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Contents

The dark side of the Balkans (the shadow economy in Southeastern Europe)

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Introduction

Measuring the size of the shadow economy in the countries and territories of Southeastern Europe (SEE) with the help of traditional methods can be a difficult task, especially because there is still a lack of uniform and full data coverage. In this article we apply a basic method using fiscal data that are available for all Balkan countries and territories. In the second part of this article, data from national accounts is used to provide further estimates. The countries and territories covered are: Albania; Bosnia and Herzegovina with its two entities – the Federation of Bosnia and Herzegovina and Republika Srpska; Bulgaria; Croatia; Macedonia; Romania; the State Union of Serbia and Montenegro and its two republics – Serbia and Montenegro; and finally, Kosovo, which is currently a protectorate under the rule of the United Nations.

Measuring the unmeasurable

Following the terminology of Schneider and Enste (2000) one can distinguish the following three types of traditional methods to measure the size and development of the shadow economy: the direct approaches, the indirect approaches and the model approach. What follows is a short description of the traditional methods. For a more detailed synopsis see Holzner (2003).

Direct approaches to the measurement of the unofficial economy are generally microeconomic approaches using either survey or tax auditing methods. However, these methods rely heavily on the honesty of the surveyed persons and on the investigative skills of the auditors respectively They may lack representativeness and can be very costly if done on a big scale.

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The indirect or indicator approaches to the estimation of the development of the hidden economy are in general macroeconomic approaches. These include, *inter alia*: the national accounts discrepancy method, using the gap between the income measure of GDP and the expenditure measure of GDP for the estimation of the shadow economy; the official and actual labour force discrepancy method, where a change in the official participation rate can be a crude estimate for a change in the informal sector activities; the transactions approach by Feige (1979, 1989, 1996), where, starting from the quantity equation, assumptions on the velocity of money and the relationship between total transactions and the total nominal GDP (= official + unofficial economy) are made; the currency demand approach by Tanzi (1980, 1983), assuming that the unofficial economy's transactions are made in cash, an increase of the shadow economy would therefore result in an increase of currency demand; and the physical input method, e.g. by Kaufmann and Kaliberda (1996) or Lackó (1996, 1998, 1999), using data on electricity consumption for estimating the size of the shadow economy. Several of the indirect approaches need either the assumption of a base year without a shadow economy or an external estimate of the unofficial economy of a base country (e.g. Feige's transaction approach, Tanzi's currency demand approach and Lackó's household electricity approach). The use of base years or base countries is at the same time one of the weaknesses of these approaches and provides, among other things, points of critique.

Finally, the model approach, which goes back to Weck (1983) and Frey and Weck-Hannemann (1984), deals with multiple causes (e.g. tax burden, burden of regulations, citizens' attitudes towards the state) leading to the existence, growth and multiple effects (e.g. monetary indicators, labour market indicators, indicators of the development of the product market) of the black economy.

Unfortunately full and uniform data coverage, which would be needed for applying the above-mentioned traditional methods for all countries and territories of the Balkans, is still lacking. This is the main reason why the literature on the shadow economy fails to provide results for the whole of Southeast Europe derived using a single method. As can be seen from Table 1, it does not help to use results from different methods. Table 1 compares the results (unofficial economy shares in per cent of official GDP) of the indirect methods by Lackó (1999), indicated as method L, by Kaufmann and Kaliberda (1996), indicated as KK, and by Madzarevic-Sujster and Mikulic (2002), indicated as MM, for Bulgaria and Croatia in the period 1992 to 1995. The first two are physical input methods, the third one is a national accounts discrepancy method. Some of the results differ quite substantially with respect to the method used, in terms of shares for single years as well as growth rates between years.

Table 1

Comparison of unofficial economy shares in % of official GDP

according to the methods of Lackó (1999), Kaufmann and Kaliberda (1996), and Madzarevic-Sujster and Mikulic (2002)

Country	Method	1992	1993	1994	1995
Bulgaria	L	34.1	34.0	35.9	34.0
Bulgaria	KK	33.3	42.7	41.0	56.7
Croatia	L	38.6	39.3	40.4	36.0
Croatia	MM	29.4	36.9	25.5	17.7

Source: Lackó (1999), pp. 52, 47, Madzarevic-Sujster and Mikulic (2002), p. 41.

The 'tax revenue anchor method'

In order to obtain results for all Balkan countries and territories with the help of a single method, it is necessary to make use of a rule-of-thumb method that may prove quite effective especially in countries for which data is poor. The IMF country report on Albania used various indicators to give a hint on the development and size of the shadow economy in this country (see IMF, 2003). The following method may be called the 'tax revenue anchor method' (TRAM). Here, one can compare tax revenue developments in per cent of GDP.

Using estimates of the household statutory tax burden and assumptions on the share of the shadow economy in a base country, differences in tax revenue rates can provide a rough estimate of the informal economy.

The IMF country report estimated a statutory tax burden of around 50% for Albania and the base country of Bulgaria. In the case of Albania this was calculated for an average household with an estimated average income tax rate of about 18%, which is the middle tax bracket, and with an employee contribution to the social security institute representing roughly 12%. If three quarters of the remaining 70% of the household income is consumed, another 11% would have to be paid in VAT at a VAT rate of 20%; assuming that one third of the consumed income is being taxed with an estimated 50% excise tax (which is approximately the average of the excise tax rates for 15 different excised goods) 7% of the income would have to be paid for excise. Assuming a further 2% for other taxes, the average Albanian household would have to spend about 50% of its income on taxes. Using an external estimate of the unofficial economy of 36.2% of GDP in the base country of Bulgaria, the nearly 10 percentage points difference in the total tax collection rates between the two countries (19% vs. 29%) would imply that, given the same statutory tax burden of 50%, the shadow economy in Albania would account for about 56.2% of official GDP.[1] Thus the 10 percentage points difference in the total tax collection rates transforms into a 20 percentage points difference in the total shadow economy shares, due to the estimated statutory tax burden of one half of the income.

One of the most crucial problems of this approach is the dual character of the estimated statutory tax rate in per cent of household income. On the one hand, it represents only the tax rate that an average household would have to pay, on the other hand it is used to estimate the informal sector in the whole economy, with the help of personal tax revenues in per cent of GDP. Ideally, a statutory tax rate for the whole economy, including the corporate sector, should be estimated. In this case, assuming the sum of taxable incomes were also known for each country, a base country for estimating the size of the shadow economy would no longer be necessary, as the ratio between actual and statutory tax burden would yield the correct size of the shadow economy for each country separately. We re-visit this issue in the second part of this article. However the 'guesstimate' of the household statutory tax rate is already difficult enough. It also implies the somewhat questionable assumption of a typical Balkan household, equal in all parts of SEE, consuming similar proportions of the income, etc. One point of criticism in common with several other methods is that it is not clear which is the most reliable external estimate of the unofficial economy for the base country.

However, it could be assumed that the relationship between the statutory tax rate for households and the personal tax revenues in GDP is relevant for the whole economy, and that, still, an anchor has to be used to capture the difference between the household and the other sectors in the economy. In fact, it will be shown below that, under certain relatively strong assumptions, results from TRAM are consistent.

Pointing once more to the fact that the SEE data coverage is far from perfect, the application of the TRAM may turn out to be a useful tool to learn more about the shadow economy in the Balkans.

[1] Using the data on the shares of the unofficial economy as a percentage of the official GDP in selected transition economies, calculated with the help of the Kaufmann and Kaliberda (1996) method, from Johnson, Kaufmann and Shleifer (1997) p. 183, the IMF Country Report 03/64 is repeating the same error as can be seen in many other publications on the shadow economy in the transition economies. The original data represent the share of the unofficial economy in % of a total GDP, comprising official plus unofficial GDP. Thus, actually, the share of the shadow economy of Bulgaria in 1995 in the official GDP would not be 36.2% but 56.7%. This would result in an Albanian share of 76.7%. Especially via the standard publications on the shadow economy by Schneider (see e.g. Schneider and Enste, 2000) the same false reproduction is being multiplied and spread throughout the whole literature. However, from Lackó (1999), p. 46 and p. 47, the original and the recalculated data in % of official GDP from Johnson, Kaufmann and Shleifer (1997) can be obtained.

This is due to the usage of basic data on tax revenue and tax rates, available for all the countries and territories in SEE.

TRAM specifications and data sources

To apply the TRAM to all parts of SEE, several specifications and definitions must be provided first. For example, the original assumption that the estimated statutory tax rate is the same for the base country and the countries analysed, can no longer be supported.

To begin with, our chosen working definition of the shadow economy, provided by Mirus and Smith (1997), is the following: 'economic activity which would generally be taxable were it reported to the tax authorities'. Hence, this would include all unreported income and barter activities related to legal goods and services. Illegal activities are not part of this concept.[2]

In order to estimate a personal statutory tax rate (PST) for an average household, information on the tax structure of the particular countries and territories, taken mostly from various IMF country reports[3] and the stability pact's tax policy assessment (see Stability Pact, 2003), was employed. As the tax summaries were assessed on different dates[4], ranging from August 1999 to August 2002, the estimated PST rates can be considered to be relevant for approximately the period 2000-2002. Nevertheless, with the help of secondary literature (e.g. Ivanov et al., 2003), it was tried in all cases to correct the data to fit especially for the year 2001. In a first approach, an average income tax rate (AIT) and an employee social security rate (ESS) had to be estimated. This is easier in the second case, as it is a flat rate all over the Balkans. It is more difficult in the first case, where only Serbia as well as Montenegro have a flat personal income tax rate and Kosovo, at that time, had neither an income tax nor social security contributions. With all the others having progressive income taxation[5], AIT was estimated by calculating a simple average of the tax brackets' tax rates, including the first tax bracket of 0%. In the case of Albania and Romania, where agricultural income is exempted of income taxation, AIT was reduced by the share of agriculture in GDP.[6] For Albania this share is as high as 49.1% in 2001 and for Romania, 13.4%. It is worth mentioning that in Albania 71.6% of employment is engaged in the private agricultural sector and that in Romania agriculture and forestry account for 40.9% of employment. The same procedure had to be applied for calculating ESS all over the Balkans, as only employees and/or employers have to make social security contributions in SEE. Additionally, figures of AIT and ESS had to be corrected by the shares of remittances and state current transfers to the households in GDP[7], as this type of income is not being taxed by direct taxes and social security contributions. In the region, Kosovo has the highest ratio of remittances to GDP (30%), but in this case no correction had to be made due to the missing income taxation. In Serbia and Montenegro and in Albania private remittances accounted for over 13% of GDP in 2001. For Romania this figure is the lowest, at below 3%. The highest state current transfers to households in the region are reported

[2] To clarify further: one is not attempting to measure 'missing GDP'. The issue of 'missing GDP', meaning value added that is somehow not captured by the official measure of GDP and which, when found, should be added to officially recorded GDP to obtain 'actual GDP', is a separate issue and a separate, different quantity. The shadow economy as defined in this article may in principle be completely captured by the official measure of GDP. In all probability, however, some of it is, and some of it is not.

[3] Albania: IMF CR 03 64; Bosnia and Herzegovina: IMF CR 00 77; Bulgaria: IMF WP 01 11, Stability Pact (2003); Croatia: IMF CR 00 22, Stability Pact (2003); Macedonia: IMF CR 02 48; Romania: IMF CR 01 16; Serbia and Montenegro: IMF CR 02 103, Stability Pact (2003); Kosovo: IMF (2002).

[4] Albania: August 2002; Bosnia and Herzegovina: January 2000; Bulgaria: January 2000; Croatia: August 1999; Macedonia: January 2002; Romania: September 2000; Serbia and Montenegro: Beginning of 2001; Kosovo: Beginning of 2001.

[5] Interestingly, in Republika Srpska, the tax structure is regressive.

[6] This is assuming that the share of agriculture is the same in the household and the corporate sector. The data on agriculture in % of GDP and total employment are taken from the wiiw Database.

[7] The sources for the data on remittances and the current transfers can be found in various IMF country reports.

for Montenegro (19.5% in GDP) and Croatia (18.1% in GDP). The lowest can be observed in Kosovo (3%) and Albania (8.9%).

In a second stage, estimating the PST, the value added tax (VAT) or the respective sales tax was applied to 95%[8] of the remaining household income, after being reduced by the AIT and the ESS. VAT or sales taxes in SEE range between 15% (in Kosovo) and 22% (in Croatia). In most cases it is 20%. On top of that, an average excise tax rate is being applied to one third of the remaining income. This was estimated by using an average of all available excise tax rates for e.g. tobacco, beer, soft drinks, coffee, perfume and various types of gasoline and oil. In most cases, the actual rates were not available. Instead we had tax rates based on physical quantities rather than ad valorem. In those cases we estimated the relevant excise rates using the prices of the most common types of local cigarettes and gasoline.

