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- Employment & Unemployment in the Western Balkans
- Skills and Export Performance
- Financial Market Regulation and Supervision
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### Employment and unemployment in the Western Balkans: an assessment\*

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The economies in the Western Balkans have been facing complex and interrelated political and economic problems. Taking into account these 'starting conditions', output recovery has been much slower in Southeast Europe than in the Central European countries. Thus, labour markets began to improve with some delay as compared to the new EU member states (NMS). Following high GDP growth that started in most countries of the region by the end of 1999, employment increased everywhere, except in both Serbia and Montenegro where it has continued to decline – despite strong GDP growth.

Regardless the of ongoing recovery, unemployment shows little improvement, with the exceptions Croatia and probably of also Montenegro. High and persistent long-term unemployment has become a salient feature of the labour markets in the region; unemployment has a disproportionate impact on young people.

Large informal sector activities are another important feature of these economies. Estimates on the size of this sector irrespective of the method used indicate a considerably larger share of the unofficial economy in SEE than in the NMS. Formality and informality in the region do not appear as binary choice, but rather along a spectrum of statuses, from full informality through semi-formality (agriculture, self-employment, double payrolls in many small private firms), to full formality most typically in the public sector.

#### **Employment rates**

With the only exception of Croatia, where some recovery started from 2002 onwards, activity and

employment rates began to rise in most countries of the region only from 2004/2005. Activity rates are ranging between 44% in Bosnia and Herzegovina and close to 63% elsewhere. These values are somewhat lower relative to Romania and Bulgaria, but far from the results obtained for Slovenia (70%). In general, employment rates are very low compared to European standards, varying between 28% in Kosovo and 57% in Croatia (Figure 1). In Bosnia and Herzegovina only about one third of the working-age population is in employment, in Macedonia 40%. In all other countries the employment rate hovers around 50%, the only exception being Croatia where a certain measure of recovery started back in 2002. In almost all countries of the region low female participation is the factor that impinges markedly on overall employment rates.

#### Figure 1



Source: National LFS. For Albania registration data.

Both male and female employment rates are lower (female much lower) than in the NMS and in the EU-15. Croatia exhibits the highest female employment rate in the region, but would still range at the lower end of the scale if compared to the EU countries. Kosovo is an extreme case in that respect, with a value of only 10%. Declines of the employment rates during the transition period were

<sup>\*</sup> This article is based on a wiiw study carried out for the European Commission within the contract ECFIN/169/2007/473194.

somewhat more severe for women than for men in Montenegro and Albania, while men were hit harder than women in Macedonia. Despite widening somewhat, the gender gap remained below the EU-25 average (15 percentage points) in Croatia and was similar in Macedonia. In Albania and Montenegro it was still below the average of the southern EU countries (25 percentage points) and in Kosovo it was the highest.

Notable differences between the Western Balkan countries and the three peer countries (Bulgaria, Romania, Slovenia) and the EU-15 exist also with regard to the employment rates of young persons. Despite some improvements of the labour markets in the region, the situation among the young (15-24 years) remains а matter of concern. Employment rates have changed only marginally over recent years. Croatia has the highest youth employment rate, which is comparable to those in Bulgaria and Romania (at 25%), but is still very low relative to Slovenia or the EU-15 (38% to 41%). At the other end of the spectrum, only 10-15% of the young people are in employment in Kosovo, Bosnia and Herzegovina and Macedonia. Serbia and Montenegro range somewhere in between the highest and lowest youth employment rates, at about 20% each. In general, employment rates of young men are higher than for women, with the gap being only slightly larger in most countries of the region than in the EU-15 (an exception being again Kosovo).

#### Supply of and demand for skills

In the following we examine the developments on the supply and the demand side regarding the skill structure of the working-age population (15 years and over) of the Western Balkan countries compared with the three peer countries. We also set these developments in relation to those in the EU-15. (See Figure 2.) There are significant differences with respect to both supply- and demand-side features between the Western Balkans and the peer countries, reflecting different inherited structures of education and different stages of structural adjustment processes relative to these economies. As regards the educational attainment levels of the working-age population, all Western Balkan countries except Croatia have a significantly higher share of low-educated than either the three peer countries or the EU-15. Close to 40% belong to this group, in Bosnia and Herzegovina and in Macedonia almost half of the working-age population, as compared to around 35% in the EU-15 and the peer countries. On the other hand, the shares of the highly educated are in some cases (Bosnia and Herzegovina and Macedonia) much lower than either in the EU-15 or in two of the three peer countries (Bulgaria and Slovenia). Romania has a similar share of highly educated as Macedonia. The Western Balkan countries have а lower representation of the medium-educated compared to the peer countries (only Croatia is similar) but a much higher share as compared to the EU-15.

Figure 2

## Educational structure of working-age population 15+, 2007



Source: Eurostat, national LFS.

Experience from other transition countries shows that particularly the low-skilled were heavily affected by employment losses during transition, while the high-skilled reported employment gains from the very beginning. Available data for the Western Balkans are patchy, thus comparable time series are not existent for the whole region. However, based on the information available one may conclude that these countries follow a similar pattern as the NMS.

#### **Employment patterns**

Owing to slow restructuring, changes in the sectoral composition of employment were less dramatic in the Western Balkan countries than observed in most new EU member states over the transition period. Coupled with a decline in industrial employment and a modest rise of services sector jobs, the proportion of agricultural employment even increased temporarily in most countries of the region and remained at high levels. Agriculture has absorbed laid-off workers from other sectors or has provided subsistence activity at times when the number of jobs in the formal sector was limited (World Bank, 2003). This differs significantly from developments in the NMS, where almost everywhere (except Poland and Romania) a rapid de-agrarianization process has been under way.

In Albania, where the agricultural sector accounted for more than 70% of total employment in the 1990s, the share fell to about 58% (or 51% according to the Living Standard Measurement Survey, LSMS) at the beginning of the new millennium (Figure 3). Agriculture still accounts for about 20% of total employment in Bosnia and Herzegovina, Serbia, Kosovo, and slightly less in Macedonia. Also in Croatia, the most developed country in the region, agriculture is still an important employer accounting for about 13% of total employment in 2007.<sup>1</sup> Montenegro is an outlier with agricultural employment below 10% of the total.

A common feature of all Western Balkan countries is the sharp contraction of industrial employment at the outset of transition, reflecting the slow recovery of industry.<sup>2</sup> In general, the countries in the region display a smaller proportion of employment in industry than, for example, Slovenia and tend to follow the pattern of Bulgaria and Romania, with industrial employment accounting for around 30% of total employment. Outliers in this respect are Montenegro, Kosovo and Albania in particular, where the share of formal industrial employment accounts for only 14-20%.

Figure 3

## Employment structure by main sectors, 2000 and 2007

% of total employment







Source: wiiw Database incorporating national statistics.

Information on employment shifts by industrial branches is limited: only Croatia, Serbia, Montenegro and Macedonia report data at the 2-digit NACE level, but at different time horizons; Macedonian data have been subject to methodological changes. Taking these limitations into account, we found strong employment cuts in the textile and clothing industries in Croatia and

<sup>&</sup>lt;sup>1</sup> Registration data reveal a much lower proportion (5%) of those employed in agriculture than obtained from the LFS (13%).

<sup>&</sup>lt;sup>2</sup> In 2007 Albania reached 63% of its 1990 industrial output level, Macedonia 56% and Serbia about 50%. Croatia (the best performer in the region, but at the lower end compared with most NMS) reached 90%.

Serbia. Also Macedonia has suffered from job losses in the textile industry, while it reports significant employment gains in the clothing industry. Despite employment losses, the food industry has remained the dominant sector in terms of employment in Croatia and Serbia and has even increased its share in the number of total manufacturing employment in recent years, accounting for 17% and 20% respectively. In the two other countries, the food industry ranks second, absorbing about 15% of total employees in Montenegro and 12% in Macedonia. The steel industry's dominant role as an employer in manufacturing remained unchanged in Montenegro during reporting period (2002-2005),the accounting for one quarter of total manufacturing employment.

The services sector is underdeveloped by European standards but also in comparison with the new EU member states. Available data show only slight changes of its share in total employment in the period 2000-2007. It seems, however, that this sector's size is underestimated due to the large informal sector that is found almost everywhere in the region and concentrates traditionally on services sector activities (together with construction and agriculture). Apart from the extreme value obtained for Albania, where the services sector absorbs only about 28% of total employment, that sector is most developed in Montenegro, where it accounts for over 70% in total employment, followed by Croatia and Kosovo.<sup>3</sup> The high number of services sector jobs in Montenegro is due to the high employment shares in trade, tourism and public sector jobs. Compared to other countries of the region, there was a dynamic development in the Croatian services sector (particularly in tourism, but also in transport) already in the 1970s and 1980s. Services sector employment differs substantially across countries and sub-sectors.

#### <sup>3</sup> Services sector employment accounts for about 62% in Hungary (the most 'advanced' country in that respect).

#### Unemployment

Unemployment has been extremely high in all Western Balkan countries, which is partly due to already high levels of unemployment inherited from the past. Apart from the extremes of Kosovo and Macedonia, where the LFS unemployment rate stands at 45% and 35% respectively (Figure 4), the incidence of unemployment is highest in Bosnia and Herzegovina (29%).<sup>4</sup> Both in Serbia and in Montenegro large-scale lay-offs and consequently the rise of unemployment started only after the implementation of economic reforms at the beginning of the new millennium, with some signs of improvement in the past two years. In Croatia unemployment was falling steadily from 2001 onwards and stood at 9.6% in 2007, but is still high compared to most of the EU countries. Montenegro is a special case where unemployment fell by 10 percentage points in 2007 to 19%, or even to 12% based on data from the Institute of Strategic Studies and Prognoses (ISSP).

#### Figure 4

#### **Unemployment in Southeast European countries**





Source: LFS of the respective countries. Albania: registration data.

<sup>&</sup>lt;sup>4</sup> All of these countries had entered the transition period already with a considerable level of unemployment in 1990: Kosovo: 40.8%, Macedonia: 23%, Montenegro: 22.9%, Bosnia and Herzegovina: 21.2% and Serbia (including Voivodina): 16.7%.

Unemployment measured by registration is almost everywhere much higher than the figures obtained from the Labour Force Surveys. The widest gaps occurred in Bosnia and Herzegovina and probably also in Macedonia. These discrepancies may be explained by the fact that a large number of registered unemployed is de facto self-employed in agriculture or working in the informal economy. Many of them are often not actively seeking a job but they do register because of health insurance (Macedonia, Serbia) or in order to get access to some other social benefits (such as in Bosnia and Herzegovina and in Croatia). In Albania registered unemployment fell from about 23% in 2003 to some 13% in 2007, but it was not accompanied by new job creation.

High and persistent long-term unemployment has become a salient feature of the labour markets of the region; those affected are running the risk of permanent exclusion and finally exiting from the labour market. The problem of long-term unemployment is much more severe in the Western Balkans than in the other transition countries and the proportion of those affected is by far higher. The most outstanding values are reported for Albania and Kosovo, exceeding 90%, and Macedonia, Bosnia and Herzegovina and Serbia, around 80% of total unemployed, while the share is 'lowest' in Croatia, with still almost 60% long-term unemployed. However, these high shares of long-term unemployment can be assumed not to reveal the actual situation in the respective countries, due to the large flows between the informal sector, employment and unemployment. In general, a large proportion of people in the region being long-term unemployed are working in households or in the informal sector. Long-term unemployment is high among laid-off workers and young first-time job seekers; in addition, vulnerable groups such as refugees, displaced persons and war veterans are heavily affected. In most cases women are more affected by long-term unemployment than men, in Bosnia and Herzegovina both sexes are equally affected.

Young people are hit disproportionately hard by unemployment. In most countries of the region the

unemployment rate among people younger than 25 years is twice as high as the total unemployment rate. Croatia, however, has made substantial progress in reducing youth unemployment recently. The high rates of 67% and 63% in Kosovo and Macedonia, respectively, indicate a quite critical situation of young people on these countries' labour markets (Figure 5). Young people lack professional experience, their options are either emigration or entering the informal economy (poor working terms).

Figure 5



Note: Albania: registration data. Source: wiiw Database incorporating national statistics, UNECE.

#### **Regional unemployment**

There is a sizeable and persistent regional mismatch of unemployment in most Western Balkan countries which suggests that there are strong barriers to regional labour mobility. Figure 6 illustrates the differences between the regions with the highest and lowest unemployment rates, indicating that they are particularly high in Albania, but are still significant in most other countries of the region. However, the comparisons of these differences should be taken with caution since the number of districts varies across countries. Internal migration in Albania, which is still underway, is mostly directed from the northern districts of the country towards the urban centres in the central

and the coastal regions; Tirana and Durres are the most important destinations. More than half of the recent internal movements have been towards the capital city of Tirana.

LFS data for Croatia show that more than 60% of the employed work within their residing area, and an additional 28% are working within the same county. When analysing the effect of lacking regional mobility on the persistence of the regional unemployment rate differences, Botric (2007) found that low mobility in a county is associated with increased unemployment. An attempt made by the Croatian Employment Service to increase mobility within the country by making the entitlement to unemployment benefit conditional on the readiness of an unemployed person to accept a job offer within a 50-kilometre distance from the place of residence was unsuccessful.

#### Figure 6

#### Regional unemployment rate spread in 2007



■ Max □ Min

Source: Eurostat, national statistics.

Despite the country's small size, unemployment has also a strong regional dimension in Macedonia. It is particularly high in rural areas and in regions affected by restructuring. But, even within urban and rural areas, there are large differences in the incidence of unemployment, with rates ranging between 27% and 59% in urban areas and 24% and 67% in rural areas (Cazes and Nesporova, 2007). This seems to also reflect the ethnic diversity of the country.

In Serbia the highest unemployment rates are recorded for Central Serbia (excluding Belgrade), while working conditions are better in the capital city of Belgrade (where the unemployment rate is nevertheless still high, at 17.4% in 2006) and in the Vojvodina region (agriculture). Central Serbia is also the region with the highest incidence of long-term unemployment. Similar to the NMS, limiting factors for the geographical mobility of the population are the high costs of living outside the place of permanent residence and the inefficient housing market, but also cultural factors.

