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Economic Prospects for Central, East and Southeast Europe

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Differentiated Impact of the Global Crisis

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Executive summary

This forecast report analyses recent economic developments in, as well as the short- and mediumterm development prospects of, the countries in Central and Eastern Europe (CEE) and Southeast Europe (SEE), together with China, Kazakhstan, Russia and Ukraine. Separate chapters present an overview of developments in the European Union's New Member States (NMS) and in SEE countries, or deal with the global economic background and the role of the energy sector. The executive summary condenses and interprets the findings of the individual country reports.

A broad variety of growth slowdown and recession patterns

Of the CEE and SEE countries, one sub-group will experience a significant slowdown in GDP growth, leading close to stagnation. The countries in that sub-group are: three new member states (NMS) in the European Union (EU) – the Czech Republic, Poland and Slovakia; one potential candidate for EU membership – Albania; Kazakhstan and Russia; and last, but not least, China.

Another sub-group is expected to suffer a significant drop in GDP. The countries in that sub-group are: four NMS – Estonia, Hungary, Latvia and Lithuania; three candidates for EU membership – Croatia, Macedonia and Turkey; three potential candidates for EU membership – Bosnia and Herzegovina, Montenegro and Serbia; and Ukraine. Straddling the two sub-groups are three NMS, in which the GDP may stagnate or decline slightly in 2009 – Bulgaria, Romania and Slovenia.

Common to all these countries is a pronounced economic downturn. On a global plane, the financial crisis has curbed activities in the non-financial private sector: households and companies alike. In so doing, it has set off a worldwide decline in industrial production and global trade; this is now to be observed in the CEE, the SEE and the countries more to the east as well.

Differences in the individual countries' performance, both current and projected, derive from countryspecific conditions which are described in the country reports. Some countries have managed to strengthen the international competitiveness of their corporate sector in recent years; this has led, inter alia, to a relatively high degree of trade diversification. In other countries, the corporate sector has been severely strained on account of the pronounced real appreciation and correspondingly high current account deficits funded by substantial net inflows of foreign capital.

The risk of what is termed a 'sudden stop', with international financial flows drying up as a source of finance, differs from country to country. In recent months, only a few countries in the region – Hungary, Latvia and Ukraine – have encountered that kind of scenario. To date, incidents of acute trouble brewing in the region's banking sector have also been limited, involving but a few countries – Latvia, and Ukraine. Furthermore, in the non-financial sector, the bad news has been coming more from Western, rather than Eastern Europe. In all likelihood over the next few months, bad news will continue to pour in from all sides. On the other hand, some countries' exposure to 'sudden stop' risks in tandem with an economic downturn throughout the region lend substance to the conclusion that the CEE and SEE region has been hard hit by the international financial and economic crisis.

Risks associated with major imbalances and high indebtedness

For any country around the globe, a crucial factor is its risk of default or, more precisely, the assessment of its vulnerability by the international financial markets. In this respect, a most decisive feature is whether a country displays large imbalances. Most countries in Europe have been quite successful in reducing their fiscal deficits. While this was mainly done in response to EU rules, in some cases a nudge in that direction on the part of the IMF also played a key role. In only a few countries, did the government deficit exceed 3% of GDP in 2008: Romania (5.3%), Albania (4.0%) and Hungary (3.1%). On the other hand, several SEE governments (Bosnia and Herzegovina, Macedonia and Montenegro) and Russia registered a surplus..

The government deficit in the CEE and SEE countries will probably increase in both 2009 and 2010. The main reason will be a combination of lower revenues and overextended expenditures. The increase in expenditures will mainly stem from the need to support ailing financial and non-financial companies and pay out higher unemployment benefits. Under such circumstances, the countries in question will hardly be in a position to finance substantial counter-cyclical programmes over a longer period.

Whereas in recent years fiscal deficits shrank relative to the GDP, countries had ample manoeuvring space in which to run up substantial or even massive trade and current account deficits. Except for Turkey, in all SEE countries, regardless whether they were EU members or not, the current account deficit in 2008 exceeded 10% of GDP. It ran as high as 27% in Montenegro, 25% in Bulgaria and 18% in Serbia, while it ranged between 10 and 15% in Albania, Croatia, Macedonia, Montenegro

and Romania. Only in Latvia and Lithuania were the deficits of a similar magnitude: 12-13% of GDP. However, the current account deficits in the CEE and SEE countries are high in general. With the exception of the Czech Republic, current account deficits exceeded 5% of GDP throughout the region. By contrast, China and Russia have a long tradition as current account surplus countries.

High current account deficits have become a source of major concern. The sources from which they were previously financed could well run dry. We expect a substantial slowdown in net private capital flows to emerging markets, with foreign banks more likely to recall more than they lend.

In 2009, the current account deficits will be lower than in previous years on account of lower energy prices, lower real incomes and less propensity to consume. In some cases, currency devaluation could also be a governing factor. However, when international financial markets assess risks, a country's degree of indebtedness may play an even more decisive role than its current account deficits. Gross external debt is quite high in some of the CEE and SEE countries, amounting in some instances to over 100% of GDP. According to estimates for 2008, the countries in question are Latvia (137%), Hungary (121%), Estonia (117%), Bulgaria (112%) and Slovenia (104%). In Croatia, the ratio in 2008 was 96%. Some of this debt will fall due in 2009 and require refinancing, thus posing a major vulnerability problem.

As a rule, governments have reduced their degree of indebtedness in recent years, whereas the private sector – households and enterprises – has shifted in the other direction and increased its indebtedness. In some countries, private agents are less indebted, as they have, to a large degree, financed their expenditures from their own income. In others, they have relied more on borrowing from domestic and/or foreign sources; the choice was theirs. Loans in foreign currencies looked very attractive in countries where domestic interest rates were much higher than foreign rates. High domestic interest rates reflect the monetary authorities' attempts at convergence as they seek to comply with the Maastricht criteria and keep their currencies stable. Countries with a high proportion of heavily indebted companies and households are in a precarious situation, especially if a high share of that debt is denominated in foreign currency.

Exchange rate regimes do matter

When current account deficits or foreign-currency debts are high, a fixed currency peg, for example in a currency board context, may come under severe strain. This is clearly visible in the case of Latvia. The dates on which large amounts of debt fall due could be marked by sirens wailing. As a rule companies in the eurozone enjoy the benefits of relatively low exposure to exchange rate risks. As evidenced by Greece, Ireland, Italy or Spain, this does not mean that their exposure to crises is zero. In any country, the real exchange rate can develop in such a manner that puts the international competitiveness of a larger number of its companies in jeopardy; they may thus find it difficult to service their debt. Quite a few of them may turn 'Detroit' in the sense of their being both important and yet unable to survive without state aid, thus causing the governments still more trouble. Cases of this kind may occur also in some of the CEE or SEE countries, or east of them. On the other hand, in the nineties most small and medium-sized companies in the CEE and SEE countries found

themselves being forced to take a crash course on how to survive in the absence of loans; that experience could now serve them well.

Indicators such as government deficit, government debt, current account deficit or external debt typically tell us something about an economy's vulnerability. However, if applied to Russia, we see that the country has recorded no government deficit in recent years and government debt has been low, further to which the current account shows a large surplus and external debt is low. All that notwithstanding, Russia is suffering an economic setback and its currency is depreciating. Owing to the country's extreme dependence on revenues from energy exports, the decline in energy prices has had a disastrous effect, revealing severe structural weaknesses in both the financial and non-financial sectors. Turkey, another large economy by CEE and SEE standards, faces a drop in its GDP and devaluation of its currency despite a rather strong corporate sector and a correspondingly diversified trade structure. Under the impact of the international crisis, China's growth has slowed down. The government's budget has been balanced in recent years, with the current account being in surplus.

Circumstances differ between euro countries and non-euro countries, as well as between non-euro countries with a fixed peg and those with a flexible exchange rate. In countries with a flexible exchange rate, the real sector, especially producers of tradables, will profit from devaluation against the lead currencies, whereas companies and households with high foreign currency debts will face trouble.

In the countries with a flexible exchange rate, the currency tended to depreciate in recent months. This holds true for the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Turkey and Ukraine. Depreciation is likely to decrease their current account deficit (at least, in terms of percentage of the GDP). Quite possibly, for countries with a fixed peg, regardless whether the peg is official or de facto, keeping the nominal exchange rate constant will lead to a decline in GDP, which will be pronounced enough to incur a substantial reduction in the current account deficit.

The divide between flexible-currency and fixed-peg countries will also be of significance in terms of price developments. Fixed-peg countries might well go through a phase of declining prices: a trend in fact that is already in motion. In flexible-currency countries, depreciation will have some inflationary impact, although it may be less than in periods of economic prosperity. Our projection of consumer price inflation shows that only in countries experiencing major devaluation, viz. Russia and Ukraine, will the rates of inflation be two-digit in 2009, yet for both countries we still expect deceleration compared to 2008.

No swift return to high growth

The CEE and SEE countries will – with very few exceptions – not be in a position to enact demandstimulating fiscal policies to any great extent. In fact, the contrary will be the case. Monetary policy has proven ineffective in its attempts to deter commercial banks from their risk-averse lending policy. Things may continue along these lines for quite some time; the situation in the banking sector will not improve substantially in the short term. In international fora, economists have resumed their discussions on the benefits and costs of capital controls. At some future juncture, this could also become a topic of discussion for certain CEE and SEE countries.

Household spending will continue to be curtailed by real income losses, asset devaluation and increased unemployment. The indebtedness of the household sector is not high compared to the UK or United States, for instance; none the less it is substantial. Investment activity will suffer from the credit facility breakdown and low capacity utilization in the wake of the sharp decline in both domestic and foreign demand.

Increasing net exports have the highest potential of becoming the engine of future growth; the balance of CEE and SEE trade can, however, improve only in the case of some partner countries' trade balance deteriorating correspondingly vis-à-vis these countries. It is not sure whether the United States or Western Europe will assume that role in the near future. The extent and eventual date of a recovery from the current slowdown and slump in the various CEE and SEE economies is shrouded in uncertainty. The impact of the major devaluations, and hence improved competitiveness, might ultimately be the key component of demand that leads to an upswing. As stated earlier, however, this depends on the timing and extent of a turnaround in Western Europe. The economy of the CEE and SEE region may start growing again in 2010 or 2011, yet this is far from certain. Furthermore, a return to high growth rates on a par with past years is somewhat unlikely in the near future.

As flexible exchange rates offer the potential for improving both export and growth performance via enhanced cost competitiveness, some peg-countries might switch allegiance and shift to the other camp (or find themselves compelled to do so), however painful that switch may be. On the other hand, some of the current members of the flexibility camp might intensify their efforts of joining the eurozone.

Country summaries

Despite its strong macroeconomic fundamentals and sound financial system, the **Czech Republic** will come close to stagnation in 2009. This is primarily an effect of weakening exports, compounded by a highly probable contraction of gross fixed investment. Given a likely stop in the expansion of household debt, which is relatively small, private consumption will enjoy moderate growth. The fiscal boost currently under consideration may prevent the country from slipping into outright recession.

After the economy had managed to pull through a most painful fiscal adjustment, **Hungary's** modest recovery was rudely interrupted by the international financial crisis. Although state insolvency was averted with the help of an IMF stand-by agreement, the country will slip into recession this year. While neither fiscal stimulus nor relaxed monetary policy can come to rescue of the Hungarian economy under the current conditions, the significantly weakened exchange rate may make for export -led recovery by 2010.

Despite some cost increases following depreciation of the domestic currency (higher burden of debt denominated in foreign exchange, losses on currency options), **Poland** stands to benefit from a weaker currency via an improved foreign trade balance. While the government is endeavouring to

restrict budgetary expenditures, it may be unable to avert an increase in the deficit. Owing to relatively low levels of household debt, the likely stop of its expansion will have no major impact on private consumption, which will enjoy moderate growth.

In **Slovakia**, adopting the euro eased the impact of the global financial crisis. At the same time, however, the high conversion rate has undermined Slovakia's competitiveness vis-à-vis its NMS neighbours, potentially bearing negative repercussions for both GDP growth and the labour market. Despite the steep decline in external demand, the Slovak economy may maintain modest positive rates of growth over the years to come, the main driver being domestic demand supported by the government's deficit spending policy.

In **Slovenia** economic activity is expected to slow down substantially in 2009 owing to weaker domestic and foreign demand. In particular, investment growth, which has been a key driver over the past few years, will turn negative. A stimulus package representing more than 2% of Slovenia's GDP should help to counter the overall economic crisis. GDP will at best stagnate in 2009 before rebounding somewhat in 2010.

The outlook for the **Bulgarian** economy has deteriorated considerably; it seems unlikely that GDP growth will be positive in 2009. A sharp drop in the current account deficit is beginning to unfold. With a fixed nominal exchange rate (currency board), the decrease in domestic prices will bring about a depreciation of the real exchange rate, which, in turn, will lead to a further drop in the trade and current account imbalances.

In **Romania** the economy is expected to stagnate in 2009. Investments will decline and consumption will hardly grow, while the current account will undergo a marked adjustment. The country remains highly exposed to external shocks; a hard landing leading ultimately to recession cannot be ruled out. Financial support from the EU and a stand-by agreement with the IMF should help to keep the economy going.

Of the Baltic countries, **Latvia** will have to face up to a severe economic recession of no less than 8% of GDP in 2009. The slump in domestic demand is aggravated by the crisis in the country's financial sector. Given the pressing need for funds to finance severe balance of payments deficits, the IMF and the EU have agreed upon a support package. The Latvian government committed itself to pursuing a pro-cyclical fiscal policy in the years ahead: a strategy that may prolong the recession throughout the period 2009 – 2011. However, Latvia and its Baltic neighbours will do their utmost to keep their currencies pegged to the euro, despite the dramatic bust that followed the economic boom in the region.

In **Estonia**, the rise in credit costs and restricted availability of loans that followed the collapse of the housing market has led to a further decline in both household consumption and capital investments which will ultimately lead to a recession of about 7% of GDP in 2009. Since domestic demand will fail to revive in 2010 owing to the accumulated debt burden in both households and enterprises and given the worsening conditions on the labour market, Estonia will not revert to positive growth before 2011.

The **Lithuanian** economy is following in the train of its Baltic neighbours and will undergo a severe 5% recession in 2009 owing to a slump in household consumption and investments alike. Since

exports will also suffer in the wake of the economic bust in both Russia and Ukraine, gradual recovery will not become apparent in Lithuania before 2011.

Albania has every prospect of overcoming the current turbulence given its lower dependence on exports and credit and its huge potential for basic infrastructure investment, a large part of which will be financed by international development organizations and private foreign concessionaires. However, positive economic growth rates hinge on the Albanian migrants' continuing ability to remit the funds needed to maintain private consumption.

The GDP of **Bosnia and Herzegovina** (BiH) is likely to shrink in 2009. For households and companies, credits have become more costly and less accessible. The slump in world market prices of metal products was a most unfavourable development, given that the country's specialization in those industries had enjoyed a marked success up until recently. Ongoing or planned construction projects financed by the EU and international financial institutions will contribute to a more stable development of the real sector. The country's foreign indebtedness is rather low, whereas the current account deficit is high and could, at some juncture, start eroding substantial portions of the country's currency reserves.

In **Croatia**, economic activities are expected to continue slowing down throughout 2009, driven by a drop in the exports of goods and services and a slowdown in domestic demand. Given the deterioration of the overall financial environment, servicing the high foreign debt and maintaining the exchange rate of the kuna will remain the most challenging tasks in the near future. Assistance from the IMF is still an open issue. A recovery might only come about in mid-2010.

In **Serbia**, deterioration has become faster than had been expected a mere couple of months ago. The key indicator is the underperformance of public revenues. Moreover, foreign financial inflows are well below the level needed to avert a sharp drop in the current account deficit. The government is suggesting that it needs 3.5 billion euros to bridge the balance of payments gap. It is planning a new stand-by agreement with the IMF, while looking for additional credits from the EU and the World Bank. There are no plans for the medium term and recovery may be delayed yet another year.

In **Montenegro**, official expectations are that some large investments in the energy sector and tourism will keep the GDP growth out of the negative territory. Failing that, GDP is bound to shrink and the budget will have to be revised to reflect lower public revenues. An additional risk is the banking sector that has started displaying some weaknesses and may have to be recapitalized with public money. In the medium term, recovery will depend on investments in energy, infrastructure and tourism.

In **Macedonia**, the government expects relatively high growth based on increased public spending this year. That notwithstanding, the GDP will probably decline on account of the drop in exports, private consumption and investment. In the medium term, recovery will depend on the regional market, in some segments of which, such as the Serbian market, Macedonia is losing competitiveness as the Serbian dinar is depreciating unlike the Macedonian denar which remains pegged to the euro.

Turkey will have to pass through a period of GDP decline. The general perception is that adverse external developments are hitting an economy, that has substantially improved its fundamentals. In

the automotive sector, plants have been (and continue to be) shut down and workers laid off temporarily, while other industries face difficulties of varying degrees. Business circles are pressing for an arrangement with the IMF. The lira is being gradually devalued; this may improve international competitiveness and so reduce the current account deficit. A return to high growth is not even expected prior to 2011, yet again mainly owing to external factors.

Russia has been seriously hit by the global crisis and GDP growth virtually collapsed in the fourth quarter 2008, while inflation remains high and may even accelerate. Similar to the United States and the EU, the Russian government has adopted various rescue and stimulus packages in order to improve the liquidity of the banking sector and restore confidence. GDP growth, however, will slow down substantially in 2009, while trade and current account surpluses in particular will diminish. The current global turmoil notwithstanding, the main challenge for the Russian economy is whether it will succeed in replacing energy exports as the key growth driver by developing other sectors and the manner in which it will cope with the acute demographic crisis.

After several years of economic boom, **Ukraine**'s economy plunged into recession in October 2008: the combined effect of the global liquidity crunch, the sharp drop in steel prices and a resumption of the political crisis. The real GDP this year should fall by at least 5%, with risks on the downside, accompanied by persistently high inflation and a marked improvement in the current account on the back of plummeting imports.

Our forecast for **Kazakhstan** has been revised downwards as the decline in major commodity prices has severely hit the Kazakh economy, which is already suffering from the current banking crisis that has been heightened by the burst of the housing bubble.

China's overheated economy is cooling down: a trend that had initially been considered desirable. However it may well cool down to an undesirable extent owing to waning foreign demand. The GDP growth rate is expected to reach only 7% in 2009 and scarcely more in the years thereafter – despite massive public investment projects.

Keywords: Central and East European new EU member states, Southeast Europe, Balkans, former Soviet Union, China, Turkey, economic forecasts, GDP growth, labour productivity, exchange rates, inflation, EU integration

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

Overview developments 2007-2008 and outlook 2009-2011

	GDP real change in % against previous year				chang	Consumer prices change in % against previous year				Unemployment, based on LFS ¹⁾ rate in %, annual average					Current account in % of GDP					
	2007	2008		2010 orecas		2007	2008		2010 Forecas	2011 st	2007	2008	2009 F	2010 orecas	2011 st	2007	2008	2009	2010 Foreca	2011 st
Czech Republic Hungary Poland Slovakia Slovenia <i>NMS-5</i> ^{2/3)}	6.0 1.1 6.6 10.4 6.8 <i>6.0</i>	3.5 0.3 4.8 6.4 4.4 <i>4.0</i>	0.4 -3 1.5 2 0 0.6	2.4 1.4 2.3 2 2 2.1	3.8 3 3.8 3 4 3.6	2.9 7.9 2.6 1.9 3.8 3.5	6.3 6.0 4.2 3.9 5.5 5.0	1.5 3 2 2.5 2.6	2.2 3 2.6 2 2.5 2.5	2.5 3 2.5 3 2 2.6	5.3 7.4 9.6 11.1 4.8 8.5	4.4 7.8 8 10.0 4.5 7.4	6 9 12 11 5.5 10.0	6.0 8.8 11 12 5 9.6	5.5 8 10 12 4.5 8.8	-1.8 -6.2 -4.7 -5.7 -4.2 -4.4	-2.8 -6.1 -5.4 -6.3 -6.3 <i>-5.1</i>	-1.7 -4.9 -3.9 -6.6 -5.8 <i>-4.0</i>	-1.3 -5.5 -4.4 -6.8 -4.9 -4.2	-1.8 -5.1 -4.3 -6.8 -4.6 -4.1
Bulgaria	6.2	6	0	1	3	7.6	12.0	2	2	3	6.9	5.8	8	9	8	-21.8	-24.5	-13.0	-11.7	-10.2
Romania	6.2	7.8	0	1	3	4.9	7.9	5	5	4	6.4	6.0	8	9	8	-13.5	-12.1	-8.0	-6.5	-6.3
Estonia	6.3	-3.5	-7	-3.5	0.5	6.7	10.6	2	-1	-1	4.7	5.5	10.5	13	15	-18.1	-8.5	-5.8	-5.5	-6.3
Latvia	10.2	-2.8	-8	-4	0	10.1	15.2	3	-2	-1	6.0	7.2	12	15	16	-23.8	-12.2	-7.0	-5.7	-7.9
Lithuania	8.9	3.2	-5	-3.5	1	5.8	11.1	3.5	0.5	0.5	4.3	5.5	8.5	13	15	-14.6	-13.6	-7.3	-6.3	-7.9
<i>NMS-10 ²⁾³⁾</i>	6.2	4.4	0.0	1.5	3.3	<i>4</i> .2	6.3	3.0	2.7	2.7	7.7	6.9	9.4	9.6	8.9	<i>-7.4</i>	<i>-7.3</i>	-5.1	<i>-4.9</i>	-4.9
Euro area ³⁾	2.7	0.7	-1.9	0.4		2.1	3.3	1.0	1.8		7.5	7.5	9.3	10.2		0.2	-0.4	-0.6	-0.6	
EU-27 ³⁾	2.9	0.9	-1.8	0.5		2.4	3.7	1.2	1.9		7.1	7.1	8.7	9.5		-0.5	-0.6	-1.4	-1.4	
Croatia	5.6	2.5	-2	1	4	2.9	6.1	4	3	2	9.6	9.0	10.5	11	10	-8.6	-10.9	-7	-8	-8
Macedonia	5.9	5.3	-1	0	2	2.3	8.3	3	3	3	34.9	33.8	34	33	33	-7.2	-13.6	-7	-8	-8
Turkey	4.5	1.5	-2.5	1	3	8.8	10.4	8	7	5	9.9	11.0	13	13	12	-5.8	-4.7	-3.6	-3.3	-3.1
<i>Candidate countries</i> ²⁾³⁾	<i>4</i> .6	<i>1.</i> 6	-2.4	1.0	3.0	<i>8</i> .3	<i>10.1</i>	7.6	6.7	4.8	10.7	<i>11.</i> 7	13.7	<i>13.7</i>	12.7	-6.0	-5.3	-4.0	-3.8	-3.5
Albania Bosnia & Herzegovina Montenegro Serbia <i>Potential candidate countries</i> ²⁾³⁾	6.0 6.8 10.7 7.1 <i>7.1</i>	6.1 5.0 8.1 6.1 <i>6.0</i>	3 -1 -2 -2 -0.9	4 -1 0 0 0.4	6 0 2 2 2.2	2.9 1.5 4.2 7.0 5.0	3.4 7.5 8.5 11.7 9.2	2 -0.5 3 6 3.8	3 0 3 2.4	3 1 3 2.6	13.5 29.0 19.3 18.1 <i>1</i> 9.2	12.8 23.4 18.5 14.0 <i>15.7</i>	13 27 19 18 <i>18.5</i>	12 27 20 20 19.0	11 26 20 20 18.4	-10.5 -12.6 -29.4 -13.3 <i>-13</i> .6	-12.7 -12.8 -26.9 -17.8 -16.5	-9.9 -11 -10 -10 -10.2	-11.4 -9 -10 -10 -10.1	-12.3 -8 -10 -12 -11.0
Kazakhstan	8.7	3.5	1	3	4.5	10.8	17.1	9.5	8	7	7.0	6.8	7.5	7	6.5	-7.0	3.7	-6.8	-4.4	-3.9
Russia	8.1	5.6	1.1	3.7	4.6	9.1	14.1	15	10	8	6.1	6.3	6.7	6.6	6.3	5.9	5.9	1.0	-0.9	-1.8
Ukraine	7.6	2.1	-5	1.5	4.5	12.8	25.2	18	12	10	6.4	6.7	7.5	7.5	7.2	-4.2	-6.9	-2.2	-0.4	-0.3
China ⁴⁾	13.0	9.0	7	8	8.2	4.8	5.9	2	2	2.5	4.0	4.2	4.4	4.3	4.2	11.0	9.3	6.2	6.6	6.1

Note: NMS: The New EU Member States.

1) LFS - Labour Force Survey. - 2) wiw estimate. - 3) Current account data include flows within the region. - 4) Registered urban unemployment rate, end of period.

Source: wiiw (February 2009), Eurostat. Forecasts by wiiw, European Commission (Interim Report, January 2009) for Euro area (16 countries) and EU-27.

Table I

Central and East European new EU member states (NMS-10): an overview of economic fundamentals, 2008

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia L	ithuania	Poland	Romania	Slovakia	Slovenia	NMS-10 ¹⁾	EU-15	EU-27 ²⁾
GDP in EUR at exchange rates, EUR bn	33.79	149.12	16.40	106.56	22.20	32.27	361.61	139.22	63.70	37.98	962.9	11609.3	12594.7
GDP in EUR at PPP, EUR bn	76.09	211.03	22.40	157.43	30.23	51.09	529.12	245.77	93.62	47.56	1464.3	11060.6	12594.7
GDP in EUR at PPP, EU-27=100	0.6	1.7	0.2	1.3	0.2	0.4	4.2	2.0	0.7	0.4	11.6	87.8	100.0
GDP in EUR at PPP, per capita	10000	20200	16700	15700	13500	15200	13900	11400	17300	23300	14300	28100	25200
GDP in EUR at PPP per capita, EU-27=100	40	80	66	62	54	60	55	45	69	92	57	112	100
GDP at constant prices, 1990=100	125.4	144.3	154.1	140.3	123.2	128.6	177.4	137.4 ³⁾	165.5	169.4	164.7	142.0	147.1
GDP at constant prices, 2000=100	154.8	140.7	165.3	130.0	177.8	176.4	138.2	163.4	162.0	141.3	145.6	116.1	118.9
Industrial production real, 1990=100	94.1	132.9	114.7	231.4	63.8	72.8	214.1	82.8 ³⁾	151.9	115.9	170.8	125.4	131.3
Industrial production real, 2000=100	177.6	163.0	175.6	152.9	135.9	188.9	165.2	142.5	162.6	129.3	160.7	107.1	113.2
Population - thousands, average	7621	10428	1341	10038	2266	3358	38123	21513	5406	2040	102133	394184	497526
Employed persons - LFS, thousands, average	3360	5003	650	3879	1120	1530	15620	9400	2438	995	43995	177527	222076
Unemployment rate - LFS, in %	5.8	4.4	5.5	7.8	7.2	5.5	8.0	6.0	10.0	4.5	6.9	7.1	7.1
General gov. expenditures, EU-def., in % of GDP	40.5	42.2	36.5	48.9	38.0	36.4	42.6	38.7	34.3	42.7	41.6	46.6	46.2
General gov. revenues, EU-def., in % of GDP	40.0	41.0	34.5	45.8	36.5	35.4	39.9	33.5	32.0	42.2	39.0	45.0	44.6
Price level, EU-27=100 (PPP/exch. rate)	44	71	73	68	73	63	68	57	68	80	66	105	100
Compensation per employee ⁴⁾ , monthly, in EUR	363	1298	1272	1263	990	963	937	701	1036	1952	1106	3327	2862
Compensation per employee, monthly, EU-27=100	12.7	45.3	44.4	44.1	34.6	33.7	32.7	24.5	36.2	68.2	38.7	116.2	100.0
Exports of goods in % of GDP	45.2	67.1	48.8	68.3	28.8	50.8	32.8	24.1	75.4	53.7	46 .7 ⁵⁾	31 .0 ⁵⁾	32.2 ⁵⁾
Imports of goods in % of GDP	71.3	64.4	59.1	67.4	47.3	62.9	37.3	37.2	76.9	61.0	51.3 ⁵⁾	31.6 ⁵⁾	33.2 ⁵⁾
Exports of services in % of GDP	15.5	10.1	19.5	12.8	14.0	9.6	6.5	6.3	9.4	13.3	9.1 ⁵⁾	9.6 ⁵⁾	9.7 ⁵⁾
Imports of services in % of GDP	12.1	8.0	12.8	11.8	9.9	9.0	5.7	5.7	9.4	8.8	7.8 ⁵⁾	8 .4 ⁵⁾	8.4 ⁵⁾
Current account in % of GDP	-24.5	-2.8	-8.5	-6.1	-12.2	-13.6	-5.4	-12.1	-6.3	-6.3	-7.3 ⁵⁾	-0.04 ⁵⁾	-0.6 ⁵⁾
FDI stock per capita in EUR	4200	7600	8200	6800	4000	3000	3900	2300	6100	5400	4400		

NMS-10: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia. PPP: Purchasing power parity.

1) wile estimates. - 2) wile estimates, except: budget and compensation per employee. - 3) 1989=100, which in the Polish case is the appropriate reference year. - 4) Gross wages plus indirect labour costs, whole economy, national account concept. - 5) Data for NMS-10, EU-15 and EU-27 include flows within the region.

Source: wiiw, AMECO, Eurostat.

Table II

Southeast Europe: an overview of economic fundamentals, 2008

	Croatia	Macedonia	Turkey	Albania	Bosnia and Herzegovina	Montenegro	Serbia	NMS-10 ¹⁾	EU-15	EU-27 ²⁾
GDP in EUR at exchange rates, EUR bn	41.42	6.69	548.6	8.63	12.48	3.34	33.71	962.9	11609.3	12594.7
GDP in EUR at PPP, EUR bn	60.19	17.74	811.3	20.37	26.30	7.16	68.18	1464.3	11060.6	12594.7
GDP in EUR at PPP, EU-27=100	0.5	0.1	6.4	0.2	0.2	0.06	0.5	11.6	87.8	100.0
GDP in EUR at PPP, per capita	13600	8700	10900	6400	6800	11400	9300	14300	28100	25200
GDP in EUR at PPP per capita, EU-27=100	54	35	43	25	27	45	37	57	112	100
GDP at constant prices, 1990=100	122.7	113.4	203.2	182.0	514.2 ³⁾			164.7	142.0	147.1
GDP at constant prices, 2000=100	143.3	124.4	141.9	157.8	150.4	149.2	154.5	145.6	116.1	118.9
Industrial production real, 1990=100	91.2	61.1	210.5					170.8	125.4	131.3
Industrial production real, 2000=100	142.0	115.6	137.3	186.7	184.6	113.2	117.1	160.7	107.1	113.2
Population - thousands, average	4435	2048	74414	3170	3843	628	7350	102133	394184	497526
Employed persons - LFS, thousands, average	1615	611	21500	1230	890	220	2805	43995	177527	222076
Unemployment rate - LFS, in %	9.0	33.8	11.0	12.8	23.4	18.5	14.0	6.9	7.1	7.1
General gov. expenditures, nat. def., in % of GDP	47.6	33.8	19.7 ⁴⁾	31.0	43.0	42.0	45.0	41.6 ⁴⁾	46.6 ⁴⁾	46.2 ⁴⁾
General gov. revenues, nat. def., in % of GDP	45.2	34.5	18.3 ⁴⁾	27.0	45.0	44.0	42.5	39.0 ⁴⁾	45.0 ⁴⁾	<i>44.6</i> ⁴⁾
Price level, EU-27=100 (PPP/exch. rate)	69	38	68	42	47	47	49	66	105	100
Average gross monthly wages, EUR at exchange rate	1038	424	788 ⁵⁾	206	547	609	558 ⁶⁾	1,106 ⁵⁾	3327 ⁵⁾	2862 ⁵⁾
Average gross monthly wages, EUR at PPP	1509	1125	1165 ⁵⁾	486	1153	1306	1128 ⁶⁾	38.7 ⁵⁾	116.2 ⁵⁾	100.0 ⁵⁾
Exports of goods in % of GDP	23.5	40.3	17.7	11.0	27.7	15.9	23.4	46.7 ⁷⁾	31.0 ⁷⁾	32.2 ⁷⁾
Imports of goods in % of GDP	49.7	70.2	23.6	37.1	66.1	68.9	49.5	51.3 ⁷⁾	31.6 ⁷⁾	33.2 ⁷⁾
Exports of services in % of GDP	24.3	9.7	4.2	18.5	8.8	22.2	7.7	9.1 ⁷⁾	9.6 ⁷⁾	9 .7 ⁷⁾
Imports of services in % of GDP	7.7	10.6	2.1	18.0	3.6	10.5	7.4	7.8 ⁷⁾	8.4 ⁷⁾	8.4 ⁷⁾
Current account in % of GDP	-10.9	-13.6	-4.7	-12.7	-12.8	-26.9	-17.8	-7.3 ⁷⁾	-0.04 7)	-0.6 ⁷⁾
FDI stock per capita in EUR	6800	1200	1200	900	1400	4800	1600	4400		

NMS-10: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia. PPP: Purchasing power parity - wiiw estimates for Albania, Bosnia and Herzegovina, Montenegro, Serbia.

1) wiw estimates. - 2) wiw estimates, except: budget and compensation per employee. - 3) 1995=100. - 4) EU definition: expenditures and revenues according to ESA'95, excessive deficit procedure. - 5) Gross wages plus indirect labour costs, whole economy, national account concept. - 6) Including various allowances. - 7) Data for NMS-10, EU-15 and EU-27 include flows within the region.

Source: wiiw, AMECO, Eurostat.

Table III

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Vladimir Gligorov

The global crisis and growth strategy

Introduction

Great uncertainty still reigns over the development of the current global crisis. In this short paper, some of the causes will be reviewed, expected developments discussed, consequences for growth prospects considered and comments on some policy responses made. A number of conclusions are drawn at the end.

A causal story

It is useful to recall that debate raged over the consequences of adjusting to global imbalances that had kept widening since the beginning of the current century (e.g., Obstfeld and Rogoff, 2005). The overriding question related to the global consequences of the United States changing its monetary policy stance, shifting from a the strong dollar and low interest rates to high interest rates and a weak dollar. Indeed, in the run-up to the outbreak of the current crisis in 2007, the American central bank, the FED, was edging towards that kind of regime change: interest rates kept going up, while the dollar weakened against most other currencies. This policy shift was interrupted when some of the financial institutions that had been investing heavily in the US real estate market collapsed on account of the continued rise in financing costs, while real estate prices kept declining. As a consequence, the regime that the global economy has since established is one of low interest rates and volatile exchange rates. How did this come about?

In the previous regime, low interest rates were supported by the surplus countries deciding to invest heavily in risk-free dollar-denominated assets. That also ensured a strong dollar. However, it also led to other investors, primarily US financial institutions, specialising in risky assets, while others followed suit in increasing numbers (Caballero and Krishnamurthy, 2009). The FED selected to turn a blind eye and continued to pursue its lax monetary policy. The other central banks seem to have taken their cue from the FED. The calculations based on the deviation of actual interest rates from those implied by the Taylor rule suggest that interest rates had been kept too low for too long (Taylor, 2008; Ahrend et al., 2008). Given a high level of liquidity, investments in risky assets called for a large helping of financial innovation; this was furthered by the emergence of unregulated financial institutions, such as the special investment vehicles, which tended to be highly leveraged (Gorton, 2008 and 2009; Brunnermeir, 2009). Those institutions were legally distinct from regulated banks; however, they invariably borrowed heavily from the banks. Thus, once interest rates went up and real estate market started to decline, these financial institutions faced prospects of bankruptcy: a threat that spilled over into the banks' balance sheets. When the banks included these losses in their balance sheets, it transpired that they were woefully undercapitalized; not only did they face liquidity problems, but insolvency also loomed large. The attempt to deleverage had the predictable effect of incurring a rise in interbank interest rates; it also proved to be counterproductive because a collective attempt to deleverage at a time when assets are falling in price culminates in deterioration of the banks' leverage ratio. This, in turn, has led to a decline in the banks' credit activities worldwide.

Even in the scenario being discussed before the outbreak of the global crisis, whereby global imbalances would have to be corrected by a change in the global monetary regime; it was understood that those countries with significant current account deficits, of which most transition countries, NMS and future member states (FMS) are prime examples, may well face a crisis caused by a sudden stop of financial inflows (Sorsa et al., 2007; Maechler et al., 2007). Given the way the crisis has since evolved, the sudden-stop scenario has come even more probable. It is evident that distinctions are being drawn between countries in terms of their risks, while even the spreads on securities within the eurozone are widening. The cost of credit is thus increasing very significantly for certain countries, some of which cannot even expect to be able to refinance in the commercial financial market. Foreign investments of all kinds are also declining, albeit more in some countries than in others. The specific trait of this crisis is that the overall availability of credit and financing is decreasing; in brief, it is a negative sum game. Those countries with a high demand for financing, especially those with high external imbalances, may well face tougher adjustment-related challenges than others.

Sudden-stop crises are particularly damaging to countries with (a) smaller tradable sectors (with low levels of exports) and (b) more specialized export activities (Calvo, 1999). They may come under strong pressure to adjust the real exchange rate in order to decrease imports and increase exports. The cost of adjustment may differ for countries with fixed exchange rates as distinct from those where the rates are flexible. With fixed exchange rates, consumption will inevitably decline in nominal terms; this means that wages will also decline in nominal terms. With flexible exchange rates, however, adjustment may prove simpler, especially because the pass-through from exchange rate depreciation to prices may be relatively minor or less than before on account of growing deflationary pressures. Nonetheless, adjustment of the real exchange rate will lead to lower consumption, yet may not lead to a rapid increase in investments owing to the global decline in demand.

Putting a sudden stop to the availability of foreign financing inevitably curbs production which, in turn, can lead to a full-blown crisis. This is already to be observed in some transition countries and others may follow suit. The key problem lies in the corporate sector which is facing falling sales and refinancing problems. In some countries, the supply of public liquidity may prove helpful. In most countries, however, monetary policy is of no help; fiscal expansion is not possible for want of financing or it is ineffective as it may end up supporting imports, thus boosting foreign and not domestic economies.

In essence, the story is one of a monetary and financial regime change and relative price adjustments, primarily via exchange rate revaluations, in the context of shrinking global demand. As a consequence, deficit countries will have to reduce consumption in the short term and perhaps draw on domestic savings to finance growth over the medium term.

Growth prospects

Since the very onset of the crisis, growth prospects have been continually revised downwards. Current projections indicate global stagnation with recessions in both the United States and the EU (IMF, 2009), as well as in Southeast Europe and such countries as Russia and (of course) Ukraine. When it comes to quantification, significant differences are to be found between the various originators and distributors of quantitative forecasts. Official forecasts, national and international, also tend to change rather frequently, mostly downwards. In fact, the actual precision of a current quantitative assessment is probably not all that important. It is probably more important to discuss the assumptions as to the short- and medium -term developments.

In the short term, growth expectations are based on the recovery of the banking sector and global trade. The effects of the various stimulus packages are also factored in (Blanchard, 2008 and Blanchard et al., 2008).

As for the banking sector, rapid recovery does not seem to be in the offing. Thus far, various packages in the United States, the UK and the EU have failed to make much of a positive difference. In the EU, it seems that the banking crisis is still unfolding. It is not at all clear whether agreement will be reached on the measures being discussed, for instance, with respect to coming to the aid of the banks with large commitments in Central and Southeast Europe. Nor is it clear whether the measures will be implemented in time. It is equally unclear what the outcome of the banking crisis in the EU will be and hence what it will mean for the countries that rely wholly on those banks. In any case, one can hardly expect a short-term solution to the problems plaguing the financial system.

Perhaps in the final analysis, the impact of trade has been the conduit mainly responsible for transmitting the financial crisis to the real sector. Overall, trade has plummeted. In that connection, industrial production has also declined almost everywhere. In the case of small open economies, a descriptor that fits most NMS and FMS (except Turkey), the steep drop in demand for tradable goods has had, and will continue to have, quite far-reaching consequences. At the present juncture, it is not at all clear whether an improvement can be expected in the short term.

Of crucial importance to these developments are the adjustments in exchange rates. In most countries with significant trade and current account deficits, the real exchange rate has to adjust – and in fact it has been doing so. However, at the global level, the turmoil in the currency markets does not seem to be abating; it is unclear where the exchange rates will ultimately land. In countries in transition, economies with fixed exchange rates are trying to adjust through lower wages and cuts in public spending. In those countries, it looks as though recession will be quite severe. In countries with flexible exchange rates, devaluations have taken place on a large scale. They have helped in terms of foreign trade adjustments, but bear negative consequences for income balances and balance sheets in the corporate sector. Thus, in some cases, exchange rate pegs run the risk of collapsing, while in other cases prospects of mass bankruptcies loom large. Thus, in the short term, the crisis poses a risk to the adjustment process in a number of transition economies.

Finally, it is not clear what the impact of the various fiscal stimulus packages will be. The US programme seems too small to bridge the output gap. According to official estimates, the gap over the next couple of years will be twice as large as the contribution that the stimulus package just adopted is expected to make to actual output. Thus, the package is expected to help, but it will not pull the US economy out of recession.

The situation in the EU is more complicated given the plethora of measures taken by the EU and its member states. It is hard to assess what the real effect of all these measures will be. Despite most projections seeing some recovery at the end of 2009 and in 2010, it is still unclear whether those projections are realistic, nor is it clear how much benefit the various stimulus packages are expected to yield.

Overall, short term prospects are probably worse than currently anticipated. Moreover, the transition countries' growth prospects seem even shakier. The deceleration of growth is particularly pronounced, especially in countries enjoying rapid growth. Although some countries still expect to record positive growth in 2009, the change in the growth rate will as a rule be rather dramatic and the news is still dipping towards the negative.

Strategic shifts

Medium-term prospects depend on the assessment of current growth and policy strategies. The regime change in the US seems to be a shift towards targeting inflation and pursuing a lax fiscal policy in the medium term. The change in monetary policy is attributable to the FED considering it essential to anchor long-term inflation expectations in positive inflation rates. It is operating on the theory that traditional monetary policy, viz. interest rate adjustment, cannot succeed in the context of deflationary expectations. Thus, in order to get back to business as usual, the FED needs to signal that it will do whatever it takes to keep inflation in positive territory: in fact around 2% in the medium term. If these expectations become firmly entrenched, consumers and investors alike should be able to count on positive inflation in the medium term, whereupon they should spend and invest accordingly. Moreover, public spending should be able to count on large deficits, for instance, of the order of one trillion dollars per year 'as far as the eye can see' (Auerbach and Gale, 2009).

When it comes to the EU, it is not clear what the policy response is going to be. There is no doubt that fiscal deficits will be larger than the Stability and Growth Pact allows in many countries (although the European Commission has opened 'excessive deficit procedures' with six member states). The European Central Bank has declared its readiness to implement 'quantitative easing; this means that it is ready to buy commercial debt and private equities. The effectiveness of such a step is hard to judge.

When it comes to countries in transition, the key question revolves around the sources of high growth rates or any positive growth rates for that matter, in the medium and long term? The canonical strategy of convergence growth that the transition economies followed in the past may no longer be applicable. If it proves difficult to return to the strategy of relying on foreign financing to

secure fast growth, the strategy of transition may well have to be changed, especially when it comes to the laggards in Southeast Europe and the countries in Eastern Europe. The alternative strategy is to recover and adopt a convergence rate of growth based on an increase in exports. In the medium term, that will call for more savings and greater competitiveness. Apart from the difficulties associated with switching strategies, this regime change hinges on the recovery of demand in both the EU and the other major trading partners. If the crisis is prolonged – not all that an unrealistic assumption given the present circumstances – and if recovery in the developed countries proves sluggish, achieving a major recovery in the transition countries will be a difficult undertaking.

Conclusion

The financial crisis, it would seem, will not be dealt with effectively in the short term. Likewise, the developed countries, it would seem, will not experience a major recovery in the medium term. Under these circumstances, growth can be expected to slow down markedly in the transition countries in the short term, while recovery over the medium term will also be sluggish. In the process, real exchange rates will have to adjust; this points to an appreciable risk of either an exchange rate crisis in countries with fixed exchange rates or a series of private sector debt defaults in countries with flexible exchange rates. At the present juncture, the sources of a return to rapid growth in the transition countries are hard to discern.

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NMS sliding down the slippery slope

Introduction: The need for a new development strategy

The economic development model of the new EU Member States (NMS), which had proved so successful up until quite recently has been terminated. The model was based on external financial inflows which are not forthcoming under the present international crisis conditions. NMS economies are on the way to adapting to the new conditions by either devaluing their currencies and/or curtailing the level of economic activities. Future growth will have to rely on domestic savings to a large extent. Switching from the consumption to the saving mode will depress demand still further and postpone recovery. The emergence of domestic investment-led growth is quite a slow process. Fortunately, given the current financial prospects, greater support can be expected from EU funds.

The NMS vary distinctly in terms of the course that the crisis has taken mostly in line with their dependence of foreign financing. Their future growth prospects are also quite diverse. In this chapter we go through the main current developments in the fields of production, employment, inflation, exchange rate, components of the balance of payments. Finally we discuss anti-crisis economic policy options for the NMS. The aim is to draw attention to country specific characteristics and prospects.

GDP growth decelerates or even turns negative

Average NMS economic growth in the first nine months of the year 2008 was close to 6% – in line with the previous year's levels. Slovakia, Romania and Bulgaria achieved peak growth rates (Figure 1). This was partly due to new capacities coming on stream in export-oriented sectors, while the two latter countries also enjoyed a credit-based consumption boom and a bumper harvest. The exceptions to this general picture were Estonia and Latvia; they were already in recession after external financing had dried up the year previous when their debt to GDP ratio exceeded 100%. Another exception was Hungary with its very slow economic growth and large external disequilibria. Hungary differed from the other countries, as it was not the private, but the public credit stance that proved unsustainable.

Following the collapse of the US investment bank Lehmann Brothers, investors suddenly took a closer look at risks and capital started to flow out as Western banks faced trouble at home and export markets began to contract. Economic growth slowed down substantially in all ten NMS in the

^{*} The research on this overview was completed on 20 February 2009. Peter Havlik, Kazimierz Laski, Michael Landesmann and the authors of the individual country reports provided useful comments on the earlier draft.

last quarter of 2008. None the less, the average GDP growth rate of 4.7% for the region as a whole in 2008 was not that disappointing. It was remarkably robust: 6-8% in Bulgaria, Romania and Slovakia implying that those countries were catching up quite significantly with the more developed West and other NMS. The growth slowdown from 6% to some 4% in the Czech Republic, Poland and Slovenia was quite modest. The processes that came to the fore in the final months of the year, however, marked the beginning of a new era, the upshot of which is that the annual data for 2008 have little or no relevance to the forecasts for 2009 and beyond.



Figure 1

Source: Eurostat. Forecast by wiiw.

The 2009 economic growth outlook for the NMS is very grim indeed; on average GDP is close to stagnation (see Table 1, and Table I following the executive summary). Little satisfaction can be gleaned from the fact that growth performance in the NMS will still be almost two percentage points above that of Western Europe (EU-15); the catching up process will thus continue.

A number of findings and assumptions underlie this upbeat forecast: commodity markets remain depressed, liquidity in the financial system is contracting, unemployment is rising, consumer and business confidence has fallen to low levels. In each individual country, the key issues at this point are financial stability, both fiscal and external. The investors' perception of risk deteriorated for all NMS, but less so for the more stable countries with low external debt, low current account and low budget deficits: in brief, those countries which only rely to a modest degree on foreign financing. By all indicators, this first group comprising the Czech Republic, Poland and Slovakia is better equipped to weather the storm than others.

A second group comprises those countries that are highly vulnerable and can be nudged into recession; they face a financial meltdown any time now. Bulgaria and Romania are two potential candidates for recession, but both are struggling hard to avert a more serious crisis. There are signs

that some international financial support (IMF, EU, etc.) will prove necessary, at least in Romania, to avoid a hard landing. The third group comprises those countries that will be in recession and heavily dependent on external assistance, the Baltic States and Hungary.

Table 1

Gross domestic product

real change in % against preceding year

	2005	2006	2007	2008 ¹⁾	2009	2010 Forecast	2011	Index 2000=100 2008
Czech Republic	6.3	6.8	6.0	3.5	0.4	2.4	3.8	140.7
Hungary	4.0	4.1	1.1	0.3 2)	-3.0	1.4	3.0	130.0
Poland	3.6	6.2	6.6	4.8	1.5	2.3	3.8	138.2
Slovakia	6.5	8.5	10.4	6.4	2.0	2.0	3.0	162.0
Slovenia	4.4	5.9	6.8	4.4	0.0	2.0	4.0	141.3
NMS-5	4.5	6.2	6.0	4.0 ²⁾	0.6	2.1	3.6	139.6
Bulgaria	6.2	6.3	6.2	6.0	0.0	1.0	3.0	154.8
Romania	4.2	7.9	6.2	7.8 ²⁾	0.0	1.0	3.0	163.4
Estonia	9.2	10.4	6.3	-3.5	-7.0	-3.5	0.5	165.3
Latvia	10.6	11.9	10.2	-2.8 ²⁾	-8.0	-4.0	0.0	177.8
Lithuania	7.8	7.8	8.9	3.2 ²⁾	-5.0	-3.5	1.0	176.4
NMS-10	4.8	6.7	6.2	4.4 ²⁾	0.0	1.5	3.3	145.8

1) Preliminary. - 2) wiiw estimate.

Source: wiiw Database incorporating Eurostat statistics. Forecasts by wiiw.

Relying on available global and European forecasts, we reckon with a slow recovery of the NMS in 2010. Compared to the very low level in the base period, resuming growth will be not too difficult, provided export markets recover. However, depending on global processes, we expect a relatively slow and protracted recovery, unevenly spread across the countries in the region. During this recovery, the NMS will again grow faster then the EU-15 countries.

The speed of recovery will depend primarily on external demand while the recovery of financial flows will hinge on the ability of each country to adapt to the financial and external market squeeze. Those countries that can count on relatively sound financing will be able to recover together with their main EU export markets. If the EU-15 recession is V-shaped, the Czech Republic, Poland, Slovakia and Slovenia may recover relatively soon. Other countries face a more prolonged recovery period as they will have to work on their current account and fiscal imbalances and shift the financing of their economies to domestic savings. It is quite likely that the medium-term rate of economic growth will be below that witnessed in the period 2002-2008 (Table 1). We expect average GDP growth in the region in the medium term, as expressed by the 2011 forecast, to remain one percentage point below 2008: at 3.3%. Higher growth rates will be achieved by those countries where the recession is

weaker, while the Baltic States and Hungary will recover more slowly as they correct the excessive disequilibria of the past.

Output declines rapidly, delayed labour market adjustment

The first early indicator of the emerging recession was industrial production which fell substantially in all NMS in November and December 2008 (for instance, by 23% year-on-year in Hungary in December; see Figure 2). This came after several years of strong growth, during which the NMS built up new export-oriented industrial capacities that hinged on FDI. In earlier years Hungary and the Czech Republic, more recently Slovakia and Bulgaria had enjoyed especially resilient industrial expansion; however, growth rates started fading in mid-2007. The primary cause of the recent setback was the squeeze in external demand. It hit the main manufacturing sectors dominated by foreign subsidiaries and serving international markets. Among the industries affected most by the drop in demand were those manufacturing cars and household electronics. Another string of industries, chemicals and steel production dipped in concert with commodity prices. Other activities hit by the crisis include construction while most services are expected to follow later.



Source: wiiw Monthly Database incorporating national statistics.

Over the past two years the labour market situation in most NMS had been on the mend (Figure 3). The employment rate among those of working age was increasing and unemployment decreasing in all countries except Hungary. The positive change was most pronounced in countries where the situation used to be far worse: Bulgaria, Poland and Slovakia. The best employment situation was in the Czech Republic and Slovenia. In the rapidly growing countries in the region, such as Poland, Romania and the Czech Republic, labour shortages prevailed until the third quarter of 2008 – aggravated by massive outward migration in the previous years.

Figure 3

Employment rate, unemployment rate 2005-2008

Quarterly, 1q 2005=100



Source: Eurostat.

The labour market effects of the recession were abrupt; however, they may not actually be as severe as the first reports of mass-scale layoffs would suggest. Initially, only foreign and contract labour were laid off and shorter working hours have been introduced. Companies are still maintaining a wait-and-see attitude and intend to keep most of the workforce on board, if the recession does not last too long. These efforts usually enjoy some government backing and wage restraint is also likely. In the event of a lasting recession, the Baltic States expect the worst drop in employment; however, the unemployment rate will only exceed 10% in Poland, Slovakia and Latvia (Table I).

Employment decline is expected to be more moderate than the drop in production, thus labour productivity will drop. The situation will mirror what happened in the early 2000s. In the previous take-off period, the region recorded jobless growth for quite some time; in other words, unemployment declined less than the economy expanded. Now again, if economic recovery sets in during 2010, unemployment is expected to become 'sticky', with little initial improvement. Assuming that economic recovery will get more robust in 2011, unemployment will still not return to 2008 levels; once again, we may have a period of jobless growth and a rapid recovery in labour productivity. In this respect as well, the Baltic States face the gloomiest prospects, while Slovenia and the Czech Republic may survive the crisis with the least privation.

A big unknown is the behaviour of migrant workers. Initial fears were voiced of Romanian workers being laid off on a massive scale in Italy and Spain and their subsequent return home. Those expectations have yet to materialise. Migrants may not even want to return home where job prospects are worsening. Even if they earn less abroad, their relative situation may not worsen thanks to their home country currencies depreciating.

Deflation curbed by depreciation

Consumer prices rose more than before in the first half of 2008; this was mostly due to extraordinarily high import prices for oil, gas and other raw materials, as well as for food. When those prices subsequently dropped, they stopped increasing in the NMS as well and inflation subdued in the final quarter of the year (Figure 4). In several countries, the price increases in the initial period were mitigated by the appreciation of local currencies (Figure 5), while overheated demand for consumer goods had countervailing effects. For 2008 as a whole (Table I), the highest inflation rates (above 10% per year) were to be found in those countries with fixed exchange rates (the Baltic States and Bulgaria). In countries with flexible exchange rates and strengthening currencies, the inflation rates in 2008 exceeded those of the previous year, with the exception of Hungary which underwent severe adjustment in 2007. Of those countries, major increases and the highest rates of inflation were to be found in Romania (due to overheating) and the Czech Republic (in the wake of increases in regulated prices and VAT rates).

In 2009 the expected depressed world market prices and very low inflation or even deflation in the eurozone will have a mitigating effect on price increases in the NMS. Consumer demand will stagnate in most countries, giving rise to an additional downward effect on prices. The only factor which is expected to mitigate deflation is the exchange rate. Many floating currencies in the region came under strong pressure in late 2008 and in the first two months of 2009 (Figure 5); this is expected to show up in the prices of imported goods – albeit with some delay. The highest rate of depreciation in the period 1 January to 13 February 2009 was recorded by the Polish zloty (12.6%) and the Hungarian forint (11.8%) while the Romanian leu, which had plummeted at an earlier stage, and the Czech koruna, which enjoys the best rating, lost only 6-7%. Depreciation may be to the benefit of Romania, whose current account requires major correction.