In order to estimate the PST on the state level of Bosnia and Herzegovina and Serbia and Montenegro, statutory tax rates of the entities and the republics, respectively, were combined with the help of a GDP-based key. Thus, for the Federation of Bosnia and Herzegovina and Republika Srpska a relationship of 3 to 2 was assumed and for Serbia and Montenegro 12 to 1.

The next task is to compute the personal tax revenue shares in GDP (PTR) in 2001. For this purpose, data on the consolidated general government fiscal operations from various IMF country reports were used.[9] PTR includes personal income tax revenue, employee social security contribution revenue, value added or the respective sales tax revenue and excise tax revenue.

As, all over the Balkans, revenues from social security contributions are generally not indicated separately for the employees and the employers, it had to be corrected for the share of statutory employer social security rates in the total statutory social security rate. Similarly, in the case of Bosnia and Herzegovina and Macedonia, the original data on the revenue from direct taxes were not split into a personal income and enterprise profit tax revenue for the general budget. For Bosnia and Herzegovina and its entities, the revenue data were corrected with the help of the share of income tax revenue in direct tax revenues of the Federation of Bosnia and Herzegovina. For Macedonia, information from the central government was employed.

Table 2

Personal statutory tax rate and personal tax revenue, 2001

	PST in % of household income	**PTR** in % of GDP
Albania	0.40	0.11
Bosnia and Herzegovina	0.51	0.26
Federation of Bosnia and Herz.	0.53	0.29
Republika Srpska	0.48	0.19
Bulgaria	0.42	0.17
Croatia	0.51	0.30
Macedonia	0.43	0.15
Romania	0.44	0.14
Serbia and Montenegro	0.44	0.24
Serbia	0.44	0.24
Montenegro	0.45	0.22
Kosovo	0.28	0.12

Source: Own estimates, IMF, wiiw Database.

Table 2 provides the results for the estimates of Southeastern European PST's and PTR's. Unsurprisingly, Croatia (30%) is the country with the highest personal tax revenue share in GDP in 2001, while Albania (11%) had the lowest in the region. This is a striking fact, as even Kosovo had

[8] The IMF assumption of 75% being consumed implies a household savings rate in disposable household income of 25%, which seems by far too high. Therefore, we assumed a 5% household savings rate in disposable household income for all the countries and territories.

[9] Albania: IMF CR 03 64; Bosnia and Herzegovina: IMF CR 03 4; Bulgaria: IMF CR 02 173; Croatia: IMF CR 03 252; Macedonia: IMF CR 03 136; Romania: IMF CR 03 12; Serbia and Montenegro: IMF CR 03 151; Kosovo: IMF (2002).

more tax revenues than Albania – although Kosovo in 2001 had neither a personal income tax nor social security contributions. This is reflected in the estimated personal statutory tax rate in per cent of household income for Kosovo, which is only 28%. All the other countries and territories have rates well above 40%, with the Federation of Bosnia and Herzegovina (53%) having the highest, followed by Croatia (51%).

TRAM assumptions

With the help of TRAM and data for the share of the shadow economy in the anchor country, the share of the shadow economy in countries can be calculated.

Here, we have employed Bulgaria as the anchor country, as there exist several, very recent estimates of the Bulgarian SSE

TRAM results

Using the anchor SSE together with our results on the declared household income as a share of GDP, provides estimates of the SSE for the whole Balkans. The results are presented in Table 3. Here, Albania ends up with the highest share of the shadow economy in the region. Albania's SSE amounts to 51% of measured GDP. This is understandable, given the lowest personal tax revenues in Southeast Europe of only 11% of GDP and a personal statutory tax rate of 40% of household income. The other extreme is Croatia, with an estimated SSE of 19%. Although Croatia has a relatively high PST (51%), PTR (30%) reaches the highest regional value.

Several (partly overlapping) structural patterns, explaining these vast differences can be assessed. On the one hand there is a substantial difference between the SSE in the countries and territories of former Yugoslavia and the other countries in Southeast Europe. While the average of the SSE for former Yugoslavia is at about 30%, Albania, Bulgaria and Romania display an average SSE of 44%. This could be explained by the fact that former Yugoslavia did not experience a hard-core communist system but a semi-market-economy system, including a relatively developed tax system. There, taxes had an allocative function, unlike in the other countries of the region.

Table 3

Tax revenue anchor method – estimate of the share of the shadow economy in GDP, 2001

	PTR/PST	SSE
Albania	0.27	0.51
Bosnia and Herzegovina	0.50	0.28
Federation of Bosnia and Herz.	0.54	0.24
Republika Srpska	0.40	0.39
Bulgaria	**0.42**	**0.36**
Croatia	0.59	0.19
Macedonia	0.36	0.43
Romania	0.32	0.46
Serbia and Montenegro	0.54	0.24
Serbia	0.54	0.24
Montenegro	0.48	0.30
Kosovo	0.42	0.36

Source: Own estimates, IMF, wiiw Database.

Another interesting pattern can be observed for some of the SEE territories where the overall political status has not yet been entirely defined. This applies to Republika Srpska (39%), Montenegro (30%) and Kosovo (36%). Here, the SSE is relatively high. The situation of political imbalance in these territories seems to make it easier for the shadow economy to operate. Moreover, these territories are also known as 'smugglers' paradises'. This includes partly also Macedonia, resulting in a high SSE of 43%. Here, a substantial part of the country is *de facto* not under the control of the central government.

Beta Estimation Tax Approach (BETA)

With the TRAM method it was necessary to make a certain number of quite restrictive assumptions. In this section we seek to formulate our chosen theoretical background in a more general way.

We retain our working definition of the shadow economy as the sum of all legal economic activities that should be taxed but are not.

Given the limited scope of the present article, we purposely confine ourselves to tax evasion and avoidance[10] by households as a contributing factor to the shadow economy. It is for this reason that we refer to our final estimates as being lower bounds, although we feel that our approach is quite comprehensive because our starting point is final household consumption as reported in the countries' national accounts.

We here take explicit account of undeclared incomes. We consider 'actual GDP', implying that there could be some value added spread between informal wages and informal profits (gross operating surpluses in this case) which is not captured by official GDP at market prices.

Here we define the size of the shadow economy ('informal sector') as the sum of informal wages and informal profits. Of course we do not know the size of informal wages and informal profits and we also do not know their formal counterparts. Indeed one must distinguish between measured quantities and formal quantities. Formal wages are wages declared to the tax authorities. Measured wages as found in the national accounts will typically be larger, but will not capture all informal wages. What we do know is that there is a wide range of different sources of household incomes which, taken together, are considerably larger than just formal or even measured wages.

Crucially, it is this sum of all household incomes which makes household consumption possible. So if we cannot identify the informal wages earned in the domestic economy, we can on the other hand make an estimate of total household income starting from household final consumption as recorded in the national accounts.

Total household income includes both formal and informal wages, as well as all other kinds of incomes, notably received social benefits (pensions, unemployment, maternity etc.), remittances from abroad, other transfers from the government, transfers from foreign or domestic aid agencies, transfers from domestic individuals, incomes in kind, consumption of household produced goods (e.g. own production of food and beverages) and so on.

We estimate total household income using the household final consumption aggregate from national accounts. We then add savings as well as recorded tax revenues and revenues from employee social security contributions in order to obtain total gross household income (THI).

The estimation of the savings rates for households was based on household survey data for Serbia and Montenegro, Croatia, Romania, Bulgaria and Macedonia. In each of these cases, the discrepancy between total average income and total average expenditure was not used. Instead we used the sum of all savings (bank deposits, purchase of equities etc.), including investments in own dwellings or plots of land, but not including regular maintenance expenditure, as well as all debt reductions (e.g. loan repayments) minus the sum of all newly incurred loans and debts as well as decreases in savings. We were not able to find the appropriate data for Kosovo and Albania, thus for these two countries we applied an arbitrary savings rate of 5%. Bosnia and Herzegovina is left out completely in this section due to the unavailability of final household consumption data.

Regarding the statutory tax rates, they were re-calculated in order to be applicable to total household income. In all the countries covered in this article, incomes from agriculture are not subject to social security contributions. In the case of Albania and Romania this holds true for personal income tax as well. The weights for personal

[10] In this article we consider tax evasion and tax avoidance as the single activity of not declaring incomes that should be taxed. Whether this is done by underreporting or by forging or fabricating documents is not relevant in the present context.

income tax and social security contributions were similarly reduced in line with the level of remittances and other transfers. In doing so the weighting is such that the full statutory tax rate is applicable to incomes of domestic origin, which we assume cover formal and informal wages.

Empirical results

The results are summarized in Tables 4 and 5. Regarding β_H (β_H = THI/GDP) we find Kosovo to have the highest total household income to GDP ratio, followed by Serbia and Montenegro and Albania. In the case of Kosovo, and to a lesser extent in the cases of Serbia and Montenegro and Albania, this is due to the very high level of remittances and other transfers (notably international aid) from abroad. The household income declaration rates we find differ strongly from one country to the other. Croatia has the highest rate (84%) while Albania has the lowest (32%). Kosovo has only slightly more with 40%. One could have expected a higher estimated declaration rate for Kosovo given the fact that it had (in 2001) neither personal income tax nor social security contributions.

As for our results for the shadow economy generated by household tax evasion and avoidance, we find estimates that are, relatively speaking, similar to those found in the TRAM part, with the notable exception of Kosovo (62% vs. 36%). The intuition behind Kosovo's large estimate of 62% is that there is a combination of high tax evasion and avoidance together with an inflated total household income due to remittances and other transfers from outside Kosovo. In this case it is particularly important to bear in mind that our figure of 62% is not a share of GDP which would imply that the formal economy is at most 38% of

Table 4

Estimate of total household income (THI) and THI to GDP ratio (Beta-H)

	GDP	Household final cons.	Savings rate	Household final consumption plus savings	THI	THI/GDP
Albania	551282	447365	5.00%	470911	482487	88%
Bulgaria	29618	20479	4.94%	21544	23143	78%
Croatia	162909	97768	6.33%	104378	121972	75%
Macedonia	233841	163788	5.47%	173265	180514	77%
Romania	1167242	756248[2]	1.09%	764573	827604	71%
Serbia and Montenegro[1]	381661	302081	0.89%	304792	344103	90%
Kosovo	1747	1722	5.00%	1808	1808	104%

In local currency units.

Notes: 1) Data for 2000. - 2) Corrected for government expenditure destined for private final consumption, e.g. sport, health, education.

Source: National statistics, IMF (Kosovo), own estimates.

Table 5

Estimates of shadow economy contribution from households

	THI/GDP	Household income declaration rate	Statutory household tax rate	Total household tax revenue in % GDP	Share of shadow economy due to households
Albania	88%	32%	38%	11%	**59%**
Bulgaria	78%	55%	41%	17%	**35%**
Croatia	75%	84%	48%	30%	**12%**
Macedonia	77%	47%	42%	15%	**41%**
Romania	71%	48%	41%	14%	**37%**
Serbia and Montenegro	90%	58%	45%	24%	**38%**
Kosovo	104%	40%	28%	12%	**62%**

Source: Own calculations and estimates.

GDP. In the case of Kosovo, the sum of formal and informal incomes is considerably larger than GDP due to the huge transfers received. Croatia again has the lowest estimate with 12%.

One final comment is in order regarding the 'lower bound' nature of the results. One may assume that informal profits subsequently appear as part of additional household incomes. In this case, the methodology presented provides a central estimate rather than a lower bound.

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Are CEECs trapped in low-quality export specialization?

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Introduction

In their early transition period, the CEECs' trade patterns showed specialization in rather low quality products compared to their Western European trade partners, despite their relatively skilled labour force. The situation at the beginning of the transition period thus raised concerns that CEECs may remain trapped in serving the international market with low-quality and labour-intensive products, in which they initially held comparative advantages due to relatively low labour costs compared with the West. Such a lock-in effect would have negative consequences for the long-run growth potential: First, specialization in the low-quality end of a market implies low export prices (often also declining prices), thus reducing the returns from trade. Second, productivity growth in low-quality products is lower than in the production of higher-quality goods, which restricts overall growth in the long run.