#### Informal labour markets

Due to the weakness of state structures as well as of the functioning of the formal sector, large informal sectors and activities with important ties with the states have developed in the Southeast European countries. Among the employed, a significant number of people are partly or in full working in the informal markets. The estimates of informality vary, in part depending on the methodology used. Still, most estimates point to about one third of the GDP being produced informally and in some cases, such as in Kosovo, Albania and Macedonia, that share is even higher. In terms of employment the informal sector's share varies between 30% and 60% of total employment. Informal employment has characteristics of involuntary employment, because it comes with much higher risks and lower rights than in the formal labour market. In that respect also, these countries have characteristics to be found in the developing world. In most countries of the region the incidence of informality has been growing during transition, driven by incentives for evasion of taxes and labour regulations as well as by the failure of the formal sector to provide jobs. Croatia is probably the only country in the region where informal sector activities have been on the decline over the past few years.

Table 1
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#### Serbia: characteristics and rates of informality among wage employees, 2005

	Informality Rates	Share in informal sector	Share among wage earners
Total	26.7	100	100
Gender			
Female	28.7	44.8	41.6
Male	25.2	55.2	58.4
Age			
15-24	52.1	14.0	7.2
25-54	25.9	80.0	82.4
55-64	15.3	6.0	10.4
Education			
Less than primary	51	4.5	2.4
Primary	29.3	14.4	13.1
Vocational	34	28.6	22.4
General Secondary	27.8	42.9	41.1
University	12.1	9.6	21.0
Region			
Belgrade	22.3	20.1	24.0
Central Serbia	25.5	44.6	46.7
Vojvodina	32.1	35.3	29.3
Source: World Bank (2006a).			

According to the World Bank (2006a)<sup>5</sup>, informal employment in Serbia amounts to 43% of all employees and 27% of wages earners, excluding farmers. Rates of entry to or exit from informal employment are low. An overview of the main features of informal sector employment in Serbia is given in Table 1. Accordingly young and less educated are overrepresented in the informal sector, and wages tend to be lower than in the formal sector especially if working hours are considered. But in general it seems difficult to ascertain the actual figures.

In almost all countries of the region a significant number of registered unemployed are working informally and register to receive free health insurance; estimates for Macedonia suggest that about 70% of the registered unemployed fall into this category. Low-skilled workers, most affected by the disintegration of the formal job market, have higher incentives to rely on employment in the informal sector than others. Heavy labour taxes are identified as being the most conducive to informality. In Bosnia and Herzegovina, tax evasion and non-payment of social insurance contributions were – apart from non-registration of workers – particularly evident in the small firm sector.

#### International labour mobility and remittances

International migration from the countries of the Western Balkans is significant, diverse, and complex. In former Yugoslavia, guest-worker emigration was already established in the 1960s in order to alleviate labour market imbalances, thus extensive expatriate networks exist. As for Albania, estimates suggest that up to one fifth of the population left the country between 1989 and 2001. In Serbia, total net immigration during the 1990s

<sup>&</sup>lt;sup>5</sup> According to the World Bank, informality includes (i) selfemployed individuals who have not completed postsecondary education; (ii) household-helpers; and (iii) wage earners and owners of private firms with less than 10 employees. All wage earners in the state- and socially owned sectors are considered formal.

Table 2
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## Population from Southeast European countries in the EU-15 by sending country, numbers, and per cent of home-country population

	2000	2001	2002	2003	2004	2005	2006	2007
Albania	380,978	427,682	476,055	591,120	670,646	722,022	753,266	872,064
%	12.5	13.9	15.4	19.0	21.5	23.0	23.9	27.6
Bosnia-Herzegovina	341,737	337,591	326,663	328,512	319,676	324,897	318,786	314,885
%	9.1	8.9	8.6	8.6	8.3	8.5	8.3	8.2
Croatia	304,066	306,452	324,005	336,967	323,121	322,001	321,335	314,881
%	6.8	6.9	7.3	7.6	7.3	7.3	7.2	7.1
Macedonia	86,795	104,440	105,679	136,577	143,693	153,749	162,144	145,888
%	4.3	5.1	5.2	6.7	7.1	7.6	7.9	7.1
Serbia	882,767	854,709	898,762	853,982	381,367	592,968	514,778	432,839
%	11.7	11.4	12.0	11.4	5.1	8.0	7.0	5.9
Bulgaria	58,489	83,384	166,913	200,412	227,987	265,764	285,698	309,749
%	0.7	1.0	2.1	2.6	2.9	3.4	3.7	4.0
Romania	180,927	230,444	283,607	461,381	602,039	764,616	930,430	1,096,664
%	0.8	1.0	1.3	2.1	2.8	3.5	4.3	5.1
Slovenia	29,339	29,947	31,922	33,642	33,504	33,712	34,307	32,616
%	1.5	1.5	1.6	1.7	1.7	1.7	1.7	1.6

Note: figures are based on different data sources due to availability.

Source: national statistics, Eurostat, LFS.

masks large gross flows in both directions. In the Southeast European peer countries, Romania and Bulgaria, emigration escalated after 1989, substantially adding to declining demographics.

Table 2 presents an overview of the extent of migration originating from the countries of Southeast Europe in the EU-15.<sup>6</sup> According to these data, Albania is by far the most affected by emigration of its population, with the share of EU-15 migrants climbing to over 20% since 2004. Migrant communities from Bosnia and Herzegovina in the EU-15 have been comparatively large throughout the 2000s, with 7-10% of the country's population. Interestingly, the share of the Serbian

population residing in the EU-15 has considerably declined, to around 6% recently. Migration from Romania and Bulgaria to the EU-15 has slightly increased to 4-5% of the population, while Slovenian nationals in the EU-15 amounted to about 1.5% cent of the country's population.

#### Remittances

Migrant remittances refer to income earned in the host country of migration that is sent or brought to the home country. More specifically, this term the following items: (1) workers' covers remittances, i.e. transfers abroad by resident workers (who live in the host country for at least 12 months); (2) compensation of employees, i.e. earnings paid by host-country employers to migrants who are not residing in that country, such as seasonal workers; and (3) migrants' transfers, namely cash and goods transferred by re-migrating individuals at their relocation back to the home economy (IMF, 1993). Understanding remittances in a more narrow perspective, only the first

<sup>&</sup>lt;sup>6</sup> Certainly, these data do not cover total emigration from the countries concerned. Besides, they suffer from the usual limitations of the coverage of migration by population and labour force statistics: short-term migrants are typically excluded from such data, and LFS data are not representative with respect to migration. However, we are not aware of a similarly up-to-date but more comprehensive dataset on the extent of emigration from Southeastern Europe.

#### Table 3

## Workers' remittances and compensation of employees in the countries of Southeast Europe, debits and credits as share of GDP, 2000 to 2006

	2000	2001	2002	2003	2004	2005	2006
Workers' remittances, credits							
Albania	12.41	12.12	12.92	17.39	21.72	21.93	20.33
Bosnia and Herzegovina	16.00	13.86	13.72	18.77	20.66	19.35	17.76
Croatia	2.47	2.35	2.61	3.43	3.69	3.36	2.53
Macedonia	1.91	1.59	2.18	4.00	4.62	4.50	4.91
Bulgaria	n.a.	2.37	2.85	4.34	2.73	2.62	2.04
Romania	0.00	0.01	0.01	0.03	0.04	5.87	7.11
Slovenia	0.06	0.07	0.06	0.06	0.06	0.03	0.02
Compensation of employees, cr	redits						
Albania	1.57	1.66	1.81	2.47	2.79	2.44	3.18
Bosnia and Herzegovina	10.64	8.77	7.75	9.76	8.91	8.20	7.18
Croatia	0.38	0.57	0.68	1.06	1.44	1.43	1.87
Macedonia	0.01	0.13	0.32	0.77	1.49	1.52	1.71
Bulgaria	0.39	2.50	3.86	6.61	8.05	6.54	6.44
Romania	0.21	0.22	0.27	0.24	0.23	1.49	1.49
Slovenia	0.81	0.72	0.77	0.97	1.15	1.12	1.13
Workers' remittances, debits							
Albania	n.a.	n.a.	n.a.	0.00	0.00	n.a.	0.00
Bosnia and Herzegovina	n.a.	-0.08	-0.09	-0.16	-0.75	-0.40	-0.53
Croatia	-0.13	-0.12	-0.10	-0.07	-0.07	-0.08	-0.10
Macedonia	-0.34	-0.48	-0.53	-0.42	-0.42	-0.37	-0.39
Bulgaria	n.a.	n.a.	n.a.	n.a.	-0.11	-0.12	-0.10
Romania	n.a.	0.00	n.a.	0.00	0.00	-0.01	-0.01
Slovenia	0.00	n.a.	0.00	0.00	0.00	0.00	0.00
Compensation of employees, de	ebits						
Albania				-0.09	-0.10	-0.12	-0.46
Bosnia and Herzegovina	-0.04	-0.09	-0.11	-0.17	-0.20	-0.18	-0.17
Croatia	-0.06	-0.05	-0.07	-0.17	-0.18	-0.14	-0.14
Macedonia			-0.02	-0.01	-0.04	-0.04	-0.05
Bulgaria	-0.18	-0.16	-0.08	-0.08	-0.07	-0.08	-0.13
Romania	-0.01	-0.01	-0.01	-0.02	-0.01	-0.04	-0.05
Slovenia	-0.12	-0.11	-0.18	-0.29	-0.36	-0.40	-0.52
Sources: wiiw Annual Database (GE	DP), IMF balance of	payments stati	stics (remittance	es).			

category corresponds to the notion of remittances as transfers of individuals residing abroad to family members in their countries of origin.<sup>7</sup> Besides, according to official data, that category is the most relevant among the above items.

The countries of the Western Balkans are fairly heterogeneous in terms of the role of remittances, as shown by the official balance of payments statistics on remittances presented in Table 3:

<sup>&</sup>lt;sup>7</sup> Compensation of employees contains salaries of employees of embassies and international institutions among others as well: such flows are less relevant in terms of their impact on the source economy. Besides, this category contains employers' payments for social security, and part of the compensation of employees is spent in the host country, so that only a fraction ends up in the source country of migration. Migrants' transfers are again corresponding to different situations and economic behaviour than workers'

remittances in the narrow sense, and these flows have very poor statistical coverage.

- Albania as well as Bosnia and Herzegovina are countries with particularly high inflows of remittances. Bosnia and Herzegovina has received inflows of remittances of around 16-18% of its official GDP throughout the present decade, while in Albania official inflows increased from just above 12% in 2000 to more than 20% in 2006.
- In Croatia and Macedonia, the role of remittances is much less pronounced: those countries have received recent inflows of 2.5-5% of their GDP. Both countries showed a tendency of increasing remittance inflows during the 2000s.
- The peer countries show considerable heterogeneity with respect to remittances as well. While inflows barely play a role in Slovenia, they amount to around 2% of GDP in Bulgaria and are rather high, at 7% of GDP, in Romania.<sup>8</sup>
- The above heterogeneity is reflected in the compensation of employees received in those countries as well, while the extent of those flows is well below the flows of workers' remittances. Receipt of compensation of employees from abroad has been particularly relevant in Bosnia and Herzegovina, where such flows amounted to 8-10% of GDP. Interestingly, among the peer countries, those flows are around three times larger than workers' remittances in Bulgaria, while they are at rather low levels in Romania.<sup>9</sup>
- Although outflows of both workers' remittances and compensation of employees have been

<sup>9</sup> Note that the reliability and international comparability of the official data on remittances is considerably impaired since the above remittances sent via the banking system, (which do feature in the balance of payments statistics) do not necessarily contain information from money transfer companies, and typically disregard informal channels of remittances. Besides, official remittances via the banking system are reported only above a threshold that is at EUR 12,500 in the eurozone countries. Therefore, the total amount of remittances is most likely underestimated by up to 50% (World Bank, 2006b).

below one per cent of the countries' GDP throughout the 2000s, flows amounting to around 0.5% of GDP in Albania, Bosnia and Herzegovina and Croatia nevertheless show that these countries also serve as hosts of worker migration.

The international IMF balance of payments statistics do not include entries on Serbia and Montenegro. According to existing evidence, this region belongs to the highest remittance recipients world-wide. In 2004, private remittances amounted to 17.5% of GDP (European Bank for Reconstruction and Development, 2006).

#### References

Botrić, Valerija (2007), 'Regional Labour Market Differences in Croatia: Can LFS Data Provide a Clearer Picture?', Paper presented at the Joint Congress of the European Regional Science Association (47th Congress) and ASRDLF (Association de Science Régionale de Langue Française, 44th Congress), France, Cergy-Pontoise, 29 August to 2 September.

Cazes, S. and A. Nesporova (2007), 'Flexicurity: A Relevant Approach in Central and Eastern Europe', ILO, Geneva.

EBRD – European Bank for Reconstruction and Development (2006), *Transition report update*, London.

IMF – International Monetary Fund (1993), *Balance of Payments Manual*, 5th edition, Washington DC.

The World Bank (2003), 'Macedonia-Country Assistance Strategy', Report No. 26513-MK, Washington DC.

The World Bank (2006a), 'Serbia. Labor Market Assessment', Report No. 36576-YU, Washington DC.

The World Bank (2006b), *Global Economic Prospects: Economic Implications of Remittances and Migration*, Washington DC.

<sup>&</sup>lt;sup>8</sup> We conjecture that the large increase in the relative inflows in 2005 from levels close to zero is due to changes in the recording of remittance statistics.

#### Skills and export performance<sup>\*</sup>

#### BY ROBERT STEHRER

In this article we present evidence of the relationship between human capital (skills measured by educational attainment) and export performance as measures of competitiveness. Higher export growth – compared to other countries – can be looked at as gaining competitiveness in world markets, driven by the dynamics of comparative advantages and thus are a measure of revealed comparative advantages.