Source: wiiw Monthly Database incorporating national statistics.

Figure 5

Figure 4

Nominal exchange rates*, 2006-2008

EUR per NCU, monthly average, January 2006=100



^{*} Ascending line indicates appreciation.

Source: wiiw Monthly Database incorporating national statistics.

The problem is different for those countries with currency boards (Bulgaria, Estonia, and Lithuania) or pegged rates (Latvia). They have maintained fixed exchange rates in addition to accumulating unsustainably high current account deficits. Adjustment of the exchange rate has not been considered an option for fear of unchecked depreciation and inflation. A further fear is that households and companies will not be able to fund their massive foreign exchange-based loans (see section on the Baltic States in this chapter). Adjustment in those countries can be borne by domestic prices and wages. Deflation or low inflation (relative to the euro) combined with a fixed exchange rate leads to real depreciation, thus curbing domestic demand and reducing the current account deficit.

Over the years to come we can expect a very moderate annual average inflation rate of 2-3% in most NMS; that figure is still above those forecast for the euro region. The same rates are also expected for the two new members of the eurozone, Slovakia and Slovenia; they can expect to be affected by price volatility in the first years following their adoption of the common currency.

Table 2

Foreign trade of the new EU member states (based on customs statistics) 2008 1) 2008 1) 2002 2003 2004 2005 2006 2007 2007 EUR mn change in % 40706 43053 55460 62785 75604 89382 98700 18 2 10 5 Czech Exports Republic Imports 43036 45240 54846 61445 74265 86051 95800 15.9 11.3 Balance -2329 -2187 614 1339 1340 3331 2900 Hungary Exports 36503 38096 44671 50588 59936 69610 73400 16.1 5.4 Imports 39927 42263 48668 53494 62331 69730 73300 11.9 5.1 -3424 -3997 -2906 -2395 100 Balance -4167 -121 Poland Exports 43499 47526 60332 71889 88229 102259 115000 15.9 12.5 58480 60354 72109 81697 101138 120912 139900 15.7 Imports 19.6 Balance -14981 -12827 -11777 -9807 -12909 -18652 -24900 15234 22305 33332 27.3 Slovakia Exports 19305 25632 42445 48200 13.5 Imports 17517 19910 24006 27851 35698 43939 49800 23.1 13.3 Balance -2283 -606 -1702 -2219 -2367 -1494 -1600 Slovenia 10962 11285 13153 15471 18501 21964 22400 18.7 Exports 1.9 Imports 11574 12239 14276 16346 19227 23027 24600 19.8 6.7 Balance -612 -954 -1123 -875 -726 -1063 -2200 NMS-5 Exports 146905 159265 195921 226365 275602 325660 357700 18.2 9.8 170534 180007 213906 240834 292659 343659 383400 Imports 17.4 11.6 Balance -23629 -20742 -17985 -14468 -17057 -17999 -25700 Bulgaria Exports 6063 6668 7985 9223 11748 13512 15273 15.0 134 Imports 8411 9611 11619 12497 15424 21862 25327 41.7 15.8 Balance -2348 -2942 -3635 -3274 -3676 -8349 -10054 Romania Exports 14675 15614 18935 22255 25850 29413 33500 13.8 13.8 Imports 18881 21201 26281 32569 40746 50980 55800 25.1 9.4 Balance -4206 -5588 -7346 -10313 -14895 -21567 -22300 3638 3996 4769 6202 7719 8036 8400 4.1 4.3 Estonia Exports 5079 6701 Imports 5734 8230 10711 11427 10800 6.7 -5.1 Balance -1441 -1737 -1932 -2028 -2992 -3391 -2400 Latvia Exports 2417 2557 3223 4149 4902 6062 6600 23.7 8.7 Imports 4279 4627 5704 6991 9191 11180 10700 21.6 -4.3 Balance -1862 -2070 -2481 -2842 -4290 -5117 -4100 Lithuania Exports 5526 6158 7478 9490 11263 12509 16100 11.1 28.4 Imports 7943 8526 9958 12498 15429 17813 21000 15.4 18.0 Balance -2417 -2368 -2480 -3008 -4167 -5303 -4900 NMS-10 337084 395192 437573 172 107 Exports 179223 194259 238311 277684 229705 274170 384161 456920 507027 Imports 215127 313618 18.9 11.0

1) Preliminary.

Source: wiiw Database incorporating Eurostat statistics.

-35903

-35447

-35859

-35933

-47077

-61727

-69454

Balance

Falling external demand

Greater economic openness has been a general feature of the processes of transformation and European integration in the NMS over the past few years with a surge of both exports and imports (Table 2). The trend of past years recently went into reverse owing to shrinking demand in the EU. In the final quarter of 2008 exports in most NMS sank below the level of the previous year imports even more (based on October-November data, Figures 6 and 7). For most export-dependent economies, we expect exports to continue shrinking in 2009. Expansion is only expected for Latvia, Lithuania and Slovenia starting from a low base in special product segments. Individual NMS depend on exports to differing degrees. Exports to GDP ratios range from 30% or less (in Romania, Latvia and Poland) to almost 70% or above (in Slovakia, the Czech Republic and Hungary). The current decline and future recovery of open economies depend to a large extent upon the situation in their main markets. Only Poland and Romania are large enough to expect significant stabilizing effects from domestic demand.

Most NMS governments consider export expansion to be the only possible way out of the crisis. They can have justified hopes of reviving their exports in sync with a recovery in Europe. Their cost competitiveness has not been shaken and, if the recent devaluation proves lasting, it will dramatically improve. The situation of the new eurozone members is more tenuous; they will have to increase productivity in order to keep pace with the loss of their relative cost positions compared to other NMS. Another question for the future is the rise of 'protectionism' – not solely in Europe, but worldwide. Owing to increasing unemployment in the EU-15, multinational companies are under pressure to keep their capacities up and running at home – even if it be to the detriment of their NMS subsidiaries. None the less, it is more likely that EU-wide competition rules will not be restricted; the NMS can thus hope for an even larger share in Europe-wide manufacturing, when demand recovers. The various forms of support for domestic companies and banks also constitute a certain form of protectionism.






Figure 7

Imports 2006-2008

Source: wiiw Monthly Database incorporating national statistics.

Table 3

Foreign financial position

in % of GDP

	е	Gross external debt ¹⁾		Nati	Reserves of National Bank (excluding gold) ¹⁾²⁾			Current account						
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2009	2010	2011		
										F	orecast	•		
Czech Republic	37.1	38.2	47.0	20.2	17.7	19.0	-2.6	-1.8	-2.8	-1.7	-1.3	-1.8		
Hungary	86.2	98.1	121.4	17.3	16.3	23.9	-7.6	-6.2	-6.1	-4.9	-5.5	-5.1		
Poland	46.6	48.8	61.2	12.7	13.1	13.8	-2.7	-4.7	-5.4	-3.9	-4.4	-4.3		
Slovakia	50.7	54.7	59.0	20.0	22.3	19.1	-8.2	-5.7	-6.3	-6.6	-6.8	-6.8		
Slovenia	77.6	100.8	104.1	17.2	1.9	1.6	-2.5	-4.2	-6.3	-5.8	-4.9	-4.6		
Bulgaria	80.7	99.8	112.4	32.9	38.8	35.3	-17.8	-21.8	-24.5	-13.0	-11.7	-10.2		
Romania	40.5	51.4	74.6	20.9	22.1	20.6	-10.5	-13.5	-12.1	-8.0	-6.5	-6.3		
Estonia	97.7	112.4	117.1	16.1	14.6	17.7	-16.7	-18.1	-8.5	-5.8	-5.5	-6.3		
Latvia	113.1	133.9	137.1	20.9	19.3	17.0	-22.5	-23.8	-12.2	-7.0	-5.7	-7.9		
Lithuania	60.2	72.3	73.7	18.0	18.2	14.1	-10.6	-14.6	-13.6	-7.3	-6.3	-7.9		

1) End of period. - 2) Forex reserves, SDR and reserve position with the IMF. Slovenia: from 2007 (Euro introduction) only the foreign currency reserves nominated in non-euro currency are included.

Source: wiiw Database incorporating Eurostat statistics. Forecasts by wiiw.

External financing as a lasting barrier to growth

Externally financed growth, something that those countries had experienced in years past, may not return for some time to come. When it returns, however, growth will have to be financed primarily by domestic savings. Current international price trends help to reduce import bills. Apart from reduced domestic demand, lower international energy and raw material prices (crude oil is expected to cost 40-50 USD/barrel in 2009) coupled with currency depreciation will do the job.

Figure 8

EUR million ■ Services Current transfers Goods □ Income - Current account **Czech Republic** Hungary Poland 1000 4000 4000 3000 500 2000 2000 0 0 1000 -500 0 -2000 -1000 -1000 -1500 -4000 -2000 -2000 -3000 -6000 -2500 -4000 -8000 -3000 -5000 -6000 -3500 -10000 3q-08 3q-08 1q-07 2q-07 3q-07 4q-07 1q-08 2q-08 1q-07 2q-07 3q-07 4q-07 1q-08 2q-08 1q-07 2q-07 3q-07 4q-07 1q-08 2q-08 3q-08 4a-08 Slovakia Slo ven ia Bulgaria 500 600 1500 400 1000 0 500 200 0 0 -500 -500 -200 -1000 -400 -1000 -1500 -600 -2000 -800 -1500 -2500 -1000 -3000 -2000 -1200 -3500 2q-08 3q-08 3q-08 1q-08 1q-08 2q-08 2q-07 3q-07 1q-08 2q-08 3q-08 4q-08 2q-07 3q-07 4q-07 2q-07 3q-07 4q-07 4q-07 lq-07 1q-07 1q-07 Romania Estonia Latvia 3000 600 1000 2000 400 1000 500 200 0 0 0 -1000 -2000 -200 -500 -3000 -400 -4000 -600 -1000 -5000 -800 -6000 -1500 -1000 -7000 -8000 -1200 -2000 lq-07 2q-07 3q-07 1q-07 lq-08 2q-08 3q-08 4q-08 1q-07 2q-07 3q-07 -07 g-08 2q-08 3q-08 4q-08 lq-07 2q-07 3q-07 -q-07 lq-08 2q-08 3q-08 4q-08

Composition of the current account 2007-2008

Source: Eurostat.

Current account deficits have made several countries vulnerable to the contraction of external finances. The Baltic States with deficits in the range of 20% of GDP (Table 3) have already been pushed into recession by a sudden correction of their external positions. Other high-deficit countries, Bulgaria and Romania, are trying to reduce their deficits in stages while avoiding a slide into recession. We actually expect the adjustments to be quite drastic. Four countries in the NMS-5 had deficits in the range of 6% of GDP; the deficit in the Czech Republic was below 3%, thus making the country the least vulnerable to external shocks. In the NMS-5 we expect the current account deficits to be somewhat lower in 2009, except for Slovakia which, having become a member of the eurozone, may attract more foreign funds.

The current account deficits in the NMS are variously composed, thus exposing them to different problems (Figure 8). The Czech Republic and Hungary have positive balances in their goods and services trade, but much larger deficits in their incomes accounts. In Slovakia, incomes also constitute the major portion of the current account deficit. This situation stands in sharp contrast to all other countries in the region, where the goods-trade balance comprises the overwhelming portion of the current account deficit.

In previous years, strong economic growth fuelled by private consumption had led to deterioration in the foreign trade balance of most NMS (Table 2). High international energy prices were also responsible for rising imports, while exports did not expand as much as before. In 2008 only the Czech Republic boasted a sizeable export surplus, while Hungary's foreign trade was in balance. Rapidly expanding imports worsened the trade balance in several countries despite remarkable export growth: primarily in Poland and Bulgaria, but also in Romania. Those countries recorded particularly high rates of economic growth requiring imports for both consumption and investment purposes. In Slovenia the situation was similar, in addition, the country's export growth was very weak. Deterioration of the trade balance was modest in the case of Slovakia where new capacities were launched enabling exports to increase in line with imports. Estonia and Latvia were able to reduce their high trade deficits by contracting imports, while Lithuania enjoyed a very pronounced export boom. All countries with high trade deficits will have to make a major effort to balance their trade as alternative ways of financing may be very limited. The countries most exposed are Romania, Bulgaria and Latvia with an import coverage ratio of only 60%, followed by Estonia and Lithuania with 77%, Slovenia with 86% and Poland with 82% (customs statistics).

The incomes account has become for some countries just as important as trade. The most important here are the direct and other investment related incomes while compensation for employees is usually modest (migrant transfers are recorded under 'transfers'). Income deficits in direct investments are large in those countries where many foreign-owned firms are generating profits. Portfolio and other investment-related income is largest in countries with high foreign debts. Hungary, which has benefited from capital inflows of all kinds, has the largest investment-related income outflow in the region.

Current transfers are the fourth main part of the current account including contributions to the EU budget, a fraction of all EU transfers, and the remittances of nationals working abroad. The latter item is especially difficult to estimate as such transfers may also appear under 'tourism revenues' or 'errors and omissions'. Remittances are high in Romania and Poland, in addition to being relatively high in Latvia and Lithuania as well. The transfer balance is negative in Hungary, Slovakia and Slovenia, which have net outward migration. The future of transfer revenues depends partly on the employment situation in the host countries. Even if we do not expect a massive return of migrant labour during the crisis, transfers may be curtailed. Migrants' consumption abroad, however, may shrink more than the amount of transfers, if those at home lose their source of income. At the same time, the depreciation of home country currencies in relationship to the host countries.

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Net capital flows

EUR million

	2006	2007 Czecł	1-9/07 n Republ	<i>1-9/08</i> ic	2006	2007 Hung	2007 <i>1-9/07</i> Hungary		
Capital inflow transfer	3578	4183	1560	5441	10216	8352	6560	9239	
Capital transfer	300	723	220	864	470	1141	794	1045	
FDI	3192	5731	3548	4913	962	3259	2461	947	
Portfolio	-934	-1881	-2353	1424	5111	-1625	-1234	2260	
Other capital (loans)	1242	-447	32	-1760	3538	4739	3745	3847	
Financial derivatives	-222	57	113	0	135	838	794	1140	
Destination of capital inflow	2997	2861	1224	4030	7831	6454	5137	7203	
Current account	2924	2270	1309	2506	6857	6307	4918	6127	
Increase reserves	73	591	-85	1524	974	147	219	1076	
Errors & omissions	-580	-1321	-335	-1413	-2383	-1900	-1426	-2035	
		P	oland			Slova	ikia		
Capital inflow transfer	12124	32223	19964	28467	929	5436	4317	3912	
Capital transfer	1667	3416	1802	3507	-33	335	166	595	
FDI	8616	13170	10300	7050	3019	1959	1344	1020	
Portfolio	-2340	-3797	-5021	1337	1286	-324	121	1486	
Other capital (loans)	4731	20863	13525	16688	-3214	3409	2610	791	
Financial derivatives	-550	-1429	-642	-115	-129	57	76	20	
Destination of capital inflow	9473	23963	15286	19528	1579	5944	4867	2902	
Current account	7443	14587	10004	13887	3636	3141	1971	2982	
Increase reserves	2030	9376	5282	5641	-2057	2803	2896	-80	
Errors & omissions	-2653	-8261	-4678	-8938	651	508	551	-1010	
		SI	ovenia			Bulga	aria		
Capital inflow transfer	-191	1570	719	1766	6863	10730	7799	9710	
Capital transfer	-132	-52	-44	-65	179	357	139	236	
FDI	-174	-269	-316	36	5869	6310	4569	4201	
Portfolio	-1443	-2265	-1451	-663	317	-456	-191	-514	
Other capital (loans)	1571	4178	2542	2453	609	4580	3326	5873	
Financial derivatives	-13	-22	-12	5	-111	-61	-44	-86	
Destination of capital inflow	-509	1315	716	1617	6007	9212	6632	8246	
Current account	772	1455	792	1617	4501	6304	3901	5525	
Increase reserves	-1281	-140	-76	0	1506	2908	2731	2721	
Errors & omissions	-321	-257	-5	-147	-856	-1516	-1166	-1468	
		Ro	omania			Esto	nia		
Capital inflow transfer	14610	21821	16269	13988	2633	2735	2322	1534	
Capital transfer	-30	823	452	362	280	173	102	166	
FDI	8722	7066	5763	6769	548	810	467	542	
Portfolio	-197	477	585	-109	-1053	-369	-361	85	
Other capital (loans)	6200	13755	9668	7042	2853	2173	2143	727	
Financial derivatives	-85	-300	-199	-76	5	-52	-29	14	
Destination of capital inflow	15459	21145	15311	12694	2674	2847	2391	1496	
Current account	10220	16715	11136	12495	2193	2758	2089	1257	
Increase reserves	5239	4430	4175	199	481	89	302	239	
Errors & omissions	848	-673	-956	-1295	40	111	69	-39	
Source: wiiw Database incorporating E	urostat statistic	s.							

Most of the transfers from the EU budget fall under the capital account. Capital transfers (Table 4) have increased in most countries, although they constitute but a relatively modest share of total capital inflows. These are expected to double in the years ahead to about 3% of GDP on average. Private capital inflows are not expected to dry up; however, they will shrink substantially. More capital is expected from multilateral institutions for those countries facing a severe liquidity crisis. Hungary was the first among the NMS to apply for IMF-led support. Altogether it received EUR 20 billion in October 2008 – enough to finance the country's external obligations for a year and a half. The support package for Latvia, EUR 7.5 billion, one third of the country's GDP for 2009-2011, was also the outcome of joint action on the part of the IMF and the EU, as well as the World Bank, EBRD and some EU member countries in January 2009. Romania will be the next country to apply for a support package that should allow the current account deficit to shrink only by a reasonable extent.

Capital inflows are on the whole to shrink the magnitude of which is not predictable yet. One can say a bit more about FDI which have been one of the driving forces of economic transformation up to now. The inflow of FDI declined in 2008, while only about half of the previous inflow is expected for 2009 in tandem with the general decline in investments throughout Europe. While most countries are aware that FDI will decline during the recession in Europe, its impacts are rarely discussed.

	Infl	low, EUR n	nn		FDI n	et, % of	CA	FDI stock EUR mn
	2006	2007	2008 ¹⁾	2009 forecast	2006	2007	2008	2008 ¹⁾
Czech Republic	4363	6710	7000	4000	109	252	143	80000
Hungary ²⁾	6024	4373	2500	1500	42	25	31	68000
Poland	15737	16672	11150	6000	116	90	44	150000
Slovakia	3311	2108	1600	800	83	62	35	33000
Slovenia	514	1050	1100	500	-23	-18	4	11000
NMS-5	29949	30913	23350	12800	81	80	49	342000
Bulgaria	6006	6510	5430	3300	130	100	60	32000
Romania	9060	7271	9000	4000	85	42	55	50000
Estonia	1432	1963	1300	700	25	29	43	11000
Latvia	1339	1656	1300	700	33	30	41	9000
Lithuania	1448	1473	1100	600	48	25	17	10000
NMS-10	49234	49786	41480	22100	79	62	49	454000
1) wiiw estimate 2) Excl	uding Special P	urpose ente	erprises (SP	E).				

Foreign direct investment to New EU Member States

Table 5

Note: CA means current account deficit. FDI net is defined as inflow minus outflow.

Source: wiiw Database incorporating national bank statistics. Forecasts by wiiw.

FDI is utmost important as foreign multinationals have now become dominant in most sectors of the NMS economies (Table 5). Throughout the region, banks, insurance companies, retail chains and many large manufacturing enterprises are now mostly foreign owned. At the turn of the century, the share of foreign subsidiaries in Hungarian manufacturing exports already amounted to about 80%. More recently, even the late-starters find themselves in a similar situation, with Romania recording a share of 77% in 2007. Foreign investors in all economic sectors enjoyed high profits in the booming markets and manufacturing companies in the West gained in terms of global competitiveness as they could rely on supplies from low-cost NMS subsidiaries. From the viewpoint of the NMS, foreign investors provided important technical and organizational stimulus to the successful transformation and modernization of their economies. Trade deficits with the EU-15 turned into surpluses and exports of services also started to grow more rapidly than imports.

Integration by FDI enabled a fast transfer of crises through the corporate channels of banks and companies. Fortunately, the Western banks that invested in the NMS were not those most seriously or directly involved in the financial crisis. None the less, they began restricting loans to their subsidiaries abroad when faced with a liquidity squeeze at home. In the automotive and electronics industries, the branches most effected by declining demand, NMS subsidiaries had to cut back production and lay off employees. It would seem that the headquarters of European multinationals do not treat their foreign subsidiaries any worse than other locations. However, the very fact that Austrian and Italian banks have asked the EU and ECB to consider setting up a special crisis fund hints at possible problems they might be facing.

Several companies have postponed equity investments given the uncertain demand for their products. There is little news about investments in new technologies or cost-saving measures. In the first three quarters of 2008, investors secured large profits, half or more of which they reinvested in their customary manner. But should profits decline (as is to be expected), the volume of reinvestment will also shrink. In Estonia, a country that has been embroiled in the crisis longer than the other NMS, foreign investors' income on equity declined by 5% in the first three quarters of 2008 as against the previous year, whereas the rate of reinvestment increased somewhat (to the relatively high rate of 79%). FDI in Estonia sank by 21% mostly on account of lower equity and other investments (intercompany loans). This shows that the confidence of established investors may be upheld even under severe crisis conditions in the host country.

At present, the FDI-led growth strategy of the NMS is in a critical state. Excessive foreign exposure has resulted in high vulnerability, particularly in the smaller countries. Even if investors seem to stay on, there is need for a more robust development of local enterprises. A firmer local production base and flexible domestic SMEs can benefit countries emerging from a crisis. SMEs, at least, can hardly flee and relocate. They need government programmes to rely on and so survive the worst of the crisis.

Public policies to mitigate the crisis

Production and GDP decline could be counter-acted by policies injecting liquidity into the economy generating additional demand; structural measures could help saving jobs and productive capacities for some time. The current crisis may provoke two types of policy responses: monetary and fiscal. The first may aim at restoring confidence and injecting liquidity into the financial system; the other

may include measures to increase demand and support ailing companies. On both fronts, NMS governments have been far less active than their Western counterparts. Basically, the crisis has been imported and not much can be done in any one country. Their scope for action is also very limited and they invariably seek external assistance in case of need.

As to the financial systems in the NMS, these display a high degree of international integration. Dominated by subsidiaries of Western banks, their behaviour can hardly be influenced domestically. (At certain crucial points during the crisis, certain national bank governors managed to persuade some commercial bank leaders to restore a bit of confidence.) Providing assistance to the banking sectors in the form of liquidity has also been envisaged, but banks have been reluctant to draw on that form of relief. No bank has been restructured or nationalised except one in Latvia. On the whole the banking system in the NMS still seems to be more robust than in many EU-15 countries. But the liquidity squeeze is a problem and so are foreign currency denominated debts.

Monetary policy has its limits given full convertibility and the general liquidity crisis. Policy interest rates may be cut with the aim of increasing liquidity, but transmission has become more expensive and the real economy will not have access to cheap credit. As for the highly indebted countries, rate cuts also have their external limits as markets now expect higher risk premia than before. After the increases in 2008, modest policy rate cuts were to be seen in several countries in early 2009 in line with falling inflation rates (Figure 9). But this may give way to another rate increase when currencies weaken. Another action for liquidity creation has been to lower mandatory reserve requirements in Romania, Bulgaria and Hungary towards the end of last year.



Figure 9

Source: wiiw Monthly Database incorporating national statistics.

A fiscal policy response to the crisis can be expected as governments are under pressure to act; however, here again the limits are obvious. Demand-side stimulation is quite widespread in the

West, but no such measures have been introduced in the NMS. One reason may be that in small open economies any stimulation of demand would have the effect of increasing direct imports: a trend one may want to avoid if the aim is to improve the external balance in times of fragile external financing. Solution to the bulk of the current problems is expected from an upturn of the business cycle in the best.

The consolidated budget deficits of the NMS are not particularly high (Table 6). Eight were below the 3% to GDP margin in 2008. The Maastricht criterion was only missed marginally in Hungary following a two-year stabilization programme and much more so in Romania, where elections were held late last year. While these two countries are obliged to save, others may spend more. What prevents them to expand expenditures can be partly ideological, partly a fear from too high deficits. Budget deficits as a percentage of GDP will automatically increase on account of the current recession. Revenues will fall short of expectations, while expenditures will inevitably rise on account of the automatic stabilizers (such as mandatory unemployment benefits).

For countries in financial distress, higher public deficits might be interpreted as a further negative message to investors. To avoid that interpretation, those countries have introduced expenditure cuts in order to keep the deficit to GDP indicator as low as without recession. Estonia, Latvia and Hungary announced VAT increases as well as wage-cuts in the public sector. Such pro-cyclical fiscal policies will curtail domestic demand still more: a development which may aggravate the recession.

	2007	2008 ²⁾	2009	2010	2011
			F	orecast	
Czech Republic	-1.0	-1.2	-2.0	-2.0	-2.0
Hungary	-4.9	-3.1	-2.9	-2.7	-2.3
Poland	-2.0	-2.7	-4.0	-3.5	-2.5
Slovakia	-1.9	-2.3	-3.0	-3.0	-3.0
Slovenia	0.5	-0.5	-3.5	-2.0	-1.5
Bulgaria	0.1	-0.5	-2.0	-2.0	-1.0
Romania	-2.6	-5.2	-4.0	-5.0	-4.0
Estonia	2.7	-2.0	-4.0	-3.0	-2.5
Latvia	0.1	-1.5	-5.0	-5.0	-3.0
Lithuania	-1.2	-1.0	-5.0	-4.0	-3.0

Fiscal balance in % of GDP ¹⁾

1) EU definition: net lending (+) or net borrowing (-) according to ESA'95, excessive deficit procedure. - 2) Preliminary. Source: wiiw Database incorporating Eurostat statistics. Forecasts by wiiw.

While stimulating private demand has only featured marginally on NMS agendas (Bulgaria, Slovakia, Slovenia), more governments have launched programmes to support the survival of the corporate sector, especially that of SMEs by restructuring expenditures. These measures include employment subsidies, cheap credits and credit guarantees provided by development banks. Subsidies in

Table 6

exchange for postponing lay-offs can be advantageous in the short term, but saving inefficient production may not yield lasting results. A further policy aims at stimulating capital investments in the private sector. Governments also envisage more infrastructure investments to keep or create jobs in the construction sector. The latter option can be feasible, as the NMS will be able to count on EU funds. There are indications that the EC is willing to lower domestic co-financing limits and permit their being financed via subsidised loans, thus easing access to funds.

As an instrument to forestalling future crises, the early introduction of the euro is becoming popular. The short-term experience with the euro in Slovenia and Slovakia has shown that members within the currency area can withstand external financial shocks more firmly than those without. Eurozone candidates, i.e. all the other NMS, may thus wish to take shelter under the common currency. In fact, the idea of introducing the euro at an earlier stage gained in popularity in Hungary, Poland and Romania. However, the example of the Czech Republic suggests that financial stability and low interest rates can also be maintained outside the eurozone.

While some of the Maastricht criteria will be easier to reach under the current recession-related deflation, achieving the fiscal targets will be more cumbersome and hinder anti-cyclical policies. Exchange rate volatility causes additional risks: fixing a currency prematurely could culminate in a sudden loss of price-competitiveness. Slovenia and Slovakia, where the euro appreciated by 20% in just a few months against other currencies in the region, seem to be a case in point. Unstable times may nurture the wish for stability; however, achievement of that stability may not necessarily be of lasting benefit.



Anton Mihailov

Bulgaria: coping with multiple external shocks

The economic situation in Bulgaria has changed dramatically over the past several months owing to the combined effect of a series of external shocks. The problems caused by waning export demand and the dearth of external funds as a result of the global economic and financial crisis were compounded by the stoppage of gas supplies from Russia and, more recently, the blockade of the Greek border by protesting Greek farmers. Bulgaria's current economic prospects have deteriorated considerably – in stark contrast to the robust growth performance observed over the past six years.

On average GDP growth in 2008 still looks impressive, yet aggregate output performance dropped markedly in the fourth quarter. Output even declined in some sectors, especially in manufacturing. This mirrored the weakening of exports (also on the decline in year on year terms in the final months of 2008) associated with the global economic crisis, more specifically, the slump in European economic activity.

Another important factor contributing to the economic downturn has been the considerable tightening of credit, reflecting a worsening in both supply and demand conditions on the domestic credit market. On the one hand, the global credit crunch has put the brakes on borrowing by Bulgarian banks abroad, which hitherto had been the main source of the domestic credit boom. On the other hand, domestic banks have become much more cautious in their lending practices given the growing economic uncertainties. Although domestic credit has not been completely suppressed, the flow of new lending to the non-government sector in December 2008 was reduced to a fraction (less than 10%) of the flow recorded a year earlier. In view of these developments, the Bulgarian National Bank (BNB) has stepped in – as far as its limited powers permit – with some monetary relief, reversing its previously restrictive stance. As of 1 January 2009, BNB lowered its mandatory reserve ratio on funds borrowed abroad from 10% to 5%: a measure which is expected to provide the banks with extra liquidity of the order of BGN 1.5 billion (equivalent to some 3% of the banks' total claims on the non-government sector).

Two unanticipated external shocks in January only served to aggravate the economic situation. Bulgaria was totally unprepared for the stoppage of Russian gas supplies. Given the country's inadequate reserve capacity (reserves were only enough to meet a third of the country's daily gas requirements for a limited period of time), the authorities began rationing gas. Gas supplies were radically diverted from a number of manufacturing firms to heating plants as a matter of priority. According to tentative estimates, the cumulative negative effect of the gas crisis could amount to close on one percentage point of annual GDP growth. The gas crisis was followed by the Greek farmers blocking the border crossings to Greece: a manoeuvre which interrupted road traffic and commercial shipments in both directions for a prolonged period.

All these negative developments, albeit belatedly, have affected the labour market, which hitherto had enjoyed seven consecutive years of improvement. Firms already started announcing projected layoffs in November 2008: a process which has only intensified since that time. Although these developments are still to be reflected in current statistics, there is no doubt that the trend is towards further deterioration in the labour market. By contrast, the cooling down of the economy coupled with a considerable drop in energy prices has resulted in a notable easing of inflationary pressures: a trend which is likely to continue in 2009.

As far back as autumn 2008, the authorities were beginning to get alarmed about the negative economic trends. In principle, Bulgaria had some macro-economic buffers that they could use to dampen somewhat the effect of those shocks. Thus, at the end of September 2008, the official foreign exchange reserves amounted to some 41% of annual GDP (covering 180% of M0); the cash fiscal reserves (accumulated over the years from the budgetary surplus) stood at some 17% of annual GDP. In cash terms, the general government balance also showed a large surplus in 2008 (at the end of October, the surplus was estimated at 7.8% of annual GDP). The government subsequently initiated a series of short- and medium-term anti-crisis measures. At the very core of the programme was public investment in infrastructure, but it also included development investment targeting higher competitiveness of businesses and regions and investment in the reform of the social security and health care systems. One of the initiatives in support of the economy was the launching of a Development Bank (initially funded with BGN 500 million): a public fund designed to support SMEs via different financial instruments. Public investment in 2009 is planned at BGN 5.6 billion (over 8% of GDP), a significant increase in both absolute and relative terms (it was some 6.4% of GDP in 2008). It is envisaged that funding the anti-crisis measures will entail drawing down part of the government's fiscal reserves. The implementation of a large-scale programme of this kind will bear major fiscal implications, with a number of commitments having already been entered into in late 2008. Thus, while in cash terms the government still reported a positive general fiscal balance for 2008 (at some 3% of GDP), in ESA '95 terms, the 2008 balance will most likely have slipped into negative territory. Given the envisaged increase in public spending and the negative economic trends, the ESA '95 deficit is likely to increase in 2009.

With the current worsening of the external environment and a more pronounced deterioration in Bulgaria's economic performance, the risks associated with the country's most acute macroeconomic problem, the current account deficit, have also increased. In 2008, this deficit dipped further in both absolute and relative terms, standing at more than 20% of GDP for a second consecutive year. While over the past few years a large share of the deficit has been covered by FDI, the growing external imbalance also mirrors an ongoing process of private borrowing abroad which has resulted in a sharp increase in foreign debt (it stood at over 110% of GDP at the end of 2008). Obviously, this process is unsustainable; one way or another, one can expect a current account adjustment in the near future. Despite the planned massive intervention by the government, the outlook for the Bulgarian economy has taken a turn towards the negative; there are no signs of a possible upturn in the immediate future. Much will depend on a possible turnaround in the global economy – more particularly in the large EU economies, which form the core of Bulgaria's export market. The current trends indicate a significant deterioration in export performance in 2009, which, in turn, will translate into a notable downturn in manufacturing output. The trend towards Bulgarian banks reducing their foreign borrowing abroad is also likely to continue; the direction of net flows may actually change in 2009. Thus, in the domestic credit market we should see further tightening in the course of the coming year, with negative implications for both private consumption and investment. Should export demand recover somewhat and these negative trends be reversed in the second half of the year, the average rate of GDP growth may be around zero for 2009 as a whole. However, if deterioration continues in the second half of the year, the economy may plunge into open recession. A downturn in aggregate output would naturally be accompanied by deteriorating conditions in the labour market and rising unemployment.

Private domestic demand (both private consumption and private fixed investment) has been weakening since the second half of 2008; it will deepen further in 2009. The planned rise in public spending will not be sufficient to invigorate economic growth in the short run. Faltering domestic demand and the drop in prices of energy and other primary commodities are likely to cause an abrupt reversal in the domestic price dynamics. In fact, signs of such a reversal were already evident in the final months of 2008, in both the CPI dynamics (two consecutive months of negative price changes) and, more pronouncedly, the PPI dynamics (four months of falling prices resulting in a cumulative 10% drop in PPI). In year-on-year terms, 2009 may turn out to be a deflationary year in Bulgaria.

While price dynamics of this kind are associated with their own risks, they may also be instrumental in triggering the necessary current account adjustment. With a fixed nominal exchange rate, falling domestic prices bring about a depreciation of the real exchange rate; this could ultimately lead to a lowering of the trade and current account imbalances. In fact, this is, theoretically at least, one of the currency board's built-in 'automatic levers' intended to prop up macro-economic stability. This notwithstanding, the current account deficit in the foreseeable future is still expected to remain relatively high, funded by continuing FDI and remittances inflows.

Table BG

Bulgaria: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹	¹⁾ 2009	2010 Forecast	2011 t
Population, th pers., average	7823.6	7781.2	7739.9	7699.0	7659.8	7621.2			
Gross domestic product, BGN mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	34627.5 5.0 2300 6700	38822.6 6.6 2600 7300	42797.4 6.2 2800 7800	49361.0 6.3 3300 8600	56519.8 6.2 3800 9300	66096 6 4400 10000	67500 0	70000 1	74500 3
Consumption of households, BGN mn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital form., BGN mn, nom. ²⁾	24182.6 5.4 6694.4	26732.0 5.9 7969.4	29841.5 6.1 10346.5	34554.3 9.5 12805.2	38826.5 5.3 16832.5	51000 5 21807	0	1	3
annual change in % (real)	13.9	13.5	23.3	14.7	21.7	18.4	-8	0	6
Gross industrial production annual change in % (real) ³⁾ Gross agricultural production	13.8	17.3	6.7	5.9	9.2	0.8	-6	0	4
annual change in % (real) Construction industry (build.& civil engin.) ⁴⁾ annual change in % (real)	-9.9 5.3	6.6 35.2	-6.0 31.8	-0.1 13.5	-21.0 20.0	32.4 11.9			
Employed persons - LFS, th, average	2834.8	2922.5	2981.9	3110.0	3252.6	3360	3220		
annual change in %	3.5	3.1	2.0	4.3	4.6	3.3	-4.2		
Unemployed persons - LFS, th, average	448.7 13.7	399.7 12.0	334.4 10.1	305.7 9.0	240.2 6.9	207 5.8	280 8	9	8
Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	13.7	12.0	10.1	9.0	6.9	6.3	8	9	8
Average gross monthly wages, BGN annual change in % (real, gross)	273.3 3.7	292.4 0.8	323.7 5.4	360.3 3.7	431.2 10.4	524.5 8.3		•	•
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a. ⁵⁾	2.4 4.9	6.1 6.0	6.0 7.9	7.4 12.1	7.6 8.4	12.0 10.6	2 -5	2	3
General governm.budget, EU-def., % GDP 6)									
Revenues	40.0 40.3	41.3	41.2	39.5	41.6	40.0		•	•
Expenditures Net lending (+) / net borrowing (-)	40.3 -0.3	39.7 1.6	39.3 1.9	36.5 3.0	41.5 0.1	40.5 -0.5	-2.0	-2.0	-1.0
Public debt, EU-def., in % of GDP ⁶⁾	45.9	37.9	29.2	22.7	18.2	15.3	-2.0	-2.0	-1.0
Base rate of NB % p.a., end of period $^{7)} $	2.8	2.4	2.1	3.3	4.6	5.8			
Current account, EUR mn	-972.3				-6304.0		-4500	-4200	-3900
Current account in % of GDP	-5.5	-6.6	-12.4	-17.8	-21.8	-24.5	-13.0	-11.7	-10.2
Exports of goods, BOP, EUR mn annual growth rate in %	6668.2 10.0	7984.9 19.7	9466.3	26.9	13512.0 12.5	15272.8	12500 -18.2	12500 0	13000 4
Imports of goods, BOP, EUR mn					20815.0		18500	18200	18500
annual growth rate in %	14.5	20.3	26.9	26.7	18.4	15.8	-23.3	-1.6	1.6
Exports of services, BOP, EUR mn	2728.7	3262.1	3564.1	4186.0		5226.3	4500	4500	4700
annual growth rate in %	11.1	19.5	9.3	17.4	10.5	13.0	-13.9	0	4.4
Imports of services, BOP, EUR mn	2176.0	2605.8	2745.2	3259.0		4083.1	3300	3300	3400
annual growth rate in %	11.6	19.8	5.3	18.7	7.7	16.3	-19.2	0	3
FDI inflow, EUR mn	1850.5	2735.9	3152.1	6006.0		5430.2	3300	3000	3000
FDI outflow, EUR mn	23.3	-165.6	249.1	138.0	201.0	460.8	•	•	•
Gross reserves of NB excl. gold, EUR mn	4981.3	6443.1	6813.9	8309.1	11215.9	11927.4			
Gross external debt, EUR mn		12658.5				38000			
Gross external debt in % of GDP	60.1	63.8	69.8	80.7	99.8	112.4			
Average exchange rate BGN/EUR Purchasing power parity BGN/EUR	1.949 0.659	1.953 0.685	1.956 0.715	1.956 0.743	1.956 0.791	1.956 0.869	1.956	1.956	1.956

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprises with more than 10 employees. - 4) Enterprises with more than 5 employees. - 5) Until 2003 domestic output prices. - 6) According to ESA'95, excessive deficit procedure. - 7) The BNB basic interest rate is not a policy rate but a monthly reference rate computed by the BNB as the average interbank LEONIA rate of previous month (valid from 2005).

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Leon Podkaminer

The Czech Republic: approaching standstill

The third quarter of 2008 scarcely differed from the first half of the year. The GDP growth rate (4.3%) was driven by consumption and foreign trade. Gross fixed investment (primarily in the form of machinery, equipment and means of transport) rose 4.5%. Growth was still combined with rising employment, while inflation kept decreasing. The first signs of the impending change in trends, however, emerged in the form of a steep depreciation of the Czech currency: the previous prolonged appreciation that had been especially prominent in the second quarter of the year went into reverse.

Simultaneously, the activities of commercial – mostly foreign-owned – banks started to change in terms of structure. Foreign assets held by the banks and their loans to monetary financial institutions contracted, while stocks of securities expanded. On the liabilities side, the stock of both residents' deposits and foreign assets declined, but were offset by the increase in government sector deposits (other than those of the central government). The emerging tensions (reflected in the growing preference for liquidity, including a weakening of the inter-bank market and rising interest rates on loans to households), prompted the decision to lower the central bank's interest rates policy. That decision, taken at the beginning of August, was the first to be taken by any central bank in the EU in 2008 (at that time, the Czech rate had dropped below that of the ECB). It was followed by further cuts totalling 200 basis points. The current reference rate (2 week repo) of 1.75% will certainly be cut still further in the near future. This certainty derives not only from the sharp drop in inflation expected in 2009 – but also because of risk of deflation.

The ongoing easing of monetary policy, though possibly moderating the tensions, has proved incapable of stopping unfavourable monetary developments. In the fourth quarter 2008, the stock of loans to business remained flat; the stock of loans to other monetary financial institutions fell by 26%; foreign assets dropped by 6.4%; and the stock of securities held by commercial banks rose by 19%. The preference for security is also to be seen in terms of the banks' liabilities – with a 2% drop in residents' total deposits (deposits with agreed maturity fell by 8%).

Negligible exposure of banks to sub-prime securities (and other similar toxic assets) did not prevent the problems spilling over into the Czech economy. Moreover, the fact that the risk levels facing the Czech banking system are quite low has provided no relief. The precautionary measures adopted by the CNB to improve the distribution of liquidity (a higher level of deposit insurance and the introduction of repurchase facilities) have still not improved the situation; however, the range of instruments acceptable to the CNB as collateral has been quite narrow.

Quite possibly the prevailing attitudes of banks, households and firms already reflect the expectations of hard times ahead: the possibility of domestic recession-cum-deflation hitting the real economy first (and the financial system a little later). Indeed, some symptoms of such a development occurring could hardly be ignored towards the end of 2008. In October, industrial production growth took a steep negative turn (-8.7% year-on-year), followed by another sharp decline (-8.3%) in November and December (-14.6%). The two main export branches, manufacture of machinery and equipment and of transport equipment fared very badly, with double-digit rates of decline in production in both months. The future is bleak: the value of the new orders placed with industry fell by 25% (year-on-year) at the end of November. The same index for the orders placed by foreign importers of Czech industrial products was -29%. Foreign trade had already fallen space (year-on-year) in October – but the real shock came in November, with exports and imports falling in EUR terms by 13% and 8%, respectively. The reason for the dismal trade performance is obvious: the slackening foreign demand indicating the advent of recession in the 'old' EU – and particularly in Germany.

As elsewhere, the Czech authorities are lagging behind developments. The government's National Economic Council - a group of ten prominent Czech economists - that only came into being on 9 January 2009 will focus on further measures to preserve stability in the financial sector and to alleviate the stress felt by the real sector. Most probably, the budget plan for 2009 will also come for further revision. The public sector deficit will certainly be much higher than that envisaged in the current plan which provides for a structural deficit of 1.5% of the GDP. The Czech authorities have not yet decided to make a genuine fiscal contribution to the European Economic Recovery Plan. The recent statement made by the Finance Ministry ('Addendum to an updated Convergence Programme') creates the impression that the central government will contribute in the form of measures to increase households' disposable income by an amount equivalent to about EUR 700 million. The second group of measures mentioned in the Addendum relates primarily to spending supporting investment, the bulk of which will go to transport infrastructure. These measures are worth about 600 million euro, the equivalent to about 0.4% of the GDP. Should these measures really represent additional spending on top of the current budget for 2009, they would be welcome – even though they miss the 1.5% mark recommended by the European Council. It is not at all clear, however, whether these measures have not already been included in the current budget in any event. In that case the additional fiscal stimulus would be zero (just as in Poland). As public debt is guite low, about 30% of the GDP, there seems to be some room for a measure of fiscal expansion. Such measures may only now be forthcoming. The plan announced on 18 February stipulates, among others, an additional fiscal impulse of 0.85% of the GDP in 2009.

Several unknowns enter the equation determining the GDP growth in 2009 and thereafter. The first is the GDP growth rate in the EU itself (primarily in Germany), which, to a large extent, will affect Czech export performance. Given the country's high reliance on exports (the exports/GDP ratio is about 77% at present), foreign trade plays a crucial role in economic growth. It is reasonable to assume that exports will fall in real terms in 2009 by about 2%, more or less in line with the German GDP. The decline in imports may perhaps be more pronounced as the import intensity of the GDP is also lower. All in all, the contribution of foreign trade to GDP growth is likely to be neutral in 2009.

But gross fixed investment is unlikely to grow. Large investments, such as those in the automotive industry, will not continue and the demand for housing is likely to remain depressed (infrastructure investments financed largely from EU transfers will continue).

Private consumption will probably carry the day. A 3% growth in private consumption in 2009 is quite likely for a number of reasons: (i) the household sector's debt is fairly low, only about 22% of the GDP; (ii) household disposable income has been positively influenced by the cut in social security premia; (iii) the same effect follows in the wake of the current rapid disinflation; (vi) despite the ongoing slowdown in production, residents' employment (and hence their wage incomes) will not necessarily suffer heavy losses.

The overall point-estimate of the GDP growth in 2009 is only 0.4% – less than the 1.5% currently projected by the Czech Ministry of Finance. Were the government to aspire to achieving a higher rate of growth, a pronounced relaxation of the fiscal policy would be required in the form of much higher spending rather than just cutting taxes, which has been the preferred policy of the present government. Unlike many other NMS, the Czech Republic would not run large risks by relaxing fiscal policy, as its public debt is reasonably low (as is its foreign debt), 80% of which devolves on the private sector. In addition, the banks are reportedly in good shape. Finally, the current account deficits are under control and low while foreign reserves exceed the country's short-term foreign debt by a very wide margin.

The prospects for 2010 should be much better, provided the recession in the 'old' EU comes to an end by the end of 2009, at the latest. The resumption of growth in the eurozone would boost Czech exports in 2010, with for a major impact on overall GDP growth.

Table CZ

Czech Republic: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹	⁾ 2009	2010 Forecas	2011 st
Population, th pers., average	10207.4	10216.0	10235.8	10269.1	10334.2	10427.9	10500	10550	10600
Gross domestic product, CZK bn, nom. ²⁾ annual change in % (real) ²⁾	2577.1 3.6	2814.8 4.5	2983.9 6.3	3215.6 6.8	3530.2 6.0	3720 3.5	3790 0.4	3970 2.4	4220 3.8
GDP/capita (EUR at exchange rate)	7900	8600	9800	11100	12300	14300	0.4	2.4	0.0
GDP/capita (EUR at PPP)	15200	16300	17100	18300	20000	20200			
Consumption of households, CZK bn, nom. ²⁾ annual change in % (real) ²⁾	1317.4	1399.2	1442.7	1543.0	1669.3				2
Gross fixed capital form., CZK bn, nom. ²⁾	6.0 687.5	2.9 727.2	2.5 741.9	5.4 792.4	5.2 857.7	3	2.5	3	3
annual change in % (real) ²⁾	0.4	3.9	1.8	6.5	6.7	4.5	-4	2	4
Gross industrial production									
annual change in % (real) 3)	5.5	9.6	6.7	11.1	9.0	0.4	2	3	5
Gross agricultural production		40.0		4.0	0.4				
annual change in % (real) Construction industry (build.& civil engin.)	-5.7	16.3	-2.0	-4.2	3.1	6.9	•	•	•
annual change in % (real) ³⁾	7.7	7.7	2.4	6.6	5.8	0.9			
Employed persons - LFS, th, average	4733.2	4706.6	4764.0	4828.1	4922.0	5002.5			
annual change in %	-0.7	-0.6	1.2	1.3	1.9	1.6	0	-0.5	0.5
Unemployed persons - LFS, th, average	399.1	425.9	410.2	371.7	276.6	229.8			
Unemployment rate - LFS, in %, average	7.8	8.3	7.9	7.1	5.3	4.4	6	6.0	5.5
Reg. unemployment rate, in %, end of period	10.3	9.5	8.9	7.7	6.0	6.0			
Average gross monthly wages, CZK ⁴⁾	16917	18041	18992	20219	21694	23450			
annual change in % (real, gross)	6.5	3.7	3.3	3.9	4.4	1.5	3	3.5	4
Consumer prices (HICP), % p.a.	-0.1	2.5	1.6	2.1	2.9	6.3	1.5	2.2	2.5
Producer prices in industry, % p.a.	0.1	4.9	1.4	0.1	2.6	0.0	•		•
General governm. budget, EU-def., % GDP ⁵⁾									
Revenues	40.7 47.3	42.2 45.1	41.4	41.2 43.8	41.6 42.6	41.0 42.2	40.5	40.0 42.0	•
Expenditures Net lending (+) / net borrowing (-)	-6.6	-2.9	45.0 -3.6	-2.7	-1.0	-1.2	42.5 -2.0	42.0 -2.0	-2.0
Public debt, EU-def., in % of GDP ⁵⁾	30.1	30.4	29.8	29.6	28.9	29.4	30.5	31.2	2.0
Discount rate of NB, % p.a., end of period	1.0	1.5	1.0	1.5	2.5	1.25	1.5	2	2.5
Current account, EUR mn Current account in % of GDP	-5028 -6.2	-4650 -5.3	-1346 -1.3	-2924 -2.6	-2270 -1.8	-4200 -2.8	-2500 -1.7	-2000 -1.3	-3000 -1.8
Exports of goods, BOP, EUR mn	43055	54091	62781	75706	89379	100000	95000	102000	110000
annual growth rate in %	5.8	25.6	16.1	20.6	18.1	12	-5	7	8
Imports of goods, BOP, EUR mn	45239	54517	60797	73415	85038	96000	91000	97000	103000
annual growth rate in %	5.1	20.5	11.5	20.8	15.8	13	-5	7	6
Exports of services, BOP, EUR mn	6880	7761	9491	11086	12493	15000			
annual growth rate in %	-8.3	12.8	22.3	16.8	12.7	20.1	•		•
Imports of services, BOP, EUR mn	6464	7245	8254	9449	10459	12000			•
annual growth rate in % FDI inflow, EUR mn	-4.9 1875	12.1 4009	13.9 9354	14.5 4363	10.7 6710	15 7000			•
FDI outflow, EUR mn	183	824	-12	1172	979	1000	•		
Gross reserves of NB excl. gold, EUR mn	21189	20745	24868	23684	23456	26339	26000		
Gross external debt, EUR mn	27624	33212	39379	43415	50669	65000	72000		
Gross external debt in % of GDP	34.7	35.9	38.3	37.1	38.2	47.0	43	42	42
Average exchange rate CZK/EUR	31.85	31.89	29.78	28.34	27.77	24.95	26.5	26.0	25.5
Purchasing power parity CZK/EUR	16.60	16.96	17.09	17.12	17.13	17.63			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprises with more than 20 employees, including part of the Ministry of Defence and the Ministry of the Interior. - 5) According to ESA'95, excessive deficit procedure.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Sándor Richter

Hungary: the home-made and the imported crisis

After years of lax fiscal policy from mid-2001 to mid-2006, a period of painful corrections has since set in. In the framework of an austerity package, the Hungarian general government deficit was reduced from over 10% of the GDP to below 4% by summer 2008. As a consequence of shrinking domestic demand, economic growth decelerated to about 1% in 2007; however, GDP data for the first two quarters of 2008 already hinted at an incipient upturn in growth. Those and other data suggested that the Hungarian economy had managed to pull through the most painful stage of fiscal adjustment. Recovery, however, was rudely interrupted by the international financial crisis last autumn. Despite the progress Hungary had achieved in curbing fiscal deficits in both 2007 and 2008, the country's image as one of the most vulnerable emerging market economies has persisted. In the middle of October 2008, amidst the enormous volatility surrounding the forint exchange rate, the market for Hungarian government bonds dried up despite the sky-rocketing yields offered. Sovereign CDS spreads rose sharply. Owing to the dependence of the Hungarian economy on external financing to rollover its huge debt (public and private external debt amounted to 114% of the GDP at end-September 2008), the threat of insolvency loomed large. It was only averted with the help of a EUR 20 billion financial package (EUR 12.5 billion stand-by agreement with the IMF, EUR 6.5 billion from the European Union (EU) and EUR 1 billion from the World Bank).

The main conditionality of the stand-by agreement is the reduction of the general government deficit from about 3.4% of GDP in 2008 to 2.6% in 2009. The assumptions in the stand-by agreement relating to the macroeconomic framework are: 0.9% contraction of the GDP, 4.5% annual average consumer price inflation and a decrease of more than 4 percentage points in the current account deficit compared to 2008. It is also assumed that both external borrowing by the government and external lending to the business sector will slow down appreciably.

In the four months since the stand-by agreement was concluded on 4 November 2008, external conditions have changed considerably. The growth prospects of Hungary's main export markets in the EU, both old and new members, have radically deteriorated. With falling energy prices and deflationary pressures in Europe, the Hungarian inflationary outlook had to be corrected downwards. Those two factors mean that the macro-economic framework envisaged in the assumptions for the 2009 budget and the IMF stand-by agreement are no longer valid. The recession will be deeper and inflation lower.

In assessing developments for 2009, it is expedient to review individual elements of the GDP. In 2009, household consumption will be affected by declining real wages in both the business and

public sectors; unemployment will increase; and credit will become more expensive and less readily available. Households with foreign exchange loans will have to reckon with a higher debt service in forint terms on account of a weaker exchange rate. Given the bleak outlook, households' propensity to save will most likely increase. Cuts in some social transfers cannot be excluded either, further to which a possible increase in the VAT rate may discourage consumption. The outcome may be a decline in household consumption of the order of 3% and 4%.

The investment outlook is bleak as well. Domestic demand is shrinking; the development of export markets is uncertain. On the financing side of investments, liquidity in the economy has generally shrunk and foreign investors cannot be counted on to provide substantial additional impetus. Profits will be lower, credits will be more expensive and conditionality stricter than before the crisis. The only expanding segment will be investment financed by EU transfers. This will accelerate as more and more commitments arising out of the 2007-2013 financial framework enter the implementation phase (roads, railway lines, schools, waste water treatment, logistics and tourism). The government has begun rearranging spending targets both across and within the operational programmes of the New Hungary Development Plan co-financed by the EU. Authorization procedures will be simplified and accelerated.

Net exports have become an important contributor to Hungarian economic growth ever since 2004. This year, they will be the only component in the GDP to contribute positively to a change in the GDP. Owing to the international crisis, both exports and imports are likely to contract; nevertheless imports will decline more rapidly than exports, as a consequence of the drop in domestic demand and lower energy prices. Although imports will decline in the main Hungarian export markets, the shrinkage of Hungarian exports may be proportionally less steep than the decline in imports in those markets. Over the past few years, Hungary has regularly managed to achieve export growth rates in its main foreign markets that were higher than these markets' overall import growth rates. Hungarian exports will be supported by the secondary effects of the counter-cyclical economic policy in the EU, primarily in Germany. This applies primarily to the automotive cluster. Exporters of both assembled cars and car components (such as engines produced for Audi, VW, Skoda and Seat models) may profit indirectly from the subsidies that the old EU member states are granting on the purchase of new cars. The automotive cluster accounts for roughly 20% of Hungary's exports.

In summary, a decline in consumption of about 3.5%, a drop in investment of about 5% and a somewhat more pronounced decline in imports (3%) than in exports (2%) may add up to a fall in the GDP of about 3% in 2009. In growth rate terms, that is equivalent to a deterioration of more than 3 percentage points compared to the previous year. Owing to all those uncertainties, this forecast is to be seen as the median value within a wide band of possible growth rates. In the ultimate analysis, real developments may culminate in a decline in GDP of up to 5%.

