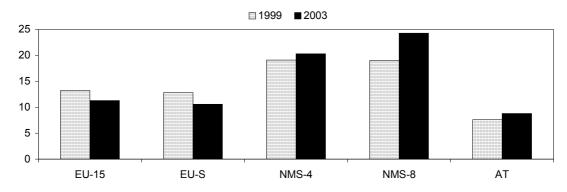




## Medium-educated



# Low-educated

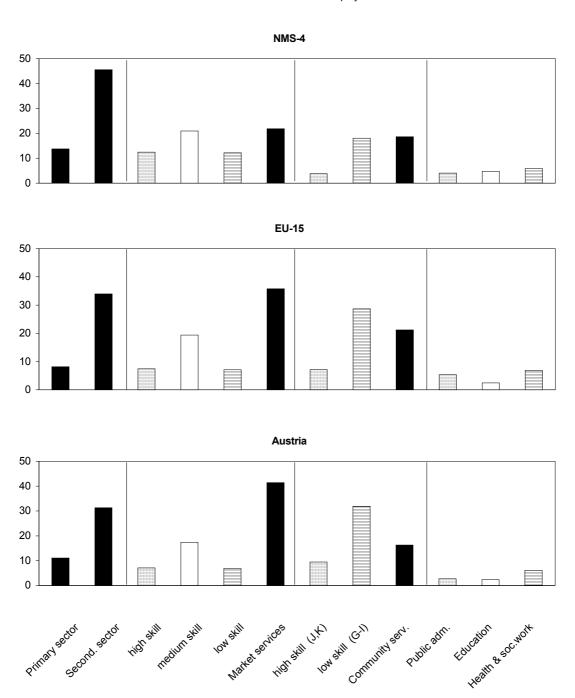


Source: Eurostat, Statistics Austria.

Figure 10

# Shares of low-educated employed by sectors, 2003

in % of total low-educated employed



Source: Eurostat, Statistics Austria.

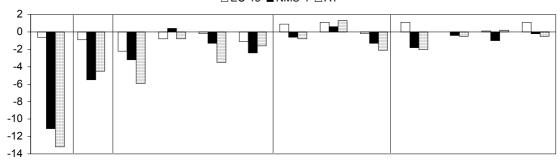
Figure 11

# Sources of employment decline, 1999-2003

change in %

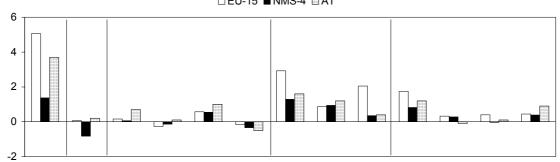
#### Low-educated

□ EU-15 ■ NMS-4 □ AT



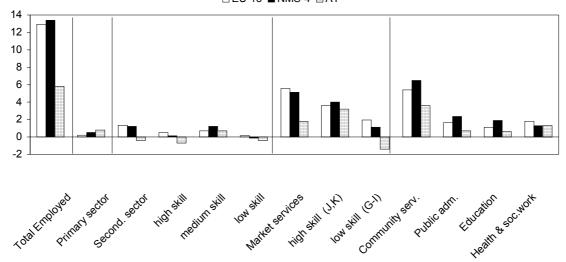
## Medium-educated

□ EU-15 ■ NMS-4 □ AT



## Highly educated

□EU-15 ■NMS-4 □AT



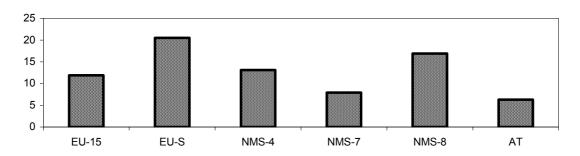
Source: Eursotat, Statistics Austria.

Figure 12

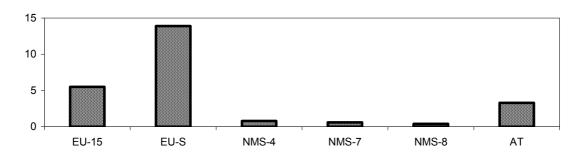
# Growth of labour force, aged 15-64, 1999-2003

in %

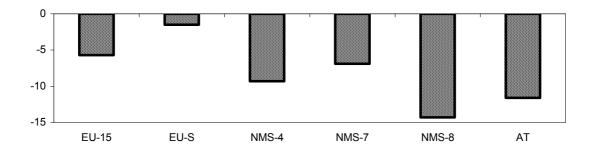
# Highly educated



## Medium-educated



## Low-educated



Source: Eurostat, Statistics Austria.

## **Concluding remarks**

The preliminary assessment of the first year of EU accession in 2004 yields by and large positive results for both the NMS and Austria. The EU accession has brought few surprises and may generally be considered a success – an indicator that the whole process was also well prepared and managed. The process of East-West economic integration started already with the fall of the Iron Curtain one and a half decades ago and direct economic effects of accession are therefore difficult to identify. Still, the earlier estimates of enlargement effects as a 'win-win situation' for both 'old' and 'new' member states<sup>20</sup> seem to be confirmed: NMS economic growth, especially of industry, had speeded up already before May 2004, a temporary increase of inflation was successfully contained and NMS domestic currencies strengthened. Net transfers from the EU budget were negligible (less than 1% of NMS GDP in 2004), yet foreign trade expanded strongly and inflows of FDI picked up again. There has been an impressive catching-up in NMS labour productivity; productivity growth in Austria has surpassed that in the EU-15 as well.

On the downside, the situation on the NMS labour market remains precarious, robust economic growth notwithstanding. The average rate of unemployment in the NMS (14.6%) is nearly twice as high as in the EU-15 (8.1%). In Austria, the unemployment rate is less than half the EU average and, contrary to the situation in the NMS, productivity growth has been associated with some creation of new jobs. Yet both Austria and the NMS face numerous challenges also regarding developments in border regions, as well as in the labour market position of different skill groups of workers. Overall, the most vulnerable group of employees are those with the lowest educational levels. There are little prospects for marked improvements anytime soon. As far as the NMS are concerned and apart from agriculture, this refers to industry in particular, which - despite a remarkable acceleration of output growth - continues to shed labour. This implies impressive gains in labour productivity and, given the general wage restraint, in unit labour costs as well. The international cost competitiveness of the NMS has recently been eroded by appreciating domestic currencies (Hungary, Poland and Slovakia); at the same time, Austrian cost competitiveness has been continuously improving – not least thanks to the country's close trade and FDI integration with neighbouring NMS. The situation on the labour market is not expected to improve much, despite the fairly robust GDP growth outlook. In fact, there is some reason to expect that employment rates may even deteriorate in the medium run, at least in some NMS (e.g. in Poland, as well as in the next EU entrant Romania).<sup>21</sup> A new start for the Lisbon Strategy, which focuses predominantly on growth, jobs and skills, as recently announced by EU Commission President M. Barroso, is therefore especially urgent for the NMS (as well as for Austria).

<sup>&</sup>lt;sup>20</sup> See Breuss (2001).

<sup>&</sup>lt;sup>21</sup> See Stehrer (2005).

In 2005, economic growth in the EU-15 is likely to slow down slightly. <sup>22</sup> Domestic demand in Germany, which has been sluggish for many years, is unlikely to rebound very much. The German labour market reforms will have adverse effects on domestic demand, at least in the near future. But the external competitiveness of Germany vs. other EU countries must be expected to improve further. This way the internal weakness of the German economy will be externalized throughout the whole EU, and beyond. On that count the external conditions facing the NMS in 2005 (and possibly also 2006) will most probably be less favourable than in 2004. Also, growth is expected to slow down in most other transition countries (Russia, Ukraine, some Balkan countries), which will continue to be of some importance for NMS exports. Concluding, in so far as external conditions contribute to the performance of the NMS, one may expect a slightly dampening effect on growth in the NMS in 2005 with a possible modest rebound later on. Austria's economic growth is currently (April 2005) projected by the Austrian Institute of Economic Research (WIFO) to be slightly higher than 2% per year in both 2005 and 2006.

