



# Monthly Report

The Vienna Institute for International Economic Studies (WIIW)

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## Agriculture in transition countries: robust expansion backed by investment and bumper harvests

BY ZDENEK LUKAS

### Abstract

Thanks to good harvests and rising investment, agricultural production increased in all CEECs<sup>1</sup> as well as in Russia and Ukraine in 2001. The growth of production coincided with a slowdown in the development of international agro-trade, triggered by contagious animal diseases and increasing non-tariff trade barriers. The 2001 aggregate deficit in CEEC-6 agro-trade was close to EUR 0.6 billion and thus more or less equal to that in 2000. With an import surplus of more than USD 7 billion,

*Russia reconfirmed its role as one of the world's biggest net importers of agro-food products. Ukraine traditionally records a surplus in agro-food trade, and the 2001 result was especially favourable. The agricultural policy of the CEECs is characterized by efforts to adjust to the rules of the EU's common agricultural policy. Nevertheless, progress in the accession negotiations is slower than originally scheduled. Agriculture is one of the reasons for the delay.*

### Czech Republic

Agricultural reforms coupled with shrinking support have resulted in a significant reduction of the importance of farming, to the lowest level (in terms of share in GDP) among the CEECs and comparable to that in EU countries. The Czech administration has followed a quite liberal agricultural policy aimed at low support and rising market orientation. Price regulations (concerning mostly bread-wheat and milk), trade barriers and export subsidies (largely for dairies, beef and barley malt) remain important elements of market price support. Direct payments to farmers have

<sup>1</sup> CEECs: the Central and East European countries. In the following we distinguish between the CEEC-4, denoting the Czech Republic, Hungary, Poland and Slovakia, and the CEEC-6, comprising the CEEC-4 plus Bulgaria and Romania. See also Tables 1 and 2 and Figure 1.

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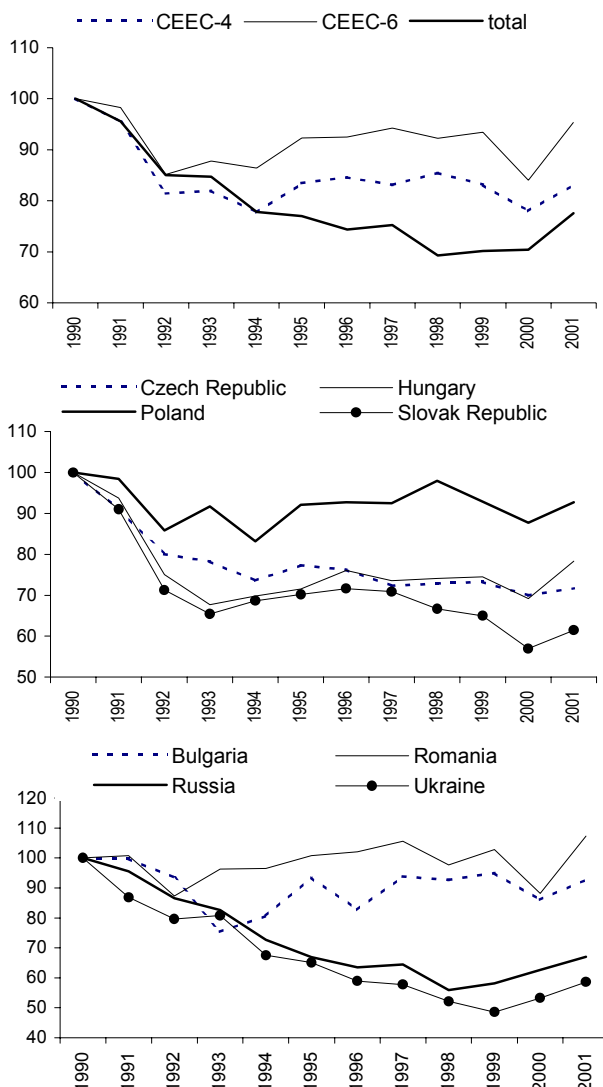
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Figure 1

## Development of gross agricultural production

1990 = 100



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aimed at area and headage payments focused on landscape maintenance, organic agriculture and extensive cattle breeding. Credit subsidies, guarantees on loans and fuel tax refunds are additional support measures. With the EU accession in mind, in 2001 the Czech authorities fixed new quotas for national sugar production (those quotas had been introduced in 2000) and launched a system of milk production quotas – which both, however, have been higher than those suggested by the European Commission. After massive cuts (by two thirds) at the beginning of the 1990s, total support for farming measured in terms

of PSE<sup>2</sup> rose marginally in 2001, by 1 percentage point to 17%. Total support for farming accounts for 1.2% of GDP, just below the OECD average.

Following a 7% drop in 2000, the grain harvest was up 14% and reached 7.3 million tonnes in 2001, the highest result in the past decade. As domestic grain consumption is around 6.4 million t, the grain surplus (mostly wheat) was exported or stockpiled. Altogether, total crop production rose by 5.2% in 2001. Following a rise in livestock inventories in 2000, stocks of cattle, pigs and laying-hens dropped last year. Only stocks of sheep and poultry increased. Near-stagnation in milk output was accompanied by slightly rising cow productivity. Production of eggs increased slightly especially in the first half of 2001, while that of cattle and pigs was nearly stagnant. Backed by higher poultry stocks, the output of poultry meat rose by 7%. In sum, the expanded crop production coupled with nearly stagnating animal output resulted in 2.5% growth of total agricultural production in 2001. Considering also the rising labour productivity, the economic situation in farming has somewhat improved.

The 2001 subsidies for agro-food exports, though doubling, remained within the limits of the WTO commitments. With both agro-food exports and imports rising by some 6% in 2001, the traditional agro-food deficit rose marginally, from EUR 494 million in 2000 to EUR 571 million last year.

While the Czech Republic has followed a path of liberalization and market orientation, with a low degree of support and protection of farming, it has recently also introduced a number of market measures that are going in the opposite direction. In the course of the ongoing preparations for

<sup>2</sup> Producer Support Estimate (PSE) is defined as the ratio of direct and indirect subsidies to the value of gross farm receipts valued at farm gate prices. The Producer Support Estimate excludes some measures formerly included in the General Services category (such as research and development, marketing and promotion) which was part of the earlier measurement, Producer Subsidy Equivalent.

Table 1

**Selected indicators in agriculture**

average annual rate of change in %

	Agricultural land in 1000 ha	Gross agricultural production						Crop production		Animal production	
		2000	1986-90 (p.a.)	1991-95 (p.a.)	1996-01 (p.a.)	1997	1998	1999	2000	2001 <sup>1)</sup>	2001 <sup>1)</sup>
Czech Republic	4280	0.4	-5.0	-1.2	-5.1	0.7	0.6	-4.5	2.5	5.2	0.3
Hungary	5854	-0.4	-6.5	1.5	-3.3	0.7	0.5	-7.1	13.2	24.6	0.9
Poland	18413	0.6	-1.6	0.1	-0.2	5.9	-5.2	-5.6	5.7	8.6	2.5
Slovak Republic	2441	0.3	-6.8	-2.2	-1.0	-5.9	-2.5	-12.3	7.8	17.6	1.4
<b>CEEC-4</b>	<b>30988</b>	<b>0.3</b>	<b>-3.6</b>	<b>-0.1</b>	<b>-1.8</b>	<b>2.9</b>	<b>-2.7</b>	<b>-6.2</b>	<b>6.6</b>	<b>11.6</b>	<b>1.7</b>
Bulgaria	6252	0.1	-1.3	-0.1	13.4	-1.3	2.5	-9.5	8 <sup>2)</sup>	19 <sup>2)</sup>	2 <sup>2)</sup>
Romania	14857	-3.5	0.2	1.1	3.4	-7.5	5.2	-14.2	21.7	35.2	-0.3
<b>CEEC-6</b>	<b>52097</b>	<b>-1.4</b>	<b>-1.7</b>	<b>0.4</b>	<b>1.9</b>	<b>-2.1</b>	<b>1.3</b>	<b>-10.1</b>	<b>13.5</b>	<b>22.9</b>	<b>0.8</b>
Russia	197000	1.3	-7.7	0.0	1.5	-13.2	4.1	7.7	6.8	10.3	2.6
Ukraine	41827	0.8	-8.2	-1.7	-1.9	-9.8	-6.9	9.8	9.9	13.2	5.2
<b>Whole region</b>	<b>290924</b>	<b>0.1</b>	<b>-5.2</b>	<b>-0.1</b>	<b>1.2</b>	<b>-8.0</b>	<b>1.4</b>	<b>0.4</b>	<b>10.1</b>	<b>16.1</b>	<b>2.2</b>

Notes: 1) Preliminary. - 2) WIIW estimate.

Source: WIIW Database incorporating national statistics

EU membership, this dichotomy will be present also in the coming years.

### Hungary

Agricultural policy in Hungary has been characterized by low and declining levels of support, in anticipation of the country's entry into the EU. Market regulation, export subsidies and area-based direct payments (though on considerably lower levels than in the EU) are still important. Market regulation policies rely mainly on a system of institutional prices, coupled with public procurements, maintenance of buffer-stocks and export subsidies. No substantial change occurred in agricultural policy last year. Guaranteed prices are applied to bread-wheat, feed maize, beef, veal, pork and milk. Area payments are granted to farms and are regressive in favour of the smallest farms.

The bulk of agricultural support is provided by payments based on input use. Altogether,

agricultural support measured in terms of PSE dropped by 8 percentage points to 12% in 2001. Total support to agriculture dropped from 2.5% to 1.4% of GDP, which is close to the OECD average. In November 2001 the government finalized an agricultural support package for 2002 which envisages a similar support level as in 2001.

Thanks to favourable weather, crop production was up 24.6% in 2001. The grain harvest rose by as much as 49% and reached 14.9 million tonnes. Harvests of sugar beet, sunflower seeds, wine grapes and vegetables also registered substantial increases. Only the production of fruits and potatoes declined last year. As grain production exceeded domestic consumption, the grain surplus, especially of maize, expanded substantially and domestic market prices fell. Excess supply also occurred in the grape and wine sector. Inventories of poultry were on the rise, while those of cattle and pigs were slightly falling. The shift in consumers'

## AGRICULTURE

Table 2

	<b>Grain production</b>										
	million tonnes										
	1986-90 annual average	1991-95	1996-01	1995	1996	1997	1998	1999	2000	2001 <sup>1)</sup>	2001/2000 change in %
Czech Republic	7.8	6.9	6.8	6.6	6.6	7.0	6.7	6.9	6.5	7.3	14
Hungary	14.3	11.5	12.5	11.3	11.3	14.1	13.0	11.4	10.0	14.9	49
Poland	26.1	23.8	25.5	25.9	25.3	25.4	27.2	25.8	22.3	27.0	21
Slovak Republic	4.0	3.6	3.1	3.5	3.3	3.7	3.5	2.8	2.2	3.0	37
<b>CEEC-4</b>	<b>52.2</b>	<b>45.7</b>	<b>47.9</b>	<b>47.3</b>	<b>46.6</b>	<b>50.2</b>	<b>50.3</b>	<b>46.9</b>	<b>41.0</b>	<b>52.3</b>	<b>27</b>
Bulgaria	8.4	6.9	4.9	6.6	3.4	6.2	5.4	5.2	4.4	5.1	17
Romania	18.3	17.0	16.4	19.9	14.2	22.1	15.5	17.0	10.5	18.9	80
<b>CEEC-6</b>	<b>78.9</b>	<b>69.6</b>	<b>69.2</b>	<b>73.7</b>	<b>64.2</b>	<b>78.5</b>	<b>71.2</b>	<b>69.1</b>	<b>55.9</b>	<b>76.2</b>	<b>36</b>
Russia	104.3	87.9	68.5	63.4	69.3	88.6	47.9	54.7	65.5	85.0	30
Ukraine	47.4	38.5	28.7	33.9	24.6	35.5	26.5	24.6	24.5	39.7	62

Note: 1) Preliminary.

Source: WIIW Database incorporating national statistics.

choice from beef and pork to poultry made poultry breeding the winner of the meat sector: poultry population and procurement rose by 12% and 14% respectively. Despite the decreasing number of cows, milk output expanded somewhat, indicating rising cow productivity. Backed by rising stocks of laying hens, egg production was up 4%. As the expansion in the poultry sector was not able to offset the decline in beef and pork production, total animal output rose by a mere 0.9%. Altogether, gross agricultural production increased by 13.2% in 2001.

For many years Hungary has registered an average annual surplus in agricultural trade of over EUR 1 billion. As a result of the considerable output expansion, agro-food exports rose by 19% to EUR 2.6 billion in 2001, in particular due to stepped-up exports of grain, dairies and eggs. Agro-food imports rose by 15%; here the increase was mainly due to higher imports of processed meat and sugar products. As a result, the agro-food trade surplus rose by EUR 260 million and

reached EUR 1.5 billion. Until the end of the 1980s the Former Soviet Union (FSU) used to be the most important outlet for Hungarian agro-food exports. In the 1990s a shift towards the EU occurred, which now accounts for half of Hungary's agro-food exports. Meanwhile the recently increasing EU non-tariff barriers have negatively affected Hungarian exports. As a result, Hungary is again paying more attention to the Russian markets.

The agricultural trade agreement between Hungary and the EU (in effect since 1 July 2000) targets at further liberalization of agro-food trade in line with the so-called 'double zero' rule. Last year negotiations continued and focused on the gradual removal of export subsidies and import duties. In this context Hungary agreed to phase out subsidies on pork and poultry exports to the EU by the time of joining the EU. Furthermore, Hungary is gradually harmonizing its agricultural institutions and phytosanitary and veterinary standards with those in the EU.

Table 3

**Evaluation of support, 1992-2001**

Percentage share of PSE

	1992	1997	1998	1999	2000	2001 <sup>1)</sup>
Czech Republic	32	6	23	24	16	17
Hungary	18	6	19	23	20	12
Poland	1	12	22	19	7	10
Slovakia	30	11	31	25	23	11
Bulgaria	-45	-10	2	-2	1	3
Romania	8	3	30	20	19	24
Russia	-94	30	19	4	8	10

Note: 1) Provisional.

Source: OECD (2002).

**Poland**

Poland's traditional small-scale farming is responsible for the country's weak competitiveness in agro-food trade. Polish farming remains labour-intensive with about 26% of the total labour force producing just some 4% of GDP. As long as there are not enough jobs in other sectors of the economy, over-employment in agriculture is a cheap alternative to state-financed programmes for jobless people. That holds true especially at a time of rising unemployment, now at a rate of about 18%. Many farmers are running part-time agriculture. Others that own holding plots are just formally registered as farmers which entitles them to receive a pension.

The main agricultural policy instruments are market price support and input subsidies. Production quotas, price supplements, intervention purchases, border tariffs and export subsidies are tools for regulating some agricultural prices. Poland has gradually harmonized its agricultural policy institutions and instruments with those of the EU. Government expenditures have shifted from input subsidies and market price support to more general support of the sector, indicating greater market orientation. Total support for farming measured in PSE remains low; in 2001 it rose by 3 percentage points to 10%. Total support to farming was 1.2% of GDP in the 1999-2001 period, compared to 2.7% in the 1991-1993 period. After some improvement in

2000, the income situation of farmers deteriorated again last year.

After two years of decline, total agricultural production was up 5.7% in 2001. The grain harvest, having fallen in 2000, expanded by 21% to 27 million tonnes in 2001 as a result of higher yields per hectare. This has caused difficulties in finding outlets for Poland's grain surpluses. The harvest of rapeseed (mainly destined for export) rose by 12% to 1.1 million t and that of fruits by over 40%. Other important crop varieties registered a production drop of over 10%. Altogether, plant production increased by 8.6% in 2001. Based on declining unit feed costs and rising pork prices, pig stocks are on the rise. Stocks of cows decreased while milk output stagnated, indicating rising milk yields per cow. Stocks of other cattle were also falling but those of poultry increased strongly. Poultry production expanded by 19% and alleviated the fall in the production of pork (-3.3%) and of beef (-11.5%). Egg production increased as well. Total animal production rose by 2.5% in the year 2001.

In view of the preparations for Poland's entry into the EU, mutual trade barriers for several agro-food products were reduced at the beginning of 2001. They relate to some three quarters of bilateral agro-food trade. Trade with less sensitive items has been fully liberalized while sensitive products are subject to import quotas coupled with zero tariff rates. The import quotas are to be expanded by

10% per year. Negotiations on further liberalization are already under way. In 2001 both export subsidies and import restrictions were in line with Poland's WTO commitments. Polish tariffs on agro-food products are relatively high compared to other advanced candidate countries. In 2001 Poland's agro-food exports rose by 16% to EUR 3.2 billion; imports increased by just 10% to EUR 3.5 billion. The deficit in agro-food trade thus dropped by EUR 0.1 billion to EUR 0.3 billion. Considering the appreciating domestic currency, that is a remarkable outcome, the best one since 1997. The EU has remained Poland's most important trading partner, followed by the Former Soviet Union (FSU) and the CEFTA. While trade with the EU displays permanent deficits, trade with the FSU is in surplus.