#### Data

For the estimations we use data from the recently released EU KLEMS database (www.euklems.org) which provides the most extensive data set of data on industrial output, value added, employment, wages, unit labour costs etc. The period we look at is 1995-2004. This allows to include a number of Central and Eastern European countries in the analysis. From this database we use data for unit labour costs. Data on exports come from the UN COMTRADE database. As the skill information in this database is provided only at a more aggregate level, we have to combine these data with information on educational attainment levels using Labour Force Survey (LFS) data (available for the period 1998-2004). We shall use averages of employment shares of different educational attainment groups (ISCED groups high, medium and low educated) over a longer time interval by sector to avoid data problems such as fluctuations in shares due to small sample sizes and outliers. This strategy allows to include 24 of the current EU member states (not included are Bulgaria, Malta and Romania for data reasons). The industry

breakdown is presented in Table 1. Data are available for eleven industries corresponding to NACE 2-digit aggregates as indicated in Table 1. Below we shall also present evidence for groupings of industries; the groupings are defined with respect to the share of high-skilled workers into low skill, medium skill and high skill intensive branches.

Table 1

#### Industry classification

Code	Description	Industry group
15t16	Food, beverages and tobacco	М
17t19	Textiles, textile products, leather and footwear	L
20	Wood and products of wood and cork	L
21t22	Pulp, paper, printing and publishing	М
23t25	Chemical, rubber, plastics and fuel	М
26	Other non-metallic mineral	М
27t28	Basic metals and fabricated metal	М
29	Machinery nec.	Н
30t33	Electrical and optical equipment	Н
34t35	Transport equipment	Н
36t37	Manufacturing nec., recycling	L

Figures 1 and 2 present the growth rates of exports (nominal at current euro rates; industries weighted by gross output shares) and the growth rates of unit labour costs (compensation divided by gross output and weighted by gross output shares) for the three industry groups and each country.

Again, one can find higher growth rates of exports in the high skill intensive sectors on average. This is especially the case for Eastern European countries such as the Czech Republic, Hungary, Poland, Slovakia, Estonia and Latvia. Finally, the pattern of growth rates of unit labour costs mainly reflects the differences in growth rates of labour productivity. Most importantly, these are in particular declining strongly in the medium and high skill intensive sectors of the Eastern European countries (e.g. Hungary, Poland, Slovakia, and Estonia).

<sup>\*</sup> This text presents results from Chapter I.1 of a study commissioned by the European Commission (Framework Contract B2/Entr/05/091) under the overall title 'Skill Problems in European Industrial Sectors'. The study was coordinated by wiiw in collaboration with Applica/ Alphametrics and the Netherlands Bureau for Economic Policy Analysis (CPB).

#### SKILLS & EXPORTS





#### Average growth rates of exports (in percent), 1995-2004

Source: UN COMTRADE database, wiiw calculations.

Figure 2



#### Growth rates of unit labour costs (in percent), 1995-2004

Source: EU KLEMS database, March 2007, wiiw calculations.

#### **Estimation results**

In the following we estimate whether a higher skill share has a positive effect on export growth where

we control for growth in unit labour costs. Specifically, the estimated equation is given by (omitting country and industry subscripts):

compensation divided by gross output in local currency units. We report the results for a

specification first without including dummies and

then including industry dummies capturing industry-

specific characteristics. The results can be found in

$$\gamma = \beta_0 + \beta_1 S_k + \beta_2 \mu + Dummies + \varepsilon$$

where  $\gamma$  is the growth rate of exports and  $\mu$  denotes the growth rates of unit labour costs. Export data are taken from the UN COMTRADE database and are measured at current US dollar. Unit labour costs are calculated as labour

Table 2

#### Skills and export performance

Table 2.

#### Dependent variable: Growth rates of exports

	Share of high skilled workers	Share of medium skilled workers	Share of low skilled workers	Share of high skilled workers	Share of medium skilled workers	Share of low skilled workers
Skill share	0.179 ***	0.059 ***	-0.103 ***	0.138 **	0.066 ***	-0.090 ***
	(0.000)	(0.005)	(0.000)	(0.018)	(0.000)	(0.000)
Growth rate of unit labour costs	-0.788 ***	-0.669 ***	-0.558 ***	-0.628 ***	-0.394 *	-0.370 *
	(0.000)	(0.002)	(0.008)	(0.001)	(0.056)	(0.076)
Industry dummies	No	No	No	Yes	Yes	Yes
F value	17.67	12.85	26.01	9.33	11.13	11.76
R squared	0.14	0.10	0.16	0.27	0.27	0.30
Observations	263	263	263	263	263	263
Notes: p-values from robust standa	rd errors are reporte	d.				

Table 3

#### Skills and export performance for industry groups

#### Dependent variable: Growth rate of exports

	Share of high skilled workers	Share of medium skilled workers	Share of low skilled workers
Growth of unit labour costs in low skill intensive			
sectors	-0.746 **	-0.476	-0.480
	(0.035)	(0.292)	(0.288)
Growth of unit labour costs in medium skill			
intensive industries	-0.078	-0.058	-0.041
	(0.773)	(0.835)	(0.881)
Growth of unit labour costs in high skill			
intensive industries	-1.118 ***	-0.620	-0.454
	(0.000)	(0.104)	(0.254)
Skill share in low skill intensive industries	0.155	0.060 *	-0.065 *
	(0.320)	(0.093)	(0.095)
Skill share in medium skill intensive industries	0.119 *	0.052 ***	-0.071 ***
	(0.053)	(0.004)	(0.000)
Skill share in high skill intensive industries	0.185 *	0.082	-0.164 ***
	(0.084)	(0.125)	(0.001)
Industry dummies	Yes	Yes	Yes
Industry group dummies	Yes	Yes	Yes
F value	8.52	9.53	10.7
R squared	0.29	0.28	0.32
Observations	263	263	263

Notes: p-values from robust standard errors are reported.

We find that a higher share of high and medium skilled workers spurs growth of exports in both specifications, i.e. also when including industry dummies. Furthermore, the coefficient of high skilled workers is again higher compared to that for the medium educated workers. The coefficient of the share of low educated workers is negatively significant. The growth rate of unit labour costs relates negatively to export growth as higher unit labour costs decrease competitiveness. The results are confirmed when allowing for industry group specific effects. The results for this are presented in Table 3.

Firstly, we find that the unit labour cost variable is particularly significant in the high and low skill intensive groups of industries. These are the industry groups where а deterioration (improvement) in the unit labour cost position has the strongest negative (positive) effect. This could be interpreted as expressing a strong competitive pressure by lower cost producers in the low skill industries, but also in the lower cost segment of the higher skill industries. Secondly, we see that a high share of low skilled workers is particularly detrimental for export competitiveness in the high and then the medium skilled industries, which is again compatible with a strong competitive pressure in the low quality segments by lower cost producers of such industries. These are the segments that need to be vacated by the higher cost producers, which in our sample (i.e. European producers) are strongly represented.

#### Conclusions

Given the data restrictions and the fact that two types of data sources had to be used (EU-KLEMS data base and LFS statistics) we were restricted to analysing time series for the period 1995 to 2004 and for eleven manufacturing industries, but for a relatively full EU country sample including 24 countries of the European Union. Furthermore, we grouped industries into three groups depending upon whether these were industries with a high, medium or low (EU-wide) share of highly skilled workers and we supplied estimates for different effects of skill composition on competitiveness in these three industry groupings.

Overall, the results are promising in that the share of high skilled turned out to be a significant factor over the entire country and industry sample in explaining export growth, followed by the share of medium skilled, and with the share of low skilled having a significant negative impact. Finally, we found particularly detrimental effects of a high share of low skilled in the high and then the medium skill industries, which would indicate that in such industries it is particularly important to vacate low skill niches which have come strongly under pressure from (both European and non-European) catching-up economies.

# Financial market regulation and supervision<sup>\*</sup>

BY LEON PODKAMINER

#### Summary

To neutralize the uncertainties about the ways in which the risks and the capital adequacy are quantified under Basel 2, one may postulate raising the level of the risk-weighted capital adequacy ratio from the current 8%. The other revisions may include the introduction of multiple safeguards, making adjustments for the size and complexity of banks, and the introduction of cyclically-adjusted regulatory requirements.

Systemically important hedge funds must not be left unregulated – though this may require compliance from the tax/regulation havens. The rating agencies sector must also be regulated. There are many other valuable recommendations which, when implemented, would make things much better. But the complexity and nontransparency of the financial system is likely to outpace the development of the system's regulation and supervision.

The opinion is expressed that what proves to be too hard to regulate and supervise, should be forbidden. Because it is difficult to efficiently regulate and supervise large, sufficiently complex and non-transparent financial conglomerates active in many jurisdictions, the legislation should require splitting such conglomerates into independent entities more easily regulated/ supervised with wellestablished routines. This opinion agrees with Professor De Grauwe's recent advocacy of the return to narrow banking.

Policies limiting the development of the assets price bubbles are essential. However, the monetary

policy should control these bubbles by means of credit rationing instead of interest rate hikes.

The tendency for asset price bubbles to become more frequent and violent is related to the profound structural changes initiated more than 30 years ago. Apart from liberalization/ deregulation, the rise of the bubble economy has been fed by the ongoing change in income distribution, with the ballooning size of private liquid wealth which is eager to engage in speculative activities. Undoing the changes introduced by the policies of the past thirty years would require unusual circumstances. The radical changes (comparable e.g. to the ones introduced under the New Deal) could come only if the world economy plunged into a long and deep depression.

The surveillance of individual institutions should be left to the national bodies currently in charge. The national supervisors should of course collaborate with one another.

The macro prudential oversight in the EU could be the responsibility of a separate international body (called e.g. European Systemic Risk Council) affiliated to e.g. the European Commission.

Supervision must remain national – as long as the fiscal costs of failures of financial firms are borne nationally. Should there be a common fiscal policy for the entire EU, with the fiscal costs in question borne by the EU as a whole, things would be different. The idea of colleges of supervisors for cross-border firms is also problematic. The ECB should not play any supervisory role. The relationship of the national central banks to their supervisory authorities should remain the national prerogative (lending of last resort is still national).

Prudential activities and consumer protection should be separated.

Linking EU supervision to international institutions should proceed via 'close cooperation' of ESRC with FSF, BIS and IMF.

<sup>\*</sup> This text was written following a request from the European Parliament's Committee on Economic and Monetary Affairs (February 2009).

#### On regulation

#### **Revision of Basel 2**

For several years now it has been pointed out that the Basel 2 rules (quantifying the requirements for individual banks' capital adequacy ratios) is deficient. Among others, these deficiencies include:

- (1) Reliance on internal statistical models specified with historical data for the assessment of asset risks. But data on very rare events (e.g. insolvencies) are scarce. Statistical modelling of such events cannot be reliable. Similarly, given the innovative character of too many assets, the use of statistics for the evaluation of their risks is tricky, to say the least.
- (2) Alternatively, reliance on the ratings produced by hired external rating agencies which – as is now obvious – are not paragons of professional competence and integrity.
- (3) Common sense and individual judgement is subordinated to (1) and (2) above.
- (4) The implied homogenization of banks. unification of rules governing their responses. This paraded is often as а virtue ('harmonization'). In fact this is likely to strengthen the lemming-like behaviour in the financial markets - resulting in the tendency for the build-up of bubbles, to be followed by busts/crises.
- (5) Systemic (or endogenous) risk is ignored and cyclicality is induced (or strengthened). Basel 2 stipulates that a bank facing increased risk/losses goes on the defensive (e.g. disposes of problematic assets, calls in credits etc). This is a good recommendation for a single bank though it may have unwelcome (and unanticipated) effects for other banks. Such (systemic) risks are not allowed for in Basel 2. Moreover, Basel 2 is actually pro-cyclical and potentially destabilizing. The actions prescribed (e.g. under a downswing in the real economy, with rising risks to banks) when followed simultaneously by a large number of banks would be reinforcing the contraction in the banking sector - and thus would amplify the real economy downswing. (Under an upswing,

the same logic may well produce excessive expansion.)

It is not clear at all how to deal, *systematically*, with the deficiencies 1-3 above. It would be naïve to hope that a radical reform of the rating agencies sector (necessary as it is) could bring such qualitative improvements as to make their ratings truly reliable. The situation seems to be fairly hopeless<sup>1</sup> – at least as long as the financial system itself remains complex beyond the intellectual capacity of an average, normally intelligent banker.

Other deficiencies of Basel 2 seem more capable of being constructively reformed:

#### Higher capital adequacy ratios

To neutralize the uncertainties about the ways in which the risks and the capital adequacy are quantified under Basel 2, one may simply postulate raising the level of the risk-weighted capital adequacy ratio from the current 8%. Should it be 10%, or more – perhaps 14%? That is a good question to ask e.g. the Research Department of the ECB.

## *Further regulatory amendments (well beyond Basel 2)*

(1) *Multiple safeguards:* Whatever the level of the Basel 2 (whether revised or not) capital adequacy ratio, it is advisable to impose on banks (and other financial sector firms) some *additional* quantitative requirements, to be observed *simultaneously* with the CAR. These requirements could relate to e.g. minimum

For example, the de Larosière Group Report's recommendation concerning risk assessment (p. 16) reads as follows: 'Future rules will have to be better complemented by more reliance on judgement, instead of being exclusively based on internal risk models. Supervisors, board members and managers should understand fully new financial products and the extent of the risks that are being taken; stress test should be undertaken without undue constraints (?); professional due diligence should be put right at the centre of their daily work'. The question is what happens if they fail to fully understand products/risks, or misunderstand them?

levels of the overall leverage<sup>2</sup>, liquidity, maximum allowable exposures to specific risks, maturity mismatches, derivative position limits, maximum speeds of expansion of some assets etc.