Barring any larger external shocks, GDP growth in the NMS-5 will slightly decelerate in 2005 (largely owing to a slowdown in Poland; the remaining NMS-4 will more or less maintain their last year's performance). On average, the NMS-5 will again grow about 2 percentage points faster that the 'old' EU-15, thus maintaining their 'standard' rate of catching-up. As for the Baltic States, they are expected to outperform the Central European NMS in terms of GDP growth again – at least in the coming two years. For the time being, they have been catching up faster (not least because they started from a lower development level) but there are some doubts whether they will be able to keep this pace of growth (more than 5-6% per year) in the medium and long run.

With pre-accession adjustment effects fading out, NMS inflation is bound to decline again in the coming years, gradually converging with the eurozone. Inflation thus poses no problem as such, yet the remaining (small and diminishing) inflation differential – together with a likelihood of further nominal appreciation of local currencies – implies some real appreciation and a corresponding loss of competitiveness. Under 'normal' circumstances this should be easily outweighed by the expected productivity and quality improvements induced by reforms and FDI (despite the lasting current account deficits in most NMS). However, any excessive (nominal) appreciation – perhaps fuelled by speculative capital inflows in the wake of preparation for EMU accession – may lead to problems. Indeed, this seems to be one of the main risks which the NMS will face in the coming years.

The Spring 2005 Economic Forecasts of the EU Commission (released on 4 April 2005) lower the expected GDP growth in the eurozone to just 1.6% in 2005 and to 2.1% in 2006. The German economy will grow only 0.8% in 2005 (1.6% in 2006).

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# Appendix Selected Indicators of Competitiveness