The government faces a triple challenge: immediate measures must be taken to ensure that the fiscal deficit corresponds to that agreed with the IMF; a boost will have to be given to domestic economic activities in order to minimize the recession; and reforms will have to be initiated to ensure the sustainability of fiscal improvements and lessen the employment-related tax burden on the

business sector. All these problems will have to be solved by a minority government struggling with a considerable credibility deficit.

On 16 February 2009 the government presented in broad strokes a major package of tax reform. *In toto*, the re-arrangement will have to be of the order of 1000 billion forint, amounting to some 4% of the GDP. On the one hand, the economy is to be stimulated by reducing employers' social security contributions from 32% to 27%, increasing the number of those taxed by the lower personal income tax rate (which in turn will be raised from 18% to 19%), as well as by scrapping the 4% so-called 'solidarity tax' on businesses and those individuals in the highest tax bracket. On the other hand, additional budget revenue will be generated by raising the VAT rate from 20% to 23% and slashing tax concessions. Corporate tax will be raised from 16% to 19%. Changes in government spending will impinge in part on social and welfare expenditure with the purpose to make them more focused on the really needy recipients. For the recipients, those transfers will be added to other income and taxed accordingly. In the course of this process, however, the position of those in the lowest income group will not worsen.

Besides curbing recession, the government will have other headaches this year. The IMF stand-by agreement expires in March 2010, by which time at the latest Hungary must have secured the external financing required to service the public debt. The question is when will the government be in a position to start issuing new government bonds once again – and on what terms. Another important issue is to ensure the continuous financing of the corporate sector. This will necessitate sufficient forex liquidity of the Hungarian banks. This will be largely determined by the behaviour of foreign mother companies (80% of the banks are foreign owned), availability of resources from other international creditors and the central bank's ability to set conditions which help ease the bottlenecks. A possible failure in this field poses one of the main risks for a deeper than the currently forecast recession.

In order to follow world-wide trends of low policy interest rates and depart from the currently very high real interest rates, the Monetary Council has already begun its cycle of interest rate cuts following the 300 basis point increase in October 2008. The prime rate, however, is still very high (9.5% in the third weak of February). In the very first days of February, the forint exchange rate dropped to 300 HUF/EUR, in concert with the weakening of the region's other currencies. A permanently weak forint might help the exporters of products with relatively low import content, yet it would impose inordinately on those households with foreign currency debts owing to the large debt-servicing burden in forint terms.

The forecasts for 2010 and even more so for 2011 are extremely uncertain. 2010 is an election year in Hungary; this usually bears detrimental consequences for the budget. This time, the conditions set by the IMF will hopefully not permit any new fiscal escapades. Under favourable external circumstances, modest economic growth may be recorded, based on a slight expansion in each of the main components of the GDP. Although it is assumed that growth will accelerate in 2011, the country will not return to the 4% growth path that it left in 2007 in that year either.

Table HU

Hungary: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008	¹⁾ 2009	2010 Forecas	2011 t
Population, th pers., average	10129.6	10107.1	10087.1	10071.4	10055.8	10037.6			
Gross domestic product, HUF bn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	18914.9 4.2 7400 13100	20695.4 4.8 8100 13700	21997.4 4.0 8800 14200	23785.2 4.1 8900 15000	25419.2 1.1 10100 15600	26800 0.3 10600 15700	26400 -3	27600 1.4	29300 3
Consumption of households, HUF bn, nom. ²⁾			11764.0					•	•
annual change in % (real) ²⁾ Gross fixed capital form., HUF bn, nom. ²⁾	8.3 4163.5	2.5 4649.4	3.4 5173.5	1.9 5130.8	0.7 5343.7	0	-3.5	0.5	2
annual change in % (real) ²⁾	2.2	7.9	8.5	-6.2	1.5	-2.5	-5	2	5
Gross industrial production annual change in % (real) Gross agricultural production	6.4	7.4	6.9	10.0	8.2	-1.1	-5	4	8
annual change in % (real) Construction industry (build.& civil engin.)	-7.1	24.1	-7.1	-2.9	-11.3	26.2	-10	0	2
annual change in % (real)	1.9	5.8	16.1	-1.5	-14.7	-5.1	0	4	10
Employed persons - LFS, th, average annual change in %	3921.9 1.3	3900.4 -0.5	3901.5 0.0	3930.0 0.7	3926.2 -0.1	3879.4 -1.2	•	•	
Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average	244.5 5.9	252.9 6.1	302.2 7.2	316.7 7.5	312.0 7.4	329.2 7.8	9	8.8	8
Reg. unemployment rate, in %, end of period	8.3	9.1	9.3	9.1	10.1	10.2	9	0.0	
Average gross monthly wages, HUF ³⁾ annual change in % (real, net)	137187 9.2	145520 -1.0	158343 6.3	171351 3.5	185017 -4.6	200000 1.0	•		•
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	4.7 2.4	6.8 3.5	3.5 4.7	4.0 6.5	7.9 1.9	6.0 5.6	3	3	3
General governm.budget, EU-def., % GDP 4)									
Revenues Expenditures	42.0 49.1	42.6 48.9	42.3 50.1	42.6 51.9	44.9 49.8	45.8 48.9	•		•
Net lending (+) / net borrowing (-)	-7.2	-6.4	-7.8	-9.3	-4.9	-3.1	-2.9	-2.7	-2.3
Public debt, EU-def., in % of GDP $^{4)}$	58.0	59.4	61.7	65.6	65.8	•		·	·
Base rate of NB, % p.a., end of period	12.5	9.5	6.0	8.0	7.5	10.0	-		
Current account, EUR mn ⁵⁾ Current account in % of GDP	-5933.0 -8.0	-7078.0 -8.6	-6655.0 -7.5	-6857.0 -7.6	-6307.0 -6.2	-6500 -6.1	-4500 -4.9	-5500 -5.5	-5700 -5.1
Exports of goods, BOP, EUR mn ⁵⁾			49672.3			72800	71300	74900	82400
annual growth rate in %	2.9	17.4	11.6	17.5	17.1	6.5	-2	5	10
Imports of goods, BOP, EUR mn ⁹ annual growth rate in %	40804.5 4.6	47369.2	51882.4 9.5	60433.0 16.5	68051.0 12.6	71790 5.5	69600 -3	72700 4.5	80000 10
Exports of services, BOP, EUR mn ⁵⁾	8122.5		10351.2			13640	13400	14100	15200
annual growth rate in %	3.9	6.8	19.4	2.7	17.1	9.6	-2	5	8
Imports of services, BOP, EUR mn ⁵⁾	8074.6		9218.7		11392.0	12540	12300	12900	13900
annual growth rate in % FDI inflow, EUR mn ⁵⁾	11.6 1887.5	1.4 3633.3	12.6	1.7 15991.0	21.5	10.1	-2	5	8
FDI outflow, EUR mn ⁵⁾	1463.3		1755.5			•	•	•	•
FDI inflow, excl. SPE, EUR mn	1887.5		6172.1			2500	1500	2500	3500
FDI outflow, excl. SPE, EUR mn	1463.4	892.1	1755.5	3126.3	2764.8	500	300	500	1000
Gross reserves of NB, excl. gold, EUR mn					16305.2				
Gross external debt, EUR mn Gross external debt in % of GDP	46041.1 63.9	55150.1 65.5	66607.8 76.6	81428.1 86.2	98265.9 98.1	122000 120.7	•		
Average exchange rate HUF/EUR Purchasing power parity HUF/EUR	253.62 142.58	251.66 149.88				251.51 170.23	290	275	260

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprises with more than 5 employees. - 4) According to ESA'95, excessive deficit procedure. - 5) From 2006 including Special Purpose Entities (SPE).

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Leon Podkaminer

Poland: a slowdown in the making

At 4.8%, the GDP growth rate in the third quarter of 2008 was still looking pretty good. However, the structure of growth changed remarkably. Growth of gross fixed capital formation slowed down abruptly to 3.5% (from over 15% in the first half of the year). Private consumption grew slightly less than in the first half of the year while public consumption stagnated as before. Exports of goods and non-factor services rose 7.1% in real terms as against a rise in imports of 5.9%. As a result, foreign trade contributed positively to overall growth for the first time since 2005. The provisional data for the whole year 2008 hint at a further marked deceleration in investment growth, somewhat faster growth in private consumption and a decline in imports and exports of goods and non-factor services. But the GDP growth in the fourth quarter of 2008 must have been very low.

The third quarter had left both the corporate non-financial sector and the banking system in an apparently good shape. Although the net profits earned by the former sector declined (from PLN 21.8 billion in the third quarter of 2007 to PLN 19.4 billion), the profitability rates remained high and the liquidity ratios did not change. At the end of the third quarter, the stock of short-term investments was some 20% higher than the stock of short-term liabilities to the banks and tax authorities combined. In the third quarter, banks also fared well, with net profits rising and the stock of credit assets matched by the stock of deposits.

Up until mid-January 2009, the Polish financial system had not been directly affected by the global turmoil. No financial institution based in Poland had gone bankrupt, nor had any institution requested public assistance. In common with the other new member states (NMS), the local (frequently foreign owned) banks had not got involved in the sub-prime market, because local business was lucrative enough. This also holds true for the local affiliates of foreign banks (such as Fortis) which have suffered heavy losses on their sub-prime exposures elsewhere. However, some indirect effects of external financial shocks have already made themselves felt. Even if the balance sheets of the local banks (including those that are foreign-owned) are as sound as claimed, their reputation has suffered. The financial stability indicators (that displayed excellent values at mid-year) must have actually deteriorated somewhat in the fourth guarter - for instance, on account of a major weakening of the Polish zloty (affecting the financial position of agents heavily indebted in foreign currencies) or owing to the abrupt weakening of overall economic growth observed in the closing months of 2008. The extent of the deterioration can be deduced from the provisional data on the banking system which show a sudden widening of the gap between the bank credits and deposits in domestic private sector. No doubt the rise in the stock of credits represents the effects of depreciation. (As elsewhere in the EU, mutual trust among banks has been impaired, bearing obvious consequences

for inter-bank lending – and, of course, for lending to the real economy). The gap in question has been closed by depreciation having inflated the banks' foreign liabilities, the nominal value of which rose from PLN 156 billion in September to 210 billion in December 2008.

The global financial crisis and the subsequent economic turmoil had many local repercussions in the fourth quarter of the year, the most visible of which was the spectacular weakening of the Polish currency. The average monthly PLN/EUR exchange rate rose from 3.37 in September to 4.02 in December – the level that had previously in 2000 and 2005. Abnormally steep devaluation followed in January-February 2009. The government intervention possibly prevented the rate from hitting the ceiling of 5. To some extent the depreciation has been a welcome development since the previously observed trend towards appreciation had been largely driven by unproductive capital inflows. The response of the real economy to the weaker currency should by and large be positive. According to the latest Business Climate Survey (published on 20 January 2009) the proportion of firms that view exchange rates as the factor restricting expansion dropped to 10% in the fourth quarter from 17% in the third. The share of unprofitable exports fell from 10% to 6%. Moreover, firms started to substitute domestic intermediate inputs for the inputs they had previously imported.

On the other hand the weak currency has been rather costly to the agents (including the government, households, banks and many non-financial firms) which have accumulated sizeable liabilities denominated in foreign currencies. Overall the rising burden of such liabilities has not yet been considered as overwhelming. However, it has just turned out that many non-financial firms have engaged in risky transactions. They issued foreign exchange (call) options just at the time when the zloty was abnormally strong. Then, the unexpected depreciation of the zloty has resulted in huge losses (estimated at PLN 16 billion) suffered by these firms. Huge gains have been recorded by their counterparties (i.e. the banks). No doubt these losses might well push too many firms into insolvency: of course, this would harm the banks themselves. Quite likely the government will seek – and find – a compromise solution that will restrict the losses and gains over the currency options' transactions.

The waning performance of industry is most ominous. Industrial production fell by over 5% in the fourth quarter, followed by a further contraction in January. Manufacture of motor vehicles was the branch most seriously affected. Furthermore, the value of orders placed with manufacturing fell precipitously (by close to 20% in December). The customs statistical data on foreign trade in the third quarter show a 3.7% contraction in the value (in euro terms) of exports (with unchanged value of imports). The value of machinery and transport equipment exports (accounting for over 40% of total exports in 2007) fell by 10.7% in October-November (after having risen by over 6% in the first three quarters of the year).

The negative production and trade developments have been hardly matched by a few positive trends, such as a marked decline in inflation, a drop in NBP interest rates and continuing growth (albeit at an ever slower pace) in both wages and employment in the corporate sector. The earlier wage and employment developments reflected, to some degree, the widespread labour shortages. These shortages are being swiftly eliminated. One can expect, with some delay, a drop in

employment and a rise in unemployment. This will slow down growth in wages and should slow down growth in unit labour costs.

Several unknowns enter the equation determining GDP growth in 2009, the first of which is the GDP growth rate in the EU itself (primarily in Germany); to a large extent, this will govern Poland's export performance. Otherwise, helped by PLN devaluation (which will probably be maintained in 2009), Poland's exports of goods and services need not fall much in real terms. On many markets the Polish products are likely to become attractive substitutes to expensive exports from the euro area countries. For several reasons, imports are likely to decline owing to lower dynamics household sector incomes and consumer demand, depreciated currency, lower demand for imported inputs in the export production, and probably somewhat weaker gross fixed investment. Falling interest rates and the continuing rather good financial position of the corporate sector suggest that investment in fixed assets need not decline much in 2009. The greatest problems are posed by the dynamics of private consumption, while public consumption may well remain constant. The correlation between private consumption growth rates and the GDP growth will remain very low - at least for the current decade. An estimate of a 3% growth rate in private consumption in 2009 seems quite conservative, especially in view of the level of household credit indebtedness that are still relatively low. All in all, our forecast for economic growth in 2009 is still in positive territory: a rare phenomenon in the EU even among the NMS.

The growth slowdown is likely to result in a return of the public sector fiscal deficit in excess of 3% of GDP. The government response to that happening is by no means predictable. Cutting spending in an effort to adjust it to falling tax revenue is likely to push the economy into recession – clearly a politically costly option. However, allowing the deficit to balloon would also seem quite hazardous at the present juncture. Understandably, the government's response to the European Recovery Plan has been to produce a programme that envisages no additional spending. A number of EU countries (not only Hungary and the Baltic States, but also the Mediterranean countries) have been recently facing difficulties in securing funds to meet their fiscal needs. The risk is that an attempt to safeguard that (external) financing may set off a further excessive devaluation pressure on the domestic currency. Poland's foreign debt is not very large in relative terms, yet the short-term debt is rather high compared to the official reserve assets which have been contracting since August and stood at EUR 46.1 billion in January 2009. In normal times, this configuration of assets and liabilities would be considered quite safe – but not under the current conditions.

Table PL

Poland: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹) 2009	2010 Forecas	2011 t
Population, th pers., average	38204.6	38182.2	38165.4	38141.3	38120.6	38123.0			
Gross domestic product, PLN bn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	843.2 3.9 5000 10100	924.5 5.3 5300 11000	983.3 3.6 6400 11500	1060.0 6.2 7100 12400	1167.8 6.6 8100 13300	1270 4.8 9500 13900	1330 1.5	1400 2.3	1490 3.8
Consumption of households, PLN bn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital form., PLN bn, nom. ²⁾ annual change in % (real) ²⁾	546.2 2.1 153.8 -0.1	589.4 4.7 167.2 6.4	614.3 2.1 179.2 6.5	652.8 5.0 208.3 14.9	701.1 5.0 253.8 17.6	5.4 7.9	3 -3	3 4	5 8
Gross industrial production (sales) ³⁾ annual change in % (real) Gross agricultural production annual change in % (real) Construction industry (build.& civil engin.) ³⁾ annual change in % (real)	8.8 -1.4	12.7 13.9	4.1 -0.7 9.1	12.0 -1.1 15.0	9.6 5.2 16.1	3.6 -4.0 12.7	2	8	8
annual change in % (real) Employed persons - LFS, th, average ⁴⁾			14115.6		15240.5	15620	•		
annual change in % Unemployed persons - LFS, th, average ⁴⁾ Unemployment rate - LFS, in %, average ⁴⁾ Reg. unemployment rate, in %, end of period ⁴⁾	0.6 3328.5 19.6 20.0	1.3 3230.3 19.0 19.1	2.3 3045.4 17.7 17.6	3.4 2344.3 13.8 14.8	4.4 1618.8 9.6 11.4	2.5 1250 8 9.5	-1 12	0.5 11	1 10
Average gross monthly wages, PLN annual change in % (real, gross)	2185.0 3.4	2273.4 0.7	2360.6 1.8	2476.9 4.0	2691.0 6.3	2960 5.5	2	3	4
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	0.7 2.6	3.6 7.1	2.1 0.7	1.3 2.2	2.6 2.3	4.2 2.6	3	2.6	2.5
General governm.budget, EU-def., % GDP ⁵⁾ Revenues Expenditures Net lending (+) / net borrowing (-) Public debt, EU-def., % of GDP ⁵⁾	38.4 44.6 -6.3 47.1	36.9 42.6 -5.7 45.7	39.0 43.3 -4.3 47.1	40.0 43.8 -3.8 47.7	40.0 42.0 -2.0 44.9	39.9 42.6 -2.7 45.9	39.0 43.0 -4.0 46.0	39.5 43.0 -3.5 45.5	40.0 42.5 -2.5 45.0
Discount rate of NB % p.a., end of period	5.8	7.0	4.8	4.3	5.3	5.3	4.3	4.5	4
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn annual growth rate in % Exports of services, BOP, EUR mn	-4878 -2.5 53836 9.1 58913 3.3 9850	-8166 -4.0 65847 22.3 70399 19.5 10815	-3016 -1.2 77562 17.8 79804 13.4 13105	-7443 -2.7 93382 20.4 98918 24.0 16349	-14587 -4.7 105883 13.4 118249 19.5 20930	-19454 -5.4 118722 12.1 134877 14.1 23554	-12000 -3.9 116400 -2.0 129000 -4.4	-4.4 130000 11.7	-16000 -4.3 139800 7.5 149800 7.0
annual growth rate in % Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	-6.6 9657 -1.1 4067 269	9.8 10787 11.7 10237 757	21.2 12520 16.1 8330 2767	24.8 15768 25.9 15737 7122	20930 28.0 17523 11.1 16672 3500	12.5 20452 16.7 11150 2679	· · · ·	· · ·	· · ·
Gross reserves of NB excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP Average exchange rate PLN/EUR	26083 85067 47.4 4.40	25870 95297 42.1 4.53	34535 112316 44.1 4.02	35237 128869 46.6 3.90	42675 158441 48.8 3.78	42107 187000 61.2 3.51	4.3	4.1	4.0
Purchasing power parity PLN/EUR	2.18	2.21	2.23	2.25	2.31	2.40			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprices with more than 10 employees. - 4) From 2003 according to census May 2002. - 5) According to ESA'95 excessive deficit procedure; forecast wiw estimate.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Gábor Hunya

Romania: on the verge of recession

Earlier wiiw forecasts warned that the overheating of the Romanian economy based on abundant external financing ultimately emerging in the form of extremely high current account deficits and currency appreciation would sooner or later require correction. That time has come: since September 2008 Romania has been sliding into an economic crisis. Currency depreciation and the decline in output have served as buffers to date, thus helping to avert a hard landing.

The EU-wide recession hit Romania at a most unfavourable point in time. Robust economic growth over several years up until the third quarter of 2008 (8.9% growth in the first three quarters of last year) generated formidable structural changes in output which led to improving competitiveness. The country established itself as a favoured FDI target and exports started to grow faster than imports. Although private consumption was by far the most decisive growth factor, fixed capital formation was also buoyant (up by 28% in the first three quarters of last year). Much of the recent boom was based on easy external borrowing by the private sector and the channelling of foreign funds into the country by foreign-owned banks. In October 2008 financial deadlock almost brought the economy to a sudden stop. Although it proved possible to overcome the short-term crisis, currency depreciation and interest rate hikes failed to provide a lasting solution. Growth is slowing down severely and an ultimate slide into recession cannot be ruled out.

The scale of the crisis is evidenced by the drop in industrial production, contraction of exports and currency depreciation over the past few months. Companies, especially large export-oriented foreign subsidiaries in the automotive, steel and machinery sectors, shifted to shorter working hours and some fifty thousand workers reportedly lost their jobs in December. Small and medium enterprises stopped payments and are soon expected to go out of business on a massive scale. Imports declined even more than exports; the current account deficit thus shrank in 2008. Retail and corporate bank loans still increased by 1.5% in December compared to November, but the annual growth rate of credits slowed down massively for the third consecutive month to 33.7% compared to 38.2% in November.

The outgoing government entered into unfounded social commitments and promised higher wages and pensions. The proliferation of budgetary spending in the last month of the previous year resulted in an unsustainable fiscal deficit (more than 5% of GDP in 2008). The new coalition government (social democrats and democratic-liberals) that was formed in December disposes of an overwhelming majority in parliament and enjoys the support of the President; it thus has all the prerequisites for assuming an active role in mitigating the economic crisis. Its capacity and means, however, are limited. As a first step, the new government discarded the budget previously set for

2009. The new targets include a consolidated budget deficit of 2% of GDP, 2.5% GDP growth and 5.3% inflation. It is also envisaged that wages and pensions will only rise apace with the rate of inflation. However, when employees pressed for wage increases and employers lobbied for financial support, they managed to delay the passage of the budget law until late February.

While the declared intention for to cut the deficit can only be welcomed, the scale of cuts seems unrealistic – all the more so as the budget is based on over-optimistic economic growth assumptions. We expect that expenditures cannot be cut all that much since unemployment benefits and other social outlays will have to increase. There is also pressure to soften the impact of the crisis on companies. The only real anti-crisis measure to date has been the decision to capitalize the state-owned savings banks CEC and the Eximbank. Extra financing may come from the EU, as much as 2% of GDP, part of which could be used to bolster public investment projects. For the latter projects, the government hopes to re-employ at least part of those construction workers who have been laid off.

We expect a stagnation of the economy in 2009, yet no outright recession. Investments will decline and consumption will hardly grow above the level of the previous year. On the positive side, with imports contracting more than exports, foreign trade will contribute positively to GDP. The current account will adjust sharply. Financing the gap will still prove highly problematic since FDI is bound to decline and external loans (if available at all) will be expensive. Romania is already in the high-risk category and investors, in yet another wave of negative sentiment, may lose confidence. Therefore, we do not exclude a further tightening of foreign financing. At this point of time, we can only stress that Romania remains highly exposed to external shocks and a hard landing leading ultimately to recession cannot be ruled out. Financial support from the EU and a stand-by agreement with the IMF would help to keep the economy going.

In the wake of the current crisis, social hardship will become even more acute. Unemployment is bound to increase sharply and wage expectations will not be fulfilled. Past experience suggests that social unrest will quite likely come to the fore. While import prices in EUR will fall, inflation will not drop very much owing to the currency losing strength. The employment situation may well become even more dire, if migrant workers start returning home. This may occur given the deteriorating employment situation in Spain and Italy. A significant part of the returnees may not immediately show up in the figures for the unemployed, but they will undoubtedly swell the ranks of the already overcrowded rural population. By another interpretation, migrants may not return as it is the experience up to now, since their relative situation abroad does not deteriorate compared to the home country due to exchange rate adjustments.

As things stand in mid-February 2009, recovery will not be robust – even in 2010 and 2011. We cannot expect external financing to rebound to its previous level; the country will have to switch to domestic savings. Consumption, therefore, will hardly recover next year and the current account deficit will have to be reduced still further. Recovery, however, can be expected in terms of both investments and FDI, should the core EU economies manage to expand. As a result of new investments, accelerated structural change and infrastructure modernization, the country may achieve medium-term economic growth of the order of 4-5%, two percentage points lower than before the crisis.

Table RO

Romania: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 st
Population, th pers., average	21742	21685	21634	21588	21547	21513			-
Gross domestic product, RON mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	197428 5.2 2400 6500	247368 8.5 2800 7400	288955 4.2 3700 7900	344651 7.9 4500 9100	412762 6.2 5800 10500	512000 7.8 6500 11400	540000 0	580000 1	630000 3
Consumption of households, RON mn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital formation, RON mn, nom. ²⁾ annual change in % (real) ²⁾	128438 8.4 42497 8.8	167644 15.8 53850 11.0	197069 10.1 68527 15.3	233135 12.9 88272 19.9	273063 11.7 125645 29.0	9.5 922	0 -7	1 3	3 10
Gross industrial production annual change in % (real) ³⁾ Gross agricultural production annual change in % (real) Construction industry (build.& civil engin.) annual change in % (real) ³⁾	3.1 7.5 6.9	5.3 18.1 8.9	2.0 -13.1 8.6	7.1 2.4 20.5	5.4 -17.7 34.0	0.9 19.4 26.0	-8	3	5
Employed persons - LFS, th, avgerage annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	9222.5 -0.1 691.8 7.0 7.4	9157.6 -0.7 799.5 8.0 6.3	9114.6 -0.5 704.5 7.2 5.9	9291.2 1.9 728.4 7.3 5.2	9353.3 0.7 640.9 6.4 4.0	9400 0.5 600 6.0 4.4		9	
Average gross monthly wages, RON annual change in % (real, net)	663.8 10.8	818.3 10.6	968.0 14.3	1146.0 8.8	1410.0 14.8	1742.2 14.0		•	•
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	15.3 19.5	11.9 19.1	9.1 10.5	6.6 11.6	4.9 8.1	7.9 15.8	5	5	4
General governm.budget, EU-def., % GDP ⁴⁾ Revenues Expenditures Net lending (+) / net borrowing (-) Public debt, EU-def., % of GDP ⁴⁾	32.1 33.6 -1.5 21.5	32.4 33.6 -1.2 18.8	32.3 33.5 -1.2 15.8	33.1 35.3 -2.2 12.4	34.7 37.3 -2.6 12.9	33.5 38.7 -5.2 14	-4	-5	-4
Discount rate of NB, % p.a., end of period $^{5)}$	20.41	17.96	7.50	8.75	7.50	10.25			
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn annual growth rate in % Exports of services, BOP, EUR mn annual growth rate in %	-3060 -5.8 15614 6.4 19569 12.3 2671 8.2	-5099 -8.4 18935 21.3 24258 24.0 2903 8.7	-6888 -8.6 22255 17.5 30061 23.9 4102 41.3	-10220 -10.5 25953 16.6 37765 25.6 5585 36.2	-16715 -13.5 29542 13.8 47365 25.4 6931 24.1	-16877 -12.1 33614 13.8 51813 9.4 8751 26.3	-10000 -8.0 30300 -10 41500 -20 8300 -5	-9000 -6.5 31200 3 41900 1 9100 10	-10000 -6.3 33400 7 44400 6 10000 10
Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	8.2 2609 5.9 1946 36	3116 19.4 5183 56	41.3 4451 42.8 5213 -24	5581 25.4 9060 338	24.1 6450 15.6 7271 206	20.3 7915 22.7 9000 -300	-5 7100 -10 4000 0	7800 10	8600 10
Gross reserves of NB excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP Average exchange rate RON/EUR	6367 17835 37.2 3.7551	10923 21505 34.2 4.0510	16785 30914 39.4 3.6209	21299 41234 40.5 3.5258	25325 58797 51.4 3.3328	26220 95000 74.6 3.6776	4.3	4.2	4.0
Purchasing power parity RON/EUR	1.3996	1.5442	1.6990	1.7618	1.8273	2.0832			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprises with more than 3 employees. - 4) According to ESA'95, excessive deficit procedure. - 5) Reference rate of NB.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Zdenek Lukas

Slovakia: after three-year boom, settling down to moderate growth

On 1 January 2009 Slovakia became the sixteenth country to join the eurozone. Since June 2008, when the conversion rate of the SKK to the euro was fixed, the process of adopting the euro has eased the impact of the financial crisis on the Slovak economy, providing a stable anchor for this small and very open economy. Whereas in the second half of 2008 the currencies in the neighbouring countries (the Czech Republic, Hungary and Poland) weakened against the euro at double-digit rates, the Slovak koruna stood firm.

Without doubt, the switch to the euro has removed the exchange rate risk and lowered both transaction and administrative costs for traders. The government hopes that the euro will attract more foreign investment and boost foreign trade, thus yielding a more rapid rise in the standard of living. However, with the Slovak koruna having appreciated by 28% over the period November 2005 to June 2008, imports have been made easier and exporters have come under heavy cost-related pressure. In fact, the strong currency has undermined Slovakia's competitiveness vis-à-vis its NMS neighbours – and hence the stability of the corporate sector. The pressure to rationalize has increased, with negative repercussions for both GDP growth and the labour market.

Despite weaker foreign demand (mostly in the final quarter), the GDP in Slovakia rose by 6.4% in 2008. Growth was driven in particular by household consumption and gross fixed capital formation. The former was stimulated by greater purchasing power attributable to rising employment and higher real incomes. Hitherto a major driving force behind GDP growth, exports lost momentum in the fourth quarter of 2008 when foreign demand plunged. Since the Slovak economy is extremely open, the impact of the global crisis has been felt quite strongly. After the extraordinarily high FDI-driven growth in the industrial sector in 2006 and 2007, the expansion of gross industrial output slowed down to 2% in 2008. As industrial employment (LFS data) rose by some 2%, labour productivity stagnated. With nominal wages rising by some 7%, unit labour costs went up. Nevertheless, the competitiveness of Slovak tradable goods still relies on relatively low nominal wages (and thus low unit labour costs). However, especially in the final two months of 2008, the effect of the financial crisis on the Slovak export-oriented industries became quite visible: output was down owing to a drop in global demand. The basic pillars of industry (predominantly in the hands of foreign investors) have been car manufacture, electro-technology, machinery and steel production. All of them were hit by falling foreign demand, recording a drop in output in the final months of 2008.

Owing to declining economic expansion, labour market conditions are worsening. Nevertheless, employment may drop only modestly as companies can reduce labour capacities by exploiting part-

time work and early retirement schemes. However, unemployment will rise with the return home of Slovak migrant from abroad in the wake of rationalization measures in the host countries.

On account of the global financial crisis, both the opportunities for potential strategic investors to gain access to loan financing and the trust between entrepreneurs and banks have also worsened in Slovakia. Furthermore, the drop in foreign demand will probably sweep the market clean as weaker (especially small) firms become susceptible to risk, although the government is trying to help by offering them guaranteed loans. Moreover, in an effort to preserve employment, the government plans to lend financial support to certain sectors which have yet to be explicitly identified. The sum envisaged for supporting employment is of the order of EUR 300 million or 0.4% of the GDP. Further suggestions are expected to emerge from the so-called 'crisis group' set up by the cabinet, the membership of which has been drawn from the ranks of the banking sector, trade unions and employers, as well as town and village administrations. This advisory body has set itself the priority task of trying to minimize the negative impact of the global crisis on the Slovak economy.

GDP growth will undoubtedly slow down in the years to come, primarily on account of the slump in foreign demand. In addition, seen from the supply-side perspective, industrial production in January 2009 was hit by energy shortages caused by the interruption of gas supplies from Russia via Ukraine. Because Slovakia relies fully on Russian gas and has no emergency storage capacities, the country was one of the hardest hit as some thousand Slovak companies were forced to cut back their gas consumption to a minimum for nearly two weeks. In addition to the problem of external supplies, Slovakia has also suffered some home-made energy shortages that will have an impact on the country's energy balance over the next few years. Pursuant to its commitment to the EU, Slovakia shut down the first reactor at the nuclear power-station in Jaslovske Bohunice at the end of 2006, followed by a second reactor two years later. Although, Slovenske Elektrarne (SE), a subsidiary of the Italian company Enel, has started to put the finishing touches to two units at the nuclear power plant in Mochovce, Slovakia currently has to import electricity.

Following the period of extraordinarily high economic expansion and despite the steep decline in external demand, the Slovak economy may maintain modest positive rates of growth over the years to come. The period of high FDI-inflows will definitely not return for a couple of years. However, little new production capacity will be required over the next two or three years, because the current under-exploited potential may suffice to accommodate lower demand, thus making for moderate GDP growth of around 2%. Compared to other EU countries, this is still relatively rapid economic expansion. For the most part, it will be driven by domestic demand because, in line with EU policy, the Slovak government will stimulate domestic demand by means of deficit spending. Generous social transfers will fuel household consumption. Thanks to EU transfers, the state will co-finance ambitious infrastructure projects and thus support economic expansion. Indeed, with public debt accounting for just 29% of GDP, Slovakia has more financial manoeuvring space in which to adopt extraordinary measures in these extraordinary times than most other EU countries. Nevertheless, Slovakia's first euro-denominated state budget deficit has been set at only 2.1% of the GDP for 2009, the lowest in recent history. However, given the pro-growth measures and the co-financing needs of the EU funds, the approved deficit seems highly optimistic – in the light of the slowdown in

economic growth and thus lower budgetary revenues. It is evident that, in the euro club, fiscal discipline will be sacrificed in favour of swifter recovery from recession. The foreign trade deficit will rise modestly, particularly on account of the sharp drop in foreign demand. However, the total external position will worsen only slightly as both the slowdown in GDP growth in Slovakia and the reduction of economic activities in the major trading countries will constrain foreign trade turnover in terms of both exports and imports.

Table SK

Slovak Republic: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 st
Population, th pers., average	5379.6	5382.4	5387.0	5391.4	5397.3	5406.0			
Gross domestic product, EUR-SKK mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	40607.1 4.7 5500 11500	45211.5 5.2 6300 12400	49315.2 6.5 7100 13500	55081.9 8.5 8300 15000	61501.1 10.4 10200 16700	66100 6.4 11800 17300	68100 2	70200 2	73800 3
Consumption of households, EUR-SKK mn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital form., EUR-SKK mn, nom. ²⁾ annual change in % (real) ²⁾	1.6	25327.5 4.2 10836.0 4.8	6.6	5.9	7.1	6 6	4 2	2 2	3 3
Gross industrial production annual change in % (real) ³⁾ Gross agricultural production annual change in % (real)	5.0 -3.7	4.2 12.5	3.6 -8.7	9.8 -2.9	13.2 -4.5	1.3 5.0	-3	0	2
Construction industry (build.& civil engin.) annual change in % (real) ³⁾	5.9	5.8	14.7	14.9	5.7	11.9			
Employed persons - LFS, th, average annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	2164.6 1.8 459.2 17.4 15.6	2170.4 0.3 480.7 18.1 13.1	2215.2 2.1 430.0 16.3 11.4	2302.3 3.9 355.4 13.4 9.4	2357.7 2.4 295.7 11.1 8.0	2438 3.4 270 10.0 8.4	11 9	12 10	12 10
Average gross monthly wages, EUR-SKK ⁴⁾ annual change in % (real, gross)	477 -2.0	525 2.5	573 6.3	623 3.3	669 4.3	730 5.0		•	
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a. ⁵⁾	8.4 8.3	7.5 2.6	2.8 5.4	4.3 5.7	1.9 -1.2	3.9 2.8	2 2	2 2	3 3
General governm.budget, EU-def., % GDP ⁶⁾ Revenues Expenditures Net lending (+) / net borrowing (-) Public debt, EU-def., in % of GDP ⁶⁾	37.4 40.1 -2.7 42.4	35.4 37.7 -2.3 41.4	35.3 38.1 -2.8 34.2	33.5 37.1 -3.5 30.4	32.7 34.6 -1.9 29.4	32.0 34.3 -2.3 28.8	-3.0	-3.0	-3.0
Discount rate of NB, % p.a., end of period	6.0	4.0	3.0	4.8	4.3	2.5			
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn annual growth rate in % Exports of services, BOP, EUR mn annual growth rate in %	-1747 -5.9 19359 26.8 19924 13.7 2912 -1.5	-2656 -7.8 22248 14.9 23485 17.9 3000 3.0	-3268 -8.5 25654 15.3 27571 17.4 3542 18.1	-3636 -8.2 33349 30.0 35817 29.9 4322 22.0	-3141 -5.7 42171 26.5 43009 20.1 5140 18.9	-4000 -6.3 48000 14 49000 14 6000 17	-4500 -6.6 48000 0 49000 1 6200 4	-4800 -6.8 49000 3 50000 3 6400 4	-5000 -6.8 51000 5 53000 5 6800 6
Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	2703 9.2 1914 219	2785 3.0 2441 -17	3285 18.0 1952 120	3790 15.4 3311 292	4752 25.4 2108 149	6000 26 1600 200	6400 6	6800 6	7200 6
Gross reserves of NB excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP	9338 14654 49.3	10605 17421 49.6	12567 22705 57.9	9639 24449 50.7	12277 30156 54.7	12600 39000 59.0		•	•
Average exchange rate EUR-SKK/EUR Purchasing power parity EUR-SKK/EUR	1.377 0.657	1.328 0.679	1.281 0.676	1.236 0.681	1.121 0.683	1.038 0.706	1.00	1.00	1.00

Note: Slovakia has introduced the Euro from 1 January 2009. For statistical purposes all time series in SKK as well as the exchange rates and PPP rates have been divided by the conversion factor 30.126 (SKK per EUR) to EUR-SKK.

The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) Enterprises with more than 20 employees. - 4) From 2006 including wages of armed forces. - 5) Until 2003 domestic output prices. - 6) According to ESA'95, excessive deficit procedure.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Hermine Vidovic

Slovenia: stimulus package to mitigate economic hardship

After a relatively good performance in the first half of the year (+5%), GDP growth slowed in the third quarter and probably continued to do so in the final quarter of 2008, ending up with 4.5% growth for the year as a whole. The deceleration of economic activities became particularly marked as of November; it was accompanied by a slowdown in the domestic banks' lending activities. Thanks to high investment being sustained in construction activities, that sector remained strong – up by 11%. After a hike in 2007, household consumption in 2008 returned to its average level of the past few years, but a slowdown in retail trade turnover (durable consumer goods) over the final quarter of the year points to further deceleration in the months to come. The contribution of foreign demand to GDP growth was negative. Inflationary pressures tapered off from July when inflation peaked (6.9%); in December consumer price inflation stood at 2.1%.

Industrial production growth slowed down from month to month and even turned negative for 2008 as a whole. Within manufacturing, production fell sharply in the leather and textiles sectors, as well as in the manufacture of food and wood products. Production in the car industry, Slovenia's largest exporter, decelerated from month to month owing to declining export demand. Some suppliers to the car industry have already been seriously affected by the crisis, for instance. Sava Tires (Goodyear) suspended production four times in the course of 2008.

The impact of the economic slowdown on the labour market has been moderate to date. National accounts data put the increase in employment at 3%, with particularly high growth in construction, business services, transport and communication. By contrast, LFS data indicate employment growth of a mere 0.5%. In 2008 unemployment reached an all-time record low: 4.5%; the registered unemployment rate stood at 6.9%. The Public Employment Service expects the number of unemployed to increase by 15,000 to 20,000 by the end of 2009. In response to growing unemployment in Slovenia, the government reduced the work permit quotas for foreigners in 2008.

Foreign trade dynamics decreased significantly, particularly in the last quarter of the year. However, imports grew at a much faster rate than exports, resulting in a widening of the trade deficit. Despite a rising surplus in the services trade, the current account deficit has doubled compared to a year earlier. This deterioration can be attributed to the higher prices of imported goods (food and energy), but also to a weakening of competitiveness following the introduction of the euro (prior to introducing the euro, the Slovene National Bank pursued a policy of steady exchange rate depreciation). As opposed to the past few years when Slovenia was a net exporter of FDI, the country's inward FDI slightly exceeded outward FDI in 2008. Gross foreign indebtedness continued to grow and

amounted to EUR 40 billion by the end of October: EUR 5.3 billion more than at the end of 2007. In order to enhance bank liquidity, Slovenia issued a three-year eurobond worth 1 EUR billion in late January. About 80% came from foreign and 20% from domestic investors.

In December 2008 the government announced a stimulus package worth EUR 858 million to counteract the overall economic crisis. The package represents more than 2% of Slovenia's GDP. Accordingly the general government deficit is forecast to widen to 3-4% of the GDP in 2009 (from 0.1% in 2008), but should narrow again in 2010. One of its centrepieces is the provision of subsidies to enterprises that shorten weekly working to below 40 hours in order to prevent lay offs amid falling demand. Subsidies are granted for a six-month period during which time the companies involved in the programme are not allowed to lay off workers and pay out bonuses to management. The measure came into effect as of February. According to the Slovene Employment Service about 70 companies employing around 35,000 workers have already expressed interest in to participating in programme. The keenest interest has been expressed by companies from the automotive and transport sectors and the timber and steel industries.

In addition, the Slovene government aims at improving liquidity by offering tax breaks for investments in small firms. According to the amendments to the corporate tax act, companies may claim a reduction of the tax base equal to 30% of investments made in equipment and non-tangible assets. However, the amendment limits the absolute tax break to EUR 30,000. In mid-November 2008, the Slovene parliament had already adopted an amendment to the Banking Act introducing unlimited state guarantees on deposits.

Economic activity is expected to slow down substantially in 2009 owing to weaker domestic and foreign demand. In particular, investment growth, which has been a key driving force over the past few years, will turn negative. Given the poor economic prospects for Slovenia's main export partners, export growth will cool down substantially. This will affect most manufacturing and some services sectors, such as transport and tourism. wiw expects GDP growth to stagnate at best in 2009, before rebounding somewhat in 2010. Construction may suffer heavily from the restricted access to credits, since strong growth over the past few years was primarily credit-financed. Inflation – a major problem up until mid-2008 – should diminish still further. Along with the downturn in the production sector and to a lesser extent in the services sector, we expect a decline in employment over the coming two years; at the same time, LFS unemployment will rise to 6%. Consequently, we expect a slowdown in household consumption; this assumption is also supported by the most recent consumer confidence indicators, which point to an all-time low in January, underscoring the fact that households are tending to postpone their purchasing decisions. Assuming a drop in investment growth, the import growth rate should taper off; hence, both the trade and current account deficits may diminish somewhat.

Table SI

Slovenia: Selected Economic Indicators

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 st
	Population, th pers., average	1995.7	1997.0	2000.5	2006.9	2018.1	2039.6			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate)	2.8 12900	4.3 13600	4.4 14400	5.9 15400	6.8 17100	4.4 18600			43170 4
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	annual change in % (real) ²⁾ Gross fixed capital form., EUR mn, nom. ²⁾	3.3 6015.4	2.8 6752.1	2.8 7263.2	2.8 8161.5	5.3 9477.5	3 10700			3 7
annual change in %-1.45.10.71.32.51.0Unemployed persons - LFS, th, average656466615046Unemployment rate - LFS, in %, average676.36.56.04.84.55.554.Reg. unemployment rate, in %, end of period11.010.110.28.67.36.96.96.86.8Average gross monthly wages, EUR ⁵⁾ 105711171157121312851391annual change in % (real, net) ⁵⁾ 1.82.13.52.54.22.0Consumer prices (HICP), % p.a.5.73.72.52.53.85.52.52.5Producer prices in industry, % p.a.1.32.61.92.34.13.932.3General governm.budget, EU-def., % GDP ⁶⁾ Revenues43.743.643.843.342.942.2Expenditures46.445.845.344.542.442.7Net lending (+) / net borrowing (-)-2.7-2.2-1.4-1.20.5-3.5-2.0-1.4Discount rate of NB, % p.a., end of period ⁷⁰ 5.03.33.83.84.02.5Current account in % of GDP-0.8-2.6-1.7-2.5-4.2-6.3-5.8-4.94.4Exports of goods, BO	annual change ⁱⁿ % (real) ³⁾ Gross agricultural production annual change in % (real) Construction industry (build.& civil engin.)	-13.0	19.0	-1.2	-7.4	2.6	-4.5	-2	2	3
annual change in % (real, net) 51 1.82.13.52.54.22.0.Consumer prices (HICP), % p.a.5.73.72.52.53.85.52.52.5Producer prices in industry, % p.a.1.32.61.92.34.13.932.3General governm.budget, EU-def., % GDP 61 Revenues43.743.643.843.342.942.2Revenues43.743.643.843.342.942.2Net lending (+) / net borrowing (-)-2.7-2.2-1.4-1.20.5-0.5-3.5-2.0-1.1Public debt, EU-def., in % of GDP 61 27.527.227.026.723.421.8Discount rate of NB, % p.a., end of period 71 5.03.33.83.84.02.5Current account, EUR mn-195.7-719.7-497.6-772.0-1455.0-2400-2270-1980-2000Current account in % of GDP-0.8-2.6-1.7-2.5-4.2-6.3-5.84.94.9Asports of goods, BOP, EUR mn11417.11292.81459.217028.01979.020300204002140023100annual growth rate in %5.416.612.116.318.18.013.5Exports of services, BOP, EUR mn1444.9218.53573.04291.050605200<	Employed persons - LFS, th, average annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average	-1.4 65 6.7	5.1 64 6.3	0.7 66 6.5	1.3 61 6.0	2.5 50 4.8	1.0 46 4.5	5.5		4.5 6.8
Producer prices in industry, % p.a.1.32.61.92.34.13.932.3General governm.budget, EU-def., % GDP ⁶⁾ Revenues43.743.643.843.342.942.2Expenditures46.445.845.344.542.442.7Net lending (+) / net borrowing (-)-2.7-2.2-1.4-1.20.5-0.5-3.5-2.0-1.7Public debt, EU-def., in % of GDP ⁶⁾ 27.527.227.026.723.421.8Discount rate of NB, % p.a., end of period ⁷⁾ 5.03.33.83.84.02.5Current account, EUR mn-195.7-719.7-497.6-772.0-1455.0-2400-2270-1980-200Current account in % of GDP-0.8-2.6-1.7-2.54.2-6.3-5.8-4.9-4.Exports of goods, BOP, EUR mn11417.112932.814599.21702.8.01979.02030020400214002310annual growth rate in %3.013.312.916.616.33.005Imports of services, BOP, EUR mn11959.913941.615625.01817.021465.02318023400242002570annual growth rate in %1.012.915.511.220.117.9251Imports of services, BOP, EUR mn1924.72095.02										•
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Current account in % of GDP -0.8 -2.6 -1.7 -2.5 -4.2 -6.3 -5.8 -4.9 -4. Exports of goods, BOP, EUR mn 11417.1 12932.8 14599.2 17028.0 19799.0 20390 20400 21400 2310 annual growth rate in % 3.0 13.3 12.9 16.6 16.3 3.0 0 5 Imports of goods, BOP, EUR mn 11959.9 13941.6 15625.0 18179.0 21465.0 23180 23400 24200 2570 annual growth rate in % 5.4 16.6 12.1 16.3 18.1 8.0 1 3.5 Exports of services, BOP, EUR mn 2464.9 2782.6 3213.5 3573.0 4291.0 5060 5200 5500 610 annual growth rate in % 1.0 12.9 15.5 11.2 20.1 17.9 2 5 1 Imports of services, BOP, EUR mn 1924.7 2095.0 2293.5 2580.0 3098.0 3350 3500 3700 410 annual growth rate in % 5.8 8.8 9.5	Discount rate of NB, % p.a., end of period $^{7)}$	5.0	3.3	3.8	3.8	4.0	2.5			
annual growth rate in % 1.0 12.9 15.5 11.2 20.1 17.9 2 5 1 Imports of services, BOP, EUR mn 1924.7 2095.0 2293.5 2580.0 3098.0 3350 3500 3700 410 annual growth rate in % 5.8 8.8 9.5 12.5 20.1 8.1 4 7 1 FDI inflow, EUR mn 270.5 665.2 472.6 514.0 1050.0 1100 . . . FDI outflow, EUR mn 421.3 441.0 515.6 687.0 1318.0 1000 . . . Gross reserves of NB excl. gold, EUR mn ⁸⁾ 6798.2 6464.0 6824.1 5341.7 669.7 623.7 . .	Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn	-0.8 11417.1 3.0 11959.9	-2.6 12932.8 13.3 13941.6 16.6	-1.7 14599.2 12.9 15625.0 12.1	-2.5 17028.0 16.6 18179.0	-4.2 19799.0 16.3 21465.0	-6.3 20390 3.0 23180	-5.8 20400 0 23400 1	-4.9 21400 5 24200	-2000 -4.6 23100 8 25700 6
	annual growth rate in % Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn	1.0 1924.7 5.8 270.5	12.9 2095.0 8.8 665.2	15.5 2293.5 9.5 472.6	11.2 2580.0 12.5 514.0	20.1 3098.0 20.1 1050.0	17.9 3350 8.1 1100	2 3500	5 3700	6100 10 4100 10
Gross external debt, EUR mn 13225 15343 20496 24067 34752 39550 . . Gross external debt in % of GDP 52.7 56.7 71.4 77.6 100.8 104.1 . Average exchange rate EUR/EUR 0.975 0.997 1.000 1.000 . . . Purchasing power parity EUR/EUR 0.728 0.725 0.730 0.745 0.768 0.799 . .	Gross external debt, EUR mn Gross external debt in % of GDP Average exchange rate EUR/EUR	13225 52.7 0.975	15343 56.7 0.997	20496 71.4 1.000	24067 77.6 1.000	34752 100.8	39550 104.1			

Note: The term 'industry' refers to NACE classification C+D+E.

Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) From 2004 new methodology. - 4) Enterprises with at least 20 employees . - 5) From January 2005 including legal persons with 1 or 2 employees in private sector.
- 6) According to ESA'95, excessive deficit procedure. - 7) Main refinancing rate, from 2007 for euro area. - 8) From January 2007 (euro introduction) only the foreign currency reserves nominated in non-euro currency are included.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Sebastian Leitner

Baltic States: an imbalanced growth model in tatters

The Baltic countries are experiencing the deepest economic crisis since the transitional recession following the break-up of the Soviet Union in the early nineties. The slump in investment and household consumption that followed hot on the heels of a seven-year credit-induced boom has been compounded by low external demand and pro-cyclical fiscal policies. All three countries will have to face up to a severe and protracted bust throughout the period 2009-2010.

Latvia on the brink of collapse

In the region as a whole, Latvia is the country that has been hit hardest by the downturn in economic activity. Until the end of 2007, soaring internal demand led to an overheated economy, accompanied by a current account deficit of 24%. By the end of 2007, gross external debt had risen to a spiralling 134% of GDP. The increase in credit costs that had started in the second half of 2007 led to the model of externally financed growth collapsing in 2008.

Although gross wages continued to rise appreciably in real terms throughout 2008, the rise in consumer price inflation to almost 16% annually and the looming economic slowdown led to a slump in consumer confidence and the ability of households to extent their debt burdens any further. Subsequently, throughout 2008 household consumption finally abandoned its former role as for the driver of economic growth and shrank by almost 6% year-on-year. Capital investments also slumped from the second quarter of 2008 onwards. The only good news is that imports fell apace with the drop in domestic demand; the current account deficit thus dropped sharply to 13% of GDP.

The severe economic downturn and the impact of the international financial crisis have had a dramatic impact on the Latvian banking sector. Parex, the second largest bank in the country and at the same time the largest financial institution in the region that is not foreign-owned, faced serious liquidity problems in the wake of a massive withdrawal of deposits in the second half of 2008. In order to avert bankruptcy, the Latvian government took over 85% of the bank in December. The loss of confidence in the Latvian banking sector in general led to an outflow of funds and a substantial reduction in the foreign currency reserves held by the Latvian national bank.

At the same time, the Latvian government's refinancing endeavours took a major turn for the worse when Latvian credit default swap rates escalated in line with Parex Bank bond spreads. Despite the country's public debt running to some 16% at the end of 2008 and its being much lower than that of Hungary (and that of many other New Member States), Latvia's eurobond-denominated sovereign spreads rose to the Hungarian levels. Major financial players, it would seem, were challenging the
Latvian government's ability to serve the liquidity needs of its affected banking system during an economic downturn.

IMF and the EU bail the country out

In view of the appreciable amount of funds needed to finance the balance of payments and given the Latvian government's intention to keep the lat pegged to the euro, it had to call both the IMF and the EU to the rescue. The support package agreed upon in December 2008 with the IMF and accepted by the EU ministers of finance in January 2009 comprises EUR 7.5 billion for the period 2009-2011 in total (equivalent to approx. 1/3 of the GDP in Latvia in 2008). The support package has also been funded by the World Bank and the EBRD, as well as by the Scandinavian countries, the Czech Republic, Poland and Estonia.

In the agreement it concluded, the Latvian government committed itself to reversing its budget plans dramatically, thereby shifting to the pursuance of pro-cyclical fiscal policy. The deterioration of the economy led to a steep drop in government revenues in 2008, particularly in terms of VAT; the targeted surplus turned into a general government deficit of 3% by the end of the year. The forecasts for 2009 showed that had expenditure plans been left unchanged, the fiscal deficit would have run to double digits. On 11 December the Parliament adopted a revised budget plan. The most important changes are an increase in the VAT rate from 18% to 21% (it already entered into effect in January 2009) and a swingeing blow (15% on average) to civil servants' wages. To nobody's surprise, the government's austerity package provoked public opposition. For the first time since the early 1990s, violent riots followed in the wake of a protest demonstration of some 10,000 people in Riga on 13 January 2009. The rising public pressure against the government led to the resignation of Prime Minister Godmanis on 20 February after losing the confidence of two of the four parties having formed the coalition government. In spite of calls for snap elections, leaders of the People's Party, the Green Party and the now opposition party New Era started talks to form a new government.

Obviously the question arises as to why the Latvian government opted for a massively unpopular austerity package rather than deciding to align the real effective exchange rate that was clearly overvalued by giving up the currency peg of lats against the euro and so devalue the domestic currency. Apparently, since more than 90% of credits to the private sector are denominated in foreign currency, a devaluation of the lat might have evoked even more resistance. The IMF argues that the balance-sheet effects of devaluation would have yielded massive defaults in households and enterprises alike. Moreover, the eagerness of other countries to help Latvia retain the peg underlines fears of a devalued lats possibly infecting the region – not only for the Baltic neighbours, but also other currency board or pegged currency arrangements in the New Member States and Southeast Europe.

Stabilization or deflationary disaster ahead?

The above notwithstanding, it is debatable whether opting for 'internal devaluation', and so attempting to correct the real value of a currency via wage and price cuts is a better means of preventing defaults. The substantial reduction of domestic demand that the government envisaged is expected to trigger a significant rise in unemployment and thus incurs the risk of a deflationary

process. If deflation should come about, the aim of gaining in terms of external competitiveness would be followed by a rise in debt burdens in real terms – just as it would be in the case of a nominal devaluation. Moreover, it is questionable whether improvements in price competitiveness will ultimately lead to a substantial rise in external demand over the short term, given the poor economic situation of the main trading partners.

In any case, the slump in domestic demand in Latvia aggravated by the pronounced pro-cyclical fiscal policies will induce a severe reduction in GDP – no less than 8% in 2009. The rise in unemployment and the dampening of demand via wage cuts will lead to another year of recession in 2010. From 2011 onwards, we expect consumption and investments to bottom out on the assumption that credit flows will ease. Moreover, we assume that export growth will gradually bolster overall economic growth. However, the stabilization package agreed upon with the IMF will obviously lead to severe social tensions as soon as it generates a substantial deterioration in labour market situation and an upsurge in defaults.