- (2) Size/complexity adjustments: The requirements should perhaps be differentiated - with more demanding requirements imposed on large, systemically important banks and other large complex financial conglomerates (and other financial institutions - such as hedge funds). More demanding requirements (which are essentially a form of taxation) would better reflect the costs (e.g. coming in the form of public support) of the external effects of an insolvency of such systemically important (These cost institutions. tend to be disproportionately large for large/systemically important institutions.) Besides, there are obvious moral-hazard disadvantages of having large/complex financial institutions. They tend to take advantage of being too large/complex to be allowed to go bankrupt. Besides, the very existence of large/complex institutions is likely to restrict or distort competition. In particular, such institutions are in a position to manipulate the market. This may have devastating macroeconomic effects (e.g. as large/complex entities capable are more \_ than small/transparent ones - of generating major waves of destabilizing speculative booms). The application of more demanding requirements should then be considered just as part of a package of measures counteracting the expansion/rise of too large or too complex financial conglomerates.
- (3) *Cyclical adjustments:* The regulatory requirements (CAR, leverage ratios or others accepted) should be varied according to the aggregate (macro) conditions. This should mitigate the systemic risk and the pro-cyclicality inherent in any constant (over time) requirements. The idea, of with many specific

variants have been proposed in the literature, is fairly simple. In very good times somewhat more restrictive requirements would weaken the market excesses. By the same token, sufficiently less restrictive requirements (administered when the good times are about to end) should attenuate de-leveraging and the severity of the approaching bust. (In long bygone days, the monetary policy in many places attempted to contribute to the stabilization of economic cvcles through changing obligatory reserve requirements, charged on banks' liabilities.3

(4) Avoiding quick-money orientations? It is believed that the prevailing systems of remuneration of top managers in the financial sector favours excessive risk taking and making quick profits. The hit-and-run orientation is proposed to be mitigated upon the 'sensible implementation of deferred compensation plans'. Firms adopting such compensation plans would be offered lower capital requirements (or other advantages). A version of this idea is alluded to in the de Larosière Group Report (p. 31). This is a nice idea, but I am not quite sure it is practicable. The regulatory requirements are now expected to perform many new tasks: provide safeguards complementing the Basel 2 CAR, affect size/complexity in the financial sector, mitigate pro-cyclicality. That would seem to be a demanding workload. Can the manipulation of requirements be the simultaneously instrumental in changing patterns of behaviour? Possibly. Realistically though, one could fear that a system trying to achieve all these worthy goals at the same time may eventually become inefficient and/or overregulated. One should perhaps try to induce *slow-money* orientation by means of a (properly modified) system of personal income taxation.

<sup>&</sup>lt;sup>2</sup> Incidentally, it has turned out that the European banks happen to have higher leverage levels – i.e. are in fact more fragile – than their US partners.

<sup>&</sup>lt;sup>3</sup> Some new EU member states, such as Bulgaria, still actively manipulate the reserve requirement for stabilization purposes. The basic reserve requirement ratio was raised strongly in mid-2007, amid clear signs of euphoria on the domestic market, and lowered – for obvious reasons – in November 2008.

#### Not only the shadow banking to be regulated

It has been generally accepted that the *systemically important* hedge funds must not be left unregulated. This is a sensible idea – provided there are at least some minimum standards for such funds enforced globally. Would the tax and regulation 'havens' (outside the EU – but also inside) comply? This remains to be seen.

If the rating agencies are to play a role in the (revised) Basel 2 rules, it is essential that they too are subject to supervision. Besides, their business model must be changed. Rating agencies cannot issue ratings in exchange for a fee paid by a party seeking a rating for its own security. This is a corrupting arrangement. One can think of many less corrupting schemes. For example, the rating agencies might get paid for their services by the regulatory bodies (e.g. the Committee of European Securities Regulators) who would charge the fee on the security's issuer.

The regulation of financial sector institutions cannot ignore the existence of the off-balance items. Such items must be consolidated into the official balances. By the same token, the regulation cannot be fooled by the practice of hiding the toxic assets in the institutions' own 'vehicles'.

Finally, the specific suggestions commonly advanced (also by the de Larosière Group) to 'civilize' the securitized 'products' and complex derivative markets deserve acceptance.

#### The root question: can regulation and supervision keep up with the growing complexity of the financial system?

It is highly probable that the changes in regulation currently under consideration could – upon being implemented – make things much better. But it would be presumptuous to claim that these changes would rule out financial crises in the future. One must have confidence in the power of human inventiveness. Complexity and nontransparency of the financial system is likely to outpace the development of the system's regulation and supervision. Sooner or later smart people will find ways to outwit the regulation. This is not to say that this will happen anytime soon. But, as one learns from Professor Hyman Minsky<sup>4</sup>, a sufficiently long spell of financial stability is likely to erode the mechanisms and instincts safeguarding that stability. The tendency for financial innovation – initially beneficial but then increasingly potentially destructive – would then come to the fore, with a rising weight of speculative and Ponzi finance.

## *Limiting the gap between the financial system's complexity and the ability to control it*

How to limit the gap between the financial system's complexity and the authorities' ability to regulate and supervise it? I am of the opinion that what proves to be too hard to regulate and supervise, should simply be forbidden. For example, I do not believe that it will be possible to efficiently regulate and supervise large, sufficiently complex and nontransparent financial conglomerates simultaneously running numerous types of activities and - to make things even less controllable - active in many jurisdictions. Rather, I would suggest the legislation should require splitting such conglomerates into independent entities, each running a separate type of business, each supervised by a single national authority, each more easily regulated/supervised with well-established routines.

I am fully sympathetic to the views expressed by Professor De Grauwe who advocates the return to narrow, traditional banking: 'Allowing banks – which inevitably borrow short and lend long – to get deeply involved in the financial markets is a recipe for disaster. The solution is to restrict banks to traditional, narrow banking with traditional oversight and guarantees...<sup>5, 6</sup>

<sup>&</sup>lt;sup>4</sup> As explained in his book *Stabilizing an Unstable Economy* (published first in 1986, most recent edition in 2008).

<sup>&</sup>lt;sup>5</sup> Paul De Grauwe, 'Returning to narrow banking', in the booklet edited by B. Eichengreen and R. Baldwin, What G20 leaders must do to stabilize our economy and fix the financial system, www.voxeu.org, 10 November 2008.

<sup>&</sup>lt;sup>6</sup> Traditional narrow banking is based on a personalized relationship with the bank clients. Under relationship banking

Would the fragmentation of financial conglomerates (and more effective regulation and supervision) bring some measurable economic losses in the form of less efficient allocation of resources or a less desirable aggregate volume of productive fixed-assets investment? Of that I have not seen any proof. Historical experience suggests that such a fragmentation would bring sizeable gains rather than losses. This is one of the lessons of the Golden Age of Capitalism (the years 1950-70). That lesson needs to be relearned now.

Fragmentation of financial conglomerates could also be important for safeguarding systemic stability – especially if associated with a downsizing (or splitting) of the largest financial firms. The fall of Lehman Brothers would not have had the global consequences it has had, if Lehman Brothers had been much smaller in size – and much more focused on a narrower array of activities.

Limiting the financial sector complexity to manageable proportions is only one fundamental recommendation that seems to be missing from many recent reform proposals. But there are others, also deserving consideration.

#### Controlling the asset price bubbles?

The speculative asset price bubbles are potentially destructive. The monetary authorities need to become asset-bubble averse. Unlike in the past, they cannot watch passively as the major bubbles build up and then collapse. It is hard to accept the opinion that it is impossible to identify such bubbles. The monetary authorities should try to prick such bubbles as soon as these are identified. However, I do not believe the central banks should do it by hiking their interest rates. Propelled by speculation, the asset prices tend to rise exponentially. Thus, the interest rates that could perhaps discourage borrowing for speculative purposes might have to be astronomic. Pushing the real economy into a severe recession (possibly combined with deflation) seems to be a rather incorrect method of counteracting the bubbles' build-up. A natural bursting of a bubble may be less damaging than its early termination achieved by excessive interest rate hikes. Instead of misusing interest rates, the monetary authorities should try to limit the speculative build-ups with *direct credit controls* imposed – when a need arises – on commercial banks.

## Some deeper structural determinants of the bubble economy

During the recent decades asset price bubbles seem to have become more frequent and more violent. In my opinion this tendency is related not only to the progressing deregulation and liberalization (going beyond the financial sector, as exemplified by the liberalization of capital flows and the abolition of the system of managed exchange rates). Perhaps equally important has been the (related) tendency for a stagnation of labour income, and the dynamic rise in non-labour income, primarily profits.7 Add to this the progressive cuts in the taxation of high incomes/profits. The result has been a ballooning size of private liquid wealth eager to engage in speculative activities (which promise extraordinary returns) rather than in the mundanely productive ones. Too much wealth (private as well as public<sup>8</sup>) chasing too few assets - this is a prescription for asset price inflation.

the bank officers do not have to run econometric models or purchase grades from the rating agencies to be able to assess their clients' creditworthiness. Nor are they supposed to engage in predatory lending that is certain to ruin the customers. Of course it is cheaper to originate-and-disposeof an asset-backed-security, without ever caring to assess the quality of the underlying assets. In this context 'cheaper' banking is simply 'low quality' banking.

<sup>&</sup>lt;sup>7</sup> For example, the hourly compensation of an average nonsupervisory worker in the USA has stagnated since the late 1970s. But the hourly productivity of that worker has risen by close to 80% in the meantime. The developments elsewhere (and in Germany in particular) have not been any better.

<sup>&</sup>lt;sup>8</sup> Unfortunately, among the big players are also the private managers of the pension funds, gambling with funds compulsorily contributed by the employees. (I am referring here to the so-called capital pillar of the pension systems, recklessly introduced in a number of OECD countries).

It would be naïve to expect meaningful reforms now. Some corrections (e.g. concerning regulation) are of course likely. Also, a review of the pension system reforms may be realistically anticipated. But only cosmetic changes may be expected as far as policies affecting income distribution are concerned. Undoing the changes introduced by the policies of the past thirty or so years would require unusual circumstances. The truly radical changes (comparable e.g. to the ones introduced in the 1930s under President Roosevelt's New Deal) could perhaps come only if the world economy plunged into a long and deep depression.

#### On supervision

- 1) Combining micro surveillance of individual institutions and macro prudential oversight: I suppose surveillance of individual the institutions should be left to the national offices currently in charge of surveillance. The national regulatory/surveillance bodies of individual countries should of course collaborate with one another, directly (e.g. exchanging information of important financial institutions with activities in many countries) or through the 3L3 Committees (or the successors to these Committees). The macro prudential oversight should be the responsibility of a separate international (EU) body (called e.g. European Systemic Risk Council) affiliated to e.g. the European Commission. (Rather than to the ECB, which should concentrate on doing its own job more efficiently.)
- (2) 3L3 Committees, cross-border colleges, etc.:
  It has been proposed (in the De Larosière Group Report) to transform the 3L3 Committees

into new European Authorities (that would replace the existing CEBS, CEIOPS and CESR). The benefits of renaming, or reorganizing, the existing bodies are not clear to me. Besides, a new institution is to be set up: the European System of Financial Supervisors, with largely undefined duties. All this smacks of another bureaucratic excess - especially if one (as myself) does not favour a centralized EU supervisory system (that could de facto require the subordination of the national supervisory systems). Supervision must remain national, as long as the fiscal costs of failures of financial firms are borne nationally. Should there be a common fiscal policy for the entire EU, with fiscal costs in question borne by the EU as a whole, things will be different. The idea of colleges supervising large EU cross-border financial firms seems also problematic to me. Has anyone determined how many such colleges would be needed? And what about foreign (to the EU) firms active in the EU?

- (3) The role of the ECB and national central banks in relation to the supervisory authorities: The ECB should not play any supervisory role. The relationship of the national central banks to their supervisory authorities should remain the national prerogative (lending of last resort is still national).
- (4) Prudential activities and consumer protection separated? Yes, provided the consumer protection agencies react aggressively to fraudulent practices (e.g. predatory lending).
- (5) *Linking EU supervision to international institutions:* This should proceed via 'close cooperation' of ESRC with FSF, BIS and IMF.

### STATISTICAL ANNEX

# Selected monthly data on the economic situation in Central and Eastern Europe

#### Conventional signs and abbreviations

used in the following section on monthly statistical data

	data not available
%	per cent
CMPY	change in % against corresponding month of previous year
CCPY	change in % against cumulated corresponding period of previous year
	(e.g., under the heading 'March': January-March of the current year against January-March
	of the preceding year)
3MMA	3-month moving average, change in % against previous year.
CPI	consumer price index
PMchange	in % against previous month
PPI	producer price index
p.a.	per annum
mn	million
bn	billion
BGN	Bulgarian lev
CZK	Czech koruna
EUR	euro, from 1 January 1999
EUR-SIT	Slovenia has introduced the euro from 1 January 2007
HRK	Croatian kuna
HUF	Hungarian forint
PLN	Polish zloty
RON	Romanian leu
RUB	Russian rouble
SKK	Slovak koruna
UAH	Ukrainian hryvnia
USD	US dollar
M0	currency outside banks / currency in circulation (ECB definition)
M1	M0 + demand deposits / narrow money (ECB definition)
M2	M1 + quasi-money / intermediate money (ECB definition)
M3	broad money

Sources of statistical data: National statistical offices and central banks; wiiw estimates.