Table A/1

GDP per capita at current PPPs (EUR), from 2005 at constant PPPs

	GDF pe	ı capı	ia ai C	uneni	•	(,	, •	2005			•		
	1991	1995	1999	2000	2001	2002	2003	2004	2005	2006	2007	2010	2015
									project	tion assum	ning 4% p.a	a. GDP gro	owth
									aı		pulation gi	owth p.a.	
Czech Republic	9191	10041	12172	12810	13530	14319	14690	15565	16141	16738	17408	19581	23824
Hungary	7310	7480	9732	10547	11549	12402	12929	13892	14420	15012	15612	17561	21366
Poland Slovak Republic	4480 6959	6210 6782	8454 8740	9048 9464	9290 10052	9664 10882	9826 11183	10582 12138	11059 12781	11556 13484	12019 14024	13519 15775	16448 19193
Slovenia	9421	9768	13685	14464	15294	15936	16404	17346	18022	18725	19474	21906	26652
Estonia	6387	5458	7636	8601	9177	9890	10378	11279	11956	12697	13205	14854	18072
Latvia	8618	4103	6341	7007	7658	8251	8756	9674	10332	11024	11465	12896	15690
Lithuania	7459	5037	6980	7610	8340	8977	9783	10857	11552	12234	12723	14312	17413
Cyprus	10889	13114	15750	17028	18272	17679	17663	18493	19232	20002	20802	23399	28468
Malta	8754	11134	14371	15525	15347	15729	16041	16452	17110	17795	18506	20817	25327
Bulgaria	5138	4749	4894	5325	5846	6099	6341	6830	7171	7530	7831	8809	10717
Romania	5252	5718	4757	5006	5462	6058	6315	6977	7360	7765	8076	9084	11052
Croatia	5954	5682	7445	8111	8638	9295	9720	10403	10767	11144	11589	13037	15861
Albania			2702			4075			4060	E170			7272
Albania Bosnia & Herzeg.	1456	2313	2792 4655	3184 4940	3857 5228	4075 5523	4267 5670	4566 6094	4863 6398	5179 6718	5387 6987	6059 7859	7372 9562
Macedonia	4103	4031	4828	5169	5003	5211	5401	5615	5840	6073	6316	7105	8644
Serbia	4100	4001	4020	4186	4508	4948	5130	5604	5828	6061	6304	7091	8627
			- 400										
Russia	8042	5677	5462	6027	6484	7000	7522	8270	8684	9161	9528	10718	13040
Ukraine	5758	3268	3403	3739	4228	4603	5108	5832	6357 6821	6802 7230	7074 7519	7957	9681
Belarus	•	2817	4060	4432	4740	5125	5545	6316	0021	7230	7519	8458	10291
											ning 2% p.a	U	owth
_											pulation gr		
Germany	17203	18187	20995	22127	22520	23012	23101	23967	24447	24935	25434	26991	29800
Greece	10781	10990	13298	14317	15092 18893	16462	17281	18270	18636	19008	19389	20575 24488	22717
Spain Austria	12470 18450	13331 19678	17017 23507	18113 25255	25459	20026 25988	20897 26118	21744 27041	22179 27581	22623 28133	23075 28696	30452	27036 33621
Portugal	10488	11139	14302	15272	15787	16249	15889	16317	16643	16976	17316	18376	20288
Turkey	4466	4587	5484	5991	5350	5626	5916	6449	6578	6710	6844	7263	8019
USA	21193	23371	29008	30679	31189	32211	32912	35489	36199	36923	37661	39966	44126
EU-15 average	15740 14127	16844 15193	20320	21639	22419 20445	23172	23321	24251	24736	25230	25735	27310	30153 28194
EU-25 average													
S .	17127	13193	18487	19706		21180	21365	22288	22769	23261	23764	25337	20194
· ·	14121	10190						22288 e = 100		23261	23/04	25337	20194
C	1991	1995								23261	2007	2010	2015
Ü	1991	1995	Euro 1999	opean 2000	Union 2001	( <b>25</b> ) a	verag 2003	e = 100 2004	2005	2006	2007	2010	2015
Czech Republic	<b>1991</b> 65	<b>1995</b> 66	<b>Euro</b> 1 <b>999</b> 66	opean 2000 65	<b>Union</b> 2001 66	2002 68	2003 69	<b>e = 100 2004</b> 70	2005 71	<b>2006</b> 72	<b>2007</b> 73	<b>2010</b> 77	<b>2015</b> 84
Czech Republic Hungary	<b>1991</b> 65 52	<b>1995</b> 66 49	<b>Euro 1999</b> 66 53	2000 65 54	<b>Union</b> 2001 66 56	(25) a 2002 68 59	2003 69 61	e = 100 2004 70 62	<b>2005</b> 71 63	<b>2006</b> 72 65	<b>2007</b> 73 66	<b>2010</b> 77 69	<b>2015</b> 84 76
Czech Republic Hungary Poland	1991 65 52 32	<b>1995</b> 66 49 41	<b>Euro 1999</b> 66 53 46	2000 65 54 46	Union 2001 66 56 45	(25) a 2002 68 59 46	2003 69 61 46	e = 100 2004 70 62 47	2005 71 63 49	<b>2006</b> 72 65 50	<b>2007</b> 73 66 51	<b>2010</b> 77 69 53	<b>2015</b> 84 76 58
Czech Republic Hungary Poland Slovak Republic	<b>1991</b> 65 52	<b>1995</b> 66 49	<b>Euro 1999</b> 66 53	2000 65 54 46 48	<b>Union</b> 2001 66 56	(25) a 2002 68 59	2003 69 61	e = 100 2004 70 62	2005 71 63 49 56	<b>2006</b> 72 65	<b>2007</b> 73 66	2010 77 69 53 62	<b>2015</b> 84 76
Czech Republic Hungary Poland	1991 65 52 32 49	<b>1995</b> 66 49 41 45	<b>Euro 1999</b> 66 53 46 47	2000 65 54 46	<b>Union</b> 2001 66 56 45 49	(25) a 2002 68 59 46 51	2003 69 61 46 52	e = 100 2004 70 62 47 54	2005 71 63 49	2006 72 65 50 58	<b>2007</b> 73 66 51 59	<b>2010</b> 77 69 53	2015 84 76 58 68
Czech Republic Hungary Poland Slovak Republic Slovenia	1991 65 52 32 49 67	1995 66 49 41 45 64	<b>Euro 1999</b> 66 53 46 47 74	2000 65 54 46 48 73	<b>Union</b> 2001 66 56 45 49 75	2002 68 59 46 51 75	2003 69 61 46 52 77	e = 100 2004 70 62 47 54 78	2005 71 63 49 56 79	2006 72 65 50 58 80	2007 73 66 51 59 82	2010 77 69 53 62 86	2015 84 76 58 68 95
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia	1991 65 52 32 49 67 45	1995 66 49 41 45 64 36	1999 66 53 46 47 74 41	2000 2000 65 54 46 48 73 44	2001 66 56 45 49 75 45	68 59 46 51 75 47	2003 69 61 46 52 77 49	e = 100 2004 70 62 47 54 78 51	2005 71 63 49 56 79 53	2006 72 65 50 58 80 55	2007 73 66 51 59 82 56	2010 77 69 53 62 86 59	2015 84 76 58 68 95 64
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia	1991 65 52 32 49 67 45 61 53 77	1995 66 49 41 45 64 36 27 33 86	1999 66 53 46 47 74 41 34 38 85	2000 65 54 46 48 73 44 36 39 86	<b>Union</b> 2001 66 56 45 49 75 45 37 41 89	68 59 46 51 75 47 39 42 83	2003 69 61 46 52 77 49 41 46 83	e = 100 2004 70 62 47 54 78 51 43 49 83	2005 71 63 49 56 79 53 45 51 84	2006 72 65 50 58 80 55 47 53 86	2007 73 66 51 59 82 56 48 54 88	2010 77 69 53 62 86 59 51 56 92	2015 84 76 58 68 95 64 56 62 101
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania	1991 65 52 32 49 67 45 61 53	1995 66 49 41 45 64 36 27 33	<b>Euro 1999</b> 66 53 46 47 74 41 34 38	2000 65 54 46 48 73 44 36 39	2001 66 56 45 49 75 45 37 41	(25) a 2002 68 59 46 51 75 47 39 42	2003 69 61 46 52 77 49 41 46	e = 100 2004 70 62 47 54 78 51 43 49	2005 71 63 49 56 79 53 45 51	2006 72 65 50 58 80 55 47 53	2007 73 66 51 59 82 56 48 54	2010 77 69 53 62 86 59 51 56	2015 84 76 58 68 95 64 56 62
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta	1991 65 52 32 49 67 45 61 53 77	1995 66 49 41 45 64 36 27 33 86 73	Euro 1999 66 53 46 47 74 41 34 38 85 78	2000 65 54 46 48 73 44 36 39 86	Union 2001 66 56 45 49 75 45 37 41 89 75	2002 68 59 46 51 75 47 39 42 83 74	2003 69 61 46 52 77 49 41 46 83 75	e = 100 2004 70 62 47 54 78 51 43 49 83	2005 71 63 49 56 79 53 45 51 84	2006 72 65 50 58 80 55 47 53 86 76	2007 73 66 51 59 82 56 48 54 88 78	2010 77 69 53 62 86 59 51 56 92 82	2015 84 76 58 68 95 64 56 62 101 90
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus	1991 65 52 32 49 67 45 61 53 77 62	1995 66 49 41 45 64 36 27 33 86	1999 66 53 46 47 74 41 34 38 85	2000 65 54 46 48 73 44 36 39 86 79	<b>Union</b> 2001 66 56 45 49 75 45 37 41 89	68 59 46 51 75 47 39 42 83	2003 69 61 46 52 77 49 41 46 83	e = 100 2004 70 62 47 54 78 51 43 49 83 74	2005 71 63 49 56 79 53 45 51 84 75	2006 72 65 50 58 80 55 47 53 86	2007 73 66 51 59 82 56 48 54 88	2010 77 69 53 62 86 59 51 56 92	2015 84 76 58 68 95 64 56 62 101
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria	1991 65 52 32 49 67 45 61 53 77 62	1995 66 49 41 45 64 36 27 33 86 73	Euro 1999 66 53 46 47 74 41 34 38 85 78	2000 65 54 46 48 73 44 36 39 86 79	Union 2001 66 56 45 49 75 45 37 41 89 75	2002 68 59 46 51 75 47 39 42 83 74	2003 69 61 46 52 77 49 41 46 83 75	e = 100 2004 70 62 47 54 78 51 43 49 83 74	2005 71 63 49 56 79 53 45 51 84 75	2006 72 65 50 58 80 55 47 53 86 76	2007 73 66 51 59 82 56 48 54 88 78	2010 77 69 53 62 86 59 51 56 92 82 35	2015 84 76 58 68 95 64 56 62 101 90
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia	1991 65 52 32 49 67 45 61 53 77 62 36 37 42	1995 66 49 41 45 64 36 27 33 86 73 31 38 37	Euro 1999 66 53 46 47 74 41 34 38 85 78 26 26 40	2000 65 54 46 48 73 44 36 39 86 79 27 25 41	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42	68 59 46 51 75 47 39 42 83 74 29 29	2003 69 61 46 52 77 49 41 46 83 75 30 30 45	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47	2005 71 63 49 56 79 53 45 51 84 75 31 32 47	2006 72 65 50 58 80 55 47 53 86 76 32 33 48	2007 73 66 51 59 82 56 48 54 88 78 33 34 49	2010 77 69 53 62 86 59 51 56 92 82 35 36 51	2015 84 76 58 68 95 64 56 62 101 90 38 39 56
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania	1991 65 52 32 49 67 45 61 53 77 62 36 37	1995 66 49 41 45 64 36 27 33 86 73 31 38 37	Euro 1999 66 53 46 47 74 41 34 38 85 78 26 40 15	2000 65 54 46 48 73 44 36 39 86 79 27 25 41	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42	68 59 46 51 75 47 39 42 83 74 29 29 44 19	2003 69 61 46 52 77 49 41 46 83 75 30 30 45	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20	2005 71 63 49 56 79 53 45 51 84 75 31 32 47	2006 72 65 50 58 80 55 47 53 86 76 32 33 48	2007 73 66 51 59 82 56 48 54 88 78 33 34 49	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24	2015 84 76 58 68 95 64 56 62 101 90 38 39 56
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg.	1991 65 52 32 49 67 45 61 53 77 62 36 37 42	1995 66 49 41 45 64 36 27 33 86 73 31 38 37	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26	2002 68 59 46 51 75 47 39 42 83 74 29 29 44	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28	2006 72 65 50 58 80 55 47 63 86 76 32 33 48 22 29	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia	1991 65 52 32 49 67 45 61 53 77 62 36 37 42	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15	Euro 1999 66 53 46 47 74 41 34 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26	Union 2001 66 56 45 49 75 45 47 41 89 75 29 27 42 19 26 24	68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26	2006 72 65 50 58 80 55 47 53 86 76 32 33 48	2007 73 66 51 59 82 56 48 54 88 78 33 34 49	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28	2015 84 76 58 68 95 64 56 62 101 90 38 39 56
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38	2006 72 65 50 58 80 55 47 63 86 76 32 33 48 22 29 26 26 39	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31	Union 2001 66 56 45 49 75 45 47 41 89 75 29 27 42 19 26 24 22 32 21	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27 40 30	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 23	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 26	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27 40 30 32	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29 57 41 122	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22	Union 2001 66 56 45 49 75 45 47 41 89 75 29 27 42 19 26 24 22 32 21 23 110	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 26 108	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31 107	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27 40 30 32 107	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29 57 41 122 76	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 37 22 19	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73	Union 2001 66 56 45 49 75 45 47 41 89 75 29 27 42 19 26 24 22 32 21 23 110 74	25) a 2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78	2003 69 61 46 52 77 49 41 46 83 75 30 45 20 27 25 24 35 24 26 108 81	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108 82	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 26 38 28 30	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31 107 82	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27 40 30 32 107 82	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 23 110 74 92	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 32 22 24	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 26	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108 82 98	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30 107 82 97	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 40 30 32 107 82 97	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 42 31 33 107 81 97	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 96
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain Austria	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 37 22 19	Euro 1999 66 53 46 47 741 34 38 85 78 26 26 40 15 25 26	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92 128	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 32 21 31 110 74 92 125	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78 95 123	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 36 108 81 98 122	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108 82 98 121	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 38 28 30 107 82 97 121	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 39 29 31 107 82 97 121	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 40 30 32 107 82 97 121	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81 97 120	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 96 119
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain Austria Portugal	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29 57 41 122 76 88 131 74	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 27 21 9 120 72 88 81 30 73	Euro 1999 66 53 46 47 74 41 34 38 85 78 26 26 40 15 25 26 30 18 22 114 72 92 127 77	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92 128 78	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 23 110 74 92 125 77	2002 68 59 46 51 75 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78 95 123 77	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 26 108 81 98 81 22 74	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 37 26 28 108 82 98 121 73	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30 107 82 97	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31 107 82 97 121 73	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 27 40 30 32 107 82 97 121 73	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81 97 120 73	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 96 119 72
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain Austria Portugal Turkey	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 27 21 9 120 72 8 8 130 73 30 31 31 32 37 37 37 37 37 37 37 37 37 37 37 37 37	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26 30 18 22 114 72 92 92 127 77 30	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92 112 73 93 93 94 94 94 95 96 96 97 97 97 97 97 97 97 97 97 97 97 97 97	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 23 110 74 92 125 77 26	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78 95 123 77 27	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 26 108 81 98 81 98 98 98 98 98 98 98 98 98 98 98 98 98	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108 82 98 121 73 29	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30 107 82 97 121 73 29	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 29 31 107 82 97 121 73 29	2007 73 66 51 59 82 56 48 88 78 33 34 49 23 29 27 27 40 30 32 107 82 97 121 73 29	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81 97 120 73 29	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 196 199 72 28
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain Austria Portugal Turkey USA	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29 57 41 122 76 88 131 74 32 150	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 37 22 19 120 72 88 130 73 30 154	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26 30 18 22 114 72 92 127 77 30 157	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92 128 78 30 156	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 31 10 74 92 125 77 26 153	2002 68 59 46 51 75 57 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78 95 123 77 27 152	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 26 108 81 198 198 198 198 198 198 198 198 198	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 37 26 28 108 82 98 121 73 29 159	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30 107 82 97 121 73 29 159	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 26 39 29 31 107 82 97 121 73 29 159	2007 73 66 51 59 82 56 48 54 88 78 33 34 49 23 29 27 40 30 32 107 82 97 121 73 29 158	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81 97 120 73 29 158	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 96 119 72 28 157
Czech Republic Hungary Poland Slovak Republic Slovenia Estonia Latvia Lithuania Cyprus Malta Bulgaria Romania Croatia Albania Bosnia & Herzeg. Macedonia Serbia Russia Ukraine Belarus Germany Greece Spain Austria Portugal Turkey	1991 65 52 32 49 67 45 61 53 77 62 36 37 42 10 29	1995 66 49 41 45 64 36 27 33 86 73 31 38 37 15 27 27 21 9 120 72 8 8 130 73 30 31 31 32 37 37 37 37 37 37 37 37 37 37 37 37 37	Euro 1999 66 53 46 47 74 41 38 85 78 26 26 40 15 25 26 30 18 22 114 72 92 92 127 77 30	2000 65 54 46 48 73 44 36 39 86 79 27 25 41 16 25 26 21 31 19 22 112 73 92 112 73 93 93 94 94 94 95 96 96 97 97 97 97 97 97 97 97 97 97 97 97 97	Union 2001 66 56 45 49 75 45 37 41 89 75 29 27 42 19 26 24 22 32 21 23 110 74 92 125 77 26	2002 68 59 46 51 75 47 39 42 83 74 29 29 44 19 26 25 23 33 22 24 109 78 95 123 77 27	2003 69 61 46 52 77 49 41 46 83 75 30 30 45 20 27 25 24 35 24 26 108 81 98 81 98 98 98 98 98 98 98 98 98 98 98 98 98	e = 100 2004 70 62 47 54 78 51 43 49 83 74 31 31 47 20 27 25 25 37 26 28 108 82 98 121 73 29	2005 71 63 49 56 79 53 45 51 84 75 31 32 47 21 28 26 26 38 28 30 107 82 97 121 73 29	2006 72 65 50 58 80 55 47 53 86 76 32 33 48 22 29 26 29 31 107 82 97 121 73 29	2007 73 66 51 59 82 56 48 88 78 33 34 49 23 29 27 27 40 30 32 107 82 97 121 73 29	2010 77 69 53 62 86 59 51 56 92 82 35 36 51 24 31 28 28 42 31 33 107 81 97 120 73 29	2015 84 76 58 68 95 64 56 62 101 90 38 39 56 26 34 31 31 46 34 36 106 81 196 199 72 28