Estonia: even further down the road to recession

The economic situation in Estonia is no less dramatic than that faced by its southern Baltic neighbour. When the housing bubble in Estonia burst in 2007, it became clear that (particularly Swedish) parent banks would have to reassess their exposure to risk in the Baltic countries. The subsequent rise in credit costs and restricted availability of loans led to a significant decline in both household consumption and capital investments. Moreover, exports and industrial production alike plummeted in 2008 in all manufacturing sectors, owing to the loss in competitiveness brought about by double digit annual wage increases in previous years. Since Finland and Sweden, Estonia's main trading partners, are expected to face a recession of about 2% in 2009, exports of goods and services are likely to fall in 2009 even more than in 2008.

The prudent fiscal policies that the Estonian government pursued during the Baltic boom years have resulted in an accumulation of budget reserves. This has allowed the Estonian government to exercise restraint over its external refinancing needs during the bust phase and also keep budget deficits within a reasonable range in the years to come. However, the Estonian government also had to adopt an austerity programme at the beginning of February, comprising 10 % (on average) cuts in civil servants' wages and VAT exemptions being lifted for selected consumer goods and services. Moreover, Estonia announced its intention to ask the European Investment Bank for credit amounting to EUR 100 million annually so that it would be able to co-finance EU funded public investment projects over the next four years.

Recent estimates of GDP decline in 2009 range between 5% and 10%. The underlying causes of the recession diverge only marginally from those to be observed in Latvia. Since domestic demand will fail to revive in 2010 owing to the accumulated debt burden in both households and enterprises and labour market conditions having substantially worsened, the Estonian economy will not return to a positive growth path before 2011. Obviously, our forecast is based on the assumption that the situation of the country's trading partners in Scandinavia will improve in 2010, thus offering Estonia a stabilization via goods and services exports at a somewhat earlier juncture than its Baltic neighbours.

Lithuania en route to bust

2009, the year in which Vilnius was designated the European capital of culture, started with violent protests against the austerity package announced by the government on 16 January. Although a GDP growth rate of 3.2% still proved possible for 2008, figures for the most recent months indicate that the Lithuanian economy is following in the footsteps of Estonia and Latvia and entering a severe recession. Household consumption and investments alike are expected to slump in 2009; this should result in a GDP decline of no less than 5%. Since neither domestic nor external demand is likely to revive next year, Lithuania will not experience gradual economic recovery before 2011.

The new right-wing coalition government, which took up office in December 2008, reacted to the expected drop in tax revenues by adopting a series of measures which include a broadening of the income tax base (thus increasing the tax burden especially on those earning low incomes in the informal sector) and lifting certain VAT exemptions. Moreover, a cut in nominal wages of civil servants of on average 12% was concluded.

The exceptional growth rate of exports in 2008, which was mostly due to the refurbishment of the Mazeiku Nafta refinery at the beginning of the year and high export prices for fuel, will drop throughout the current year. Moreover, many Lithuanian export firms will suffer substantial losses over a protracted period of time owing to the economic slowdown in Russia and bust in Ukraine. Both countries together accounted for more than 25% of Lithuania's trade volume in 2008.

At the beginning of 2010 Lithuania will have to shut down the nuclear power plant at Ignalina in order to meet its obligations specified in the EU-accession treaty. The subsequent inevitable rise in energy imports will not only worsen the current account balance, but also contribute to a rise in domestic prices.

A final remark

It comes as no surprise that Estonia and Lithuania have upheld their pledge to abide by their currency board arrangements (in the case of Latvia the hard peg) despite the dramatic bust that followed the boom in the region. Although the immediate effect of the Latvian rescue package has been a reduction of the pressure on the lats, the ability of all three Baltic States to weather the challenge of 'internal devaluation' will be put to the test throughout the recessionary phase extending over the next two years. Even if the measures implemented lead to an improvement in external competitiveness, the countries will not be able to revert to a sustainable growth pattern, unless they reorientate their economic output from the current inflated construction and service activities towards the production of tradable goods. Since restructuring on that scale, if at all feasible, requires several years to work itself out, we expect unemployment to remain high in the years to come. Similar to the years following EU accession, the strategy of the unemployed might be to emigrate in search of a job in an attempt to cope with the situation, even though that option today is less promising than it once was.

Table EE

Estonia: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹) 2009	2010 Forecas	2011 st
Population, th pers., average	1353.6	1349.3	1346.1	1343.5	1341.7	1340.6			
Gross domestic product, EEK mn, nom. ²⁾ annual change, % (real) ²⁾	136010 7.1	7.5	173530 9.2	10.4	238929 6.3	256600 -3.5	241000 -7	227900 -3.5	224500 0.5
GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	6400 11300	7100 12400	8200 13700	9700 15400	11400 16900	12200 16700			
Consumption of households, EEK mn, nom. $^{2)}$ annual change in % (real) $^{2)}$	74148 10.0	82868 9.6	94112 9.7	110497 12.8	128533 7.9	137400 -2.5	129100 -7	124000 -2	121500 0
Gross fixed capital form., EEK mn, nom ²⁾ annual change in % (real) ²⁾	43089 18.6	46805 5.2	53293 9.4	69462 19.5	77570 4.8	82000 -3.5	74500 -10	70800 -3	70400 1.5
Gross industrial production annual change in % (real)	10.9	10.5	11.0	9.9	6.6	-6.5	-7	0	2
Gross agricultural production annual change in % (real)	-2.0	3.1	6.6	-2.1	12.3	-9.9			
Construction industry annual change in % (real)	6.0	11.1	23.0	27.8	9.8	-13.0			
Employed persons - LFS, th, average	594.3	595.5	607.4	646.3	655.3	650			
annual change in % Unemployed persons - LFS, th, average	1.5 66.2	0.2 63.6	2.0 52.2	6.4 40.5	1.4 32.0	-0.8 37.8	•	•	•
Unemployeed persons - LFS, in %, average	10.0	9.6	7.9	-0.5 5.9	4.7	5.5	10.5	13	15
Reg. unemployment rate, in %, end of period	4.4	3.5	2.7	1.4	2.2	4.7			
Average gross monthly wages, EEK annual change in % (real, gross)	6723 8.0	7287 5.2	8073 6.4	9407 11.6	11336 13.0	13000 7.5			•
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	1.4 0.2	3.0 2.8	4.1 2.1	4.5 4.5	6.7 8.3	10.6 7.2	2	-1	-1
General governm. budget, EU-def., % GDP ³⁾									
Revenues	36.6	35.7	35.5	37.1	38.2	34.5	•	•	•
Expenditures Net lending (+) / net borrowing (-)	34.9 1.7	34.1 1.7	34.0 1.5	34.2 2.9	35.5 2.7	36.5 -2.0	-4.0	-3.0	-2.5
Public debt in % of GDP ³⁾	5.6	5.0	4.5	4.3	3.5	-2.0	-4.0	-5.0	-2.5
Money market rate, % p.a., end of period $^{\rm 4)}$	2.6	2.4	2.5	3.8	7.0	7.1			
Current account, EUR mn		-1130.0				-1400	-900	-800	-900
Current account in % of GDP Exports of goods, BOP, EUR mn	-11.3 4054.8	-11.7 4730.3	-10.0 6280.1	-16.7 7761.0	-18.1 8076.0	-8.5 8000	-5.8 7100	-5.5 7300	-6.3 7900
annual growth rate in %	4034.8	4730.3	32.8	23.6	4.1	-1	-11	3	8
Imports of goods, BOP, EUR mn	5430.3	6333.3		10159.0		9700	8500	8600	9500
annual growth rate in %	11.2	16.6	23.5	29.9	5.9	-10	-12	1	10
Exports of services, BOP, EUR mn	1960.4	2293.7	2571.1	2787.0	3199.0	3200	3000	3100	3300
annual growth rate in %	8.9	17.0	12.1	8.4	14.8	0	-6	3	6
Imports of services, BOP, EUR mn	1227.0	1404.2	1733.7	1938.0	2237.0	2100	1900	2000	2200
annual growth rate in %	5.1	14.4	23.5	11.8	15.4	-6	-10	5	10
FDI inflow, EUR mn FDI outflow, EUR mn	822.2 137.4	770.8 216.6	2302.2 556.0	1432.0 883.0	1963.0 1152.0	1300 700	700 300	•	•
Gross reserves of NB excl. gold, EUR mn	1095.5			2115.0		2900			
Gross external debt, EUR mn Gross external debt in % of GDP	5603.2 64.5	7339.7 76.0	9553.3 86.1	12802.4 97.7	17165.6 112.4	19200 117.1			•
Average exchange rate EEK/EUR	15 6466	15.6466	15 6466	15 6466	15 6466	15 6/66	15.65	15.65	15.65
Purchasing power parity EEK/EUR		9.0215							

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) According to ESA'95, excessive deficit procedure. - 4) TALIBOR 1 month interbank offered rate.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.

Table LV

Latvia: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹	¹⁾ 2009	2010 Forecas	2011 t
Population, th pers., average	2325.3	2312.8	2300.5	2287.9	2276.1	2266.0			
Gross domestic product, LVL mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate)	6392.8 7.2 4300	7434.5 8.7 4800	9059.1 10.6 5700	11171.7 11.9 7000	13957.4 10.2 8800	15600 -2.8 9800	14600 -8	13600 -4	13300 0
GDP/capita (EUR at PPP)	9000	9900	10900	12400	13600	13300			
Consumption of households, LVL mn, nom. $^{2)}$ annual change in % (real) $^{2)}$	3972.7 8.2	4605.9 9.1	5578.2 11.3	7184.2 20.0	8944.2 13.8	9700 -5.5	9100 -8	8500 -4	8400 0.5
Gross fixed capital form., LVL mn, nom. ²⁾	1559.8	2041.8	2773.8	3644.1	4542.1	4900	4500	4200	4200
annual change in % (real) ²⁾	12.3	23.8	23.6	18.3	10.3	-6.5	-10	-4	1
Gross industrial production ³⁾ annual change in % (real) Gross agricultural production	6.8	7.0	5.9	5.3	0.7	-6.7	-12	-5	2
annual change in % (real) Construction industry	7.1	4.5	11.8	-1.9	10.8	-0.7			
annual change in % (real)	13.1	13.1	15.4	13.3	13.6	1.0			
Employed persons - LFS, th, average annual change in %	1006.9 1.8	1017.7 1.1	1033.7 1.6	1087.1 5.2	1118.0 2.8	1120 0.2			
Unemployed persons - LFS, th, average	119.2	118.6	101.0	79.5	71.3	88.0			
Unemployment rate - LFS, in %, average	10.6	10.4	8.9	6.8	6.0	7.2	12	15	16
Reg. unemployment rate, in %, end of period	8.6	8.5	7.4	6.5	4.9	7.0			
Average gross monthly wages, LVL annual change in % (real, gross)	192 7.8	211 2.4	246 9.7	302 15.6	398 19.9	480 4.0	•	•	
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	2.9 3.2	6.2 8.6	6.9 7.8	6.6 10.3	10.1 16.1	15.2 11.5	3	-2	-1
General government budget, EU-def., % GDP 4)									
Revenues	33.2	34.7	35.2	37.7	37.7	36.5	•	•	
Expenditures	34.8	35.8	35.6	37.9	37.7	38.0			
Net lending (+) / net borrowing (-) $^{4)}$ Public debt, EU-def., in % of GDP $^{5)}$	-1.6 14.6	-1.0 14.9	-0.4 12.4	-0.2 10.7	0.1 9.5	-1.5 14	-5	-5	-3
			4.0		6.0			·	•
Refinancing rate of NB, % p.a., end of period	3.0	4.0		5.0		6.0			
Current account, EUR mn Current account in % of GDP	-8.1	-1422.9	-1010.1	-3603.0 -22.5	-4754.0	-2700 -12.2	-1450 -7.0	-1100 -5.7	-1500 -7.9
Exports of goods, BOP, EUR mn	2804.2	3394.6	4313.1	4929.0	6020.0	6400	6550	6800	7200
annual growth rate in %	4.1	21.1	27.1	14.3	22.1	6	2.3	3.8	5.9
Imports of goods, BOP, EUR mn	4573.5	5634.2	6753.5	9032.0	11074.0	10500	9500	9700	10500
annual growth rate in %	7.5	23.2	19.9	33.7	22.6	-5	-9.5	2.1	8.2
Exports of services, BOP, EUR mn	1333.4	1431.5	1743.0			3100	3300	3500	3800
annual growth rate in %	1.6	7.4	21.8	21.7	26.4	16	6.5	6.1	8.6
Imports of services, BOP, EUR mn	821.6 10.8	947.5	1255.6	1586.0	1974.0 24.5	2200 11	2300 4.5	2400	2600
annual growth rate in % FDI inflow, EUR mn	269.8	15.3 512.4	32.5 567.0	26.3 1339.0		1300	4.5 700	4.3	8.3
FDI outflow, EUR mn	43.8	88.3	103.0	136.0	237.0	200	100		
Gross reserves of NB excl. gold, EUR mn	1150.9	1412.8	1901.8	3346.2		3739.0			
Gross external debt, EUR mn	7545.1			18127.8		30200			
Gross external debt in % of GDP	75.6	88.3	98.4	113.0	134.6	136.0		•	•
Average exchange rate LVL/EUR Purchasing power parity LVL/EUR	0.6407 0.3062	0.6652 0.3251	0.6962 0.3605	0.6962 0.3932	0.7001 0.4506	0.7027 0.5160	0.7028	0.7028	0.7028

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted). 3) Enterprises with more than 20 employees. - 4) Deficit including banking restructuring costs financed by IMF/EU rescue package in 2009: -17.5% of GDP and 2010: -7%. - 5) According to ESA'95, excessive deficit procedure.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.

Table LT

Lithuania: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 t
Population, th pers., average	3454.2	3435.6	3414.3	3394.1	3375.6	3358.4			
Gross domestic product, LTL mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP)	56959.4 10.2 4800 10200	62697.8 7.3 5300 10900	72060.4 7.8 6100 11900	82792.8 7.8 7100 13100	98138.7 8.9 8400 14800	111430 3.2 9600 15200	108500 -5	104200 -3.5	104700 1
Consumption of households, LTL mn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital form., LTL mn, nom. ²⁾ annual change in % (real) ²⁾	10.4	11.9	46312.0 12.3 16405.0 11.2	10.6	12.3	71600 3.0 29600 -2.0	69700 -5 28500 -6	67300 -3 27200 -4	67600 1 27600 2
Gross industrial production (sales) annual change in % (real) Gross agricultural production annual change in % (real) Construction industry	11.3 7.9	10.9 11.1	7.1 10.5	7.3 -4.1	4.0 8.2	2.7 0.5	-7	-5	3
annual change in % (real)	27.8	6.8	11.5	21.2	21.6	1.4		•	
Employed persons - LFS, th, average annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	1438.0 2.3 203.9 12.4 7.7	1436.3 -0.1 184.4 11.4 6.5	1473.9 2.6 133.0 8.3 4.1	1499.0 1.7 89.4 5.6 3.7	1534.2 2.3 69.0 4.3 4.3	1530 -0.3 89.1 5.5 5.7	8.5	13	15
Average gross monthly wages, LTL annual change in % (real, net)	1072.6 9.3	1149.3 5.0	1276.2 6.8	1495.7 15.0	1802.4 17.0	2270 13		•	
Consumer prices (HICP), % p.a. Producer prices in industry, % p.a.	-1.1 -0.5	1.2 6.0	2.7 11.5	3.8 7.4	5.8 6.9	11.1 18.2	3.5	0.5	0.5
General goverm.budget, EU-def., % GDP ³⁾ Revenues Expenditures Net lending (+) / net borrowing (-) Public debt in % of GDP ³⁾	31.9 33.2 -1.3 21.1	31.8 33.3 -1.5 19.4	32.8 33.3 -0.5 18.4	33.1 33.6 -0.4 18.0	33.9 35.2 -1.2 17.0	35.4 36.4 -1.0 14.2	-5	-4	-3
Money market rate, % p.a., end of period $^{4)}$	2.3	2.3	2.5	3.7	6.8	7.8			
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn annual growth rate in %	-1116.2 -6.8 6772.8 6.4 8261.7 6.3	-7.7 7477.7 10.4	-1481.3 -7.1 9490.0 26.9 11849.0 26.1	-10.6 11262.0 18.7	-14.6 12509.0 11.1	-4400 -13.6 16400 31 20300 21	-2300 -7.3 17000 3.7 20000 -1.5	-1900 -6.3 17800 4.7 20000 0.0	-2400 -7.9 19000 6.7 22000 10.0
Exports of services, BOP, EUR mn annual growth rate in % Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn EDI outflow, EUR mp	1661.2 6.5 1114.4 13.0 159.9		27.1 1655.3 26.0 826.0	2879.0 15.0 2018.0 21.9 1448.0	2931.0 1.8 2471.0 22.4 1473.0	3100 6 2900 17 1100 250	3200 3.2 2900 0.0 600	3300 3.1 3000 3.4	3500 6.1 3100 3.3
FDI outflow, EUR mn Gross reserves of NB excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP	33.7 2697.5 6669.9 40.4	2578.5 7686.6 42.3	10586.5 50.7	60.2	72.3	350 4550.0 23800 73.7	150		
Average exchange rate LTL/EUR Purchasing power parity LTL/EUR	3.45 1.62		3.45 1.77	3.45 1.86	3.45 1.96	3.45 2.18	3.45	3.45	3.45

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) According to ESA'95 (FISIM adjusted and real change based on previous year prices). - 3) According to ESA'95, excessive deficit procedure. - 4) VILIBOR 1 month interbank offered rate.

Source: wiiw Database incorporating Eurostat and national statistics. Forecasts by wiiw.



Josef Pöschl^{*}

Overview Southeast Europe: shifting from the expansion to the contraction mode

Patterns revealed by the most recent data

This overview focuses on three EU candidate countries – Croatia, Macedonia and Turkey – and four potential candidates – Albania, Bosnia and Herzegovina, Montenegro and Serbia. The most recently available statistical data for these economies point to a shift from expansion to contraction in the course of 2008, very much in keeping with events elsewhere. The shift is clearly visible in monthly data relating to developments in

- Industrial production
- Exports and imports
- Prices

Figure 1



Gross industrial production, 2008

Source: wiiw Monthly Database incorporating national statistics.

* The research on this overview was completed on 20 February 2009. Peter Havlik, Kazimierz Laski, Michael Landesmann and the authors of the individual country reports provided useful comments on the earlier draft.

In all countries but one (Bosnia and Herzegovina¹) industrial output grew less than before or went into decline during the final months of 2008 (Figure 1, based on preliminary data that have not been seasonally adjusted). The industrial business climate has without the shadow of a doubt deteriorated. Previously, during the first half or first three quarters of 2008, industrial output in Bosnia and Herzegovina, Croatia, Macedonia, Montenegro and Serbia had been significantly higher compared to the 2007 average. This was much less the case in Turkey. Turkey's economy was just cooling down after a prolonged period of economic prosperity.

Figure 2 shows the euro values of monthly exports and imports for 2008 of (i) all the West Balkan countries together; and (ii) Turkey. Turkey's exports and imports of goods are significantly higher than the aggregates of the West Balkan countries. The latter figures include trade between the six countries. We see an increase in the exports and imports of goods up to mid-2008 with a subsequent decrease towards the end of the year. The region as a whole is a major net importer of goods. Trade deficits were highest in mid-2008, when energy and food prices boomed, but they then fell when the business climate deteriorated in the second half of the year and world market prices for energy dropped sharply.



Figure 2

Note: SEE-5 (AL, BA, HR, MK, RS)

Source: wiiw Monthly Database incorporating national statistics.

Turkey is a major net exporter of unprocessed agricultural products and processed food, whereas the West Balkan countries are net importers, particularly of processed food. During the final months of 2008, weak international demand for transport equipment, metals and textiles battered industry throughout the region, the Western Balkan countries being more dependent than Turkey on demand conditions in the EU.

¹ Limitations of the comparability of the country's industrial output statistics are mentioned in the Bosnia and Herzegovina chapter. January 2009 data point to a strong decline.

Price developments (Figure 3) display similar patterns. Consumer prices increased significantly up to July-October 2008, increasing but slightly or declining later on. More specifically, consumer prices declined in five countries in November (Albania, Bosnia and Herzegovina, Croatia, Montenegro and Turkey), in four countries in December (Bosnia and Herzegovina, Croatia, Serbia and Turkey) and in three countries in January (Macedonia, Bosnia and Herzegovina and Montenegro). In Serbia and Turkey, where the exchange rates are flexible and devaluated, inflation was more pronounced than in the other countries.



Source: wiiw Monthly Database incorporating national statistics.

These price patterns were in keeping with global developments. For many tradable goods, international market demand started shrinking in the second half or at least in the fourth quarter of 2008. Whereas prices for energy and material-type commodities actually dropped, the manufacturers of finished goods tended to cut down production volume, yet kept their prices up. As manufacturers tend to adjust their output to the demand on a continuing basis, we can interpret recent developments as a sequence of equilibrium states with shrinking market volumes and declining capacity utilization as characteristic features. It is likely that prices for energy and goods of a material character will remain depressed over the next few months - and possibly for even longer. Most probably, demand for final goods (consumption and investment goods) will also remain weak for some time. International competition between suppliers of tradables will tend to deflate prices in this segment of the economy. Prices for non-tradable goods and services may prove 'stickier' and even continue to rise. For example, local and central governments and suppliers of public utilities might feel tempted to increase their fees. Moreover, if a national currency depreciates heavily against the two lead currencies, EUR and USD, prices for energy and materials may even increase and nudge prices for final goods upwards. In the ultimate analysis, the development of the price indices will be the net outcome of different and, to some degree, contradictory trends. In countries that follow a fixed exchange rate regime, longer periods of constant or falling price levels are guite feasible.



*Values over 100 indicate appreciation relative to January 2007. Bosnia and Herzegovina CPI-deflated.

Source: wiiw Monthly Database incorporating national statistics.

Figure 4

Four of the countries pursue a policy of keeping national exchange rates completely or approximately constant vis-à-vis the euro (Figure 4). Bosnia and Herzegovina is doing the same in the context of a currency board arrangement, while Montenegro, which is not included in Figure 4, uses the euro as legal tender. Serbia and Turkey allow their currencies to fluctuate, the central banks being free to intervene if they feel it advisable. In both countries, the currency depreciated during the last quarter of 2008. The result was real depreciation: the ratio between producer prices in both countries and producer prices in the EU dropped below the level it had recorded in January 2007 (Turkey) or at least returned to that level (Serbia). Macedonia with its stable nominal exchange rate managed to return to the level of January 2007 thanks to its inflation rate being lower than that in the EU. Producer price levels in Bosnia and Herzegovina, and especially in Croatia as well, increased relative to the EU. This is hardly what one would consider favourable for countries that have very high trade deficits: these deficits reflect low international competitiveness of domestic producers.



Figure 5

*Calculated with current exchange rates.

Source: wiiw Monthly Database incorporating national statistics.

In the period covered in Figure 5 (2007-2008), there is no indication of a change in wage development trends. In 2008 nominal wages calculated in euro terms rose almost continuously, whereas unit labour costs, again in euro terms, fluctuated considerably, but failed to show a clear

upward or downward trend. Wage growth is likely to slow down or stop in the later stages of recession. Unit labour costs, on the other hand, can rise in the context of declining labour productivity (reduction of output being greater than that of employment).

Money M1, 2008

Figure 6



Source: wiiw Monthly Database incorporating national statistics.

Figure 7

GDP, 2008-2009

real change in % against preceding year



Source: wiiw Monthly Database incorporating national statistics, Eurostat.

In the past few years, including 2007, the quantity of money (M1 in Figure 6) rapidly grew. In 2008, however, growth slowed down and came to standstill as early as mid-2008 (Bosnia and Herzegovina, Croatia and Serbia). In Macedonia, M1 growth slowed down, but did not stop. In Albania the pattern was atypical: M1 growth started in early 2008 and gained momentum in the months thereafter. Viewed from the supply side of things, the development of M1 is linked to the

lending policy of the commercial banks. Deposits held at commercial banks by non-banks are the main component of M1; their expansion depends on the volume of new credits. The slowdown in M1 growth points to a change in the banks' lending patterns. Similar to almost everywhere else on the globe, banks in these countries have also become increasingly aware of risk. This has led to their curtailing lending activities: in other words a 'credit squeeze'. Whatever the location, almost every large real sector activity relies to some extent on borrowing. Hence, any changes in lending conditions have a marked impact on the real sector. In the second half of 2008, real GDP growth slowed down in all the candidate and potential candidate countries, as shown in Figure 7. Since they do not issue quarterly GDP statistics, some countries are not included in the graph.

The countries' capacity to withstand the current challenges

Even in mid-2008, the widely shared perception was that the emerging countries' financial markets were not sophisticated enough to risk being contaminated by the crisis, which had started to plague the most developed countries. That notwithstanding,, the wiw Forecast No. 2 (July 2008) addressed the issue of risk resulting from large current account deficits, high indebtedness (especially debt denominated in foreign currencies) and real estate bubbles. When the Baltic States, Hungary and Ukraine first faced serious trouble, the turmoil fuelled suspicions about Europe's emerging markets being weak and hence unable to stand up to the crisis in general.

The financial sector in Southeast Europe has pursued a prudent lending policy, where a large number of the banks are foreign-owned. The foreign-owned banks were not expected to engage in deals with risky clients, such as semi-restructured and hence unprofitable companies. If commercial banks in Southeast Europe are finding themselves in difficulty, the reason is that things are more or less the same across the globe. The reasons are not local in nature. However, the measures that the commercial banks ultimately adopt over the next few months is another issue. Last December, Serbia's central bank released EUR 600 million in local foreign exchange liquidity by relaxing the banks' reserve requirements. Foreign banks seized the opportunity to transfer funds out of the country, so the lament of Radovan Jelasic, the governor of Serbia's central banks. This has also given rise to fears of more of the same: anxiety over subsidiaries of international banks in Southeast Europe deciding to support their parent companies by transferring funds they have accrued in the Balkans.

Currently, the problem is that in a global recession even those otherwise highly successful debtors may default. In Europe's emerging markets it is primarily the non-financial corporate sector that is under stress, while the banking sector is more in the position of adding to that stress rather than curbing it. Concerns over non-financial companies' viability are quite justified, if the companies are active in industries that are facing a major adverse shift in demand. At present, the automotive sector is in trouble in Turkey, where it is quite significant in size, as well as in the West Balkan countries, where it is still small. Difficulties are also being faced by the extraction and processing of metals, textile industry, construction activities, and most probably tourism as well – all of them industries in which at least some of the countries of Southeast Europe are specialized. Problems also tend to spill over to other sectors, one contributory factor being the stagnation of aggregate real income.

A second main source of concern is the high indebtedness of companies. One of the characteristics of the past few years, although not limited to Southeast Europe alone, has been a decline in the indebtedness of the public sector in tandem with increasing indebtedness of the private sector. The region's companies, especially the foreign-owned companies, were deemed increasingly creditworthy by local and international investors alike. This was one of the factors that enabled the countries to build up large current account deficits, while currency reserves increased in parallel.

When a company's sales revenues are generated predominantly in a domestic currency and the debt is denominated in a foreign currency, this creates an exchange rate risk. Households burdened with debt denominated in foreign currency face a similar risk. The countries in Southeast Europe tried to reduce this risk by keeping their exchange rates stable vis-à-vis the euro. In the case of Turkey, that policy failed as far back as 2001, and the country never returned to it. In Serbia, attempts to keep the exchange rate constant failed repeatedly in recent years. The other countries were more successful, however. They either introduced the euro straight out (Montenegro, Kosovo), fixed the exchange rate via a currency board arrangement (Bosnia and Herzegovina) or managed to maintain a de facto exchange rate stabilization (Albania, Croatia, Macedonia). A fixed exchange rate can become a trap, once its fundamentals start eroding. Both in Bosnia and Herzegovina and in Montenegro, nominal wages grew much more rapidly than consumer prices in 2008 (Table 1), which means real wages grew strongly. As is visible from Figure 7, in the case of Montenegro this went hand in hand with a strong increase in unit labour costs. Most likely, this is also the case for Bosnia and Herzegovina (because of lack of monthly data, the country is not represented in Figure 7). Under conditions of a fixed exchange rate, a strong rise in unit labour costs reduces the corporate sector's competitiveness.

change	e in % against preceding yea	ar	
	Consumer price inflation	Nominal growth of gross monthly wages	Nominal currency appreciation EUR/NCU
Croatia	6.1	6.4	1.6
Macedonia	8.3	7.7	-0.1
Turkey	10.4	10.7	2.2
Albania	3.4	8.9	0.7
Bosnia and Herzegovina	7.5	14.0	0.0
Montenegro	8.5	22.5	
Serbia	11.7	17.9	-2.3
1) Preliminary.			
Source: wiiw Database incorporating national statisti	CS.		

Nominal stability indicators, 2008

If a country with a high current account deficit is to secure funding, a significant part of the economic opportunities it can offer, be they located in the private or public sector, need to appear profitable

Table 1

and not too risky to foreign investors (direct investors, portfolio investors, providers of credit). These are matters of importance when assessing the strengths and weaknesses of the individual countries in Southeast Europe.

One source of information of particular relevance is our Table II on page x. The figures for 2008 show that compared to the West Balkan countries, Turkey plays in a different category. The country produces some 55% of the aggregate GDP of all ten new EU member states. At the same time, Turkey's GDP is 13 times larger than that of Croatia, the economy with the highest GDP in the West Balkans. The size of Turkey's economy and territory, the remarkable development opportunities that the country has to offer and its strategic location make the country attractive to major international financial investors – including short-term investors – on account of the high interest rates. In the European context, the West Balkans are also most relevant for both economic and political reasons.

The economies of all seven countries in Southeast Europe have developed a similar dynamic. In all of them except Macedonia the GDP grew by about 50% compared to 2000. In two of them, Albania and Bosnia and Herzegovina, industrial growth far exceeded GDP growth. In the case of Albania, a low basis in 2000 may have played a role, while in the case of Bosnia and Herzegovina (see country report) it could have been for statistical reasons. In Macedonia, Montenegro and Serbia, on the other hand, industrial growth was quite slow. Exports comprise predominantly industrial products; not surprisingly in both Albania and Montenegro, they are very small relative to the GDP. In Macedonia, on the other hand, they are surprisingly high: a reflection at least in part of the country's role as a transit link between Serbia and Greece. With approximately 18%, Turkey's export-to-GDP ratio is also low; this, however, cannot be attributed solely to the 'big country effect'.

The most striking phenomenon, in the West Balkans in particular, is the degree to which imports of goods exceed exports. According to 2008 data, revenues from the exports of goods finance merely one quarter of the import expenditures in Montenegro and 30% in Albania. Only Macedonia's exports finance more than half of the country's imports (58%). Both Croatia's and Serbia's ratio remains somewhat below 50%. Turkey is different; exports cover about three quarters of imports.

Table 2, shows how the seven countries have financed their high deficits in the foreign trade with goods over the period January to September 2008, the period immediately prior to the current crisis. In Croatia, net exports of services financed over three quarters of the trade deficit. It was mainly tourism that made ends meet. This was, albeit to a lesser degree, also the case with Montenegro and Turkey, but not with Albania despite its tourism potential. In the other countries, current transfers, i.e. primarily remittances transferred by migrant workers, financed a considerable share of the trade deficit: 60% in Macedonia and between 40 and 30% in Albania, Bosnia and Herzegovina and Serbia.

The net inflow of foreign direct investment also covered a large proportion of the trade deficit: 40% in Montenegro, one third in Macedonia and around one quarter in Serbia, Croatia, Turkey and Albania. Bosnia and Herzegovina attracted little FDI. In the case of Turkey and Serbia, it was borrowing (net

other investment) that financed a high proportion of the trade deficit: 75% and 50% respectively. In the other countries, this proportion was around one quarter.

Components of the Balance of Payments (BOP)

Table 2

components of the balance of rayments (Bor)												
					Bosnia &							
	Croatia	Macedonia	Turkey	Albania	Herzegovina	Montenegro	Serbia					
EUR mn, Jan-Sep 2008												
Current account	-2486	-565	-24877	-843	-1361	-640	-4612					
Trade balance of goods	-8404	-1286	-31257	-1699	-3595	-1084	-5750					
Services, net	6491	18	9556	-10	519	399	-148					
Income, net	-1334	-69	-4279	194	333	-8	-576					
Current transfers, net	761	772	1103	672	1381	52	1862					
Capital and financial account	3797	580	30060	666	1192	615	4573					
Capital transfers, net	26	-4		58	151	0	13					
Foreign direct investment, net	2137	416	7879	380	306	434	1601					
Portfolio investment, net	46	-27	323	-10	-3	-10	-60					
Other investment, net	1997	339	23217	339	807	273	2987					
Reserve assets	-409	-143	-1359	-101	-69	-82	32					
Errors and omissions	-1311	-15	-5183	177	169	25	40					
In % of GDP, 2008												
Current account	-10.9	-13.6	-4.7	-12.7	-12.8	-26.9	-17.8					
Exports of goods	23.5	40.3	17.7	11.0	27.7	15.9	23.4					
Imports of goods	-49.7	-70.2	-23.6	-37.1	-66.1	-68.9	-49.5					
Trade balance of goods	-26.2	-29.9	-5.9	-26.1	-38.5	-53.0	-26.1					
Source: National banks of respectiv	ve countries	3.										

In late 2008, a trend towards a decline in the trade deficit became visible (see Figure 2). During the first half of 2009, compared to the corresponding months of the previous year, monthly imports will shrink on account of quantity and energy price effects. Both effects, however, should more or less disappear towards the end of the year. Regardless whether the trade deficits are likely to be less than in previous years, it will not be no easier financing them. EU citizens might spend less on tourism; this could hit Croatia, Montenegro and Turkey particularly hard. The inflow of remittances could diminish as relatives working abroad face prospects of unemployment and a deterioration of their living conditions in host countries hit by recession.

Foreign direct investment (FDI) will not run dry, but it will decline substantially. A country can only avoid this by offering excellent acquisition opportunities; this, however, will hardly be the case. Finally, the capacity to borrow money will hinge on the trust shown by international markets – the manner in which investors assess the debtors' ability to service the credits. High interest rates can ease access to credits as long as the situation does not look too alarming; the riskier the business

appears, the larger the share of short-term credits. Over the next few months, the countries will attract the attention of investors and analysts each time a large amount of debt falls due and in most instances a rollover solution has to be found. As Table 3 shows, in the first three quarters of 2008 government expenditures were below revenues (Bosnia and Herzegovina, Macedonia and Montenegro) or not much higher (all the others except Albania, where the gap was quite substantial). At the same time, general government indebtedness is not very high. Here again, it is less so in the case of Albania.

General government budget and public debt ¹⁾ in % of GDP, 2008 ²⁾									
	Revenues	Expenditures	Public debt						
Croatia	45.2	47.6	54.5						
Macedonia	34.5	33.8							
Turkey	18.3	19.6	35.1						
Albania	27	31	53.5						
Bosnia and Herzegovina	45	43	20						
Montenegro	44	42							
Serbia	42.5	45							

Source: wiiw Database incorporating national statistics.

Quite possibly, over the next few years, countries such as those we are dealing with here will find it very difficult to import goods and services much in excess of exports. This means countries will face conditions similar to those that non-financial enterprises are already facing today. Their purchases are very much constrained by their current revenues; access to additional funds becomes tighter and costlier.

Given the structures established over decades, the demands of a large proportion of economic agents were hardly constrained by their current incomes. For an economy as a whole, this meant aggregate demand was not constrained by the GDP. In such a case, the country under consideration uses 'other countries' savings', as some economists call it. This, however, does not necessarily mean that those external funds are used for domestic investment. In the extreme case, the citizens may use it all for consumption. For example, during the early post-1995 years, Bosnia and Herzegovina's aggregate private consumption in all likelihood exceeded the country's GDP². Thanks to the inflow of all kinds of transfers, this was feasible.

If large import surpluses become close to unmanageable (because nobody is willing to finance them) or costly (because of the high risk premia), a difficult transition period sets in. A feasible

² Up to recently, no statistics institute calculated Bosnia and Herzegovina's GDP from the expenditure side.

scenario is one where lower GDP leads to lower imports, whereby the job is already done if the recession in the country is much more pronounced than in the countries of its main trading partners. Of course, for the majority of citizens this would be a painful process. Another feasible scenario is one where the trade balance improves in the context of nominal currency depreciation. This would be painful for those indebted in foreign currency terms, but it would improve the real sector's business conditions overall – at least as long real appreciation did not gobble up the positive competitiveness effects brought about by depreciation. The producers of tradables in Southeast Europe have encountered problems related to cost-competitiveness. The region is a relatively expensive production location (see ULC levels in Appendix). Wages in euro terms, one of the aspects of cost-competitiveness, are low compared to the EU-27 average, but not that low compared to those countries that joined the EU in 2004 or 2007; nominal depreciation would change the ratio. However, for Bosnia and Herzegovina and Montenegro depreciation is not an option, whereas policy-makers in Croatia and Macedonia may well be determined to avoid such a situation at all costs.

Given that the real sector is reducing output for want of demand and given that prices of tradables could start gradually declining in many countries around the globe, people have started re-assessing Keynes' ideas regarding 'sticky' underemployment equilibria. The metaphors he used to demonstrate the working of fiscal stimuli³ have become much-discussed topics. Analysts agree that the economies are in a 'liquidity trap', meaning that the central banks' efforts to increase money supply have failed to exert a positive impact on the real sector, as the commercial banks' lending rates did not drop. In fact, all their efforts did not bring about an increase in the money supply. It is no surprise that ongoing discussions also gave rise once more to Milton Friedman's money-spreading helicopter⁴. However, we need to distinguish between two distinct types of economies. One type of economy can afford to invest in anti-cyclical policies, whereas the other cannot. The United States, France, Germany and Japan are examples of those that can, whereas the countries in Southeast Europe belong to those that cannot. Countries that are on the brink of drawing on IMF support definitely cannot. IMF teams will continue to push for enhanced restructuring efforts fiscal austerity and monetary discipline or, in other words, pro-cyclical policies. What other options do they have? Small countries - including the not so small countries such as Turkey - cannot manage to create their own independent positive business climate. Those countries have almost no choice of options other than tightening their belts in times of global crisis. Nevertheless, governments can influence the degree to which recession engenders extreme poverty.

The likely development scenario over the next few years

As can be seen from the Table I on page ix, we expect a stagnating or even declining GDP for most countries in Southeast Europe. The one exception is Albania. Albania's optimistic forecast figures

³ 'If the Treasury were to fill old bottles with banknotes, bury them at suitable depths in disused coalmines which are then filled up to the surface with town rubbish, and leave it to private enterprise on well-tried principles of laissez-faire to dig the notes up again (the right to do so being obtained, of course, by tendering for leases of the note-bearing territory), there need be no more unemployment', John Maynard Keynes, *General Theory*, 1936, Chapter 10.

⁴ Milton Friedman, *The Optimum Quantity of Money*, 1969.

can be interpreted in a variety of ways. They are: the result of politically biased statistics; an example of a poorly developed economy, in which a few externally funded development projects govern the business cycle; or a case of de-coupled development in a context of general economic backwardness. As Turkey is a most interesting economy for financial markets on account of its size, information on latest developments there is plentiful and readily available, in stark contrast to limited availability of data and analysis related to some of the West Balkan countries.

Over the period 2008 (preliminary results) to 2009, we expect the annual GDP growth rate to decline by 5-6 percentage points in the group of potential candidate countries and by around 4 pp in the group of candidate countries (see Table I on page ix). In 2010, the general business climate could improve somewhat; instead of deteriorating, the GDP in the countries reviewed could either stagnate or even grow slightly. Growth could strengthen in 2011. Gradual improvements of this kind could materialize after 2009 in the context of similar developments in the international sphere, primarily in the EU.

We expect a decline in household consumption in Turkey for 2009 (Table 4); first indications of this happening were already apparent in late 2008. In other countries, household consumption will hardly change compared to 2008. Albania could be the exception once again – and to a lesser degree Bosnia and Herzegovina as well, where increases in real wages could still have an impact in 2009; in the latter case, stagnation of household consumption could occur at a later juncture in 2010.

		2007	2008 ¹⁾		2010 orecas	
	Macedonia	9.4	5	0	0	2
	Turkey	4.1	2	-2	0.3	1
	Albania	6.0	6	2	3	5
	Bosnia and Herzegovina	8.3	5	0	-1	0
	Montenegro	8	7	-2	0	2
	Serbia	6	6	-2	0	2
Preliminary.						

Consumption of households real change in % against preceding year

1) Preliminary

Table 4

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.

For three of the countries, Bosnia and Herzegovina, Croatia and Turkey, we expect a significant decline in gross fixed investment (Table, 5). In Macedonia, Montenegro and Serbia investment could be marginally higher than in 2008, whereas in the case of Albania investment could continue to expand significantly thanks to foreign assistance, which is large relative to the GDP. This could also continue for years to come, unlike all the other countries where investment may grow only slightly and pick up speed at later stage.

	real change in % against preceding year									
		2007	2008 ¹⁾		2010 precas					
	Croatia	6.5	6	-2	3	6				
	Macedonia	12.0	4	-2	0	3				
	Turkey	5.5	-3	-11	4	7				
	Albania	8.0	10	6	9	10				
	Bosnia and Herzegovina	27.5	5	-9	0	4				
	Montenegro	10	8	-2	0	3				
	Serbia	12	8	-2	0	3				
1) Preliminary.										
Source: wiiw Databa	ase incorporating national statistics.	Forecasts	s by wiiw.							

Gross fixed capital formation

Insufficient employment opportunities and correspondingly high unemployment are a major problem in the countries of Southeast Europe. As Table 6 shows, a total of 23.7 million persons were employed in the candidate countries and 3 million were without jobs in 2008. In the potential candidate countries, the corresponding figures were 5.1 million employed and close to 1 million jobless. Only in Croatia was the rate of unemployment single-digit (9%). In Turkey, it was also relatively low at 11%, whereas in Macedonia it was higher than anywhere else in the region (34%). We expect a rise in unemployment in 2009. For the three candidate countries taken together, it will range from 11.6% to 13.7% in 2009, and for all four potential candidate countries it will spread from 15.7% to 18.5% the same year. For the candidate countries, this might mark the peak value, whereas the potential candidate countries might only reach their peak a year later in 2010. In brief, we can expect a serious recession, but not an utter disaster.

	Employment and anemployment, Er o demitten, annaar averages, 2000										
	Employment	Unemployment	Rate of								
	in 100	0 persons	unemployment								
Croatia	1615	158	9.0								
Macedonia	611	311	33.8								
Turkey	21500	2630	11.0								
Candidate countries	23726	3099	11.7								
Albania	1230	180	12.8								
Bosnia & Herzegovina	890	272	23.4								
Montenegro	220	50	18.5								
Serbia	2805	457	14.0								
Potential candidate countries	5146	959	15.7								
Source: wiiw Database incorporating natio	nal statistics.										

Employment and unemployment, LFS definition, annual averages, 2008

Table 6

Table 5



Mario Holzner

Albania: the one-eyed king

Among the transition economies in Europe whose growth prospects have been dampened, the forecasts of growth for Albania are the best. While other countries in the region face prospects of stagnation or even recession in 2009 as a result of the international financial crisis spilling over, Albania can expect to grow by close on 3%. However, it is still unclear from which level of economic activity the growth will actually decelerate (GDP has been growing by about 6% per year over the past few years). In mid-January 2009, the Albanian Institute of Statistics (INSTAT) published quarterly GDP data for the first time. The data are mainly based on VAT-related information and present a picture quite different to previous annual national accounts data.

For the first three quarters of 2008, growth rates in excess of 10% were estimated. According to the quarterly GDP estimates, growth in the construction sector of close to 20% was mainly responsible for the double-digit overall growth. This should be seen in relation to the major efforts being made to finalise the construction of the 'patriotic highway' leading from Durres, Albania's main port, to the Kosovo border by June 2009 (when parliamentary elections are to be held). The Albanian Minister of Finance initially rejected the growth projected by INSTAT for the first three quarters of 2008 only to be sharply rebuked by the Prime Minister. In the meantime, INSTAT has announced revisions to the quarterly data to be released at the end of March 2009. Depending on the growth rate agreed upon for 2008, be it 10% or 6%, the country's economy faces the prospects of either a hard or soft landing in 2009 in the wake of the international financial crisis.

The global crisis is also making itself felt in Albania, albeit to a lesser degree, given the country's limited integration in the international goods, services and capital markets. None the less, liquidity has dried up on the financial market. By the end of 2008, bad loans had reached an historical high: 5% of the overall credit portfolio. The banking system faced a major credibility crisis when Albanians withdrew more than EUR 345 million from their bank accounts: more than 6% of total deposits. 12-month treasury bill yields reached a multi-year high at 9.1% at the end of January 2009, whereas treasury bills were scarcely in demand. Ultimately, at the end of January, the Albanian central bank lowered its interest rate by 50 basis points down to 5.75%, following a request earlier in the month by the CEO of Raiffeisen Bank that interest rates be lowered. Given this environment, the Albanian government decided not to renew the remit of the IMF mission to the country. The Prime Minister described the move as putting an end to Albania's transition process.

The government's populist measures, however, may well prove to be of crucial importance to sustaining growth by increasing effective demand. With parliamentary elections scheduled for June

2009, public spending will target infrastructure projects in the transport and energy sectors. These investment projects rely not only on government financing, but also on international donor funding, such as the World Bank. Overall, the donor community invests some USD 300 million into Albania's ailing energy sector. The construction of the thermo-power plant in Vlora is proceeding well; it is planned to go on stream in 2009. This will mark a major step towards lessening dependence on hydro-power. Although rain was plentiful in the past winter and the country even started exporting electricity to neighbouring Greece, reliance on hydro-power and a series of droughts have led to regular power cuts over the past few years.

Nevertheless, new hydro-power projects are under way, given that the potential hydro-power capacities have still not been fully exploited. At the end of January, the Albanian government approved a EUR 950 million deal with the Austrian electricity company EVN and the Norwegian renewable energy group Statkraft for the construction of three hydro-power plants. Apart from generally stimulating the economy, the project could increase the country's power production by as much as 20%. The government also awarded a 35-year concession contract to the British-Swiss Zumax AG group for the construction of a EUR 1.2 billion ship container terminal in Vlora. Construction is expected to take four years.

Remittances have been an important factor in fuelling domestic demand and triggering a private building boom; however, growing reluctance on the part of migrants and their growing inability to remit funds are being reported. That notwithstanding, no radical reduction in remittances is to be expected. On the contrary, it can be assumed that remittances are demand-driven. Migrants will try to maintain their relatives' basic consumption patterns at all costs. For 2009, we thus expect a slowdown in household consumption growth to some 2% and a subsequent reduction of the current account deficit to a level of 10% of GDP or maybe even lower – on account of fewer imports. This process will also be reinforced by a slight devaluation of the Albanian lek in the course of the year.

With liquidity returning to the international capital markets, we expect a slow acceleration of economic growth in 2010 to a level of around 4%, with the current account deficit increasing once again. By 2011, growth should once more be of the order of 6%. Whereas the crisis may last longer in other countries, Albania has every prospect of overcoming the current turbulence given: (i) its lower dependence on exports and credit; and (ii) its huge potential for basic infrastructure investment, a large part of which will be financed by international development organizations and private foreign concessionaires.

Table AL

Albania: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecast	2011
Population, th pers., average	3111	3127	3142	3151	3161	3170			
Gross domestic product, ALL bn, nom.	694.1	750.8	814.8	891.0	982.2	1120	1177	1261	1390
annual change in % (real)	5.8	5.7	5.7	5.5	6.0	6.1	3	4	6
GDP/capita (EUR at exchange rate)	1600	1900	2100	2300	2500	2700			
GDP/capita (EUR at PPP - wiiw)	4300	4600	5000	5500	5900	6400			
Consumption of households, ALL bn, nom.	521.0	584.7	634.5	696.5	728.8				
annual change in % (real)	11.1	9.4	6.0	7.2	6.0	6	2	3	5
Gross fixed capital form., ALL bn, nom.	280.9	279.4	301.4	313.2	380.2			·	
annual change in % (real)	18.0	2.7	4.9	9.3	8.0	10	6	9	10
Gross industrial production									
annual change in % (real) $^{2)}$	29.0	14.1	11.7	12.1	-5.1	6	3	4	5
Gross agricultural production									
annual change in % (real) ²⁾	2.9	6.3	0.9	3.0	1.7	3	2	2	3
Construction output total							_		
annual change in % (real) $^{2)}$	23.4	7.9	6.3	11.0	7.5	15	7	10	11
Employed persons - LFS, th, June					1188.3	1230			
annual change in %						3.5			
Employment reg. total, th pers., end of period	926.2	931.2	932.1	935.1	939.0	970	•	•	•
annual change in %	0.7	0.5	0.1	0.3	0.4	3.3	•	•	•
Unemployment rate - LFS, in %, June					13.5	12.8	13	12	11
Reg. unemployment rate, in %, end of period	15.0	14.4	14.1	13.8	13.2	12.6			
Average gross monthly wages, ALL	18522	19039	19993	21493	23234	25300			
annual change in % (real, gross)	13.1	-5.8	2.5	5.0	15.3	8.9			
Consumer prices, % p.a.	2.4	2.9	2.4	2.4	2.9	3.4	2	3	3
Producer prices in industry, % p.a. 3)	8.7	12.2	4.9	0.8	3.5	7.3			
General governm.budget, nat.def., % GDP									
Revenues	24.1	24.6	25.1	25.8	25.6	27			
Expenditures	29.0	29.6	28.5	29.0	29.1	31			
Deficit (-) / surplus (+), % GDP	-4.9	-5.1	-3.5	-3.3	-3.5	-4	-4	-3	-3
Public debt in % of GDP 4)	60.7	57.7	58.1	55.9	53.1	53.5			
Base rate of NB, % p.a., end of period $^{5)}$	6.5	5.3	5.0	5.5	6.3	6.3			
Current account, EUR mn	-349.5	-340.2	-589.1	-471.0	-831.0	-1100	-900	-1150	-1400
Current account in % of GDP	-6.9	-5.8	-9.0	-6.5	-10.5	-12.7	-9.9	-11.4	-12.3
Exports of goods, BOP, EUR mn	394.9	485.6	530.2	630.6	786.3	950	800	950	1200
annual growth rate in %	13.3	23.0	9.2	18.9	24.7	20.8	-16	19	26
Imports of goods, BOP, EUR mn	1571.8	1762.3	2006.9	2289.6	2890.4	3200	2800	3100	3900
annual growth rate in %	0.3	12.1	13.9	14.1	26.2	10.7	-13	11	26
Exports of services, BOP, EUR mn	633.1	807.6	967.3	1156.6	1415.1	1600	1400	1700	2100
annual growth rate in %	3.4	27.6	19.8	19.6	22.3	13.1	-13	21	24
Imports of services, BOP, EUR mn	705.0	848.1		1188.0	1402.3	1550	1400	1650	1800
annual growth rate in %	13.6	20.3	30.6	7.2	18.0	10.5	-10	18	9
FDI inflow, EUR mn	156.9	278.4	212.6	258.6	481.1	500		•	•
FDI outflow, EUR mn		9.0	1.7	8.2	11.0	•			·
Gross reserves of NB excl. gold, EUR mn	789.7	982.7	1171.6	1329.2	1415.9	1700			•
Gross external debt, EUR mn ⁴⁾	1110.0	1224.0	1373.5	1445.4	1445.7	1700	•	•	•
Gross external debt in % of GDP	21.5	20.6	20.7	20.1	17.9	19.9			
Average exchange rate ALL/EUR	137.5	127.7	124.2	123.1	123.6	122.8	129	125	122
Purchasing power parity ALL/EUR ⁶⁾	52.0	51.9	52.1	51.2	52.6	52.0		·	

1) Preliminary and wiw estimates. - 2) Gross value added. - 3) Until 2005 producer prices in manufacturing industry. - 4) Based on IMF data. - 5) One week repo rate. - 6) Benchmark results 2005 from Eurostat and wiw estimates.

Source: wiiw Database incorporating national statistics and IMF. Forecasts by wiiw.



Josef Pöschl

Bosnia and Herzegovina: landing in the fog

Assessment of current economic developments in Bosnia and Herzegovina (BiH) is hampered by the lack of whole-country indicators. To make matters worse, indicators available for the period starting from October 2008 do not necessarily match other sources of information pertaining to most recent developments. Despite the limited visibility, there is little doubt that the economy is heading for what might be termed 'a forced landing'.

Bosnia and Herzegovina's statisticians do not produce an industrial production index for the country as a whole; instead, they produce two such indices: one for each entity (Federation of BiH and Republika Srpska).⁵ These indices have to be taken with a dose of salt; some components reflect nominal (instead of real) changes, thus making it difficult to use them for analysing real sector developments. The index for the Republika Srpska speaks of the entity's industrial production in December 2008 having doubled over December 2007. This has mainly one simple reason: After having been bought by the Russian state company Zarubezhneft, Republika Srpska's refinery company finally resumed production in late November. At the same time, however, most industry groupings recorded a decline (other intermediary goods and capital goods) or a more modest increase (consumer goods). The Federation's aggregate industrial output was, year on year, up by 9.4% in December 2008. Possibly, an index for the whole country, even if calculated at constant prices, would have shown slight annual growth in December 2008. Such a conclusion is, however, put in question by the frequent media reports on lay-offs or reduced working hours in different companies. Industrial output indices for January 2009 leave no doubt about strong decline.

The metal, automotive and wood processing sectors, all lynchpins of the country's industry, are in trouble. If a highly specialized company, such as Metalno Zenica, has full order books, it is deemed worthy of reporting in the media. The government of the Republika Srpska entity spares no effort in announcing its plans to support the business environment, be it funding construction work or supporting the textile sector and metal processing plants such as the alumina factory Birac. Implementing those plans, however, will be a difficult undertaking.

The reduction of activities can be clearly seen in the foreign trade data. In 2008, both exports and imports increased considerably up until July; they remained at a rather high level during the subsequent months, only to plummet in November and December. The foreign trade deficit was relatively low in those two months; this is mostly attributable to the decline in fuel and food prices.

⁵ For years now, the EU and international financial institutions have been pushing for more data with country-wide coverage and they have launched several projects to foster improvements, so far with limited success.

Over the next few months, it may prove more difficult to fund the current account deficit. Matters could be exacerbated by a drop in the inflow of remittances, should relatives living abroad have to economize.

A glimpse at the price indices⁶ confirms that developments in BiH do not deviate substantially from events elsewhere: The consumer price index went up until mid-2008, stopped rising in subsequent months only to fall from November onwards. In all likelihood, prices of tradable goods will remain stable or even drop over the next few months. Prices of non-tradable goods and services may not necessarily follow this trend, as prices of public utilities may well increase. Real estate prices have declined by some 30%. Our estimate of approximately zero annual inflation in 2009 differs considerably from others that reckon with an inflation rate of around 5%. We do not regard the latter as very realistic despite the inflationary expectations, which are visible, for example, in the mark-up ceilings introduced for certain products in the Republika Srpska.