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														(updated	end of Ma	r 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PRODUCTION																
Industry, total <sup>1)2)</sup>	real, CMPY	1.8	11.8	11.4	2.5	8.3	3.9	5.0	4.2	-5.4	3.3	-5.1	-11.7	-11.2	-13.3	
Industry, total <sup>1)2)</sup>	real, CCPY	8.4	11.8	11.6	8.2	8.2	7.3	6.9	6.5	4.9	4.7	3.7	2.2	1.0	-13.3	
Industry, total <sup>1)</sup>	real, 3MMA	6.5	7.9	8.2	7.2	4.8	5.7	4.4	1.3	0.7	-2.5	-4.6	-9.3			
LABOUR																
Employees total	th.persons	2306	2430	2437	2450	2477	2487	2502	2526	2516	2495	2481	2466	2436		
Employees in industry	th. persons	689	714	713	711	718	711	711	711	708	698	699	692	681		
Unemployment, end of period	th.persons	255.9	273.3	268.8	251.6	241.1	229.1	221.1	220.9	218.3	214.7	216.6	216.8	232.3	240.8	
Unemployment rate <sup>3)</sup>	. %	6.9	7.4	7.3	6.8	6.5	6.2	6.0	6.0	5.9	5.8	5.8	5.8	6.3	6.5	
Labour productivity, industry <sup>1)</sup>	CCPY	8.6	10.5	10.3	7.1	7.0	6.1	5.7	5.3	3.8	3.7	2.7	1.3	0.3		
Unit labour costs, exch.r. adj.(EUR)1)	CCPY	10.5	13.1	13.1	16.8	16.6	17.3	17.8	18.3	19.6	19.4	20.0	21.2	21.8		
WAGES, SALARIES																
Total economy gross	BGN	474	479	474	500	512	503	515	517	514	538	538	542	566		
Total economy, gross	real CMPY	8.6	13.0	10.2	10.6	117	64	9.5	76	10.4	11.8	12.8	10.9	10.8		
Total economy, gross	FLIR	242	245	24.2	256	262	257	263	264	263	275	275	277	289	·	
Industry gross	EUR	242	240	242	265	250	265	200	267	200	278	273	276	283		
	LOIX	277	244	241	200	200	200	210	201	210	210	2/ 1	210	200		
PRICES	DM				0.0	0.0	0.5	0.0	4 5	0.1		0.5	0.1	0.0	0.0	0.1
Consumer		10 5	1.4	1.1	14.0	0.8	15.0	-U.Z	1.5	11.0	1.1	10.0	-0.1	-0.2	0.8	0.1
Consumer	CMPT	12.5	12.5	13.2	14.2	14.0	15.0	10.3	14.5	11.2	11.0	10.9	9.1	10.0	7.1	6.0 C.C
Consumer	CUPY	0.4	12.5	12.8	13.3	13.0	13.9	14.1	14.2	13.8	13.5	13.2	12.8	12.3	1.1	C.0
Producer, in industry	PM	-2.0	0.9	1.0	2.5	0.2	1.5	1.4	2.3	-0.1	-0.5	-0.8	-3.2	-5.7	-0.3	•
Producer, in industry	CMPY	11.1	13.2	14.6	15.3	13.4	12.8	12.7	13.2	11.8	11.2	8.9	2.9	-1.0	2.2	
	CCPY	8.4	13.2	13.9	14.4	14.1	13.9	13./	13.6	13.3	13.1	12.7	11./	10.6	2.2	•
FOREIGN TRADE <sup>4)5)</sup>																
Exports total (fob), cumulated	EUR mn	13474	1115	2327	3649	5021	6342	7737	9253	10561	11964	13251	14327	15273	812	
Imports total (cif), cumulated	EUR mn	21877	1819	3723	5722	7973	10215	12656	15099	17146	19352	21736	23659	25327	1217	
Trade balance, cumulated	EUR mn	-8403	-704	-1396	-2074	-2953	-3873	-4920	-5846	-6584	-7388	-8485	-9331	-10054	-406	
Exports to EU-27 (fob), cumulated	EUR mn	8165	709	1473	2308	3106	3864	4672	5569	6317	7130	7952	8637	9170	570	
Imports from EU-27 (cif) <sup>0</sup> , cumulated	EUR mn	12796	945	2051	3240	4543	5772	7098	8394	9439	10741	12121	13309	14323	724	
Trade balance with EU-27, cumulated	EUR mn	-4631	-237	-578	-933	-1438	-1908	-2426	-2825	-3122	-3611	-4169	-4673	-5153	-155	
FOREIGN FINANCE																
Current account, cumulated <sup>7)</sup>	EUR mn	-7267	-807	-1465	-1980	-2778	-3567	-4465	-4954	-5245	-5846	-6919	-7767	-8634	-440	
EXCHANGE RATE																
BGN/USD, monthly average	nominal	1.343	1.329	1.326	1.259	1.241	1.257	1.258	1.240	1.307	1.362	1.470	1.536	1.460	1.479	1.530
BGN/EUR, monthly average	nominal	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956
USD/BGN, calculated with CPI <sup>8)</sup>	real, Jan04=100	132.9	135.5	137.0	144.1	146.6	144.3	142.6	146.0	139.3	135.2	127.3	124.1	131.7		
USD/BGN, calculated with PPI <sup>8)</sup>	real, Jan04=100	121.7	122.4	122.6	128.7	128.8	125.3	124.5	126.2	122.9	118.9	115.6	112.5	115.5		
EUR/BGN, calculated with CPI <sup>8)</sup>	real, Jan04=100	118.6	120.5	121.3	121.3	121.8	121.6	120.9	122.8	123.0	124.1	124.7	125.1	125.1	126.8	
EUR/BGN, calculated with PPI <sup>8)</sup>	real, Jan04=100	114.3	114.2	114.5	116.5	115.6	115.6	115.7	117.5	118.2	118.0	118.6	117.0	111.9		
DOMESTIC FINANCE																
Currency in circulation, end of period <sup>9)</sup>	BGN mn	7433	6952	6992	6990	7224	7245	7364	7576	7758	7745	7699	7583	8029	7433	
M1 end of period <sup>9)</sup>	BGN mn	20727	19882	19590	19848	20075	20338	20327	20832	20822	20525	19791	19245	19867	18645	
Broad money, end of period <sup>9</sup>	BGN mn	42062	41585	41684	42249	42833	43181	43965	45040	45716	45690	44603	43928	45778	45020	
Broad money, and of period	CMPY	31.2	30.9	29.8	29.0	28.3	27.3	24.4	23.8	21.0	19.5	15.0	10.9	8.8	8.3	
BNB base rate (D.a.) and of period	%	4.6	4 7	4.8	4.8	4.8	4.9	5.0	51	5.3	5.2	5.4	57	5.8	5.2	39
BNB base rate (p.a.) and of period <sup>10</sup>	real %	-5.8	-7.5	-86	-9.1	-7.5	-70	-6.9	-7.2	-5.9	-5.4	-3.2	27	6.8	2.9	0.0
	100a, 70	0.0	1.0	0.0	0.1	7.0	7.5	0.0	·	0.0	0.7	0.2	2.1	0.0	2.0	
Central dov budget balance	BGN mn	1120	378	673	1278	2102	2715	3256	3706	4104	44 98	4586	4152			
Sontra gov. Suger balance, ball.	DON IIII	1123	510	010	1210	2102	2113	02.00	57 00	-104	-++ 00	-100	7102	·	•	

#### B U L G A R I A: Selected monthly data on the economic situation 2007 to 2009

1) Enterprises with 10 and more persons.

2) From January 2009 according to NACE rev. 2.

3) Ratio of unemployed to the economically active.

4) Based on cumulated national currency and converted with the average exchange rate.

5) Cumulation starting January and ending December each year.

6) According to country of dispatch.

7) Based on national currency and converted with the exchange rate.

8) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

9) According to ECB methodology.

														(updated	end of Ma	ar 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
							.,									
PRODUCTION																
Industry, total <sup>1)</sup>	real. CMPY	5.9	8.4	11.6	-2.1	12.1	3.1	3.4	7.7	-4.4	9.0	-7.7	-17.4	-14.6	-23.3	
Industry, total <sup>1)</sup>	real, CCPY	9.0	8.4	10.0	5.6	7.2	6.3	5.8	6.1	4.9	5.3	3.9	1.7	0.4	-23.3	
Industry total	real 3MMA	7.8	87	5.6	6.8	4 1	6.0	4.6	2.3	4 2	-1.3	-6.1	-13.2	0	20.0	•
Construction total <sup>1)</sup>	real CMPY	5.6	0.8	117	0.5	1.3	-3.5	-3.0	7.2	-1.8	93	-12	-61	-26	-11 1	
		0.0	0.0	1 1.7	0.0	1.0	0.0	0.0	7.2	1.0	0.0	1.2	0.1	2.0		•
Employees in industry <sup>(1)2)</sup>	the norsons	1107	1192	1102	1196	1102	1190	1101	1197	1179	1169	1162	1151	11 21	062	
Linemployees in industry	til. persons	254.0	2015	1103	220.2	24.0.4	200 5	207.0	210.1	240.0	214.0	214.7	200.2	250.0	200 4	400.0
Unemployment, end of period	th. persons	354.9	304.5	355.0	330.3	310.1	302.5	297.9	310.1	312.3	3 14.0	311.7	320.3	352.3	398.1	420.0
	% 00DV	6.0	6.1	5.9	5.0	5.2	5.0	5.0	5.3	5.3	5.3	5.2	5.3	6.0	6.8	7.4
Labour productivity, industry	CCPY	8.1	5.0	6.7	3.0	4.9	4.3	3.9	4.4	3.5	4.1	3.1	1.0	0.2	•	•
Unit labour costs, exch.r. adj.(EUR)	CCPY	1.4	14.3	15.2	19.0	17.2	17.4	18.5	19.1	19.7	18.8	19.2	20.1	20.1		•
WAGES, SALARIES																
Industry, gross <sup>1/2)</sup>	CZK	22214	22396	21252	22459	22659	23239	22911	23220	21438	21850	22807	24843	24394	23020	
Industry, gross <sup>1/2)</sup>	real, CMPY	0.5	4.5	5.3	2.2	3.7	0.3	1.5	2.5	-2.1	2.0	-0.3	-1.9	6.0	-0.2	
Industry, gross <sup>1)2)</sup>	EUR	845	860	837	890	904	926	942	987	883	892	920	986	934	847	
PRICES																
Consumer	PM	0.5	3.0	0.3	-0.1	0.4	0.5	0.2	0.5	-0.1	-0.2	0.0	-0.5	-0.3	1.5	0.1
Consumer	CMPY	5.4	7.5	7.5	7.1	6.8	6.8	6.7	6.9	6.5	6.6	6.0	4.4	3.6	2.2	2.0
Consumer	CCPY	2.8	7.5	7.5	7.4	7.2	7.1	7.1	7.0	7.0	6.9	6.8	6.6	6.4	2.1	2.0
Producer, in industry <sup>1)</sup>	PM	-0.1	1.9	0.1	0.3	0.0	1.0	0.8	0.1	0.4	-0.1	-1.2	-1.9	-1.5	1.1	0.3
Producer, in industry <sup>1)</sup>	CMPY	5.2	6.0	5.6	5.3	4.7	5.2	5.4	5.3	5.7	5.5	3.9	12	-0.2	-0.8	-0.6
Producer, in industry <sup>1)</sup>	CCPY	4 0	6.0	5.8	57	54	54	54	54	54	54	53	49	4.5	-0.8	-0.7
FOREIGN TRADE <sup>5)6)</sup>			0.0	0.0	•	0.1	0.1	0.1	0.1	0.1	0.1	0.0	1.0		0.0	•
Exports total (fob) cumulated	ELID mp	90.22.1	9170	16756	25201	2/1/7	10175	51450	60102	67272	76420	95000	02040	09776	5057	
Imports total (cif) cumulated		09331	7700	16700	20201	34147	42475	1000E	67226	64 41 6	70459	00222	92 940	90770	5937	•
Trada balance sumulated	EUR IIII EUR mn	2169	1120	10/92	23007	32342	40400	40000	27330	2057	13030	22022	2170	900 19	107	
Finance barance, cumulated	EUR IIII	3 100	401	904	1334	0001	1909	2074	2000	2907	3309	3200	3170	2/ 30	127	
Exports to EU-27 (tob), cumulated	EUR mn	70 100	7040	14412	21/00	29300	30540	44108	20205	12050	400.04	12103	79345	64120	0100	•
Imports from EU-27 (CIT) 7, cumulated	EUR mn	61001	5102	10729	102/7	22334	2/080	33474	39205	43652	49084	55415	60436	04202	3544	•
I rade balance with EU-27, cumulated	EUR mn	15157	1938	3683	5423	7034	8861	10634	12343	13798	15648	17368	18909	1985/	1606	•
FOREIGN FINANCE																
Current account, cumulated <sup>37</sup>	EUR mn	-4009	468	911	1186	892	512	-1016	-1240	-1792	-2243	-3146	-3806	-4562		•
EXCHANGE RATE																
CZK/USD, monthly average	nominal	18.0	17.7	17.2	16.2	15.9	16.1	15.6	14.9	16.2	17.1	18.6	19.8	19.5	20.5	22.3
CZK/EUR, monthly average	nominal	26.3	26.1	25.4	25.2	25.1	25.1	24.3	23.5	24.3	24.5	24.8	25.2	26.1	27.2	28.5
USD/CZK, calculated with CPI®	real, Jan04=100	140.4	146.7	151.0	158.4	161.4	158.8	162.5	170.3	157.0	149.3	138.4	131.9	135.0		
USD/CZK, calculated with PPI <sup>8)</sup>	real, Jan04=100	130.9	134.2	136.8	141.3	142.0	137.5	140.1	143.5	136.2	131.1	125.8	121.8	126.1		
EUR/CZK, calculated with CPI®	real, Jan04=100	125.1	130.4	133.7	133.3	134.0	133.7	137.7	143.1	138.6	136.8	135.1	132.8	128.0	125.6	
EUR/CZK, calculated with PPI <sup>8)</sup>	real, Jan04=100	122.8	125.1	127.6	127.9	127.4	126.7	130.1	133.6	130.9	130.0	128.7	126.7	122.1		
DOMESTIC FINANCE																
Currency in circulation, end of period <sup>9)</sup>	CZK bn	324.1	321.0	323.5	322.5	326.4	327.7	326.9	326.9	329.3	331.7	364.7	368.1	365.5	362.8	
M1, end of period <sup>9)</sup>	CZK bn	1526.6	1556.5	1527.7	1558.7	1540.6	1564.3	1596.5	1608.3	1598.0	1629.7	1630.6	1650.1	1674.8	1665.6	
Broad money, end of period <sup>9)</sup>	CZK bn	2380.0	2386.4	2408.3	2406.5	2445.9	2475.5	2456.6	2510.1	2543.8	2541.6	2583.7	2621.9	2705.1	2713.7	
Broad money, end of period	CMPY	16.1	15.1	14.5	14.2	12.5	12.3	11.3	12.5	12.4	13.2	12.7	12.4	13.7	13.7	
Discount rate (p.a.) end of period	%	2.50	2.50	2,75	2.75	2.75	2.75	2,75	2.75	2.50	2.50	2.50	1,75	1.25	1.25	0.75
Discount rate (p.a.), end of period <sup>10)</sup>	real. %	-2.6	-3.3	-2.7	-2.5	-1.9	-2.3	-2.5	-2.4	-3.0	-2.9	-1.3	0.5	1.5	2.1	1.4
BUDGET			2.5							2.5	2.9					
Central dov huddet balance som	C7K mn	-66.300	0720	_4070	-13350	-28000	-38300	-5650	0280	5220	10/1.80	100/0	-6510	-200.02	/18.0	5300
contral gov.budgot butanoo,bun.		00000	51 50		10000	20000	00020	-0000	5200	0020	10-100	100-10	-0010	20000	702	0000

#### CZECH REPUBLIC: Selected monthly data on the economic situation 2007 to 2009

1) From January 2009 according to NACE rev. 2.