Sources: National statistics, Eurostat, wiiw estimates.

# Indicators of macro-competitiveness, 1996-2004

EUR-based, annual averages

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic									prelim.
Producer price index, 2000=100	85.7	90.0	94.4	95.3	100.0	102.8	102.3	102.0	107.8
Consumer price index, 2000=100	78.5	85.1	94.3	96.2	100.0	102.0	102.5	102.0	107.0
GDP deflator, 2000=100	79.7	86.3	95.9	98.6	100.0	104.7	107.8	100.7	112.7
Exchange rate (ER), CZK/EUR	34.01	35.80	36.16		35.61	34.08	30.81	31.84	31.90
ER nominal, 2000=100	95.5	100.5	101.6	103.6	100.0	95.7	86.5	89.4	89.6
Real ER (CPI-based), 2000=100	114.5	113.0			100.0	93.4	84.7	89.2	88.8
Real ER (PPI-based), 2000=100	106.6	107.9	103.1	103.7	100.0	94.7	85.9	90.4	88.1
PPP, CZK/EUR	13.99	14.76	16.10	16.31	16.34	16.74	16.53	17.02	17.12
Price level, EU(25) = 100	41	41	45	44	46	49	54	53	54
Average monthly gross wages, CZK	9825	10802	11801	12797	13614	14793	15866	16920	18050
Average monthly gross wages, EUR (ER)	289	302	326	347	382	434	515	531	566
Average monthly gross wages, EUR (PPP)	702	732			833	884	960	994	1054
GDP nominal, bn CZK	1660.6	1785.1	1962.5		2150.1	2315.3	2414.7	2550.8	2720
Employed persons - LFS, th., average	4972.0	4936.5	4865.7		4731.6	4750.2	4764.9	4733.2	4706.7
GDP per employed person, CZK	334000	361619				487402	506762	538913	577900
GDP per empl. person, CZK at 1999 pr.	413490					458220	463438	484122	505512
Unit labour costs, 2000=100	78.2	86.0	93.7		100.0	106.3	112.7	115.0	117.5
Unit labour costs, ER adj., 2000=100	81.9	85.6	92.3		100.0	111.0	130.2	128.7	131.2
Unit labour costs, PPP adj., Austria=100	25.46	27.71	30.18	30.61	32.25	35.41	41.14	39.55	39.89
Hungary									
Producer price index, 2000=100	63.6	76.6	85.3		100.0	105.2	103.3	105.8	109.5
Consumer price index, 2000=100	61.2	72.4	82.8		100.0	109.2	115.0	120.4	128.6
GDP deflator, 2000=100	63.0	74.6	84.0		100.0	108.6	118.3	127.4	136.6
Exchange rate (ER), HUF/EUR	191.15 73.5	210.93	240.98	252.80	260.04	256.68	242.97	253.51	251.68 96.8
ER, nominal 2000=100 Real ER (CPI-based), 2000=100	113.0	81.1 107.2	92.7 108.5	97.2 104.8	100.0 100.0	98.7 92.4	93.4 84.8	97.5 86.2	81.8
Real ER (PPI-based), 2000=100	110.6	107.2		104.6	100.0	95.5	91.8	95.0	93.6
PPP, HUF/EUR	84.43	97.42		114.35	122.11	126.21	132.87	141.78	147.57
Price level, EU(25) = 100	44	46	45		47	49	55	56	59
Average monthly gross wages, HUF	46837	57270	67764		87645	103553	122482	137193	145675
Average monthly gross wages, EUR (ER)	245	272	281	305	337	403	504	541	579
Average monthly gross wages, EUR (PPP)	555	588	629	675	718	820	922	968	987
GDP nominal, bn HUF	6893.9	8540.7	10087.4	11393.5	13150.8	14849.8	16740.4	18568.3	20700
Employed persons - LFS, th., average	3605.1	3610.3	3674.7	3809.3	3856.2	3868.3	3870.6	3921.9	3900.4
GDP per employed person, HUF	1912273	2365640	2745104	2990969	3410291	3838846	4325020	4734509	5307148
GDP per empl. person, HUF at 1999 pr.	2765169	2888463	2976353	2990969	3107678	3222322	3332642	3387590	3539175
Unit labour costs, 2000=100	60.1	70.3	80.7	91.5	100.0	113.9	130.3	143.6	145.9
Unit labour costs, ER adj., 2000=100	81.7	86.7			100.0	115.4	139.5	147.3	150.8
Unit labour costs, PPP adj., Austria=100	22.63	25.02	25.40	27.05	28.75	32.82	39.27	40.36	40.87
Poland									
Producer price index, 2000=100	72.9	81.8	87.8		100.0	101.6	102.6	105.3	112.7
Consumer price index, 2000=100	65.9	75.7	84.6	90.8	100.0	105.5	107.5	108.4	112.2
GDP deflator, 2000=100	69.4	79.0	88.1	93.7	100.0	104.0	105.4	105.9	109.0
Exchange rate (ER), PLN/EUR	3.377	3.706			4.011	3.669	3.856	4.398	4.534
ER, nominal, 2000=100	84.2	92.4				91.5	96.1	109.6	113.0
Real ER (CPI-based), 2000=100 Real ER (PPI-based), 2000=100	120.3 110.5	116.8 109.0	112.0 106.7		100.0 100.0	88.6 91.6	93.3 95.1	107.7 107.3	109.5 106.3
PPP, PLZ/EUR	1.579	1.751	1.919		2.070	2.119	2.114	2.171	2.188
Price level, EU(25) = 100	47	47				58	55	49	48
Average monthly gross wages, PLN *)	874	1066			1894	2045	2098	2185	2439
Average monthly gross wages, EUR (ER)	259	288	314		472	557	544	497	538
Average monthly gross wages, EUR (PPP)	554	609	642		915	965	992	1006	1114
GDP nominal, bn PLN	414.4	504.1	589.4	652.5	723.9	760.6	781.1	814.9	884.2
Employment total - reg., th., average		15438.7		15373.5		14923.6	14589.9	14486.9	14490
GDP per employed person, PLN	27590	32654		42444	48203	50966	53538	56252	61021
GDP per empl. person, PLN at 1999 pr.	37283	38741	39672	42444	45189	45927	47634	49795	52494
Unit labour costs, 2000=100	56.0	65.6	74.1	95.4	100.0	106.3	105.1	104.7	110.9
Unit labour costs, ER adj., 2000=100	66.5	71.1	75.8		100.0	116.2	109.3	95.5	98.1
Unit labour costs, PPP adj., Austria=100	30.97	34.51	37.19	43.77	48.36	55.56	51.78	44.02	44.71