### Slovakia

In the course of the agricultural reforms in the 1990s the legal and economic status of farms changed substantially while their structure has largely remained the same: it is still dominated by large farms which, however, have somewhat diminished in size. The economic reforms have also resulted in a declining importance of agriculture. It now has a share of 4% of GDP and 5% of total employment.

As other candidate countries applying for EU membership, Slovakia has been gradually introducing an agricultural policy similar to the CAP, with market regulation, trade restrictions and direct payments. Since 2001 the government sets minimum guaranteed prices for wheat, potatoes, beef and pork, linked to production quotas. Production quotas have regulated the sugar market. Area payments relate to grains, potatoes and vegetables. Overall payments to the animal sector (headage and output payments) have been rising; the bulk is spent on milk produced within set quotas. The largest portion of direct payments in 2001 went to farmers in less favourable areas and to payments based on inputs. The customs tariffs in agro-food trade applied by Slovakia are fully in line with the WTO. After massive cuts at the beginning of the 1990s, total support for farming in terms of PSE dropped considerably, by another

12 percentage points, to 11% in 2001. That reflects in particular the liberal foreign trade policy coupled with diminishing market price support. Total support for farming accounts for just 0.9% of GDP, i.e. 0.4 percentage points below the OECD average. Nevertheless, mainly thanks to higher receipts for plant production, Slovak farmers reported a pre-tax profit of SKK 0.6 billion in 2001, as compared to losses of SKK 0.6 billion the year before.

Following deep declines in the two preceding years, the grain harvest soared by 37% to 3 million tonnes in 2001, despite slightly contracting sown area. Also sugar beet and oilseeds registered two-digit output growth. Only the production of potatoes contracted on account of diminished area under cultivation. Total crop production was up 17.6% in 2001. Inventories of pigs were falling, while those of sheep expanded. Total cattle stocks have hardly changed although the number of cows increased slightly (0.5%). Milk output rose by 4.4%, thus cow productivity has again improved. Based on rich and cheaper fodder, grain poultry stocks were on the rise after the 2001 harvest. The production of eggs rose by 5.8%. In line with expanding stocks, output of poultry increased. Still total meat output declined because of the strong decline in beef production due to the rising number of BSE cases (nearly ten in 2001).

Slovakia's agro-food trade deficit rose by EUR 94 million to EUR 466 million in 2001 especially on account of expanding imports. In addition, imports were driven by the real appreciation of the Slovak koruna against the euro in the last quarter of 2001. The EU is the country's most important trading partner, followed by the Czech Republic. With import tariffs applied for agro-food products of less than 5% on a weighted average, Slovakia has followed a quite liberal agricultural trade policy. Furthermore, in accordance with the WTO, Slovakia has further reduced import tariffs. The current Slovak government intends to close the pre-accession negotiations with the EU on the agriculture chapter still in its term of office (until end-September 2002). However, this seems to be an unrealistic target

considering the present inhomogeneous position of the EU.

### **Bulgaria**

Bulgarian farming, though gradually diminishing in the course of the past several years, still accounts for 13% of GDP and thus holds an important position in the economy. As in other transition countries with a significant farming sector, agricultural employment in Bulgaria is rising along with growing unemployment in other sectors of the economy. Workers laid off from non-agricultural sectors are moving to the countryside where they run subsistence farming. Currently agriculture accounts for about 25% of total employment. The significance of agriculture in the economy is also justified by the permanent (though shrinking) agro-food surpluses. The declining presence of Bulgarian agricultural items on the international agro-food markets is, among other things, the result of the country's liberal agricultural policy. Bulgaria has stepwise removed price controls and now follows the most liberal non-interventionist agricultural policy among the CEECs. Consequently, domestic prices of agricultural goods are converging to those on the world market and fluctuating in line with them. At the same time the exportable surpluses have diminished because Bulgarian farmers have to cope with heavily subsidized agro-food surpluses on the world markets stemming from other countries. Agricultural support in terms of PSE rose by 2 percentage points to 3% in 2001, largely due to higher support of maize and cattle. The commodity supported most is sugar. At 0.5% of GDP, Bulgaria's total support to agriculture is the lowest among the CEECs.

Thanks to 19% growth of crop output agriculture stabilized somewhat in 2001, following two years of deep decline. The grain harvest rose by 17% to 5.1 million tonnes, mostly because of expanding output of barley and wheat due to enlarged sown area. Even higher production growth was registered by crops used in textile manufacturing (54%), sugar beet (49%) and tobacco (26%). The

output of oilseeds dropped by 3%, mainly reflecting a drop in area under cultivation. The decline in grape production (-6%) may ease the massive surplus of Bulgarian wine for which it is hard to find new international outlets anyway. Following a drop prior to the 2001 harvest, livestock inventories strongly recovered in the second half of 2001. The very good fodder basis backed by falling feed grain prices resulted in a strong expansion of the number of pigs (around 14%) and, more moderately, of the number of cattle, sheep and goats. Supported by slightly rising cow stocks, milk production grew by 4%. The production of eggs also rose by some 4%, that of poultry stagnated. The strongest expansion in meat production was reported for sheep and goats (about 5%), which, however, had also registered the strongest declines in stocks and output during the last decade. Altogether, total animal output rose by an estimated 2% in 2001. Together with the strong expansion in crop output, total agricultural production increased by an estimated 8% in 2001.

Agro-food exports rose by 4% to EUR 511 million in 2001 mostly supported by increased exports of barley and sunflowers. The largest decline in export value was registered for tobacco, beverages and spirits. Still the export composition remains dominated by these three product groups as well as by cereals. With imports expanding by around 18% to EUR 424 million, Bulgaria's net agro-food trade surplus diminished to EUR 87 million, the lowest level in the past decade. This outcome is mainly reflecting the production plunge in the period 1999-2001, which could not be compensated by the modest growth of agricultural output in 2001. In addition, the very liberal foreign trade policy opens the doors to agro-food imports, while there are no export subsidies that might promote agro-food exports.

### **Romania**

Agriculture is still one of the most important sectors in the Romanian economy. It has as a share of about 40% in total employment and 14% in GDP, thus labour productivity in farming is far below the

average for the entire economy. As in other less developed countries, the over-employment in agriculture alleviates unemployment in the non-agricultural sectors. In 2001 total agricultural production expanded by 22%, mainly thanks to an excellent grain harvest: after a disastrous result in 2000, sown area was increased and grain output soared by 80% to 18.9 million tonnes. The fall in sugar beet production in the three previous years came to a halt: in 2001 25% growth was registered. Only the output of sunflower seeds was falling, by 44%, especially due to shrinking sown area and lower hectare yields. For the first time in the past decade the use of fertilizers increased, but it still amounts to just about one third of the pre-reform level. The increased application of fertilizers together with favourable weather resulted in higher hectare yields for most crop varieties. Livestock inventories continued to decrease in 2001. However, driven by rising demand for meat, the pace of the decline has decelerated, in particular in the private sector. A slight rise in meat production coupled with a modest drop in milk output resulted in stagnating animal production.

Small-scale family farms own over two thirds of total agricultural land. The strong fragmentation of ownership and cultivation has impeded the recovery of farming. In addition the lack of transparent and clear legislation hindered the privatization of the remaining state-run agricultural companies for many years. The new law approved in May 2001 is aimed at accelerating this procedure especially by way of sale of shares and assets in state farms to Romanian citizens and apparently also to foreigners. As many of these farms are heavily indebted, the government is considering to write off the debts of the state-run agricultural enterprises before slating them for privatization.

The administration supports farmers especially by market price support (accounting for 87% of total support), direct payments, preferential credits and support based on inputs use. In 2001 price support focused on milk, bread-wheat used for domestic consumption and maize. Since March 2001 direct

payments per hectare have replaced the old voucher-for-inputs scheme. The level of support measured in terms of PSE rose by 5 percentage points to 24% in 2001, largely due to increased support to the livestock sector. In addition, writing off debts is just another form of subsidization. After a slight drop in 2000, the total support to agriculture, expressed as a share of GDP, rose by 2 percentage points to 6% in 2001, the highest level by far among the CEECs.

In the wake of the excellent grain harvest in 2001 Romania has to cope with grain surpluses. The government reacted by applying non-tariff barriers such as phytosanitary controls for imported wheat and wheat flour. After a slight drop in 2000, agro-food exports rose by 35% to EUR 422 million in 2001; the expansion was mainly based on increased exports of vegetables and grain. The bulk of exports (70%) went to the OECD countries. Imports rose by 33% to EUR 1.3 billion, in particular because of higher imports of live animals, meat and cereals. (The latter took place before the 2001 harvest.) Altogether, the agro-food trade deficit expanded to a record level (since 1990) of EUR 863 million in 2001, compared to EUR 652 million in 2000.

The new government (in office since the end of 2000) has inherited the structural problems in farming. Backed by the new law of May 2001, it will make efforts to cope with the excessive fragmentation of ownership as well as with the privatization of the remaining state-run agricultural companies. Considering the budgetary constraints, one of the key challenges in agriculture includes real access to the funds of the Special Accession Programme for Agriculture and Rural Development (SAPARD). The annual SAPARD allocation for Romania amounts to EUR 153 million (prices of 2000). That accounts for 29% of the total SAPARD budget provided by the EU, or the second highest share following Poland's with 32%. In order to activate that money, each country first has to prepare detailed individual projects which are to be approved by the EU, and finally each applicant has to co-finance the scheme with 25%.



## Russia

After a plunge in 1998 agriculture recorded growth for three subsequent years – mostly supported by the general recovery of the Russian economy, and in the year 2001 also by a bumper grain harvest. The latter was the result of favourable weather conditions as well as of rising investment into grain cultivation, which is the most profitable agricultural sub-sector. Grain output soared by 30% to 85 million tonnes in 2001. The production of sunflower seeds dropped by one third to below 3 million t, mostly due to reduced sown area. Sunflower cultivation, very profitable earlier on, was reduced when the administration doubled duties for sunflower seeds exports to 20% in order to protect domestic sunflower processors who have to cope with under-utilized capacities. Output of sugar beet and of potatoes rose by around 3%, that of vegetables by over 5%. Altogether crop production increased by 10.3% in 2001.

After a decade of continuous decline the animal sector stabilized in 2000. Last year it benefited from an excellent fodder supply and falling feed grain prices. While the number of cattle continued to decline in 2001, poultry and pig inventories were rising. That resulted in moderate production growth mostly of poultry meat and eggs. The importance of large-scale corporations, operating mainly in the animal sector, is growing whereas that of household subsistence farms (earlier on important makers of animal products) is gradually shrinking as non-farming incomes rise and deliveries to the domestic food market improve. The larger commercially oriented family farms are mostly engaged in the profitable and less capital-intensive crop production. The modest output growth in the animal sector coupled with the strong expansion of crop production resulted in 6.8% growth of total agricultural output in 2001.

The strong agrarian-communist opposition in the State Duma obstructed the liberalization of the agricultural land market for many years. Finally a new Land Code was approved in 2001. Above all, the new law has legitimized private land ownership, agricultural land transaction and land tenure. As a

result farm restructuring in favour of larger commercially oriented farms has accelerated because land tenure rules are getting more transparent. The possibility to use agricultural land as collateral now facilitates raising urgently needed agricultural credits. Supported by the new programme of preferential subsidized credits, in 2001 bank credits for farming increased strongly. At the same time the government approved new regulations for farm debt restructuring in the federal budget and extra-budgetary funds. Furthermore farmers benefit from tax concessions such as lower unified agricultural tax. The level of support measured in terms of PSE remained low, though rising by 2 percentage points to 10% in 2001.

Despite the gradual appreciation of the rouble, the currency has remained some 20% weaker in real terms compared to the pre-crisis period. In spite of this, agro-food imports are increasing strongly. At the same time, also the output of the domestic food industry is expanding continuously because the demand for foodstuffs is strongly growing due to rising real incomes of the population. As Russian farmers are not able to cover the growing demand for some agricultural raw products, food processors are forced to import part of their inputs. Besides, the price gap between domestic and world market prices especially for agricultural raw materials is narrowing.

Agro-food imports expanded by one quarter to over USD 8.7 billion and exports rose by 10% to about USD 1.4 billion. The total agro-food deficit increased and again exceeded the mark of USD 7 billion in 2001 (after USD 5.7 billion in 2000, the lowest level in the past decade). Russia remains one of the world's largest importers, in particular of raw sugar and raw meat. Sugar imports were stepped up and totalled some 5 million tonnes in 2001, of which Brazil supplied one third. Raw meat imports (mainly poultry) increased above-average and accounted for some 35% of total agro-food imports. Meanwhile the imports of processed meat are shrinking as the domestic meat processing industry is expanding. While the OECD countries have delivered mostly

meat and fish, the Former Soviet Union countries have dominated in Russia's imports of vegetable oil, alcohol and beverages. Despite the relatively strongly expanding grain exports, their absolute importance for the agro-food trade balance remains marginal. In addition, the underdeveloped handling capacity at Russia's ports has hindered grain sales on the international markets.

### Ukraine

The general recovery of the Ukrainian economy has apparently been the main driving force behind the improvement in agriculture. Supported by the progress in land reform (important for using agricultural land as collateral) as well as by the preferential credit scheme provided by the government, investment into farming has risen considerably. At the same time, the demand for domestic foodstuffs has increased; living standards are rising and the domestic currency (UAH) still remains depreciated in real terms as compared to the end of the 1990s. Consequently the domestic food industry continued to expand strongly.

The favourable weather conditions in 2001 together with enlarged sown area resulted in a bumper grain harvest of 39.7 million tonnes, i.e. 62% more than in 2000. The domestic grain supply fully met internal demand and generated a huge grain surplus of which about 8 million t was exported. Russia, an important buyer of Ukrainian grain earlier on, recorded itself large surpluses after the 2001 harvest. Thus Ukraine redirected its grain exports, mostly to the Middle and Far East and to South Korea. Some portion of the grain export, about 500,000 t, went to the EU, particularly to France, Italy and Spain. The output of sugar beet was up 17% as the area under cultivation was expanded, after having been considerably reduced in the second half of the 1990s. Recently Ukraine's traditional sugar buyers from Russia and Kazakhstan have preferred sugar deliveries from much lower-cost producers (e.g. from Brazil) and very cheap subsidized sugar deliveries from western countries. As a result of lower yields and diminished area, the production of sunflower seeds dropped by 29%. Nevertheless Ukraine has

remained one of Europe's leading producers on sunflower seeds.

For the first time in over ten years, the number of livestock is on the rise because of growing domestic demand for animal products. Thanks to a large and cheaper fodder supply, pig stocks increased by 7% in 2001, sheep and goat inventories by 5%, and the number of poultry even expanded by 10%. The declining trend in cattle stocks (down 62% since 1990) has nearly terminated. The production of milk and eggs registered the highest growth rates, 6% and 10% respectively. Because animal stocks for slaughter increased only in the second half of 2001, meat production in the whole year 2001 declined slightly. Altogether, total agricultural output expanded by 9.9% in 2001.

While a growing number of farms were making profits, total profits of the sector dropped from USD 486 million in 2000 to USD 355 million in 2001. Sunflower and grain producers reported the highest profits while the meat sector (without poultry), despite some improvement, remained in the red. The agricultural market infrastructure and services are still deeply underdeveloped, and the state joint-stock company accounting for the main portion of grain trade (*Khlib Ukrainy*) is facing a crisis. Though the government is making efforts to promote the development of these networks, things are changing very slowly. Farmers still have to look for scarce agricultural inputs by barter trade, especially energy-for-sugar/grain.

In 2001 the Land Code was finally amended, after years of obstruction by the orthodox communist wing in the parliament. Thus the legal base ensuring land property rights has improved. The key point consists in the final legalization of land property rights by issuing land titles to the owners. As a result land titling has accelerated, though there are still considerable administrative obstacles to its implementation. Despite the worldwide prevailing shift from price support towards cheaper direct income support, the Ukrainian government is trying to assure farmers' income mainly by

guaranteed prices for agricultural output. The new preferential credit system for farmers resulted in commercial credits more than tripling in 2001 compared to 2000, and in a significant increase in agricultural investment. Total budgetary expenditures for farming in 2001 amounted to USD 230 million in 2001, i.e. just 0.6% of the GDP. For the current year the government envisages spending some USD 350 million.

Agro-food exports soared by nearly 40% to USD 2.1 billion in 2001, mainly based on the expansion of exports of grain and dairies. Imports rose less dynamically and amounted to USD 1.2 billion. Ukraine's agro-food surplus expanded to USD 0.8 billion in 2001, compared to USD 0.5 billion in 2000. As accession to the WTO remains one of the priorities of Ukrainian foreign trade policy, the government has taken several steps towards a gradual harmonization of the legislative and tariff framework, mutual access to goods and services markets and the reform of agricultural support.