2) Enterprises employing 20 and more, from January 2009 50 and more persons.

3) Ratio of job applicants to the economically active (including women on maternity leave), calculated with disposable number of registered unemployment.

4) Calculation based on industrial sales index (at constant prices).

5) Based on cumulated national currency and converted with the average exchange rate.

6) Cumulation starting January and ending December each year.

7) According to country of origin.

8) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

9) According to ECB methodology.

H U N G A R Y: Selected monthly da	ata on the economic situation 2007 to 2009
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														(updated	l end of M	ar 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PRODUCTION																
Industry, total <sup>1)</sup>	real, CMPY	6.2	5.9	13.3	2.2	11.5	3.0	-0.5	0.3	-5.8	0.1	-7.0	-11.9	-19.6	-22.9	
Industry, total <sup>1)</sup>	real, CCPY	8.2	5.9	9.6	7.0	8.1	7.1	5.7	4.9	3.6	3.2	2.0	0.6	-1.1	-22.9	
Industry, total	real, 3MMA	5.9	8.5	7.0	8.8	5.5	4.5	0.9	-1.9	-1.7	-4.3	-6.4	-12.5			
Construction, total <sup>1)</sup>	real, CMPY	-21.3	-23.3	-16.7	-13.7	2.0	-7.2	-7.5	-11.4	-6.1	3.2	-2.7	2.7	5.5	-16.0	
LABOUR																
Employees total <sup>1)2)</sup>	th.persons	2696.9	2754.7	2767.4	2776.7	2797.4	2803.9	2783.6	2779.0	2767.0	2762.1	2751.6	2725.5	2682.1	2686.8	
Employees in industry <sup>1)2)</sup>	th.persons	737.7	755.0	758.1	756.6	757.7	755.6	752.5	755.1	751.5	746.4	737.9	728.3	713.7	678.2	
Unemployment, end of period	th.persons	445.0	468.1	476.6	462.4	442.8	424.5	415.6	421.1	425.0	423.9	424.6	446.0	477.4	509.1	
Unemployment rate	%	10.1	10.6	10.8	10.5	10.0	9.6	9.4	9.5	9.6	9.6	9.6	10.1	10.8	11.5	
Labour productivity, industry <sup>1)2)</sup>	CCPY	9.2	5.1	8.8	6.2	7.1	6.0	4.8	3.9	2.5	2.1	1.3	0.2	-1.5	-17.8	
Unit labour costs, exch.r. adj.(EUR) <sup>1)2)</sup>	CCPY	4.4	1.7	-2.5	-1.3	-2.3	-0.8	1.1	3.1	5.2	6.3	6.5	6.8	8.1	15.0	
WAGES, SALARIES																
Total economy, gross <sup>1)2)</sup>	HUF th	211.0	205.1	187.5	193.4	193.8	195.3	199.7	194.4	189.5	189.7	196.7	222.7	220.7	194.5	
Total economy, gross <sup>1)2)</sup>	real, CMPY	-2.5	-8.5	5.5	2.7	3.4	2.1	2.6	0.6	0.3	2.3	3.0	4.1	1.1	-8.1	
Total economy, gross <sup>1)2)</sup>	EUR	833	801	716	743	764	789	823	838	803	788	763	840	835	695	
Industry, gross <sup>1)2)</sup>	EUR	786	692	671	714	748	802	777	806	774	767	729	797	799	652	
PRICES																
Consumer	PM	0.4	1.0	1.1	0.6	0.3	1.1	0.1	0.1	-0.3	0.0	0.2	-0.2	-0.3	0.6	1.0
Consumer	CMPY	7.4	7.1	6.9	6.7	6.6	7.0	6.7	6.7	6.5	5.7	5.1	4.2	3.5	3.1	3.0
Consumer	CCPY	8.0	7.1	7.0	6.9	6.8	6.9	6.8	6.8	6.8	6.7	6.5	6.3	6.1	3.1	3.1
Producer, in industry <sup>1)</sup>	PM	0.4	3.0	0.7	0.2	-0.1	-1.1	-0.5	-0.7	0.7	1.2	3.4	0.1	-0.9	2.9	
Producer, in industry <sup>1)</sup>	CMPY	1.6	4.3	4.9	5.7	6.5	4.9	4.6	3.7	3.2	4.7	7.8	7.1	5.8	5.3	
Producer, in industry <sup>1)</sup>	CCPY	0.2	4.3	4.6	5.0	5.4	5.3	5.2	5.0	4.7	4.7	5.0	5.2	5.3	5.3	
FOREIGN TRADE <sup>3)4)</sup>																
Exports total (fob), cumulated	EUR mn	69015	6096	12431	18789	25404	31555	38041	44232	49600	56332	62642	68477	72779	4189	
Imports total (cif), cumulated	EUR mn	69135	6183	12347	18497	25071	31257	37714	44268	49728	56345	62737	68474	72874	4354	
Trade balance, cumulated	EUR mn	-119	-88	84	291	333	298	327	-36	-129	-13	-95	3	-95	-165	
Exports to EU-27 (fob), cumulated	EUR mn	54586	4760	9664	14505	19723	24516	29585	34421	38629	43928	48945	53637	56866	3519	
Imports from EU-27 (cif) <sup>5)</sup> , cumulated	EUR mn	48218	4082	8350	12642	17229	21427	25913	30403	34209	38779	43047	46698	49541	2917	
Trade balance with EU-27, cumulated	EUR mn	6368	678	1313	1863	2494	3089	3672	4018	4421	5150	5898	6939	7325	602	
FOREIGN FINANCE																
Current account. cumulated	EUR mn	-6510			-1636			-3582			-6074					
EXCHANGE RATE																
HUE/USD monthly average	nominal	173 9	174 1	1777	167.6	161.0	158 9	155.9	147 1	157 4	167.4	193.2	208.2	196.8	211 7	233.3
HUE/EUR monthly average	nominal	253 1	256.0	262.0	260.1	253.8	247.4	242.6	231.9	235.9	240.6	257.9	265.2	264.1	279.8	298.5
	real .lan04=100	130.5	131.0	129.5	136.9	142.0	144.4	145.8	154.0	144.0	135.5	118.8	112.2	1197	2.0.0	200.0
USD/HUF, calculated with PPI <sup>6</sup>	real .lan04=100	106.5	108.1	105.6	109.2	111.7	108.7	108.0	111 1	107.4	103.5	98.2	95.8	104.0		
EUR/HUF, calculated with CPI <sup>6)</sup>	real, Jan04=100	116.4	116.6	114.6	115.2	117.9	121.5	123.6	129.5	127.0	124.2	116.0	113.1	113.3	108.3	
EUR/HUF, calculated with PPI <sup>6)</sup>	real, Jan04=100	100.0	100.9	98.6	98.9	100.2	100.2	100.3	103.4	103.1	102.7	100.3	99.6	100.5		
DOMESTIC FINANCE	,															
	HUE bn	2067.9	2022.3	20387	2068.9	2070 1	2034.8	2018.8	20024	2023.8	20.08.6	21501	2190.6	2137.2	2115.0	
M1. end of period <sup>7)</sup>	HUF bn	6348.3	6203.5	6254.2	6416.6	6246.6	6118.0	6045.5	6259.5	6068.9	61 15.6	6236.9	6183.3	6158.3	5962.3	
Broad money, and of period 7	HUF hn	14196.1	14176.4	14654.5	14685.7	14681.5	14404.4	14183.2	14694.7	14553.7	14693.8	14892.0	15065.1	15421.2	15594.7	
Broad money, end of period	CMPY	11.0	12.2	16.2	15.2	15.5	12.2	9.1	11.8	8.7	8.5	7.8	8.7	86	10.0	
NBH base rate (p.a.),end of period	%	7.5	7.5	7.5	7,5	8.3	8.5	8,5	8.5	8,5	8,5	11.5	11.0	10.0	9.5	9.5
NBH base rate (p.a.),end of period <sup>8)</sup>	real, %	5.8	3.1	2.5	1.7	1.6	3.4	3.7	4.6	5.1	3.6	3.4	3.6	4.0	4.0	
BUDGET	,															
Central gov.budget balance.cum	HUF hn	-1427 8	-10.5	-2610	-547 9	-5516	-4754	-7830	-6774	-772 በ	-824.3	-828 0	-973.9	-8617	11 6	-262 0
Jenne generalgot bananoo,ban.													2.0.0			

1) From January 2009 according to NACE rev. 2.

2) Economic organizations employing more than 5 persons. Including employees with second or more jobs.

3) Based on cumulated national currency and converted with the average exchange rate.

4) Cumulation starting January and ending December each year.

5) According to country of dispatch.

6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

7) According to ECB methodology.

														(updated	end of Ma	ır 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PRODUCTION																
Industry total <sup>1)2)</sup>		6.4	10.6	15.0	1.0	15 1	2.4	7 2	5.0	2.7	67	0.1	0.2	4.4	14 0	
	real, CIVIP r	0.4	10.0	10.0	1.0	10.1	2.4	1.3	5.9	-3.7	0.7	-0.1	-9.2	-4.4	-14.8	•
Industry, total //	real, CCP r	9.0	10.0	12.0	0.0	10.2	0.0	6.4 5.0	0.0	0.5	0.5	5.6	4.3	3.0	-14.8	
		0.0 12.0	10.0	0.0	10.0	0.0	0.2	0.Z	3.2	5.U E 0	12.0	-0.9	-4.5	. 6.1	7 /	•
	real, CiviP f	13.0	0.7	20.0	10.2	23.0	10.0	20.0	10.9	0.0	13.2	10.5	5.5	0.1	7.4	•
			50.40	5074	5004			50.04	- 100		- 10 1	- 100		50.00	5074	50.50
	th. persons	5241	5348	53/1	5384	5389	5390	5391	5400	5399	5404	5406	5394	5360	53/4	5352
Employees in industry	th.persons	2595	2625	2634	2638	2639	2636	2631	2628	2624	2620	2619	2602	2576	2509	•
Unemployment, end of period	th.persons	1746.6	1813.4	1778.5	1702.2	1605.7	1525.6	1455.3	1422.9	1404.4	1376.6	1352.3	1398.5	1473.8	1634.4	•
Unemployment rate <sup>37</sup>	%	11.2	11.5	11.3	10.9	10.3	9.8	9.4	9.2	9.1	8.9	8.8	9.1	9.5	10.5	•
Labour productivity, industry	CCPY	5.9	6.6	8.8	4.8	6.4	5.0	4.9	4.7	3.5	3.7	3.1	1.9	1.5	-12.0	•
Unit labour costs, exch.r. adj.(EUR) <sup>(12)</sup>	CCPY	5.7	10.7	10.4	14.6	13.9	15.6	16.3	17.4	19.1	19.0	18.7	18.4	16.3	4.3	•
WAGES, SALARIES																
Total economy, gross <sup>1)2)</sup>	PLN	3246	2970	3033	3144	3138	3069	3215	3229	3165	3172	3242	3321	3420	3216	3196
Total economy, gross <sup>1)2)</sup>	real, CMPY	3.1	7.2	8.3	5.9	8.3	5.9	7.1	6.5	4.7	6.2	5.4	3.6	2.0	5.1	1.7
Total economy, gross <sup>1/2)</sup>	EUR	901	823	847	889	911	901	952	990	963	941	904	893	851	762	688
Industry, gross <sup>1)2)</sup>	EUR	910	823	858	892	909	896	966	993	958	939	892	918	856	750	
PRICES																
Consumer	PM	0.3	0.7	0.4	0.4	0.4	0.8	0.2	0.0	-0.4	0.3	0.4	0.2	-0.1	0.5	0.9
Consumer	CMPY	4.0	4.0	4.2	4.1	4.0	4.4	4.6	4.8	4.8	4.5	4.2	3.7	3.3	2.8	3.3
Consumer	CCPY	2.5	4.0	4.1	4.3	4.3	4.3	4.4	4.5	4.5	4.5	4.5	4.4	4.3	2.8	3.1
Producer, in industry <sup>2)</sup>	PM	-0.7	1.2	0.6	0.2	-0.1	0.8	0.4	-0.1	0.2	0.3	-0.1	-0.3	-0.5	1.7	
Producer, in industry <sup>2)</sup>	CMPY	2.3	2.9	3.2	2.9	2.3	2.7	2.6	2.1	2.0	2.3	2.6	2.4	2.6	3.0	
Producer, in industry <sup>2)</sup>	CCPY	2.2	2.9	3.1	3.0	2.8	2.8	2.8	2.7	2.6	2.6	2.6	2.6	2.6	3.0	
FOREIGN TRADE <sup>4)5)</sup>																
Exports total (fob) cumulated	FUR mn	102164	9273	19100	28737	39533	49085	59147	69420	78528	89281	99563	107846	113564	6647	
Imports total (cif) cumulated	EUR mn	120736	10784	22246	34036	46734	58323	70713	83311	94542	107363	119836	130292	138156	7542	
Trade balance cumulated	EUR mn	-18573	-1511	-3146	-5299	-7202	-9238	-11566	-13891	-16014	-18083	-20273	-22447	-24592	-894	
Exports to EU-27 (fob) cumulated	FUR mn	80592	7516	15213	22891	31284	38697	46517	54333	61083	69330	77258	83776	87967	5452	
Imports from EU-27 (cif) <sup>6)</sup> , cumulated	EUR mn	77486	67.52	14029	21386	29545	36925	44685	52530	58971	66788	74303	80510	84897	4321	
Trade balance with EU-27 cumulated	EUR mn	3106	765	1185	1505	1740	1772	1832	1803	2113	2542	2955	3266	3070	1132	
	201111	0.00						.002		20	20.2	2000	0200	0010		
		14600	1011	0500	4240	50.61	7606	00.05	10704	12004	12005	15007	17524	10454		
Current account, cumulated	EURIIII	-14009	-1211	-2000	-4340	-3001	-7000	-9020	-10704	- 12004	-13003	-15097	- 17 554	-19404	•	•
EXCHANGE RATE																
PLN/USD, monthly average	nominal	2.475	2.454	2.431	2.282	2.185	2.190	2.169	2.067	2.193	2.350	2.698	2.921	2.971	3.172	3.631
PLN/EUR, monthly average	nominal	3.604	3.608	3.582	3.537	3.444	3.407	3.376	3.260	3.288	3.371	3.586	3.721	4.018	4.218	4.644
USD/PLN, calculated with CPI'	real, Jan04=100	146.6	148.2	149.9	158.9	165.6	165.2	165.5	172.8	162.9	152.6	134.8	127.2	126.3	•	•
USD/PLN, calculated with PPI <sup>7</sup>	real, Jan04=100	130.8	131.8	132.6	137.6	141.3	138.0	137.1	140.4	136.3	129.2	119.0	115.1	116.5		•
EUR/PLN, calculated with CPI''	real, Jan04=100	130.8	131.9	132.8	133.9	137.5	139.2	140.2	145.3	143.5	140.1	132.2	128.1	118.7	114.3	•
EUR/PLN, calculated with PPI <sup>1</sup>	real, Jan04=100	122.9	123.1	123.8	124.8	126.7	127.3	127.3	130.7	130.8	128.4	122.2	119.7	111.9	•	•
DOMESTIC FINANCE																
Currency in circulation, end of period	PLN bn	77.2	75.5	76.1	77.8	80.0	80.7	81.9	82.7	83.6	82.5	90.7	90.1	90.7	88.6	
M1, end of period <sup>8)</sup>	PLN bn	335.3	330.4	328.7	338.0	327.1	343.8	353.7	352.9	353.0	355.0	345.5	344.9	349.7	341.3	
Broad money, end of period <sup>8)</sup>	PLN bn	561.7	568.6	578.0	581.8	594.3	600.1	606.6	616.1	628.6	630.5	635.7	648.3	666.3	668.9	
Broad money, end of period	CMPY	13.4	12.9	13.5	13.6	15.0	15.1	16.3	16.8	16.8	17.3	17.3	18.1	18.6	17.6	
Discount rate (p.a.),end of period	%	5.3	5.3	5.8	6.0	6.0	6.0	6.3	6.3	6.3	6.3	6.3	6.0	5.3	4.5	4.0
Discount rate (p.a.) ,end of period <sup>9</sup>	real, %	2.9	2.3	2.5	3.0	3.6	3.2	3.6	4.1	4.2	3.9	3.6	3.5	2.6	1.5	
BUDGET																
Central gov.budget balance, cum.	PLN mn	-16922	4407	-137	1803	554	-1877	-3381	-2745	-317	-4225	-11485	-14973	-24591	2914	