In the following we discuss the specialization patterns of CEEC-10[1] trade flows into the EU-15 in two types of industries: low-technology-intensive and high-technology-intensive. The following industries are identified as being low-tech industries: food products, beverages and tobacco (DA), textiles and textile products (DB), and leather and leather products (DC). High-tech industries include machinery and equipment (DK), electrical and optical equipment (DL), and transport equipment (DM). Data are presented for three country groups: CEE-5 (Czech Republic Hungary, Poland, Slovakia, and Slovenia), SEE-2 (Bulgaria and Romania) and BAL (Estonia, Latvia, and Lithuania) for the years 1995 and 2000 respectively. Starting from 1995 has several advantages: In this year the CEECs had already overcome the transformational recession; the trade integration process of CEECs and the EU had been started; and from 1995 data for the EU-15 are available, thus including important trading partners of the CEECs (in particular Austria and Finland). Calculations are based on the COMEXT trade database, which provides trade data at the 8-digit CN level for EU imports and exports. The database consists of about 10,000 products each year.[2]

What is a low-quality trap?

We distinguish three notions of quality: The first one refers to specialization in general, i.e. specialization in more or less skill- and technology-intensive industries. Thus, a country would enter a low-quality trap if it remained specialized in low-tech, often low-skill, labour-intensive industries without successfully diversifying production and exports into more skill-intensive, high-tech industries. Secondly, one can distinguish different quality segments within industries and look at movements across these segments within the same industry. Consequently, a low-quality trap would imply specialization in the low-quality segment of a respective industry; e.g., a country may show strong exports of electrical machinery, but within this industry it specializes in exporting lighting equipment and lamps rather than computers and communication equipment. Thirdly, one may observe upgrading towards producing higher-quality goods within quality segments. A country may, for instance, experience a shift towards higher quality (measured in unit values) in the low-tech segment of a certain industry, while it does not improve the quality of goods produced in the upper segments. A low-quality trap would thus be defined as no improvements in the quality of goods within segments.

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1 CEEC-10 here comprises the Czech Republic Hungary, Poland, Slovakia and Slovenia, Bulgaria and Romania, and Estonia, Latvia and Lithuania.

2 One of the problems is that the number of products and the products covered varies from year to year. To cope with this problem we decided to consider only products that are consistently covered by the database over the whole period. This reduced the number of products to about 8000 per year.

In the following we present some empirical evidence for the three scenarios of quality upgrading outlined above, using simple descriptive measures such as export and import shares, unit values and unit value ratios with respect to the EU-15.

Specialization patterns across industries

Table 1a describes trade patterns for the three groups of countries in 1995 and 2000. Export structure is defined as the share of an individual industry's exports in total exports of the respective country group. Shares in EU-15 imports are the same exports in terms of total EU imports in these industries. The unit value is calculated as the ratio of the value of exports in current euro to the quantity of exports measured in tons. Finally, the unit value ratio is the unit value of the respective country group in relation to the corresponding unit value of EU imports for the same industry group (in logarithms). Table 1b reports average annual growth rates of the respective variables over the six-year period.

From these tables we can see that CEE-5 and the Baltic states have decreased their low-tech export shares, while Bulgaria and Romania showed increasing shares in this category. In 1995 the five Central European countries exported about one quarter of all manufacturing goods in either the low-tech or the high-tech industries. By the end of 2000 the share of low-tech industries had decreased to about 16% whereas the share of high-tech industries had expanded to more than 37%. Thus, this group of countries clearly exhibits export restructuring towards more technology-intensive industries. The Baltic states show a similar but less pronounced development. The initial low-tech export share of more than 40% has declined somewhat, while the initial less than 5% share of high-tech exports has more than doubled. Despite specialization towards higher-tech industries, the Baltic states remain specialized in the low-tech category. Bulgaria and Romania show a strong (and increasing) specialization in low-tech goods, although export shares are also rising in high-tech industries (as the shares of the other industries – mainly resource-intensive ones – are decreasing). The same patterns are reflected in CEECs' market shares in total EU-15 imports. Although there has been a general increase in EU import penetration observed for all three country groups in all industry groups, growth rates were higher in the high-tech industries for CEE-5 and the Baltic states, while Bulgaria and Romania gained relatively more market shares in the low-tech industries. Further, it becomes clear from Table 1a that the bulk of CEEC exports to the EU originates – not surprisingly – from the group of CEE-5.

Changes in unit values are certainly more meaningful when discussing quality upgrading in trade patterns. The third panel of Table 1b reveals that CEE-5 is the only group that shows a (moderate) decline in unit values in low-tech exports, while all other groups show increases in unit values for both industry categories. The rise in unit values is again strongest for high-tech exports from CEE-5, implying substantial quality improvements of the goods exported to the EU in these industries. Unit value ratios with respect to the EU-15 are negative in 1995 (in logarithms), reflecting the fact that CEEC exports to the EU represent relatively low quality compared to total EU-15 imports. By the year 2000, low-tech exports from CEE-5 showed a small positive unit value, indicating considerable quality improvements for this subgroup. Unit value ratios have improved for all country and industry groups, indicating a general tendency towards higher quality. In 2000, unit value ratios for the two subsets of industries were relatively similar for CEE-5 and the Baltic states, with the former showing stronger improvements in high-tech industries. Romania and Bulgaria also showed strong improvements in both industry groups, thus converging in terms of quality, while the gap towards all other CEECs remained.

Table 1a

Specialization patterns

Export structure of CEECs

	CEE-5		SEE-2		BAL	
	1995	2000	1995	2000	1995	2000
Low-tech	24.59	15.98	43.11	47.83	43.51	37.08
High-tech	27.13	37.32	8.18	10.61	4.92	10.14

Shares in EU-15 imports

	CEE-5		SEE-2		BAL	
	1995	2000	1995	2000	1995	2000
Low-tech	3.27	3.45	0.81	1.49	0.28	0.50
High-tech	1.96	3.12	0.08	0.13	0.02	0.05
Total	2.73	3.66	0.39	0.53	0.13	0.23

Unit value

	CEE-5		SEE-2		BAL	
	1995	2000	1995	2000	1995	2000
Low-tech	19.38	18.10	15.53	18.34	13.64	17.29
High-tech	12.05	18.83	11.54	12.02	10.81	16.45

Unit value ratios

	CEE-5		SEE-2		BAL	
	1995	2000	1995	2000	1995	2000
Low-tech	-0.03	0.05	-0.29	-0.15	-0.23	-0.02
High-tech	-0.35	-0.17	-0.74	-0.35	-0.38	-0.19

Source: COMEXT trade database; wiiw calculations.

Table 1b

Changes in specialization patterns (average annual growth rates)

Total value of EU-15 imports from CEECs

	CEE-5	SEE-2	BAL
	1995-2000	1995-2000	1995-2000
Low-tech	-0.07	0.02	-0.03
High-tech	0.08	0.06	0.10

Shares in EU-15 imports

	CEE-5	SEE-2	BAL
	1995-2000	1995-2000	1995-2000
Low-tech	0.01	0.17	0.09
High-tech	0.12	0.11	0.13
Total	0.07	0.07	0.08

Unit value

	CEE-5	SEE-2	BAL
	1995-2000	1995-2000	1995-2000
Low-tech	-0.01	0.04	0.04
High-tech	0.11	0.01	0.07

Unit value ratios[1)]

	CEE-5	SEE-2	BAL
	1995-2000	1995-2000	1995-2000
Low-tech	0.08	0.14	0.21
High-tech	0.18	0.38	0.18

Note: 1) Difference between 1995 and 2000.

Source: COMECT trade database; wiiw calculations.

Specialization within industries

Given the general tendency towards upgrading in terms of industrial specialization patterns, we now turn to quality specialization within industries. We identify three segments within each industry in the following way: First, we calculate the unit values, using averages of EU imports for the years 1995-2000 and ranking them within each industry. Then we calculate the cumulated sum of the value of EU imports (ranked by the unit values) within industries. Finally, we classify the products of the lower third of the cumulated import value as segment 1 (low-quality segment), the second third as segment 2 (medium-quality segment) and the upper third as segment 3 (high-quality segment).

Tables 2a and 2b display the results for the individual segments. In 1995, the export share of the low-quality segment (segment 1) is much higher (roughly 70%) in the high-tech sector than in the low-tech sector (15-30%) for all three county groups. In contrast, the share of the high-tech segment (segment 3) is considerably higher (above 40%) in the low-tech sector and relatively small (roughly 10% or less) in the high-tech sector. This pattern is more or less stable over time. In 2000, the picture changed only marginally. CEE-5 decreased their export shares in the high-quality, low-tech segment and in the low-quality, high-tech segment and gained some shares in all other segments. Conversely, Bulgaria, Romania and the Baltic states gained shares in the high-quality, low-tech segment and the low-quality, high-tech segment, while losing export shares in all others. This marks a pronounced difference between CEE-5 and the two other groups. CEE-5 is the only group which shifted specialization to low-quality segments within the group of low-tech goods and to high-quality segments of high-tech goods. Especially the latter observation has to be regarded as successful upgrading in export patterns. Quality improvements in high-tech industries are certainly more rewarding in terms of learning effects, productivity growth, etc. and also more difficult to achieve than in low-tech industries. Again, the CEECs' import shares in the EU showed a general upward trend in all industries and in all quality segments, with one exception (segment 3 in low-tech industries for CEE-5). However, increases in EU import market shares are in general stronger within the low- and medium-quality segments and weaker in the high-quality segments in both industry groups for all countries. Again, Bulgaria and Romania represent an exception with stronger gains in the high-quality segment of low-tech industries than in lower-quality segments in these industries.

Unit values also increased over time, with few exceptions. There are decreases in the low-tech industries for CEE-5 (in quality segments 1 and 3) and in the higher-tech industries for Bulgaria and Romania (segment 1) and the Baltic states (segment 2). The increases in the high-quality segment of the high-tech sectors for CEE-5 and the Baltic states are remarkable. It has to be mentioned, however, that the unit values of EU-15 total imports increased from 81 in 1995 to 150 in 2000. These patterns are of course also reflected in the developments of the unit value ratios. In general, there have been smaller changes in unit values in low-tech industries and considerably stronger changes in high-tech industries. In Bulgaria and Romania, trends in the latter group of industries are again opposite to those in the two other groups. Whereas quality improvements (reflected in increasing unit values) were most pronounced in the high-quality segment for CEE-5 and the Baltic states, Bulgaria and Romania showed stronger improvements in the medium-quality segment.

Unit value ratios remained pronouncedly different for the two industry groups in all three segments for all CEECs. Unit value ratios are much smaller (indicating relatively lower quality in EU imports) in the higher-tech industries than in low-tech industries in general. In the latter group of industries, even some positive unit value ratios could be observed, often so in the medium-quality segment. Improvements were stronger, however, in the high-tech industries, especially so in segment 3

Table 2a

Specialization in quality segments within industry groups (average annual growth rates)

Export structure

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech		100.00	100.00	100.00	100.00	100.00	100.00
	1	28.63	33.28	15.32	11.61	26.84	25.35
	2	26.85	27.40	31.33	29.91	29.53	30.07
	3	44.52	39.32	53.35	58.48	43.63	44.59
High-tech		100.00	100.00	100.00	100.00	100.00	100.00
	1	70.51	67.59	62.39	67.32	71.23	75.09
	2	18.97	20.66	26.30	23.92	20.36	16.90
	3	10.51	11.75	11.32	8.76	8.41	8.01

Shares in EU-15 imports

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech		3.27	3.45	0.81	1.49	0.28	0.50
	1	2.74	3.57	0.36	0.54	0.82	1.54
	2	2.78	2.87	0.81	1.35	0.24	0.38
	3	4.25	3.89	1.27	2.50	0.24	0.43
High-tech		1.96	3.12	0.08	0.13	0.02	0.05
	1	3.96	6.57	0.15	0.27	0.05	0.16
	2	1.44	2.63	0.09	0.13	0.05	0.16
	3	0.52	0.84	0.02	0.03	0.01	0.02

Unit value

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech		19.38	18.10	15.53	18.34	13.64	17.29
	1	8.31	7.41	6.32	8.34	5.62	7.72
	2	15.13	17.15	12.16	15.52	12.74	18.59
	3	29.05	27.81	20.16	21.78	19.18	21.85
High-tech		12.05	18.83	11.54	12.02	10.81	16.45
	1	5.57	8.36	6.20	5.74	3.58	11.05
	2	15.55	20.63	9.34	16.38	35.65	24.89
	3	49.22	75.92	46.08	48.34	11.91	49.27

Unit value ratios

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech							
	1	-0.06	-0.04	-0.27	-0.11	-0.21	0.06
	2	0.02	0.14	-0.20	0.00	-0.14	0.13
	3	-0.03	0.06	-0.37	-0.24	-0.30	-0.16
High-tech							
	1	-0.36	-0.21	-0.62	-0.29	-0.58	-0.07
	2	-0.48	-0.33	-0.94	-0.79	-0.63	-0.69
	3	-0.55	-0.32	-0.81	-0.94	-0.86	-0.44

Source: COMEXT trade database; wiiw calculations.