<sup>\*)</sup> Poland: Methodological change in 1999 (broader wage coverage).

(Table A/2 ctd.)

Table A/2 (ctd.)

Table A/2 (ctd.)									
	1996	1997	1998	1999	2000	2001	2002	2003	2004
									prelim.
Slovak Republic									
Producer price index, 2000=100	80.2		86.5	90.2	100.0	106.5	108.7	117.8	121.8
Consumer price index, 2000=100	71.3		80.7	89.3	100.0	107.1	110.6	120.0	129.0
GDP deflator, 2000=100 Exchange rate (ER), SKK/EUR	77.1 38.40		86.5 39.60	92.2 44.12	100.0 42.59	104.2 43.31	108.4 42.70	113.5 41.49	119.2 40.05
ER, nominal, 2000=100	90.2		93.0	103.6	100.0	101.7	100.3	97.4	94.0
Real ER (CPI-based), 2000=100	119.0		111.7	113.9	100.0	97.0	94.6	86.4	79.2
Real ER (PPI-based), 2000=100	107.6		102.9	109.6	100.0	97.1	93.6	85.2	81.8
PPP, SKK/EUR	16.00		17.19	17.90	18.28	18.67	18.77	19.97	20.36
Price level, EU(25) = 100	42		43	41	43	43	44	48	51
Average monthly gross wages, SKK	8154	9226	10003	10728	11430	12365	13511	14365	14366
Average monthly gross wages, EUR (ER)	212	243	253	243	268	286	316	346	359
Average monthly gross wages, EUR (PPP)	510	555	582	599	625	662	720	719	706
GDP nominal, bn SKK	638.4	712.7	781.4	844.1	934.1	1009.8	1098.7	1201.2	1330.0
Employed persons, - LFS, th., average	2224.9	2205.9	2198.6	2132.1	2101.7	2123.7	2127.0	2164.6	2160
GDP per employed person, SKK	286956		355425	395905	444440	475509	516529	554927	615741
GDP per empl. person, SKK at 1999 pr.	343027		378496		409615	420561	439297	450768	475890
Unit labour costs, 2000=100	85.2		94.7	97.1	100.0	105.4	110.2	114.2	108.2
Unit labour costs, ER adj., 2000=100	94.5		101.9	93.7	100.0	103.6	109.9	117.2	115.0
Unit labour costs, PPP adj., Austria=100	24.75	27.94	28.09	25.48	27.18	27.85	29.27	30.37	29.49
Slovenia									
Producer price index, 2000=100	80.9	85.9	91.0	92.9	100.0	108.9	114.5	117.3	120.9
Consumer price index, 2000=100	74.0		86.5	91.8	100.0	108.4	116.5	123.1	127.5
GDP deflator, 2000=100	76.3	83.1	89.4		100.0	109.1	117.8	124.2	128.6
Exchange rate (ER), SIT/EUR	169.51	180.40	186.27	193.63	205.03	217.19	226.22	233.70	238.86
ER, nominal, 2000=100	82.7		90.8	94.4	100.0	105.9	110.3	114.0	116.5
Real ER (CPI-based), 2000=100	105.2		101.8	100.9	100.0	99.9	98.8	98.6	99.3
Real ER (PPI-based), 2000=100	97.7		95.6	97.0	100.0	99.0	97.9	100.1	102.0 179.08
PPP, SIT/EUR Price level, EU(25) = 100	122.86 72		137.57 74	142.60 74	147.72 72	156.30 72	167.10 74	175.46 75	75
Average monthly gross wages, SIT	129125		158069	173245	191669	214561	235436	253200	267571
Average monthly gross wages, STI  Average monthly gross wages, EUR (ER)	762		849	895	935	988	1041	1083	1120
Average monthly gross wages, EUR (PPP)	1051	1108	1149	1215	1298	1373	1409	1443	1494
GDP nominal, bn SIT	2728.2		3464.9	3874.7	4252.3	4761.8	5314.5	5747.2	6200.0
Employment total - reg., th., average	741.7		745.2	758.5	768.2	779.0	783.5	777.2	781.9
GDP per employed person, SIT	3678186	4183408	4649803	5108573	5535629	6112406	6783026	7394262	7929296
GDP per empl. person, SIT at 1999 pr.	4561427	4767509	4925982	5108573	5240102	5305488	5450747	5633410	5836746
Unit labour costs, 2000=100	77.4	82.7	87.7	92.7	100.0	110.6	118.1	122.9	125.3
Unit labour costs, ER adj., 2000=100	93.6	94.0	96.6	98.2	100.0	104.4	107.0	107.8	107.6
Unit labour costs, PPP adj., Austria=100	53.19	55.67	57.76	57.88	58.96	60.87	61.81	60.59	59.81
Estonia									
Producer price index, 2000=100	85.1	92.6	96.5	95.3	100.0	104.4	104.8	105.0	108.1
Consumer price index, 2000=100	77.4	86.0	93.1	96.2	100.0	105.8	109.6	111.0	114.4
GDP deflator, 2000=100	75.6	83.5	91.0	94.9	100.0	105.8	110.5	113.1	117.4
Exchange rate (ER), EEK/EUR	15.074	15.670	15.783	15.647	15.647	15.647	15.647	15.647	15.647
ER, nominal, 2000=100	96.3		100.9	100.0	100.0	100.0	100.0	100.0	100.0
Real ER (CPI-based), 2000=100	117.2		105.1	102.1	100.0	96.6	95.2	95.9	95.0
Real ER (PPI-based), 2000=100	108.3		100.1	100.2	100.0	97.4	96.9	98.1	98.0
PPP, EEK/EUR	6.610		7.623	7.772	7.872	8.335	8.698	8.956	9.114
Price level, EU(25) = 100	44			50	50	53	56	57	58 7450
Average monthly gross wages, EEK	2985		4125	4440	4907	5510	6144	6723	7150
Average monthly gross wages, EUR (ER)  Average monthly gross wages, EUR (PPP)	198 452		261 541	284 571	314 623	352 661	393 706	430 751	457 785
GDP nominal, bn EEK	56.0		78.3		92.7	661 104.3	116.9	125.8	138.7
Employed persons - LFS, th., average	619.3		606.5	579.3	572.5	577.7	585.5	594.3	595
GDP per employed person, EEK	90371		129169		161951	180609	199605	211732	233109
GDP per empl. person, EEK at 1999 pr.	113458				153732	162089	171516	177669	188462
Unit labour costs, 2000=100	82.4		95.9	98.7	100.0	106.5	112.2	118.5	118.9
Unit labour costs, ER adj., 2000=100	85.6		95.1	98.7	100.0	106.5	112.2	118.5	118.9
Unit labour costs, PPP adj., Austria=100	30.30		35.46		36.75	38.71	40.39	41.53	41.18
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(Table A/2 ctd.)