## Average effective tax rates in CEE and EU countries

BY MARKUS LEIBRECHT<sup>\*</sup> & ROMAN RÖMISCH

### Abstract

*The average effective tax rates (AETR) on consumption, labour income, capital income and corporate income in 11 EU and 9 CEE countries are reported. It turns out that AETRs for labour, capital and corporate income in the CEE countries still tend to be lower than in the EU. AETRs for consumption are generally higher in the CEE countries.*

### Introduction

The actual burden of taxation levied on any individual macroeconomic item such as labour income, profits, capital income or consumption can be reflected only inaccurately by the nominal (or statutory) tax rates. One of the reasons for this is the fact that in reality the tax systems tend to be quite complex. For example, there are usually several VAT and excise tax rates applicable to various consumption items. From the macroeconomic point of view the relevant measure of the consumption tax burden relates the total tax revenue collected through consumption taxes to the actual volume of consumption.

While the concept of average effective tax rate levied on consumption is relatively simple and does not involve very difficult data requirements, things are not that easy when it comes to effective rates of taxation of labour and capital incomes and of corporate income. Conceptual issues are much more intricate here, and the data requirements much more demanding.

In this contribution the average effective tax rates (AETR) on consumption, labour income, capital income and corporate income in 11 EU and 9 CEE

countries are reported. The method used for calculation of AETR was proposed in a seminal article by Mendoza, Razin and Tesar (MRT later on – see Annex).<sup>1</sup> In their article MRT use 'real-life' data from OECD National Accounts and Revenue Statistics for calculating the effective or implicit tax burden levied upon production factors (labour, capital) and various national accounts items (e.g. consumption). Thus effective tax rates are average measures as they are ratios between a variable which represents the effective tax paid (numerator) and a variable which represents the effective tax base (denominator) out of which the tax payments were made.

### The data base

The estimates of AETR (Tables 1 and 2) were calculated from data taken primarily from the IMF's Government Finance Statistics (GFS), not from the OECD sources. This choice was made because in contrast to the OECD revenue statistics, the GFS contain data for virtually every country and hence also for those CEE countries that are not members of the OECD. Nevertheless a considerable drawback of the GFS is that for certain countries it does not cover data on a general government level, which is required for our work, but it only shows data on the central government level, thus leaving out e.g. local government revenues. To the authors' understanding this was less of a problem for the CEE countries, as data coverage was to our requirements; nevertheless it caused problems with certain EU member countries (e.g. Finland and Greece). In these cases one had to rely on the information of the OECD revenue statistics.<sup>2</sup>

<sup>1</sup> Mendoza, Enrique G., Assaf Razin and Linda L. Tesar (1994), 'Effective tax rates in macroeconomics: Cross-country estimates of tax rates on factor incomes and consumption', *Journal of Monetary Economics*, 34, pp. 297-323.

<sup>2</sup> We had to mix together two different tax revenue data bases, since both the IMF GFS and the OECD revenue statistics show data on cash basis, so the margin of error was assumed to be small. Additionally cross checking the data for countries for which we had both data – from the IMF and the OECD – showed that although there were deviations, these were small and at an acceptable level.

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Although the compilation of a workable tax data set was therefore not without difficulties, the problems were small compared to the troubles encountered in compiling a useable data set for national accounts data.

Because the statistical offices in the individual countries differ in the stage of revision of the national accounts data on the new ESA95 basis, certain countries were not able to supply the required data on the new basis. As a consequence our data set consists partly of data according to the old ESA79 data and partly of data according to the new basis. Also, due to the change of the national accounting system the data reported in the most common databases (OECD National Accounts – Detailed Tables, New Cronos) changed in an unfavourable way for us, because certain time series were no longer made available. This was especially the case for the series 'property income of households'<sup>3</sup>, which is important for the calculation of every AETR except the consumption tax.

The second difficulty in using national accounts data was data availability *per se*. Thus even prior to the introduction of the new ESA95 some countries did not publish (at least not in the sources available to us) certain national accounts time series (mostly 'property income of households', again) that were important for the calculation of our AETRs.

The third difficulty was caused by the two previous ones. Because data coverage in our available databases was either heterogeneous or not complete we tried – in order to fill our data set – to contact all the statistical offices in the EU and also those of the Slovak Republic and Slovenia; for the other CEE countries the WIIW provided an excellent data source. The answers we got were very heterogeneous again. Thus whereas certain countries such as Finland, Ireland, the UK, Germany, Spain, the Netherlands, Sweden, Denmark and even, with a delay of five months, Greece were very helpful through either sending

the appropriate data directly or indicating where they could be found, other countries such as Portugal, Italy, and especially Austria, simply were not able to deliver useful data.

As a consequence the coverage of average effective tax rates of EU and CEE countries is not as comprehensive as desired, but nevertheless it allowed the compilation of data for the most important EU countries and almost all CEE countries. The countries for which we could calculate AETRs are: Belgium, Finland, Germany, Greece, Ireland, Netherlands, Spain, Sweden, United Kingdom, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia.

#### Average effective tax rates

Table 1 shows averaged effective tax rates (AETRs) for 11 EU and 9 CEE countries. Taking into account the data restrictions, we reported in this table AETRs calculated with SNA79 data as well as AETRs calculated with SNA93 / ESA95 data, in order to control for the effects on corporate and capital income AETRs. All AETRs have been calculated by using the formulae specified above.

Looking first at AETRs for labour and capital income in Table 1 it becomes immediately apparent that despite the heterogeneity of the EU (which includes both high- and low-tax countries), the CEE countries still tend to have AETRs below the lower EU extreme or at least tax rates that could be found at the lower end of the EU tax rates.

Obviously this is the case for taxes on capital where the AETRs for almost all CEE countries are well below the tax rates of the EU countries, with the exception of Greece. As far as labour AETRs are concerned, the CEE tax rates do not have such an extreme position; but nevertheless it can be seen from the table that those CEE tax rates are generally at the lower end of the range of EU tax rates.

<sup>3</sup> This has been changed to 'interest, dividends and investment receipts'.

## TAX RATES

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In consumption taxes things are almost the complete opposite as compared to the other taxes, in so far as the CEE tax rates take a position at the higher end of the EU consumption AETRs.

After all, the impression gained from the comparison of AETRs between EU and CEE countries is hardly surprising, since it is a reflection of the fact that as a rule statutory (nominal) tax rates are higher in the CEE countries than in the EU.

Nevertheless, it might have been expected that the differences in AETRs on consumption are higher, since value added and excise taxes are much more important in the CEE countries than in the EU. The absence of major differences in AETRs on consumption for some CEE countries compared to EU countries (such as for Poland, Latvia and Lithuania) might be explained by the fact that the (VAT and excise) tax bases are still too narrow and tax collection still might pose some problems. This is especially true for Bulgaria and Romania, which are in the peculiar position to have much lower AETRs on consumption than any other EU and CEE country.

Implications for the public discussion about tax competition can be derived from the differences in corporate income AETRs between the EU and the CEE countries. Concentrating on the ESA95 data in Table 1 shows that for many CEE countries the AETRs on corporate income are to be found at the lower end of the EU AETRs. Nevertheless, what is also striking is that the differences between EU and CEE AETRs are not that pronounced and that there are large divergences between the CEE AETRs on corporate income.

This may seem puzzling as one might expect that the CEE countries compete with each other for foreign capital, which should lead – *ceteris paribus* – to a harmonization of AETRs.

However, by looking at the time trend of the AETRs on corporate income in Table 2, the puzzle resolves in so far as a clear downward tendency in each country's AETRs is visible, leading also to a homogeneous AETR structure across the CEE countries.<sup>4</sup>

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<sup>4</sup> The one exception in this respect is Poland, which in 1998 still shows a higher AETR on corporate income. However, since 1998 the Polish corporate tax rate has been gradually lowered (from 38% to 24%). The current Polish AETR on corporate income may well have approached a 'normal' CEE level.

Table 1

Average effective tax rates (AETRs)

	Consumption		Labour		Capital		Corporate	
	SNA79	SNA93/ ESA95	SNA79	SNA93/ ESA95	SNA79	SNA93/ ESA95	SNA79	SNA93/ ESA95
Belgium	21.7 <sup>1</sup>	23.9 <sup>6</sup>	47.1 <sup>1</sup>	46.9 <sup>6</sup>	35.5 <sup>1</sup>	26.9 <sup>6</sup>	27.6 <sup>1</sup>	15.1 <sup>6</sup>
Denmark	36.3 <sup>3</sup>		40.9 <sup>3</sup>		33.4 <sup>3</sup>		10.9 <sup>3</sup>	
Finland	27.1 <sup>1</sup>	27.6 <sup>3</sup>	52.5 <sup>1</sup>	51.9 <sup>3</sup>	37.4 <sup>1</sup>	39.8 <sup>3</sup>	20.4 <sup>1</sup>	23.4 <sup>3</sup>
France	18.9 <sup>1</sup>		45.7 <sup>1</sup>		17.0 <sup>1</sup>		21.3 <sup>1</sup>	
Germany	19.2 <sup>1</sup>	18.1 <sup>3</sup>	42.6 <sup>1</sup>	40.9 <sup>3</sup>	25.1 <sup>1</sup>	26.4 <sup>3</sup>		17.6 <sup>3</sup>
Greece		18.8 <sup>5</sup>		37.8 <sup>5</sup>		10.1 <sup>5</sup>		14.2 <sup>5</sup>
Ireland	22.4 <sup>2</sup>	23.2 <sup>5</sup>	24.9 <sup>2</sup>	24.9 <sup>5</sup>	20.1 <sup>2</sup>	20.1 <sup>5</sup>	17.2 <sup>2</sup>	15.7 <sup>5</sup>
Netherlands	17.7 <sup>1</sup>	17.6 <sup>2</sup>	52.2 <sup>1</sup>	50.0 <sup>2</sup>	31.0 <sup>1</sup>	21.3 <sup>2</sup>	24.1 <sup>1</sup>	14.7 <sup>2</sup>
Spain	14.6 <sup>1</sup>	15.3 <sup>5</sup>	34.0 <sup>1</sup>	33.0 <sup>5</sup>	20.7 <sup>1</sup>	17.4 <sup>5</sup>	19.2 <sup>1</sup>	11.1 <sup>5</sup>
Sweden	24.4 <sup>1</sup>	23.0 <sup>3</sup>	49.6 <sup>1</sup>	51.3 <sup>3</sup>	46.6 <sup>1</sup>	46.1 <sup>3</sup>	31.6 <sup>1</sup>	27.6 <sup>3</sup>
United Kingdom	15.6 <sup>1</sup>	16.5 <sup>3</sup>	24.9 <sup>1</sup>	24.6 <sup>3</sup>	45.8 <sup>1</sup>	31.9 <sup>3</sup>	38.4 <sup>1</sup>	16.2 <sup>3</sup>
Bulgaria		13.2 <sup>2</sup>		28.4 <sup>2</sup>		16.0 <sup>2</sup>		28.1 <sup>2</sup>
Czech Republic		21.6 <sup>3</sup>		37.8 <sup>3</sup>		15.8 <sup>3</sup>		17.0 <sup>3</sup>
Estonia		23.1 <sup>3</sup>		33.5 <sup>3</sup>		15.7 <sup>3</sup>		14.4 <sup>3</sup>
Hungary		24.5 <sup>3</sup>		36.2 <sup>3</sup>		12.5 <sup>3</sup>		9.5 <sup>3</sup>
Latvia		20.5 <sup>3</sup>		32.0 <sup>3</sup>		13.4 <sup>3</sup>		10.0 <sup>3</sup>
Lithuania		17.2 <sup>3</sup>		28.2 <sup>3</sup>		12.8 <sup>3</sup>		10.2 <sup>3</sup>
Poland		20.2 <sup>3</sup>		37.8 <sup>3</sup>		20.6 <sup>3</sup>		19.8 <sup>3</sup>
Romania	10.7 <sup>2</sup>		31.9 <sup>2</sup>		12.3 <sup>2</sup>		13.9 <sup>2</sup>	
Slovenia		27.5 <sup>4</sup>						6.4 <sup>4</sup>

Notes: 1) Average 1993-1996. - 2) Average 1993-1997. - 3) Average 1993-1998. - 4) Average 1994-1998. - 5) Average 1995-1997. - 6) Average 1995-1998.

## TAX RATES

Table 2

### Average effective tax rates (AETRs), 1993-1998

	1993	1994	1995	1996	1997	1998		1993	1994	1995	1996	1997	1998
<b>Consumption</b>													
<b>EU</b>							<b>CEECs</b>						
Belgium	.	.	21.6	24.8	25.1	24.3	Bulgaria	10.6	16.3	15.1	11.7	12.3	.
Finland	26.7	27.0	26.1	27.8	28.8	29.5	Czech R.	22.8	21.8	21.9	21.0	21.4	20.5
Germany	18.3	19.4	18.7	17.7	17.4	17.4	Estonia	19.7	23.5	23.7	23.1	26.1	22.4
Greece	.	.	18.4	18.6	19.3	.	Hungary	22.9	18.5	24.2	25.5	27.7	28.5
Ireland	.	.	22.4	23.1	24.0	.	Latvia	.	17.4	19.4	19.9	22.6	23.0
Netherlands	17.4	17.4	17.6	17.9	18.0	.	Lithuania	11.6	13.7	17.8	17.0	22.0	21.1
Spain	.	.	15.0	15.3	15.7	.	Poland	18.8	19.2	20.0	20.7	21.6	21.1
Sweden	22.8	24.5	23.6	24.9	21.4	20.7	Romania	13.2	10.8	10.4	9.3	9.5	.
United Kingdom	15.9	16.6	16.6	16.6	17.0	16.4	Slovenia	.	25.4	26.0	26.9	28.7	30.5
<b>Labour income</b>													
<b>EU</b>							<b>CEECs</b>						
Belgium	.	.	47.6	46.5	46.9	46.7	Bulgaria	.	29.0	28.0	27.3	29.2	.
Finland	55.9	50.0	48.7	54.6	54.0	47.9	Czech R.	34.4	37.7	37.8	37.9	39.3	39.8
Germany	39.8	40.8	41.7	40.8	41.1	41.1	Estonia	34.1	33.1	32.3	33.1	33.4	34.9
Greece	.	.	37.0	37.6	38.9	.	Hungary	38.0	37.3	36.5	34.8	35.3	35.4
Ireland	.	.	25.0	24.9	24.8	.	Latvia	.	29.7	39.3	29.8	29.6	31.4
Netherlands	53.0	53.4	49.5	46.6	47.5	.	Lithuania	24.8	30.3	27.1	27.3	29.0	30.8
Spain	.	.	33.3	32.8	32.9	.	Poland	41.7	37.0	37.3	37.2	36.8	36.6
Sweden	47.7	44.7	51.5	54.5	56.3	53.4	Romania	35.3	33.3	30.4	29.3	31.2	.
United Kingdom	23.6	24.8	24.8	24.5	23.7	26.2	Slovenia	.	.	.	.	.	.
<b>Capital income</b>													
<b>EU</b>							<b>CEECs</b>						
Belgium	.	.	27.2	25.8	26.7	27.8	Bulgaria	.	16.9	15.5	15.4	16.4	.
Finland	41.6	39.4	35.8	41.1	43.1	37.5	Czech R.	19.2	17.7	16.3	14.7	13.1	13.4
Germany	29.5	26.6	26.5	26.1	24.9	25.1	Estonia	20.3	20.8	16.7	11.8	11.9	12.9
Greece	.	.	9.6	9.7	10.9	.	Hungary	13.8	13.3	12.5	12.4	11.3	11.6
Ireland	.	.	19.5	20.4	20.3	.	Latvia	.	14.6	13.2	14.4	12.0	12.8
Netherlands	24.6	21.1	18.9	20.8	21.3	.	Lithuania	15.6	13.7	13.2	11.2	11.6	11.5
Spain	.	.	16.7	16.8	18.6	.	Poland	23.6	20.8	20.4	20.1	19.7	19.1
Sweden	48.3	38.6	40.4	49.1	47.8	52.0	Romania	13.0	12.6	13.3	11.3	11.5	.
United Kingdom	29.1	29.1	31.5	31.9	33.8	35.8	Slovenia	.	.	.	.	.	.
<b>Corporate income</b>													
<b>EU</b>							<b>CEECs</b>						
Belgium	.	.	14.8	13.7	15.0	17.0	Bulgaria	24.4	33.7	28.5	22.2	31.7	.
Finland	18.4	20.1	21.1	22.8	29.5	28.9	Czech R.	24.8	19.8	17.6	15.0	12.3	12.4
Germany	22.3	15.5	14.0	19.0	18.0	17.1	Estonia	21.9	22.2	15.4	8.5	8.8	9.9
Greece	.	.	12.9	13.0	16.6	.	Hungary	10.8	10.7	9.7	9.0	8.2	8.7
Ireland	.	.	15.4	16.4	15.2	.	Latvia	.	12.4	9.5	11.3	8.2	8.4
Netherlands	14.7	13.8	12.4	15.6	17.2	.	Lithuania	19.0	12.2	10.0	7.6	6.6	5.7
Spain	.	.	9.3	10.0	13.8	.	Poland	24.8	19.7	19.0	19.5	18.4	17.3
Sweden	25.5	18.5	24.7	30.2	30.4	36.6	Romania	13.1	12.9	15.3	12.6	15.6	.
United Kingdom	12.3	12.9	15.6	17.0	19.9	19.4	Slovenia	.	6.8	4.8	6.3	7.2	7.1



**ANNEX:**

**The MRT methodology**

MRT base their effective average tax rates on the OECD Revenue Statistics and OECD National Accounts (SNA68) nomenclature. For calculating tax revenues they suggest using the following variables from the Revenue Statistics:

- Item 1100 = Taxes on income, profits, and capital gains of individuals
- Item 1200 = Taxes on income, profits, and capital gains of corporations
- Item 2000 = Total social security contributions
- Item 2200 = Employer's contribution to social security
- Item 3000 = Taxes on payroll and workforce
- Item 4100 = Recurrent taxes on immovable property
- Item 4400 = Taxes on financial and capital transactions
- Item 5110 = General taxes on goods and services
- Item 5121 = Excise taxes

For calculating the tax bases they suggest using the following variables from the National Accounts (SNA68):

- C = Private final consumption expenditure
- G = Government final consumption expenditure
- GW = Compensation of employees paid by producers of government services
- OSPUE = Operating surplus of private unincorporated enterprises
- PEI = Household's property and entrepreneurial income
- W = Wages and salaries
- OS = Total operating surplus of the economy

From these variables effective average tax rates on consumption, labour and capital are then calculated.