Table 2b

Changes in specialization in quality segments

Export structure

		CEE-5 1995-2000	SEE-2 1995-2000	BAL 1995-2000
Low-tech				
	1	0.03	-0.05	-0.01
	2	0.00	-0.01	0.00
	3	-0.02	0.02	0.00
High-tech				
	1	-0.01	0.02	0.01
	2	0.02	-0.02	-0.03
	3	0.02	-0.05	-0.01

Shares in EU-15 imports

		CEE-5 1995-2000	SEE-2 1995-2000	BAL 1995-2000
Low-tech		0.01	0.17	0.16
	1	0.06	0.10	0.18
	2	0.01	0.14	0.12
	3	-0.02	0.19	0.16
High-tech		0.12	0.11	0.41
	1	0.13	0.16	0.47
	2	0.17	0.09	0.48
	3	0.12	0.01	0.26

Unit value

		CEE-5 1995-2000	SEE-2 1995-2000	BAL 1995-2000
Low-tech		-0.01	0.04	0.05
	1	-0.02	0.06	0.08
	2	0.03	0.06	0.09
	3	-0.01	0.02	0.03
High-tech		0.11	0.01	0.10
	1	0.10	-0.01	0.42
	2	0.07	0.15	-0.06
	3	0.11	0.01	0.63

Unit value ratios[1)]

		CEE-5 1995-2000	SEE-2 1995-2000	BAL 1995-2000
Low-tech				
	1	0.02	0.16	0.27
	2	0.12	0.20	0.28
	3	0.09	0.13	0.14
High-tech				
	1	0.15	0.33	0.51
	2	0.15	0.15	-0.05
	3	0.23	-0.12	0.41

Note: 1) Difference between 1995 and 2000.

Source: COMECT trade database; wiiw calculations.

for CEE-5 and in both segments 1 and 3 for the Baltic states. Bulgaria and Romania on the other hand show strongest gains in unit value ratios in the low-quality segment of the high-tech industries, while their exports to the EU in general remain well behind those from CEE-5 and the Baltics in terms of quality. According to the dynamics of specialization within industries there is again some evidence for quality upgrading in CEECs' exports to the EU. For CEE-5 and BAL, this trend is strongest in the high-tech industries, whereas SEE-2 show restructuring towards low-quality segments within industries, especially so in the high-tech industries.

Quality specialization within segments

Finally, we look at the third notion of quality upgrading as outlined above and investigate more closely the changes in unit values over time. One may ask if these changes in unit values and unit value ratios within segments are due to changes in the composition within segments (which corresponds to the third notion of quality above) or to changes in selling prices. Table 3 presents the data for unit values and unit value ratios using 1995 weights. The values are more constant over time as compared to Table 2 above. This is especially true for the high-quality segment in the higher-tech sectors where the group CEE-5 and BAL showed large increases in the unit value previously. Thus, although price increases in this segment have played a role, shifts towards higher quality within the segments (i.e. the composition) have been more important.

The difference between 1995 weights and current weights exceeds the difference in less technology-intensive industries in all segments of the high-tech industries. Not surprisingly, price increases have been stronger in the former type of industries. Still, the overall increases in unit value ratios in all three segments of the high-tech industries suggest that the CEEC-10 do not show a tendency towards entering a low-quality trap in their trade with the EU. Again, quality improvements are strongest in the upper quality segment for CEE-5 and BAL, while SEE-2 show more gains in the lowest quality segment. Further, unit value ratios in high-tech industries clearly remain negative up to 2000, indicating a still relatively inferior quality of CEECs' exports as compared to the average EU imports. Bulgaria and Romania again trail further behind in terms of quality in all industries and all segments than their Eastern European counterparts.

Conclusion

The analysis of the CEECs' specialization patterns in trade with the EU, using export shares and unit values in different industries and different quality segments within industries, reveals no incidence of a low-quality trap for CEECs. In other words, their initial specialization in low-quality goods for the Western European market does not appear to be persistent.

Both in terms of specialization across industries as well as within industries, an upgrading of exports can be observed over the second half of the 1990s. Further, relative quality improvements in total EU imports as measured by the ratio of price over quantity not only arose due to general price increases, but can be attributed explicitly to improvements in quality as such.

Thus, the question that guided the analysis, namely whether CEECs are trapped in exporting low quality, can be answered in the negative. This is good news for CEECs as such, however, there are marked differences within the region. The five Central European countries, the Czech Republic, Hungary, Poland, Slovakia and Slovenia, most strongly exhibit the favourable pattern described above. The Baltic states, although less pronounced, also showed restructuring towards higher-tech industries and higher quality within these industries. In contrast, Bulgaria and Romania showed stronger improvements in low-tech industries or in low-quality segments of high-tech industries. These two countries show more signs of remaining specialized in low quality and thus low value added activities.

Table 3a

Unit values and UVRs using weights of 1995

Unit value (1995 weights)

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech							
	1	8.31	8.13	6.32	7.15	5.62	6.45
	2	15.13	16.44	12.16	11.94	12.74	15.14
	3	29.05	29.60	20.16	21.74	19.18	21.29
High-tech							
	1	5.57	6.40	6.20	4.29	3.58	4.40
	2	15.55	16.29	9.34	8.32	35.65	13.12
	3	49.22	58.69	46.08	45.41	11.91	14.81

Unit value ratios (1995 weights)

		CEE-5		SEE-2		BAL	
		1995	2000	1995	2000	1995	2000
Low-tech							
	1	-0.06	-0.03	-0.27	-0.10	-0.21	0.06
	2	0.02	0.10	-0.20	-0.08	-0.14	0.07
	3	-0.03	0.06	-0.37	-0.23	-0.30	-0.14
High-tech							
	1	-0.36	-0.23	-0.62	-0.43	-0.58	-0.32
	2	-0.48	-0.38	-0.94	-0.82	-0.63	-0.54
	3	-0.55	-0.41	-0.81	-0.76	-0.86	-0.49

Source: COMEXT trade database; wiiw calculations.

Table 3b

Changes in unit values and UVRs using weights from 1995

Unit value (1995 weights)

		CEE-5	SEE-2	BAL
		1995-2000	1995-2000	1995-2000
Low-tech				
	1	0.00	0.03	0.03
	2	0.02	0.00	0.04
	3	0.00	0.02	0.02
High-tech				
	1	0.03	-0.06	0.05
	2	0.01	-0.02	-0.13
	3	0.04	0.00	0.05

Unit value ratios (1995 weights)[1)]

		CEE-5	SEE-2	BAL
		1995-2000	1995-2000	1995-2000
Low-tech				
	1	0.04	0.17	0.27
	2	0.07	0.12	0.21
	3	0.10	0.13	0.17
High-tech				
	1	0.12	0.19	0.26
	2	0.10	0.12	0.10
	3	0.14	0.05	0.37

Note: 1) Difference between 1995 and 2000.

Source: COMECT trade database; wiiw calculations.

Do interest rate differentials determine the movements in the zloty/euro exchange rate?

BY PAWEL KOWALEWSKI[1]

What are the factors accounting for the Polish currency's exchange rate trajectory over the past five years? For a long while the zloty (PLN) was generally strengthening; this was usually attributed to the so-called Balassa-Samuelson effect. Alternatively, there was much talk about the so-called convergence game, with the approaching EU accession inducing the participants in the foreign exchange markets to bet on Poland's currency. Both explanations fail to explain the more recent trend: the weakening of the zloty. In the following it is suggested that the fortunes of the zloty may be primarily related to the level of interest rate. In particular, the policy of high interest rates that had been pursued from late 1997 until recently (with brief intervals) was perhaps the key factor behind the strength of the zloty throughout much of that period.

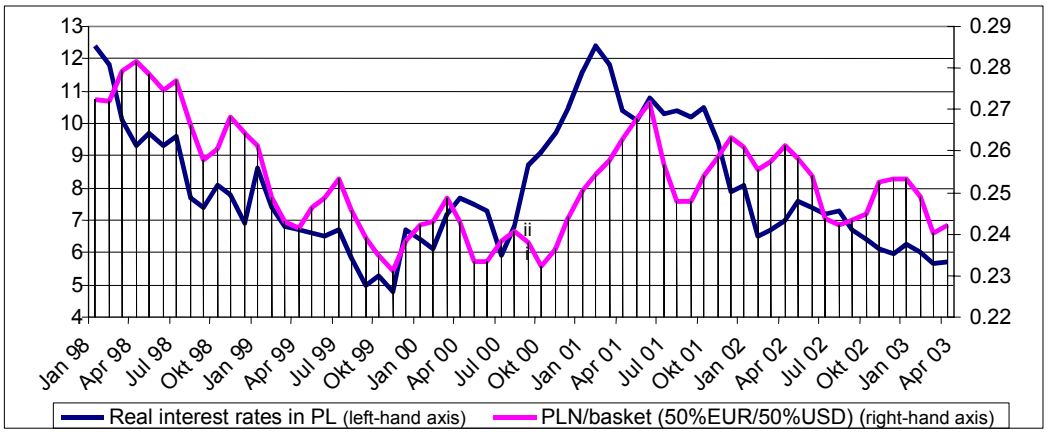
The association between the exchange rate and the real interest rate (nominal interest adjusted by CPI) is illustrated by Figure 1.

The zloty's strength peaked between November 2000 and June 2001. The first 'correction' happened in July 2001, when the zloty fell appreciably. However, the correction then set in place was not the beginning of a long-term adjustment in the value of the domestic currency. The relatively good performance of the zloty in the final months of 2001 was due to fiscal expansion. It was a typical textbook example of a policy mix consisting of relatively high interest rates and a loose fiscal policy.

Apart from fiscal expansion, there is another explanation of the trajectory of the domestic currency. Much of the story presented here is based on the so-called Real Interest Rates Model[2]. That model is based on two assumptions: (1) that an uncovered interest parity holds, and (2) that the real exchange rate will sooner or later adjust to its long-run purchasing power parity (PPP) level. This model has something in common with the Dornbusch model, known in the literature also under the name of overshooting model. According to Dornbusch, the overshooting of the currency is rather quick, but its reversal not necessarily so. This was the case in Poland. While the rise in the value of the zloty took about six months, its reversal (the return of the zloty to its previous level) took more than one year.

Figure 1

Real interest rates and PLN exchange rate (vs. the 50-50 EUR/USD basket)



Source: National Bank of Poland, European Central Bank.

[1] I would like to thank Adam Antoniak, Polish Ministry of Finance, for valuable data used here.

[2] Michael Rosenberg, *Currency Forecasting*, Irwin Professional Publishing, 1996.

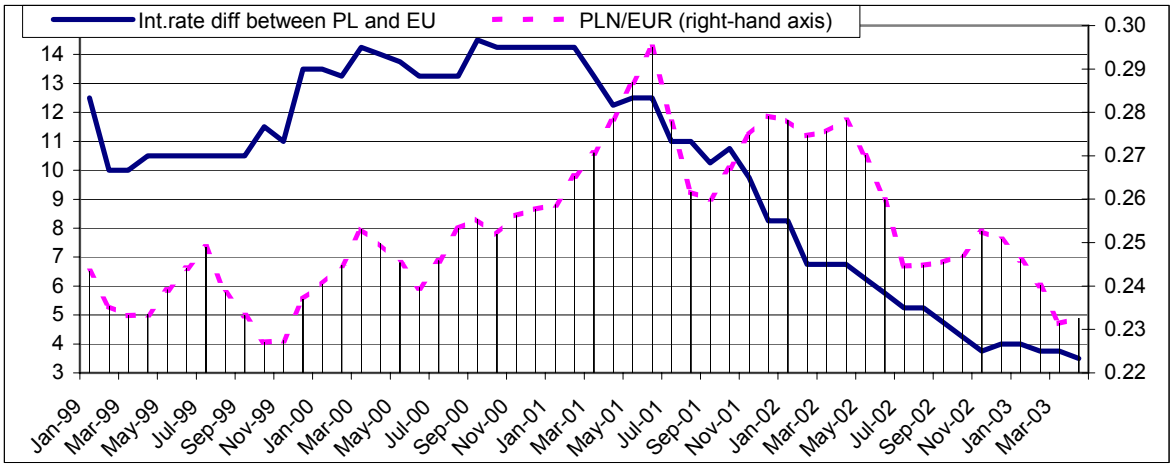
Of course, if the exchange rates were to affect the interest rates via their impact on capital flows, then one would have to study the relationship between the interest rate differential (Polish vs. foreign) and the exchange rate.