Table A/2 (ctd.)

Table A/2 (ctd.)									
	1996	1997	1998	1999	2000	2001	2002	2003	2004
									prelim.
Latvia									
Producer price index, 2000=100	97.6	101.6	103.5	99.4	100.0	101.7	102.7	106.0	115.1
Consumer price index, 2000=100	83.9	90.9	95.2	97.5	100.0	102.5	104.4	107.5	114.1
GDP deflator, 2000=100	82.2	87.9	92.0	96.4	100.0	102.1	105.6	109.2	116.5
Exchange rate (ER), LVL/EUR	0.6900	0.6574	0.6614	0.6237	0.5600	0.5627	0.5826	0.6449	0.6711
ER, nominal, 2000=100 Real ER (CPI-based), 2000=100	123.2 138.3	117.4 123.6	118.1 120.3	111.4 112.1	100.0 100.0	100.5 100.2	104.0 103.9	115.2 114.0	119.8 114.1
Real ER (PPI-based), 2000=100	120.8	111.5	109.3	107.0	100.0	100.2	103.9	112.0	110.3
PPP, LVL/EUR	0.2540	0.2646	0.2718	0.2787	0.2818	0.2866	0.2949	0.3105	0.3248
Price level, EU(25) = 100	37	40	41	45	50	51	51	48	48
Average monthly gross wages, LVL	99	120	133	141	150	159	173	192	210
Average monthly gross wages, EUR (ER)	143	183	202	226	267	283	297	298	313
Average monthly gross wages, EUR (PPP)	389	454	490	506	531	555	587	620	646
GDP nominal, bn LVL	3.076	3.563	3.903	4.224	4.686	5.168	5.691	6.322	7.270
Employed persons - LFS, th., average	948.7	990.2	986.1	968.5	941.1	962.1	989.0	1006.9	1020
GDP per employed person, LVL	3242	3598	3958	4362	4979	5372	5754	6279	7127
GDP per empl. person, LVL at 1999 pr.	3802	3944	4147	4362	4798	5069	5249	5540	5894
Unit labour costs, 2000=100	83.3	97.7	103.1	103.7	100.0	100.6	105.8	111.5	114.3
Unit labour costs, ER adj., 2000=100	67.6	83.2	87.3	93.1	100.0	100.2	101.6	96.8	95.4
Unit labour costs, PPP adj., Austria=100	23.43	30.03	31.84	33.47	35.95	35.61	35.79	33.17	32.33
Lithuania									
Producer price index, 2000=100	83.6	88.7	84.8	86.2	100.0	97.0	94.3	93.8	98.5
Consumer price index, 2000=100	85.8	93.5	98.2	99.0	100.0	101.3	101.6	100.4	101.6
GDP deflator, 2000=100	83.2	94.8	99.6	99.0	100.0	99.9	99.9	99.1	102.2
Exchange rate (ER), LTL/EUR	5.0118	4.5272	4.4924	4.2712	3.6990	3.5849	3.4605	3.4528	3.4528
ER, nominal, 2000=100	135.5	122.4	121.4	115.5	100.0	96.9	93.6	93.3	93.3
Real ER (CPI-based), 2000=100	148.6	125.4	119.9	114.4	100.0	97.8	96.1	99.0	99.8
Real ER (PPI-based), 2000=100	155.0	133.2	137.2	127.9	100.0	101.6	100.7	102.5	100.4
PPP, LTL/EUR	1.5829	1.7568	1.8127	1.7628	1.7096	1.6663	1.6582	1.6626	1.6567
Price level, EU(25) = 100	32	39	40	41	46	46	48	48	48
Average monthly gross wages, LTL	618	778	930	987	971	982	1014	1073	1158
Average monthly gross wages, EUR (ER)	123	172	207	231	262	274	293	311	335
Average monthly gross wages, EUR (PPP)	391	443	513	560	568	590	611	645	699
GDP nominal, bn LTL	32.3 1620.4	39.4 1570.7	44.4 1597.6	43.4 1598.4	45.5 1397.8	48.4 1351.8	51.6 1405.9	56.2 1438.0	61.8 1435
Employed persons - LFS, th., average GDP per employed person, LTL	19927	25070	27778	27127	32570	35788	36733	39067	43067
GDP per empl. person, LTL at 1999 pr.	23711	26176	27608	27127	32235	35458	36399	39036	41699
Unit labour costs, 2000=100	86.6	98.7	111.8	120.9	100.0	92.0	92.5	91.2	92.2
Unit labour costs, ER adj., 2000=100	63.9	80.6	92.1	104.7	100.0	94.9	98.9	97.7	98.8
Unit labour costs, PPP adj., Austria=100	20.48	26.94	31.07	34.81	33.27	31.23	32.21	30.99	30.98
Austria	07.0	07.4	06.0	06.0	100.0	101 5	101.1	100.7	107.7
Producer price index, 2000=100	97.0	97.4	96.9	96.2	100.0	101.5	101.1	102.7	107.7
Consumer price index, 2000=100	95.0	96.2	97.1	97.7	100.0	102.7	104.5	106.0	108.2
GDP deflator, 2000=100	96.6	97.4	97.9	98.6	100.0	102.1	103.4	105.5	107.1
Exchange rate (ER), ATS-EUR/EUR	0.9636	1.0017	1.0089	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
PPP, ATS-EUR/EUR Price level, EU(25) = 100	1.1015 114	1.0881 109	1.0892 108	1.0646 106	1.0397 104	1.0543 105	1.0560 106	1.0692 107	1.0814 108
Average monthly gross wages, EUR-ATS	2157	2180	2245	2296	2355	2389	2438	2499	2558
Average monthly gross wages, EUR (ER)	2239	2177	2225	2296	2355	2389	2438	2499	2558
Average monthly gross wages, EUR (PPP)	1958	2004	2061	2157	2265	2266	2308	2337	2366
GDP nominal, bn EUR-ATS	178.0	182.5	190.6	197.1	206.7	212.5	218.3	224.1	232.0
Employment total - reg., th., average	3415.4	3424.5	3446.6	3478.8	3506.5	3522.5	3532.9	3565.5	3586.9
GDP per employed person, EUR-ATS	52131	53289	55309	56647	58939	60330	61800	62861	64673
GDP per empl. person, EUR-ATS at 1999 pr.	53235	53939	55695	56647	58122	58292	58914	58764	59524
Unit labour costs, 2000=100	100.0	99.7	99.5	100.0	100.0	101.1	102.1	104.9	106.1
Unit labour costs, ER adj., 2000=100	103.8	99.6	98.6	100.0	100.0	101.1	102.1	104.9	106.1
Unit labour costs, PPP adjusted	0.54	0.52	0.51	0.52	0.52	0.52	0.53	0.54	0.55

ER = Exchange Rate; PPP = Purchasing Power Parity; Price level: PPP / ER.

ATS-EUR: ATS divided by fixed parity before 1999 (1€ = 13.7603 ATS).

For new EU member states and candidate countries PPPs are taken from Eurostat. For the rest of the countries PPPs have been estimated by wiiw using the OECD benchmark PPPs for 2002 and extrapolated with GDP price deflators.