**Effective tax rate on consumption**

$$\tau_c = \left[ \frac{\text{Item 5110} + \text{Item 5121}}{C + G - GW - \text{Item 5110} - \text{Item 5121}} \right] * 100 \quad (1)$$

**Effective tax rate on labour income**

$$\tau_L = \left[ \frac{\tau_H * W + \text{Item 2000} + \text{Item 3000}}{W + \text{Item 2200}} \right] * 100 \quad (2)$$

As an intermediate step  $\tau_H$ , i.e. the household's average tax rate on total income, is calculated as:

$$\tau_H = \left[ \frac{\text{Item 1100}}{\text{OSPUE} + \text{PEI} + W} \right] * 100 \quad (3)$$

## TAX RATES

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The second formula represents the average statutory tax rate on total income from profits, wages and salaries and capital gains of individuals. Therefore one has to assume that all income components of households are taxed at the same rate. That is, one has to assume a synthetic personal income tax, where all kinds of personal income are taxed at the same rate.

### ***Effective tax rate on capital income of households and all firms***

$$\tau_K = \left[ \frac{\tau_H * (OSPUE + PEI) + Item\ 1200 + Item\ 4100 + Item\ 4400}{OS} \right] * 100 \quad (4)$$

### ***Effective tax rate on income of corporations<sup>5</sup>***

$$\tau_{KC} = \left[ \frac{Item\ 1200}{OS - OSPUE} \right] * 100 \quad (5)$$

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<sup>5</sup> MRT do not provide an explicit formula for calculating the average tax rate on corporate income (corporate capital), but footnote 9 in their article suggests how to calculate such a rate.

## 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
PM	change in % against previous month
PPI	producer price index
p.a.	per annum
mn	million
bn	billion
BGN	Bulgarian lev (1 BGN = 1000 BGL)
CZK	Czech koruna
ECU	European currency unit
EUR	Euro, from 1 January 1999
HRK	Croatian kuna
HUF	Hungarian forint
PLN	Polish zloty
ROL	Romanian leu
RUB	Russian rouble (1 RUB = 1000 RUR)
SIT	Slovenian tolar
SKK	Slovak koruna
UAH	Ukrainian hryvnia
USD	US dollar
M0	currency outside banks
M1	M0 + demand deposits
M2	M1 + quasi-money

Sources of statistical data:

National statistical offices and central banks; WIIW estimates.

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## B U L G A R I A: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total	real, CPMY	1,6	4,0	0,2	6,8	10,3	2,7	-0,7	1,3	-5,0	-2,9	0,1	-2,5	15,5	5,3	3,0	.	
Industry, total	real, CCPY	3,0	2,4	1,7	2,0	2,6	2,2	1,5	2,4	0,7	-2,9	-2,7	-3,1	1,3	2,1	1,5	.	
<b>LABOUR</b>																		
Employees total	th. persons	1703	1717	1725	1719	1708	1713	1717	1707	1686	1889	1894	1906	1905	1921	1930	.	
Employees in industry	th. persons	600	598	598	592	588	585	584	581	575	632	629	628	631	629	630	.	
Unemployment, end of period	th. persons	707,8	678,5	654,0	643,5	637,8	629,9	637,3	657,0	662,3	687,8	683,9	669,0	678,6	673,8	659,0	653,3	
Unemployment rate <sup>1)</sup>	%	18,5	17,8	17,1	16,8	16,7	16,5	16,7	17,2	17,3	18,0	17,9	17,5	17,8	17,6	17,2	17,6	
Labour productivity, industry	CCPY	7,5	6,7	5,9	6,2	6,8	6,4	5,7	6,6	4,7	-7,8	-7,6	-7,8	-3,6	-2,9	-3,5	.	
Unit labour costs, exch.r. adj.(EUR)	CCPY	-0,2	0,5	1,3	0,9	0,4	0,5	1,3	0,3	1,9	11,6	12,4	12,7	7,4	6,2	6,6	.	
<b>WAGES, SALARIES</b>																		
Total economy, gross	BGN	253,0	261,0	261,0	256,0	256,0	264,0	259,0	261,0	278,0	250,0	252,0	265,0	262,0	269,0	264,0	.	
Total economy, gross	real, CPMY	2,8	2,9	4,2	3,5	6,7	4,6	7,0	3,9	4,8	-1,0	-0,2	-0,9	-5,2	-3,6	-3,8	.	
Total economy, gross	USD	115	117	114	113	118	123	120	119	127	113	112	119	119	126	129	.	
Total economy, gross	EUR	129	133	133	131	131	135	132	133	142	128	129	135	134	138	135	.	
Industry, gross	USD	120	118	120	117	125	131	126	125	131	118	117	124	122	126	137	.	
<b>PRICES</b>																		
Consumer <sup>2)</sup>	PM	-0,2	0,1	-0,1	-0,2	0,3	1,3	1,7	0,2	0,6	2,7	1,6	0,8	-0,1	-2,1	-1,7	0,1	
Consumer <sup>2)</sup>	CPY	9,8	9,7	9,4	8,5	5,7	4,7	5,2	4,6	4,8	7,0	8,4	9,2	9,2	6,9	5,2	5,5	
Consumer <sup>2)</sup>	CCPY	9,1	9,2	9,3	9,2	8,7	8,2	7,9	7,6	7,4	7,0	7,7	8,2	8,4	8,1	7,6	7,3	
Producer, in industry	PM	0,3	0,6	-0,3	-0,6	0,0	0,4	0,2	0,1	-0,5	0,4	1,3	0,8	1,0	-0,4	-1,1	.	
Producer, in industry	CPY	12,1	9,7	9,5	7,7	6,0	3,3	1,2	1,2	0,7	1,2	2,4	2,7	3,4	2,3	1,6	.	
Producer, in industry	CCPY	11,9	11,5	11,1	10,6	10,1	9,3	8,4	7,7	7,1	1,2	1,8	2,1	2,4	2,4	2,3	.	
<b>RETAIL TRADE</b>																		
Turnover	real, CPMY	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Turnover	real, CCPY	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
<b>FOREIGN TRADE<sup>2)3)</sup></b>																		
Exports total (fob), cumulated	EUR mn	1852	2300	2801	3327	3824	4290	4792	5301	5709	434	904	1369	1849	2287	2734	.	
Imports total (cif), cumulated	EUR mn	2413	3100	3854	4678	5341	5944	6703	7454	8107	571	1171	1790	2490	3191	3797	.	
Trade balance, cumulated	EUR mn	-561	-799	-1053	-1351	-1517	-1654	-1910	-2153	-2398	-137	-268	-421	-641	-905	-1063	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	-299	-389	-390	-465	-381	-427	-541	-697	-842	-130	-179	-232	-368	-467	-381	.	
<b>EXCHANGE RATE</b>																		
BGN/USD, monthly average	nominal	2,192	2,234	2,293	2,273	2,173	2,141	2,159	2,202	2,192	2,215	2,248	2,234	2,210	2,131	2,048	1,972	
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	1,956	
BGN/USD, calculated with CPI <sup>4)</sup>	real, Jan98=100	110,9	113,4	116,7	115,6	110,2	107,6	106,4	108,0	106,5	105,1	105,3	104,4	104,0	102,4	100,2	96,4	
BGN/USD, calculated with PPI <sup>4)</sup>	real, Jan98=100	99,5	101,2	103,2	101,2	96,8	94,9	93,4	94,8	93,7	94,6	94,7	94,4	93,3	90,4	87,9	.	
BGN/EUR, calculated with CPI <sup>4)</sup>	real, Jan98=100	89,2	89,6	89,7	89,7	89,5	88,6	87,1	86,7	86,3	84,4	83,2	82,9	83,4	85,3	86,7	86,6	
BGN/EUR, calculated with PPI <sup>4)</sup>	real, Jan98=100	79,6	79,3	79,5	79,7	79,6	79,4	78,9	78,5	78,7	78,6	77,5	77,2	76,7	77,2	77,9	.	
<b>DOMESTIC FINANCE</b>																		
M0, end of period <sup>5)</sup>	BGN mn	2307,3	2344,2	2427,5	2522,1	2542,5	2601,8	2570,5	2641,9	3081,0	2924,6	2897,3	2855,2	2873,2	2781,0	2828,4	.	
M1, end of period <sup>5)</sup>	BGN mn	4128,2	4135,7	4039,2	4163,9	4193,7	4275,1	4240,9	4982,0	4883,8	4651,4	4584,3	4594,2	4602,9	4474,8	4402,9	.	
Broad money, end of period <sup>5)</sup>	BGN mn	10088,2	10374,7	10651,7	10984,9	11107,2	11318,5	11383,3	11673,0	12600,1	12513,5	12516,9	12503,1	12631,3	12358,6	12335,3	.	
Broad money, end of period	CPY	27,5	33,9	36,3	25,8	23,5	25,0	15,6	18,6	25,2	23,0	21,8	20,2	25,2	19,1	15,8	.	
BNB base rate (p.a.)end of period	%	4,4	4,6	4,6	4,6	4,8	4,8	4,7	4,9	4,7	4,9	4,6	4,5	4,0	4,0	3,8	3,7	
BNB base rate (p.a.)end of period <sup>5)</sup>	real, %	-6,8	-4,7	-4,6	-2,9	-1,1	1,5	3,5	3,6	4,0	3,6	2,2	1,7	0,6	1,6	2,1	.	
<b>BUDGET</b>																		
Government budget balance, cum. <sup>7)</sup>	BGN mn	-98,1	-18,5	-175,7	-447,8	-468,9	-559,1	-409,6	-408,3	-669,4	154,2	116,0	205,6	-50,7	194,1	181,9	.	

1) Ratio of unemployed to total employment.

2) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.

3) Cumulation starting January and ending December each year.

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

5) Revised according to International Accounting Standards.

6) Deflated with annual PPI.

7) Including some extrabudgetary accounts and funds.

## C R O A T I A: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total <sup>1)</sup>	real, CMPY	9,8	8,3	1,2	3,9	8,6	5,7	8,3	4,6	5,2	3,3	3,9	-1,0	5,8	3,9	-2,1	10,5	
Industry, total <sup>1)</sup>	real, CCPY	6,7	7,0	5,9	5,6	6,0	5,9	6,2	6,0	6,0	3,3	3,6	1,9	2,9	3,1	2,2	3,4	
Industry, total <sup>1)</sup>	real, 3MMA	7,5	6,2	4,4	4,4	6,0	7,5	6,2	6,1	4,4	4,1	1,9	2,8	2,8	2,5	4,0	.	
Construction, total, effect. work. time <sup>2)</sup>	real, CMPY	0,5	2,6	1,9	8,0	5,2	2,6	11,0	7,8	2,8	9,6	12,8	9,5	19,9	11,7	.	.	
<b>LABOUR</b>																		
Employment total	th. persons	1319,0	1327,4	1335,6	1344,9	1346,4	1337,7	1333,3	1329,0	1316,8	1305,2	1324,0	1326,8	1332,8	1341,5	1352,4	.	
Employees in industry <sup>2)</sup>	th. persons	283,2	283,7	284,1	284,0	283,5	282,7	283,8	282,5	279,6	277,8	280,1	279,6	279,4	278,4	277,1	.	
Unemployment, end of period	th. persons	382,8	373,4	364,9	367,9	369,2	376,6	383,5	385,3	395,1	411,1	414,4	415,4	407,7	394,1	385,0	382,8	
Unemployment rate <sup>3)</sup>	%	22,5	22,0	21,5	21,5	21,5	22,0	22,3	22,5	23,1	24,0	23,8	23,8	23,4	22,7	22,2	22,2	
Labour productivity, industry <sup>1)</sup>	CCPY	10,4	10,8	9,7	9,4	9,7	9,6	9,8	9,5	9,3	7,2	7,4	5,6	6,6	6,8	6,0	.	
Unit labour costs, exch. r. adj. (EUR) <sup>1)</sup>	CCPY	0,3	0,7	1,8	2,7	2,2	1,5	1,1	1,2	1,2	-1,6	-0,8	0,9	1,2	0,7	.	.	
<b>WAGES, SALARIES</b>																		
Total economy, gross	HRK	5002	5202	4999	5066	5090	4885	5051	5325	5142	5159	5017	5224	5352	5507	.	.	
Total economy, gross	real, CMPY	0,4	-1,7	-2,0	2,4	-1,3	-2,3	-0,5	1,3	-0,1	-1,5	0,9	0,2	4,7	4,0	.	.	
Total economy, gross	USD	587	619	585	604	620	592	612	639	621	610	582	618	640	682	.	.	
Total economy, gross	EUR	657	706	685	704	690	650	676	719	696	690	669	706	724	746	.	.	
Industry, gross	USD	526	572	534	552	562	536	565	589	561	555	526	554	581	634	.	.	
<b>PRICES</b>																		
Retail <sup>4)</sup>	PM	1,4	0,6	-0,3	-0,6	1,0	0,3	-0,1	-0,2	-0,2	0,8	0,1	0,4	0,4	0,2	0,1	-0,4	
Retail <sup>4)</sup>	CMPY	6,8	7,2	4,9	3,8	4,9	3,8	3,2	2,8	2,6	3,3	2,8	3,2	2,2	1,8	2,2	2,3	
Retail <sup>4)</sup>	CCPY	6,6	6,8	6,4	6,0	5,9	5,7	5,3	5,1	4,9	3,3	3,0	3,2	2,9	2,6	2,5	2,6	
Producer, in industry	PM	0,0	0,0	0,1	-0,7	-0,5	0,6	0,2	-0,5	-1,0	-0,1	0,6	-1,1	0,9	0,2	0,3	0,5	
Producer, in industry	CMPY	5,1	5,2	4,5	4,0	3,4	3,0	2,1	-2,0	-3,1	-2,6	-2,8	-2,3	-1,4	-1,2	-1,0	0,2	
Producer, in industry	CCPY	6,7	6,4	6,1	5,8	5,5	5,2	4,8	4,2	3,6	-2,6	-2,7	-2,6	-2,3	-2,1	-1,9	-1,6	
<b>RETAIL TRADE</b>																		
Turnover	real, CMPY	13,2	12,0	11,2	9,2	8,1	6,8	8,5	8,7	7,7	10,9	13,5	14,7	9,4	12,0	9,1	.	
Turnover	real, CCPY	11,5	11,6	11,7	11,3	10,9	10,5	10,4	10,2	10,0	10,9	12,2	13,0	12,1	12,1	11,6	.	
<b>FOREIGN TRADE<sup>5)6)</sup></b>																		
Exports total (fob), cumulated	EUR mn	1570	2011	2488	2923	3396	3831	4381	4768	5209	356	720	1178	1654	2139	2510	.	
Imports total (cif), cumulated	EUR mn	2995	4076	5019	5964	6733	7549	8480	9320	10082	677	1494	2403	3368	4372	5308	.	
Trade balance, cumulated	EUR mn	-1425	-2064	-2531	-3041	-3337	-3718	-4099	-4552	-4873	-321	-775	-1226	-1713	-2233	-2798	.	
Exports to EU (fob), cumulated	EUR mn	880	1093	1367	1586	1857	2109	2458	2666	2853	196	417	657	952	1188	1405	.	
Imports from EU (cif), cumulated	EUR mn	1653	2249	2808	3323	3730	4169	4702	5210	5653	350	797	1308	1844	2428	2971	.	
Trade balance with EU, cumulated	EUR mn	-773	-1156	-1440	-1737	-1873	-2060	-2243	-2544	-2800	-154	-380	-651	-893	-1240	-1566	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	.	.	-1452	.	.	-237	.	.	-642	.	.	-771	.	.	.	.	
<b>EXCHANGE RATE</b>																		
HRK/USD, monthly average	nominal	8,528	8,409	8,545	8,384	8,208	8,248	8,254	8,333	8,286	8,452	8,626	8,455	8,359	8,072	7,697	.	
HRD/EUR, monthly average	nominal	7,615	7,369	7,298	7,199	7,377	7,516	7,475	7,408	7,391	7,477	7,500	7,403	7,393	7,378	7,344	.	
HRK/USD, calculated with CPI <sup>7)</sup>	real, Jan98=100	124,0	122,1	124,7	122,7	118,9	119,6	119,5	120,6	119,8	121,5	124,4	122,0	120,9	116,5	111,1	.	
HRK/USD, calculated with PPI <sup>7)</sup>	real, Jan98=100	126,9	125,6	126,3	122,8	120,8	120,5	117,7	119,0	118,1	120,9	122,6	122,9	121,5	117,1	111,5	.	
HRD/EUR, calculated with CPI <sup>7)</sup>	real, Jan98=100	99,7	96,4	95,8	94,9	96,4	98,1	97,7	96,8	96,8	97,6	98,0	96,7	96,7	96,5	95,8	.	
HRD/EUR, calculated with PPI <sup>7)</sup>	real, Jan98=100	101,5	98,4	97,3	96,3	99,1	100,5	99,3	98,4	99,0	100,4	100,2	100,4	99,7	99,4	98,6	.	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	HRK mn	6551	6790	7266	7734	7551	7475	7182	7423	8507	8255	8345	9146	9112	9277	.	.	
M1, end of period	HRK mn	18253	18845	19065	20531	19838	20285	20065	20976	23704	22398	22165	24375	26418	26716	28254	.	
Broad money, end of period	HRK mn	77651	77828	79690	81993	87748	88344	90102	95006	106071	108647	107184	106245	106333	106445	106593	.	
Broad money, end of period	CMPY	31,7	29,7	28,5	24,9	28,6	28,1	29,1	34,8	45,2	46,7	41,9	37,1	36,9	36,8	33,8	.	
Discount rate (p.a.), end of period	%	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	
Discount rate (p.a.), end of period <sup>8)</sup>	real, %	0,8	0,7	1,3	1,8	2,4	2,8	3,7	8,1	9,3	8,7	9,0	8,4	7,4	7,2	7,0	5,7	
<b>BUDGET</b>																		
Central gov. budget balance, cum. <sup>9)</sup>	HRK mn	-3609,1	-4044,8	-4380,0	-4549,6	-4629,3	-5435,0	-2175,5	-2232,1	-3758,5	-498,2	-842,3	-2614,0	-2289,5	-2445,1	-2867,5	.	