It turns out that the relationship between the interest rate differential (Poland vs. Euroland) and the zloty/euro exchange rate is 'visually' much less obvious (see Figure 2). Although the turning points of both curves (interest rate differential and the zloty/euro exchange rate) are quite close to each other, the link between those two curves is not very strong. That mainly refers to the period preceding the fall in the interest rate differential between Poland and Euroland.

However, once the interest rates are adjusted by the CPI (in the case of Euroland by the Harmonized Index of Consumer Pries – HICP), the comparison of the zloty/euro exchange rate and the real interest rate differential between Poland and the Euroland points to a much closer correspondence between the two items (Figure 3).

Figure 2

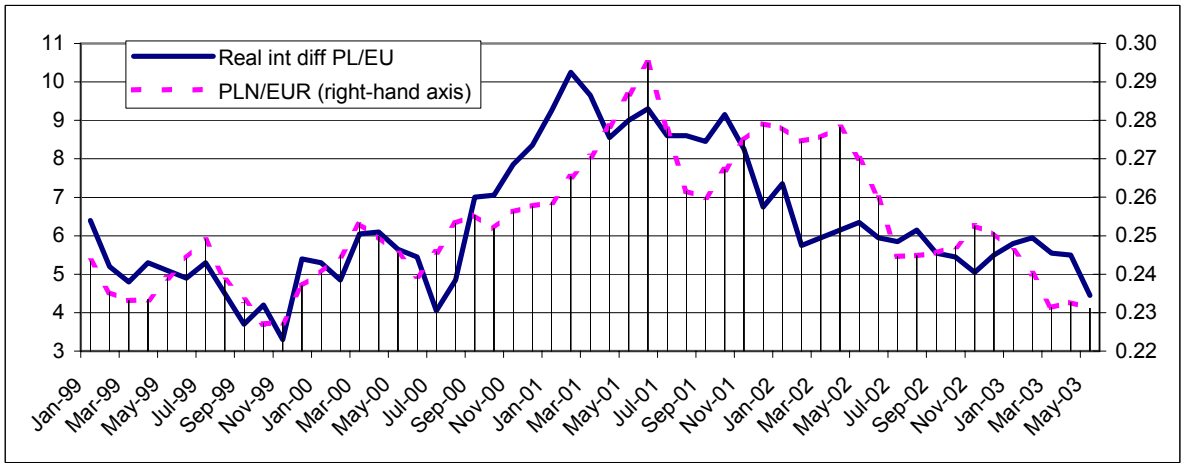
Interest rate differential between Poland and the EU and PLN/EUR exchange rate



Source: National Bank of Poland, European Central Bank.

Figure 3

Real interest differential between Poland and the EU and PLN/EUR exchange rate



Source: National Bank of Poland, European Central Bank.

Finally, it may be worth examining the relationship between the zloty/euro exchange rate and the yields on 10-year government bonds. As can be seen from Figure 4, there is a rather loose correspondence between the bond yield differentials (Poland vs. Euroland).

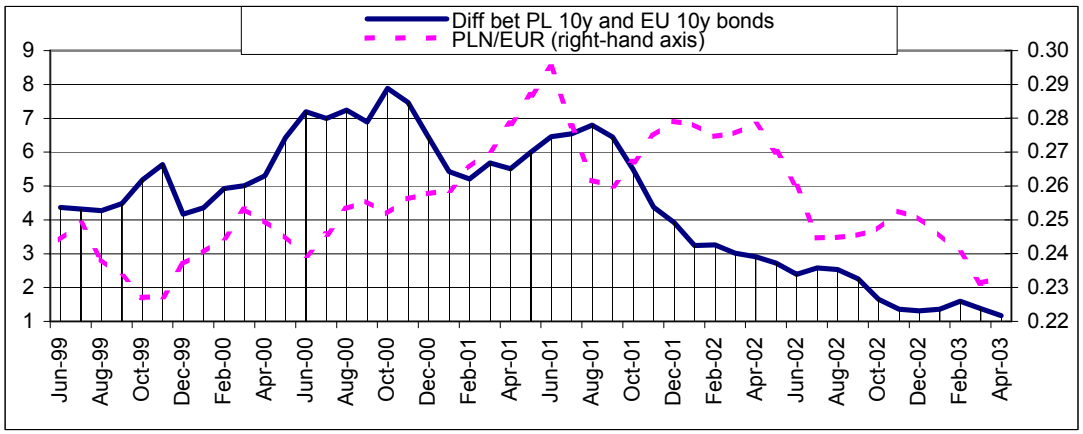
Interestingly, a very close correspondence between the two items becomes apparent once one moves the exchange rate curve backwards by eight months (see Figure 5).

The striking correspondence between the yield differentials and the zloty/euro exchange rate adjusted by a time lag of eight months seems to suggest that the former determine the exchange rate movements – though with a considerable time lag.

Summarizing, it seems that the longer-term movements of the zloty/euro exchange rate can be explained fairly accurately by the interest rate movements. Apparently, there is little need to invoke the Balassa-Samuelson effect, or other concepts (such as the 'convergence game'). In practical terms, there is still room for further cuts in Polish interest rates. If this happens, a further weakening of the zloty can be expected.

Figure 4

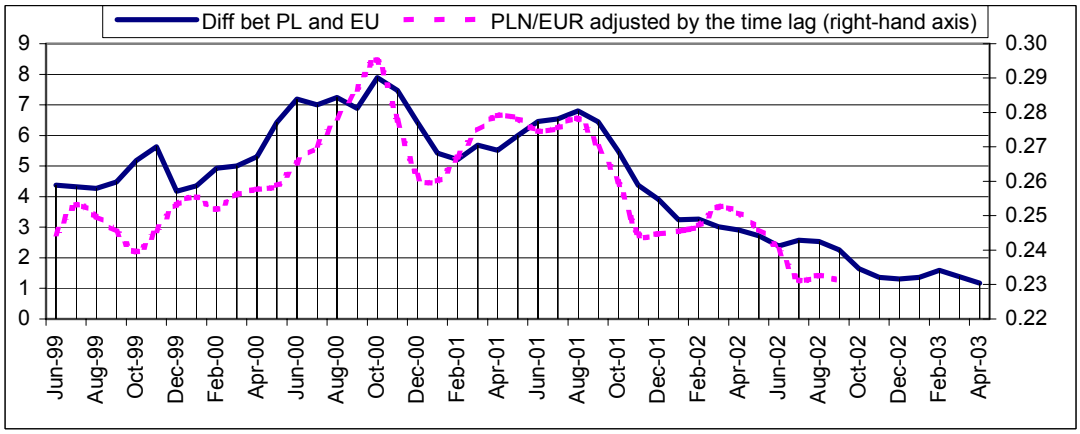
Differentials between Polish and EU 10-year bonds and PLN/EUR exchange rate



Source: Ministry of Finance, European Central Bank.

Figure 5

Differentials between Polish and EU 10-year bonds and PLN/EUR exchange rate adjusted by a time lag of 8 months



Source: National Bank of Poland, Ministry of Finance, European Central Bank.

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.

Please note: *wiiw* Members have **free online access** to the wiiw Monthly Database Eastern Europe.
To receive your personal password, please go to http://mdb.wiiw.ac.at

B U L G A R I A: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total[1]	real, CMPY	11.5	4.5	7.6	12.0	4.6	9.7	5.6	9.9	4.0	15.4	15.4	23.4	11.9	9.6	13.7	.
Industry, total[1]	real, CCPY	-0.7	0.3	1.5	3.0	3.2	4.0	4.1	4.7	4.6	15.4	15.4	18.2	16.4	15.0	14.7	.
LABOUR																	
Employees total	th. persons	1896	1906	1913	1918	1914	1925	1917	1919	1911	1939	1988	2013	2049	2062	2079	.
Employees in industry	th. persons	652	651	651	652	652	657	652	650	642	661	669	671	676	673	674	.
Unemployment, end of period	th. persons	678.6	673.8	659.0	653.3	650.0	644.7	644.3	624.9	602.5	646.8	611.7	581.3	552.0	528.7	506.4	489.3
Unemployment rate[2]	%	17.8	17.6	17.2	17.6	17.5	17.4	17.4	16.9	16.3	17.5	16.5	15.7	14.9	14.3	13.7	13.2
Labour productivity, industry[1]	CCPY	-1.7	-0.7	0.5	1.7	1.7	2.1	2.0	2.4	2.2	13.6	12.7	14.9	12.9	11.5	11.1	.
Unit labour costs, exch.r. adj.(EUR)[1]	CCPY	7.1	6.0	4.4	3.1	2.9	2.1	2.0	1.4	1.5	-7.6	-8.1	-9.4	-7.9	-6.9	-6.5	.
WAGES, SALARIES																	
Total economy, gross	BGN	262.0	269.0	265.0	267.0	265.0	272.0	271.0	272.0	282.0	270.0	265.0	280.0	280.0	287.0	281.0	.
Total economy, gross	real, CMPY	-3.3	-0.9	-0.8	1.6	2.3	2.2	3.7	3.4	0.6	5.7	4.9	5.8	6.6	4.8	4.7	.
Total economy, gross	USD	119	126	129	135	132	136	136	139	147	147	146	155	155	170	168	.
Total economy, gross	EUR	134	138	135	137	135	139	139	139	144	138	135	143	143	147	144	.
Industry, gross	USD	120	126	134	136	135	138	135	140	147	147	146	158	152	164	171	.
PRICES																	
Consumer[3]	PM	-0.1	-2.1	-1.7	0.1	-0.7	0.8	1.0	0.2	1.2	0.7	0.1	0.4	0.3	-0.6	-2.2	0.9
Consumer[3]	CMPY	9.2	6.9	5.2	5.5	4.5	4.0	3.2	3.2	3.8	1.7	0.2	-0.2	0.2	1.7	1.2	2.0
Consumer[3]	CCPY	8.4	8.1	7.6	7.3	7.0	6.6	6.3	6.0	5.8	1.7	1.0	0.6	0.5	0.8	0.8	1.0
Producer, in industry[1]	PM	1.0	-0.6	-0.5	0.4	0.7	1.2	0.6	-0.5	1.4	1.8	1.4	1.0	-3.6	-1.1	1.2	.
Producer, in industry[1]	CMPY	1.3	0.4	-0.2	0.4	0.7	1.0	2.8	2.9	6.3	7.7	8.0	8.0	3.1	2.6	4.3	.
Producer, in industry[1]	CCPY	0.3	0.3	0.2	0.3	0.3	0.4	0.6	0.8	1.3	7.7	7.9	7.9	6.7	5.9	5.6	.
FOREIGN TRADE[3)4)]																	
Exports total (fob), cumulated	EUR mn	1840	2292	2828	3440	3971	4511	5046	5586	6063	531	1034	1633	2172	2685	3236	.
Imports total (cif), cumulated	EUR mn	2486	3209	3877	4634	5272	5949	6724	7542	8411	649	1315	2082	2940	3778	4528	.
Trade balance, cumulated	EUR mn	-646	-917	-1049	-1194	-1301	-1438	-1678	-1956	-2348	-118	-281	-449	-767	-1093	-1291	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	-375	-476	-383	-267	-106	-55	-196	-375	-677	-165	-324	-416	-748	-968	.	.
EXCHANGE RATE																	
BGN/USD, monthly average	nominal	2.210	2.131	2.048	1.972	2.000	1.995	1.994	1.953	1.924	1.842	1.816	1.810	1.804	1.684	1.677	1.720
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[5]	real, Jan98=100	104.0	102.4	100.2	96.5	98.8	98.0	97.1	95.0	92.2	88.0	87.3	87.3	86.5	81.1	82.8	84.1
BGN/USD, calculated with PPI[5]	real, Jan98=100	98.3	95.4	92.2	88.7	89.6	88.8	88.9	87.4	84.8	81.2	80.4	81.5	81.5	76.9	76.4	.
BGN/EUR, calculated with CPI[5]	real, Jan98=100	83.1	85.1	86.6	86.4	87.1	86.6	86.0	85.9	85.1	84.7	84.9	84.8	84.7	85.3	87.2	86.5
BGN/EUR, calculated with PPI[5]	real, Jan98=100	80.9	81.4	81.7	81.5	81.0	80.2	79.8	79.9	78.9	78.0	77.2	76.6	79.1	79.7	78.7	.
DOMESTIC FINANCE																	
M0, end of period[6]	BGN mn	2873	2781	2828	2900	2997	3022	2998	2987	3335	3113	3132	3088	3200	3248	3356	3491
M1, end of period[6]	BGN mn	4603	4475	4403	4589	4750	4805	4804	4936	5543	5141	5235	5087	5272	5371	5583	5831
Broad money, end of period[6]	BGN mn	12631	12359	12335	12696	12998	13094	13227	13432	14146	13739	13933	13812	14062	14095	14515	15059
Broad money, end of period	CMPY	25.2	19.1	15.8	15.6	17.0	15.7	16.2	15.1	12.3	9.8	11.3	10.5	11.3	14.1	17.7	18.6
BNB base rate (p.a.),end of period	%	4.0	4.0	3.8	3.7	3.8	3.8	3.8	3.8	3.3	2.5	2.5	2.6	3.0	3.0	2.5	2.5
BNB base rate (p.a.),end of period[7]	real, %	2.6	3.6	4.0	3.3	3.1	2.8	1.0	0.9	-2.7	-4.8	-5.1	-5.1	-0.1	0.4	-1.7	.
BUDGET																	
Central gov.budget balance,cum.	BGN mn	251.3	511.1	521.9	523.8	577.9	658.4	823.5	697.8	3.4	-85.7	-132.8	90.8	284.0	609.7	582.0	.