Sources: National statistics; WIFO; Eurostat; Purchasing power parities and real expenditures, 2002 benchmark year, OECD 2005; wiiw estimates.

# Indicators of macro-competitiveness, 1996-2004

annual changes in %

	1996	1997	1998	1999	2000	2001	2002	2003		<b>1996-04</b> average
Czech Republic									•	
GDP deflator	8.7	8.3	11.2	2.8	1.4	4.9	2.8	1.8	2.7	4.9
Exchange rate (ER), CZK/EUR	-0.9	5.3	1.0	2.0	-3.4	-4.3	-9.6	3.3	0.2	-0.8
Real ER (CPI-based) Real ER (PPI-based)	-6.7 -4.9	-1.3 1.2	-7.6 -4.4	1.1 0.7	-5.3 -3.6	-6.6 -5.3	-9.3 -9.3	5.3 5.2	-0.5 -2.6	-3.5 -2.6
Average gross wages, CZK	18.3	9.9	9.2	8.4	6.4	8.7	7.3	6.6	6.7	9.0
Average gross wages, real (PPI based)	13.0	4.8	4.1	7.4	1.4	5.7	7.8	7.0	0.9	5.7
Average gross wages, real (CPI based)	8.7	1.3	-1.3	6.2	2.4	3.8	5.4	6.5	3.8	4.0
Average gross wages, EUR (ER)	19.3	4.4	8.2	6.3	10.2	13.5	18.6	3.2	6.5	9.9
Employment total GDP per empl. person, CZK at 1999 pr.	0.2 10.4	-0.7 0.0	-1.4 0.3	-2.1 3.3	-0.7 4.6	0.4 2.2	0.3 1.1	-0.7 4.5	-0.6 4.4	-0.6 3.4
Unit labour costs, CZK at 1999 prices	7.1	10.0	8.9	4.9	1.7	6.3	6.0	2.1	2.2	5.4
Unit labour costs, ER (EUR) adjusted	8.1	4.5	7.8	2.9	5.4	11.0	17.3	-1.2	2.0	6.3
Hungary										
GDP deflator	21.2	18.4	12.6	8.4	9.7	8.6	8.9	7.7	7.3	11.3
Exchange rate (ER), HUF/EUR Real ER (CPI-based)	17.5 -2.6	10.3 -5.1	14.2 1.2	4.9 -3.5	2.9 -4.5	-1.3 -7.6	-5.3 -8.2	4.3 1.6	-0.7 -5.1	5.0 -3.8
Real ER (PPI-based)	-3.1	-7.6	1.9	-0.5	-3.5	-4.5	-3.8	3.4	-1.4	-2.2
Average gross wages, HUF	20.4	22.3	18.3	13.9	13.5	18.2	18.3	12.0	6.2	15.8
Average gross wages, real (PPI based)	-1.1	1.6	6.3	8.4	1.7	12.3	20.4	9.4	2.6	6.7
Average gross wages, real (CPI based)	-2.6	3.3	3.5	3.5	3.4	8.2	12.3	7.0	-0.6	4.2
Average gross wages, EUR (ER)	2.5	10.8	3.6	8.6	10.4	19.7	25.0	7.4	7.0	10.3
Employment total GDP per empl. person, HUF at 1999 pr.	-0.5 2.7	0.1 4.5	1.8 3.0	3.7 0.5	1.2 3.9	0.3 3.7	0.1 3.4	1.3 1.6	-0.5 4.5	0.8 3.1
Unit labour costs, HUF at 1999 prices	17.2	17.1	14.8	13.3	9.3	13.9	14.4	10.2	1.6	12.3
Unit labour costs, ER (EUR) adjusted	-0.3	6.1	0.5	8.0	6.2	15.4	20.8	5.6	2.4	7.0
Poland										
GDP deflator	18.6	13.9	11.5	6.4	6.7	4.0	1.3	0.5	2.9	7.2
Exchange rate (ER), PLN/EUR	7.7	9.7	5.9	7.7	-5.1	-8.5	5.1	14.1	3.1	4.2
Real ER (CPI-based) Real ER (PPI-based)	-8.0 -3.7	-2.9 -1.4	-4.1 -2.1	1.6 1.6	-12.2 -7.8	-11.4 -8.4	5.3 3.9	15.4 12.8	1.7 -0.9	-1.9 -0.9
Average gross wages, PLN*)	26.5	21.9	15.7	10.6	11.6	8.0	2.6	4.2	11.6	12.3
Average gross wages, real (PPI based)	12.6	8.6	7.8	30.3	3.5	6.3	1.6	1.5	4.3	8.2
Average gross wages, real (CPI based)	5.5	6.1	3.5	28.3	1.3	2.4	0.7	3.3	7.8	6.3
Average gross wages, EUR (ER)	17.4	11.1	9.2	27.8	17.6	18.1	-2.4	-8.7	8.3	10.4
Employment total GDP per empl. person, PLN at 1999 pr.	1.9 4.0	2.8 3.9	2.3 2.4	-2.7 7.0	-2.3 6.5	-0.6 1.6	-2.2 3.7	-0.7 4.5	0.0 5.4	-0.2 4.3
Unit labour costs, PLN at 1999 prices	21.7	17.3	12.9	28.7	4.8	6.3	-1.1	-0.4	5.9	10.3
Unit labour costs, ER (EUR) adjusted	12.9	6.9	6.7	19.4	10.5	16.2	-5.9	-12.6	2.7	5.8
Slovak Republic										
GDP deflator	4.3	6.7	5.2	6.5	8.5	4.2	4.0	4.7	5.1	5.5
Exchange rate (ER), SKK/EUR	-0.1	-1.0	4.2	11.4	-3.5	1.7	-1.4	-2.8	-3.5	0.5
Real ER (CPI-based) Real ER (PPI-based)	-3.3 -3.7	-5.1 -4.5	-1.1 0.1	2.0 6.5	-12.2 -8.8	-3.0 -2.9	-2.6 -3.6	-8.7 -8.9	-8.3 -4.0	-4.8 -3.4
Average gross wages, SKK	13.3	13.1	8.4	7.2	6.5	8.2	9.3	6.3	0.0	8.0
Average gross wages, real (PPI based)	8.8	8.3	5.0	2.8	-3.8	1.6	7.0	-1.8	-3.3	2.6
Average gross wages, real (CPI based)	7.1	6.6	1.6	-3.0	-4.9	1.0	5.8	-2.0	-7.0	0.5
Average gross wages, EUR (ER)	13.5	14.3	4.1	-3.7	10.4	6.4	10.8	9.4	3.6	7.5
Employment total GDP per empl. person, SKK at 1999 pr.	3.6 2.5	-0.9 5.5	-0.3 4.6	-3.0 4.6	-1.4 3.5	1.0 2.7	0.2 4.5	1.8 2.6	-0.2 5.6	0.1 4.0
Unit labour costs, SKK at 1999 prices	10.6	7.2	3.7	2.5	3.0	5.4	4.6	3.6	-5.3	3.8
Unit labour costs, ER (EUR) adjusted	10.8	8.3	-0.5	-8.0	6.7	3.6	6.1	6.6	-1.9	3.4
Slovenia										
GDP deflator	10.9	8.8	7.6	5.9	5.6	9.1	8.0	5.5	3.5	7.2
Exchange rate (ER), SIT/EUR	10.7	6.4	3.3	4.0	5.9	5.9	4.2	3.3	2.2	5.1
Real ER (CPI-based) Real ER (PPI-based)	3.2 4.1	-0.2 1.2	-3.1 -3.3	-0.8 1.5	-0.9 3.1	-0.1 -1.0	-1.1 -1.1	-0.2 2.3	0.7 1.9	-0.3 0.9
Average gross wages, SIT	15.3	11.7	-3.3 9.6	9.6	ا . 10.6	11.9	9.7	2.3 7.5	5.7	10.2
Average gross wages, cri  Average gross wages, real (PPI based)	8.0	5.3	3.4	7.3	2.8	2.8	4.4	4.9	2.5	4.6
Average gross wages, real (CPI based)	4.9	3.1	1.6	3.3	1.6	3.3	2.1	1.8	2.0	2.6
Average gross wages, EUR (ER)	4.1	5.0	6.1	5.4	4.5	5.7	5.3	4.1	3.4	4.8
Employment total	-0.5	0.2	0.2	1.8	1.3	1.4	0.6	-0.8	0.6	0.5
GDP per empl. person, SIT at 1999 pr. Unit labour costs, SIT at 1999 prices	11.2 3.7	4.5 6.9	3.3 6.1	3.7 5.7	2.6 7.9	1.2 10.6	2.7 6.8	3.4 4.1	3.6 2.0	4.0 5.9
Unit labour costs, SIT at 1999 prices Unit labour costs, ER (EUR) adjusted	-6.4	0.9	2.7	1.7	1.9	4.4	2.5	0.7	-0.2	0.8
(———, ——,										

<sup>\*)</sup> Poland: Methodological change in 1999 (broader wage coverage). Growth in 1999 comparable according to new methodology.