1) In business entities with more than 19 persons employed.

2) In business entities with more than 10 persons employed.

3) Ratio of unemployed to the economically active population.

4) From August 2001 adjustment lowering telecom prices.

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

6) Cumulation starting January and ending December each year.

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

8) Deflated with annual PPI.

9) From January 2002 including social security funds.

## C Z E C H REPUBLIC: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total	real, CPMY	11,3	6,9	3,7	9,3	3,0	1,1	4,1	6,6	3,7	2,6	5,8	4,1	8,2	5,1	1,3	.	
Industry, total	real, CCPY	10,3	9,6	8,6	8,7	7,9	7,1	6,8	6,8	6,5	2,6	4,2	4,2	5,2	5,2	4,5	.	
Industry, total	real, 3MMA	9,3	7,2	6,5	5,1	4,2	2,7	4,0	4,8	4,4	4,0	4,2	6,0	5,7	4,9	.	.	
Construction, total	real, CPMY	16,1	15,1	12,2	21,4	9,2	3,6	7,0	2,5	-6,8	3,1	13,8	-2,7	5,2	5,2	-1,3	.	
<b>LABOUR</b>																		
Employees in industry <sup>1)</sup>	th. persons	1175	1172	1174	1179	1177	1170	1170	1172	1164	1165	1168	1168	1164	1166	1164	.	
Unemployment, end of period	th. persons	433,3	420,6	420,3	439,8	443,6	440,5	437,3	439,2	461,9	489,0	485,2	471,7	456,4	447,9	454,3	479,2	
Unemployment rate <sup>2)</sup>	%	8,3	8,1	8,1	8,5	8,5	8,5	8,4	8,5	8,9	9,4	9,3	9,1	8,8	8,6	8,7	9,2	
Labour productivity, industry <sup>13)</sup>	CCPY	9,6	8,4	7,7	7,4	7,0	6,4	6,3	6,4	5,5	-0,3	1,9	1,8	3,5	3,3	2,5	.	
Unit labour costs, exch.r. adj.(EUR) <sup>13)</sup>	CCPY	1,3	3,0	3,7	4,2	4,3	4,6	4,8	4,6	5,4	18,2	15,5	15,4	15,0	15,2	15,7	.	
<b>WAGES, SALARIES</b>																		
Industry, gross <sup>1)</sup>	CZK	13709	15053	14717	14538	14274	13802	14770	16937	15512	14610	13763	14499	14923	15920	15333	.	
Industry, gross <sup>1)</sup>	real, CPMY	3,1	2,3	0,4	1,6	0,6	0,3	2,5	0,5	0,7	3,8	3,8	2,5	5,5	3,2	3,0	.	
Industry, gross <sup>1)</sup>	USD	354	383	370	370	377	367	399	452	425	402	377	405	435	478	483	.	
Industry, gross <sup>1)</sup>	EUR	397	438	433	429	419	404	440	508	476	455	433	462	492	521	506	.	
<b>PRICES</b>																		
Consumer	PM	0,4	0,6	1,0	1,0	-0,2	-0,7	0,0	-0,1	0,1	1,5	0,2	-0,1	-0,1	-0,1	-0,3	0,5	
Consumer	CMY	4,6	5,0	5,5	5,9	5,5	4,7	4,4	4,2	4,1	3,7	3,9	3,7	3,2	2,5	1,2	0,6	
Consumer	CCPY	4,2	4,4	4,5	4,7	4,8	4,8	4,8	4,7	4,7	3,7	3,8	3,7	3,6	3,4	3,0	2,7	
Producer, in industry	PM	-0,6	0,2	0,2	-0,1	-0,3	0,0	0,7	-0,4	-0,3	0,2	0,2	0,0	-0,5	-0,2	-0,1	-0,4	
Producer, in industry	CMY	4,1	3,8	3,4	3,0	2,4	1,8	1,4	0,9	0,8	0,6	-0,1	-0,2	-0,1	-0,5	-0,8	-1,1	
Producer, in industry	CCPY	4,3	4,2	4,0	3,9	3,7	3,5	3,3	3,1	2,9	0,6	0,2	0,1	0,0	-0,1	-0,2	-0,3	
<b>RETAIL TRADE</b>																		
Turnover	real, CPMY	6,0	4,3	2,5	6,8	3,6	3,6	8,4	8,7	-0,3	4,1	4,3	4,2	4,9	2,6	-0,5	.	
Turnover	real, CCPY	4,3	4,3	4,0	4,4	4,3	4,2	4,7	5,0	4,5	4,1	4,2	4,2	4,4	4,0	3,3	.	
<b>FOREIGN TRADE<sup>4)5)</sup></b>																		
Exports total (fob), cumulated	EUR mn	12132	15398	18596	21402	24255	27355	30924	34483	37265	3071	6344	9869	13512	16917	20251	.	
Imports total (fob), cumulated	EUR mn	13215	16731	20068	23410	26657	29671	33549	37277	40690	3254	6442	10155	13809	17580	21020	.	
Trade balance, cumulated	EUR mn	-1083	-1334	-1472	-2008	-2402	-2316	-2625	-2793	-3425	-182	-97	-285	-297	-663	-769	.	
Exports to EU (fob), cumulated	EUR mn	8585	10843	13046	14958	16862	18965	21389	23801	25692	2150	4459	6942	9480	11798	14098	.	
Imports from EU (fob), cumulated	EUR mn	8351	10540	12645	14758	16762	18575	20965	23196	25148	1997	3970	6229	8503	10759	12885	.	
Trade balance with EU, cumulated	EUR mn	234	302	401	199	100	390	424	605	543	153	490	713	977	1039	1213	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	.	.	-1266	.	.	-2004	.	.	-2638	.	.	-442	.	.	.	.	
<b>EXCHANGE RATE</b>																		
CZK/USD, monthly average	nominal	38,7	39,3	39,8	39,3	37,9	37,6	37,0	37,5	36,5	36,3	36,5	35,8	34,3	33,3	31,7	30,0	
CZK/EUR, monthly average	nominal	34,5	34,4	34,0	33,9	34,0	34,2	33,6	33,3	32,6	32,1	31,8	31,4	30,4	30,6	30,3	29,7	
CZK/USD, calculated with CPI <sup>6)</sup>	real, Jan98=100	107,2	108,5	109,0	106,4	102,7	102,9	101,1	102,3	99,2	97,5	98,3	97,0	93,4	90,9	86,9	81,6	
CZK/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	108,3	110,0	110,1	107,3	103,6	102,6	98,2	99,5	95,9	95,6	95,9	95,2	92,3	89,9	85,8	81,3	
CZK/EUR, calculated with CPI <sup>6)</sup>	real, Jan98=100	86,1	85,6	83,8	82,5	83,2	84,4	82,8	82,1	80,3	78,2	77,5	76,9	74,8	75,6	75,1	73,3	
CZK/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	86,6	86,1	85,0	84,4	85,0	85,5	83,0	82,3	80,6	79,3	78,5	77,8	75,9	76,6	76,0	74,9	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	CZK bn	172,6	172,6	173,9	170,6	172,6	177,1	175,9	181,8	180,4	179,9	182,3	182,8	183,3	184,9	188,5	.	
M1, end of period <sup>7)</sup>	CZK bn	519,9	538,0	544,1	546,7	552,3	556,5	553,1	566,7	583,6	572,8	575,2	568,8	582,5	605,0	617,5	.	
M2, end of period <sup>7)</sup>	CZK bn	1466,6	1512,6	1514,1	1528,7	1547,9	1532,5	1540,5	1564,8	1596,0	1590,9	1585,3	1581,6	1606,5	1625,0	1580,5	.	
M2, end of period	CMY	9,3	11,7	13,3	13,5	13,1	11,9	12,2	12,5	13,0	11,1	10,2	9,8	9,5	7,4	4,4	.	
Discount rate (p.a.), end of period	%	4,0	4,0	4,0	4,3	4,3	4,3	4,3	3,8	3,8	3,5	3,3	3,3	2,8	2,8	2,8	2,0	
Discount rate (p.a.), end of period <sup>8)</sup>	real, %	-0,1	0,2	0,6	1,2	1,8	2,4	2,8	2,8	2,9	2,9	3,4	3,5	2,9	3,3	3,6	3,1	
<b>BUDGET</b>																		
Central gov. budget balance, cum.	CZK mn	-16809	-28713	-29652	-23519	-25566	-22644	-35432	-59797	-67698	-3417	-24923	-15737	-41863	-32401	-915	.	

1) Enterprises employing 20 and more persons.

2) Ratio of job applicants to the sum of economically active, women on maternity leave and job applicants.

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

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

5) Cumulation starting January and ending December each year.

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

7) Revision based on new methodology starting January 2002 - excluding extrabudgetary funds.

8) Deflated with annual PPI.

## HUNGARY: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total	real, CPMY	11,6	8,6	0,2	2,7	2,4	-6,4	5,9	-1,0	-2,2	-3,4	0,9	3,1	4,5	-2,7	3,1	.	
Industry, total	real, CCPY	10,8	10,4	8,4	7,6	6,9	5,3	5,3	4,6	4,1	-3,4	-1,2	0,1	1,1	0,4	0,8	.	
Industry, total	real, 3MMA	7,5	6,2	3,6	1,7	-0,7	0,5	-0,6	0,9	-2,2	-1,5	0,1	2,7	1,5	1,6	.	.	
Construction, total	real, CPMY	7,1	16,8	8,7	11,7	22,4	9,9	7,2	7,0	7,4	14,0	26,5	27,3	34,8	22,1	14,4	.	
<b>LABOUR</b>																		
Employees in industry <sup>1)</sup>	th. persons	839,7	835,6	834,2	834,4	831,3	828,1	824,1	821,8	812,6	829,9	828,2	826,0	821,8	814,5	819,3	.	
Unemployment <sup>2)</sup>	th. persons	233,6	232,2	223,8	233,9	237,0	218,3	227,5	235,2	216,9	235,8	238,5	231,6	224,4	232,2	232,5	260,7	
Unemployment rate <sup>2)</sup>	%	5,8	5,7	5,4	5,7	5,8	5,3	5,6	5,8	5,4	5,8	5,9	5,7	5,5	5,7	5,7	6,4	
Labour productivity, industry <sup>1)</sup>	CCPY	11,1	10,9	9,3	8,6	8,0	6,6	7,0	6,6	5,9	-1,9	0,8	2,4	3,6	2,8	3,3	.	
Unit labour costs, exchr. adj.(EUR) <sup>1)</sup>	CCPY	1,2	1,5	4,1	5,4	6,5	7,9	7,9	8,6	9,5	25,4	22,0	19,9	19,7	19,8	17,6	.	
<b>WAGES, SALARIES</b>																		
Total economy, gross <sup>1)</sup>	HUF	99268	98523	101567	99069	97581	99416	106173	124074	136593	112480	108878	113857	114200	118184	118854	.	
Total economy, gross <sup>1)</sup>	real, CPMY	8,5	4,1	6,8	4,2	7,9	10,3	12,9	14,8	10,5	11,9	12,2	12,8	8,4	13,6	11,6	.	
Total economy, gross <sup>1)</sup>	USD	332	334	351	342	350	354	377	438	493	408	389	407	417	445	468	.	
Total economy, gross <sup>1)</sup>	EUR	372	381	411	398	389	389	416	494	552	461	447	465	471	485	490	.	
Industry, gross <sup>1)</sup>	USD	326	361	358	352	372	356	375	438	433	388	376	403	413	455	453	.	
<b>PRICES</b>																		
Consumer	PM	0,7	0,9	0,3	0,1	-0,2	0,5	0,3	0,1	0,1	1,3	1,0	0,7	0,9	0,5	-0,4	-0,1	
Consumer	CPMY	10,3	10,8	10,5	9,4	8,7	8,0	7,6	7,1	6,8	6,6	6,2	5,9	6,1	5,6	4,8	4,6	
Consumer	CCPY	10,3	10,4	10,4	10,3	10,1	9,9	9,6	9,4	9,2	6,6	6,4	6,2	6,2	6,1	5,9	5,8	
Producer, in industry	PM	0,2	-0,7	-1,3	0,1	0,1	0,7	-0,3	-0,8	-0,7	0,1	0,3	0,3	0,3	0,1	-1,1	.	
Producer, in industry	CPMY	8,9	7,0	5,3	4,4	3,3	2,9	1,9	0,0	-0,4	-2,0	-2,3	-2,8	-2,7	-2,0	-1,1	.	
Producer, in industry	CCPY	9,5	9,0	8,4	7,8	7,3	6,8	6,3	5,7	5,2	-2,0	-2,2	-2,4	-2,5	-2,4	-2,2	.	
<b>RETAIL TRADE</b>																		
Turnover <sup>3)</sup>	real, CPMY	5,8	4,3	4,0	5,3	4,7	3,3	5,5	3,2	3,7	12,8	9,5	15,9	9,7	9,9	12,0	.	
Turnover <sup>3)</sup>	real, CCPY	6,4	5,9	5,6	5,5	5,4	5,2	5,2	5,0	4,8	12,8	11,1	12,9	12,0	11,5	11,6	.	
<b>FOREIGN TRADE<sup>4)5)</sup></b>																		
Exports total (fob), cumulated	EUR mn	10919	13920	16860	19563	22191	25079	28251	31550	34087	2585	5562	8795	11875	15029	18024	.	
Imports total (cif), cumulated	EUR mn	12260	15606	18803	21956	24776	27762	31266	34713	37659	2958	6193	9551	12925	16301	19467	.	
Trade balance, cumulated	EUR mn	-1341	-1686	-1943	-2392	-2585	-2683	-3015	-3163	-3573	-373	-631	-756	-1049	-1272	-1443	.	
Exports to EU (fob), cumulated	EUR mn	8392	10640	12813	14830	16740	18929	21313	23622	25319	1923	4169	6588	9031	11417	13662	.	
Imports from EU (cif), cumulated	EUR mn	7130	9096	10936	12825	14472	16203	18216	20129	21764	1623	3410	5284	7260	9172	10992	.	
Trade balance with EU, cumulated	EUR mn	1262	1544	1878	2005	2268	2726	3097	3493	3554	299	759	1304	1771	2245	2670	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	-329	-516	-888	-807	-626	-637	-702	-812	-1105	-345	-517	-493	-847	-1252	-1631	.	
<b>EXCHANGE RATE</b>																		
HUF/USD, monthly average	nominal	299,0	295,4	289,3	289,5	279,1	280,9	281,5	283,1	277,0	275,9	279,9	279,5	273,6	265,8	254,1	248,6	
HUF/EUR, monthly average	nominal	267,0	258,3	247,1	249,0	251,2	255,9	255,5	251,1	247,6	243,9	243,5	244,7	242,4	243,7	242,7	246,6	
HUF/USD, calculated with CPI <sup>6)</sup>	real, Jan98=100	115,6	113,6	111,2	110,8	107,0	107,6	107,2	107,5	104,8	103,2	104,1	103,7	101,2	97,9	94,0	92,1	
HUF/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	122,2	122,0	119,9	117,9	113,6	113,4	111,5	112,6	109,6	109,4	110,5	111,3	109,7	106,4	103,0	.	
HUF/EUR, calculated with CPI <sup>6)</sup>	real, Jan98=100	93,0	89,7	85,6	86,0	87,0	88,4	88,0	86,2	85,0	83,0	82,2	82,4	81,3	81,4	81,4	82,8	
HUF/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	97,8	95,5	92,6	92,8	93,4	94,6	94,4	93,0	92,2	90,9	90,5	91,0	90,3	90,8	91,3	.	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	HUF bn	849,8	872,8	903,4	907,8	932,2	957,4	965,6	1006,8	1037,9	986,0	991,8	1005,0	1029,4	1077,1	1100,7	1136,8	
M1, end of period	HUF bn	2235,0	2292,1	2331,6	2319,5	2438,1	2457,9	2478,7	2537,4	2776,3	2564,3	2569,9	2644,2	2662,3	2765,8	2802,7	2812,3	
Broad money, end of period	HUF bn	6059,0	6155,1	6163,7	6241,6	6516,0	6544,8	6637,4	6715,1	7090,1	6984,3	6927,4	6985,2	7133,7	7191,4	7214,0	7310,5	
Broad money, end of period	CPMY	11,6	13,5	12,7	13,3	15,9	15,2	15,4	13,9	17,2	17,0	15,9	16,2	17,7	16,8	17,0	17,1	
NBH base rate (p.a.)end of period	%	11,0	11,0	11,0	11,3	11,3	11,0	10,8	10,3	9,8	9,0	8,5	8,5	8,5	9,0	9,0	9,5	
NBH base rate (p.a.)end of period <sup>7)</sup>	real, %	1,9	3,7	5,4	6,6	7,7	7,9	8,7	10,3	10,2	11,2	11,1	11,6	11,5	11,2	10,2	.	
<b>BUDGET</b>																		
Central gov.budget balance,cum.	HUF bn	-56,4	-66,8	-84,2	-102,7	-135,8	-170,6	-194,9	-178,5	-413,2	-59,3	-143,1	-186,9	-240,2	-280,2	-359,6	.	