1) According to new calculation for industrial output and prices.

2) Ratio of unemployed to total employment, from July 2002 according to new labour force base.

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) According to International Accounting Standards.

7) Deflated with annual PPI.

C R O A T I A: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total[1]	real, CMPY	5.8	3.9	-2.1	10.5	1.3	12.7	9.4	9.9	8.3	0.7	6.9	6.0	8.2	6.2	7.0	4.4
Industry, total[1]	real, CCPY	2.9	3.1	2.2	3.4	3.1	4.2	4.8	5.2	5.5	0.7	3.8	4.6	5.5	5.7	5.9	5.7
Industry, total[1]	real, 3MMA	2.8	2.5	4.0	3.2	8.2	7.8	10.6	9.2	6.4	5.3	4.6	7.0	6.8	7.1	5.8	.
Construction, total,effect.work.time[2]	real, CMPY	19.9	11.7	7.2	17.1	11.5	15.9	12.7	10.8	15.2	9.6	17.8	28.1	26.7	30.7	.	.
LABOUR																	
Employment total	th. persons	1350.3	1359.1	1370.2	1378.8	1380.3	1375.1	1367.4	1361.8	1351.4	1343.0	1337.4	1338.8	1351.2	1360.2	1372.6	.
Employees in industry[2]	th. persons	279.4	278.4	277.1	276.0	276.0	275.1	275.6	274.7	272.1	275.4	274.0	273.5	273.5	273.6	274.0	.
Unemployment, end of period	th. persons	407.7	394.1	385.0	382.8	379.7	375.8	375.0	369.7	366.2	367.1	362.6	355.8	345.3	330.9	319.7	314.2
Unemployment rate[3]	%	23.2	22.5	21.9	21.7	21.6	21.5	21.5	21.4	21.3	21.5	21.3	21.0	20.4	19.6	18.9	18.6
Labour productivity, industry[1]	CCPY	6.6	6.8	6.0	7.3	7.1	8.3	9.0	9.5	9.8	1.7	5.0	6.0	7.0	7.2	7.4	.
Unit labour costs, exch.r. adj.(EUR)[1]	CCPY	1.2	0.7	1.6	0.2	0.3	-0.4	-1.0	-1.5	-1.8	6.5	2.4	0.1	-1.7	-2.8	.	.
WAGES, SALARIES																	
Total economy, gross	HRK	5352	5507	5374	5433	5398	5289	5447	5687	5498	5527	5375	5475	5541	5671	.	.
Total economy, gross	real, CMPY	4.7	4.0	5.2	4.8	4.7	6.7	5.6	4.7	4.5	5.4	5.3	3.1	2.6	2.1	.	.
Total economy, gross	USD	640	682	698	734	716	707	719	762	753	780	764	771	795	866	.	.
Total economy, gross	EUR	724	746	732	739	732	720	733	762	741	737	709	714	734	752	.	.
Industry, gross	USD	581	634	644	682	652	642	661	708	692	720	697	705	730	805	.	.
PRICES																	
Retail	PM	0.4	0.2	0.1	-0.4	-0.1	0.5	0.5	-0.3	0.1	0.4	0.2	0.4	-0.4	0.2	0.1	0.0
Retail	CMPY	2.2	1.8	2.2	2.3	1.3	1.5	2.1	2.0	2.3	1.6	1.7	1.7	0.9	0.9	1.1	1.5
Retail	CCPY	2.9	2.6	2.5	2.6	2.4	2.2	2.2	2.3	2.2	1.6	1.6	1.7	1.5	1.4	1.3	1.3
Producer, in industry	PM	0.9	0.2	0.3	0.5	-0.1	0.4	1.4	-0.6	-0.1	0.5	0.4	0.8	-0.9	-0.8	0.2	0.2
Producer, in industry	CMPY	-1.4	-1.2	-1.0	0.2	0.7	0.4	1.6	1.5	2.3	2.9	2.7	4.7	2.8	1.8	1.7	1.4
Producer, in industry	CCPY	-2.3	-2.1	-1.9	-1.6	-1.3	-1.1	-0.8	-0.6	-0.4	2.9	2.8	3.4	3.3	3.0	2.8	2.5
RETAIL TRADE																	
Turnover	real, CMPY	9.4	12.0	9.1	19.3	14.4	14.0	12.1	10.8	9.8	7.5	8.6	1.1	13.3	6.5	5.2	.
Turnover	real, CCPY	12.1	12.1	11.6	12.7	12.8	13.0	13.0	12.7	12.5	7.5	8.0	5.7	7.6	7.3	7.0	.
FOREIGN TRADE[4)5)]																	
Exports total (fob), cumulated	EUR mn	1658	2144	2525	3060	3404	3840	4324	4719	5187	379	904	1364	1760	2214	2685	.
Imports total (cif), cumulated	EUR mn	3453	4458	5442	6557	7347	8325	9428	10388	11324	715	1681	2752	3858	4993	5973	.
Trade balance, cumulated	EUR mn	-1795	-2314	-2916	-3497	-3943	-4485	-5104	-5668	-6137	-335	-777	-1388	-2097	-2780	-3287	.
Exports to EU (fob), cumulated	EUR mn	952	1188	1405	1735	1913	2122	2327	2538	2732	209	467	741	955	1233	1495	.
Imports from EU (cif), cumulated	EUR mn	1844	2428	2971	3620	4043	4679	5260	5797	6327	387	946	1544	2159	2847	3411	.
Trade balance with EU, cumulated	EUR mn	-893	-1240	-1566	-1885	-2130	-2557	-2933	-3259	-3595	-178	-479	-803	-1205	-1614	-1916	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	.	.	-1644	.	.	-638	.	.	-1587	.	.	-1006	.	.	.	.
EXCHANGE RATE																	
HRK/USD, monthly average	nominal	8.359	8.072	7.697	7.405	7.542	7.484	7.571	7.464	7.298	7.082	7.032	7.099	6.966	6.549	6.443	6.591
HRD/EUR, monthly average	nominal	7.393	7.378	7.344	7.350	7.377	7.347	7.427	7.468	7.423	7.500	7.584	7.663	7.554	7.542	7.536	7.498
HRK/USD, calculated with CPI[6)]	real, Jan98=100	120.9	116.5	111.1	107.4	109.8	108.6	109.6	108.4	105.5	102.4	102.3	103.5	101.7	95.3	93.8	96.0
HRK/USD, calculated with PPI[6)]	real, Jan98=100	121.3	116.9	111.2	106.8	109.1	108.5	109.1	108.1	105.6	103.9	104.5	107.5	103.0	97.5	96.6	98.6
HRD/EUR, calculated with CPI[6)]	real, Jan98=100	96.4	96.3	95.7	96.1	96.7	96.1	96.8	97.8	97.4	98.1	99.4	100.3	99.5	99.1	99.0	98.5
HRD/EUR, calculated with PPI[6)]	real, Jan98=100	99.5	99.2	98.4	98.1	98.6	98.0	97.8	98.6	98.3	99.3	100.4	100.8	99.8	100.0	99.7	99.0
DOMESTIC FINANCE																	
M0, end of period	HRK mn	9112	9277	9904	10288	10296	9680	9507	9348	9681	9468	9605	9526	9813	10078	.	.
M1, end of period	HRK mn	26418	26716	28254	28947	29502	28914	29090	29092	30870	29412	29456	29512	30294	32002	32828	.
Broad money, end of period	HRK mn	106333	106445	106593	109734	113037	113275	114826	114261	116142	116615	117209	118791	117854	119105	120022	.
Broad money, end of period	CMPY	36.9	36.8	33.8	33.8	28.8	28.2	27.4	20.3	9.5	7.3	9.4	11.8	10.8	11.9	12.6	.
Discount rate (p.a.),end of period	%	5.9	5.9	5.9	5.9	5.9	5.9	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Discount rate (p.a.),end of period[7)]	real, %	7.4	7.2	7.0	5.7	5.2	5.5	2.9	3.0	2.2	1.6	1.8	-0.2	1.7	2.7	2.8	3.1
BUDGET																	
Central gov. budget balance, cum.[8)]	HRK mn	-2289.5	-2445.1	-2867.5	-2065.0	-2176.2	-2489.9	-2803.0	-3255.9	-4010.4	-689.5	-1438.4	-2639.9	-2978.0	-4489.9	-5110.4	.

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) 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.

8) From January 2002 including social security funds.