(Table A/3 ctd.)

Table A/3 (ctd.)

Table A/3 (clu.)										
	1996	1997	1998	1999	2000	2001	2002	2003		<b>1996-04</b> average
Estonia									premii.	average
GDP deflator	24.3	10.5	9.0	4.3	5.3	5.8	4.4	2.4	3.8	7.6
Exchange rate (ER), EEK/EUR	1.7	4.0	0.7	-0.9	0.0	0.0	0.0	0.0	0.0	0.6
Real ER (CPI-based)	-15.4	-4.9	-5.7	-2.9	-2.0	-3.4	-1.4	0.7	-0.9	-4.1
Real ER (PPI-based)	-11.0	-3.6	-4.1	0.0	-0.2	-2.6	-0.6	1.3	-0.1	-2.4
Average gross wages, EEK	25.7	19.7	15.4	7.6	10.5	12.3	11.5	9.4	6.4	13.0
Average gross wages, real (PPI based)	9.5	10.0	10.8	8.9	5.4	7.6	11.1	9.2	3.4	8.4
Average gross wages, real (CPI based)	2.1	7.6	6.7	4.2	6.3	6.1	7.6	8.0	3.3	5.8
Average gross wages, EUR (ER)	23.6	15.1	14.6	8.6	10.5	12.3	11.5	9.4	6.4	12.3
Employment total	-2.2	-0.3	-1.7	-4.5	-1.2	0.9	1.4	1.5	0.1	-0.7
GDP per empl. person, EEK at 1999 pr.	6.9	10.9	7.1	4.6	9.1	5.4	5.8	3.6	6.1	6.6
Unit labour costs, EEK at 1999 prices	17.6	7.9	7.8	2.9	1.3	6.5	5.4	5.6	0.3	6.0
Unit labour costs, ER (EUR) adjusted	15.6	3.8	7.1	3.8	1.3	6.5	5.4	5.6	0.3	5.4
Latvia										
GDP deflator	14.9	7.0	4.6	4.8	3.8	2.1	3.4	3.4	6.7	5.6
Exchange rate (ER), LVL/EUR	1.2	-4.7	0.6	-5.7	-10.2	0.5	3.5	10.7	4.1	-0.2
Real ER (CPI-based)	-11.9	-10.6	-2.7	-6.8	-10.8	0.2	3.7	9.7	0.0	-3.5
Real ER (PPI-based)	-10.6	-7.7	-2.0	-2.1	-6.5	0.5	2.3	8.9	-1.5	-2.2
Average gross wages, LVL	10.3	21.6	11.1 9.0	5.8 10.2	6.1 5.4	6.3 4.6	8.8 7.7	11.3	9.1 0.5	9.9 6.4
Average gross wages, real (CPI based)	-3.0 -6.2	16.8 12.2	9.0 6.1	3.3	3.4	3.7	6.8	7.8 8.1	2.7	4.3
Average gross wages, real (CPI based)	9.0	27.6	10.4	3.3 12.2	18.1	5.7 5.8	5.1	0.1	4.8	10.1
Average gross wages, EUR (ER) Employment total	-1.9	4.4	-0.4	-1.8	-2.8	2.2	2.8	1.8	1.3	0.6
GDP per empl. person, LVL at 1999 pr.	17.1	3.7	5.2	5.2	10.0	5.7	3.6	5.5	6.4	6.9
Unit labour costs, LVL at 1999 prices	-5.8	17.2	5.6	0.6	-3.6	0.6	5.1	5.4	2.6	2.9
Unit labour costs, ER (EUR) adjusted	-6.9	23.0	5.0	6.7	7.4	0.2	1.5	-4.8	-1.5	3.1
Lithuania										
GDP deflator	20.6	14.0	5.1	-0.6	1.0	-0.1	0.0	-0.8	3.2	4.5
Exchange rate (ER), LTL/EUR	-3.1	-9.7	-0.8	-4.9	-13.4	-3.1	-3.5	-0.2	0.0	-4.4
Real ER (CPI-based)	-20.4	-15.6	-4.4	-4.5	-12.6	-2.2	-1.7	3.0	0.9	-6.7
Real ER (PPI-based)	-16.4	-14.1	3.0	-6.8	-21.8	1.6	-0.9	1.8	-2.1	-6.6
Average gross wages, LTL	28.6	25.9	19.5	6.2	-1.7	1.2	3.2	5.8	7.9	10.3
Average gross wages, real (PPI based)	10.3	18.7	25.0	4.4	-15.2	4.3	6.2	6.3	2.8	6.4
Average gross wages, real (CPI based)	3.2	15.6	13.7	5.4	-2.7	-0.1	2.9	7.1	6.7	5.6
Average gross wages, EUR (ER)	32.7	39.3	20.4	11.7	13.5	4.4	6.9	6.0	7.9	15.3
Employment total	-0.7	-3.1	1.7	0.1	-12.6	-3.3	4.0	2.3	-0.2	-1.4
GDP per empl. person, LTL at 1999 pr.	8.8	10.4	5.5	-1.7	18.8	10.0	2.7	7.2	6.8	7.5
Unit labour costs, LTL at 1999 prices	18.2	14.0	13.3	8.1	-17.3	-8.0	0.5	-1.4	1.0	2.6
Unit labour costs, ER (EUR) adjusted	21.9	26.2	14.2	13.7	-4.5	-5.1	4.2	-1.1	1.0	7.3
Austria										
GDP deflator	1.3	0.9	0.5	0.7	1.4	2.1	1.4	2.0	1.6	1.3
Exchange rate (ER), ATS-EUR/EUR	1.7	4.0	0.7	-0.9	0.0	0.0	0.0	0.0	0.0	0.6
Real ER (CPI-based)	2.2	4.4	1.1	-0.3	-0.5	-0.5	0.3	0.6	0.0	0.8
Real ER (PPI-based)	2.2	4.4	0.5	-0.4	0.7	0.2	0.2	-0.1	-2.0	0.6
Average gross wages, ATS-EUR	0.8	1.1	3.0	2.3	2.6	1.4	2.1	2.5	2.4	2.0
Average gross wages, real (PPI based)	8.0	0.7	3.5	3.1	-1.4	-0.1	2.5	0.9	-2.4	8.0
Average gross wages, real (CPI based)	-1.1	-0.2	2.0	1.7	0.2	-1.3	0.2	1.1	0.3	0.3
Average gross wages, EUR (ER)	-0.9	-2.8	2.2	3.2	2.6	1.4	2.1	2.5	2.4	1.4
Employment total	-0.7	0.3	0.6	0.9	0.8	0.5	0.3	0.9	0.6	0.5
GDP per empl. person, ATS-EUR at 1999 pr.	2.7	1.3	3.3	1.7	2.6	0.3	1.1	-0.3	1.3	1.6
Unit labour costs, ATS-EUR at 1999 prices Unit labour costs, ER (EUR) adjusted	-1.9 -3.6	-0.2 -4.0	-0.3 -1.0	0.6 1.5	0.0 0.0	1.1 1.1	1.0 1.0	2.8 2.8	1.1 1.1	0.4 -0.2
Onit laboul costs, LN (EUN) aujusteu	-3.0	<del>-4</del> .0	-1.0	1.5	0.0	1.1	1.0	2.0	1.1	-∪.∠

ER = Exchange Rate, PPI = Producer price index, CPI = Consumer price index.

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