1) Economic organizations employing more than 5 persons.

2) According to ILO methodology, from 2002 calculated by WIW based on the 3-month averages.

3) Excluding catering.

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

5) Cumulation starting January and ending December each year.

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

7) Deflated with annual PPI.

# P O L A N D: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry <sup>1)</sup>	real, CPMY	3,8	-0,4	-4,7	1,5	0,9	-3,7	1,8	-1,1	-4,8	-1,4	0,3	-3,2	0,3	-4,2	2,1	6,0	
Industry <sup>1)</sup>	real, CCPY	4,3	3,3	1,9	1,8	1,7	1,0	1,1	0,9	-0,2	-1,4	-0,6	-1,5	-1,1	-1,7	-1,1	-0,1	
Industry <sup>1)</sup>	real, 3MMA	2,2	-0,6	-1,3	-0,9	-0,6	-0,4	-1,0	-1,3	-2,5	-2,1	-1,5	-0,9	-2,4	-0,7	1,2	.	
Construction <sup>1)</sup>	real, CPMY	-10,8	0,3	-10,0	-10,3	-14,0	-10,9	-9,7	-9,5	-10,5	-21,5	-13,9	-14,3	-6,2	-20,3	-13,2	-3,9	
<b>LABOUR</b>																		
Employees <sup>1)</sup>	th. persons	5156	5135	5121	5097	5074	5060	5044	5020	4952	4940	4931	4924	4907	4896	4898	4884	
Employees in industry <sup>1)</sup>	th. persons	2651	2634	2624	2608	2594	2584	2589	2576	2528	2494	2492	2486	2475	2471	2471	.	
Unemployment, end of period	th. persons	2878,0	2841,1	2849,2	2871,5	2892,6	2920,4	2944,3	3022,4	3115,1	3253,3	3277,9	3259,9	3203,6	3064,6	3090,9	3105,3	
Unemployment rate <sup>2)</sup>	%	16,0	15,9	15,9	16,0	16,2	16,3	16,4	16,8	17,4	18,0	18,1	18,1	17,8	17,2	17,3	17,4	
Labour productivity, industry <sup>1)</sup>	CCPY	9,4	8,4	7,0	7,0	6,9	6,3	6,4	6,3	5,8	5,5	6,5	5,5	6,0	5,2	5,7	.	
Unit labour costs, exch.r. adj.(EUR) <sup>1)</sup>	CCPY	6,8	9,5	12,4	12,7	11,5	10,8	10,3	10,4	10,4	8,4	5,0	3,8	2,0	0,5	-2,2	.	
<b>WAGES, SALARIES</b>																		
Total economy, gross <sup>1)</sup>	PLN	2176	2163	2148	2199	2192	2218	2252	2302	2471	2188	2189	2252	2226	2255	2232	2289	
Total economy, gross <sup>1)</sup>	real, CPMY	-1,2	1,8	-1,1	3,0	1,8	1,8	3,9	3,0	1,8	2,1	2,0	1,5	-0,6	2,5	2,5	2,8	
Total economy, gross <sup>1)</sup>	USD	542	543	541	525	516	526	545	562	616	538	523	544	549	557	555	556	
Total economy, gross <sup>1)</sup>	EUR	606	621	634	611	574	577	602	633	690	609	601	621	619	609	580	560	
Industry, gross <sup>1)</sup>	USD	534	542	537	526	516	512	532	579	636	545	526	542	549	546	556	.	
<b>PRICES</b>																		
Consumer	PM	0,8	1,1	-0,1	-0,3	-0,3	0,3	0,4	0,1	0,2	0,8	0,1	0,2	0,5	-0,2	-0,4	-0,5	
Consumer	CPMY	6,6	6,9	6,2	5,2	5,1	4,3	4,0	3,6	3,6	3,4	3,5	3,3	3,0	1,9	1,6	1,3	
Consumer	CCPY	6,8	6,9	6,7	6,5	6,3	6,1	5,9	5,7	5,5	3,6	3,6	3,5	3,4	3,1	2,8	2,6	
Producer, in industry	PM	0,2	0,0	-0,4	0,3	0,8	0,5	-0,6	-0,6	-0,3	0,1	0,2	0,2	0,3	0,1	0,2	0,5	
Producer, in industry	CPMY	3,4	2,3	0,9	0,6	1,0	0,7	-0,5	-1,0	-0,4	0,0	0,2	0,3	0,4	0,5	1,2	1,4	
Producer, in industry	CCPY	4,1	3,8	3,3	2,9	2,7	2,5	2,2	1,9	1,6	0,1	0,2	0,3	0,3	0,4	0,5	0,6	
<b>RETAIL TRADE</b>																		
Turnover <sup>1)</sup>	real, CPMY	-2,5	0,2	-1,8	-0,1	1,1	0,2	5,1	2,1	1,1	3,9	6,6	8,2	1,0	1,1	1,8	.	
Turnover <sup>1)</sup>	real, CCPY	-2,6	-1,2	-1,4	-0,8	-0,4	-0,4	0,1	0,4	0,7	3,9	5,3	5,8	4,0	3,3	3,1	.	
<b>FOREIGN TRADE<sup>3)4)</sup></b>																		
Exports total (fob), cumulated	EUR mn	13157	16497	19836	23049	26297	29948	33899	37388	40372	3283	6554	10248	13964	17280	20649	.	
Imports total (cif), cumulated	EUR mn	18084	22896	27654	32482	36888	41518	46871	51754	56220	4119	8579	13518	18845	23558	28246	.	
Trade balance, cumulated	EUR mn	-4928	-6399	-7819	-9433	-10591	-11570	-12971	-14365	-15847	-836	-2025	-3270	-4881	-6279	-7598	.	
Exports to EU (fob), cumulated	EUR mn	9396	11764	14102	16323	18466	20902	23532	25930	27940	2383	4663	7206	9714	11763	14373	.	
Imports from EU (cif), cumulated	EUR mn	11080	14028	16932	19958	22599	25484	28814	31783	34510	2454	5266	8364	11505	14438	17481	.	
Trade balance with EU, cumulated	EUR mn	-1684	-2264	-2829	-3635	-4133	-4582	-5282	-5852	-6569	-71	-603	-1158	-1791	-2676	-3108	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	-2752	-3489	-4440	-4745	-5105	-5413	-6249	-6667	-7166	-868	-1684	-2336	-2970	-3519	-3895	.	
<b>EXCHANGE RATE</b>																		
PLN/USD, monthly average	nominal	4,017	3,981	3,970	4,186	4,246	4,219	4,133	4,094	4,014	4,065	4,187	4,143	4,059	4,045	4,025	4,118	
PLN/EUR, monthly average	nominal	3,590	3,485	3,389	3,600	3,822	3,845	3,743	3,639	3,583	3,595	3,641	3,629	3,595	3,703	3,847	4,088	
PLN/USD, calculated with CPI <sup>6)</sup>	real, Jan98=100	97,3	95,8	95,8	101,0	102,8	102,2	99,4	98,2	95,8	96,4	99,6	98,9	97,0	96,8	96,8	99,6	
PLN/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	104,6	104,1	103,2	106,7	107,4	106,1	102,3	101,5	98,6	100,1	102,8	102,7	101,2	100,8	100,2	102,0	
PLN/EUR, calculated with CPI <sup>6)</sup>	real, Jan98=100	78,4	75,6	73,7	78,3	83,5	83,9	81,4	78,9	77,6	77,5	78,6	78,5	77,8	80,4	83,8	89,5	
PLN/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	83,8	81,5	79,6	83,9	88,3	88,5	86,3	84,0	82,8	83,2	84,1	84,0	83,2	85,7	88,8	93,9	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	PLN bn	34,5	33,8	35,0	35,3	35,5	36,6	36,6	36,6	38,2	36,8	37,9	38,8	40,0	39,8	41,2	41,8	
M1, end of period <sup>6)</sup>	PLN bn	102,6	104,0	104,6	107,6	107,2	110,5	110,2	108,2	118,3	111,7	115,4	114,8	116,3	121,6	126,1	.	
M2, end of period <sup>6)</sup>	PLN bn	310,2	312,5	314,3	320,0	323,4	325,4	329,2	321,2	327,6	322,2	324,6	319,0	317,6	322,0	321,9	.	
M2, end of period	CPMY	13,7	12,9	7,7	12,6	13,5	12,6	11,4	7,5	9,0	7,8	6,9	3,2	2,4	3,1	2,4	.	
Discount rate (p.a.)end of period	%	19,5	19,5	18,0	18,0	17,0	17,0	15,5	14,0	14,0	12,0	12,0	12,0	11,0	10,5	10,0	.	
Discount rate (p.a.)end of period <sup>7)</sup>	real, %	15,6	16,8	16,9	17,3	15,8	16,2	16,1	15,2	14,5	12,0	11,8	11,7	10,6	10,0	8,7	.	
<b>BUDGET</b>																		
Central gov.budget balance, cum.	PLN mn	-18282	-20384	-18806	-19316	-20932	-21865	-24739	-27651	-32358	-6963	-13668	-16437	-19911	-22985	-24980	-25665	

1) Enterprises employing more than 9 persons.

2) Ratio of unemployed to the economically active.

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

4) Cumulation starting January and ending December each year.

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

6) Revised according to ECB monetary standards.

7) Deflated with annual PPI.



## R O M A N I A: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

	2001										2002						
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																	
Industry, total <sup>1)</sup>	real, CPMY	12,5	12,9	5,0	5,7	4,6	2,5	9,5	8,4	5,3	5,0	5,0	-0,1	5,6	0,1	6,5	.
Industry, total <sup>1)</sup>	real, CCPY	11,3	11,6	10,5	9,7	9,1	8,3	8,4	8,4	8,2	5,0	5,0	3,1	3,8	3,0	3,6	.
Industry, total	real, 3MMA	10,9	10,1	7,9	5,1	4,3	5,6	6,8	7,8	6,3	5,1	3,1	3,4	1,8	4,0	.	.
<b>LABOUR</b>																	
Employees total	th. persons	4485,2	4521,5	4529,7	4542,3	4546,4	4551,7	4544,8	4507,3	4470,3	4314,2	4333,8	4377,7	4386,8	4397,5	4404,2	.
Employees in industry	th. persons	1828,2	1833,5	1833,2	1836,7	1845,0	1843,6	1843,5	1829,7	1820,0	1833,8	1831,3	1830,2	1823,7	1824,2	1814,0	.
Unemployment, end of period	th. persons	948,4	890,8	840,3	798,3	771,8	747,1	742,4	774,0	826,9	1193,7	1267,4	1257,4	1069,7	983,3	929,7	.
Unemployment rate <sup>2)</sup>	%	9,8	9,2	8,7	8,3	8,0	7,8	7,7	8,0	8,6	12,4	13,2	13,0	11,1	10,2	9,6	.
Labour productivity, industry	CCPY	16,4	16,4	15,1	14,0	13,1	12,1	12,1	11,9	11,5	3,8	4,2	2,5	3,4	2,8	3,6	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	-2,5	-1,1	1,6	4,1	4,6	5,0	4,5	4,1	3,9	14,3	14,9	14,4	10,8	7,9	4,6	.
<b>WAGES, SALARIES</b>																	
Total economy, gross	th. ROL	4321,7	4174,7	4280,6	4436,3	4449,5	4424,0	4534,1	4719,7	5299,7	5144,8	4778,5	5091,1	5585,4	5329,1	5327,1	.
Total economy, gross	real, CPMY	10,8	13,6	13,1	18,1	15,6	12,8	11,3	7,8	2,3	10,5	10,1	9,5	3,9	2,5	0,3	.
Total economy, gross	USD	155	147	148	151	149	146	147	151	168	161	148	155	169	159	160	.
Total economy, gross	EUR	174	168	173	176	166	161	163	170	188	182	170	177	191	173	167	.
Industry, gross	USD	159	154	149	161	158	150	151	153	170	150	147	155	170	159	161	.
<b>PRICES</b>																	
Consumer	PM	2,7	1,7	1,6	1,3	2,2	1,9	2,4	2,7	2,2	2,3	1,2	0,4	2,0	1,9	1,2	0,5
Consumer	CPMY	37,5	37,4	35,7	31,8	32,3	31,2	30,8	30,7	30,3	28,6	27,2	25,1	24,4	24,5	24,0	23,0
Consumer	CCPY	39,4	39,0	38,4	37,3	36,7	36,0	35,4	34,9	34,5	28,6	27,9	26,9	26,3	25,9	25,6	25,2
Producer, in industry	PM	1,5	2,3	1,6	3,0	2,1	2,0	2,1	1,4	1,4	2,0	1,7	1,6	2,3	2,1	1,4	.
Producer, in industry	CPMY	48,5	48,5	43,9	40,2	39,2	36,4	33,7	31,3	30,1	28,3	25,9	25,2	26,1	25,9	25,7	.
Producer, in industry	CCPY	50,1	49,7	48,7	47,3	46,2	44,9	43,6	42,2	41,0	28,3	27,1	26,4	26,3	26,3	26,2	.
<b>RETAIL TRADE</b>																	
Turnover	real, CPMY	-1,6	-1,2	-6,4	3,2	1,8	1,7	5,1	2,6	-1,9	-3,0	-0,3	-1,8	8,4	-1,9	.	.
Turnover	real, CCPY	-0,4	-0,5	-1,6	-0,8	-0,5	-0,2	0,4	0,6	0,3	-3,0	-1,6	-1,7	1,1	0,4	.	.
<b>FOREIGN TRADE<sup>3(4)</sup></b>																	
Exports total (fob), cumulated	EUR mn	4039	5158	6342	7525	8604	9672	10693	11795	12711	1034	2134	3309	4497	5641	6924	.
Imports total (cif), cumulated	EUR mn	5425	7090	8617	10115	11413	12637	14221	15787	17363	1332	2710	4170	5741	7266	8884	.
Trade balance, cumulated	EUR mn	-1386	-1932	-2275	-2590	-2809	-2965	-3528	-3992	-4652	-298	-576	-861	-1244	-1626	-1960	.
Exports to EU (fob), cumulated	EUR mn	2773	3522	4321	5093	5802	6535	7254	8011	8619	746	1532	2347	3148	3923	4786	.
Imports from EU (cif), cumulated	EUR mn	3005	3930	4831	5775	6491	7190	8161	9100	9957	780	1545	2404	3362	4271	5278	.
Trade balance with EU, cumulated	EUR mn	-233	-408	-510	-682	-688	-655	-907	-1089	-1338	-34	-13	-57	-214	-349	-492	.
<b>FOREIGN FINANCE</b>																	
Current account, cumulated	USD mn	-791	-1197	-1337	-1382	-1387	-1378	-1626	-1903	-2349	-59	-180	-286	-543	-665	-909	.
<b>EXCHANGE RATE</b>																	
ROL/USD, monthly average	nominal	27878	28493	28952	29364	29809	30236	30786	31299	31556	32052	32233	32766	33102	33491	33392	32979
ROL/EUR, monthly average	nominal	24880	24910	24732	25266	26853	27549	27899	27806	28205	28281	28054	28698	29316	30774	31912	32721
ROL/USD, calculated with CPI <sup>5)</sup>	real, Jan98=100	113,5	114,6	114,8	114,6	113,8	112,8	111,4	109,6	109,6	109,0	108,8	110,7	110,3	109,5	108,0	106,1
ROL/USD, calculated with PP <sup>6)</sup>	real, Jan98=100	115,3	115,7	114,6	111,0	110,4	109,6	106,9	106,8	104,9	104,8	103,5	104,8	104,4	103,5	101,8	.
ROL/EUR, calculated with CPI <sup>5)</sup>	real, Jan98=100	91,4	90,4	88,4	89,0	92,6	93,5	92,4	89,5	88,9	87,5	86,0	87,9	88,5	91,4	93,5	95,4
ROL/EUR, calculated with PP <sup>6)</sup>	real, Jan98=100	92,4	90,6	88,5	87,4	90,9	91,5	90,4	88,4	88,3	87,0	84,8	85,8	86,0	88,5	90,4	.
<b>DOMESTIC FINANCE</b>																	
M0, end of period	ROL bn	25811	25457	29645	29328	29830	32645	30835	31080	35635	30021	32411	33416	37683	34997	39615	.
M1, end of period	ROL bn	42070	41751	46001	46945	48172	51073	50032	50331	64309	50757	54482	55881	60373	59796	64366	.
M2, end of period	ROL bn	198613	199829	208498	216377	226557	235145	236890	244841	270512	259932	267090	275326	286066	290629	300912	.
M2, end of period	CPMY	42,4	39,7	40,4	41,5	43,3	44,0	44,4	48,8	46,2	44,3	43,4	43,7	44,0	45,4	44,3	.
Discount rate (p.a.) <sup>end of period<sup>6)</sup></sup>	%	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	34,6	34,2	34,1	32,2	30,6	28,3
Discount rate (p.a.) <sup>end of period<sup>6(7)</sup></sup>	real, %	-9,1	-9,1	-6,2	-3,7	-3,0	-1,0	1,0	2,8	3,8	5,2	6,9	7,2	6,3	5,0	3,9	.
<b>BUDGET</b>																	
Central gov.budget balance, cum.	ROL bn	-10875	-14045	-22689	-26092	-27530	-30417	-31250	-32016	-35809	-4416	-8978	-11228	-14009	-14789	-29334	.