Construction boomed throughout most of 2008; even the figures for November 2008 still confirm this. The boom most probably came to an end in December or January. Banks have become more reticent in their lending behaviour. They now take a closer look at the quality of collateral and charge higher risk premia. As in other countries, there was a brief episode in October when clients started withdrawing money from their bank accounts. The central bank responded swiftly and successfully. The announcement of higher deposit guarantees brought relief.

There is every reason to worry about the fiscal situation. A few months ago, the public sector indulged in a round of rewarding its senior executives with higher salaries. Protests from various guarters convinced the parliament of the need to introduce certain revisions in January 2009. Relatively high public sector wages will add to the problems of making ends meet. Economic stagnation in tandem with roughly constant price levels will lead to rather unfavourable developments in terms of government revenues. To some degree, this is already making itself felt, as the Indirect Tax Authority reports. At the same time, it will be difficult to restrict the growth of expenditures. For example, higher unemployment could place the social security system under severe strain. Some segments of it are in trouble already. The public sector may well face difficulties in financing its deficit. The removal of barriers to trade with the European Union has already affected the trade balance and fiscal revenues negatively. In January 2009, tariff revenues were below the level of January 2008. This was foreseeable and had been predicted in a study prepared for the BiH government⁷ as far back as 2006. At the time, it would have been easy to avoid most of the subsequent negative revenue effects. A display of firmer resolve to improve the business environment could have strengthened the competitiveness of producers of tradables. Exporters are complaining about increased non-tariff barriers in other CEFTA countries. At the same time, reintroducing tariffs on agro-food imports vis-à-vis CEFTA countries has become an issue.

⁶ For BiH as a whole, only a consumer price index is available.

⁷ Author of the study was Mario Holzner, member of the wiiw staff; he prepared it in the context of a EuropeAid project.

The likely GDP development in terms of expenditure categories may be described as follows: over the next few months, private consumption will decline (or stagnate at best), as employment and the inflow of remittances will decline. Private investment will decline. The government sector will not be able to pursue an anti-cyclical fiscal policy. It is difficult to predict the net impact of foreign trade. In real terms, both exports and imports of goods and services will decline. It is difficult to see strong internal forces pushing for an economic recovery. For 2009, we expect a decline in real GDP, contrary to more optimistic forecasts, viz. that of the EBRD (1.5%). In 2010 and 2011, the economy may reach approximately the same level of output as in 2008. Recession is not likely to mean instability as well. In December, the country's stability was duly respected when Standard and Poor's gave BiH a B+ credit rating along and described the country's future prospects as stable.

A large proportion of the GDP is attributable to the public sector in a broader sense, in that it includes public utilities. The public sector will retain its stability compared to the production of tradables, both in real and nominal terms. EU money and projects funded by international financial institutions will also contribute to stabilizing the economy.

Some of the country's politicians are trying to woo the electorate with populist rhetoric. However, in January 2009 the three top leaders, one from each of the 'constituent peoples', baffled the public with what has since been called the 'Banja Luka agreement'. In essence, it is a territorial restructuring of the country. This sounds like a potential step in the right direction. However, the proof of the pudding is in the eating, and in BiH discussions tend to delay reforms endlessly. Pressure for change comes from the other Balkan countries' rapid rapprochement with the EU. Those citizens who do not have a second passport (from Croatia or Serbia) do not cherish the thought of ending up as the only people still requiring a Schengen visa. Should the constitutional arrangement remain as it is, BiH will hardly qualify for EU candidate status. In addition, the economy will not develop its potential to the full. Initiatives have to come from within BiH; this is the only way to secure close cooperation with the international community, especially the EU. In this context, the new High Representative/Special Representative - Valentin Inzko, possibly - and the new lead persons in the EU delegation will play a key role. The former head of the Directorate of European Integration has moved to Brussels to represent his country vis-à-vis the EU institutions. This will improve the country's standing there, but has created problems at home, as heading up this key institution calls for extensive experience and exceptional skills.

Table BA

Bosnia and Herzegovina: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 t
Population, th pers., average	3832	3842	3843	3843	3843	3843			
Gross domestic product, BAM mn, nom. ²⁾ annual change in % (real) ²⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	13442.6 3.0 1800 4100	15786.0 6.3 2100 4800	16927.9 3.9 2300 5100	19121.1 6.9 2500 5700	21640.6 6.8 2900 6300	24400 5.0 3200 6800	24000 -1	23800 -1	24000 0
GDP by expend. approach, BAM mn, nom. ²⁾ Consumption of households, BAM mn, nom. ²⁾ annual change in % (real) ²⁾ Gross fixed capital form., BAM mn, nom. ²⁾ annual change in % (real) ²⁾		16680.2 15017.5 4044.4		21151.3 18064.3 4.5 4756.8 -9.4		5 5	0 -9	-1 0	0 4
Gross industrial production annual change in % (real) ³⁾ Gross agricultural production, total annual change in % (real)	5.1 -8.4	12.1 27.7	10.8 -0.5	11.5 2.3	6.4	7.5	-5	0	3
Employed persons - LFS, th, April annual change in % Employees total - reg., th, average annual change in % Unemployed persons - LFS, th, April Unemployment rate - LFS, in %, April Reg. unemployment rate, in %, end of period	635.1 0.2 41.9	637.2 0.3 43.2	642.8 0.9 44.1	811.0 653.3 1.6 366.8 31.1 44.1	849.6 4.8 686.1 5.0 346.7 29.0 42.5	890.2 4.8 717.7 4.6 272.0 23.4 40.5	27	27	26
Average gross monthly wages, BAM $^{\rm 4)}$ annual change in % (real, net) $^{\rm 4)5)}$	717 7.3	748 3.5	798 3.4	869 2.3	939 8.5	1070 6.1	•	•	•
Consumer prices, % p.a. ⁶⁾ Producer prices in industry, % p.a.	1.1	0.8	3.0	6.2	1.5	7.5	-0.5	0	1
General governm.budget, nat.def., % GDP Revenues Expenditures Deficit (-) / surplus (+), % GDP Public debt in % of GDP ⁷⁾	44.8 44.0 0.8 30.2	40.4 38.8 1.6 27.5	42.1 39.6 2.4 27.5	44.9 42.0 2.9 22.9	45.4 44.1 1.3 20.5	45 43 2 20	-1	-1	0
Base rate of NB, % p.a., end of period									
Current account, EUR mn ⁸⁾ Current account in % of GDP Exports of goods, BOP, EUR mn ⁸⁾ annual growth rate in % Imports of goods, BOP, EUR mn ⁸⁾ annual growth rate in % Exports of services, BOP, EUR mn ⁸⁾ annual growth rate in % Imports of services, BOP, EUR mn ⁸⁾ annual growth rate in %	-1438.6 -20.9 1303.0 11.5 4974.1 6.0 636.2 15.2 339.2 5.9	-1318.4 -16.3 1676.9 28.7 5354.5 7.6 696.1 9.4 349.2 3.0	-1500.1 -17.3 2059.7 22.8 6021.6 12.5 798.6 14.7 352.6 1.0	-763.5 -7.8 2687.3 30.5 6093.0 1.2 921.5 15.4 386.6 9.6	-1396.5 -12.6 3091.6 15.0 7233.9 18.7 994.1 7.9 413.5 7.0	-1600 -12.8 3450 11.6 8250 14.0 1100 10.7 450 8.8	-1300 -11 3000 -13 6500 -21 1000 -9 400 -11	-1100 -9 3100 3 6400 -2 1030 3 400 0	-1000 -8 3260 5 6500 2 1080 5 410 2
FDI inflow, EUR mn ⁸⁾ FDI outflow, EUR mn ⁸⁾	337.7	566.9 1.3	493.1 0.4	572.3 3.2	1546.2 17.2	700 0.5		•	-
Gross reserves of NB excl. gold, EUR mn ⁹⁾ Gross external public debt, EUR mn Gross external public debt in % of GDP Average exchange rate BAM/EUR	1428.0 2052.3 29.9 1.956	1778.8 2061.4 25.5 1.956	2160.0 2217.9 25.6 1.956	2787.4 2081.5 21.3 1.956	3424.9 2025.2 18.3 1.956	3000 2025 16.2 1.956	1.96	1.96	1.96
Purchasing power parity BAM/EUR ¹⁰⁾	0.850	0.850	0.857	0.878	0.889	0.928			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) From 2004 GDP figures include the Non-Observed Economy (NOE). - 3) wiiw estimates based on weighted averages for the two entities (Federation BH and Republika Srpska). - 4) From 2005 District Brcko included. - 5) wiiw calculation. - 6) Until 2005 costs of living, from 2006 harmonized CPI. - 7) Based on IMF data. - 8) Converted from national currency. - 9) From 2006 including investment in foreign securities. - 10) Benchmark results 2005 from Eurostat and wiiw estimates.

Source: wiiw Database incorporating national statistics and IMF. Forecasts by wiiw.



Hermine Vidovic

Croatia: meeting financial obligations – a major challenge

GDP growth moderated noticeably in the second half of 2008. Latest figures (third quarter 2008) show a marked slowdown of private consumption and a drop in investment activities. Starting from the second half of the year, private lending, particularly housing credits, declined significantly. In al likelihood, GDP growth turned negative in the final quarter of 2008, thus GDP for the whole year rose only 2.5%. The construction industry maintained high growth; industrial production decelerated from month to month and rose by a mere 1.6% in 2008. Inflation continued to decelerate from its peak level in July and reached 2.9% in December (over December 2007).

The impact of the economic downturn on the labour market remained limited during the first three quarters of the year, but registered unemployment started to rise in the last quarter. Over the first eleven months, employment increased by 1.4% year-on-year and unemployment, though increasing, was still lower than the year previous.

Foreign trade lost momentum towards the end of 2008. Based on customs statistics, exports of goods measured in euro terms were up by 6.3% and imports rose by 10.5%. Thus, the foreign trade deficit continued to widen, reaching about 27% of the GDP. Trade in both directions was very dynamic in 'other transport equipment': the main exports under that item were ships, while on the import side fishing boats, helicopters and aeroplanes played the most important role. By no means did earnings from tourism suffice to offset the deterioration in the trade balance. The current account closed with an unparalleled record deficit equivalent to about 11% of the GDP. As for FDI, inflows valued at EUR 3.6 billion reached almost the same level as in 2007 – covering about 80% of the current account deficit. Experts from the National Bank expect a drop in FDI inflows of the order of 30-60% in 2009.

Croatia's gross foreign indebtedness has continued to grow. At the end of October, it had reached EUR 37.7 billion; EUR 4.4 billion higher than in December 2007. The bulk of that increase was due to the corporate sector borrowing more. By contrast, the banking sector's foreign debt declined, while that of the government remained unchanged. Debt servicing appears to have become a serious problem in 2009, with some EUR 11 billion reportedly due to be repaid over the year as a whole. Restricted access to international credit markets will aggravate debt repayment, particularly in the corporate sector. The government has requested a syndicated loan (from six banks) worth EUR 1 billion in order to: (i) repay debt falling due in the first half of the year; and (ii) finance current obligations, such as salaries, pensions and social welfare expenses. Representatives of the enterprises, however, expressed concern that there might be too little money left for the corporate

sector. In response the Minister of Finance announced that the state would seek additional fresh money from abroad in the second half of the year. Assistance from the IMF has been mentioned by various sources but it is still an open issue whether Croatia will have to resort to that support.

In October 2008, in an attempt to boost liquidity, the National Bank abolished the application of its ruling on the marginal reserve requirement which had been in force for four years. As of mid-January 2009, the National Bank has increased the commercial banks' calculated foreign exchange component of the reserve requirement (allocated in kuna) from 50 to 75 per cent to limit the depreciation pressure on the Croatian kuna and maintain exchange rate stability. In a further step the National Bank has intervened heavily on the foreign exchange market by selling EUR 328 million and EUR 182 million.

In January, the Croatian prime minister announced that the Economic Institute together with the Ministries of Economy and Finance will prepare a set of short-term anti-recession measures to preserve macro-economic stability and budget sustainability and boost economic activity and exports.

In late December, parliament adopted the 2009 budget, which envisaged the deficit declining further to 0.9% of the GDP (from about 2% in 2008) in order to reduce the need for fresh borrowing. However, taking into account that the budget is based on a GDP growth rate of 2%, achieving this goal seems to be a rather optimistic proposition. A revision of the budget in the months to come seems highly likely.

Croatia's EU accession talks are currently blocked. Slovenia vetoed the opening of nine of the 35 policy negotiating chapters in December 2008 owing to intractable border disputes over territory and accession to the sea. Attempts at mediation are being made by various parties to get the negotiations going again and so complete them by the end of 2009 as envisaged by the roadmap suggested by the Commission. (Croatia's entry to the EU is planned for 2011.)

The slowdown in economic activity is expected to continue throughout 2009, driven by decreasing exports (of both goods and services) and a slowdown in domestic demand. A decline in the exports of goods is not only to be expected in trade with the EU, but also with the Western Balkan countries, in particular Bosnia and Herzegovina. Thus, the negative trends in industrial production that prevailed over the final months of 2008 will continue or even worsen. A decline in production might be expected most in labour-intensive sectors, which had already been dipping downwards over the past few years, as well as in shipbuilding, Croatia's most important export industry. Those developments will translate into a drop in employment and a rise in unemployment – or even a rise in inactivity. In addition, tourism is extremely vulnerable to external shocks: it will, therefore, be significantly affected by the deteriorating economic situation in Western Europe. Shrinking foreign trade may trigger a reduction in the trade and current account deficits. Given the deterioration of the overall financial environment, servicing (or restructuring) the high foreign debt and maintaining the exchange rate of the Croatian kuna will remain the most challenging tasks in the near future. A recovery might only come about by mid-2010, assuming that the international environment also experiences a recovery.

Table HR

Croatia: Selected Economic Indicators

								Forecas	2011 st
Population, th pers., average	4442	4439	4442	4440	4436	4435			
Gross domestic product, HRK mn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	198422 5.3 5900 9800	214983 4.3 6500 10600	231349 4.3 7000 11100	250590 4.8 7700 12100	275078 5.6 8500 13300	299150 2.5 9300 13600	304900 -2	317200 1	336500 4
Consumption of households, HRK mn, nom. annual change in % (real) Gross fixed capital form., HRK mn, nom. annual change in % (real)	4.6 56662 24.7	123123 4.8 60512 5.0	131671 3.4 65008 4.8	140261 3.5 74792 10.9	153421 6.2 82386 6.5	166000 2 92700 6	-1 -2	1 3	3 6
Gross industrial production ²⁾ annual change in % (real) Gross agricultural production annual change in % (real) Construction industry, hours worked ²⁾ annual change in % (real)	4.1 -15.9 22.8	3.7 11.9 2.0	5.1 -8.7 -0.8	4.5 4.4 9.4	5.6 -3.9 2.3	1.6 11	-2	2	3.5
Employed persons - LFS, th, average annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate in %, end of period	1537 0.6 256 14.3 18.7	1563 1.7 250 13.8 18.5	1573 0.7 229 12.7 17.8	1586 0.8 199 11.1 17.0	1615 1.8 171 9.6 14.7	1615 0.0 158 9.0 13.7	10.5		10
Average gross monthly wages, HRK annual change in % (real, net)	5623 3.8	5985 3.7	6248 1.5	6634 1.9	7047 2.2	7500 0.4			
Consumer prices, % p.a. Producer prices in industry, % p.a. ³⁾	1.8 1.9	2.1 3.5	3.3 3.0	3.2 2.9	2.9 3.4	6.1 8.4	4	3	2
General governm.budget, nat.def., % GDP ⁴⁾ Revenues Expenditures Deficit (-) / surplus (+), % GDP ⁵⁾ Public debt in % of GDP% ⁶⁾	45.1 50.1 -6.2 51.2	44.9 49.5 -4.8 52.0	44.5 48.3 -4.0 52.7	44.8 47.6 -3.0 50.0	46.3 48.6 -2.3 53	45.2 47.6 -2.3 54.5	-2.5	-3	-2.5
Discount rate of NB, % p.a., end of period	4.5	4.5	4.5	4.5	9.0	9.0			
Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in %	-7.2 5574.7 5.3	-5.0 6606.8 18.5	-1975.6 -6.3 7220.3 9.3 14738.3 10.6	-2702.1 -7.9 8463.6 17.2 16807.8 14.0	-3233.4 -8.6 9192.5 8.6 18626.5 10.8	-4500 -10.9 9740 6.0 20580 10.5	-2900 -7 9600 -1 20800 1	-3400 -8 9800 2 21400 3	-3600 -8 10300 5 22700 6
Exports of services, BOP, EUR mn annual growth rate in % Imports of services, BOP, EUR mn annual growth rate in %	7565.9 29.7 2632.9 3.4 1762.4 105.5	7636.7 0.9 2867.8 8.9 949.6 278.8	8052.6 5.4 2734.9 -4.6 1467.9 191.8	8528.5 5.9 2823.9 3.3	9152.1 7.3 2858.9 1.2 3648.9 180.4	10070 10.0 3190 11.6 3600 100	10000 -1 3100 -2	10200 2 3200 2	10600 4 3400 5
Gross external debt, EUR mn ⁻⁷⁾ 1 Gross external debt in % of GDP ⁻⁷⁾ Average exchange rate HRK/EUR	6554.1 9883.7 76.6 7.5634 4.5448		82.1 7.4002	8725.3 29273.9 85.8 7.3226 4.6748	9307.4 32929.2 87.7 7.3362 4.6559	9120.9 39000 95.5 7.2230 4.9700	7.4	7.4	7.4

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) Enterprises with more than 20 employees. - 3) Based on domestic output prices. - 4) On accrual basis. - 5) Including change in arrears and non-recorded expenditures. - 6) Including guarantees. - 7) From 2008 new reporting system.

Source: wiiw Database incorporating Eurostat, IMF and national statistics. Forecasts by wiiw.



Vladimir Gligorov

Macedonia: relying on fiscal stimulus

Growth was already decelerating by the third quarter of 2008. Preliminary data for the fourth quarter suggest a further slowdown in both industrial production and foreign trade. Personal consumption has also declined, as have investments. Inflation has decelerated dramatically, while deflationary tendencies became apparent at the beginning of 2009. Some people have been withdrawing their bank deposits in domestic currency – but not in foreign currencies. Credit activity, however, has declined significantly. Reportedly workers are being laid off; however, for want of reliable data the labour market's reaction to that development cannot be assessed. Overall, the crisis has not spared Macedonia.

The response has been somewhat hard to decipher to date. Whereas the central bank has been rather pessimistic suggesting that a stand-by agreement with the IMF would be desirable, the government has been bullish suggesting that Macedonia will weather the global crisis unscathed. There were suggestions that international investors will relocate their operations to Macedonia owing to diminishing prospects elsewhere. Ultimately, the government submitted, and parliament approved, a draft budget envisaging significant increases in public spending. The budget was predicated on an assumed GDP growth of 4.5% accompanied by moderate inflation and a high current account deficit equivalent to about 14% of GDP; the latter figure reflects the expectations of high foreign investment inflows.

Early indications are that those assumptions were unrealistic. Indeed, if anything, the crisis has come to Macedonia sooner than expected. Exports have declined sharply because many of them comprise metals and raw materials, for which there is no market at present. Imports have also dropped owing to an overall decline in consumption. Furthermore, deflationary pressures have proven stronger than initially expected.

The government cannot be expected to come up with new programmes to deal with the crisis because of the presidential elections scheduled for March. Once the elections are over, there may be an attempt to take a second look at the crisis and the government's ability to overcome things by increasing public spending. The key problem with current government strategy is that it does not reveal the source of the funds required to cover increased public expenditures. In addition, adverse developments in both foreign trade and the current account in general may increase the pressure on the exchange rate. Macedonia has a very strict fixed exchange rate regime; if the financial inflows from abroad dry up, the country may come under strong pressures to devalue. Indeed, one of the contentious issues between the government and the central bank is the degree to which monetary

policy should be restrictive. The bank is reluctant to ease matters by cutting interest rates, while the government is pressing for a relaxation of monetary policy.

These policy intentions and dilemmas will prove academic, if Macedonia has to turn to the IMF and request a stand-by programme. Judging by the stand-by programme in neighbouring Serbia, it is highly unlikely that the IMF will condone lax fiscal policy. None the less, with or without the IMF, it is hard to see whether any significant scope exists for increases in public spending.

Should some degree of fiscal stimulus still prove possible, GDP growth may not turn negative. However, the odds are on its turning negative and recession becoming a real possibility. In the medium term, it is hard to expect any swift improvement owing to the slow rate of recovery throughout the region, on which Macedonia depends more than most of its neighbours. As in the region as a whole, a shift in development strategy is essential; that in turn will call for structural adjustment and so dampen the country's medium-term prospects.

Table MK

Macedonia: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 t
Population, th pers., average 2)	2026.8	2032.5	2036.9	2040.2	2045.0	2048			
Gross domestic product, MKD mn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	251486 2.8 2000 5300	265257 4.1 2100 5800	286619 4.1 2300 6400	310915 4.0 2500 6900	353786 5.9 2800 7800	410146 5.3 3300 8700	418000 -1	431000 0	453000 2
Consumption of households, MKD mn, nom. annual change in % (real) ²⁾ Gross fixed capital form., MKD mn, nom. annual change in % (real) ²⁾	191873 -1.5 42110 1.1	209075 8.0 47286 10.9	222726 5.7 48868 -5.4	243131 6.0 56485 11.6	272886 9.4 71557 12.0	310300 5 80600 4	320000 0 81000 -2	330000 0 83000 0	347000 2 88000 3
Gross industrial production annual change in % (real) ³⁾ Gross agricultural production annual change in % (real) Construction industry annual change in % (real)	4.1 4.5 -4.9	-2.2 6.8 -1.0	7.1 0.3 -20.5	3.6 4.8 -11.9	3.7 -3.0 9.7	6.7 6.9	-3	0	3
Employed persons - LFS, th, average annual change in % Unnemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	545.1 -2.9 315.9 36.7	523.0 -4.1 309.3 37.2	545.3 4.3 323.9 37.3	570.4 4.6 321.3 36.0	590.2 3.5 316.9 34.9	610.7 3.5 311.5 33.8	34	33	
Average gross monthly wages, MKD real growth rate, % (net wages)	19950 3.6	20771 4.4	21330 2.0	23036 3.9	24136 5.5	25997 2			
Consumer prices, % p.a. Producer prices in industry, % p.a. ⁴⁾	1.2 -0.3	-0.4 0.9	0.5 3.2	3.2 7.3	2.3 2.5	8.3 10.3	3	3	3
General governm. budget, nat.def., % GDP ⁵⁾ Revenues Expenditures Deficit (-) / surplus (+), % GDP Public debt in % of GDP	33.4 34.5 -1.1	33.2 33.2 0.0	35.2 35.0 0.2	33.5 34.0 -0.6	33.8 33.2 0.6	34.5 33.8 -1.0	-2	-2 -2	0
Discount rate of NB, % p.a., end of period	6.5	6.5	6.5	6.5	6.5	6.5			
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual growth rate in % Imports of goods, BOP, EUR mn annual growth rate in % Exports of services, BOP, EUR mn annual growth rate in %	-168.2 -4.1 1203.2 1.9 1956.2 -3.9 335.3	-362.7 -8.4 1345.0 11.8 2259.3 15.5 363.7 8.5	-121.3 -2.6 1642.9 22.2 2501.4 10.7 416.2 14.4	-44.9 -0.9 1902.7 15.8 2923.1 16.9 477.3 14.7	-414.8 -7.2 2441.5 28.3 3616.3 23.7 594.3 24.5	-912 -13.6 2700 11 4700 30 650 9	-478 -7 2400 -10 4700 0 600 -5	-563 -8 2400 0 4900 5 600 0	-592 -8 2500 5 5100 5 600 5
Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	341.4 100.4 0.3	407.2 19.3 260.7 1.0	440.8 8.3 77.2 2.3	455.1 3.2 344.8 0.1	568.7 25.0 506.0 -0.9	710 25 300 0	700 -5	700 0	700 5
Gross reserves of NB, excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP	685.3 1472.9 35.9	653.3 2070.6 47.9	1028.0 2518.1 53.7	1311.3 2495.2 49.1	1400.1 2840.2 49.1	1552.5 ^{IX} 3360.3 ^{IX}			
Average exchange rate MKD/EUR Purchasing power parity MKD/EUR	61.26 23.42	61.34 22.65	61.30 21.96	61.19 21.94	61.18 22.28	61.27 23.12	61.2 ·	61.2	61.2

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) In 2008 wiw estimate. - 3) Enterprises with more than 10 employees. - 4) Based on domestic output prices. - 5) Refers to central government budget and extra-budgetary funds.

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.



Vladimir Gligorov

Montenegro: banking problems

Recent high growth was based on high foreign investment inflows that have all but stopped. As a consequence, growth expectations have had to be revised, even though the government still expects growth of around 2% in 2009. That expectation is premised on the a number of investment projects being implemented, mostly in tourism and hydro-plant construction. If those plans fall through, it is hard to see how recession can be averted.

One serious problem is the current state of the banking sector. Late last year, the government had to come to the rescue of the Prva banka with 40 million euro. The liquidity of the economy would have been threatened, had the bank been allowed to fail. After that, the government realised that a comprehensive package was needed to shore up the banking sector. It is not yet altogether clear what that plan entails. It cannot be doubted, however, that the banking sector faces serious problems and challenges.

These problems are due to the drop in the prices of their assets and a lack of investment opportunities in general. Over the past few years, real estate prices and the stock exchange boomed excessively. That boom has now come to an end, creating problems for the banks that invested in those assets. The state will clearly have to recapitalize the banks because few private investors are interested in taking over stakes in those banks.

The government is in a strong position because it ran general budget surpluses over the past couple of years. It, thus, disposes of some resources with which to address the adjustment problem. Fiscal policy is practically the sole option on account of Montenegro using the euro as its legal tender. Fiscal policy, however, does not have much room for manoeuvre because it offers little scope for spending cuts. Indeed, expenditures will have to increase in order to meet the higher bills for social and welfare transfers.

Exports have plummeted owing to the low price of aluminium, the major export item. Imports have also declined for want of credit and foreign financing. In the past few years the current account deficit was as high as 40% of GDP; it will have to shrink quite dramatically this year and in the medium term. In that context, the key factor governing the country's economic prospects is the performance of the tourism sector. If tourism has a bad season and slumps markedly, the economy will have no other resources for growth. If, in addition, the planned foreign investments fail to materialize, prolonged recession is quite probable.

Table ME

Montenegro: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecast	2011
Population, th pers., average 2)	620.3	622.1	623.3	624.2	626.2	628.0			
Gross domestic product, EUR mn, nom. ³⁾ annual change in % (real) ³⁾ GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	1510.1 2.5 2400 6100	1669.8 4.4 2700 6500	1815.0 4.2 2900 6900	2149.0 8.6 3400 8300	2807.9 10.7 4500 10300	3340 8.1 5300 11400	3400 -2	3500 0	3700 2
Consumption of households, EUR mn, nom. annual change in % (real) ⁴⁾ Gross fixed capital form., EUR mn, nom. annual change in % (real) ⁴⁾	1120.5 200.8	1221.1 16 286.1 37	1268.0 3 326.3 12	1660.9 10 469.8 8	2157.6 8 683.6 10	7 8	-2 -2 -2	0 0	2 3
Gross industrial production annual change in % (real) Net agricultural production annual change in % (real) Construction industry annual change in % (real)	2.4 1.0	13.8 3.8	-1.9 -0.9	1.0 1.9	0.1 -11.0	-2.0	5	0	0
Employed persons - LFS, th, average ⁵⁾ annual change in % Unemployed persons - LFS, th, average ⁵⁾ Unemployment rate - LFS, in %, average ⁵⁾ Reg. unemployment rate, in %, end of period ⁶⁾		187.3 71.8 27.7 29.3	178.8 -4.5 77.8 30.3 25.2	178.4 -0.3 74.8 29.6 20.5	217.4 21.9 52.1 19.3 16.5	220 1.2 50 18.5 16.0	19	20	20
Average gross monthly wages, EUR ⁷⁾ annual change in % (real, net)	271 9.3	303 9.1	326 6.7	377 12.0	497 15.0	609 13.4			•
Consumer prices, % p.a. Producer prices in industry, % p.a. ⁸⁾	6.7 4.5	2.4 5.8	2.3 2.1	3.0 3.6	4.2 8.5	8.5 15.0	3	3	3
General governm.budget, nat.def., % GDP ⁹⁾ Revenues Expenditures Deficit(-)/Surplus(+) in % of GDP Public debt in % of GDP	39.7 42.1 -2.4	39.2 41.8 -2.6	39.4 42.0 -2.6	45.4 42.7 2.7	47.7 41.4 6.4	44 42 2	-2	0	0
Base rate of NB, % p.a., end of period									
Current account, EUR mn ¹⁰⁾ Current account in % of GDP Exports of goods, BOP, EUR mn ¹¹⁾ annual growth rate in % Imports of goods, BOP, EUR mn ¹¹⁾ annual growth rate in % Exports of services, BOP, EUR mn annual growth rate in % Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	-102.1 -6.8 270.6 -16.1 629.9 -15.7 191.3 11.4 79.7 11.1 43.8 5.1	-119.6 -7.2 452.1 868.6 249.5 30.4 101.4 27.2 52.7 2.1	-154.0 -8.5 460.6 1.9 974.3 12.2 329.8 32.2 134.3 32.5 392.7 11.5	-531.2 -24.7 648.3 40.7 1497.7 53.7 418.0 26.8 220.9 64.6 644.3 177.6	-825.1 -29.4 659.7 1.8 2001.4 33.6 674.1 61.2 230 5.9 1007.7 482.8	-900 -26.9 530 -20 2300 15 740 10 340 50 700.0 250.0	-340 -10 480 -10 2070 -10 740 0 310 -10	-350 -10 460 -5 1860 -10 780 5 290 -5	-370 -10 480 5 2050 10 860 10 320 10
Gross reserves of NB, excl. gold, EUR mn Gross external public debt, EUR mn Gross external public debt in % of GDP	461.5 30.6	488.6 29.3	513.3 28.3	504.0 23.5	462.1 16.5	481.7 14.4	•	•	
Purchasing power parity EUR/EUR ¹²⁾	0.40	0.41	0.42	0.41	0.44	0.47			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) From 2003 according to census November 2003; 2008 wiiw estimate. - 3) Including non-observed economy. - 4) wiiw estimate. - 5) Until 2007 as of October. - 6) In % of unemployed plus employment (excluding individual farmers). - 7) From 2007 wage data refer to employees who received wages (previously wages were divided by all registered employees in enterprises); comparable value for 2006: 433. - 8) Based on domestic output prices. - 9) Revenues excluding grants, expenditures excluding net lending. - 10) Including all transactions with Serbia. - 11) From 2004 trade with Serbia and Kosovo based on customs statistics (before on ITRS). - 12) Benchmark results 2005 from Eurostat and wiiw estimates.

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.



Vladimir Gligorov

Serbia: risking instability

The impact of the crisis on Serbia is nothing out of the ordinary. The main features have been a decrease in foreign investment and a sharp decline in foreign trade. Even before that, industrial production had started to decline, ending the year close to stagnation. This was partly attributable to tighter monetary policy that the central bank introduced as it struggled to check inflation. In the last quarter, however, the decline was more pronounced owing to falling exports and declining consumption.

Perhaps the major story has been the budget. In September 2008, it was revised in order to increase pensions on average by 10%, thus fulfilling a pre-election promise. Three months later in December, however, the government drew up the budget for the coming year assuming a GDP growth rate of 3.5% in 2009. That budget served as the basis for the stand-by agreement with the IMF that entered into effect in mid-January 2009. At that very moment, however, it was clear that the initial assumptions had been too optimistic. Equally miscalculated and hence more than inadequate was the financial support of just over 400 million euro, which the Serb government had negotiated with the IMF, the declared intention being only to draw down the funds, if absolutely necessary.

As a consequence, it transpired that the assumptions on which the monetary and fiscal polices had been predicated were completely out of touch with reality. Awareness of that fact was reflected in the sharp depreciation of the dinar – of about 25% in the final months of 2008 and the first month of 2009. The budget, on the other hand, has been facing a series of shortfalls; it will have to be revised in the very near future. Initially, the idea was to put a cap on the current expenditures, yet continue with public investments and even increase them. In the next budget revision, it is quite likely that current expenditures will have to be cut and some investments either postponed or discontinued.

An additional problem is the relatively high inflation rate. With imports falling in tandem with import prices, such as those of oil, gas and raw materials, one could expect inflation to decelerate. This should be matched by a decrease in consumption owing to credit not being readily available. Disinflation will thus eventually come; at present, however, depreciation and the long overdue adjustment of regulated prices are keeping the inflation rate at a relatively high level. The central bank expects inflation to run to 8% (plus or minus 2%) year-on-year. Given the speed with which the economy is deteriorating, an even lower inflation rate seems realistic. At the moment, however, prices are going in the opposite direction.
The government's revised projection for GDP growth in 2009 is 1.9% with a rebound in 2010. The basis for this assessment is not known. Most observers expect a zero GDP growth rate at best. This can only be achieved if macro-economic stability is ensured. For want of a significant inflow of foreign funds, however, it will not be possible to stabilize the currency; that in turn may lead to problems with refinancing private debt. The country runs the risk of a surge of bankruptcies that will place the banks in a very awkward position. Thus, there is every risk of a full-blown crisis.

Current government strategy seems to be to one of seeking financial support from the international financial institutions and sovereign lenders. The first step will have to be the revised stand-by agreement with the IMF; it will include major savings in the public sector in exchange for significant financial support for the central bank reserves designed to stabilize the currency. When it comes, that programme will lead to further contraction as it will require a trade-off between growth and stability.

In addition to that, there are hopes of receiving some financial support from the EU funds for macroeconomic stability; those funds, however, are rather limited (around 1 billion euro) and all candidate and potential candidate countries in need of support are eligible. Projects financed by the World Bank will be continued; however, the source of funds that the government will draw on to co-finance those projects is not clear. No other financial sources have been identified to date.

Given the negative outlook, GDP cannot be expected to grow this year. Employment will also decline in both the public and private sectors. It is not clear whether the government will have the money to finance ever-increasing social and welfare needs. Enterprises are also demanding ever more financial support from the budget as they face problems of securing credits and servicing the higher costs of borrowing. The budget can hardly satisfy all these demands.

Beyond the current crisis, it is uncertain whether the economy can return to its previous growth strategy. It seems more realistic to base the medium-term strategy on increased savings and exportled growth. If that turns out to be the case, one can hardly expect the economy to return to high rate of growth in the next two years. It will take at least that long to build up the necessary export base.

Table RS

Serbia: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008	¹⁾ 2009	2010 Forecast	2011
Population, th pers., average ²⁾	7481	7463	7441	7412	7382	7350			
Gross domestic product, RSD mn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	1137607 2.8 2300 5900	1388099 8.2 2600 6600	1691941 6.0 2700 7200	1987765 5.6 3200 7800	2329400 7.1 4000 8500	2760700 6.1 4600 9300	2867800 -2	2953800 3 0	103300 2
Consumption of households, RSD mn, nom. annual change in % (real) ³⁾ Gross fixed capital form., RSD mn, nom.			1281014 5.0			. 6	-2	0	2
annual change in % (real) 3)			5.0	15.2	12	8	-2	0	3
Gross industrial production annual change in % (real) Gross agricultural production	-3.0	7.1	0.8	4.7	3.7	1.1	0	0	3
annual change in % (real) Construction output total annual change in % (real) ⁴⁾	-11.4 10.8	26.0 3.5	-3.4 2.0	-2.6 7.7	8.3	•		•	•
Employed persons - LFS, th, Oct ⁵⁾ annual change in %	2918.6 -2.7	2930.8 0.4	2733.4	2630.7 -3.8	2655.7 1.0	2805.3 5.6		•	•
Unemployed persons - LFS, th, Oct ⁵⁾ Unemployment rate - LFS, in %, Oct ⁵⁾ Reg. unemployment rate, in %, end of period ⁶⁾	500.3 14.6 31.9	665.4 18.5 26.4	719.9 20.8 27.1	693.0 20.9 27.9	585.5 18.1 25.1	457.2 14.0 24	18	20	20
Average gross monthly wages, RSD annual change in % (real, net)	16612 13.6	20555 10.1	25514 6.4	31745 11.4	38744 19.5	45674 3.9			•
Consumer prices, % p.a. ⁷⁾ Producer prices in industry, % p.a. ⁸⁾	9.9 4.6	11.4 9.1	16.2 14.2	11.7 13.3	7.0 5.9	11.7 12.4	6	3	3
General governm.budget, nat.def., % GDP Revenues Expenditures Deficit (-) / surplus (+), % GDP	41.6 42.7 -1.1	42.5 41.5 0.9	42.7 41.8 0.9	43.6 45.2 -1.7	43.3 45.2 -1.9	42.5 45.0 -2.5	-2	2	-1
Public debt in % of GDP	-1.1	0.9	0.9	-1.7	-1.9	-2.5	-2	-2	-1
Discount rate of NB, % p.a., end of period	9.0	8.5	8.5	8.5	8.5	8.5			
Current account, EUR mn ⁹⁾ Current account in % of GDP Exports of goods, BOP, EUR mn ⁹⁾¹⁰⁾	-1356.1 -7.8 2937.9	-2639.5 -13.8 3283.8	-1766.1 -8.7 3998.9	-2382.1 -10.1 5137.4	-3863.8 -13.3 6473.5	-6000 -17.8 7900	-2900 -10 7100	-2700 -10 7100	-3100 -12 7800
annual growth rate in % Imports of goods, BOP, EUR mn ⁹⁾¹⁰⁾ annual growth rate in %	25.1 6497.1 12.5	11.8 8487.9 30.6	21.8 8255.3 -2.7	28.5 10138.4 22.8	26.0 12927.3 27.5	22 16700 29	-10 15000 -10	0 15000 0	10 16500 10
Exports of services, BOP, EUR mn ⁹⁾¹⁰⁾ annual growth rate in % Imports of services, BOP, EUR mn ⁹⁾¹⁰⁾⁾	919.7 15.7 740.9	1186.6 29.0 1055.5	1315.5 10.9 1321.2	1851.0 40.7 1892.4	2148.6 16.1 2161.7	2600 20 2500	2500 -5 2300	2500 0 2300	2800 10 2500
annual growth rate in % FDI inflow, EUR mn ⁹⁾¹¹⁾ FDI outflow, EUR mn ⁹⁾	12.8 1208.3	42.5 777.1	25.2 1265.3 18	43.2 3515.7 17	14.2 2272.5 668	15 1900 160	-10	0	10
Gross reserves of NB, excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP	2728.2 10858.3 65.2	3008.0 10354.5 58.8	4753.7 13064.0 66.0	8841.3 14884.6 59.2	9422.2 17790.5 60.5	7875.1 22000 70.6	•		
Average exchange rate RSD/EUR Purchasing power parity RSD/EUR ¹²⁾	65.05 25.62	72.57 28.22	82.91 31.72	84.19 34.34	79.98 37.30	81.90 40.49	100	110	120

Note: From 2004 the term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) wiiw estimate in 2008. - 3) wiiw estimate. - 4) Gross value added. - 5) From 2004 according to census 2002 and revisions based on ILO and Eurostat methodology. - 6) Until 2003 jobseekers in per cent of labour force excluding farmers. - 7) From 2008 according to COICOP-classification. - 8) Based on domestic output prices. - 9) Converted from USD with the average exchange rate. - 10) From 2006 including transactions with Montenegro. - 11) Until 2004 FDI net. - 12) Benchmark results 2005 from Eurostat and wiiw estimates.

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.



Josef Pöschl

Turkey: a robust, but recessive economy

Turkey's GDP is likely to decline by 2-3% in 2009, mirroring exactly what the analysts have come to expect for the EU and the United States. In the case of Turkey, this means a remarkable change of scenery after several years of very high growth. At the outbreak of the international financial crisis, a business downturn was already in the making in Turkey; it is now intensifying to an unexpected degree. The Turkish banking sector is relatively robust thanks to earlier restructuring, regulation and surveillance in response to the homemade financial crisis in 2001. Nevertheless, the banks' risk awareness has increased; for households and non-financial corporations alike, this means tighter lending conditions and higher risk premia. The Central Bank's business climate survey points to historical lows in terms of both the current situation and people's expectations for the next few months. The companies complain about the lack of entries in their order books and capacity utilization is low.

The Central Bank's real sector confidence index in January stood at 55: down from 104 in the same month of the previous year. As for the first three months of the current year, only 16% of the companies expected an increase in output and less than 5% envisaged an upturn in employment. The purchasing managers' index as published by the Turkish Economy Bank fell to 31 in December 2008: a six-year low (an indicator lower than 50 means that industry is contracting). Even more pessimistic was the assessment of new orders coming in; the index plunged below 29. In December 2008, the rate of capacity utilization in manufacturing was a mere 65%⁸. The GDP had already contracted in the fourth quarter of 2008; the above figures suggest that in the first half of 2009 the recession will continue to deepen with no prospects of it being overcome in the short term. Owing to low capacity utilization, real sector investment over the next few months will remain confined to a certain measure of replacement and technological updating of current capacities.

In 2009, household consumption will decline. One reason is the decline in household borrowing, which became visible towards the end of 2008; another reason is the decline in employment and real income. Exports slumped badly during the final months of 2008, and a swift return to high volumes is unlikely. Imports are also falling for two reasons: lower world market prices (especially for energy) and lower import volumes. In recent years, Turkey has become an important producer and exporter of transport equipment; it is now suffering on account of the worldwide decline in demand for these products.

⁸ Provisional survey results of 4808 manufacturing industrial establishments weighted by production value according to NACE Rev. 1.1; the December 2007 figure had been 81% (Source: Turkish Statistical Institute).

In fiscal terms, Turkey's economy creates a relatively robust impression. Thanks to a series of high annual primary surpluses and debt growing less than the GDP, the general government's debt to GDP ratio dropped to 38.1% (June 2008). Local elections, scheduled for March 2009, will put the popularity of the ruling Justice and Development Party⁹ to the test. Only thereafter, will negotiations with the IMF most likely lead to a new stand-by agreement; it is expected to be for a period of 18-24 months and foresees financial support of the order of EUR 15-20 billion. Turkey would be in a much better position today, had a new stand-by agreement been concluded soon after the expiry of the previous agreement in May 2008.

It is neither the government nor the banking sector that could stir up major trouble. Foreign debt in the non-financial corporate sector has increased rapidly over the past few years, peaking at 25% of GDP in 2008 (compared to 16% in 2004). In the fourth quarter of 2008, the non-financial corporate sector drastically reduced its borrowing from abroad, and became, together with the banking sector, a net re-payer. For Turkey, debt servicing has not customarily been a problem. Last autumn, when the international financial crisis took on a new dimension, it had an impact on Turkey too. Nerves were strained, the currency dropped in value and interest rate spreads increased. Later on, however, the situation relaxed and the lira recouped some of its losses. In an endeavour to stimulate capital inflows, Turkey has tried to create conditions conducive to attracting Turkish money parked abroad, which is roughly estimated as possibly amounting to some EUR 100 billion. It has also tried selling bonds index-linked to the revenues of several state-owned companies so as to attract investors from the Gulf States. To date, both attempts have yielded but modest results. In January, it transpired that fears about debt affordability had been exaggerated. A USD 1 billion 2017 bond that Turkey issued in the first half of January was oversubscribed – by a factor of two. The yield spread over US treasuries was approximately 500 basis points and the yield to maturity 7.5%. Under current conditions, this has been perceived as a success, which will encourage the issue of more debt in the first half of 2009 as a means of replenishing the country's foreign currency reserves. Foreign direct investment (FDI) amounted to EUR 11 billion in 2008; it may reach about half that value this year. FDI is frequently linked to mergers and acquisitions (EUR 14.5 billion in 2009); these will also decline over the year.

Over the past few years, the current account deficit rose constantly and reached EUR 26 billion (or 4.7% of GDP) in 2008. The deficit in trade with goods amounted to EUR 32.5 billion and the surplus in services to EUR 11.5 billion. Turkey's exports of goods have diversified considerably over recent years in terms of both destination and composition; this means that the country is less dependent on what happens in individual partner countries. In recent months, Turkish exports to emerging markets have risen, whereas exports to others have declined. In the case of the automotive industry, however, the degree of diversification is low as Turkish cars are primarily shipped to EU countries. In late 2008, shipments dropped dramatically. In December 2008 the association of car manufacturers reported a decline of close on 60% year-on-year and stressed the need for a rescue package. Temporary production stoppages have become the rule and companies are cutting back on labour.

⁹ Adalet ve Kalkınma Partisi AKP.

A major factor contributing to the current account deficit has been the scale of profits originating from foreign investment. In previous years, recipients used to re-invest a large proportion of their profits in Turkey. The overall inflow of foreign capital did not merely finance current account deficits, but it also led to a continuous increase in foreign currency reserves from 2001 onwards. At the end of 2009, those reserves amounted to EUR 51 billion. This was higher than it had been a year before despite some decline during the fourth quarter of the year. The current account deficit also fell in the final quarter of 2008.

Given the impact of skyrocketing prices on international energy markets, the rate of consumer and producer price inflation temporarily overshot the 10% mark in 2008. During the last quarter of the year, however, the price indices first stopped rising and then even declined at a later juncture. As a result, the rate of inflation for 2008 as a whole only slightly exceeded 10%. The consumer price index for 2009 may well plummet to some 8%; it could decline even more in the absence of lira devaluation. Some devaluation is, however, likely, but it may be less pronounced than predicted by Nomura International. Another source of inflation could be a lifting of the ceilings on regulated prices. For example, electricity prices are kept at a level, which is said to make investment in new capacities unprofitable. Turkey's producers of tradable goods and services can be assumed to be pleased to see the lira devalued somewhat, as that increases their competitiveness on both domestic and foreign markets. It does, on the other hand, spell trouble for those burdened with high debts denominated in foreign currency.

At the end of 2008, private companies held USD 99.3 billion in long-term foreign debt. Of this amount, USD 42.2 billion (USD 12 billion held by banks and USD 30.2 billion held by the non-financial private sector) will mature in 2009, with the highest proportion to be repaid in March, June and September-October.

Under the impact of the recession, government revenues did not come up to expectations in the fourth quarter of 2008. A large number of companies failed to pay the full amount of accrued tax. This will continue in 2009, despite measures designed to increase taxpayer (or rather non-taxpayer) discipline. The government stresses that much is being done to enhance the business climate: for example, through programmes amounting to about 1% of GDP in 2008; a higher proportion is envisaged for 2009. The programmes aim at improving the infrastructure (roads and water supplies), supporting the building of homes and making more funds available for local administration (wages and other expenditures). After the local elections in late March, there may be no room left for anti-cyclical fiscal policies. With or without the IMF agreement, the government may be forced to curb expenditures in response to the unsatisfactory development of revenues.

Durmuş Yılmaz, the governor of the Central Bank, opposes the demands that the government should launch a comprehensive stimulus package. Turkey's economy is not in a position to implement expansionary fiscal policies; this would result in higher interest rates and risk premia, so the governor's warning. In his view, it is the Central Bank that can do a lot of useful things and has done so already. The Central Bank adopted active liquidity measures so as to inject confidence into financial markets and will remain flexible in its approach to further measures. In order to relax the

liquidity squeeze, the Central Bank cut interest rates, introduced foreign exchange auctions and/or re-established the foreign exchange depot market. Prime Minister Erdoğan accused the banking sector of slamming the door shut on the real economy. The response of Suzan Sabancı Dinçer, a member of the Akbank board, was that 'Turkish banks lend to those with credibility'. Banks are adopting a wait-and-see approach. In recent months, the share of non-performing loans has been on the rise; this comes as no surprise during a business slump. More consumers than before have had trouble servicing their debts, and the volume of non-performing credit card debt increased.

Without doubt, Turkey, too, is caught in the liquidity-trap. The Central Bank's lowering of interest rates does not mean that banks will re-intensify their lending activities. For Turkey as well, a change in external conditions will be the precondition for a return to high growth. The US economist Dani Rodrik recommends that the government put emphasis on: (i) helping corporations to meet their financing needs; and (ii) maintaining credit mechanisms through a type of collocation involving a guarantee fund. Turkey could well manage to weather the stormy months or years ahead without incurring a disaster. If that is the case, the current exchange rate might devaluate to a limited extent. Whether that means that the economy will then be predominantly stabilized or predominantly dynamic is anybody's guess.

Guiding the country into EU membership ranked high as a priority target during Mr. Erdoğan's early years as Prime Minister. In the meantime, any hopes of achieving rapid progress on that score have evaporated. Many people have lost all enthusiasm; the government now contents itself with keeping the accession process alive. It derives greater comfort from strengthening its ties with neighbouring countries. This policy has also proved quite successful in economic terms; it has contributed to boosting Turkish self-confidence. The Gaza conflict in late 2008 and early 2009, however, triggered considerable collateral damage in Turkey's foreign policy.

As for the development of the country's economy over the next few years, Turkish society is adept, accustomed to change and full of dynamism. As soon as the international business climate improves, economic growth will jump-start again. This moment, however, is not likely to come within a matter of months.

Table TR

Turkey: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008 ¹⁾	2009	2010 Forecas	2011 st
Population, th pers., average ²⁾	70231	71152	72065	72971	73436	74414			
Gross domestic product, TRY bn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	454.8 5.3 3800 7100	559.0 9.4 4400 8200	648.9 8.4 5400 9100	758.4 6.9 5700 10100	853.6 4.6 6500 10800	960 1.5 7400 10900	1010 -2.5	1090 1	1180 3
Consumption of households,TRY bn, nom. annual change in % (real) Gross fixed capital form., TRY bn, nom. annual change in % (real)	324.016 10.2 77.367 14.2	398.6 11.0 113.7 28.4	465.4 7.9 136.5 17.4	534.8 4.6 169.0 13.3	604.7 4.1 184.1 5.5	2 -3	-2 -11	0.3 4	1 7
Gross industrial production annual change in % (real) Gross agricultural production annual change in % (real) Construction industry annual change in % (real)	8.7 -2.2 -9.0	9.8 2.7 4.6	5.4 6.6 21.5	5.8 1.3	5.4 -7.3	-2.3	-15	2	5
Employed persons - LFS, th, avg. ³⁾ annual change in % Unemployed persons - LFS, th, average ³⁾ Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, average	21147 -1.0 2493 10.5 2.5	21791 3.0 2498 10.3	22046 1.2 2520 10.3	22330 1.3 2446 9.9	21207 1.1 2323 9.9	21500 1.5 2630 11.0	13	13	12
Average gross monthly wages, manuf.ind., TRY $^{\rm 4)}$ annual change in % (real) $^{\rm 4)}$	-1.9	1030	1162 4.3	1301 2.1	1437 1.6	1590 0		•	
Consumer prices, % p.a. Producer prices in industry, % p.a.	25.3	10.6 12.2	8.2 7.1	9.6 9.7	8.8 6.0	10.4 13.0	8	7	5
General governm. budget, EU-def., % GDP ⁵⁾ Revenues Expenditures Deficit (-) / surplus (+) Public debt, EU-def., in % of GDP ⁵⁾	67.3	-4.5 59.2	-0.6 52.3	20.2 20.3 -0.1 46.1	18.3 19.6 -1.2 38.9	18.3 19.6 -1.3 35.1	-2.5	2	-1.5
Discount rate of NB % p.a., end of period $^{\rm 6)}$	31.0	22.0	17.5	22.5	20.0	17.5			
Current account, EUR mn Current account in % of GDP Exports of goods, BOP, EUR mn annual change in % Imports of goods, BOP, EUR mn annual change in % Exports of services, BOP, EUR mn annual growth rate in %	-7083 -2.6 45183 6.6 57504 15.0 15881 5.1	-12482 -4.0 53889 19.3 73102 27.1 18531 16.7	-17800 -4.6 63157 17.2 89829 22.9 21597 16.5	-25469 -6.1 74397 17.8 106978 19.1 20045 -7.2	-27457 -5.8 84003 12.9 117958 10.3 20994 4.7	-26000 -4.7 97000 15 129500 10 23000 10	-16000 -3.6 90000 -7 115000 -11 22000 -4	-15000 -3.3 93000 3 116000 1 22500 2	-15000 -3.1 102000 10 125000 8 24000 7
Imports of services, BOP, EUR mn annual growth rate in % FDI inflow, EUR mn FDI outflow, EUR mn	6617 -4.4 1537 439	8165 23.4 2328 693	9180 12.4 8289 863	9125 -0.6 15916 713	10893 19.4 16412 1568	11500 6 11000 1620	11000 -4	11000 0	12000 9
Gross reserves of CB, excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP Average exchange rate TRY/EUR	26616 114139 44.5 1.6949	26436 117932 38.7 1.7771	42823 142774 35.0 1.6771	46251 155775 38.3 1.8090	49804 167869 33.8 1.7891	51157 207888 46.5 1.7498	2.3	2.4	2.4
Purchasing power parity TRY/EUR	0.9149		0.9917		1.0732	1.1833			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) SIS projections. 2007 figure: Eurostat. SIS figure 2007 (end of year): 70586 th. persons based on new census methodology. - 3) From 2007 according to census 2006. - 4) From 2004 including overtime payment. - 5) According to ESA'95 excessive deficit procedure. - 6) Overnight lending rate.

Source: National statistics (Central Bank, State Institute for Statistics etc). Forecasts by wiiw.



Peter Havlik

Russia: economy hit by global turmoil

Until very recently, Russia was awash with money: both foreign exchange reserves and capital inflows were at record levels, the current account and government budget showed large surplus. The downside of that economic boom was – apart from growing assertiveness, nationalism and a revival of some ugly remnants of past Soviet stereotypes – the return of double-digit inflation and a sizeable rouble appreciation in real terms. Russian economic growth still reached some 6% in 2008; fixed investments grew by 13% and real money incomes by 8%. Export revenues grew by 24% (imports by 22%, both in Euro terms) and the current account surplus increased as well (Table RU). However, GDP growth virtually collapsed in the fourth quarter 2008 while inflation remains high and may even accelerate as a consequence of the recent government rescue measures and the depreciation of the rouble.

Despite strong economic fundamentals, Russia has been seriously hit by the global crisis especially after September 2008. The stock market dropped by more than 70% between May 2008 and January 2009 - one of the largest declines among emerging markets. Market capitalisation declined by about USD 1000 billion over the same period. For the whole of 2008, net capital outflow reached nearly USD 140 billion (net capital inflows exceeded USD 80 billion during 2007). The stocks of a number of Russian blue chip companies (such as Gazprom, Rosneft, Lukoil, Sberbank, Norilsk Nickel, etc.) were hit particularly hard - reflecting partly investors' overreaction, although fundamental factors played a role given the recent decline in the world prices for oil and metals and high exposure to the short term foreign debts. The adverse external shocks that triggered these events may have been compounded by domestic political factors, such as the Mechel and TNK-BP affairs from early summer 2008, the war in Georgia and the gas conflict with Ukraine at the beginning of 2009. However, the shallow depth and relative immaturity of the domestic stock market should keep repercussions on the real economy in check. The current developments probably reflect more of a temporary overreaction on the part of the market participants rather than a lasting deterioration of the domestic investment climate. Medium- and long term prospects for economic growth are not bad.