#### POLAND: Selected monthly data on the economic situation 2007 to 2009

1) Enterprises employing more than 9 persons.

2) From January 2009 according to NACE rev. 2.

3) Ratio of unemployed to the economically active.

4) Based on cumulated national currency and converted with the average exchange rate.

5) Cumulation starting January and ending December each year.

6) According to country of origin.

7) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

8) According to ECB methodology.

#### R O M A N I A: Selected monthly data on the economic situation 2007 to 2009

														(updated	l end of Ma	ır 2009)
		2007	20.08												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
						r.	.,									
PRODUCTION																
Industry, total <sup>1)2)</sup>	real, CMPY	2.6	6.0	7.6	3.0	13.4	2.8	4.0	5.1	-1.6	3.8	-2.8	-11.5	-18.0	-17.7	
Industry, total <sup>1)2)</sup>	real, CCPY	5.4	6.0	6.8	5.5	7.4	6.4	6.0	5.8	4.9	4.8	4.0	2.5	0.9	-17.7	
Industry, total <sup>1)</sup>	real, 3MMA	4.4	5.4	5.5	7.8	6.1	6.4	4.0	2.5	2.5	-0.2	-3.6	-10.4			
Construction, total <sup>2)</sup>	real, CCPY	33.6	29.7	31.5	32.0	32.2	32.7	32.9	32.3	31.8	31.4	29.9	26.9	26.0	6.0	
LABOUR																
Employees total <sup>1)2)</sup>	th.persons	4717.2	4765.2	4775.5	4803.6	4820.0	4829.2	4827.4	4833.2	4828.9	4834.6	4825.1	4791.2	4738.6	4736.7	
Employees in industry <sup>1)2)</sup>	th.persons	1547.2	1560.8	1554.1	1558.4	1552.9	1547.0	1539.4	1530.9	1517.1	1510.7	1497.3	1477.4	1449.2	1379.6	
Unemployment, end of period	th.persons	367.8	384.0	379.8	374.0	352.5	338.3	337.1	340.5	345.5	352.9	364.2	377.0	403.4	444.9	
Unemployment rate <sup>3)</sup>	. %	4.0	4.2	4.2	4.1	3.9	3.7	3.7	3.7	3.8	3.9	4.0	4.1	4.4	4.9	
Labour productivity, industry <sup>1)2)</sup>	CCPY	9.9	8.8	9.9	8.8	10.9	9.9	9.5	9.4	8.5	8.4	7.7	6.4	4.8	-8.6	
Unit labour costs, exch.r. adj.(EUR) <sup>1)2)</sup>	CCPY	16.8	3.0	1.6	-0.1	-0.4	0.5	0.8	0.8	1.5	2.2	2.5	3.6	4.9	11.8	
WAGES, SALARIES																
Total economy, gross <sup>1)2)</sup>	RON	1730.0	1637.0	1543.0	1623.0	1751.0	1704.0	1738.0	1769.0	1728.0	1751.0	1795.0	1844.0	2023.0	1839.0	
Total economy, gross <sup>1)2)</sup>	real CMPY	9.6	23.9	13.1	9.5	16.2	15.4	16.2	15.7	14 7	15.7	13.6	13.5	10.0	5.3	
Total economy, gross <sup>1)2)</sup>	EUR	490	443	422	436	481	466	475	494	490	483	479	488	517	434	
Industry, aross <sup>1)2)</sup>	EUR	440	374	381	394	449	428	436	464	456	460	437	434	472	382	
DRICES																
Consumer	PM	0.6	0.9	07	0.7	0.5	0.5	03	07	-0 1	0.4	11	03	0.2	12	0 9
Consumer	CMPY	6.6	7.3	8.0	8.6	8.6	8.5	8.6	9.0	8.0	7.3	74	6.7	6.3	6.7	6.8
Consumer	CCPY	4.8	7.3	7.6	8.0	8.1	8.2	8.3	8.4	8.3	82	81	8.0	7.8	6.7	6.8
Producer, in industry <sup>2)</sup>	PM	1.6	23	14	17	11	17	21	0.9	11	-0.1	-0.1	-2.5	-19	19	0.0
Producer, in industry <sup>2)</sup>	CMPY	10.5	13.0	14.7	15.6	15.5	16.8	19.4	20.3	20.1	18.6	16.7	11.7	7.9	7.0	
Producer in industry <sup>2)</sup>	CCPY	8 1	13.0	13.9	14.4	14.7	15.1	15.8	16.5	16.9	17.1	17.1	16.6	15.8	7.0	
	0011	0.1	10.0	10.0				10.0	10.0	10.0			10.0	10.0		
Exports total (fob) cumulated	ELIR mn	205/0	2525	5302	81/13	10015	13051	170.27	20270	2203.2	25806	201/1	3160/	33638	1012	
Imports total (cif), cumulated	EUR mn	51322	3976	8410	13241	18190	23059	28226	33442	37865	43287	48635	52899	56337	2489	•
Trade balance, cumulated	EUR mn	-21773	-1451	-3018	-5098	-7275	-9108	-11199	-13163	-14933	-17391	-19494	-21206	-227.09	-576	•
Exports to EU-27 (fob) cumulated	EUR mn	21269	1825	3870	5789	7719	9821	1 1943	14249	16064	18210	20517	22346	23671	1477	
Imports from EU-27 (cif) <sup>5</sup> , cumulated	EUR mn	36587	2761	5986	9377	12916	16217	19805	23325	26155	29799	33512	36497	38937	1818	
Trade balance with EU-27, cumulated	EUR mn	-15318	-936	-2116	-3588	-5197	-6397	-7863	-9075	-10091	-11588	-12995	-14151	-15266	-341	
															••••	
	ELIR mn	-16676	-1154	-2377	-3762	- 53.08	-7023	-8663	-10134	-10774	-12970	-14404	-15884	-16877	-525	
	Loitin	-10070	-1104	-2011	-0702	-0000	-1020	-0000	-10104	- 1077 4	-12570	-14404	-10004	-10077	-020	•
		0 405	0.540	0 477	0.007	0.040	0.050	0.054	0.000	0.057	0.504	0.04.0	0.000	0.000	2 200	2.2.40
RON/USD, monthly average	nominal	2.420	2.512	2.477	2.397	2.310	2.352	2.301	2.209	2.307	2.524	2.013	2.903	2.903	3.200	3.348
LISD/RON astructured with Op/6		3.529 155 1	3.093	3.000	3.722	3.043	3.039	3.000	3.579	3.527 150.6	1/0.0	3.740	122.2	3.9 15 127 9	4.233	4.204
	real, Jan04-100	160.0	150.5	100.2	101.9	100.7	100.3	109.0	100.0	160.0	145.0	157.2	147 5	157.0	•	•
FUR/RON, calculated with PPI <sup>-6</sup>	real Jan04-100	102.0	133.8	135.6	132.0	170.5	100.0	135.1	109.1	1/1 0	137/	13/1.0	147.5	102.9	122 /	•
ELLP/P ON calculated with CP1 <sup>6</sup>	real Jan04-100	153.0	1/18.2	150.0	1/0 6	152.0	152.5	153.0	155.0	162.6	158.5	155.4	153.3	147.2	122.4	
	1 cal, 3a1104-100	155.0	140.2	150.5	143.0	152.5	152.5	100.0	157.4	102.0	100.0	155.4	155.5	147.2	•	
	DOM	01017	00700	01454	01550	00000	00050	00500	00747	00000	00014	04457	05 000	05044	04040	
Mu and afforded <sup>7</sup>	RON mn	21317	20732	21154	21009	22209	22002	23598	23/4/	23996	23011	24457	25230	203 14	24943	•
Prood monovy and standard	RON IIII RON mp	1/7/09	1/9100	1/0762	02029	03//3	157605	90904	161209	90900	92071	162522	92401	92000	09720	•
Broad money, and of period		14/390 23 E	147001	14310Z	2/ 0	000101	207	10 14 90 20 0	2/1/	102301 20 /	21 1	102020	104727 01 0	174130	10 103	
Discount rate (n.e.) and of period		აა.5 7 ნ	30.4 7.5	20.0 20.0	04.0 0 N	20.9 20.9	39.1 Q F	0.9 0 0	04.4 0.2	30.4 10.0	31.1 10.2	20.1 10.2	21.U 10.2	10.2	19.4 10.3	10 3
Discount rate (p.a.) and of period	/0 real %	-27	_1.0	_5.0	-5 7	-5 A	-6.2	_R 1	_8.7	_8 /	_7 0	-5.5	_1 २	22	3 0	10.0
	10ai, /0	-2.1		-0.0	-0.7	-0.0	-0.5	-0.1	-0.7	-0.4	-1.0	-0.0	-1.0	2.2	5.0	
Control gov budget belance	DON	15 200	200	2024	4444	7774	5017	73 /7	50.70	6560	0070	0 10 0	12700			
Central gov. Dudget balance, cum.	RUNIM	-10369	-222	-2234	-4  4	-2114	-5247	-1341	-2018	-0002	-0372	-0493	-13/02		•	•

1) Enterprises with more than 3 employees.

2) From January 2009 according to NACE rev. 2.

3) Ratio of unemployed to economically active population as of December of previous year.

4) Cumulation starting January and ending December each year.

5) According to country of dispatch.

6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

7) According to ECB methodology.

8) Reference rate of RNB.