1) Enterprises with more than 50 (in food industry 20) employees.

2) Ratio of unemployed to economically active population as of December of previous year, from 2001 as of December 2000.

3) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.

4) Cumulation starting January and ending December each year.

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

6) From 1, February 2002 reference rate of RNB.

7) Deflated with annual PPI.

## R U S S I A: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total	real, CMPY	7,0	7,0	3,7	4,5	5,1	3,8	5,1	4,7	2,6	2,2	2,0	3,7	4,3	2,8	4,4	7,8	
Industry, total	real, CCPY	5,7	5,9	5,5	5,4	5,3	5,2	5,2	5,1	4,9	2,2	2,1	2,6	3,0	3,0	3,2	3,9	
Industry, total <sup>1)</sup>	real, 3MMA	6,3	5,9	5,1	4,4	4,4	4,7	4,5	4,1	3,2	2,3	2,6	3,3	3,6	3,8	.	.	
Construction, total	real, CMPY	7,0	6,6	6,3	8,1	12,7	12,3	12,2	13,5	16,7	4,1	1,5	2,0	3,3	3,1	2,8	.	
<b>LABOUR</b>																		
Employment total <sup>2)</sup>	th. persons	64000	64500	64800	65100	65500	65200	64900	64700	64800	64900	65000	65300	65700	66000	66600	.	
Unemployment, end of period <sup>3)</sup>	th. persons	6419	6068	6095	6122	6149	6200	6252	6303	6190	6077	5964	5819	5674	5529	5472	5452	
Unemployment rate <sup>3)</sup>	%	9,1	8,6	8,6	8,6	8,6	8,7	8,8	8,9	8,7	8,6	8,4	8,2	7,9	7,7	7,6	7,6	
<b>WAGES, SALARIES</b>																		
Total economy, gross	RUB	2923,0	3054,0	3284,0	3364,0	3376,0	3405,0	3515,0	3578,0	4541,0	3760,0	3725,0	4031,0	4110,0	4187,0	4460,0	4520,0	
Total economy, gross	real, CMPY	14,7	16,3	15,7	19,6	21,9	19,8	21,9	20,1	26,3	15,5	19,0	16,3	20,9	18,0	18,2	16,7	
Total economy, gross	USD	101	105	113	115	115	116	119	120	151	123	121	130	132	134	142	143	
Total economy, gross	EUR	113	120	132	134	128	127	131	135	169	140	139	148	149	146	149	144	
Industry, gross	USD	131	134	141	145	149	148	153	155	177	147	146	158	160	159	.	.	
<b>PRICES</b>																		
Consumer	PM	1,8	1,8	1,6	0,5	0,0	0,6	1,1	1,4	1,6	3,1	1,2	1,1	1,2	1,7	0,5	0,7	
Consumer	CMPY	25,0	25,0	23,7	22,2	20,9	20,1	18,9	18,8	18,8	19,2	17,9	17,0	16,3	16,2	14,9	15,1	
Consumer	CCPY	23,0	23,4	23,4	23,2	22,9	22,6	22,2	21,9	21,6	19,2	18,5	18,0	17,5	17,3	16,8	16,6	
Producer, in industry	PM	0,9	0,9	2,0	0,9	0,0	-0,1	0,4	0,3	0,2	0,4	-0,3	-0,1	2,2	2,5	3,1	2,6	
Producer, in industry	CMPY	23,8	22,6	22,4	19,4	17,4	15,0	12,5	11,4	10,7	9,0	6,9	5,5	6,8	8,5	9,6	11,4	
Producer, in industry	CCPY	25,8	25,1	24,7	23,8	23,0	22,0	21,0	20,0	19,1	9,0	7,9	7,1	7,0	7,4	7,7	8,3	
<b>RETAIL TRADE</b>																		
Turnover <sup>4)</sup>	real, CMPY	10,5	12,3	11,5	11,1	11,9	11,1	12,2	11,6	10,8	9,4	8,2	8,8	9,4	5,9	7,5	.	
Turnover <sup>4)</sup>	real, CCPY	8,2	9,0	9,5	9,7	10,0	10,1	10,3	10,5	10,5	9,4	8,8	8,8	9,0	8,3	8,2	.	
<b>FOREIGN TRADE<sup>5(6)</sup></b>																		
Exports total, cumulated	EUR mn	36782	46583	57225	66660	76667	85914	94737	104254	113443	7700	15392	24972	35511	44698	53220	.	
Imports total, cumulated	EUR mn	17098	22294	27733	32860	37978	42588	47903	53594	60029	4168	8767	14090	19735	24737	29768	.	
Trade balance, cumulated	EUR mn	19684	24288	29493	33800	38689	43325	46835	50660	53414	3531	6624	10882	15775	19961	23452	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	.	.	20842	.	.	28092	.	.	34575	.	.	7200	.	.	14600	.	
<b>EXCHANGE RATE</b>																		
RUB/USD, monthly average	nominal	28,851	29,028	29,115	29,223	29,343	29,430	29,538	29,797	30,100	30,473	30,806	31,064	31,174	31,255	31,405	31,515	
RUB/EUR, monthly average	nominal	25,769	25,415	24,871	25,111	26,370	26,821	26,784	26,478	26,852	26,952	26,781	27,201	27,596	28,682	29,965	31,323	
RUB/USD, calculated with CPI <sup>7)</sup>	real, Jan98=100	162,3	161,1	159,3	158,7	159,3	159,5	157,8	156,7	155,3	152,8	153,3	153,7	153,3	151,1	151,2	150,7	
RUB/USD, calculated with PPI <sup>7)</sup>	real, Jan98=100	184,0	184,2	179,3	175,5	176,2	176,8	172,8	173,1	172,4	174,4	176,7	180,5	178,8	174,9	170,6	166,9	
RUB/EUR, calculated with CPI <sup>7)</sup>	real, Jan98=100	130,6	127,1	122,6	122,9	129,2	130,9	129,3	125,8	125,7	122,8	120,9	121,9	122,8	125,8	130,6	135,6	
RUB/EUR, calculated with PPI <sup>7)</sup>	real, Jan98=100	147,2	144,2	138,4	137,9	144,7	147,4	146,1	143,2	144,7	144,9	144,4	147,4	147,0	149,2	151,0	153,8	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	RUB bn	435,3	438,3	474,7	490,6	507,1	531,0	531,5	527,3	584,3	533,4	543,4	552,9	610,3	607,5	645,9	.	
M1, end of period	RUB bn	918,2	938,5	987,9	1015,1	1040,8	1074,9	1084,4	1058,1	1192,6	1079,4	1084,6	1106,3	1147,5	1204,1	1254,5	.	
M2, end of period	RUB bn	1683,4	1730,0	1798,7	1842,3	1870,4	1925,5	1974,7	1984,9	2122,7	2056,3	2105,0	2137,7	2213,5	2288,3	2356,8	.	
M2, end of period	CMPY	49,9	47,8	44,7	41,5	40,9	38,7	39,5	36,2	36,1	34,3	30,3	31,0	31,5	32,3	31,0	.	
Refinancing rate (p.a.) <sub>end of period</sub>	%	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	23,0	23,0	23,0	23,0	
Refinancing rate (p.a.) <sub>end of period<sup>8)</sup></sub>	real, %	1,0	1,9	2,1	4,7	6,5	8,7	11,1	12,2	12,9	14,6	17,0	18,4	15,2	13,3	12,3	10,4	
<b>BUDGET</b>																		
Central gov. budget balance, cum.	RUB bn	86,6	120,2	133,1	167,6	174,4	178,6	214,7	257,4	264,7	82,9	89,2	108,1	132,3	148,0	150,6	.	

1) Seasonally adjusted.

2) Based on labour force survey.

3) According to ILO methodology.

4) Including estimated turnover of non-registered firms, including catering.

5) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.

6) Cumulation starting January and ending December each year, incl. estimates of non-registered imports.

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

8) Deflated with annual PPI.

## S L O V A K REPUBLIC: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002					
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
<b>PRODUCTION</b>																	
Industry, total	real, CMPY	6,4	8,5	8,9	9,4	5,8	6,8	8,4	3,9	2,1	0,3	4,8	-1,5	8,9	3,8	3,8	.
Industry, total	real, CCPY	7,5	7,7	7,9	8,1	7,8	7,7	7,8	7,4	6,9	0,3	2,5	1,1	3,0	3,2	3,3	.
Industry, total	real, 3MMA	6,8	7,9	8,9	8,0	7,3	7,1	6,3	4,9	2,2	2,4	1,1	3,9	3,6	5,4	.	.
Construction, total	real, CMPY	6,2	1,0	3,3	0,7	-1,6	-6,7	-1,2	-4,1	-8,2	-4,2	-5,5	-0,8	8,9	7,0	-1,5	.
<b>LABOUR</b>																	
Employment in industry	th. persons	554,4	554,0	555,8	557,2	555,7	556,0	554,1	553,5	549,1	542,9	543,0	544,2	545,7	546,4	549,3	.
Unemployment, end of period <sup>1)</sup>	th. persons	519,0	498,7	505,2	510,7	506,1	497,6	499,3	513,1	533,7	563,9	560,2	546,3	521,0	510,2	507,0	505,0
Unemployment rate <sup>1)</sup>	%	18,3	17,5	17,8	18,0	17,8	17,4	17,3	17,7	18,6	19,7	19,6	19,1	18,1	17,7	17,6	17,6
Labour productivity, industry	CCPY	6,2	6,4	6,6	6,8	6,5	6,4	6,6	6,3	5,9	2,3	4,6	3,1	5,0	5,0	5,0	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	-0,2	0,1	0,4	0,6	0,8	0,8	0,9	1,5	2,4	9,7	8,5	9,8	7,6	6,3	4,9	.
<b>WAGES, SALARIES</b>																	
Industry, gross	SKK	12708	13459	13809	13322	13125	12667	13763	15835	15258	13529	12866	13565	13687	14340	14706	.
Industry, gross	real, CMPY	3,2	2,5	2,7	1,3	1,0	-0,3	3,1	4,4	7,0	2,8	6,3	4,2	4,0	3,2	3,8	.
Industry, gross	USD	261	273	275	269	274	265	286	326	316	281	265	283	290	306	316	.
Industry, gross	EUR	292	312	322	313	305	291	316	367	354	318	304	323	328	334	332	.
<b>PRICES</b>																	
Consumer	PM	0,5	0,5	0,3	0,2	-0,2	0,2	0,0	0,0	0,2	1,5	0,4	0,0	0,4	0,2	-0,4	-0,3
Consumer	CMPY	7,1	7,4	7,8	8,0	7,8	7,3	6,9	6,4	6,4	6,2	4,3	3,6	3,6	3,2	2,6	2,0
Consumer	CCPY	6,9	7,0	7,1	7,2	7,3	7,3	7,3	7,2	7,1	6,2	5,2	4,7	4,4	4,2	3,9	3,6
Producer, in industry	PM	0,3	-0,3	0,4	-0,4	-0,1	-0,2	0,1	-0,4	-0,1	0,4	1,8	0,0	0,8	-0,2	-0,4	0,2
Producer, in industry	CMPY	9,2	7,9	7,5	6,2	5,9	4,8	3,6	2,4	2,2	2,4	2,3	1,5	2,0	2,1	1,5	2,2
Producer, in industry	CCPY	9,4	9,1	8,9	8,5	8,1	7,8	7,3	6,9	6,5	2,4	2,3	2,1	2,0	2,1	2,0	2,0
<b>RETAIL TRADE</b>																	
Turnover	real, CMPY	2,8	3,9	0,4	5,1	5,4	6,1	5,0	4,8	5,4	.	.	.	.	.	.	.
Turnover	real, CCPY	3,4	3,5	3,0	3,3	3,6	3,9	4,0	4,1	4,2	.	.	.	.	.	.	.
<b>FOREIGN TRADE<sup>2)3)</sup></b>																	
Exports total (fob), cumulated	EUR mn	4572	5839	7084	8284	9365	10575	11856	13088	14102	1065	2188	3400	4696	5903	7203	8538
Imports total (fob), cumulated	EUR mn	5158	6604	8040	9436	10704	12073	13567	15101	16485	1200	2473	3859	5288	6750	8181	9677
Trade balance, cumulated	EUR mn	-585	-764	-956	-1152	-1338	-1498	-1712	-2013	-2383	-135	-285	-460	-592	-847	-978	-1140
Exports to EU (fob), cumulated	EUR mn	2805	3586	4351	5068	5648	6371	7121	7865	8441	664	1368	2117	2898	3608	4398	5202
Imports from EU (fob), cumulated	EUR mn	2545	3292	4038	4779	5377	6056	6801	7557	8207	584	1221	1922	2654	3383	4122	4907
Trade balance with EU, cumulated	EUR mn	260	294	313	289	271	315	320	308	235	80	147	195	244	225	276	294
<b>FOREIGN FINANCE</b>																	
Current account, cumulated	USD mn	-372	-586	-784	-856	-956	-1131	-1251	-1492	-1756	-84	-168	-312	-446	-762	.	.
<b>EXCHANGE RATE</b>																	
SKK/USD, monthly average	nominal	48,7	49,3	50,2	49,6	48,0	47,8	48,1	48,5	48,2	48,1	48,6	47,9	47,1	46,9	46,5	44,8
SKK/EUR, monthly average	nominal	43,5	43,2	42,8	42,6	43,1	43,5	43,6	43,1	43,1	42,5	42,3	41,9	41,7	43,0	44,3	44,5
SKK/USD, calculated with CPI <sup>4)</sup>	real, Jan98=100	113,1	114,4	116,2	114,2	110,9	110,6	111,0	111,8	110,5	108,7	109,9	108,9	107,4	106,6	106,4	102,6
SKK/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	122,5	124,9	125,6	122,6	118,6	118,9	117,2	118,1	116,0	114,2	113,4	113,4	111,8	111,5	111,2	106,8
SKK/EUR, calculated with CPI <sup>4)</sup>	real, Jan98=100	90,8	90,2	89,3	88,5	89,8	90,7	90,8	89,6	89,5	87,3	86,6	86,3	85,9	88,5	91,6	92,2
SKK/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	97,9	97,8	96,8	96,3	97,2	99,0	98,9	97,6	97,4	94,9	92,7	92,6	91,7	94,9	98,1	98,3
<b>DOMESTIC FINANCE</b>																	
M0, end of period	SKK bn	65,6	67,3	69,3	70,0	70,7	72,7	74,9	79,1	81,0	79,7	80,1	79,6	78,8	79,0	79,6	79,3
M1, end of period	SKK bn	182,0	186,3	189,8	195,8	198,4	207,4	207,0	214,0	228,5	217,8	214,2	210,3	210,6	212,1	218,7	220,2
M2, end of period	SKK bn	619,8	619,3	625,3	633,9	644,0	641,8	635,3	651,3	680,3	668,4	674,8	666,0	662,8	668,7	678,9	692,2
M2, end of period	CMPY	14,0	13,5	14,5	13,6	10,3	9,5	9,3	12,0	13,1	10,2	10,9	8,8	6,9	8,0	8,6	9,2
Discount rate (p.a.), end of period <sup>5)</sup>	%	8,8	8,8	8,8	8,8	8,8	8,8	8,8	8,8	8,8	7,8	7,8	7,8	8,3	8,3	8,3	8,3
Discount rate (p.a.), end of period <sup>5)6)</sup>	real, %	-0,4	0,8	1,2	2,5	2,8	3,8	5,0	6,3	6,4	5,2	5,3	6,2	6,1	6,0	6,6	5,9
<b>BUDGET</b>																	
Central gov. budget balance, cum.	SKK mn	-14916	-14649	-13462	-22339	-22415	-22878	-27560	-29797	-44371	-2902	-10851	-15185	-13497	-20825	-24661	-34768

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

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

3) Cumulation starting January and ending December each year.