Indeed, potentially more serious than the dismal and volatile performance of the stock market – especially as far as repercussions on the real economy are concerned – is the tightening of credit conditions. There is no doubt that several large Russian companies (such as Mr Deripaska's Basic Element) and especially smaller Russian banks have been facing difficulties to service and refinance their outstanding foreign debts. The lack and/or dearth of domestic, especially long term credit financing – a by-product of past restrictive monetary policies in Russia and easy credits abroad –

have motivated Russian companies, even the state-owned or state-controlled ones such as Gazprom or Rosneft, to seek external financing. The private foreign debt reached more than USD 350 billion as of end-September 2008 (an increase of USD 80 billion since the beginning of the year).

Similar to the USA and the EU, the Russian government has adopted various rescue and stimulation packages in order to improve the liquidity of the banking sector and restore confidence. The Central Bank released more than USD 100 billion out of its reserves (amounting to USD 430 billion as of end-2008) in order to provide additional liquidity and to support the rouble exchange rate. New loans to the banking sector with a maturity of up to six months will be provided via the state-owned Vneshekonombank (VEB) with no collateral required. In addition, the VEB will provide credit for refinancing short-term foreign loans, while acquiring shares in those companies as collateral (e.g. Mr. Deripaska's Basic Element). The bank guarantee on private deposits was raised to RUB 700,000 (EUR 20,000). Altogether, more than USD 200 billion of state assistance in various forms have been earmarked in an endeavour to ease liquidity in the financial sector. Critics point to the usual dangers of misappropriation and corruption; they also expect that in the main the large (or well connected) banks stand to gain disproportionately from this facility. They wonder in fact whether the money will reach the companies facing the liquidity squeeze. It is to be expected that a number of small and medium-sized banks will eventually collapse, the banking sector will be streamlined and the state will exert greater influence on companies seeking financial help.

With lower export revenues, GDP growth will slow down substantially in 2009; the trade and especially current account surpluses will diminish. A number of ambitious future spending and investment plans will have to be scaled down and government revenue will drop markedly following lower export duties on oil. Taken together, a substantial slowdown of GDP growth – to about 1% in 2009 – will now definitely materialize. The outcome, however, may be much worse: until recently, the range of GDP growth forecasts for the year 2009 fluctuated around 4-6% – largely depending on assumptions regarding the level of energy prices. Most current forecasts of Russian GDP growth are in a range of 1-3% for 2009, with some acceleration possible even in 2010. Both investment and consumption are expected to expand by 3%-7% in 2009. Owing to the albeit limited role of credits in financing both consumption and investments (the latter are still largely financed from own resources or by the government), any effect of the financial crisis should be relatively modest and short-lived. The domestic financial market may stabilise and even recover fairly soon, yet the investment climate (including financing and the climate for investments in general) will remain difficult. Nominal export and import growth will slow down substantially; the volume of exports will even decline slightly in 2009.

The expected GDP growth slowdown appears inevitable in the medium term, at least until the end of the decade before any (uncertain) modernization efforts start to bear fruit. Our forecast for 2010 is based on a modest recovery of oil prices (Urals costing not more than USD 50-70 per barrel) and limited (potential impact of current financial market turmoil). Both private consumption and investments are expected to grow faster than GDP; real exports will continue to be sluggish since volumes of exported oil and gas will hardly increase, while imports will expand rapidly – roughly in

line with private consumption and investments. This implies an ongoing negative (albeit diminishing) contribution of real net exports to GDP and – in nominal terms – a gradual reduction of trade and current account surpluses. In fact, the current account surplus which leapt to EUR 70 billion in 2008 (about 6% of GDP) will soon disappear. Inflation will remain above 10% in 2009 and stubbornly close to 10% thereafter.

More than the direct effects of the global financial crisis, the oil price in particular constitutes a crucial variable for Russia in the short, medium and possibly even long term. The current global turmoil notwithstanding, the main challenge for the Russian economy is whether it will succeed in replacing energy exports as the key growth driver by developing other sectors (diversifying towards manufacturing, high-tech branches, services, etc.) and the manner in which it will cope with the acute demographic crisis. The major challenges for the Russian economy – institutional developments, economic diversification and modernisation – thus remain unchanged.

Table RU

Russia: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008	¹⁾ 2009	2010 Forecas	2011 st
Population, th pers., average ²⁾	144566	143821	143114	142487	142115	141900	140500	140000	139500
Gross domestic product, RUB bn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	13243.2 7.3 2600 8300	17048.1 7.2 3300 9200	21625.4 6.4 4300 10000	26903.5 7.7 5500 11100	33113.5 8.1 6700 12400	41540.4 5.6 8000 13500	46500 1.1	53000 3.7	60000 4.6
Consumption of households, RUB bn, nom. annual change in % (real) Gross fixed capital form., RUB bn, nom. annual change in % (real)	6540.1 7.6 2432.3 13.9	8405.6 12.1 3130.5 12.6	10590.0 11.8 3836.9 10.6	12965.3 11.3 4980.6 18.0	15976.5 13.6 6982.4 21.1	20155.7 11.5 9178.5 10.3	3.4 4.1	5 7.8	4.8 9.1
Gross industrial production annual change in % (real) Gross agricultural production annual change in % (real) Construction industry annual change in % (real)	8.9 1.3 14.4	8.0 3.0 10.1	5.1 2.3 10.5	6.3 3.6 18.1	6.3 3.3 18.2	2.1 10.8 12.8	0	3	5
Employed persons - LFS, th, average annual change in % Unemployed persons - LFS, th, average Unemployment rate - LFS, in %, average Reg. unemployment rate, in %, end of period	66432.2 -0.3 5959.2 8.2 2.3	67274.8 5674.8 7.8 2.6	68169.0 1.3 5262.8 7.2 2.5	68855.0 1.0 5312.0 7.2 2.3	70570.5 2.5 4589.0 6.1 2.0	70992.3 0.6 4791.5 6.3 2.0	70500 5100 6.7	70600 5000 6.6	71000 4800 6.3
Average gross monthly wages, RUB annual change in % (real, gross)	5498.5 10.9	6739.5 10.6	8554.9 12.6	10633.9 13.3	13527.4 16.2	17112.0 9.7		•	•
Consumer prices, % p.a. Producer prices in industry, % p.a. ³⁾	13.6 15.6	11.0 24.0	12.5 20.7	9.8 12.4	9.1 14.1	14.1 21.4	15 18	10 15	8 10
General governm.budget, nat.def., % GDP Revenues Expenditures Deficit (-) / surplus (+), % GDP Public debt, nat.def., in % of GDP ⁴⁾	31.3 29.9 1.3 28.6	31.9 27.4 4.5 21.6	39.7 31.5 8.1 14.9	39.5 31.1 8.4 8.9	40.4 34.4 6.0 7.2	38 30 8	- - - -		
Base rate of NB % p.a., end of per.	16	13	12	11	10	13			
Current account, EUR mn ⁵⁾ Current account in % of GDP Exports of goods, BOP, EUR mn ⁵⁾ annual growth rate in % Imports of goods, BOP, EUR mn ⁵⁾ annual growth rate in % Exports of services, BOP, EUR mn ⁵⁾ annual growth rate in %	31329 8.2 120264 6.0 67304 4.4 14359 -0.2	47867 10.1 147358 22.5 78327 16.4 16564 15.4	32.7	75198 9.5 241960 23.7 130948 30.2 24791 23.8	55703 5.9 258930 7.0 163282 24.7 28798 16.2	67483 5.9 320016 23.6 199584 22.2 34663 20.4	10000 1.0 275000 -14 230000 15 32000 -8	-10000 -0.9 285000 4 255000 11 33000 3	-20000 -1.8 300000 5 270000 6 35000 6
Imports of services, BOP, EUR mn ⁵⁾ annual growth rate in % FDI inflow, EUR mn ⁵⁾ FDI outflow, EUR mn ⁵⁾	23996 -3.4 7041 8606	26774 11.6 12422 11085	31173 16.4 10336 10240	35741 14.7 23675 18454	43244 21.0 40237 33547	52267 20.9 40000 35000	55000 5 25000 40000	60000 9 35000 30000	65000 8 45000 30000
Gross reserves of NB, excl. gold, EUR mn Gross external debt, EUR mn Gross external debt in % of GDP Average exchange rate RUB/EUR	58531 148776 41.4 34.69	156689 34.8 35.81	148094 216553 34.2 35.26	235714 30.4 34.11	316620 34.4 35.01	370000 36.9 36.43	45	50	55
Purchasing power parity RUB/EUR, wiiw ⁶⁾	11.02	12.92	15.06	17.01	18.84	21.75			

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiiw estimates. - 2) Resident population. - 3) Based on domestic output prices. - 4) wiiw estimate. - 5) Converted from USD with the average exchange rate. - 6) wiiw estimates based on the 2005 International Comparison Project benchmark.

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.



Vasily Astrov

Ukraine: in the midst of economic meltdown

After several years of economic boom, Ukraine's economy plunged into recession in October 2008: the combined effect of the global liquidity crunch, the sharp drop in steel prices (by some 70% in the second half of last year) and a resumption of the political crisis. According to preliminary estimates, the country's GDP contracted by 2% (year-on-year) in October and by double-digit rates in both November and December, thus bringing the cumulative growth for 2008 as a whole to just 2.1%. Agriculture performed exceptionally well (+17.5% in gross output terms) on the back of a record grain harvest, whereas construction (-16%) declined throughout most of the year; industry (-3.1%) has been constantly contracting since August. On average, the production of metals (the country's major foreign currency earner) fell by 10.6%, while two other major industries – chemicals and oil processing – reduced their output by 6.2% and 15%, respectively, in response to plummeting world prices.

On the demand side, net exports must have been an even bigger drag on GDP growth (with imports growing ahead of exports), while fixed investments were probably flat. The latter decelerated markedly on a quarterly basis and almost certainly shrank in the final quarter of 2008, as many investment projects (including foreign) were reportedly put on hold. Against this background, private consumption proved the main pillar of economic growth. The retail trade turnover was up by 18.6% in real terms, boosted by the generous wage policy of the Tymoshenko government and the credit boom – at least until the global liquidity crunch spilled over into Ukraine in September 2008. In addition, at the initial stage of the crisis, household spending was fuelled by the shattered trust in banks and expectations of a rise in inflation following the massive hryvnia devaluation (see below). However, as the crisis deepened, the decline in real wages (in December 2008, real wages fell by 3% on a year-on-year basis), blocked access to credit, and – last but not least – rising unemployment ineluctably dampened private consumption as well. At the beginning of 2009, *registered* unemployment (3%) was 0.7 percentage points higher than the year before – back to the level last observed in 2005.¹⁰

The impact of the liquidity crunch is not surprising given that over the past few years, Ukraine has been borrowing heavily on international capital markets in order to finance its increasingly domestically-driven growth. Throughout, it has relied on access to new credit in order to re-finance its existing debts. Before the financial crisis hit the country in autumn 2008, Ukraine's gross external

¹⁰ Registered unemployment is much below the figures provided by labour force surveys (not yet available for the last quarter 2008), given the modest level of unemployment benefits and the low incentives to register as unemployed. However, the *changes* in registered unemployment should be indicative of actual trends.

debt – almost exclusively within the corporate and banking sectors – stood at almost 60% of GDP. In international comparison, this share does not appear particularly high.¹¹ However, unlike many other countries in Eastern Europe and despite the recent boom in inward FDI, the bulk of the private sector in Ukraine is still largely domestically owned and thus typically lacks privileged access to the funds of parent companies headquartered abroad. Furthermore, the prospects for external borrowing worsened dramatically as global commodity prices plummeted, Ukraine's terms of trade worsened and credit ratings were revised accordingly.

Restricted access to external finance plunged the country's financial markets into turmoil and contributed – along with the shareholder dispute over Prominvestbank – to a run on the banks in October-November 2008.¹² As households started converting part of their hryvnia withdrawals into foreign currency while export revenues were drying up, the exchange rate came under severe pressure as well. Although the National Bank spent USD 4.1 billion of its foreign exchange reserves in October 2008, USD 3.4 billion in November and USD 2.8 billion in December, in an endeavour to bolster the faltering hryvnia, the latter depreciated by some 60% against the US dollar, to some 8 UAH/USD. Ironically, the National Bank spent some of the reserves on sterilizing the hryvnia liquidity which it had injected in order to ease the credit crunch, only to have some of it channelled into the foreign exchange market instead.

Generally, the National Bank's foreign exchange interventions have been constrained by the IMF requirement to keep reserves at a minimum level as a pre-requisite for a 'stand-by' loan (see below). However, in the first weeks of this year, the interbank market exchange rate – though highly volatile – proved fairly stable, even appreciating somewhat. None the less, if sustained over a longer period of time, the new exchange rate will put the holders of foreign-currency-denominated liabilities (half of total outstanding loans in the country) under pressure. In all likelihood, this will lead to a growing number of non-performing loans and a series of private defaults in the months to come.

In an attempt to alleviate the mounting problems, the government received a USD 16.4 billion 'stand-by' loan from the IMF in November 2008, of which USD 4.5 billion has since been transferred. The conditions set by the IMF included a bank re-capitalization programme and a deficit-free central government budget for 2009. However, achieving those two requirements under the current circumstances may prove highly problematic. One reason is the persistent stalemate between Prime Minister Tymoshenko and President Yushchenko and the resultant poor coordination between the government and the National Bank (which is subordinate to the president). As a result, the refinancing of commercial banks by the National Bank – which, according to the 2009 budget law, has to be agreed with the government – virtually stalled in the first few weeks of this year.¹³

¹¹ Some East European countries, such as Hungary, Bulgaria, Croatia, Latvia or Estonia, have a much higher foreign debt burden (close to, or even exceeding, 100% of GDP).

¹² In January 2009, 75% of the insolvent Prominvestbank was acquired by the Russian state-owned Vneshekonombank.

¹³ One requirement reportedly advocated by Ms Tymoshenko for the banks to be eligible for refinancing is e.g. provision of credit to agricultural producers.

In violation of the IMF conditionality, the 2009 budget also envisages a deficit of 3% of GDP.¹⁴ This is probably justified at a time of a steep economic decline (a balanced budget would undermine consumer demand still further). It is also hardly surprising, as Ms Tymoshenko is seeking to soften the painful social blow of recession and maintain her popularity in view of the upcoming presidential elections. However, given the bleak privatization prospects and blocked access to external funding, the deficit has little chances of being funded from sources other than the National Bank: once again largely in contravention to the IMF requirement. (The National Bank also started purchasing sovereign bonds on several occasions in the final quarter of 2008, as the government was unable to place them in either foreign or domestic capital markets.) These violations imply that further instalments of the IMF loan might prove problematic, potentially raising the country's external financial vulnerability still further.

The combined effect of a recent pronounced devaluation and planned administrative price hikes should be a lower rate of disinflation in 2009 compared to the very high level observed the previous year. In 2008, the consumer price index was up by 22.3% on the end-year basis, largely owing to booming food prices in the first half of the year. The good news, however, is that the devaluation might lend a major boost to net exports. Both in nominal and real terms, we expect exports in 2009 to decline less than imports, which are becoming increasingly unaffordable. At the same time, a marked contraction in domestic demand can be hardly avoided this year. In particular, we expect a decline in private consumption by a few percentage points and a more pronounced contraction of fixed investments, which will almost certainly be double-digit. Against this background, we forecast that the real GDP in 2009 will fall by at least 5%, with risks on the downside. The main challenge facing the country's authorities this year will be to find the right balance between providing enough fiscal stimulus to the economy, on the one hand, and keeping the pace of monetary expansion in check, on the other, in order to avoid a potentially dangerous slide into spiralling hyperinflation-devaluation.

In the medium term, Ukraine's exporters (in the food and machinery sectors, for example) may take advantage of the new competitive exchange rate – though not necessarily in trade with Russia whose currency has also depreciated markedly. They may thus become the locomotive for economic recovery. Helped by growing export revenues, domestic demand will also pick up gradually, albeit not as rapidly as over the past few years, since access to credit will ease only gradually and unemployment will initially not recede from the current level (relatively moderate, given the circumstances), thus making upward wage pressures highly unlikely. In line with these developments, the current account deficit – which we expect to shrink to around 2% of GDP this year – should virtually disappear in the years to come. (Needless to say, this export-led growth scenario hinges on the external environment not being too unfavourable – otherwise the economic recession will continue well into 2010 and possibly thereafter.)

¹⁴ The budget is based on the projections of 0.4% economic growth and 9.5% consumer price inflation. Both assumptions are hardly realistic, but inflation higher than planned should help tax collection and thus at least partially offset the recession-induced revenue shortfalls.

The 'gas war' with Russia in early January 2009 should only have a limited impact on Ukraine's economic performance. The newly signed contract is a welcome step forwards in the hitherto murky energy relations between the two countries. In contrast to earlier agreements, it is a long-term contract linking the gas price charged to Ukraine to the price of oil in line with the 'European formula', with a 20% discount being granted for 2009. Assuming that the oil price stays at its currently depressed level, the *average* gas price paid by Ukraine this year should not exceed USD 240 per thousand cubic metres, representing at the most a 30% price increase compared to the previous year (although in hryvnia terms, the price will probably double). The new contract also eliminates Rosukrenergo as the intermediary in the Russian-Ukrainian gas trade. This represents a victory for Ms Tymoshenko who has pinned her political banner not least to fighting 'shady schemes' – particularly those that benefit her political opponents. Along with the pro-Russian opposition leader Viktor Yanukovych, she is a favourite for the forthcoming presidential elections due in December 2009/January 2010.

Table UA

Ukraine: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008	¹⁾ 2009	2010 Forecas	2011 st
Population, th pers., average	47813	47452	47105	46788	46509	46251	46000	45800	45600
Gross domestic product, UAH mn, nom. annual change in % (real) GDP/capita (EUR at exchange rate)	267344 9.6 900	12.1 1100	2.7 1500	7.3 1800	712945 7.6 2200	2.1 2600	1021700 -5	1161500 1.5	1335100 4.5
GDP/capita (EUR at PPP - wiiw)	3900	4500	4700	5200	5800	6100			
Consumption of households, UAH mn, nom. annual change in % (real) Gross fixed capital form., UAH mn, nom.	146301 11.5 55075	180956 13.5 77820	252624 16.6 96965	319383 15.9 133874	17.1	12	-4.5	2	6
annual change in % (real)	22.5	20.5	3.9	21.2	24.8	0	-24	2.5	12
Gross industrial production annual change in % (real) Gross agricultural production	15.8	12.5	3.1	6.2	10.2	-3.1	-11	5	7
annual change in % (real) Construction industry	-11.0	19.7	0.1	2.5	-6.5	17.5			
annual change in % (real)	26.5	17.2	-6.6	9.9	15.6	-16.0			
Employed persons - LFS, th, average annual change in %	20163.3	20295.7	20680.0 1.9	20730.4	20904.7	20800 -0.5	•		•
Unemployed persons - LFS, th, average	2008.0	1906.7	1600.8	1515.0	1417.6	1500			
Unemployment rate - LFS, in %, average	9.1	8.6	7.2	6.8	6.4	6.7	7.5	7.5	7.2
Reg. unemployment rate, in %, end of period	3.6	3.5	3.1	2.7	2.3	3.0	•	•	•
Average gross monthly wages, UAH ²⁾ annual change in % (real, gross)	462.3 16.7	589.6 17.0	806.2 20.4	1041.4 18.4	1351.0 15.0	1806.0 6.8			
Consumer prices, % p.a. Producer prices in industry, % p.a. ³⁾	5.2 7.6	9.0 20.5	13.5 16.7	9.1 9.6	12.8 19.5	25.2 35.5	18	12	10
General governm.budget, nat.def., % GDP									
Revenues Expenditures ⁴⁾	28.2 28.4	26.5 29.7	30.4 32.2	31.6 32.3	30.8 31.9	32.7 34.2		•	
Deficit (-) / surplus (+), % GDP	-0.2	-3.2	-1.8	-0.7	-1.1	-1.6	•	•	•
Public debt in % of GDP	29.0	24.7	17.7	14.8	12.4	12.0			
Discount rate of NB, % p.a., end of period	7.0	9.0	9.5	8.5	8.0	12.0			
Current account, EUR mn ⁵⁾	2559	5560	2030	-1289	-4320	-8130	-2200	-500	-500
Current account in % of GDP	5.8	10.6	2.9	-1.5	-4.2	-6.9	-2.2	-0.4	-0.3
Exports of goods, BOP, EUR mn ⁵⁾ annual growth rate in %	21013 6.3	26906 28.0	28093 4.4	31048 10.5	36383 17.2	46000 26.4	41400 -10	45500 10	50100 10
Imports of goods, BOP, EUR mn ⁵⁾	20555	23895	29004	35188	44100	58000	47000	49800	54800
annual growth rate in %	8.1	16.3	21.4	21.3	25.3	31.5	-19	6	10
Exports of services, BOP, EUR mn 5)	4615	6325	7503	9000	10337	12000	12000	12000	12000
annual growth rate in %	-6.9	37.0	18.6	19.9	14.9	16.1	0	0	0
Imports of services, BOP, EUR mn ⁵⁾	3934	5329	6054	7305	8369	10500	10500	10500	10500
annual growth rate in %	5.1	35.5	13.6	20.7	14.6	25.5	0	0	0
FDI inflow, EUR mn ⁵⁾ FDI outflow, EUR mn ⁵⁾	1261 12	1380 3	6263 221	4467 -106	7220 491	8000 800	•	•	•
Gross reserves of NB excl. gold, EUR mn	5348	6977	16058	16587	21634	21847			
Gross external debt, EUR mn	19055	22528	33504	41391	56264	70000	•		•
Gross external debt in % of GDP	47.5	47.1	45.3	50.6	58.6	83.4			·
Average exchange rate UAH/EUR Purchasing power parity UAH/EUR, wiiw ⁶⁾	6.024 1.451	6.609 1.631	6.389 1.986	6.335 2.229	6.918 2.639	7.708 3.211	10	9.5	9

Note: The term 'industry' refers to NACE classification C+D+E.

1) Preliminary and wiw estimates. - 2) Excluding small enterprises. - 3) Domestic output prices. - 4) From 2004 including lending minus repayments. - 5) Converted from USD with the average exchange rate. - 6) wiw estimates based on the 2005 International Comparison Project benchmark.

Source: wiiw Database incorporating national statistics. Forecasts by wiiw.



Olga Pindyuk

Kazakhstan: avoiding recession and prolonging recovery

Our forecast for Kazakhstan has been revised downwards as the decline in major commodity prices has severely hit the Kazakh economy, which is highly dependent on exports of oil and metals (in 2007 their respective shares in goods exported were 70% and 17%). Negative developments on the world commodity markets have been aggravated by the current crisis in the country's banking system and the domestic housing bubble having burst last year. According to our forecast, 2009 will be the least successful year for the Kazakh economy in the past ten years – the GDP growth rate will drop to a mere 1%. Recession will be avoided thanks mostly to the government's vigorous anticrisis policy. Over the period 2010-2011, the probable gradual revival of the global demand will lead to an increase in commodity prices, the country's banking sector will slowly start to recover from the crisis, and economic growth will accelerate to 3% and 4.5% in the respective years.

As for the sectoral structure, short-term economic growth will continue to hinge on the mining sector, which will remain relatively robust owing to the opening-up of new oil fields and increased production in the fields already on stream, as well as expansion in the transport and communication sectors. This reliance had already come to the fore in 2008, prior to which growth had been primarily driven by construction, financial services and trade. Over a period of nine months in 2007, the latter three sectors grew in real terms by 30.4%, 47.1%, and 10%, respectively; together they accounted for 75% of gross value-added growth. Over a similar period in 2008, the same three sectors, which had been most severely affected by the banking and housing market crisis, grew by only 3.9%, 1%, and 2.5% ,respectively; their total contribution to GDP growth was a mere 16.5%.

The ongoing banking crisis has started to affect the real economy. As Kazakh banks continued to suffer from the lack of financing throughout 2008, the amount of loans issued declined by 39% compared to 2007, thus curtailing consumption and investment. Loans to households shrank most noticeably – by 69%; corporate loans declined to a substantially lesser degree – by 28%. As a result, the share of household loans in the total amount of loans issued over the year decreased by half (compared to the previous year) to no more than 12%.

The burst of the housing bubble has compounded the banking crisis. After house prices increased dramatically over the period 2001-2007 (prices on the primary market increased some eightfold over that period and prices on the secondary market by a factor close on eighteen), they started to fall sharply in 2008 (by 9% year-on-year on the primary market and by 20% on the secondary market). Banking sector assets have also deteriorated in qualitative terms, with the share of overdue loans increasing (by 2 p.p. to 3.3% in 2008). The increase is more significant in loans to the construction

sector (by 3 p.p. to 5.4%), household mortgage loans (by 5 p.p. to 5.8%) and consumer loans (by 4 p.p. to 4.4%). During 2008 the share of overdue consumer and mortgage loans in total overdue loans increased by 18.3 p.p. to 24.8%.

The Kazakh government is determined to mitigate the economic crisis. By the end of 2008 the government had accumulated more than USD 27 billion (EUR 18 billion) in the form of assets in the National Oil Fund (or about 20% of GDP) and more than USD 19 billion of foreign exchange reserves (EUR 13.7 billion). It now intends to spend about USD 14 billion (or about 10% of the GDP) over the period 2009-2010 as part of its economic stabilization programme. Most of that money will be channelled to the banking sector in order to recapitalize banks, provide them liquidity support and promote residential mortgage lending. Furthermore, three sector-specific programmes are envisaged, channelling funds to small and medium enterprises, agriculture and infrastructure development.

Another fiscal stimulation relates to a new tax code, which entered into force on 1 January 2009. The new tax code provides for cuts in corporate income tax by 10 p.p. to 20% in 2009, and a further cut by 5 p.p. by 2011. Moreover, the VAT rate will be reduced by 1 p.p. to 12%, while the minimum level of revenue exempt from VAT will be doubled to USD 320,000. Expansionary fiscal policy on this scale will lead to an increase in the budget deficit to more than 3% during the forecasting period.

Deflationary pressures in 2009 will neutralize the impact that the government's expansionary policy will have on monetary stability. The average annual oil price is expected to be about half of that in 2008 and housing prices will most likely continue to drop. We thus expect consumer prices to rise by less than 10% p.a. (after 17.1% growth p.a. in 2008), while the producer price index will drop by 10% p.a. Over the period 2010-2011, CPI growth will drop still more and producer prices will increase – albeit at a single digit rate.

On 4 February 2009, the Central Bank of Kazakhstan devalued the national currency: from 120 KZT/USD to 150 KZT/USD. This was done in order to maintain Kazakh exporters' competitiveness, which had been rapidly weakening owing to the currencies of their competitors and major trading partners having depreciated. The government believes that its active anti-crisis measures will mitigate the negative consequences of the tenge depreciation for the banking sector and households. We envisage no further devaluation of the tenge over the period 2009-2011, as the government will prefer stability of the national currency to providing an additional boost to the exporters' competitiveness. The adequacy of the country's foreign reserves will permit the government to maintain a relatively stable KZT/USD exchange rate – even despite the negative current account balance and limited foreign capital inflows.

Table KZ

Kazakhstan: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008		2010 cast	2011
Population, th pers., average	14909.0	15013.0	15147.1	15308.1	15484.2	15650.8	15770	15810	7985
Gross domestic product, KZT bn, nom.	4612.0	5870.1	7590.6	10139.5	12763.2	16100	17100	19400	21900
annual change in % (real)	9.3	9.6	9.7	10.6	8.7	3.5	1	3	4.5
GDP/capita (EUR at exchange rate)	1800	2300	3000	4200	4900	5800	5600	6800	7200
GDP/capita (EUR at PPP - wiiw)	5800	6500	7300	8100	9000	9300			
Consumption of households, KZT bn, nom.	2434	3054	3686	4547	5468	6500	7300	8200	9200
annual change in % (real)	11.9	14.1	10.9	12.7	11.0	2	3	4	5
Gross fixed capital form., KZT bn, nom.	1063	1472		3084	3869	5500	5100	5700	6600
annual change in % (real)	8.0	22.5	28.1	29.7	17.8	4	2	3	7
Gross industrial production									
annual change in % (real)	9.1	10.4	4.8	7.0	4.5	2.1	-2	5	7
Gross agricultural production									
annual change in % (real)	2.1	-0.5	7.3	7.0	8.4	-5.6	4	6	6
Construction industry annual change in % (real)	4.0	17.9	47.4	28.6	5.7	1.8	-5	5	7
Employed persons - LFS, th, average	6985.2	7181.8	7261.0	7403.5	7631.8				
annual change in %	4.1	2.8		2.0	3.1				
Unemployed persons - LFS, th, average	672.1	658.8		625.4	578.8				
Unemployment rate - LFS, in %, average	8.8	8.4		7.8	7.0	6.8	7.5	7	6.5
Reg. unemployment rate, in %, end of period	1.9	1.6		1.1	0.8	0.7			
Average gross monthly wages, KZT	23128	28329	34060	40790	53238	60500			
annual change in % (real, gross)	7.0	20529		10.3	17.8	-0.8	•	•	
annual change in 76 (real, gross)	7.0	14.0	11.7	10.5	17.0	-0.0		•	•
Consumer prices, % p.a.	6.4	6.9	7.6	8.6	10.8	17.1	9.5	8	7
Producer prices in industry, % p.a.	9.3	16.7	23.7	18.4	12.4	36.9	-10	9	8
General governm.budget, nat.def., % GDP									
Revenues and grants	25.4	24.6	28.1	27.9	22.6	25.1			
Expenditures and net lending	22.6	22.1	22.3	20.4	24.3	27.1	•		
Deficit (-) / surplus (+), % GDP	2.7			7.5	-1.7	-2.1	-3.5	-3.5	-3.0
Public debt in % of GDP	3.6	3.9	9.3	11.3	7.2	8.2	•		-
Base rate of NB % p.a., end of period	7.0	7.0	8.0	9.0	9.0	10.5			
Current account, EUR mn ²⁾	-241.6	269.9	-848.1	-1525.3	-5355.2	3400	-6100	-4700	-4500
Current account in % of GDP	-0.9	0.8	-1.8	-2.4	-7.0	3.7	-6.8	-4.4	-3.9
Exports of goods, BOP, EUR mn ²⁾	11726.6	16581.0	22733.5	30880.8	35308.6	49400	42000	49100	54000
annual growth rate in %	10.4	41.4	37.1	35.8	14.3	40	-15	17	10
Imports of goods, BOP, EUR mn ²⁾			14442.2			26200	29300	32200	36100
annual growth rate in %	-0.6	31.3		33.1	26.4	8	12	10	12
Exports of services, BOP, EUR mn ²	1517.4	1617.0		2236.7	2596.0	3200	3400	3700	4200
annual growth rate in %	-7.0	6.6	10.7	25.0	16.1	25	5	10	13
Imports of services, BOP, EUR mn ²⁾		4110.7				8700	9000	9600	10600
annual growth rate in %	-11.3			15.4	22.2	2	3	1	10
FDI inflow, EUR mn ²⁾ FDI outflow, EUR mn ²⁾	1853.9	3345.6 -1029.3		4958.2 -308.7	7440.3 2368.6	6795.1 3057.8	•	•	
							•	•	•
Gross reserves of NB excl. gold, EUR mn ²⁾	3971	6810		14525	11970	13711	•	•	
Gross external debt, EUR mn	18341	24013		56252	65436	77738	•	•	•
Gross external debt in % of GDP	67.1	69.1	79.9	87.8	86.0	85.5		•	•
Average exchange rate KZT/EUR	168.79	169.04	165.42	158.27	167.75	177.0	191.8	180.0	189.6
Purchasing power parity KZT/EUR, wiiw ³⁾	52.92	59.95	68.78	81.45	91.40	111.1			

1) Preliminary and wiw estimates. - 2) Converted from USD with the average exchange rate. - 3) Based on ICP benchmark results 2005 and wiw estimates.

Source: National statistics (National Bank, Agency of Statistics etc). Forecasts by wiiw.



Waltraut Urban

China: travelling down a bumpy road

In January 2009, the Chinese statistical authorities revised the GDP figures for 2007 upwards from 11.9% to 13%. Two weeks later, they announced that year-on-year growth in the fourth quarter of 2008 was only 6.8%, thus dragging GDP growth for the whole year down to 9%: the first single-digit rate of growth in China since 2002. A cooling down of the overheated economy, something that had initially been considered desirable, evolved into a 'hard landing'. The fact that the slowdown was faster than expected was attributable to waning foreign demand as the global economic crisis took a turn for the worse, triggering a significant slowdown in industrial production and related services. In an endeavour to check the downward trend, the government adopted a EUR 400 billion stimulus package at the end of the year, together with a broad swathe of other measures to support the economy.

The received wisdom is that exports will remain sluggish and may even deteriorate more, especially in the first half of 2009, while government policies will only have a significant positive impact on consumption and investment later in the year. It is thus assumed that GDP in 2009 will grow more rapidly than in the fourth quarter of 2008, but significantly less than in 2008 as whole; it will attain a rate of about 7%, a figure that is considered to be on the high side. As a matter of fact, given the deterioration of various economic indicators over the past few months, many forecasters have significantly reduced their growth projection figures for China in 2009. Estimates currently range between 5% (Roubini Global Economics Monitor), 5.5% (Morgan Stanley), 6.7% (International Monetary Fund) and 8% (Chinese government), 8.2% (Asian Development Bank) and 8.3% (Chinese Academy of Social Sciences)¹⁵

In 2010, we expect the Chinese economy to pick up again and the growth rate to reach 8%, provided the global economy recovers somewhat and exports rebound. However, growth in 2011 is expected to remain below pre-crisis levels, probably approaching 8.2%, since the capacity and willingness of the United States and Europe to absorb Chinese imports may still remain below previous levels.

In recent years, China's exports of goods ranged close to 30% of GDP: a very high export share for a country the size of China. However, more than half of the country's exports can be classified as 'processing trade', major components of which are imported; hence, the value-added of exports and

¹⁵ Generally, growth forecasts of investment banks range between 7% and 8% (Bank of Finland, *BOFIT Weekly*, 30 January 2009).

the contribution of net exports to GDP is markedly less.¹⁶ That notwithstanding, in recent years, the swift expansion of net exports (2007: 30%) has contributed significantly to GDP growth, something that will not occur this year – nor probably in the next two years either. Export and import growth remained high throughout the first nine months of 2008, only to collapse at the end of the year. In November and December 2008, both exports and imports contracted year-on-year. This was a reflection of the ever broader and deeper global financial and economic crisis, making it increasingly difficult for China to offset the weakening demand among its traditional trading partners, in particular the USA, by adopting an aggressive approach to tapping new markets in Asia, Africa and Latin America¹⁷. We expect the grim situation to continue throughout the first three quarters of 2009 with only a slight improvement in the fourth quarter of the year. This will lead to a decline in Chinese exports and imports (in US dollar terms) of the order of 3-5% over the year as a whole. Starting from a much higher level of exports than imports, this development will yield yet again a high trade surplus of about USD 280 billion (EUR 212 billion) and a corresponding current account surplus in 2009 – although lower than in 2008. In 2010 and 2011, export growth is expected to pick up once again, should the global crisis have come to an end by that time.

Over and above the direct effect on final demand, the export slowdown has had an disproportionately negative impact on employment and hence on private consumption, as labourintensive products account for a higher share in exports than in manufacturing as a whole. Furthermore, it also has a significant impact on both upstream (suppliers) and downstream activities (such as transport services), a trend that is already quite noticeable. Viewed from a longer term perspective, the export slowdown will also curb investment, including foreign direct investment, in those sectors.

With a share of more than 40% in GDP, investment has been the major driver of economic growth over the past few years in China. Unfortunately, the official demand-side data for 2008 have not been released yet. Drawing on those indicators available, however, we can hazard a guess that domestic investment activity still ran high, with total investment in fixed assets rising 25% in nominal terms and 17% in real terms. However, a certain slowdown was to be observed towards the end of the year. Shrinking profits and overcapacities in manufacturing and real estate, as well as a deterioration of the business climate and confidence indices, all point to things getting worse in 2009. Based on the data available (equity investment in the non-financial sector only)¹⁸, foreign direct investment increased substantially over the first three quarters of 2008, but dropped in the final quarter compared to the same period in the previous year; it reached EUR 62.3 billion (USD 92.4 billion) for the whole year. This decline will continue in 2009, should the general

¹⁶ In 2007, when net exports (exports of goods and services minus imports of goods and services) reached a record height, their share in GDP was 9% (2006:7.5%).

¹⁷ Over the first 10 months of 2008, Chinese exports to India, for instance, rose by 35%, those to Indonesia by 40%, to Iraq by 84%, to Brazil by 75% and to Angola by 134% (China Monthly Statistics, 12/2008).

¹⁸ Net FDI inflows as reported in the balance of payments statistics also include reinvestments and loans from parent companies, which in 2007 seem to have included a considerable amount of speculative money, in expectation of a revaluation of the yuan versus the US dollar; they are therefore not comparable to other years.

downward trend in FDI persist on account of the heightened degree of uncertainty and financial restraint.

Retail trade turnover as a proxy for private consumption recorded high and steady growth throughout the year, reaching 15.7% (in real terms) on average. Consumption was supported by a marked rise (11%) in per capita incomes in rural households owing to sky-high prices for agricultural products in the first half of 2008. Since then food prices have dropped to the detriment of farmers, but to the benefit of urban consumers. However, given the rural households' relatively low incomes and thus their greater propensity to consume, the combined effect on consumption will be negative. More importantly, however, unemployment is rising rapidly and may have a significant negative impact on private consumption in the months to come. Official estimates claim that 20 million migrant workers (15% of the total) are currently out of work and a recent study by the Chinese Academy of Social Sciences (CASS) estimates that unemployment overall reached almost 10% at the end of 2008.¹⁹ Wage levels have also started to drop recently.

The rise in unemployment is a consequence of thousands of manufacturing enterprises, in the main producing low-skill labour-intensive goods for export such as clothing, shoes, toys and sports equipment having had to close down for want of demand, while other enterprises are growing more slowly than before. The growth rate of industrial value-added dropped from 14.7% in 2007 to 9.3% in 2008. Service industries also slowed down: from 13.8% to 9.5%. However, the pronounced slow growth in manufacturing (a mere 5-6%) over the final months of 2008 was also due to a massive destocking of material, a process that may have since come to an end. Only agricultural value-added expanded significantly, partly as a result of a record grain harvest, but probably also as a result of the positive impact that government policies in support of the rural population are having. Agriculture may offer some opportunities for the jobless migrant workers as they return home in the hope of earning some income.

In the first half of 2008, government policies had been aimed at curbing excessive demand and inflation. However, from August onwards, monetary policy took an expansive turn and interest rates were lowered five times. Those moves were matched by a significant relaxation of reserve requirements and a stop being put to the creeping revaluation of the yuan versus the US dollar. In November, in the light of the deteriorating global economic outlook and the rapid deceleration of the Chinese economy, the government announced a massive 'stimulus package'. This package will provide additional funds of the order of yuan 4000 billion (EUR 416 billion) over the next two years (equivalent to some 7% of GDP per annum). The funds will be spent mainly on infrastructure and the national health and education systems, as well as on supporting industries such as the automotive and steel industries, which have suffered bitterly on account of the crisis. Of that sum, however, only yuan 1180 billion (EUR 123 billion) will come from the central government; the rest will be put up by local governments, state-owned enterprises and banks. Central government spending thus accounts for 2% of GDP per annum, significantly less than the support the government lent during the Asian

¹⁹ See Bank of Finland, *BOFIT Weekly*, 6 February 2009. Registered unemployment in the cities, which is only the tip of the iceberg only, increased from 4.0% to 4.2% in 2008; it is expected to rise to 4.4% in 2009.

financial crisis in 1998/99. Moreover, these measures will take some time before they bite. A wide range of additional measures designed to stimulate the economy or certain parts thereof in a more direct manner have been adopted. They include increasing VAT refunds for exporters, the government instructing banks to extend loans to small and medium private enterprises, lowering thresholds on mortgage loans for private households, reducing transaction fees associated with purchases of apartments, cutting the sales tax on cars, distributing vouchers to residents, students and senior citizens on low incomes in certain cities and granting direct subsidies to farming families for the purchase of domestic appliances.

Beyond any doubt, the future development of the Chinese economy will hinge on two factors: (i) the degree to which the problems confronting exporters will have an impact on investment and consumption; and (ii) the effectiveness of government support.

Table CN

China: Selected Economic Indicators

	2003	2004	2005	2006	2007	2008	¹⁾ 2009	2010 Forecas	2011 st
Population, mn pers., end of period	1292.3	1299.9	1307.6	1314.5	1321.3	1328			
Gross domestic product, CNY bn, nom. annual change in % (real) GDP/capita (EUR at exchange rate) GDP/capita (EUR at PPP - wiiw)	13582.3 10.0 1100 2700	15987.8 10.1 1100 3000	18321.7 10.4 1400 3400	21192.4 11.6 1600 3900	25700.0 13.0 1900 4500	30067.0 9.0 2200 4900	32800 7	36100 8	40000 8.2
Retail trade turnover, CNY bn annual change in % (real) Total investment in fixed assets, CNY bn annual change in % (nominal)	5251.6 9.2 5556.7 27.7	5950.1 13.3 7047.7 26.8	6717.7 12.9 8877.4 26.0	13.8	8921.0 13.0 13723.9 24.8	10848.8 15.7 17229.1 25.4			• • •
Industrial value added annual change in % (real) Agricultural value added	12.8	11.5	11.6	12.9	13.5	9.3			·
annual change in % (real) Construction value added annual change in % (real)	2.5 12.1	6.3 8.1	5.2 12.6	5.0 13.7	3.7 12.6	5.5	•		
Employment total -reg., mn, end of period annual change in % Staff and workers, mn, end of period ²⁾ annual change in % Reg. unemploym.rate (urban), in %, end of per. ³⁾	744.3 0.9 104.9 -0.7 4.3	752.0 1.0 105.8 0.8 4.2	758.3 0.8 108.5 2.6 4.2	764.0 0.8 111.6 2.9 4.1	769.9 0.8 114.3 2.4 4.0	114.6 2.6 4.2	4.4	4.3	4.2
Average gross annual wages, CNY ⁴⁾ annual change in % (real) ⁵⁾	14040 12.0	16024 10.5	18364 12.8	21001 12.7	25932 13.6	26265 11.0			
Consumer prices, % p.a. Producer prices in industry, % p.a.	1.2 2.3	3.9 6.1	1.8 4.9	1.5 3.0	4.8 3.1	5.9 6.9	2	2	2.5
General government budget, nat.def., % GDP Revenues Expenditures Deficit (-) / surplus (+)	16.0 18.1 -2.2	16.5 17.8 -1.3	17.3 18.5 -1.2	18.3 19.1 -0.8	20.0 19.4 0.6	20.4 20.8 -0.4		-	-
Base rate of NB % p.a., end of period $^{\rm 6)}$	2.7	3.3	3.3	3.3	3.3	4.1			
Current account, EUR bn Current account in % of GDP Exports of goods total, EUR bn ⁷⁾ annual change in % Imports of goods total, EUR bn ⁷⁾ annual change in % Trade balance of goods, EUR bn ⁷⁾ Exports of services, BOP, EUR mn annual growth rate in % Imports of services, BOP, EUR mn	40.6 2.8 387.3 11.4 364.8 15.8 22.5 41.3 -2.7 48.9	51.4 3.6 435.5 12.5 411.9 12.9 23.6 45.8 11.0 52.9	128.8 7.2 609.3 39.9 527.8 28.1 81.6 59.5 29.8 67.0	198.8 9.4 771.0 26.5 629.7 19.3 141.2 73.2 23.0 80.2	271.4 11.0 888.9 15.3 697.8 10.8 191.1 89.2 21.9 95.0	270 9.3 963.2 8.4 764.5 9.6 198.7	230 6.2	260 6.6	260 6.1
annual growth rate in % FDI inflow, EUR bn ⁸⁾ FDI outflow, EUR bn ⁸⁾	-1.6 41.6 -0.1	8.3 40.3 1.3	26.6 63.3 9.0	19.7 62.1 16.8	18.4 101.0 12.4	62.3	60		
Gross reserves of NB excl. gold, EUR bn Gross external debt, EUR bn Gross external debt in % of GDP	319.3 153.3 11.8	447.7 167.8 11.8	694.2 238.2 12.6	810.0 245.4 12.1	1038.2 373.0 11.1	1385.3			•
Average exchange rate CNY/USD Average exchange rate CNY/EUR Purchasing power parity CNY/USD, wiiw ⁹⁾ Purchasing power parity CNY/EUR, wiiw ⁹⁾	8.277 9.366 3.304 3.909	8.277 11.276 3.433 4.077	8.206 10.261 3.45 4.120	7.972 10.019 3.465 4.159	7.604 10.418 3.621 4.357	6.958 10.315 3.783 4.654	6.8 9.0	6.8 9.0	7.0 9.5

Note: CNY: ISO code for the Chinese yuan.

1) Preliminary and wiw estimates. - 2) Staff and workers (on duty) refer to persons who work in state-owned enterprises, urban collectives, shareholding ownership and foreign invested enterprises. - 3) Ratio of registered urban unemployed in per cent of urban employed and unemployed. - 4) Average gross annual wages of staff and workers, defined as: total wages of staff and workers on duty per average number of staff and workers on duty. - 5) Staff and workers cost of living index is used as deflator for calculating real wage. For 2008 the consumer price index was used as a deflator. - 6) Overnight rate, 2008: September. - 7) According to customs statistics. - 8) Net investments drawn from the Chinese balance of payments. 2008 data and 2009 estimates are gross equity investments in the non-financial sector as given by the Chinese Ministery of Commerce. - 9) wiw estimates based on the 2005 International Comparison Project benchmark (Worldbank).

Source: National statistics (National Bureau of Statistics, Central Bank, China Daily etc). Forecasts by wiiw.

Vasily Astrov*

The global financial crisis, oil prices and the economies of Central and Eastern Europe

The current financial crisis has been accompanied by increasingly volatile energy prices. After several years of steady growth, driven largely by the strong energy demand in emerging economies (such as China), global oil prices surged dramatically in the first half of 2008 and stood at more than USD 140 per barrel by the middle of the year. This impressive surge was primarily a reflection of speculative demand, as the sub-prime mortgage crisis in the United States shattered confidence in US financial markets and the US dollar (which plunged against most major currencies), whereupon financial speculators turned to commodities as an alternative investment asset. Furthermore, some of the surge could be attributed to the purely statistical effect of a weakening US dollar: as long as oil prices continue to be quoted in US dollars, oil-exporting countries tend to raise the prices they charge in order to offset the resultant exchange rate losses (and/or the oil-importing countries, such as the EU, are prepared to pay a higher price in US dollars once the dollar weakens against their currencies).

However, as the financial crisis deepened and spilled over from the United States and Europe into other parts of the world and took hold of the real economy, global growth prospects worsened considerably; this had a dampening impact on both oil demand and oil prices (as well as on other commodity prices). As a result, oil prices sank threefold in the second half of 2008, levelling out at around USD 40 per barrel in February 2009. If this new price level can be sustained (a scenario which appears likely at least for the next one to two years), it will provide welcome relief for most countries covered in this report - the two major exceptions being oil exporting Russia and Kazakhstan. None of the remaining countries produces its own oil in sufficient quantities to cover domestic needs; crude oil and oil products account for an important part of their imports. Admittedly, the PPP-adjusted energy intensity of GDP (an indicator of 'technical' energy efficiency) is not particularly high in the countries in Central and Eastern Europe - in fact, many of them are comparable to Germany or Austria, and some even outperform them on that account (Table 1, column 2). However, when measured at market exchange rates (column 1), the oil intensity of GDP of the countries in Central and Eastern Europe appears much higher - particularly in certain Balkan countries, reflecting their (still) relatively weak currencies and/or low productivity levels. A sustained low level of oil prices should, thus, benefit their economies comparatively well. Low prices should reduce the import bill and improve the countries' current accounts, contain inflationary pressures (or even compound deflationary pressures in some cases) and 'free up' additional resources, which may (or may not) boost domestic demand and GDP growth.²⁰

^{*} The author thanks Peter Havlik (wiiw) for valuable comments on the first draft of this chapter.

²⁰ These resources may not add to domestic demand, as long as deflation prevents economic agents from spending or investing at the present juncture in anticipation of prices dropping even more.

	Oil intensity of GDP at ER (barrels per 1 million euro of GDP at ER)	Oil intensity of GDP at PPP (barrels per 1 million euro of GDP at PPP)	Net imports 1) ('000 barrels per day)	Annual savings on the oil import bill 2) EUR million	Improvement in CA owing to lower oil prices as % of GDP
	2007	2007	2007	2009	2009
Bulgaria	1528	607	117.6	845	2.4
Czech Republic	592	364	193.5	1389	1.0
Hungary	588	370	130.0	933	1.0
Poland	620	369	486.8	3495	1.0
Romania	659	371	104.9	753	0.6
Slovakia	552	329	70.0	503	0.7
Slovenia	653	484	60.0	431	1.1
Estonia	657	429	20.6	148	0.9
Latvia	684	414	37.2	267	1.2
Lithuania	912	509	61.7	443	1.3
Albania	1460	684	25.4	182	2.0
Bosnia and Herzegovina	937	429	27.5	197	1.6
Croatia	1003	642	79.4	570	1.4
Macedonia	1381	515	21.0	151	2.2
Montenegro	1073	460	7.1	51	1.5
Serbia	1032	478	72.5	520	1.8
Turkey	516	325	631.0	4530	0.8
Kazakhstan	1108	605	-1213.2	-8710	-9.8
Russia	1088	584	-7054.0	-50641	-4.9
Ukraine	1243	475	248.1	1781	1.7
For comparison:					
Austria	390	402	264.2	1897	
Germany	370	388	2310.4	16587	

Dependence on oil in Eastern Europe and the impact of lower oil prices on current accounts in the region

1) Including oil products. - 2) Assuming an average oil price of 40 USD per barrel, average exchange rate of 1.3 USD/EUR and the same import volumes as in 2007. *Source:* wiw calculations based on data taken from EIA, German and Austrian statistical agencies, and the wiw Database.

Table 1

Obviously, the impact on the oil-exporting countries (such as Russia and Kazakhstan, where energy – largely crude oil, oil products and natural gas – accounted for more than half of their exports in the past year) should be quite the opposite. In both countries, the 'windfall profits' enjoyed by energy exporters will shrink massively, implying, via the multiplier effect, a drop in domestic demand and, particularly if the falling oil prices are accompanied by a reduction in oil export duties (such as is the case in Russia), a decline in budget revenues, thus bearing implications for both public consumption and investments. At the same time, deflationary pressures as a result of falling domestic energy prices – which would be a rather welcome development against the current backdrop of high inflation (at least in Russia) – may not materialise, given the sizeable gap between global and domestic energy prices, many of which are regulated (especially those for gas) and are scheduled for gradual revision upwards.²¹ Ironically, to date the drop in oil prices appears to have had an *inflationary* – rather than deflationary – effect, as it exerts downward pressure on the exchange rate and thus translates into higher prices for imported goods.

Table 1 presents our rough estimates of the impact that lower oil price may have on the external balances of the countries in the region. We have based our calculations on the assumption that the average price for Russian Urals oil in 2009 will remain at USD 40 per barrel; this represents a decline of USD 29 or 42%, against 2007 – the last full year for which data are available on the crude oil and oil products imported/exported by the countries in question.²² (In euro terms, assuming an average EUR/USD exchange rate of 1.3, the decline will be somewhat less.) In the short term, the demand for oil is relatively price-inelastic so that the 'oil bill' these countries have to pay sinks roughly in keeping with the oil price. (In any event, the changes in demand are of a much smaller magnitude than the price changes discussed here; they should not distort our findings too much). Similarly, in all likelihood Russia will, for the most part, maintain its oil production and exports at their current level. Given its capacity constraints, the country will be unable to raise its output in the short term (after several years of impressive growth, Russia's production stagnated and even declined marginally in the course of the past year), nor will it be willing to reduce its output substantially – despite the possibility of cooperating with OPEC, an option currently being considered.

According to our calculations, lower oil prices will improve the current accounts of most countries in Central and Eastern Europe. The improvements will range from 0.6% of GDP (in Romania, whose domestic production covers half its consumption) to 2.4% (in Bulgaria, which imports almost all of its oil to meet demand in one of the most oil-intensive economies in the region). In general, the improvements will be more pronounced in the countries of Southeast Europe, where energy accounts for a larger portion of imports. Quite obviously the impact on the oil-exporting countries, viz. Russia and Kazakhstan, will be diametrically opposed – and much more dramatic. Russia's current account, for instance, will shrink by nearly 5, and that of Kazakhstan by nearly 10 percentage points as a result of the slump in oil prices alone. In reality, the current account will probably deteriorate still more, given that the price of natural gas sold on European markets is coupled to the oil price (with a time-lag of 3-4 months) and will thus drop accordingly.

²¹ It is indicative, for instance, that the domestic gasoline prices in Russia in the second half of 2008 declined only marginally – despite the above-mentioned threefold plunge in the world price of oil.

²² Urals blend (Russia), the most common oil blend imported by the countries in Central and East Europe, trades somewhat below Brent oil (UK) or West Texas Intermediate (USA): a reflection of its lower quality.