C Z E C H REPUBLIC: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total	real, CMPY	8.2	5.1	1.3	10.8	-2.8	9.2	3.5	4.4	6.6	6.4	5.2	7.0	5.6	3.2	6.2	.
Industry, total	real, CCPY	5.2	5.2	4.5	5.3	4.3	4.8	4.7	4.7	4.8	6.4	5.8	6.2	6.1	5.5	5.6	.
Industry, total	real, 3MMA	5.7	4.9	5.5	2.8	5.5	3.3	5.5	4.7	5.7	6.1	6.2	5.9	5.3	5.0	.	.
Construction, total	real, CMPY	5.2	5.0	-1.5	-1.3	-4.9	6.7	3.5	3.5	4.8	-2.2	-4.0	2.5	3.3	-0.9	12.0	.
LABOUR																	
Employees in industry[1]	th. persons	1155	1158	1156	1159	1152	1145	1141	1139	1130	1135	1138	1138	1134	1129	1127	.
Unemployment, end of period	th. persons	456.4	447.9	454.3	479.2	488.3	492.9	486.7	489.8	514.4	539.0	538.1	528.2	509.4	496.8	501.0	520.4
Unemployment rate[2]	%	8.8	8.6	8.7	9.2	9.4	9.4	9.3	9.3	9.8	10.2	10.2	10.0	9.6	9.4	9.5	9.9
Labour productivity, industry[1)3]	CCPY	4.7	4.5	3.8	5.3	4.3	5.1	5.1	5.6	5.8	12.1	9.8	9.4	9.6	8.6	9.1	.
Unit labour costs, exch.r. adj.(EUR)[1)3]	CCPY	13.1	13.4	13.9	12.8	13.4	12.8	12.5	11.6	10.8	-4.2	-3.7	-4.2	-5.1	-4.7	-5.2	.
WAGES, SALARIES																	
Industry, gross[1]	CZK	14976	15949	15371	15680	14998	14759	15723	17671	16861	15443	14326	15184	15797	16728	16348	.
Industry, gross[1]	real, CMPY	5.0	2.9	2.7	6.8	4.2	5.7	5.2	3.2	7.0	5.8	4.0	4.9	5.4	4.8	6.1	.
Industry, gross[1]	USD	437	479	484	523	476	479	503	575	550	521	488	517	542	617	607	.
Industry, gross[1]	EUR	493	522	507	527	487	489	513	575	541	490	453	478	500	533	520	.
PRICES																	
Consumer	PM	-0.1	-0.1	-0.3	0.5	-0.2	-0.5	-0.3	-0.2	0.2	0.6	0.2	-0.1	0.2	0.0	0.0	0.1
Consumer	CMPY	3.2	2.5	1.2	0.6	0.6	0.8	0.6	0.5	0.6	-0.4	-0.4	-0.4	-0.1	0.0	0.3	-0.1
Consumer	CCPY	3.6	3.4	3.0	2.7	2.4	2.2	2.1	1.9	1.8	-0.4	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1
Producer, in industry	PM	-0.5	-0.2	-0.1	-0.4	-0.1	0.0	0.6	-0.1	-0.3	0.0	0.4	0.3	-0.8	-0.3	-0.2	-0.2
Producer, in industry	CMPY	-0.1	-0.5	-0.8	-1.1	-0.9	-0.9	-0.9	-0.7	-0.7	-0.8	-0.7	-0.4	-0.7	-0.8	-0.9	-0.6
Producer, in industry	CCPY	0.0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.8	-0.7	-0.6	-0.6	-0.7	-0.7	-0.7
RETAIL TRADE																	
Turnover	real, CMPY	5.4	3.3	-0.4	6.5	-3.8	6.5	1.9	0.8	4.2	4.2	4.3	1.3	6.6	2.3	7.5	.
Turnover	real, CCPY	4.4	4.2	3.4	3.8	2.9	3.3	3.2	2.9	3.0	4.2	4.3	3.3	4.1	3.7	4.3	.
FOREIGN TRADE[4)5]																	
Exports total (fob),cumulated	EUR mn	13501	16906	20274	23534	26368	30092	33908	37752	40705	3439	6775	10543	14224	17818	21357	24820
Imports total (fob),cumulated	EUR mn	13795	17560	20994	24557	27564	31416	35481	39516	43019	3456	6860	10681	14607	18279	21919	25758
Trade balance,cumulated	EUR mn	-294	-653	-719	-1022	-1196	-1324	-1573	-1765	-2314	-17	-85	-137	-383	-461	-562	-937
Exports to EU (fob), cumulated	EUR mn	9473	11794	14128	16329	18243	20770	23289	25878	27844	2456	4824	7498	10101	12619	15076	17465
Imports from EU (fob), cumulated	EUR mn	8493	10745	12867	15085	16879	19153	21540	23890	25898	1986	4012	6302	8606	10834	13049	15431
Trade balance with EU, cumulated	EUR mn	980	1048	1261	1244	1364	1617	1750	1987	1946	470	812	1196	1495	1785	2027	2035
FOREIGN FINANCE																	
Current account, cumulated	USD mn	.	.	-1706	.	.	-3196	.	.	-4523	-1	-235	-553	-1029	-1712	-2120	.
EXCHANGE RATE																	
CZK/USD, monthly average	nominal	34.3	33.3	31.7	30.0	31.5	30.8	31.2	30.7	30.7	29.7	29.4	29.4	29.2	27.1	26.9	28.0
CZK/EUR, monthly average	nominal	30.4	30.6	30.3	29.7	30.8	30.2	30.7	30.8	31.2	31.5	31.6	31.8	31.6	31.4	31.4	31.9
CZK/USD, calculated with CPI[6]	real, Jan98=100	93.4	90.9	86.9	81.7	86.3	85.0	86.7	85.4	84.8	81.9	81.6	82.2	81.2	75.3	75.0	78.0
CZK/USD, calculated with PPI[6]	real, Jan98=100	92.1	89.7	85.6	81.4	85.8	84.4	85.8	84.4	84.3	83.1	83.4	85.4	82.7	77.0	77.4	80.7
CZK/EUR, calculated with CPI[6]	real, Jan98=100	74.6	75.4	75.0	73.2	76.0	75.1	76.6	77.1	78.3	78.7	79.2	79.8	79.5	78.9	79.0	80.1
CZK/EUR, calculated with PPI[6]	real, Jan98=100	75.7	76.5	75.8	74.8	77.6	76.2	77.0	77.0	78.5	79.6	80.0	80.3	80.2	79.5	79.6	80.9
DOMESTIC FINANCE																	
M0, end of period	CZK bn	183.3	184.9	188.5	185.6	190.5	192.2	195.1	198.6	197.8	197.6	201.7	205.9	208.5	211.4	215.2	.
M1, end of period	CZK bn	582.5	605.0	617.5	619.2	639.6	647.4	658.0	669.8	692.3	671.9	688.9	683.6	699.2	711.4	718.4	.
M2, end of period	CZK bn	1606.5	1625.0	1580.5	1594.6	1622.3	1605.6	1635.8	1646.6	1647.3	1643.1	1643.6	1621.8	1656.5	1658.5	1646.4	.
M2, end of period	CMPY	9.5	7.4	4.4	4.3	4.8	4.8	6.2	5.2	3.2	3.3	3.7	2.5	3.1	2.1	4.2	.
Discount rate (p.a.),end of period	%	2.75	2.75	2.75	2.00	2.00	2.00	2.00	1.75	1.75	1.50	1.50	1.50	1.50	1.50	1.25	1.25
Discount rate (p.a.),end of period[7]	real, %	2.9	3.3	3.6	3.1	2.9	2.9	2.9	2.4	2.4	2.3	2.2	1.9	2.2	2.3	2.1	1.9
BUDGET																	
Central gov.budget balance,cum.	CZK mn	-41863	-32401	-915	-26854	-32956	-21434	-32321	-41726	-45715	-10392	-24941	-31840	-64422	-74586	-53399	-62110

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) Deflated with annual PPI.

H U N G A R Y: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total	real, CMPY	4.1	-4.2	3.9	7.9	-2.6	10.9	-0.8	4.0	9.6	4.6	1.2	7.3	6.6	3.7	4.3	.
Industry, total	real, CCPY	0.6	-0.3	0.4	1.4	0.9	2.0	1.7	1.9	2.6	4.6	2.8	4.3	4.8	4.6	4.6	.
Industry, total	real, 3MMA	1.0	1.3	2.5	3.0	5.4	2.4	4.5	4.1	5.9	5.0	4.3	4.9	5.9	4.8	.	.
Construction, total	real, CMPY	33.6	24.1	13.9	17.2	22.4	28.0	9.8	8.5	22.7	-0.3	-18.7	-17.3	-10.7	5.3	11.9	.
LABOUR																	
Employees in industry[1)]	th. persons	823.7	816.9	815.3	818.8	811.4	809.7	810.9	812.6	803.5	804.8	805.9	805.7	803.2	801.4	805.4	.
Unemployment[2)]	th. persons	232.4	230.0	229.4	241.4	242.7	245.5	242.9	245.1	244.2	249.4	258.7	264.7	257.0	250.8	241.2	238.7
Unemployment rate[2)]	%	5.7	5.6	5.6	5.9	5.9	5.9	5.9	5.9	5.9	6.0	6.3	6.4	6.2	6.0	5.8	5.7
Labour productivity, industry[1)]	CCPY	2.9	2.0	2.8	4.0	3.5	4.7	4.4	4.6	5.1	8.3	6.4	7.7	8.2	8.1	.	.
Unit labour costs, exch.r. adj.(EUR)[1)]	CCPY	20.5	20.8	18.2	16.1	15.8	14.4	14.5	13.7	13.1	3.4	3.7	1.7	0.8	0.7	.	.
WAGES, SALARIES																	
Total economy, gross[1)]	HUF	114240	118160	118892	116563	113353	120578	126779	142460	162862	136063	123209	126998	129628	132852	134952	.
Total economy, gross[1)]	real, CMPY	8.5	13.5	11.7	12.5	11.2	16.0	13.8	9.5	13.7	15.5	8.3	6.5	9.2	8.5	8.8	.
Total economy, gross[1)]	USD	418	445	468	469	452	485	511	600	702	602	542	559	573	626	603	.
Total economy, gross[1)]	EUR	471	485	490	473	462	494	520	598	690	567	503	517	528	540	517	.
Industry, gross[1)]	USD	413	455	453	470	461	456	474	568	579	522	505	536	547	619	565	.
PRICES																	
Consumer	PM	0.9	0.5	-0.4	-0.1	-0.3	0.6	0.6	0.0	0.1	1.2	0.8	0.9	0.1	0.3	0.2	0.3
Consumer	CMPY	6.1	5.6	4.8	4.6	4.5	4.6	4.9	4.8	4.8	4.7	4.5	4.7	3.9	3.6	4.3	4.7
Consumer	CCPY	6.2	6.1	5.9	5.7	5.5	5.4	5.4	5.3	5.3	4.7	4.6	4.6	4.4	4.3	4.3	4.4
Producer, in industry	PM	0.3	0.1	-0.5	0.2	0.0	-0.1	-0.1	-1.3	-0.3	1.1	1.1	0.6	-0.7	-0.6	1.9	.
Producer, in industry	CMPY	-2.7	-2.0	-1.1	-0.9	-1.0	-1.8	-1.5	-1.9	-1.3	-0.1	0.9	1.2	0.1	-0.5	2.3	.
Producer, in industry	CCPY	-2.5	-2.4	-2.2	-2.0	-1.9	-1.9	-1.8	-1.8	-1.8	-0.1	0.4	0.7	0.5	0.3	0.6	.
RETAIL TRADE																	
Turnover[3)]	real, CMPY	11.5	12.3	13.5	8.3	8.1	8.6	10.1	7.8	8.7	11.8	8.0	6.1	14.6	5.1	6.3	.
Turnover[3)]	real, CCPY	13.6	13.3	13.3	12.5	11.8	11.4	11.3	10.9	10.7	11.8	9.8	8.4	10.1	8.9	8.4	.
FOREIGN TRADE[4)5)]																	
Exports total (fob), cumulated	EUR mn	12129	15305	18427	21364	23979	27195	30527	33872	36537	2778	5582	8823	11731	14705	17727	.
Imports total (cif), cumulated	EUR mn	13142	16484	19734	23117	25944	29303	33112	36684	39955	2980	6213	9732	13220	16770	20126	.
Trade balance, cumulated	EUR mn	-1014	-1179	-1307	-1752	-1965	-2108	-2584	-2811	-3418	-203	-631	-910	-1490	-2066	-2399	.
Exports to EU (fob), cumulated	EUR mn	9224	11618	13941	16183	18124	20517	22997	25538	27452	1953	4135	6435	8864	11007	13222	.
Imports from EU (cif), cumulated	EUR mn	7341	9271	11133	13177	14746	16620	18756	20756	22476	1570	3407	5425	7441	9506	11407	.
Trade balance with EU, cumulated	EUR mn	1882	2348	2808	3006	3378	3897	4242	4783	4977	383	728	1010	1423	1501	1815	.
FOREIGN FINANCE																	
Current account, cumulated[6)]	USD mn	-723	-837	-1086	-1338	-1317	-1369	-1697	-2007	-2655	-213	-671	-912	-1555	-1909	-2571	.
EXCHANGE RATE																	
HUF/USD, monthly average	nominal	273.6	265.8	254.1	248.6	250.9	248.7	248.2	237.6	231.9	226.1	227.5	227.3	226.3	212.2	223.7	232.1
HUF/EUR, monthly average	nominal	242.4	243.7	242.7	246.6	245.1	243.9	243.6	238.1	236.1	240.2	245.1	245.6	245.6	245.9	261.1	264.0
HUF/USD, calculated with CPI[7)]	real, Jan98=100	101.2	97.9	94.0	92.2	93.6	92.4	91.8	87.9	85.5	82.7	83.2	82.9	82.2	76.7	80.9	83.7
HUF/USD, calculated with PPI[7)]	real, Jan98=100	109.4	106.2	102.1	100.0	101.2	101.0	101.7	98.5	96.2	94.6	95.8	97.6	94.8	89.3	93.2	.
HUF/EUR, calculated with CPI[7)]	real, Jan98=100	81.0	81.3	81.3	82.6	82.4	81.8	81.3	79.6	79.1	79.6	80.9	80.6	80.6	80.5	85.4	86.1
HUF/EUR, calculated with PPI[7)]	real, Jan98=100	90.1	90.6	90.6	92.0	91.5	91.3	91.4	90.1	89.8	90.8	92.0	91.9	92.0	92.3	96.1	.
DOMESTIC FINANCE																	
M0, end of period[8)]	HUF bn	1029.4	1077.1	1100.7	1136.2	1153.5	1149.4	1161.7	1191.5	1181.9	1168.3	1180.5	1197.7	1237.7	1249.2	1287.0	.
M1, end of period[8)]	HUF bn	2986.4	3073.2	3116.1	3158.0	3248.6	3220.6	3274.0	3406.6	3645.3	3450.4	3417.0	3446.9	3513.6	3589.6	3705.5	.
Broad money, end of period[8)]	HUF bn	6936.1	6954.0	6942.5	7002.1	7200.7	7142.1	7332.9	7503.8	7844.1	7685.5	7720.6	7699.7	7778.9	7849.4	8012.8	.
Broad money, end of period[8)]	CMPY	10.8	9.0	9.3	9.1	8.7	7.0	7.9	9.9	9.4	9.8	13.0	13.0	12.2	12.9	15.4	.
NBH base rate (p.a.),end of period	%	8.5	9.0	9.0	9.5	9.5	9.5	9.5	9.0	8.5	6.5	6.5	6.5	6.5	6.5	9.5	9.5
NBH base rate (p.a.),end of period[9)]	real, %	11.5	11.2	10.2	10.5	10.6	11.5	11.2	11.1	9.9	6.6	5.6	5.2	6.4	7.0	7.0	.
BUDGET																	
Central gov.budget balance,cum.	HUF bn	-240.2	-280.2	-359.6	-343.5	-413.7	-507.4	-801.9	-586.3	-1474.6	-12.9	-140.8	-224.1	-275.6	-252.9	-458.6	.