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

5) From January 2002 corresponding to the 2-week limit rate of NBS.

6) Deflated with annual PPI.

## S L O V E N I A: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total	real, CMPY	9,4	1,2	-3,9	6,4	2,9	-1,1	7,2	0,1	0,2	3,9	3,2	-1,5	9,6	0,1	-1,9	.	
Industry, total	real, CCPY	5,8	4,8	3,2	3,7	3,6	3,0	3,5	3,2	2,9	3,9	3,5	1,7	3,7	2,9	2,1	.	
Industry, total	real, 3MMA	4,3	1,8	1,0	1,6	2,7	3,0	2,0	2,5	1,3	2,4	1,7	3,6	2,6	2,5	.	.	
Construction, total <sup>1)</sup>	real, CMPY	0,7	-2,7	-5,5	0,4	-2,2	-3,9	1,6	-3,2	-9,0	-11,6	-3,9	-6,1	-0,1	-4,9	0,6	.	
<b>LABOUR</b>																		
Employment total	th. persons	776,3	779,8	781,9	782,3	782,1	786,2	786,6	785,6	782,1	779,5	781,3	782,8	784,3	785,3	785,6	.	
Employees in industry <sup>2)</sup>	th. persons	223,0	223,5	223,4	222,9	221,9	221,8	221,5	221,2	219,8	220,2	220,2	220,5	219,8	219,6	.	.	
Unemployment, end of period	th. persons	102,7	100,1	97,8	99,2	98,1	99,8	102,2	103,2	104,3	106,2	105,0	103,5	102,7	101,1	100,1	.	
Unemployment rate <sup>3)</sup>	%	11,7	11,4	11,1	11,3	11,1	11,3	11,5	11,6	11,8	12,0	11,8	11,7	11,6	11,4	11,3	.	
Labour productivity, industry	CCPY	5,6	4,6	3,0	3,5	3,5	3,1	3,8	3,6	3,5	6,9	6,6	4,8	6,9	6,2	5,4	.	
Unit labour costs, excl.r. adj.(EUR)	CCPY	0,4	1,1	2,3	1,5	1,6	1,7	1,1	1,1	1,1	-3,2	-3,3	-1,2	-2,6	-1,7	.	.	
<b>WAGES, SALARIES</b>																		
Total economy, gross	th. SIT	206,9	210,5	209,3	210,1	216,4	214,1	219,2	234,8	234,1	226,4	223,3	227,0	228,8	231,1	229,2	.	
Total economy, gross	real, CMPY	4,1	2,0	1,7	1,3	3,0	3,0	3,3	3,0	2,6	0,8	0,9	2,0	2,0	2,1	2,5	.	
Total economy, gross	USD	855	852	823	829	889	890	903	946	945	901	870	888	901	939	967	.	
Total economy, gross	EUR	960	974	965	965	989	976	997	1066	1059	1020	1001	1014	1019	1026	1014	.	
Industry, gross	USD	731	732	700	709	770	757	779	818	791	771	735	760	767	806	.	.	
<b>PRICES</b>																		
Consumer	PM	0,7	1,1	0,4	0,2	0,0	0,9	0,5	0,4	0,1	1,6	0,9	0,7	1,4	0,3	-0,2	0,5	
Consumer	CMPY	9,0	9,7	9,5	8,8	8,5	7,9	7,8	7,0	7,0	8,4	8,1	7,6	8,4	7,5	6,8	7,2	
Consumer	CCPY	8,8	9,0	9,1	9,0	9,0	8,8	8,7	8,6	8,4	8,4	8,3	8,1	8,2	8,0	7,8	7,7	
Producer, in industry	PM	0,9	0,1	0,3	0,4	0,3	0,4	1,0	0,5	1,0	0,3	0,6	0,4	0,4	0,1	0,2	0,2	
Producer, in industry	CMPY	10,0	9,9	9,8	9,2	8,2	8,0	7,2	7,1	7,5	5,8	5,3	6,3	5,7	5,7	5,6	5,3	
Producer, in industry	CCPY	10,1	10,1	10,0	9,9	9,7	9,5	9,3	9,1	8,9	5,8	5,6	5,8	5,8	5,7	5,7	5,7	
<b>RETAIL TRADE</b>																		
Turnover	real, CMPY	11,0	5,6	3,2	12,2	9,7	5,5	9,4	5,3	6,4	9,2	8,5	8,5	8,3	5,7	.	.	
Turnover	real, CCPY	8,9	8,2	7,3	8,0	8,2	7,9	8,1	7,8	7,7	9,2	8,8	8,7	8,6	8,0	.	.	
<b>FOREIGN TRADE<sup>4)5)</sup></b>																		
Exports total (fob), cumulated	EUR mn	3438	4348	5264	6196	6900	7782	8741	9627	10348	829	1686	2653	3622	4538	5454	.	
Imports total (cif), cumulated	EUR mn	3758	4803	5783	6775	7548	8466	9481	10463	11342	877	1792	2817	3860	4844	5762	.	
Trade balance total, cumulated	EUR mn	-320	-456	-519	-580	-649	-684	-740	-836	-994	-48	-106	-164	-238	-306	-307	.	
Exports to EU (fob), cumulated	EUR mn	2223	2779	3343	3929	4342	4882	5465	6006	6434	553	1082	1670	2253	2789	.	.	
Imports from EU (cif), cumulated	EUR mn	2551	3269	3934	4611	5110	5724	6414	7090	7677	587	1204	1913	2622	3306	.	.	
Trade balance with EU, cumulated	EUR mn	-328	-489	-591	-681	-768	-843	-949	-1083	-1243	-34	-122	-242	-369	-517	.	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	22	-29	-44	-30	-10	35	86	102	-67	62	93	82	86	94	169	.	
<b>EXCHANGE RATE</b>																		
SIT/USD, monthly average	nominal	241,9	247,1	254,4	253,5	243,5	240,7	242,7	248,2	247,8	251,4	256,6	255,7	254,0	246,1	237,1	228,3	
SIT/EUR, monthly average	nominal	215,6	216,3	217,0	217,8	218,7	219,4	219,9	220,4	221,1	222,0	223,0	223,8	224,6	225,3	226,0	226,7	
SIT/USD, calculated with CPI <sup>6)</sup>	real, Jan98=100	120,8	122,6	125,9	124,8	119,9	117,9	118,0	119,9	119,3	119,3	121,2	120,5	118,8	114,8	110,9	106,3	
SIT/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	128,1	131,3	133,4	130,3	124,8	122,7	119,8	121,4	118,6	120,3	122,0	122,5	122,3	118,4	113,9	109,5	
SIT/EUR, calculated with CPI <sup>6)</sup>	real, Jan98=100	97,0	96,7	96,7	96,7	97,2	96,8	96,6	96,2	96,5	95,8	95,5	95,6	95,1	95,3	95,7	95,5	
SIT/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	102,3	102,8	102,8	102,4	102,4	102,4	101,2	100,4	99,6	99,9	99,7	100,1	100,4	100,8	100,8	100,9	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	SIT bn	114,9	113,2	124,3	115,9	116,3	122,6	124,7	126,5	142,1	129,4	130,0	135,9	134,3	135,1	.	.	
M1, end of period	SIT bn	417,1	408,1	437,8	419,6	418,1	438,1	440,3	455,3	502,2	471,8	469,2	485,3	489,5	502,8	524,3	.	
Broad money, end of period	SIT bn	2353,0	2410,3	2445,9	2477,1	2514,8	2555,2	2617,3	2705,7	2876,7	2911,5	2929,0	2970,8	3010,4	3036,4	3025,5	.	
Broad money, end of period	CMPY	18,6	20,2	19,8	19,3	19,9	20,2	21,8	23,4	30,4	29,9	29,1	27,5	27,9	26,0	23,7	.	
Discount rate (p.a.)end of period	%	11	11	11	11	11	11	11	11	11	9	9	9	10	10	10	.	
Discount rate (p.a.)end of period <sup>7)</sup>	real, %	0,9	1,0	1,1	1,6	2,6	2,8	3,5	3,6	3,3	3,0	3,5	2,5	4,1	4,1	4,2	.	
<b>BUDGET</b>																		
General gov.budget balance, cum.	SIT mn	-41823	-58363	-107532	-98297	-104403	-129993	-127649	-135450	-63193	-71095	-103744	-128285	-116819	.	.	.	

1) Effective working hours.

2) Enterprises with 3 or more employed, excluding employees of self-employed persons.

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

7) Deflated with annual PPI.

## U K R A I N E: Selected monthly data on the economic situation 2001 to 2002

(updated end of Aug 2002)

		2001										2002						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
<b>PRODUCTION</b>																		
Industry, total <sup>1)</sup>	real, CMPY	18,1	19,8	17,1	12,5	10,6	11,3	-2,2	-0,4	-5,0	-1,2	1,4	-0,8	.	.	.	.	
Industry, total	real, CCPY	18,7	19,1	18,8	18,0	17,1	16,7	16,2	15,4	14,2	1,7	3,5	3,1	3,5	3,1	5,8	6,1	
Industry, total <sup>1)</sup>	real, 3MMA	15,4	18,3	16,4	13,3	11,5	6,2	2,6	-2,5	-2,2	-1,7	-0,2	.	.	.	.	.	
<b>LABOUR</b>																		
Unemployment, end of period	th. persons	1131,5	1088,4	1046,5	1015,3	1001,1	984,6	971,2	981,6	1008,1	1028,7	1067,4	1079,0	1087,0	1051,0	1023,4	1005,2	
Unemployment rate <sup>2)</sup>	%	4,1	4,0	3,8	3,7	3,7	3,6	3,5	3,6	3,7	3,8	3,9	3,9	4,0	3,8	3,7	3,7	
<b>WAGES, SALARIES <sup>1)</sup></b>																		
Total economy, gross	UAH	288,9	303,0	317,8	327,3	329,3	326,3	335,8	334,4	378,5	320,8	328,7	354,8	355,8	358,9	377,4	398,1	
Total economy, gross	real, CMPY	20,2	23,5	24,4	24,9	21,4	22,1	24,6	22,3	20,4	19,9	20,5	23,6	20,6	16,9	20,0	22,7	
Total economy, gross	USD	53	56	59	61	62	61	63	63	71	60	62	67	67	67	71	.	
Total economy, gross	EUR	60	64	69	71	69	67	70	71	80	68	71	76	76	74	74	.	
Industry, gross	USD	70	74	77	81	82	81	84	83	89	80	80	.	.	.	.	.	
<b>PRICES</b>																		
Consumer	PM	1,5	0,4	0,6	-1,7	-0,2	0,4	0,2	0,5	1,6	1,0	-1,4	-0,7	1,4	-0,3	-1,8	-1,5	
Consumer	CCPY	17,0	15,1	11,6	9,9	9,6	7,3	6,0	6,1	6,1	5,6	3,5	2,2	2,1	1,4	-1,1	-0,9	
Consumer	CCPY	18,8	18,0	16,9	15,8	15,0	14,1	13,2	12,5	12,0	5,6	4,5	3,7	3,3	2,9	2,2	1,8	
Producer, in industry	PM	0,2	0,0	0,2	0,1	-0,1	0,1	-0,7	0,7	-0,5	-0,4	0,7	-0,8	1,2	1,5	2,2	1,0	
Producer, in industry	CCPY	10,8	10,1	9,4	7,9	7,1	5,9	3,8	3,5	0,9	-0,3	-0,2	-0,5	0,5	2,0	4,0	5,0	
Producer, in industry	CCPY	14,4	13,5	12,8	12,1	11,4	10,8	10,0	9,4	8,6	-0,3	-0,3	-0,3	-0,1	0,3	0,9	1,5	
<b>RETAIL TRADE</b>																		
Turnover <sup>3)</sup>	real, CCPY	8,7	10,3	10,4	11,4	11,4	11,5	11,8	12,3	12,6	.	18,7	16,8	18,0	18,1	16,1	.	
<b>FOREIGN TRADE<sup>4)5)</sup></b>																		
Exports total (fob), cumulated	EUR mn	5656	7174	8918	10497	11973	13389	15054	16684	18160	1376	2862	4419	6089	7581	9054	.	
Imports total (cif), cumulated	EUR mn	5227	6710	8257	9682	11273	12683	14242	15946	17613	1161	2478	4047	5662	7047	8519	.	
Trade balance, cumulated	EUR mn	430	464	661	815	700	706	812	738	547	215	384	372	427	534	535	.	
<b>FOREIGN FINANCE</b>																		
Current account, cumulated	USD mn	.	.	845	.	.	1237	.	.	1402	.	.	722	.	.	.	.	
<b>EXCHANGE RATE</b>																		
UAH/USD, monthly average	nominal	5,418	5,414	5,401	5,371	5,347	5,339	5,310	5,287	5,294	5,313	5,321	5,322	5,327	5,328	5,329	.	
UAH/EUR, monthly average	nominal	4,832	4,753	4,609	4,617	4,807	4,869	4,809	4,703	4,718	4,696	4,630	4,660	4,712	4,865	5,079	.	
UAH/USD, calculated with CPI <sup>6)</sup>	real, Jan98=100	168,1	168,0	166,9	168,3	167,9	167,7	165,9	164,1	161,2	160,5	163,7	165,7	164,6	165,1	168,3	.	
UAH/USD, calculated with PPI <sup>6)</sup>	real, Jan98=100	162,7	163,2	160,9	157,3	156,7	156,2	153,0	150,7	149,8	151,4	150,4	153,5	153,2	150,9	147,9	.	
UAH/EUR, calculated with CPI <sup>6)</sup>	real, Jan98=100	134,8	132,7	128,0	130,2	136,0	137,5	135,5	131,6	130,1	128,7	128,9	131,2	131,5	136,5	144,9	.	
UAH/EUR, calculated with PPI <sup>6)</sup>	real, Jan98=100	129,8	127,9	123,8	123,4	128,5	130,1	128,9	124,6	125,3	125,5	122,9	125,2	125,6	127,9	130,5	.	
<b>DOMESTIC FINANCE</b>																		
M0, end of period	UAH mn	13610	13452	14487	14797	15527	16208	16685	17325	19465	18101	18666	19646	20980	20394	21400	22600	
M1, end of period	UAH mn	21796	22554	23820	24164	24768	25884	26406	26782	29773	27586	28416	30287	30672	30670	.	.	
Broad money, end of period	UAH mn	34092	35157	36953	37373	38275	39643	40750	41508	45555	43619	45032	47345	48389	48813	51200	53900	
Broad money, end of period	CCPY	35,8	35,1	36,4	32,9	29,8	36,8	41,2	41,2	42,0	41,5	42,3	43,4	41,9	38,8	38,6	44,2	
Refinancing rate (p.a.) <sup>end of period</sup>	%	21,0	21,0	19,0	19,0	17,0	15,0	15,0	15,0	12,5	12,5	12,5	11,5	10,0	10,0	10,0	8,0	
Refinancing rate (p.a.) <sup>end of period</sup> <sup>7)</sup>	real, %	9,2	9,9	8,8	10,2	9,3	8,6	10,8	11,1	11,5	12,8	12,7	12,1	9,5	7,9	5,7	2,9	
<b>BUDGET</b>																		
General gov. budget balance, cum. <sup>8)</sup>	UAH mn	1493,0	1623,7	1385,0	1676,6	1407,5	1379,7	1616,3	982,3	-1263,6	1381,7	1516,6	660,6	564,2	1626,6	1368,2	.	

1) Excluding small firms.

2) Ratio of unemployed to the economically active.

3) Official registered enterprises.

4) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.

5) Cumulation starting January and ending December each year.

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

7) Deflated with annual PPI.

8) Including pension fund.

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