Appendix

Selected Indicators of Competitiveness

Table A/1

GDP per capita at current PPPs (EUR), from 2008 at constant PPPs

	ODI per	capita a	curren			0111 2000		Stant i i	13		
	1991	1995	2000	2005	2006	2007	2008	2009	2010	2011 projecti	2015 on ¹⁾
Bulgaria	4400	4700	5300	7700	8600	9300	10000	10000	10100	10500	12300
Cyprus	10700	13000	16900	20400	21300	22600	23100	23400	23900	24900	29100
Czech Republic	8800	10100	13000	17100	18300	19900	20200	20300	20800	21600	25300
Estonia	5500	5300	8500	13700	15400	16900	16700	15500	15000	15600	18200
Hungary	6800	7300	10700	14200	15000	15600	15700	15200	15400	16000	18700
Latvia	6500	4600	7000	10900	12400	13600	13300	12200	11700	12200	14200
Lithuania	7100	5000	7500	11900	13100	14800	15200	14400	13900	14500	17000
Malta	9500	12700	15900	17600	18200	19400	19800	19900	20200	21000	24500
Poland	4500	6100	9100	11500	12400	13300	13900	14100	14400	15000	17500
Romania	4000	4500	4900	7900	9100	10500	11400	11500	11500	11600	13600
Slovak Republic	5800	6900	9600	13500	15000	16700	17300	17700	18100	18500	21600
Slovenia	8500	9800	15200	19600	20700	22200	23300	23300	23800	24800	29000
NMS-12	5400	6300	8600	11700	12700	13800	14400	14400	14600	15200	17800
Croatia	6000	5700	8100	11100	12100	13300	13600	13300	13400	13900	16300
Macedonia	4300	4000	5100	6400	6900	7800	8700	8600	8600	8900	10500
Turkey	3700	4300	7600	9100	10100	10800	10900	10600	10700	11100	13000
Albania	1600	2200	3500	5000	5500	5900	6400	6600	6900	7200	8400
Bosnia & Herzeg.	1000	2200	3500	5100	5700	6300	6800	6700	6600	6900	8100
Montenegro		-	5600	6900	8300	10300	11400	11200	11200	11600	13600
Serbia			5000	7200	7800	8500	9300	9100	9100	9500	11100
Kanalikatan		2400	4000	7000	0000	0000	0000	0400	0700	10100	11000
Kazakhstan		3100	4200	7300	8200	9000	9300	9400	9700	10100	11800
Russia	7600	5300	6600	10000	11100	12400	13500	13600	14100	14700	17200
Ukraine	4600	2600	2800	4700	5200	5800	6100	5800	5900	6100	7200
China	750	1300	2100	3400	3900	4500	4900	5200	5600	5800	6700
Austria	18800	19700	25000	28100	29400	30800	31400	31000	31200	31800	34400
Germany	18100	18900	22600	26300	27400	28600	29100	28400	28600	29200	31600
Greece	12300	12300	16000	20900	22200	23600	24400	24400	24600	25100	27100
Portugal	10500	11000	14900	17300	18000	19000	19100	18800	18600	19000	20600
Spain	12800	13400	18500	22900	24600	26200	26300	25800	25700	26200	28300
USA	21500	23300	30300	35100	36700	38000	38300	37700	38300	39100	42300
EU(27) average	13700	14600	19000	22500	23600	24900	25200	25200	25500	26000	28100
EO(EI) avoiago	10100	11000	10000	LLCCC	20000	21000	LOLOO	LOLOO	20000	20000	20100
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	1991	1995	2000	E 2005	uropean 2006	Union (2 2007	7) averaç 2008	ge = 100 2009	2010	2011 projecti	2015
Bulgaria				2005	2006	2007	2008	2009		project	on ¹⁾
Bulgaria	32	32	28	2005 34	2006 36	2007 37	2008	2009 40	40	projecti 40	on ¹⁾ 44
Cyprus	32 78	32 89	28 89	2005 34 91	2006 36 90	2007 37 91	2008 40 92	2009 40 93	40 94	projecti 40 96	on ¹⁾ 44 104
Cyprus Czech Republic	32 78 64	32 89 69	28 89 68	2005 34 91 76	2006 36 90 78	2007 37 91 80	2008 40 92 80	2009 40 93 81	40 94 82	projecti 40 96 83	on ¹⁾ 44 104 90
Cyprus Czech Republic Estonia	32 78 64 40	32 89 69 36	28 89 68 45	2005 34 91 76 61	2006 36 90 78 65	2007 37 91 80 68	2008 40 92 80 66	2009 40 93 81 62	40 94 82 59	projecti 40 96 83 60	on ¹⁾ 44 104 90 65
Cyprus Czech Republic Estonia Hungary	32 78 64 40 50	32 89 69 36 50	28 89 68 45 56	2005 34 91 76 61 63	2006 36 90 78 65 64	2007 37 91 80 68 63	2008 40 92 80 66 62	2009 40 93 81 62 60	40 94 82 59 60	projecti 40 96 83 60 62	ion ¹⁾ 44 104 90 65 67
Cyprus Czech Republic Estonia Hungary Latvia	32 78 64 40 50 47	32 89 69 36 50 32	28 89 68 45 56 37	2005 34 91 76 61 63 48	2006 36 90 78 65 64 53	2007 37 91 80 68 63 55	2008 40 92 80 66 62 53	2009 40 93 81 62 60 48	40 94 82 59 60 46	projecti 40 96 83 60 62 47	on ¹⁾ 44 104 90 65 67 51
Cyprus Czech Republic Estonia Hungary Latvia Lithuania	32 78 64 40 50 47 52	32 89 36 50 32 34	28 89 68 45 56 37 39	2005 34 91 76 61 63 48 53	2006 36 90 78 65 64 53 56	2007 37 91 80 68 63 55 59	2008 40 92 80 66 62 53 60	2009 40 93 81 62 60 48 57	40 94 82 59 60 46 55	projecti 40 96 83 60 62 47 56	on ¹⁾ 44 104 90 65 67 51 60
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta	32 78 64 40 50 47 52 69	32 89 69 36 50 32 34 87	28 89 68 45 56 37 39 84	2005 34 91 76 61 63 48 53 78	2006 36 90 78 65 64 53 56 77	2007 37 91 80 68 63 55 59 78	2008 40 92 80 66 62 53 60 79	2009 40 93 81 62 60 48 57 79	40 94 82 59 60 46 55 79	projecti 40 96 83 60 62 47 56 81	on ¹⁾ 44 104 90 65 67 51 60 87
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland	32 78 64 40 50 47 52 69 33	32 89 36 50 32 34 87 42	28 89 68 45 56 37 39 84 48	2005 34 91 76 61 63 48 53 78 51	2006 36 90 78 65 64 53 56 77 53	2007 37 91 80 68 63 55 55 59 78 53	2008 40 92 80 66 62 53 60 79 55	2009 40 93 81 62 60 48 57 79 56	40 94 82 59 60 46 55 79 56	projecti 40 96 83 60 62 47 56 81 58	on ¹⁾ 44 104 90 65 67 51 60 87 62
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania	32 78 64 40 50 47 52 69 33 29	32 89 36 50 32 34 87 42 31	28 89 68 45 56 37 39 84 48 26	2005 34 91 76 61 63 48 53 78 51 35	2006 36 90 78 65 64 53 56 77 53 39	2007 37 91 80 68 63 55 59 78 53 42	2008 40 92 80 66 62 53 60 79 55 45	2009 40 93 81 62 60 48 57 79 56 46	40 94 82 59 60 46 55 79 56 45	projecti 40 96 83 60 62 47 56 81 58 45	on ¹⁾ 44 104 90 65 67 51 60 87 62 48
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic	32 78 64 40 50 47 52 69 33 29 42	32 89 36 50 32 34 87 42 31 45	28 89 68 45 56 37 39 84 48 26 51	2005 34 91 76 61 63 48 53 78 51 35 60	2006 36 90 78 65 64 53 56 77 53 39 64	2007 37 91 80 68 63 55 59 78 53 42 67	2008 40 92 80 66 62 53 60 79 55 45 69	2009 40 93 81 62 60 48 57 79 56 46 70	40 94 82 59 60 46 55 79 56 45 71	projecti 40 96 83 60 62 47 56 81 58 45 71	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia	32 78 64 40 50 47 52 69 33 29 42 62	32 89 36 50 32 34 87 42 31 45 68	28 89 68 45 56 37 39 84 48 26 51 80	2005 34 91 76 61 63 48 53 78 51 35 60 87	2006 36 90 78 65 64 53 56 77 53 39 64 88	2007 37 91 80 68 63 55 59 78 53 42 67 89	2008 40 92 80 66 62 53 60 79 55 45 69 92	2009 40 93 81 62 60 48 57 79 56 46 70 92	40 94 59 60 46 55 79 56 45 71 93	projecti 40 96 83 60 62 47 56 81 58 45 71 95	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic	32 78 64 40 50 47 52 69 33 29 42	32 89 36 50 32 34 87 42 31 45	28 89 68 45 56 37 39 84 48 26 51	2005 34 91 76 61 63 48 53 78 51 35 60	2006 36 90 78 65 64 53 56 77 53 39 64	2007 37 91 80 68 63 55 59 78 53 42 67	2008 40 92 80 66 62 53 60 79 55 45 69	2009 40 93 81 62 60 48 57 79 56 46 70	40 94 82 59 60 46 55 79 56 45 71	projecti 40 96 83 60 62 47 56 81 58 45 71	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia	32 78 64 40 50 47 52 69 33 29 42 62 39 44	32 89 69 36 50 32 34 87 42 31 45 68 43 39	28 89 68 45 56 37 39 84 48 26 51 80 45 43	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53	2008 40 92 80 66 62 53 60 79 55 69 92 57 54	2009 40 93 81 62 60 48 57 79 56 66 70 92 57 53	40 94 82 59 60 46 55 79 56 71 93 57 53	projecti 40 96 83 60 62 47 56 81 58 45 71 95	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 877 103 63 58
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12	32 78 64 40 50 47 52 69 33 29 42 62 39	32 89 36 50 32 34 87 42 31 45 68 43	28 89 68 45 56 37 39 84 48 26 51 80 45	2005 34 91 76 61 63 48 53 78 51 35 60 87 52	2006 36 90 78 65 64 53 56 77 53 39 64 88 54	2007 37 91 80 68 63 55 59 78 53 42 67 89 55	2008 40 92 80 66 62 53 60 79 55 45 69 92 57	2009 40 93 81 62 60 48 57 79 56 46 70 92 57	40 94 82 59 60 46 55 79 56 45 71 93 57	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia	32 78 64 40 50 47 52 69 33 29 42 62 39 44	32 89 69 36 50 32 34 87 42 31 45 68 43 39	28 89 68 45 56 37 39 84 48 26 51 80 45 43	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53	2008 40 92 80 66 62 53 60 79 55 69 92 57 54	2009 40 93 81 62 60 48 57 79 56 66 70 92 57 53	40 94 82 59 60 46 55 79 56 71 93 57 53	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 58 53	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 877 103 63 58
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43	2008 40 92 80 66 62 53 60 79 55 69 92 57 54 35 43	2009 40 93 81 62 60 48 57 79 56 46 46 70 92 57 53 34 42	40 94 82 59 60 46 55 79 56 71 93 57 53 34 42	projecti 40 96 83 60 62 47 56 81 58 55 81 55 85 53 34 43	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24	2008 40 92 80 66 62 53 60 79 55 45 92 57 54 35 43 25	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26	40 94 82 59 60 46 55 79 56 71 93 57 53 34 42 27	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg.	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27	40 94 82 59 60 55 79 56 45 71 93 57 53 34 42 27 26	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41	2008 40 92 80 66 62 53 80 66 62 53 79 55 45 69 92 57 54 35 43 25 27 45	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44	40 94 82 59 60 45 57 79 56 45 71 93 57 53 34 42 27 26 44	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 311 43 24 25 41 34	2008 40 92 80 66 62 53 60 79 55 45 92 57 54 35 43 25 27 45 37	2009 40 93 81 62 63 79 56 46 70 53 34 42 26 27 44 36	40 94 82 59 60 46 55 79 56 45 71 93 57 53 34 42 27 26 44 36	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27 45 37 37	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37	40 94 82 59 60 55 79 56 45 57 93 57 53 34 42 27 26 44 36 38	projecti 40 96 83 60 62 47 56 81 58 45 58 53 34 43 28 27 45 37 39	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50	2008 40 92 80 66 62 53 80 66 62 53 45 55 45 57 54 35 43 25 27 45 37 37 37 54	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54	40 94 82 59 60 45 57 79 56 45 71 93 57 53 34 42 27 26 44 36 38 55	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12 55 34	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44 21	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 24 35 33 35 47 22	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23	2008 40 92 80 66 62 53 60 79 55 55 45 99 22 57 54 35 43 25 27 54 35 43 75 43 77 54 25 37 54 24	2009 40 93 81 62 63 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23	40 94 82 59 60 46 55 79 56 57 71 93 57 53 34 42 27 26 4 43 6 88 55 23	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 40 42 61 26
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50	2008 40 92 80 66 62 53 80 66 62 53 45 55 45 57 54 35 43 25 27 45 37 37 37 54	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54	40 94 82 59 60 45 57 79 56 45 71 93 57 53 34 42 27 26 44 36 38 55	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12 55 34	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44 21	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 24 35 33 35 47 22	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23	2008 40 92 80 66 62 53 60 79 55 55 45 99 22 57 54 35 43 25 27 54 35 43 75 43 77 54 25 37 54 24	2009 40 93 81 62 63 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23	40 94 82 59 60 46 55 79 56 57 71 93 57 53 34 42 27 26 4 43 6 88 55 23	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 40 42 61 26
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine China	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18 9	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15 11 132 119	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 44 21 15 125 117	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47 22 17 125 116	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23 18	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27 45 37 54 37 54 24 19 125 115	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23 21 123 113	40 94 82 59 60 46 55 79 56 45 71 93 57 53 34 42 27 26 44 43 6 38 55 23 22 122	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23 22 122 112	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61 26 24
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine China Austria	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12 55 34 5 51 37	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18 9 135	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15 11 132	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44 21 15 125	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47 22 17 125	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23 18 124	2008 40 92 80 66 62 53 60 92 55 45 69 92 57 54 35 43 25 27 45 37 37 54 24 19 125	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23 21 123	40 94 82 59 60 45 579 56 45 71 93 57 53 34 42 27 26 44 36 38 55 23 22 122	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23 22 122	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61 26 24 122
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Maita Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine China Austria Germany	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18 9 135 129	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15 11 132 119	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 44 21 15 125 117	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47 22 17 125 116	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23 18 124 115	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27 45 37 54 37 54 24 19 125 115	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23 21 123 113	40 94 82 59 60 46 55 79 56 45 71 93 57 53 34 42 27 26 44 43 6 38 55 23 22 122	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23 22 122 112	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61 26 24 122 112
Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine China Austria Germany Greece	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15 11 132 119 84	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 32 44 21 15 125 117 93	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 35 47 22 17 125 116 94	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23 18 124 115 95	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27 45 37 37 54 43 25 27 45 37 54 125 115 97	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 32 21 123 113 97	40 94 82 59 60 46 55 79 56 57 71 93 57 53 34 42 27 26 44 38 55 53 32 22 122 122 96	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23 22 122 112 97	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61 26 24 122 112 96
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Cyprus Czech Republic Estonia Hungary Latvia Lithuania Malta Poland Romania Slovak Republic Slovenia NMS-12 Croatia Macedonia Turkey Albania Bosnia & Herzeg. Montenegro Serbia Kazakhstan Russia Ukraine China Austria Germany Greece Portugal Spain	32 78 64 40 50 47 52 69 33 29 42 62 39 44 31 27 12	32 89 69 36 50 32 34 87 42 31 45 68 43 39 27 29 15 21 36 18 9 135 129 84 75 92	28 89 68 45 56 37 39 84 48 26 51 80 45 43 27 40 18 18 29 26 22 35 15 11 132 119 84 78 97	2005 34 91 76 61 63 48 53 78 51 35 60 87 52 49 28 40 22 23 31 32 44 21 52 115 125 117 93 77 102	2006 36 90 78 65 64 53 56 77 53 39 64 88 54 51 29 43 23 24 35 33 47 22 17 125 116 94 76 104	2007 37 91 80 68 63 55 59 78 53 42 67 89 55 53 31 43 24 25 41 34 36 50 23 18 124 115 95 76 105	2008 40 92 80 66 62 53 60 79 55 45 69 92 57 54 35 43 25 27 45 37 37 54 24 19 125 115 97 76 104	2009 40 93 81 62 60 48 57 79 56 46 70 92 57 53 34 42 26 27 44 36 37 54 23 21 123 113 97 55 102	40 94 82 59 60 45 57 79 56 45 57 93 57 53 34 42 27 26 44 36 38 55 23 22 112 96 6 73 101	projecti 40 96 83 60 62 47 56 81 58 45 71 95 58 53 34 43 28 27 45 37 39 57 23 22 122 122 122 97 73 101	on ¹⁾ 44 104 90 65 67 51 60 87 62 48 77 103 63 58 37 46 30 29 48 40 42 61 266 24 122 112 966 73 101

1) Projection assuming a 2 percentage point growth differential with respect to the EU from 2011.

Sources: National statistics, Eurostat, wiiw estimates.

Table A/2

Indicators of macro-competitiveness, 2000-2008

EUR based, annual averages

	2001	2002	2003	2004	2005	2006	2007	2008
Czech Republic								prelim.
Producer price index, 2000=100	102.2	99.4	99.5	104.4	105.9	106.1	108.8	108.8
Consumer price index, 2000=100	104.5	106.1	106.0	108.6	110.4	112.7	116.0	123.3
GDP deflator, 2000=100	104.9	107.8	108.8	113.8	113.4	114.5	118.6	120.8
Exchange rate (ER), NC/EUR	34.07	30.80	31.85	31.89	29.78	28.34	27.77	24.95
ER nominal, 2000=100	95.7	86.5	89.5	89.6	83.7	79.6	78.0	70.1
Real ER (CPI-based), 2000=100	106.9	117.5	111.4	111.6	118.9	124.8	128.1	146.2
Real ER (PPI-based), 2000=100	105.6	114.3	109.9	112.6	117.0	117.4	120.0	125.2
PPP, NC/EUR	16.56	16.75	16.60	16.96	17.09	17.12	17.13	17.63
Price level, EU27 = 100	49	54	52	53	57	60	62	71
Average monthly gross wages, NC Average monthly gross wages, EUR (ER)	14793 434	15866 515	16917 531	18041 566	18992 638	20219 713	21694 781	23450 940
Average monthly gross wages, EUR (ER) Average monthly gross wages, EUR (PPP)	893	947	1019	1064	1111	1181	1267	1330
GDP nominal, NC mn	2352214	2464432	2577110	2814762	2983862	3215642	3530249	3720000
Employed persons - LFS, th., average ¹⁾	4750.2	4764.9	4733.2	4706.6	4764.0	4828.1	4922.0	5002.5
GDP per employed person, NC	495182	517205	544481	598046	626335	666026	717239	743628
GDP per empl. person, NC at 2000 pr.	472052	479782	500442	525523	552324	581682	604754	615586
Unit labour costs, NC, 2000=100	106.5	112.4	114.9	116.7	116.9	118.1	121.9	129.5
Unit labour costs, ER adj., 2000=100	111.3	129.9	128.4	130.2	139.7	148.4	156.3	184.7
Unit labour costs, PPP adj., Austria=100	33.6	38.5	37.3	38.6	40.7	42.2	43.7	49.2
Hungary								
Producer price index, 2000=100	105.1	103.2	105.7	109.4	114.5	122.0	124.4	131.3
Consumer price index, 2000=100	109.1	114.8	120.2	128.3	132.8	138.1	149.1	158.1
GDP deflator, 2000=100	108.5	116.9	123.7	129.1	132.0	137.1	145.0	152.4
Exchange rate (ER), NC/EUR	256.59	242.96	253.62	251.66	248.05	264.26	251.35	251.51
ER, nominal 2000=100	98.7	93.4	97.5	96.8	95.4	101.6	96.7	96.7
Real ER (CPI-based), 2000=100	108.2	117.8	115.8	122.0	125.4	119.8	132.8	135.8
Real ER (PPI-based), 2000=100	105.3	109.8	107.1	109.2	110.9	105.8	110.7	109.5
PPP, NC/EUR	128.83	134.39	142.58	149.88	153.53	157.23	162.20	170.23
Price level, EU27 = 100	50	55	56	60	62	59	65	68
Average monthly gross wages, NC Average monthly gross wages, EUR (ER)	103553 404	122482 504	137187 541	145520 578	158343 638	171351 648	185017 736	200000 795
Average monthly gross wages, EUR (ER) Average monthly gross wages, EUR (PPP)	404 804	911	962	971	1031	1090	1141	1175
GDP nominal, NC bn	15273	17148	18915	20695	21997	23785	25419	26800
Employed persons - LFS, th., average	3868.3	3870.6	3921.9	3900.4	3901.5	3930.0	3926.2	3879.4
GDP per employed person, NC	3948148	4430427	4822889	5305960	5638184	6052225	6474241	6908285
GDP per empl. person, NC at 2000 pr.	3638846	3789929	3898860	4109961	4271351	4414460	4464994	4532995
Unit labour costs, NC, 2000=100	113.9	129.4	140.9	141.8	148.4	155.4	165.9	176.7
Unit labour costs, ER adj., 2000=100	115.5	138.5	144.4	146.5	155.6	152.9	171.6	182.6
Unit labour costs, PPP adj., Austria=100	30.7	36.2	37.0	38.3	40.0	38.4	42.3	42.9
Poland								
Producer price index, 2000=100	101.8	102.8	105.5	113.0	113.7	116.3	118.9	122.1
Consumer price index, 2000=100	105.3	107.3	108.1	112.0	114.4	115.9	118.9	123.9
GDP deflator, 2000=100	103.5	105.8	106.2	110.6	113.5	115.2	119.0	123.5
Exchange rate (ER), NC/EUR	3.672	3.857	4.400	4.527	4.023	3.896	3.784	3.512
ER, nominal, 2000=100	91.6	96.2	109.8	112.9	100.4	97.2	94.4	87.6
Real ER (CPI-based), 2000=100	112.4	106.9	92.6	91.3	102.7	105.1	108.5	117.5
Real ER (PPI-based), 2000=100	109.8	106.2	95.0	96.6	104.7	105.4	108.4	112.3
PPP, PLZ/EUR	2.166	2.140	2.178	2.209	2.232	2.248	2.306	2.400
Price level, EU27 = 100	59	55	50	49	55	58	61	68
Average monthly gross wages, NC	2045	2098	2185	2273	2361	2477	2691	2960
Average monthly gross wages, EUR (ER)	557	544	497	502	587	636	711	843
Average monthly gross wages, EUR (PPP)	944 770564	980	1003	1029	1058	1102	1167	1233
GDP nominal, NC mn Employed persons - LFS, th., average ²⁾	779564 14207	808578 13782	843156 13617	924538 13795	983302 14116	1060031 14594	1167795 15241	1270000 15620
GDP per employed person, NC	54872	58669	61921	67021	69661	72637	76624	81306
GDP per empl. person, NC at 2000 pr.	53016	55453	58306	60597	61375	63053	64390	65835
Unit labour costs, NC, 2000=100	104.4	102.4	101.4	101.5	104.1	106.3	113.1	121.7
Unit labour costs, ER adj., 2000=100	113.9	102.4	92.4	89.9	103.7	100.0	119.8	138.8
Unit labour costs, PPP adj., Austria=100	49.7	45.5	38.8	38.5	43.7	44.9	48.4	53.5

1) From 2002 according to census 2001. - 2) From 2003 according to census 2002.

(Table A/2 ctd.)								
	2001	2002	2003	2004	2005	2006	2007	2008 prelim.
Slovak Republic								preiim.
Producer price index, 2000=100	106.5	108.7	117.8	120.9	127.4	134.6	133.0	136.8
Consumer price index, 2000=100	107.2	110.9	120.3	129.2	132.9	138.5	141.1	146.7
GDP deflator, 2000=100	105.0	109.1	114.9	121.6	124.5	128.2	129.6	130.9
Exchange rate (ER), NC/EUR	1.44	1.42	1.38	1.33	1.28	1.24	1.12	1.04
ER, nominal, 2000=100	101.6	100.2	97.4	93.9	90.6	87.4	79.3	73.4
Real ER (CPI-based), 2000=100	103.2	106.1	116.1	126.6	132.1	139.7	153.3	166.1
Real ER (PPI-based), 2000=100	103.6	107.9	119.5	124.3	129.9	135.8	144.3	150.2
PPP NC/ EUR	0.61	0.62	0.66	0.68	0.68	0.68	0.68	0.71
Price level, EU27 = 100	42	44	48	51	53	55	61	68
Average monthly gross wages, NC	410	448	477	525	573	623	669	730
Average monthly gross wages, EUR (ER)	286	316	346	395	448	504	596	703
Average monthly gross wages, EUR (PPP)	676	726	726	773	849	915	979	1,034
GDP nominal, NC mn	33836	36818	40607	45212	49315	55082	61501	66100
Employed persons - LFS, th., average	2123.7	2127.0	2164.6	2170.4	2215.2	2302.3	2357.7	2438.0
GDP per employed person, NC	15933	17310	18760	20831	22262	23925	26085	27112
GDP per empl. person, NC at 2000 pr.	15174	15866	16327	17131	17881	18662	20127	20712
Unit labour costs, NC, 2000=100	105.7	110.5	114.1	119.8	125.3	130.4	129.8	137.7
Unit labour costs, ER adj., 2000=100	104.0	110.2	117.2	127.6	138.3	149.2	163.8	187.7
Unit labour costs, PPP adj., Austria=100	25.4	26.4	27.6	30.6	32.6	34.4	37.1	40.5
Slovenia								
Producer price index, 2000=100	107.2	111.2	112.6	115.5	117.7	120.4	125.3	130.2
Consumer price index, 2000=100	108.6	116.7	123.3	127.8	131.0	134.3	139.3	147.0
GDP deflator, 2000=100	108.7	117.0	123.6	127.7	129.8	132.4	137.9	145.5
Exchange rate (ER), NC/EUR	0.9063	0.9440	0.9752	0.9968	1.0000	0.9998	1.0000	1.0000
ER, nominal, 2000=100	105.9	110.3	114.0	116.5	116.9	116.9	116.9	116.9
Real ER (CPI-based), 2000=100	100.3	101.4	101.7	101.0	101.0	101.3	102.7	104.5
Real ER (PPI-based), 2000=100	100.0	100.2	97.6	95.8	93.0	90.8	92.2	89.8
PPP, NC/EUR	0.6580	0.6884	0.7275	0.7248	0.7302	0.7455	0.7683	0.7986
Price level, EU27 = 100	73	73	75	73	73	75	77	80
Average monthly gross wages, NC	895	982	1057	1117	1157	1213	1285	1391
Average monthly gross wages, EUR (ER)	988	1041	1083	1120	1157	1213	1285	1391
Average monthly gross wages, EUR (PPP)	1361	1427	1452	1541	1585	1627	1672	1742
GDP nominal, NC mn	20654	23129	25114	27073	28704	31008	34471	37980
Employed persons - LFS, th., average	916 22548	910 25416	897 27998	943 28710	949 30240	961 32260	985 34989	995 38171
GDP per employed person, NC GDP per empl. person, NC at 2000 pr.	22546	21723	27998	22482	30240 23297	24365	25373	26234
Unit labour costs, NC, 2000=100	110.7	116.0	119.6	127.4	127.4	127.6	129.9	136.0
Unit labour costs, ER adj., 2000=100	104.5	105.1	104.9	109.3	109.0	109.2	123.3	116.4
Unit labour costs, PPP adj., Austria=100	65.0	64.2	62.9	66.8	65.5	64.1	64.1	64.0
· · · ·	0010	02	02.0	00.0	00.0	•	• …	0.1.0
Bulgaria	100.0	405.0	110.1	440 7	105.0	444.0	150.0	100.0
Producer price index, 2000=100	103.8	105.0	110.1	116.7	125.9	141.2	153.0	169.2
Consumer price index, 2000=100	107.4	113.6	116.3	123.4	130.9	140.6	151.2	169.3
GDP deflator, 2000=100	106.7	111.4	113.3	119.2	123.6	134.1	144.7	161.8
Exchange rate (ER), NC/EUR	1.9482 99.8	1.9492 99.8	1.9490	1.9533	1.9558	1.9558	1.9558	1.9558
ER, nominal, 2000=100 Real ER (CPI-based), 2000=100	99.8 105.3	99.8 109.1	99.8 109.5	100.1	100.2	100.2	100.2	100.2
Real ER (PPI-based), 2000–100 Real ER (PPI-based), 2000=100	105.3	109.1	109.5	113.5 112.7	117.7 116.2	123.7 124.2	130.0 131.4	140.4 136.2
PPP, NC/EUR	0.6506	0.6510	0.6594	0.6847	0.7152	0.7429	0.7913	0.8687
Price level, EU27 = 100	33	33	34	35	37	38	40	44
Average monthly gross wages, NC	240	258	273	292	324	360	431	525
Average monthly gross wages, NC Average monthly gross wages, EUR (ER)	123	132	140	150	166	184	220	268
Average monthly gross wages, EUR (PPP)	369	396	414	427	453	485	545	604
GDP nominal, NC mn	29709	32402	34628	38823	42797	49361	56520	66096
Employed persons - LFS, th.,average	2698.8	2739.6	2834.8	2922.5	2981.9	3110.0	3252.6	3360
GDP per employed person, NC	11008	11827	12215	13284	14352	15872	17377	19671
GDP per empl. person, NC at 2000 pr.	10317	10617	10781	11144	11612	11836	12009	12160
Unit labour costs, NC, 2000=100	99.2	103.5	108.1	111.9	118.9	129.8	153.1	183.9
Unit labour costs, ER adj., 2000=100	99.4	103.6	108.3	111.8	118.6	129.6	152.8	183.6
Unit labour costs, PPP adj., Austria=100	16.5	16.9	17.3	18.2	19.1	20.3	23.5	26.9
								A/2 ctd)

(Table A/2 ctd.)								
	2001	2002	2003	2004	2005	2006	2007	2008 prelim.
Romania								preiim.
Producer price index, 2000=100	138.1	169.9	203.0	241.8	267.2	298.1	322.2	373.1
Consumer price index, 2000=100	134.5	164.8	189.9	212.5	231.7	247.0	259.2	279.7
GDP deflator, 2000=100	137.4	170.1	210.0	242.5	272.0	300.7	339.0	389.9
Exchange rate (ER), NC/EUR	2.6004	3.1270	3.7551	4.0510	3.6209	3.5258	3.3328	3.6776
ER, nominal, 2000=100	130.5	157.0	188.5	203.3	181.8	177.0	167.3	184.6
Real ER (CPI-based), 2000=100	100.8	100.6	94.7	96.2	114.9	123.1	133.4	125.9
Real ER (PPI-based), 2000=100	104.6	107.6	106.4	114.9	135.8	148.5	165.7	162.9
PPP, NC/EUR	0.9570	1.1589	1.3996	1.5442	1.6990	1.7618	1.8273	2.0832
Price level, EU27 = 100	37	37	37	38	47	50	55	57 1742
Average monthly grross wages, NC Average monthly gross wages, EUR (ER)	422 162	532 170	664 177	818 202	968 267	1146 325	1410 423	1742 474
Average monthly gross wages, EUR (PPP)	441	459	474	530	570	650	772	836
GDP nominal, NC mn	116769	152017	197428	247368	288955	344651	412762	512000
Employed persons - LFS, th., average ³⁾	10440.0	9234.2	9222.5	9157.6	9114.6	9291.2	9353.3	9400
GDP per employed person, NC	11185	16462	21407	27012	31702	37094	44130	54468
GDP per empl. person, NC at 2000 pr.	8140	9678	10194	11139	11655	12336	13018	13969
Unit labour costs, NC, 2000=100	139.6	148.0	175.4	197.8	223.7	250.2	291.7	335.9
Unit labour costs, ER adj., 2000=100	107.0	94.3	93.0	97.3	123.1	141.4	174.4	181.9
Unit labour costs, PPP adj., Austria=100	32.4	28.0	27.1	28.9	36.0	40.3	48.9	48.7
Estonia								
Producer price index, 2000=100	104.4	104.8	105.1	108.1	110.4	115.3	124.8	133.8
Consumer price index, 2000=100	105.6	109.4	110.9	114.3	119.0	124.3	132.7	146.7
GDP deflator, 2000=100	105.3	109.5	114.5	118.3	124.5	133.3	146.1	160.1
Exchange rate (ER), NC/EUR	15.647	15.647	15.647	15.647	15.647	15.647	15.647	15.647
ER, nominal, 2000=100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Real ER (CPI-based), 2000=100	103.4	104.9	104.3	105.2	107.2	109.6	114.3	121.9
Real ER (PPI-based), 2000=100	103.2	104.2	103.8	104.4	102.0	101.6	107.4	107.8
PPP, NC/EUR	8.686	8.738	8.898	9.022	9.377	9.883	10.525	11.456
Price level, EU27 = 100	56	56	57	58	60	63	67	73
Average monthly gross wages, NC	5510	6144	6723	7287	8073	9407	11336	13000
Average monthly gross wages, EUR (ER) Average monthly gross wages, EUR (PPP)	352 634	393 703	430 756	466 808	516 861	601 952	725 1077	831 1135
GDP nominal, NC mn	108218	121372	136010	151012	173530	205038	238929	256600
Employed persons - LFS, th., average	577.7	585.5	594.3	595.5	607.4	646.3	655.3	650
GDP per employed person, NC	187326	207297	228858	253589	285693	317249	364610	394769
GDP per empl. person, NC at 2000 pr.	177898	189312	199876	214361	229473	237996	249562	246623
Unit labour costs, NC, 2000=100	105.3	110.3	114.3	115.6	119.6	134.4	154.4	179.2
Unit labour costs, ER adj., 2000=100	105.3	110.3	114.3	115.6	119.6	134.4	154.4	179.2
Unit labour costs, PPP adj., Austria=100	36.2	37.3	37.8	39.0	39.7	43.5	49.2	54.4
Latvia								
Producer price index, 2000=100	101.7	102.7	105.9	115.0	124.0	136.8	158.8	177.2
Consumer price index, 2000=100	102.5	104.5	107.6	114.3	122.1	130.2	143.3	165.2
GDP deflator, 2000=100	101.7	105.4	109.1	116.8	128.7	141.8	160.6	184.7
Exchange rate (ER), NC/EUR	0.5601	0.5810	0.6407	0.6652	0.6962	0.6962	0.7001	0.7027
ER, nominal, 2000=100	100.2	103.9	114.6	119.0	124.5	124.5	125.2	125.7
Real ER (CPI-based), 2000=100	100.2	96.4	88.3	88.4	88.4	92.2	98.6	109.2
Real ER (PPI-based), 2000=100	100.4	98.2	91.3	93.4	92.0	96.8	109.1	113.6
PPP, NC/EUR	0.2894	0.2919	0.3062	0.3251	0.3605	0.3932	0.4506	0.5160
Price level, EU27 = 100	52	50	48	49	52	56	64	73
Average monthly gross wages, NC	159	173	192	211	246	302	398	480
Average monthly gross wages, EUR (ER)	284	298	300	317	353	434	568	683
Average monthly gross wages, EUR (PPP)	549	593	629	649	682	769	882	930
GDP nominal, NC mn	5219.9	5758.3	6392.8	7434.5	9059.1	11171.7	13957.4	15600
Employed persons - LFS, th., average	962.1	989.0	1006.9	1017.7	1033.7	1087.1	1118.0	1120
GDP per employed person, NC GDP per empl. person, NC at 2000 pr.	5426 5335	5822 5524	6349 5819	7305 6254	8764 6809	10277 7247	12484 7774	13929 7541
Unit labour costs, NC, 2000=100	100.6	5524 105.7	111.7	6254 113.9	121.8	140.9	172.7	214.9
Unit labour costs, ER adj., 2000–100	100.5	105.7	97.5	95.7	97.9	140.9	172.7	214.9 171.0
Unit labour costs, PPP adj., Austria=100	34.0	33.9	31.8	31.8	32.0	36.1	43.3	51.2
3) Methodological break in 2001/2002.	00	20.5	0.10	5.15	52.5			02
-							(= - 1.1	o A/2 otd)

(Table A/2 etd)								
(Table A/2 ctd.)	2001	2002	2003	2004	2005	2006	2007	2008 prelim.
Lithuania								promit.
Producer price index, 2000=100	97.0	94.2	93.8	99.4	110.9	119.1	127.3	150.5
Consumer price index, 2000=100	101.5	101.9	100.8	102.0	104.7	108.6	115.0	127.7
GDP deflator, 2000=100	99.6	99.8	99.0	101.5	108.3	115.3	125.5	138.0
Exchange rate (ER), NC/EUR	3.5823	3.4594	3.4527	3.4529	3.4528	3.4528	3.4528	3.4528
ER, nominal, 2000=100	96.9	93.6	93.4	93.4	93.4	93.4	93.4	93.4
Real ER (CPI-based), 2000=100	102.5	104.3	101.4	100.5	100.9	102.5	106.0	113.6
Real ER (PPI-based), 2000=100	98.9	100.1	99.2	102.8	109.6	112.3	117.2	129.8
PPP, NC/EUR	1.7025	1.6617	1.6212	1.6699	1.7749	1.8589	1.9622	2.1811
Price level, EU27 = 100	48	48	47	48	51	54	57	63
Average monthly gross wages, NC	982	1014	1073	1149	1276	1496	1802	2270
Average monthly gross wages, EUR (ER)	274 577	293 610	311 662	333	370 719	433	522 919	657 1041
Average monthly gross wages, EUR (PPP) GDP nominal, NC mn	48637	52070	56959	688 62698	72060	805 82793	98139	111430
Employed persons - LFS, th., average	1351.8	1405.9	1438.0	1436.3	1473.9	1499.0	1534.2	1530
GDP per employed person, NC	35979	37037	39610	43652	48891	55232	63967	72830
GDP per empl. person, NC at 2000 pr.	36124	37111	40010	43007	45144	47903	50970	52775
Unit labour costs, NC, 2000=100	91.7	92.1	90.4	90.1	95.3	105.2	119.2	145.0
Unit labour costs, ER adj., 2000=100	94.5	98.4	96.7	96.4	102.0	112.6	127.6	155.1
Unit labour costs, PPP adj., Austria=100	29.6	30.2	29.1	29.6	30.8	33.2	37.0	42.9
Croatia								
Producer price index, 2000=100	103.6	103.2	105.1	108.8	112.1	115.3	119.3	129.3
Consumer price index, 2000=100	104.9	106.7	108.6	110.9	114.6	118.2	121.6	129.1
GDP deflator, 2000=100	104.0	107.8	112.1	116.4	120.1	124.1	129.0	136.9
Exchange rate (ER), NC/EUR	7.4690	7.4068	7.5634	7.4952	7.4002	7.3226	7.3362	7.2230
ER, nominal, 2000=100	97.8	97.0	99.1	98.2	96.9	95.9	96.1	94.6
Real ER (CPI-based), 2000=100	104.9	105.4	103.1	104.0	106.5	108.7	109.0	113.4
Real ER (PPI-based), 2000=100	104.7	105.7	104.9	107.1	106.8	106.0	106.8	110.2
PPP, NC/EUR	4.3229	4.3756	4.5448	4.5803	4.6746	4.6748	4.6559	4.9700
Price level, EU27 = 100	58	59	60	61	63	64	63	69
Average monthly gross wages, NC	5061	5366	5623	5985	6248	6634	7047	7500
Average monthly gross wages, EUR (ER)	678	724	743	799	844	906	961	1038
Average monthly gross wages, EUR (PPP)	1171	1226	1237	1307	1337	1419	1514	1509
GDP nominal, NC mn	165640	181231	198422	214983	231349	250590	275078	299150
Employed persons - LFS, th., average	1469.0	1528.0	1536.5	1562.5	1573.0	1586.0	1614.5	1615.0
GDP per employed person, NC	112757 108392	118607 110041	129139 115234	137589 118188	147075 122451	158001 127280	170380 132033	185232 135295
GDP per empl. person, NC at 2000 pr. Unit labour costs, NC, 2000=100	94.2	98.4	98.4	102.1	102.9	127260	132033	135295
Unit labour costs, ER adj., 2000–100	94.2 96.3	90.4 101.4	98.4 99.4	102.1	102.9	105.1	107.7	111.0
Unit labour costs, PPP adj., Austria=100	59.1	61.2	58.8	62.8	63.0	63.5	63.8	64.1
-	00.1	01.2	00.0	02.0	00.0	00.0	00.0	01.1
Macedonia Producer price index, 2000=100	102.0	101.1	100.8	101.7	104.9	112.6	115.4	127.3
Consumer price index, 2000=100	102.0	101.1	100.0	101.7	104.9	112.3	114.8	124.4
GDP deflator, 2000=100	103.6	107.1	107.4	108.8	113.0	117.8	126.6	139.4
Exchange rate (ER), NC/EUR	60.91	60.98	61.26	61.34	61.30	61.19	61.18	61.27
ER, nominal, 2000=100	100.3	100.4	100.9	101.0	100.9	100.8	100.7	100.9
Real ER (CPI-based), 2000=100	102.9	102.5	101.3	98.6	97.1	98.2	98.2	102.4
Real ER (PPI-based), 2000=100	100.5	100.1	98.7	97.3	96.1	98.5	98.5	101.7
PPP, NC/EUR	23.14	23.38	23.42	22.65	21.96	21.94	22.28	23.12
Price level, EU27 = 100	38	38	38	37	36	36	36	38
Average monthly gross wages, NC	17886	19025	19950	20771	21330	23036	24136	25997
Average monthly gross wages, EUR (ER)	294	312	326	339	348	376	395	424
Average monthly gross wages, EUR (PPP)	773	814	852	917	972	1050	1083	1125
GDP nominal, NC mn	233841	243970	251486	265257	286619	310915	353786	410146
Employed persons - LFS, th., average	599.3	561.3	545.1	523.0	545.3	570.4	590.2	610.7
GDP per employed person, NC	390185	434620	461351	507189	525662	545079	599400	671567
GDP per empl. person, NC at 2000 pr.	376626	405723	429388	465992	465285	462580	473385	481721
Unit labour costs, NC, 2000=100	113.7	112.3	111.2	106.7	109.8	119.2	122.1	129.2
Unit labour costs, ER adj., 2000=100 Unit labour costs, PPP adj., Austria=100	113.3 39.6	111.8 38.4	110.3 37.1	105.6 36.3	108.7 36.7	118.3 39.0	121.2 39.3	128.1 39.6
onit labour costs, FFF auj., Austria-100	39.0	50.4	57.1	50.5	50.7	39.0		
							(Tahl	e A/2 ctd)

2061 2002 2003 2004 2006 2006 2008 prelim. Albania P	(Table A/2 ctd.)								
Albania Producer price index, 2000-100 102.8 91.4 99.3 111.4 116.9 117.8 122.9 127.4 GP deflator, 2000-100 103.1 108.5 111.1 114.2 116.9 117.8 122.4 122.40 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.63 122.80 123.64 114.3 115.3 111.71 113.71 113.8 114.4 113.8 116.1 115.3 114.9 116.3 111.64 115.8 123.63 123.53 149 1161 117.8 128.20 166.00 123.5 135.7 336 42.0 44.14 486 GDP nominal, NC m Regermonthy gross wages, EUR (FP) 129.0 22.6 92.8<		2001	2002	2003	2004	2005	2006	2007	2008
Consumer price index, 2000-100 103.1 108.5 111.1 114.2 119.9 119.7 123.4 123.8 Exchange rate (ER), NCEUR 128.47 132.36 137.5 127.67 124.19 123.08 123.63 128.64 Exchange rate (ER), NCEUR 128.47 132.36 137.51 127.67 124.19 123.08 123.63 128.64 Reil ER (CP-based), 2000-100 94.6 91.0 94.6 111.8 115.3 111.7 113.8 114.3 Reil ER (CP-based), 2000-100 94.6 91.0 94.6 111.8 115.3 114.0 115.2 51.05 52.634 52.025 Price Neev, EU27 = 100 39 37 38 41 42 42.4 34 42.0 44.41 486.020 42.0 44.41 486.020 42.0 44.41 486.020 42.00 44.41 486.020 42.00 43.00 93.07 92.8 93.07 93.8 93.07 93.8 93.07 93.8 93.07 93.8	Albania								preim.
CDP defain, 2000=100 103.3 105.8 111.5 114.1 117.1 121.4 122.80 122.80 Rail ER, ND-Lossed), 2000=100 104.1 104.2 100.7 109.2 112.5 113.7 113.8 114.3 114.5 114.3 114.3 <td>Producer price index, 2000=100</td> <td>92.8</td> <td>91.4</td> <td>99.3</td> <td>111.4</td> <td>116.9</td> <td>117.8</td> <td>121.9</td> <td>130.8</td>	Producer price index, 2000=100	92.8	91.4	99.3	111.4	116.9	117.8	121.9	130.8
Exchange raie (EP), NC/EUR 128,43 132,45 132,45 123,45 124,45	Consumer price index, 2000=100	103.1	108.5	111.1	114.2	116.9	119.7	123.2	127.4
ER, nominal, 2006=100 96.9 90.3 103.7 96.3 90.7 92.2 92.2 92.2 Real ER (PF)-based), 2000=100 194.1 104.2 100.7 109.2 112.5 113.3 111.8 111.8 111.8 111.8 111.8 111.8 111.8 111.8 111.8 112.4 113.8 111.8 112.4 113.8 112.4 113.8 112.4 133.8 Proce level, EUZ? = 100 39 37 38 41 42 42 43 42 Average monthy gross wages, EUR (PP) 116 125 135 1367 387 384 420 441 486 CDP nominal, NCm 53393 622.11 640.0 393.3 106.0 1060.0 10650 674.27 75185 1479.7 801.00 98.27 98.30 100.2 110.22 10.2 110.2 10.0 100.2 100.2 10.2 10.5 10.5 10.6 7557 64.07 751.65 74.27 750.9 <td>GDP deflator, 2000=100</td> <td>103.3</td> <td>105.8</td> <td>111.5</td> <td>114.1</td> <td>117.1</td> <td>121.4</td> <td>126.3</td> <td>128.4</td>	GDP deflator, 2000=100	103.3	105.8	111.5	114.1	117.1	121.4	126.3	128.4
Read ER (CPI-based). 2000=100 104.1 104.2 100.7 109.2 112.5 113.3 113.8 114.3 Read ER (PIP-based). 2000=100 94.6 91.0 94.6 51.912 52.103 51.150 52.634 52.025 Price level, EU27 = 100 39 37 33 4.1 42 42 43 42 Average monthly gross wages, EUR (ER) 115 125 135 149 161 175 188 2060 Average monthly gross wages, EUR (ERP) 299 353 357 367 384 420 444 486 GDP nominal, NC m 58336 62271 674938 676754 75181 808408 974537 81000 104207 1110520 GDP aremal person, NC 42000 pr. 529636 636276 674287 708537 76653 746653 74653 106.7 104.5 118.3 127.2 110.2 116.0 111.8 115.2 113.3 117.4 118.4 111.5 113.1 111.5 <td>Exchange rate (ER), NC/EUR</td> <td>128.47</td> <td>132.36</td> <td>137.51</td> <td>127.67</td> <td>124.19</td> <td>123.08</td> <td>123.63</td> <td>122.80</td>	Exchange rate (ER), NC/EUR	128.47	132.36	137.51	127.67	124.19	123.08	123.63	122.80
Real ER (PF)-based), 2000=100 94.6 91.0 94.6 91.18 115.3 111.8 112.4 113.8 PPP, NC/EUR 39 39.44 51.952 51.912 52.103 51.150 52.63 52.025 Price level, EUZ7 = 100 39 37 38 41 42 42 43 42 Average monthy gross wages, EUR (ER) 115 125 135 1397 384 420 441 486 GDP nominal, NC mn 563369 652.11 692.09 923 929 932 934 937 80000 864.200 116000 102.7 102.5 102.5 104.20 104.207 1110.2 116.0 103.2 104.5 102.5 105.0 108.2 102.2 10.0 106.0 51.5 72.0 10.5 108.2 10.0 10.6 10.5 109.7 106.5 109.7 106.5 109.7 106.5 109.7 106.5 108.7 108.5 108.5 10.5 109.7	ER, nominal, 2000=100	96.9	99.8	103.7	96.3	93.7	92.8	93.2	92.6
PPP, NC/EUR 49.438 51.952 51.912 52.103 51.150 52.634 52.025 Price level, EUZ = 100 39 37 38 41 42 43 42 Average monthy gross wages, EUR (PP) 115 125 135 149 161 175 188 GDP nominal, NC m 583369 622711 694098 750755 81477 81000 82200 1066000 Reg, employment total, th. average ¹⁰ 1066 920 922 932 934 937 955 GDP per empl. person, NC at 2000 pr. 52836 63576 674287 708537 748563 763979 80307 84623 Unit labour costs, RA di, 2000=100 102.7 95.0 100.9 98.7 98.3 100.4 102.8 105.7 106.5 198.7 116.5 118.1 116.7 118.3 127.2 102.2 802.9 12.0 12.0 12.0 12.0 12.5 105.5 118.3 127.2 100.7 116.5	Real ER (CPI-based), 2000=100	104.1	104.2	100.7	109.2	112.5	113.7	113.8	114.3
Price level, EU27 = 100 39 37 38 41 42 43 42 Average monthly gross wages, EUR (ER) 14820 16541 18522 19039 19933 21493 23234 25300 Average monthly gross wages, EUR (PP) 29 335 337 337 334 420 441 486 GDP nominal, NC mn 553369 62711 64048 75075 614777 69100 822.00 106000 Reg. employment total, th., average ¹⁰ 1066 920 923 929 932 932 93070 86429 Unit labour costs, NC, 2000=100 102.7 85.0 100.9 98.7 7863 78653 785879 830070 86429 Unit labour costs, NC, 2000=100 102.3 21.0 21.0 22.6 22.8 22.9 22.9 23.0 Broducer price index, 2000=100 105.0 105.1 113.1 116.7 116.5 118.3 117.2 GD defator, 2000=100 103.2 104.5	Real ER (PPI-based), 2000=100	94.6	91.0	94.6	111.8	115.3	111.8	112.4	113.8
Average monthly gross wages, NC ⁰ 14820 16541 11522 1030 19933 21433 23234 22300 Average monthly gross wages, EUR (PP) 299 335 337 337 334 420 441 446 GDP nominal, NC m 583369 622711 694098 750758 814797 89100 982200 1060000 Reg, employment total, th, average ⁰ 1066 2920 932 934 937 9555 GDP per employed person, NC at 2000 pr. 528386 633676 674287 706553 746563 788797 830070 86429 Unit labour costs, ER adj, 2000=100 102.7 95.0 100.9 98.7 98.3 100.4 102.8 107.4 Unit labour costs, EP adj, Austra=100 13.8 11.0 21.0 22.6 22.8 22.9 230 Consumer price index, 2000=100 13.2 10.4.5 105.7 106.5 19.7 116.5 118.3 127.2 GDP deflator, 2000=100 10.0.0 100.0	PPP, NC/EUR	49.493	49.448	51.952	51.912	52.103	51.150	52.634	52.025
Average monthly gross wages, EUR (PP) 195 125 135 149 161 175 188 206 Average monthly gross wages, EUR (PP) 299 335 357 367 384 420 0441 486 GDP nominal, NC mn 53336 622711 694098 75078 814797 89100 96220 106000 Reg. employment total, th., average ⁵¹ 1066 920 923 923 934 937 955 GDP per empl. person, NC at 2000 rt0 102.7 65.0 100.9 98.3 100.4 1062.2 110.2 116.0 Unit labour costs, PP adj, Austria=100 23.8 21.0 21.0 22.6 22.8 22.9 22.9 23.0 Bosnia and Herzegovira Tro .	Price level, EU27 = 100	39	37	38	41	42	42	43	42
Average monthly oross wages, EUR (PPP) 299 335 357 367 384 420 441 466 GDP nominal, NC mn 53369 622711 694098 750785 814797 891000 96200 106000 GDP per employed person, NC 547458 676754 751851 804408 874653 765371 10428 107.4 1110529 Unit labour costs, RC adj, 2000=100 102.7 95.0 100.9 98.7 98.3 100.4 102.8 107.4 Unit labour costs, PP adj, Austina=100 23.8 21.0 21.0 22.6 22.9 22.9 23.0 Consumer price index, 2000=100 . <td>Average monthly gross wages, NC $^{ m 4)}$</td> <td>14820</td> <td>16541</td> <td>18522</td> <td>19039</td> <td>19993</td> <td>21493</td> <td>23234</td> <td>25300</td>	Average monthly gross wages, NC $^{ m 4)}$	14820	16541	18522	19039	19993	21493	23234	25300
CDP nominal, NC m 58389 622711 694088 750785 814797 891000 90200 106005 Reg. employment total, th., average ⁵¹ 1066 920 923 929 932 934 937 955 CDP per empl. person, NC at 2000 pr. 529836 639576 674287 70853 74563 974593 1004.201 11052 Dini labour costs, RC, 2000-100 102.7 55.0 100.9 98.7 98.3 100.4 102.8 107.4 Unit labour costs, RC, 2000-100 102.7 52.8 21.0 21.0 21.0 116.5 118.1 118.3 107.4 110.2 116.0 Consumer price index, 2000-100 103.2 104.5 105.7 100.5 109.7 116.5 118.3 127.7 101.9 130.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	Average monthly gross wages, EUR (ER)	115	125	135	149	161	175	188	206
Reg. employment total, th., average ⁵⁾ 1066 920 923 929 932 934 937 955 GDP per employed person, NC 547458 676754 751851 808408 874565 95431 1048207 1110529 GDP per employed person, NC at 2000 pr. 1027 95.0 100.9 98.7 98.3 10.4 102.8 101.4 Unit labour costs, ER adj, 2000-100 102.6 95.1 97.2 102.5 102.9 110.2 116.0 Unit labour costs, ER adj, 2000-100 103.2 104.5 105.7 105.5 109.7 116.5 118.3 127.2 GDP deflator, 2000-100 103.2 104.5 105.7 105.5 109.7 116.5 118.3 127.2 GDP deflator, 2000-100 100.0	Average monthly gross wages, EUR (PPP)	299	335	357	367	384	420	441	486
GD ^D per employed person, N.C 547458 678754 751851 808408 874565 954391 1048207 1110529 GDP per empl. person, N.C at 2000 pr. 529836 639576 674287 708553 746563 785979 830070 864299 Unit labour costs, N.C. 2000=100 102.7 95.0 100.9 98.1 100.4 102.2 102.5 105.0 108.2 110.2 110.0 Desnia and Herzegovina Producer pitce index, 2000=100 10.3.2 104.5 105.5 109.7 116.5 118.3 127.2 12.3 130.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 196 1.96 1	GDP nominal, NC mn	583369	622711	694098	750785	814797	891000	982200	1060000
GDP per empl. person, NC at 2000 pr. 529836 639576 674287 708553 746563 785979 830070 864629 Unit labour costs, RC al., 2000=100 106.0 95.1 99.7 98.3 100.4 102.8 107.1 Unit labour costs, RC al., 2000=100 23.8 21.0 21.0 22.6 22.8 22.9 22.9 23.0 Broducer price index, 2000=100 0.3.2 104.5 105.7 106.5 109.7 115.5 118.3 127.2 GDP deflator, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 19.6	Reg. employment total, th., average ⁵⁾	1066	920	923	929	932	934	937	955
Unit labour costs, NC, 2000-100 102.7 95.0 100.9 98.7 98.3 100.4 102.8 107.4 Unit labour costs, RPP adj., Austria=100 23.8 21.0 21.0 22.6 22.8 22.9 23.0 Bosnia and Herzegovina Producer price index, 2000=100 103.2 104.5 105.7 106.5 109.7 118.5 118.3 127.2 Consumer price index, 2000=100 103.6 108.6 10.05 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NO/EUR 196 1.9	GDP per employed person, NC								
Unit labour costs, ER adj., 2000-100 106.0 95.1 97.2 102.5 105.0 108.2 110.2 116.0 Donalization 23.8 21.0 21.0 22.6 22.8 22.9 22.9 23.0 Destina and Herzegovina Producer price index, 2000-100 103.2 104.5 105.7 106.5 109.7 116.5 118.3 127.2 GDP deflator, 2000-100 103.6 108.6 1.96 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>									
Unit labour costs, PPP adj., Austria=100 23.8 21.0 21.0 22.6 22.8 22.9 22.9 23.0 Bosnia and Herzegovina Producer price index, 2000=100 103.2 104.5 105.7 106.5 109.7 116.5 118.3 127.2 GDP deflator, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exnange rate (ER), NC/EUR 1.96									
Bosnia and Herzegovina Producer price index, 2000=100 103.2 104.5 105.7 106.5 109.7 116.5 118.3 127.2 Consumer price index, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 1.96 1.90 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 1.96 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Producer price index, 2000=100 Image: style index, 2000=100 103.2 104.5 105.7 106.5 109.7 116.5 118.3 127.2 GDP deflator, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 1.96	Unit labour costs, PPP adj., Austria=100	23.8	21.0	21.0	22.6	22.8	22.9	22.9	23.0
Consumer price index, 2000=100 103.2 104.5 105.7 106.5 109.7 116.5 118.3 127.2 GDP deflator, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 1.96 1.90 1.900	C C								
GDP deflator, 2000=100 103.6 108.6 110.5 113.1 116.7 123.4 130.7 140.3 Exchange rate (ER), NC/EUR 1.96 <t< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	•								
Exchange rate (ER), NC/EUR 1.96 <th< td=""><td>• *</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	• *								
ER, nominal, 2000=100 100.0<									
Real ER (CPI-based), 2000=100 101.0 100.2 99.4 98.1 98.9 102.7 101.9 105.6 Real ER (PI-based), 2000=100 .	o								
Real ER (PPI-based), 2000=100 .									
PPP, NC/EUR0.8190.8380.8500.8500.8570.8780.8890.928Price level, EUZ = 100424343434444544547Average monthly gross wages, NC598660717748798869939107Average monthly gross wages, EUR (EP)306337367382408444480547Average monthly gross wages, EUR (PP)73078784388093199010561153GDP nominal, NC m11599.212829.413442.615786.016927.91911.12164.624400Employed person, NC at 2000 pr.1768518699190852186422602191111949019530Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, RE adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj, Austria=10031.1931.9733.530.9831.4639.5341.18416.1GDP deflator, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0114.5119.7128.6129.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4122.5128.2GDP deflator, 2001=100 </td <td></td> <td>101.0</td> <td>100.2</td> <td>99.4</td> <td>90.1</td> <td>90.9</td> <td>102.7</td> <td>101.9</td> <td>105.0</td>		101.0	100.2	99.4	90.1	90.9	102.7	101.9	105.0
Price level, EU27 = 1004243434344454547Average monthly gross wages, NC5986607177487988699391070Average monthly gross wages, EUR (ER)306337367382408444440547Average monthly gross wages, EUR (PPP)73078784388093199010561153GDP nominal, NC m11599.212829.413442.61578.016927.91912.1.21640.624400Employed persons - LFS, th., average ⁶¹ 633.1631.7637.5638.2641.5811.0849.6890.2GDP per employed person, NC1832120311210872473526386235772547127408GDP per empl. person, NC at 2000 pr.1765110.4117.5107.0110.4142.2150.6171.3Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, NC, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0114.5119.7126.6129.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4120.5136.3PP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 100<		0.819	0.838	0.850	0.850	0.857	0.878	0.889	0 928
Average monthly gross wages, NC5986607177487988699391070Average monthly gross wages, EUR (ER)306337367382408444480547Average monthly gross wages, EUR (PPP)73078784388093199010561153GDP nominal, NC mn11592.12829.413442.615786.016927.919121.12166.624400Employed persons - LFS, th., average ⁶⁾ 633.1631.7637.5638.2641.5811.0849.6890.2GDP per employed person, NC at 2000 pr.1768518699190852186422602191111949019530Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, RE adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.933.733.530.831.4639.5341.1844.63Consumer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1GDP deflator, 2001=100100.0115.2119.6123.8120.9119.4120.3122.5128.2Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPN NC/EUR0.370.370.404.1424.1									
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Employed persons - LFS, th., average633.1631.7637.5638.2641.5811.0849.6890.2GDP per employed person, NC1832120311210872473526386235772547127408GDP per empl. person, NC at 2000 pr.1768518699190852186422602191111949019530Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, ER adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0114.5119.7126.6129.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5138.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737374041424144Average monthly gross wages, NC176251271303326377497<	Average monthly gross wages, EUR (PPP)	730	787	843	880	931	990	1056	1153
GDP per employed person, NC1832120311210872473526386235772547127408GDP per empl. person, NC at 2000 pr.1768518699190852186422602191111949019530Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, ER adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306 <td>GDP nominal, NC mn</td> <td>11599.2</td> <td>12829.4</td> <td>13442.6</td> <td>15786.0</td> <td>16927.9</td> <td>19121.1</td> <td>21640.6</td> <td>24400</td>	GDP nominal, NC mn	11599.2	12829.4	13442.6	15786.0	16927.9	19121.1	21640.6	24400
GDP per empl. person, NC at 2000 pr.1768518699190852186422602191111949019530Unit labour costs, NC, 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, ER adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609GDP nominal, NC mn1295.11360.41510.11669.81815.0214.9.02807.93340GDP per employed person, NC604261677551891310150120481291615182<	Employed persons - LFS, th., average 6)	633.1	631.7	637.5	638.2	641.5	811.0	849.6	890.2
Unit labour costs, NC, 200=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, ER adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0114.5119.7126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.0214.902807.93340Employed person, NC at 2000 pr.50264978562662726846745167657226Unit la	GDP per employed person, NC	18321	20311	21087	24735	26386	23577	25471	27408
Unit labour costs, ER adj., 2000=100105.7110.4117.5107.0110.4142.2150.6171.3Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1GDP deflator, 2001=100100.0101.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (CPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP per employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182 <td>GDP per empl. person, NC at 2000 pr.</td> <td>17685</td> <td>18699</td> <td>19085</td> <td>21864</td> <td>22602</td> <td>19111</td> <td>19490</td> <td>19530</td>	GDP per empl. person, NC at 2000 pr.	17685	18699	19085	21864	22602	19111	19490	19530
Unit labour costs, PPP adj., Austria=10031.1931.9733.3530.9831.4639.5341.1844.63MontenegroProducer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0103.1111.7118.2123.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.02149.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl	Unit labour costs, NC, 2000=100	105.7	110.4	117.5	107.0	110.4	142.2	150.6	171.3
Montenegro Producer price index, 2001=100 100.0 114.5 119.7 126.6 129.3 134.0 145.3 167.1 Consumer price index, 2001=100 100.0 116.0 123.8 126.8 129.7 133.5 139.2 151.0 GDP deflator, 2001=100 100.0 103.1 111.7 118.2 123.3 134.5 158.8 174.8 Real ER (CPI-based), 2001=100 100.0 113.6 118.9 119.2 119.4 120.3 122.5 128.2 Real ER (PPI-based), 2001=100 100.0 115.2 119.6 123.8 120.9 119.4 126.5 136.3 PPP, NC/EUR 0.37 0.37 0.40 0.41 0.42 0.41 0.44 0.47 Price level, EU27 = 100 37 37 40 41 42 41 44 47 Average monthly gross wages, NC 176 251 271 303 326 377 497 609 Average monthly gross wages, EUR (PPP)	Unit labour costs, ER adj., 2000=100	105.7	110.4	117.5	107.0	110.4	142.2	150.6	171.3
Producer price index, 2001=100100.0114.5119.7126.6129.3134.0145.3167.1Consumer price index, 2001=100100.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0103.1111.7118.2123.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.4151.11669.81815.0214.9.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5 <t< td=""><td>Unit labour costs, PPP adj., Austria=100</td><td>31.19</td><td>31.97</td><td>33.35</td><td>30.98</td><td>31.46</td><td>39.53</td><td>41.18</td><td>44.63</td></t<>	Unit labour costs, PPP adj., Austria=100	31.19	31.97	33.35	30.98	31.46	39.53	41.18	44.63
Consumer price index, 2001=100100.0116.0123.8126.8129.7133.5139.2151.0GDP deflator, 2001=100100.0103.1111.7118.2123.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.4151.11669.81815.0214.9.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5154.8147.7148.0146.2155.3225.3258.4	-								
GDP deflator, 2001=100100.0103.1111.7118.2123.3134.5158.8174.8Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.0214.9.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5154.8147.7148.0146.2155.3225.3258.4	•								
Real ER (CPI-based), 2001=100100.0113.6118.9119.2119.4120.3122.5128.2Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.0214.9.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5154.8147.7148.0146.2155.3225.3258.4	•								
Real ER (PPI-based), 2001=100100.0115.2119.6123.8120.9119.4126.5136.3PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.02149.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5154.8147.7148.0146.2155.3225.3258.4									
PPP, NC/EUR0.370.370.400.410.420.410.440.47Price level, EU27 = 1003737404142414447Average monthly gross wages, NC176251271303326377497609Average monthly gross wages, EUR (PPP)48168268173677891111391306GDP nominal, NC mn1295.11360.41510.11669.81815.02149.02807.93340Employed persons - LFS, th., average214.4220.6200187.3178.8178.4217.4220GDP per employed person, NC604261677551891310150120481291615182GDP per empl. person, NC at 2000 pr.50264978562662726846745167657226Unit labour costs, NC, 2000=100107.5154.8147.7148.0146.2155.3225.3258.4									
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GDP per empl. person, NC at 2000 pr. 5026 4978 5626 6272 6846 7451 6765 7226 Unit labour costs, NC, 2000=100 107.5 154.8 147.7 148.0 146.2 155.3 225.3 258.4									
Unit labour costs, NC, 2000=100 107.5 154.8 147.7 148.0 146.2 155.3 225.3 258.4									
Unit labour costs, PPP adj., Austria=100 24.37 34.48 32.23 32.95 32.03 33.19 47.33 51.74	Unit labour costs, NC, 2000=100	107.5	154.8	147.7	148.0	146.2	155.3	225.3	258.4
	Unit labour costs, PPP adj., Austria=100	24.37	34.48	32.23	32.95	32.03	33.19	47.33	51.74