														(updated	end of Ma	ar 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PRODUCTION																
Industry, total <sup>1)</sup>	real, CMPY	5.2	8.8	13.9	-1.2	13.2	2.0	6.3	3.3	-1.1	5.8	0.0	-9.2	-15.1	-28.0	
Industry, total <sup>1)</sup>	real, CCPY	13.0	8.8	11.3	6.8	8.4	7.0	6.9	6.4	5.5	5.6	4.9	3.5	2.1	-28.0	
Industry, total	real, 3MMA	9.2	9.4	6.8	8.2	4.4	7.0	3.9	2.9	2.8	1.6	-1.3	-7.7			
Construction, total <sup>1)</sup>	real, CMPY	-1.2	13.8	13.0	7.6	17.9	9.2	6.5	9.1	7.1	17.2	16.5	14.2	12.7	-25.6	
	,								••••							-
EADOUR	the margane	E 0 / 1	E 0 E 0	600.7	606.0	601.6	500 F	E 00 7	506.0	E07 7	E02 7	50.0 7	E01 2	E71 G	E40.0	
Employment in industry	th. persons	000.0	040.4	000.7	000.9	001.0	000.0	000.0	004.0	000.0	000.7	092.7	005.0	5/ 1.0	049.U	
	tn. persons	239.9	242.4	237.0	229.6	223.3	222.3	222.9	224.8	222.3	228.7	228.2	235.2	248.6	269.5	289.6
Unemployment rate?	%	8.0	8.1	7.8	7.6	7.4	7.4	7.4	7.5	7.4	7.5	7.5	7.8	8.4	9.0	9.7
Labour productivity, industry"	CCPY	9.9	6.0	8.4	4.1	5.5	4.2	4.2	3.8	3.0	3.1	2.6	1.5	0.5	-22.8	
Unit labour costs, exch.r. adj.(EUR) <sup>1)</sup>	CCPY	6.7	5.4	4.1	8.4	6.9	8.6	10.1	11.2	12.2	12.8	13.2	13.6	14.7	49.3	
WAGES, SALARIES																
Industry, gross <sup>1)</sup>	EUR-SKK	751	692	682	707	705	743	753	739	706	723	737	824	780	714	
Industry, gross <sup>1)</sup>	real, CMPY	1.2	3.9	5.3	3.6	4.5	2.7	5.0	3.5	0.5	3.9	-0.7	-4.3	-0.5	0.2	
PRICES																
Consumer	PM	0.3	13	04	0.3	02	0.3	04	01	0.2	07	04	02	-0.2	04	0.1
Consumer	CMPV	2.4	20	4.0	4.2	4.2	4.6	4.6	1.9	5.0	5.4	5.1	10	1.1	2.4	2.1
Consumer		0.4 0.0	3.0	4.0	4.2	4.5	4.0	4.0	4.0	5.0	1.4	1.0	4.9	4.4	3.4	3.1
Deaduraa in industra <sup>1</sup>		2.0	3.0	0.9	4.0	4.1	4.2	4.2	4.5	4.4	4.5	4.0	4.0	4.0	J.4	5.5
Producer, in industry		0.0	1.0	Z.4	0.2	0.2	0.5	0.2	0.5	0.2	0.0	0.9	-0.2	-0.0	-1.2	•
Producer, in industry	CMPY	2.0	4.4	5. I	5.3	5.8	0.4	0.3	0.3	0.7	0.0	7.5	0.7	0.0	3.7	•
Producer, in industry '	CCPY	2.1	4.4	4.7	4.9	5.1	5.4	5.5	5.7	5.8	5.9	6.1	6.1	6.1	3.7	
FOREIGN TRADE <sup>3(4)</sup>																
Exports total (fob),cumulated	EUR mn	42065	3732	7712	11601	15757	19811	24107	28178	31863	36252	40889	44764	47710	2913	
Imports total (fob),cumulated	EUR mn	42699	3694	7665	11606	15976	19930	24292	28486	32106	36490	41062	45121	48398	3192	
Trade balance, cum ulated	EUR mn	-633	38	47	-5	-219	-118	-185	-308	-243	-238	-173	-357	-687	-280	
Exports to EU-27 (fob), cumulated	EUR mn	36458	3229	6610	9925	13462	16972	20528	23952	27034	30733	34726	38081	40542		
Imports from EU-27 (fob) <sup>5)</sup> , cumulated	EUR mn	29411	2433	5162	7798	10745	13460	16422	19292	21684	24679	27642	30286	32407		
Trade balance with EU-27, cumulated	EUR mn	7047	797	1448	2127	2717	3512	4106	4660	5349	6053	7084	7795	8135		
Current account cumulated <sup>3)</sup>	ELID mp	2023			30.8			-2017	-2514	2575	-2034	3230	3564	40.70		
	LOICHIN	-2323	•	•	-550	•	•	-2017	-23 14	-2373	-2304	-5250	-0.004	-4070	•	•
EXCHANGE RATE																
EUR-SKK/USD, monthly average	nominal	0.7595	0.7567	0.7467	0.6963	0.6821	0.6723	0.6477	0.6378	0.6704	0.6986	0.7561	0.7921	0.7520	0.7553	0.7822
EUR-SKK/EUR, monthly average	nominal	1.1075	1.1133	1.1001	1.0787	1.0751	1.0467	1.0065	1.0062	1.0071	1.0051	1.0109	1.0088	1.0026	1.0000	1.0000
USD/EUR-SKK, calculated with CPI®	real, Jan04=100	140.5	142.2	144.4	153.9	156.5	158.0	163.0	164.9	157.8	152.7	143.1	139.5	148.2	•	•
USD/EUR-SKK, calculated with PPI <sup>6)</sup>	real, Jan04=100	133.1	133.2	136.9	143.1	144.1	142.6	145.4	144.9	142.0	138.9	137.0	137.1	148.6		
EUR/EUR-SKK, calculated with CPI®	real, Jan04=100	125.3	126.5	128.0	129.8	130.0	133.1	138.4	138.7	138.9	139.8	139.5	140.5	141.4	143.2	
EUR/EUR-SKK, calculated with PPI <sup>6)</sup>	real, Jan04=100	125.0	124.4	127.9	129.9	129.2	131.5	135.3	134.9	136.1	137.6	139.9	142.6	144.7		
DOMESTIC FINANCE																
Currency in circulation, end of period <sup>7)</sup>	EUR-SKK mn	4704	4656	4592	4542	4521	4471	4386	4298	4244	4074	4122	3695	1600	6250	
M1 end of period <sup>7)</sup>	ELIR-SKK mn	20667	19577	19743	19602	19094	19642	19767	19277	18823	19149	19186	19102	19116	22625	
Broad money, end of period <sup>7)</sup>	EUR-SKK mn	35940	35927	36283	36001	36207	36781	36335	36677	36963	36708	36285	36674	37684	40359	•
Broad money, and of period	CMPY	13.0	12.6	12.2	10.6	10.2	9.00	6.6	9.6	8.2	6.4	5 1	61	4 9	12 3	•
Discount rate (n a ) and of pariod <sup>8)</sup>	0/	1 3	12.0	12.2	10.0	10.2	۵.0 ۸ ۹	 2	۵.0 ۸ ۹	0.2 م 2	 ∕1 २	3.1 3.8	2.2	J 25	2.0	20
Discount rate (p.a.) and stands <sup>89</sup>	/0 roal 0/	1.0	-0.1	J	-1.0	-1.5	-20	-10	-1.0	-7.J	J	.3 5	20	2.0	2.0 .1 G	2.0
Discourriate (p.a.) end or penda	ieai, 70	1.4	-0.1	-0.0	-1.0	-1.0	-2.0	-1.9	-1.9	-2.3	-2.4	-0.0	-5.2	-0.0	-1.0	•
BUDGET																
Central gov.budget balance, cum.	EUR-SKK mn	-781	433	52	114	258	-103	-137	-20	169	143	262	318	-704	100	-185

#### S L O V A K REPUBLIC: Selected monthly data on the economic situation 2007 to 2009

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

1) From January 2009 according to NACE rev. 2.

2) Ratio of disposable number of registered unemployment calculated to the economically active population as of previous year.

3) Based on cumulated national currency and converted with the average exchange rate.

4) Cumulation starting January and ending December each year.

5) According to country of origin.

6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

7) According to ECB methodology.

8) Corresponding to the 2-week limit rate of NBS. From January 2009 ECB official refinancing operation rate.

														(updated	end of Ma	ar 2009)
		2007	2008												2009	
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PRODUCTION																
Industry, total	real, CMPY	-0.7	0.5	7.9	-2.9	9.1	-0.8	2.4	-2.0	-6.9	5.5	-2.8	-13.9	-14.3	-17.4	
Industry, total '	real, CCPY	6.2	0.5	4.1	1.6	3.5	2.6	2.5	1.9	0.9	1.4	0.9	-0.5	-1.5	-17.4	
Industry, total	real, 3MMA	0.6	2.6	1.6	4.4	1.6	3.4	-0.1	-2.0	-0.9	-1.2	-3.9	-10.0			
Construction, total	real, CMPY	-11.8	38.7	41.3	21.2	23.1	13.6	14.0	18.6	10.4	20.8	10.7	-3.6	-4.1	-20.7	•
LABOUR																
Employment total	th.persons	864.4	867.3	870.9	874.2	876.6	879.6	882.0	879.9	879.8	885.3	888.1	886.9	880.3		
Employees in industry	th.persons	237.1	237.1	237.6	237.8	237.7	237.6	237.6	236.4	235.8	235.8	235.0	233.5	233.0		
Unemployment, end of period	th.persons	68.4	69.2	67.0	64.3	62.4	61.2	60.7	61.5	60.7	59.3	62.6	63.4	66.2	73.9	
Unemployment rate <sup>3)</sup>	%	7.3	7.4	7.1	6.9	6.6	6.5	6.4	6.5	6.5	6.3	6.6	6.7	7.0	7.8	
Labour productivity, industry	CCPY	5.4	0.0	3.7	1.2	3.1	2.3	2.3	1.8	0.9	1.5	1.1	-0.1	-1.0	•	
Unit labour costs, exch.r. adj.(EUR)	CCPY	1.2	6.2	4.3	7.0	5.7	6.5	6.5	7.3	8.0	7.5	7.8	8.1	8.9		
WAGES, SALARIES																
Total economy, gross	EUR	1343	1326	1326	1353	1354	1360	1365	1372	1405	1400	1424	1550	1458	1416	
Total economy, gross	real, CMPY	0.8	-0.3	2.6	1.1	2.8	1.2	1.7	1.7	3.6	5.4	4.1	0.8	6.3	5.1	
Industry, gross	EUR	1207	1211	1181	1221	1219	1219	1231	1242	1238	1244	1284	1394	1276		
PRICES																
Consumer	PM	0.4	0.1	0.0	1.3	0.8	1.1	0.9	0.0	-0.6	0.0	0.0	-0.7	-0.6	-0.4	0.5
Consumer	CMPY	5.6	6.4	6.5	6.9	6.5	6.4	7.0	6.9	6.0	5.5	4.9	3.1	2.1	1.6	2.1
Consumer	CCPY	3.6	6.4	6.4	6.6	6.6	6.5	6.6	6.7	6.6	6.5	6.3	6.0	5.7	1.6	1.8
Producer, in industry <sup>1)</sup>	PM	0.1	0.8	1.3	0.5	0.7	0.4	0.5	0.4	0.0	-0.1	-0.3	-0.7	-0.4	-0.4	
Producer, in industry <sup>1)</sup>	CMPY	6.3	6.5	5.6	5.7	6.1	6.3	6.5	6.9	7.0	5.7	4.8	3.6	3.1	2.3	
Producer, in industry <sup>1)</sup>	CCPY	5.4	6.5	6.0	5.9	6.0	6.0	6.1	6.2	6.3	6.3	6.1	5.9	5.6	2.3	
FOREIGN TRADE <sup>4)5)</sup>																
Exports total (fob), cumulated	EUR mn	19406	1599	3290	5027	6871	8566	10313	12098	13415	15283	17099	18604	19793	1183	
Imports total (cif), cumulated	EUR mn	21508	1829	3697	5643	7698	9729	11747	13849	15505	17615	19753	21485	23002	1252	
Trade balance total, cumulated	EUR mn	-2102	-230	-407	-616	-827	-1163	-1434	-1752	-2089	-2331	-2655	-2881	-3209	-70	
Exports to EU-27 (fob), cumulated	EUR mn	13707	1196	2389	3595	4871	6062	7279	8485	9349	10600	11834	12874	13658	866	
Imports from EU-27 (cif) <sup>6)</sup> , cumulated	EUR mn	16976	1415	2907	4441	6076	7685	9233	10833	12117	13783	15443	16769	17897	951	
Trade balance with EU-27, cumulated	EUR mn	-3269	-218	-518	-846	-1205	-1622	-1954	-2348	-2769	-3183	-3609	-3894	-4239	-85	
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-1455	-215	-396	-512	-630	-865	-992	-1187	-1332	-1448	-1682	-1833	-2180		
EXCHANGE RATE <sup>7)</sup>																
FUR/USD monthly average <sup>8)</sup>	nominal	0.6863	0 6794	0.6781	0 6440	0 6349	0 6428	0 64 25	0 6341	0.6678	0 6959	0 7 50 6	0 7854	0 7435	0 7 5 5 3	0 7822
FUR/FUR monthly average	nominal	1 0000	1 0000	1 0000	1 0 0 0 0	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0 0 0 0	1 0000	1 0000	1 00 00
USD/ELIR calculated with CPI <sup>9)</sup>	real .lan04=100	114 9	115.6	115.6	122.2	124.2	123.0	122.9	123.9	117.5	112.8	105.7	102.2	108.5	1.0000	1.0000
USD/FUR calculated with PPI <sup>9)</sup>	real .lan04=100	109.1	109.6	110.0	113.4	114.0	109.8	108.2	107.5	104.9	101.9	99.7	99.3	108.2		
EUR/EUR, calculated with CPI <sup>9)</sup>	real, Jan04=100	102.4	102.8	102.3	102.8	103.2	103.7	104.2	104.3	103.7	103.4	103.4	103.0	102.6	102.8	
EUR/EUR, calculated with PPI <sup>9)</sup>	real .lan04=100	102.4	102.3	102.8	102 7	102.3	101.3	100.5	100 1	100.8	101.0	102.1	103.4	104.4		-
	roal, cano r roo			.02.0		102.0		100.0				102.1				
	ELID mn	260.8	25.80	2601	2627	26/18	2681	26.87	2734	2737	2731	2808	2032	20.07	3045	
M1 and of pariod <sup>10</sup>	EUR IIII	2090	2000	6962	2027	2040	7120	72/1	7020	6096	7101	2090	6000	2331	6714	
Broad money and effected <sup>10</sup>	EURIIII	16595	16557	16/26	16/56	16500	16385	16580	16604	16660	17058	16836	17/72	170.01	18030	
Broad money, and of period		5 0	7/	10420 7 F	10400 A F	70	20	10009	1 500 74	0009	2000	0000	0.0	17221 Q /	8 0	•
Discount rate (n a ) and of period	0/vir <sup>2</sup> f	 ⊿ ∩∩	1.4 1.00	7.5 ≰∩∩	0.0 ≰ ∩∩	7.0 ⊿ ∩∩	3.9 ≰∩∩	J.Z ∕I.∩∩	1.0	0.7 125	2.0 1 25	3.75	3.25	2.50	200	2 00
Discount rate (p.a.) and of period <sup>12</sup>	/0 real %	-2.00	-23	-15	-1.6	-20	-20	-22	-25	-26	-1.4	_10	_0.2.0	2.00 _0.6	-0.3	2.00
	10ai, 70	-2.2	-2.0	-1.5	-1.0	-2.0	-2.2	-2.3	-2.3	-2.0	-1.4	-1.0	-0.0	-0.0	-0.0	•
General dov budget belance		04	104	64	10	045	110	104	200	44.9	400	470	205	100		
Serielar gov.budget balance, am.		91	104	04	-19	213	112	194	290	44.3	422	413	323	-100	•	•

#### S L O V E N I A: Selected monthly data on the economic situation 2007 to 2009

1) From January 2009 according to NACE rev. 2.

2) Effective working hours, construction put in place of enterprises with 20 and more persons employed.

3) Ratio of unemployed to the economically active.

4) Based on cumulated national currency and converted with the average exchange rate.

5) Cumulation starting January and ending December each year.

6) According to country of dispatch.

7) Slovenia has introduced the Euro from 1 January 2007.

8) Reference rate from ECB.

9) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

10) According to ECB methodology.

11) From January 2007 ECB official refinancing operation rate.

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