4) Excluding private sector. - 5) From 2002 according to census 2001. - 6) Until 2005 registered employees, from 2006 based on LFS.

(Table A/2 and)								
(Table A/2 ctd.)	2001	2002	2003	2004	2005	2006	2007	2008 prelim.
Serbia								preim.
Producer price index, 2000=100	187.7	204.2	213.6	233.1	266.1	301.5	319.3	358.9
Consumer price index, 2000=100	193.3	225.4	247.7	275.9	320.6	358.2	383.2	428.1
GDP deflator, 2000=100	188.5	232.9	261.9	295.3	339.6	378.0	413.6	461.9
Exchange rate (ER), NC/EUR	59.46	60.68	65.05	72.57	82.91	84.19	79.98	81.90
ER, nominal, 2000=100	113.1	115.5	123.8	138.1	157.8	160.2	152.2	155.9
Real ER (CPI-based), 2000=100	167.2	187.1	188.1	183.9	183.1	197.1	216.9	228.2
Real ER (PPI-based), 2000=100	164.0	175.8	170.5	163.0	155.9	165.9	180.5	185.7
PPP, NC/EUR	19.0	22.9	25.6	28.2	31.7	34.3	37.3	40.5
Price level, EU27 = 100	32	38	39	39	38	41	47	49
Average monthly gross wages, NC	8691	13260	16612	20555	25514	31745	38744	45674
Average monthly gross wages, EUR (ER)	146	219	255	283	308	377	484	558
Average monthly gross wages, EUR (PPP)	458	580	648	728	804	925	1039	1128
GDP nominal, NC mn	768576	983831	1137607	1388099	1691941	1987765		2760700
Employed persons - LFS, th., average	3106 247481	3000	2919	2931 473617	2733	2631 755606	2656 877120	2805 984099
GDP per employed person, NC GDP per empl. person, NC at 2000 pr.	131318	327920 140778	389780 148830	160380	618985 182284	199919	212070	213040
Unit labour costs, NC, 2000=100	217.9	310.1	367.4	421.9	460.8	522.7	601.4	705.8
Unit labour costs, ER adj., 2000–100	192.6	268.5	296.8	305.5	292.1	326.3	395.2	452.9
Unit labour costs, PPP adj., Austria=100	25.53	34.97	37.88	39.78	37.42	40.78	48.55	53.03
Russia	20.00	01.01	01.00	00.10	01.12	10.10	10.00	00.00
Producer price index, 2000=100	119.1	133.0	153.8	190.7	230.2	258.7	295.1	358.3
Consumer price index, 2000=100	121.6	141.1	160.2	177.9	200.1	219.7	239.7	273.5
GDP deflator, 2000=100	116.5	134.7	153.5	184.4	219.8	253.9	289.1	343.5
Exchange rate (ER), NC/EUR	26.130	29.647	34.686	35.814	35.264	34.112	35.014	36.425
ER, nominal, 2000=100	100.4	113.9	133.3	137.6	135.5	131.1	134.5	139.9
Real ER (CPI-based), 2000=100	118.5	118.7	113.1	119.0	133.1	147.8	153.5	162.4
Real ER (PPI-based), 2000=100	117.2	116.1	114.0	133.9	157.0	174.0	188.7	206.4
PPP, NC/EUR	8.595	9.699	11.020	12.924	15.061	17.007	18.836	21.745
Price level, EU27 = 100	33	33	32	36	43	50	54	60
Average monthly gross wages, NC	3240	4360	5499	6740	8555	10634	13593	17112
Average monthly gross wages, EUR (ER)	124	147	159	188	243	312	388	470
Average monthly gross wages, EUR (PPP)	377	450	499	521	568	625	722	787
GDP nominal, NC bn	8944	10831	13243	17048	21625	26904	33114	41540
Employed persons - LFS, th., average	65123	66659	66432	67275	68169	68855	70571	70992
GDP per employed person, NC	137334 117901	162477 120598	199350 129841	253410 137434	317232 144315	390727 153871	469226 162293	585140 170367
GDP per empl. person, NC at 2000 pr. Unit labour costs, NC, 2000=100	138.8	120398	213.8	247.6	299.3	349.0	422.9	507.2
Unit labour costs, ER adj., 2000=100	138.2	160.3	160.5	180.0	233.0	266.3	314.4	362.4
Unit labour costs, PPP adj., Austria=100	17.70	20.16	19.77	22.62	27.33	32.13	37.30	40.98
Ukraine								
Producer price index, 2000=100	108.7	112.0	120.5	145.2	169.4	185.7	221.9	300.6
Consumer price index, 2000=100	112.0	112.9	118.8	129.5	147.0	160.4	180.9	226.5
GDP deflator, 2000=100	109.9	115.6	124.9	143.8	179.1	205.6	250.2	313.2
Exchange rate (ER), NC/EUR	4.814	5.030	6.024	6.609	6.389	6.335	6.918	7.708
ER, nominal, 2000=100	95.7	100.0	119.8	131.4	127.0	126.0	137.6	153.3
Real ER (CPI-based), 2000=100	114.5	108.2	93.2	90.7	104.2	112.2	113.2	122.8
Real ER (PPI-based), 2000=100	112.3	111.3	99.3	106.7	123.2	129.9	138.7	158.1
PPP, NC/EUR	1.3133	1.3469	1.4506	1.6313	1.9861	2.2288	2.6386	3.2105
Price level, EU27 = 100	27	27	24	25	31	35	38	42
Average monthly gross wages, NC	311	376	462	590	806	1041	1351	1806
Average monthly gross wages, EUR (ER)	65	75	77	89	126	164	195	234
Average monthly gross wages, EUR (PPP)	237	279	319	361	406	467	512	563
GDP nominal, NC mn	204190	225810	267344	345113	441452	544153	712945	911400
Employed persons - LFS, th., average	19971.5	20091.2	20163.3	20295.7	20680.0	20730.4	20904.7	20800
GDP per employed person, NC	10224	11239	13259	17004	21347	26249	34105	43817
GDP per empl. person, NC at 2000 pr.	9299	9725	10620	11827	11921	12769	13632	13989
Unit labour costs, NC, 2000=100	122.5 128.0	141.8 141.7	159.4 133.1	182.6	247.7 105.0	298.8	363.0	472.9 308 5
Unit labour costs, ER adj., 2000=100 Unit labour costs, PPP adj., Austria=100	128.0	20.59	133.1	138.9 20.18	195.0 27.86	237.2 33.06	263.9 36.16	308.5 40.30
Chit idoodi oosto, I I I adj., Adollia-100	10.93	20.09	10.34	20.10	21.00	55.00		
							(Tah	$ \Delta/2 \text{ ctd} \rangle$

(Table A/2 ctd.)	0004			0004	0005		0007	
	2001	2002	2003	2004	2005	2006	2007	2008 prelim.
Austria								prenim.
Producer price index, 2000=100	101.5	101.1	102.7	107.7	110.0	113.2	117.8	125.4
Consumer price index, 2000=100	102.7	104.5	106.0	108.2	110.7	112.4	114.9	118.5
GDP deflator, 2000=100	101.9	103.2	104.5	106.2	108.4	110.4	112.7	115.3
Real ER (CPI-based), 2000=100	100.5	100.2	99.7	99.6	99.8	99.1	98.9	98.5
Real ER (PPI-based), 2000=100	100.3	100.5	101.5	104.1	101.6	99.8	101.4	101.1
PPP, NC/EUR	1.0680	1.0478	1.0465	1.0376	1.0583	1.0576	1.0559	1.0824
Price level, EU27 = 100	107	105	105	104	106	106	106	108
Average monthly gross wages, EUR	2432	2482	2532	2579	2639	2723	2784	2868
Average monthly gross wages, EUR (PPP)	2277	2369	2420	2485	2494	2575	2637	2649
GDP nominal, NC mn	212499	218848	223302	232782	244453	257294	270837	279504
Employed persons - LFS, th., average 6)	3711	3762	3794	3744	3824	3928	4028	4140
GDP per employed person, NC	57259	58172	58864	62175	63919	65498	67240	67513
GDP per empl. person, NC at 2000 pr.	56210	56363	56345	58542	58959	59336	59643	58550
Unit labour costs, NC, 2000=100	102.0	103.8	105.9	103.8	105.5	108.2	110.0	115.4
Unit labour costs, PPP adjusted	0.54	0.55	0.56	0.55	0.56	0.57	0.58	0.61

6) From 2004 new methodology.

NC = national currency (including euro-fixed series for euro area countries - SK, SI, AT). ER = Exchange Rate, PPP = Purchasing Power Parity, Price level: PPP/ ER.

PPP rates have been taken from Eurostat based on the benchmark results 2005. For Albania, Bosnia and Herzegovina, Montenegro and Serbia available data 2005-2007 have been extrapolated by wiiw with GDP deflators. Russia and Ukraine are estimated by wiiw using the OECD PPP benchmark results 2005 and extrapolation with GDP price deflators.

Real exchange rates: Increasing values mean real appreciation.

Sources: National statistics; WIFO; Eurostat; Purchasing power parities, 2005 benchmark year, OECD November 2007; wiiw estimates.

Table A3

Indicators of macro-competitiveness, 2001-2008

annual changes in %

Crach Republic GPF definition 4.6 -0.4 1.0 3.1 GPF definition 4.6 0.5		2001	2002	2003	2004	2005	2006	2007		2004-08
	Czech Republic								preim.	average
Real ER (PF)-based) 6.9 9.9 -5.2 0.2 6.5 5.0 2.6 1.1 5.6 Average gross wages, NC 8.7 7.3 6.6 6.6 5.3 8.5 7.3 8.1 6.7 Average gross wages, real (PF) based) 4.0 5.7 6.7 7.4 0.3 6.4 4.3 4.2 4.3 4.2 1.1 4.3 4.2 1.2 1.1 1.5 <td></td>										
Real ER (PF)-based)5.68.2-3.82.53.90.42.24.32.6Average gross wages, real (PF) based)6.310.26.51.63.86.34.68.14.9Average gross wages, real (PF) based)1.518.63.16.51.21.31.91.61.1GDP per empl. person, NC at 2000 prices2.01.14.26.05.25.34.04.21.7Unit isour costs, ER (ER) adjusted1.1.37.7-1.11.45.05.15.34.04.22.7Unit isour costs, ER (ER) adjusted1.37.75.84.42.23.95.85.14.34.2CDP deflator8.57.75.84.42.23.95.85.14.34.2Real ER (PI-based)8.28.9-1.65.42.84.51.02.23.3Average gross wages, real (PP) based)1.22.04.73.06.03.33.33.4Average gross wages, real (PP) based)1.3-0.50.00.70.1-1.22.02.03.3Average gross wages, real (PP) based)1.3-0.50.00.70.1-1.22.02.03.33.43.41.15.33.33.53.33.53.33.53.33.53.33.53.33.53.33.53.33.53.33.53.3										
Average gross wages, real (PP based) 6.7 7.3 6.6 6.5 6.5 6.5 4.6 8.1 4.9 Average gross wages, real (PP based) 4.0 5.7 6.7 4.0 3.6 4.3 4.2 1.7 3.6 Average gross wages, EUR (ER) 1.3 1.8 1.6 1.1 1.3 1.3 1.6 1.1 CDP per entit, Derson, NC at 2000 prices 6.5 6.0 2.2 1.6 0.2 1.1 3.2 6.2 2.4 Unit labour costs, RC at 2000 prices 6.5 6.0 2.2 1.6 5.4 2.1 1.4 3.5 6.6 1.5 6.1 5.1 5.3 1.4 2.2 2.4 1.4 1.4 7.5 4.4 2.2 3.9 5.8 5.1 4.3 Exchange rate (ER), EURNC 1.3 5.5 4.2 1.8 1.8 1.8 1.8 1.0 1.6 4.8 8.0 8.1 7.8 4.4 1.6 5.4 6.1 1										
Average gross wages, EuR (ER) 4.0 5.7 6.7 4.0 3.6 4.3 4.2 1.7 3.6 CDP per enpl, Derson, NC at 2000 prices 0.4 0.8 -0.7 -0.6 1.2 1.1 9.5 20.3 12.1 DCP per enpl, Derson, NC at 2000 prices 0.5 0.5 1.5 3.4 0.1 1.8 4.2 2.1 1.4 7.3 6.2 2.3 1.8 2.2 2.2 2.2 2.4 2.4 2.5 3 1.8 2.7 5 Hungary C Coll deflator 8.5 7.7 5.8 4.4 2.2 3.9 5.3 5.1 4.3 Exchange rate (ER), EURNC 1.3 5.6 4.4 2.6 1.5 6.1 1.0 2.2 3.2 3.2 3.4 1.1 1.4 3.5 4.6 4.6 1.6 1.3 4.6 4.6 1.6 1.3 4.5 1.6 1.4 3.5 1.6 1.6 3.5 1.6										
Average gross wages, EUR (ER) 13.5 18.6 3.1 6.5 12.7 11.9 9.5 20.3 12.1 GDP per empl, person, NC at 2000 prices 2.0 1.1 4.3 5.0 5.1 5.3 4.0 1.8 4.2 Unit labour costs, ER (EUR) adjusted 11.3 1.7.3 1.1 1.4 7.3 6.2 1.5 3.4 1.8 4.2 Unit labour costs, ER (EUR) adjusted 11.3 1.7.3 1.1 1.4 7.3 6.2 1.5 1.6 6.1 2.1 1.6 6.1 2.1 1.6 6.1 2.2 1.6 4.6 1.6 1.0 2.2 2.4 1.0 1.0 2.2 1.6 4.6 4.6 1.0 2.2 3.3 3.4 3.1 2.2 3.3 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
Employed person, $(LES)^{1}$, 0.4, 0.8, 0.7, 0.6, 1.2, 1.3, 1.9, 1.6, 1.1, 0.10 person, NG 2000 prices 6.5, 6.0, 2.2, 1.6, 0.2, 1.1, 3.2, 6.2, 2.4, Unit labour costs, FR (EUR) adjusted 1.13, 17.3, 1.1, 1.4, 7.3, 6.2, 5.3, 1.8, 4.2, 2.4 Unit labour costs, FR (EUR) adjusted 1.3, 17.3, 1.1, 1.4, 7.3, 6.2, 5.3, 1.2, 7.5, 1.4, 1.4, 7.3, 6.2, 5.4, 1.5, 1.4, 0.4, 2.2, 1.6, 0.2, 1.1, 3.2, 6.2, 2.4, 0.4, 1.5, 1.4, 0.4, 0.4, 1.4, 7.3, 6.4, 1.5, 1.4, 0.4, 0.4, 1.4, 0.4, 0.4, 0.4, 0.4, 0.4, 0.4, 0.4, 0										
GDP per empl. person, NC at 2000 prices 2.0 1.1 4.3 5.0 5.1 5.3 4.0 1.8 4.2 Unit labour costs, NC at 2000 prices 1.1 1.3 1.1 1.4 2.2 5.3 18.2 7.5 Hungary CDP deflator 1.3 5.6 4.2 0.8 1.5 6.1 5.1 0.1 0.2 Real ER (CP-based) 5.3 4.3 2.5 2.0 1.6 4.6 4.6 1.1 0.4 Average gross wages, real (CPI based) 1.2 1.2 1.3 1.4 0.0 0.2 2.1 Average gross wages, real (CPI based) 1.2 1.4 7.0 0.7 5.1 4.0 0.0 0.2 2.1 Average gross wages, real (CPI based) 3.2 2.6 4.3 3.4 1.4 0.0 0.0 0.0 0.0 0.2 2.1 Average gross wages, Real (CPI based) 3.7 4.1 2.6 1.5 3.3 3.8 3.3 3.3 <										
Unit labour costs, ER (EUR) adjusted 11.3 17.3 -1.1 1.4 7.3 6.2 5.3 18.2 7.5 Hungary GDP deflator 85 7.7 5.8 4.4 2.2 3.9 5.8 5.1 4.3 Exchange rate (ER), EURNC 1.3 5.6 4.2 0.8 4.5 10.9 2.2 3.2 Real ER (Ph-based) 5.3 4.3 2.2.5 2.0 1.6 4.6 4.6 1.1 0.4 Average gross wages, real (Ph based) 1.2 4.2 7.3 6.9 10.4 1.6 0.0 0.0 2.0 2.1 Average gross wages, real (Ph based) 3.2 2.4 7.0 0.5 0.0<	GDP per empl. person, NC at 2000 prices									
Hungary GDP defator8.57.75.84.42.23.95.85.14.3Exchange rate (ER), EURNC1.35.64.20.81.55.10.10.2Real ER (PI-based)8.28.91.65.42.84.51.09.22.3Real ER (PI-based)1.8.21.8.31.2.06.18.88.28.08.17.8Average gross wages, Rel (PI-based)8.31.2.47.0-0.75.14.00.02.02.1Average gross wages, Rel (ER)1.31.2.47.0-0.75.14.00.02.02.1Average gross wages, Rel (FE)1.31.3-0.50.00.7-1.1-1.2-0.2GDP er empt, Derson, NG 2000 prices1.3.91.3.68.90.64.74.76.86.54.6Unit labour costs, KE (EUR) adjusted1.5.51.94.31.46.21.71.22.44.84.22.83.33.18.33.1Exchange rate (ER), EURNC9.2-4.8-1.22.81.33.07.46.66.34.9Real ER (PI-based)1.2.44.9-1.3.4-1.41.2.52.42.83.33.1Exchange rate (ER), EURNC9.2-4.8-1.2.33.33.07.74.66.54.24.03.84.9Real ER (PI-based)1.51.52.83.12.52.4 <td>· · ·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	· · ·									
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Real ER (PF)-based)5.34.3-2.52.01.64.64.6-1.10.4Average gross wages, real (PF) based)12.420.49.32.54.01.65.92.33.3Average gross wages, real (CP) based)12.420.49.32.54.01.65.92.33.3Average gross wages, real (CP) based)13.712.47.00.75.14.00.02.02.1Average gross wages, real (CP) based)3.31.13.050.00.7-0.1-1.2-2.2GDP per empl, person, NC at 2000 prices3.74.22.95.43.93.41.11.53.1Unit labour costs, RC (EUR) adjusted15.519.94.31.46.2-1.712.26.44.8POlandGDP deflator3.52.20.44.12.61.53.33.83.1Real ER (PF)-based)12.44.9-1.34-1.412.53.33.07.74.6Real ER (PF)-based)12.44.9-1.34-1.412.53.33.07.74.6Real ER (PF)-based)2.60.63.40.41.71.68.33.1Average gross wages, real (PP) based)6.11.51.52.83.12.62.62.72.23.2Average gross wages, real (PP) based)2.60.63.40.41.73.55.95								5.1		
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$ \begin{array}{c} \mbody eq persons (LFS) & 0.3 & 0.1 & 1.3 & -0.5 & 0.0 & 0.7 & -0.1 & -1.2 & -0.2 \\ \mbody eq persons (LFS) & 1200 prices & 13.9 & 13.6 & 8.9 & 0.6 & 4.7 & 4.7 & 6.8 & 6.5 & 4.6 \\ \mbody eq persons (LFS) & 13.9 & 13.6 & 8.9 & 0.6 & 4.7 & 4.7 & 6.8 & 6.5 & 4.6 \\ \mbody eq persons (LFS) & 13.9 & 13.6 & 8.9 & 0.6 & 4.7 & 4.7 & 6.8 & 6.5 & 4.6 \\ \mbody eq persons (LFS) & 13.9 & 13.6 & 8.9 & 0.6 & 4.7 & 4.7 & 6.8 & 6.5 & 4.6 \\ \mbody eq persons (LFS) & 0.2 & 4.8 & -12.3 & -2.8 & 12.5 & 3.3 & 3.0 & 7.7 & 4.6 \\ \mbody eq persons (LFS) & 0.2 & 4.8 & -12.3 & -2.8 & 12.5 & 2.4 & 3.2 & 8.3 & 4.9 \\ \mbody eq persons (LFS) & 0.2 & 4.8 & -12.3 & -2.8 & 12.5 & 2.4 & 3.2 & 8.3 & 4.9 \\ \mbody eq persons wages, NC & 8.0 & 2.6 & 4.2 & 4.0 & 3.8 & 4.9 & 8.6 & 10.0 & 6.3 \\ \mbody eq persons (LFS) & 0.6 & 1.15 & 1.5 & -2.8 & 3.1 & 2.6 & 6.2 & 7.2 & 3.2 \\ \mbody eq persons (LFS) & 0.6 & 1.6 & 1.5 & 1.5 & -2.8 & 3.1 & 2.6 & 6.2 & 7.2 & 3.2 \\ \mbody eq persons (LFS) & 0.6 & 1.4 & 1.7 & 3.6 & 5.9 & 5.5 & 3.4 \\ \mbody eq persons (LFS) & 0.6 & 1.3 & 2.3 & 3.4 & 4.4 & 2.5 & 2.8 \\ \mbody eq persons (LFS) & 0.2 & 0.6 & 1.3 & 2.3 & 3.4 & 4.4 & 2.5 & 2.8 \\ \mbody eq persons (LFS) & 0.2 & 0.6 & 1.3 & 2.3 & 3.4 & 4.4 & 2.5 & 2.8 \\ \mbody eq persons (LFS) & 0.2 & 0.0 & 6 & 1.1 & 2.7 & 15.4 & 5.5 & 9.5 & 15.9 & 8.5 \\ \mbody eq persons (LFS) & 0.2 & 0.0 & 0.1 & 2.5 & 2.1 & 6.4 & 7.6 & 3.7 \\ \mbody eq persons (LFS) & 0.3 & 9 & 5.3 & 5.8 & 2.4 & 3.0 & 1.1 & 1.0 & 2.6 \\ \mbody eq persons (LFS) & 0.3 & 0.4 & 2.9 & 3.6 & 3.1 & 0.2 & 3.6 & 4.1 & 4.7 \\ \mbody eq persons (LFS) & 0.3 & 0.4 & 2.9 & 3.6 & 3.1 & 0.2 & 2.8 & 6.7 & 4.2 & 8.9 \\ \mbody eq persons (LFS) & 0.0 & 0.2 & 1.8 & 0.3 & 0.1 & 1 & 0.2 & 2.6 \\ \mbody eq persons (LFS) & 0.0 & 2.2 & 2.8 & 6.7 & 4.2 & 8.9 \\ \mbody eq persons (LFS) & 1.0 & 0.2 & 1.8 & 0.3 & 0.1 & 1 & 0.2 & 2.6 \\ \mbody eq persons (LFS) & 1.0 & 0.2 & 1.8 & 0.3 & 2.1 & 3.9 & 2.4 & 3.4 & 2.4 \\ \mbody eq persons (LFS) & 1.0 & 0.2 & 1.8 & 0.3 & 2.1 & 3.9 & 2.4 & 3.4 & 2.4 \\ \mbody eq persons (LFS) & 1.0 & 0.2 & 1.8 & 0.3 & 2.$	Average gross wages, real (CPI based)									
$ \begin{array}{c} GDP \ pre rempl. person, NC at 2000 prices \\ 139 \\ 136 \\ 136 \\ 136 \\ 155 \\ 19.9 \\ 4.3 \\ 1.4 \\ 6.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ 122 \\ 6.4 \\ 4.8 \\ -1.2 \\ -1.7 \\ -1.7 \\ -1.2 \\ -1.7 \\ -1.7 \\ -1.2 \\ -1.7 \\ -1.7 \\ -1.2 \\ -1.7 \\ -1.7 \\ -1.2 \\ -1.7 \\ -$										
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Unit labour costs, NC at 2000 prices 10.7 4.8 3.1 6.5 0.0 0.2 1.7 4.7 2.6										
Unit labour costs, ER (EUR) adjusted 4.5 0.6 -0.2 4.2 -0.3 0.2 1.7 4.7 2.1	Unit labour costs, NC at 2000 prices	10.7	4.8	3.1		0.0	0.2	1.7	4.7	2.6
	Unit labour costs, ER (EUR) adjusted	4.5	0.6	-0.2	4.2	-0.3	0.2	1.7	4.7	2.1

1) From 2002 according to census 2001. - 2) From 2003 according to census 2002.

Table A3 (ctd.)									
	2001	2002	2003	2004	2005	2006	2007		2004-08 average
Bulgaria								premi.	average
GDP deflator	6.7	4.4	1.7	5.2	3.7	8.5	7.9	11.8	7.4
Exchange rate (ER), EUR/NC	0.2	-0.1	0.0	-0.2	-0.1	0.0	0.0	0.0	-0.1
Real ER (CPI-based)	5.3	3.6	0.4	3.7	3.7	5.1	5.1	8.0	5.1
Real ER (PPI-based)	2.8	1.7	4.3	3.4	3.0	6.9	5.8 10.7	3.6	4.6
Average gross wages, NC Average gross wages, real (PPI based)	6.9 3.0	7.3 6.1	6.1 1.1	7.0 0.9	10.7 2.6	11.3 -0.7	19.7 10.4	21.6 10.0	13.9 4.5
Average gross wages, real (CPI based)	-0.4	1.4	3.7	0.8	4.4	3.6	11.3	8.7	5.7
Average gross wages, EUR (ER)	7.1	7.3	6.1	6.8	10.6	11.3	19.7	21.6	13.8
Employed persons (LFS)	-3.4	1.5	3.5	3.1	2.0	4.3	4.6	3.3	3.5
GDP per empl. person, NC at 2000 prices	7.8	2.9	1.6	3.4	4.2	1.9	1.5	1.3	2.4
Unit labour costs, NC at 2000 prices	-0.8	4.3	4.5	3.5	6.2	9.2	18.0	20.1	11.2
Unit labour costs, ER (EUR) adjusted	-0.6	4.2	4.5	3.3	6.1	9.2	18.0	20.1	11.1
Romania									
GDP deflator	37.4	23.8	23.5	15.5	12.2	10.6	12.7	15.0	13.2
Exchange rate (ER), EUR/NC	-23.4	-16.8	-16.7	-7.3	11.9	2.7	5.8	-9.4	0.4
Real ER (CPI-based) Real ER (PPI-based)	0.8 4.6	-0.2 2.9	-5.9 -1.1	1.5 8.0	19.4 18.2	7.1 9.3	8.4 11.6	-5.7 -1.6	5.9 8.9
Average gross wages, NC	48.6	26.1	24.8	23.3	18.3	18.4	23.0	23.6	21.3
Average gross wages, real (PPI based)	7.6	2.5	4.4	3.5	7.1	6.1	13.8	6.7	7.4
Average gross wages, real (CPI based)	10.5	2.9	8.2	10.2	8.4	11.1	17.3	14.5	12.2
Average gross wages, EUR (ER)	13.8	4.8	3.9	14.3	32.3	21.6	30.2	12.0	21.8
Employed persons (LFS)	-0.6		-0.1	-0.7	-0.5	1.9	0.7	0.5	0.4
GDP per empl. person, NC at 2000 prices	6.4	•	5.3	9.3	4.6	5.8	5.5	7.3	6.5
Unit labour costs, NC at 2000 prices	39.6		18.4	12.8	13.1	11.9	16.6	15.1	13.9
Unit labour costs, ER (EUR) adjusted	7.0	•	-1.4	4.6	26.5	14.9	23.3	4.4	14.4
Estonia GDP deflator	5.3	4.0	4.6	3.3	5.2	7.1	9.6	9.6	6.9
Exchange rate (ER), EUR/NC	0.0	4.0 0.0	4.0 0.0	0.0	0.0	0.0	9.0 0.0	9.0 0.0	0.9
Real ER (CPI-based)	3.4	1.5	-0.6	0.9	1.9	2.2	4.3	6.7	3.2
Real ER (PPI-based)	3.2	1.0	-0.4	0.6	-2.3	-0.3	5.7	0.4	0.8
Average gross wages, NC	12.3	11.5	9.4	8.4	10.8	16.5	20.5	14.7	14.1
Average gross wages, real (PPI based)	7.5	11.1	9.2	5.4	8.5	11.5	11.3	7.0	8.7
Average gross wages, real (CPI based)	6.3	7.6	7.9	5.2	6.4	11.6	12.9	3.7	7.9
Average gross wages, EUR (ER)	12.3	11.5	9.4	8.4	10.8	16.5	20.5	14.7	14.1
Employed persons (LFS)	0.9	1.4	1.5	0.2	2.0	6.4	1.4	-0.8	1.8
GDP per empl. person, NC at 2000 prices Unit labour costs, NC at 2000 prices	6.7 5.3	6.4 4.8	5.6 3.6	7.2 1.1	7.0 3.5	3.7 12.4	4.9 14.9	-1.2 16.0	4.3 9.4
Unit labour costs, ER (EUR) adjusted	5.3	4.8	3.6	1.1	3.5	12.4	14.9	16.0	9.4
Latvia									
GDP deflator	1.7	3.6	3.5	7.1	10.2	10.2	13.3	15.0	11.1
Exchange rate (ER), EUR/NC	-0.2	-3.6	-9.3	-3.7	-4.5	0.0	-0.6	-0.4	-1.8
Real ER (CPI-based)	0.2	-3.7	-8.4	0.1	0.0	4.3	6.9	10.8	4.3
Real ER (PPI-based)	0.4	-2.2	-7.0	2.3	-1.5	5.3	12.7	4.1	4.5
Average gross wages, NC	6.3	8.8	11.3	9.6	16.5	23.0	31.5	20.7	20.1
Average gross wages, real (PPI based) Average gross wages, real (CPI based)	4.5 3.7	7.8 6.7	7.8 8.1	0.9 3.2	8.1 9.0	11.5 15.5	13.2 19.5	8.2 4.7	8.3 10.2
Average gross wages, FUR (ER)	6.2	4.9	0.9	5.5	11.3	23.0	30.8	20.3	17.9
Employed persons (LFS)	2.2	2.8	1.8	1.1	1.6	5.2	2.8	0.2	2.2
GDP per empl. person, NC at 2000 prices	5.7	3.5	5.3	7.5	8.9	6.4	7.3	-3.0	5.3
Unit labour costs, NC at 2000 prices	0.6	5.1	5.6	2.0	7.0	15.6	22.6	24.4	14.0
Unit labour costs, ER (EUR) adjusted	0.4	1.3	-4.2	-1.8	2.2	15.6	21.9	24.0	11.9
Lithuania									
GDP deflator	-0.4	0.2	-0.8	2.5	6.7	6.5	8.8	10.0	6.9
Exchange rate (ER), EUR/NC	3.2	3.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Real ER (CPI-based) Real ER (PPI-based)	2.5 -1.1	1.8 1.2	-2.8 -0.9	-1.0 3.7	0.5 6.6	1.6 2.4	3.4 4.4	7.2 10.8	2.3 5.5
Average gross wages, NC	-1.1	3.2	-0.9 5.8	3.7 7.2	0.0 11.0	2.4 17.2	4.4 20.5	25.9	5.5 16.2
Average gross wages, real (PPI based)	4.3	6.2	6.3	1.1	-0.4	9.1	12.7	6.5	5.7
Average gross wages, real (CPI based)	-0.4	2.9	6.9	5.9	8.2	12.9	13.9	13.4	10.8
Average gross wages, EUR (ER)	4.4	6.9	6.0	7.1	11.0	17.2	20.5	25.9	16.2
Employed persons (LFS)	-3.3	4.0	2.3	-0.1	2.6	1.7	2.3	-0.3	1.2
GDP per empl. person, NC at 2000 prices	10.4	2.7	7.8	7.5	5.0	6.1	6.4	3.5	5.7
Unit labour costs, NC at 2000 prices	-8.3	0.5	-1.9	-0.3	5.8	10.4	13.3	21.6	9.9
Unit labour costs, ER (EUR) adjusted	-5.5	4.0	-1.7	-0.3	5.8	10.4	13.3	21.6	9.9

Table A3 (ctd.)									
	2001	2002	2003	2004	2005	2006	2007		2004-08 average
Croatia								preim.	average
GDP deflator	4.0	3.6	4.0	3.9	3.2	3.4	4.0	6.1	4.1
Exchange rate (ER), EUR/NC	2.2	0.8	-2.1	0.9	1.3	1.1	-0.2	1.6	0.9
Real ER (CPI-based)	4.9	0.5	-2.2	0.9	2.4	2.0	0.3	4.0	1.9
Real ER (PPI-based)	4.7	1.0	-0.8	2.1	-0.2	-0.8	0.7	3.2	1.0
Average gross wages, NC	3.9	6.0	4.8	6.4	4.4	6.2	6.2	6.4	5.9
Average gross wages, real (PPI based)	0.3	6.5	2.8	2.8	1.4	3.2	2.7	-1.8	1.6
Average gross wages, real (CPI based)	-0.9	4.3	2.9	4.3	1.0	2.9	3.2	0.3	2.3
Average gross wages, EUR (ER)	6.3	6.9	2.6	7.4	5.7	7.3	6.0	8.1	6.9
Employed persons (LFS)	-5.4	4.0	0.6	1.7	0.7	0.8	1.8	0.0	1.0
GDP per empl. person, NC at 2000 prices	10.4	1.5	4.7	2.6	3.6	3.9	3.7	2.5	3.3
Unit labour costs, NC at 2000 prices Unit labour costs, ER (EUR) adjusted	-5.8 -3.7	4.4 5.3	0.1 -2.0	3.8 4.7	0.8 2.1	2.1 3.2	2.4 2.2	3.9 5.5	2.6 3.5
Macedonia									
GDP deflator	3.6	3.4	0.3	1.3	3.8	4.3	7.5	10.1	5.3
Exchange rate (ER), EUR/NC	-0.3	-0.1	-0.5	-0.1	0.1	0.2	0.0	-0.1	0.0
Real ER (CPI-based)	2.9	-0.4	-1.2	-2.6	-1.6	1.2	-0.1	4.3	0.2
Real ER (PPI-based)	0.5	-0.4	-1.4	-1.4	-1.2	2.5	0.0	3.2	0.6
Average gross wages, NC	-0.4	6.4	4.9	4.1	2.7	8.0	4.8	7.7	5.4
Average gross wages, real (PPI based)	-2.4	7.3	5.2	3.2	-0.5	0.7	2.2	-2.3	0.6
Average gross wages, real (CPI based)	-5.6	4.5	3.6	4.5	2.2	4.6	2.4	-0.5	2.6
Average gross wages, EUR (ER)	-0.7	6.3	4.4	4.0	2.8	8.2	4.8	7.6	5.4
Employed persons (LFS)	9.0	-6.3	-2.9	-4.1	4.3	4.6	3.5	3.5	2.3
GDP per empl. person, NC at 2000 prices	-12.4	7.7	5.8	8.5	-0.2	-0.6	2.3	1.8	2.3
Unit labour costs, NC at 2000 prices Unit labour costs, ER (EUR) adjusted	13.7 13.3	-1.3 -1.4	-0.9 -1.4	-4.1 -4.2	2.8 2.9	8.6 8.8	2.4 2.4	5.8 5.7	3.0 3.0
Albania									
GDP deflator	3.3	2.4	5.4	2.3	2.7	3.7	4.0	1.7	2.9
Exchange rate (ER), EUR/NC	3.2	-2.9	-3.7	2.3 7.7	2.7	0.9	-0.4	0.7	2.9
Real ER (CPI-based)	4.1	0.0	-3.3	8.5	3.0	1.1	0.1	0.4	2.6
Real ER (PPI-based)	-5.4	-3.9	4.0	18.2	3.2	-3.0	0.5	1.2	3.8
Average gross wages, NC	11.0	11.6	12.0	2.8	5.0	7.5	8.1	8.9	6.4
Average gross wages, real (PPI based)	19.6	13.3	3.0	-8.4	0.1	6.7	4.5	1.5	0.7
Average gross wages, real (CPI based)	7.6	6.1	9.4	-0.1	2.6	5.0	5.0	5.3	3.6
Average gross wages, EUR (ER)	14.5	8.3	7.8	10.7	8.0	8.5	7.6	9.6	8.9
Registered employment, total 3)	-0.1	-0.1	0.3	0.6	0.3	0.2	0.4	1.9	0.7
GDP per empl. person, NC at 2000 prices	8.0	4.3	5.4	5.1	5.4	5.3	5.6	4.2	5.1
Unit labour costs, NC at 2000 prices	2.7	7.0	6.2	-2.2	-0.3	2.1	2.4	4.5	1.3
Unit labour costs, ER (EUR) adjusted	6.0	3.9	2.2	5.4	2.5	3.0	1.9	5.2	3.6
Bosnia and Herzegovina									
GDP deflator	3.6	4.8	1.7	2.4	3.2	5.7	5.9	7.4	4.9
Exchange rate (ER), EUR/NC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real ER (CPI-based)	1.0	-0.8	-0.8	-1.3	0.8	3.9	-0.8	3.7	1.2
Real ER (PPI-based)									
Average gross wages, NC Average gross wages, real (PPI based)	10.9	10.4	8.6	4.3	6.7	8.9	8.1	14.0	8.3
Average gross wages, real (PPI based) Average gross wages, real (CPI based)	7.5	9.0	7.5	3.5	3.6	2.5	6.5	6.0	4.4
Average gross wages, Fear (CFT based) Average gross wages, EUR (ER)	10.9	9.0 10.4	8.6	4.3	6.7	8.9	8.1	14.0	8.3
Employed persons (LFS) ⁴	-0.4	-0.2	0.9	4.3 0.1	0.7	1.1	4.8	4.8	2.2
GDP per empl. person, NC at 2000 prices	4.9	5.7	2.1	14.6	3.4	5.7	2.0	0.2	5.0
Unit labour costs, NC at 2000 prices	5.7	4.4	6.4	-8.9	3.2	3.0	6.0	13.7	3.1
Unit labour costs, ER (EUR) adjusted	5.7	4.4	6.4	-8.9	3.2	3.0	6.0	13.7	3.1
Montenegro									
GDP deflator	20.2	3.1	8.3	5.9	4.3	9.1	18.1	10.0	9.4
Real ER (CPI-based)	19.1	13.6	4.7	0.3	0.1	0.8	1.8	4.7	1.5
Real ER (PPI-based)		15.2	3.8	3.5	-2.4	-1.2	5.9	7.8	2.6
Average gross wages, NC	16.8	42.6	7.8	11.7	7.8	15.6	31.7	22.5	17.6
Average gross wages, real (PPI based)		24.5	3.2	5.6	5.6	11.6	21.4	6.6	10.0
Average gross wages, real (CPI based)	-4.1	23.0	1.1	9.1	5.4	12.2	26.4	12.9	13.0
Employed persons (LFS)	-6.9	2.9	-9.3	-6.3	-4.5	-0.3	21.9	1.2	1.9
GDP per empl. person, NC	30.6	2.1	22.4	18.0	13.9	18.7	7.2	17.5	15.0
GDP per empl. person, NC at 2000 prices	8.6	-1.0	13.0	11.5	9.1	8.8	-9.2	6.8	5.1
Unit labour costs, NC at 2000 prices	7.5	44.0	-4.6	0.2	-1.2	6.2	45.1	14.7	11.8
Unit labour costs, ER (EUR) adjusted	7.5	44.0	-4.6	0.2	-1.2	6.2	45.1	14.7	11.8

3) From 2002 according to census 2001. - 4) Until 2006 based on registered employees.

Table A3 (ctd.)	2001	2002	2003	2004	2005	2006	2007		2004-08 average
Serbia								premn.	average
GDP deflator	88.5	23.6	12.4	12.8	15.0	11.3	9.4	11.7	12.0
Exchange rate (ER), NC/EUR	-11.6	-2.0	-6.7	-10.4	-12.5	-1.5	5.3	-2.3	-4.5
Real ER (CPI-based)	67.2	11.9	0.6	-2.2	-0.4	7.6	10.0	5.2	3.9
Real ER (PPI-based)	64.0	7.2	-3.0	-4.4	-4.4	6.4	8.8	2.9	1.7
Average gross wages, NC	128.8	52.6	25.3	23.7	24.1	24.4	22.0	17.9	22.4
Average gross wages, real (PPI based)	21.9	40.2	19.8	13.4	8.7	9.8	15.2	4.9	10.4
Average gross wages, real (CPI based)	18.4	30.9	14.0	11.1	6.8	11.4	14.1	5.5	9.7
Average gross wages, EUR (ER)	102.2	49.5	16.9	10.9	8.6	22.5	28.5	15.1	16.9
Employed persons (LFS)	0.4	-3.4	-2.7	0.4	-6.7	-3.8	1.0	5.6	-0.8
GDP per empl. person, NC at 2000 prices	5.0	7.2	5.7	7.8	13.7	9.7	6.1	0.5	7.4
Unit labour costs, NC at 2000 prices	117.9	42.3	18.5	14.8	9.2	13.4	15.1	17.3	13.9
Unit labour costs, ER (EUR) adjusted	92.6	39.5	10.5	2.9	-4.4	11.7	21.1	14.6	8.8
Russia									
GDP deflator	16.5	15.7	14.0	20.1	19.2	15.5	13.9	18.8	17.5
Exchange rate (ER), NC/EUR	-0.4	-11.9	-14.5	-3.1	1.6	3.4	-2.6	-3.9	-1.0
Real ER (CPI-based)	18.5	0.2	-4.8	5.3	11.8	11.1	3.8	5.8	7.5
Real ER (PPI-based)	17.2	-0.9	-1.8	17.4	17.2	10.8	8.5	9.4	12.6
Average gross wages, NC	45.7	34.6	26.1	22.6	26.9	24.3	27.8	25.9	25.5
Average gross wages, real (PPI based)	22.4	20.4	9.1	-1.2	5.2	10.6	12.1	3.7	6.0
Average gross wages, real (CPI based)	19.9 45.2	16.0	11.0	10.4 18.7	12.8 28.9	13.2 28.5	17.2 24.5	10.3 21.0	12.8
Average gross wages, EUR (ER)	45.2 0.1	18.6 2.4	7.8 -0.3	18.7	28.9 1.3	28.5 1.0	24.5 2.5	21.0 0.6	24.3 1.3
Employed persons (LFS)	5.0	2.4	-0.3	5.8	1.3 5.0	6.6	2.5 5.5	0.6 5.0	1.3 5.6
GDP per empl. person, NC at 2000 prices							5.5 21.2		
Unit labour costs, NC at 2000 prices Unit labour costs, ER (EUR) adjusted	38.8 38.2	31.6 15.9	17.1 0.1	15.8 12.2	20.9 22.8	16.6 20.5	21.2 18.1	19.9 15.3	18.9 17.7
Onit labour costs, ER (EOR) adjusted	30.2	15.5	0.1	12.2	22.0	20.5	10.1	15.5	17.7
Ukraine									
GDP deflator	9.9	5.1	8.0	15.2	24.6	14.8	21.7	25.2	20.2
Exchange rate (ER), NC/EUR	4.5	-4.3	-16.5	-8.9	3.5	0.8	-8.4	-10.3	-4.8
Real ER (CPI-based)	14.5	-5.5	-13.8	-2.7	14.9	7.7	0.9	8.4	5.7
Real ER (PPI-based)	12.3	-0.9	-10.7	7.4	15.5	5.4	6.8	14.0	9.7
Average gross wages, NC	35.2	21.0	22.8	27.6	36.7	29.2	29.7	33.7	31.3
Average gross wages, real (PPI based)	24.4	17.5	14.1	5.9	17.2	17.9	8.6	-1.3	9.4
Average gross wages, real (CPI based)	20.7	20.0	16.7	17.0	20.5	18.4	15.0	6.8	15.4
Average gross wages, EUR (ER)	41.2	15.8	2.5	16.3	41.4	30.3	18.8	20.0	25.0
Employed persons (LFS)	-1.0	0.6	0.4	0.7	1.9	0.2	0.8	-0.5	0.6
GDP per empl. person, NC at 2000 prices	10.3	4.6	9.2	11.4	0.8	7.1	6.8	2.6	5.7
Unit labour costs, NC at 2000 prices	22.5	15.7	12.5	14.5	35.7	20.6	21.5	30.3	24.3
Unit labour costs, ER (EUR) adjusted	28.0	10.7	-6.1	4.4	40.3	21.6	11.3	16.9	18.3
Austria									
GDP deflator	1.9	1.3	1.2	1.7	2.1	1.8	2.1	2.3	2.0
Real ER (CPI-based)	0.5	-0.3	-0.5	0.0	0.1	-0.7	-0.2	-0.4	-0.2
Real ER (PPI-based)	0.3	0.2	1.0	2.6	-2.4	-1.8	1.6	-0.3	-0.1
Average gross wages, NC	1.8	2.1	2.0	1.8	2.3	3.2	2.2	3.0	2.5
Average gross wages, real (PPI based)	0.3	2.5	0.4	-2.9	0.2	0.3	-1.8	-3.2	-1.5
Average gross wages, real (CPI based)	-0.9	0.3	0.6	-0.3	0.0	1.6	0.0	-0.2	0.3
Employed persons (LFS) ⁵⁾	0.7	1.4	0.8	0.4	2.1	2.7	2.5	2.8	2.1
GDP per empl. person, NC at 2000 prices	-0.2	0.3	0.0	2.1	0.7	0.6	0.5	-1.8	0.4
Unit labour costs, NC at 2000 prices	2.0	1.8	2.0	-0.3	1.6	2.5	1.7	4.9	2.1
Unit labour costs, ER (EUR) adjusted	2.0	1.8	2.0	-0.3	1.6	2.5	1.7	4.9	2.1

5) From 2004 new methodology.

NC = national currency (including euro-fixed series for euro area countries - SK, SI, AT). ER = Exchange Rate, PPI = Producer price index, CPI = Consumer price index. Positive growth of real exchange rates means real appreciation.

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