1) Economic organizations employing more than 5 persons.

2) According to ILO methodology, from 2002 3-month averages comprising also the two previous months.

3) Revised according to NACE 50+52, from Jan 2003 NACE 52.

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

5) Cumulation starting January and ending December each year.

6) Revised data according to international standards (e.g. trade data refer to customs statistics).

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

8) Revised according to ECB monetary standards.

9) Deflated with annual PPI.

P O L A N D: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry[1]	real, CMPY	0.3	-4.2	2.1	5.7	-1.2	6.7	3.3	3.1	5.1	3.4	4.2	5.5	8.5	11.7	7.9	10.3
Industry[1]	real, CCPY	-1.1	-1.7	-1.1	-0.1	-0.2	0.5	0.8	1.1	1.5	3.4	3.8	4.4	5.5	6.7	6.9	7.4
Industry[1]	real, 3MMA	-2.4	-0.7	1.1	2.2	3.7	2.9	4.3	3.8	3.9	4.3	4.4	6.1	8.5	9.3	9.9	.
Construction[1]	real, CMPY	-6.2	-20.3	-13.2	-3.8	-7.8	-6.1	-8.8	-8.4	-10.4	-11.0	-24.1	-25.3	-13.5	-6.9	-1.1	1.6
LABOUR																	
Employees[1]	th. persons	4907	4896	4898	4884	4876	4864	4870	4862	4839	4736	4741	4728	4726	4723	4722	4722
Employees in industry[1]	th. persons	2475	2471	2471	2462	2457	2451	2462	2462	2448	2417	2418	2412	2408	2405	2405	2407
Unemployment, end of period	th. persons	3203.6	3064.6	3090.9	3105.3	3105.6	3112.6	3108.1	3150.8	3217.0	3320.6	3344.2	3321.0	3246.1	3159.6	3134.6	3123.0
Unemployment rate[2]	%	17.9	17.3	17.4	17.5	17.5	17.6	17.5	17.8	18.1	18.7	18.8	18.7	18.4	17.9	17.8	17.8
Labour productivity, industry[1]	CCPY	6.0	5.2	5.7	6.6	6.3	7.1	7.2	7.3	7.4	6.7	7.0	7.6	8.6	9.9	10.0	10.5
Unit labour costs, exch.r. adj.(EUR)[1]	CCPY	2.0	0.5	-2.2	-4.7	-5.1	-6.0	-6.7	-7.4	-8.1	-15.2	-16.0	-18.2	-19.1	-20.1	-19.9	-19.4
WAGES, SALARIES																	
Total economy, gross[1]	PLN	2226	2255	2232	2289	2253	2302	2263	2343	2532	2247	2235	2268	2321	2254	2301	2343
Total economy, gross[1]	real, CMPY	-0.6	2.5	2.5	2.8	1.5	2.4	-0.8	0.6	1.2	2.0	1.4	-0.1	3.7	-0.7	2.1	1.4
Total economy, gross[1]	USD	549	557	555	556	539	555	549	592	647	586	579	566	586	601	606	600
Total economy, gross[1]	EUR	619	609	580	560	551	565	559	592	635	553	537	525	540	521	519	527
Industry, gross[1]	USD	549	546	556	561	539	546	548	604	671	591	583	564	589	600	612	604
PRICES																	
Consumer	PM	0.5	-0.2	-0.4	-0.5	-0.4	0.3	0.3	-0.1	0.1	0.4	0.1	0.3	0.2	0.0	-0.1	-0.4
Consumer	CMPY	3.0	1.9	1.6	1.3	1.2	1.3	1.1	0.9	0.8	0.5	0.5	0.6	0.3	0.4	0.8	0.8
Consumer	CCPY	3.4	3.1	2.8	2.6	2.4	2.2	2.1	2.0	1.9	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Producer, in industry	PM	0.3	0.1	0.2	0.8	0.4	0.3	0.0	-0.5	0.1	0.4	0.6	0.9	-0.6	-0.6	0.3	0.6
Producer, in industry	CMPY	0.4	0.5	1.2	1.7	1.3	1.1	1.7	1.7	2.2	2.5	2.9	3.6	2.7	2.0	2.0	1.8
Producer, in industry	CCPY	0.3	0.4	0.5	0.7	0.8	0.8	0.9	1.0	1.0	2.5	2.7	3.0	3.0	2.8	2.7	2.5
RETAIL TRADE																	
Turnover[1]	real, CMPY	1.0	1.1	1.8	7.7	3.9	3.6	3.8	4.8	4.4	3.8	4.3	-1.9	11.4	9.9	7.7	.
Turnover[1]	real, CCPY	4.0	3.3	3.1	3.3	2.5	2.6	2.9	1.7	1.6	3.8	4.1	1.2	4.5	6.2	6.0	.
FOREIGN TRADE[3][4]																	
Exports total (fob), cumulated	EUR mn	14018	17383	20972	24505	27917	31695	36074	39981	43418	3406	6910	10858	14761	18492	21717	.
Imports total (cif), cumulated	EUR mn	18872	23617	28416	33428	37803	42779	48336	53495	58331	4406	8880	13932	18938	23740	27910	.
Trade balance, cumulated	EUR mn	-4854	-6234	-7445	-8924	-9886	-11084	-12262	-13514	-14913	-1000	-1970	-3074	-4176	-5248	-6193	.
Exports to EU (fob), cumulated	EUR mn	9797	12120	14617	17078	19331	21877	24759	27509	29832	2475	4915	7733	10410	12948	15146	.
Imports from EU (cif), cumulated	EUR mn	11536	14557	17596	20816	23446	26519	29885	33035	35986	2625	5370	8473	11539	14545	17129	.
Trade balance with EU, cumulated	EUR mn	-1739	-2437	-2979	-3738	-4115	-4642	-5126	-5526	-6154	-150	-455	-740	-1129	-1597	-1983	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	-2980	-3548	-3978	-4087	-4363	-4887	-5453	-6205	-6700	-752	-1274	-1545	-2055	-2538	-2627	.
EXCHANGE RATE																	
PLN/USD, monthly average	nominal	4.059	4.045	4.025	4.118	4.179	4.150	4.123	3.956	3.911	3.832	3.863	4.003	3.961	3.748	3.797	3.906
PLN/EUR, monthly average	nominal	3.595	3.703	3.847	4.088	4.085	4.074	4.045	3.959	3.988	4.064	4.165	4.323	4.299	4.326	4.436	4.443
PLN/USD, calculated with CPI[5]	real, Jan98=100	97.0	96.8	96.8	99.7	101.9	101.1	100.3	96.3	94.9	92.9	94.3	98.1	96.6	91.3	92.7	95.8
PLN/USD, calculated with PPI[5]	real, Jan98=100	101.0	100.6	100.0	101.8	103.1	102.7	102.8	99.0	97.6	97.1	98.9	104.4	100.5	95.6	97.4	99.7
PLN/EUR, calculated with CPI[5]	real, Jan98=100	77.5	80.3	83.7	89.3	89.7	89.5	88.7	87.0	87.8	89.2	91.7	95.2	94.7	95.3	97.9	98.4
PLN/EUR, calculated with PPI[5]	real, Jan98=100	83.1	85.6	88.7	93.5	93.2	92.8	92.3	90.4	91.2	93.0	95.1	98.0	97.6	98.4	100.5	100.1
DOMESTIC FINANCE																	
M0, end of period	PLN bn	40.0	39.8	41.2	41.8	42.1	41.9	42.0	42.1	42.2	41.6	42.7	44.2	45.9	46.1	47.4	.
M1, end of period[6]	PLN bn	116.3	121.6	126.1	128.5	126.1	127.4	126.9	130.7	136.6	129.8	133.0	136.2	130.7	138.0	146.4	.
M2, end of period[6]	PLN bn	317.6	322.0	321.9	324.2	322.9	320.7	321.1	317.5	320.2	315.4	318.4	317.9	317.2	320.2	322.9	.
M2, end of period	CMPY	2.4	3.1	2.4	1.3	-0.2	-1.4	-2.5	-1.1	-2.4	-2.1	-1.9	-0.4	-0.1	-0.6	0.3	.
Discount rate (p.a.),end of period	%	11.0	10.5	10.0	10.0	9.0	8.5	7.8	7.5	7.5	7.3	6.8	6.5	6.3	6.0	5.8	5.8
Discount rate (p.a.),end of period[7]	real, %	10.6	10.0	8.7	8.2	7.6	7.3	5.9	5.7	5.2	4.6	3.7	2.8	3.5	3.9	3.7	3.9
BUDGET																	
Central gov.budget balance, cum.	PLN mn	-19911	-22985	-24923	-25597	-27280	-29147	-34057	-37073	-39403	-4039	-11637	-15430	-17954	-23218	-23818	-27692

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 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total[1]	real, CMPY	5.6	0.1	6.6	9.1	6.4	9.1	9.6	7.0	8.6	1.6	-1.7	3.4	1.6	4.4	6.7	.
Industry, total[1]	real, CCPY	3.8	3.0	3.6	4.4	4.7	5.1	5.6	5.8	6.0	1.6	-0.1	1.1	1.3	1.9	2.8	.
Industry, total	real, 3MMA	1.8	4.0	5.2	7.4	8.2	8.4	8.6	8.4	5.8	2.7	1.1	1.2	3.2	4.3	.	.
LABOUR																	
Employees total	th. persons	4386.8	4397.5	4404.2	4405.1	4399.4	4395.5	4375.1	4353.0	4331.0	4331.2	4348.6	4376.5	4393.6	4411.4	4420.5	.
Employees in industry	th. persons	1823.7	1824.2	1814.0	1812.6	1808.6	1801.7	1797.6	1795.2	1785.5	1796.4	1795.3	1801.3	1790.7	1786.0	1784.6	.
Unemployment, end of period	th. persons	1069.7	983.3	929.7	867.4	815.5	786.2	767.7	755.9	760.6	781.4	798.4	779.2	731.4	693.1	663.6	.
Unemployment rate[2]	%	11.4	10.5	9.9	9.2	8.7	8.4	8.2	8.1	8.1	8.3	8.5	8.3	7.8	7.4	7.1	.
Labour productivity, industry	CCPY	9.2	8.7	9.7	10.9	11.5	12.3	13.0	13.3	13.7	9.0	7.3	8.7	9.2	9.9	11.0	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	4.9	2.1	-1.2	-4.4	-5.8	-6.7	-7.6	-8.6	-9.5	-10.7	-9.6	-10.9	-11.8	-12.2	-12.9	.
WAGES, SALARIES																	
Total economy, gross	th. ROL	5585.4	5329.1	5327.1	5498.5	5469.6	5404.1	5570.8	5704.7	6521.6	6520.3	6054.1	6338.9	6885.5	6521.4	6476.2	.
Total economy, gross	real, CMPY	3.9	2.5	0.3	0.7	1.3	2.0	3.4	1.9	4.4	8.7	9.0	6.3	6.3	7.0	6.6	.
Total economy, gross	USD	169	159	160	167	165	163	168	170	194	195	184	191	204	201	199	.
Total economy, gross	EUR	191	173	167	168	169	166	171	170	190	183	171	177	188	173	170	.
Industry, gross	USD	170	159	161	174	170	165	167	165	188	176	176	184	198	194	193	.
PRICES																	
Consumer	PM	2.0	1.9	1.2	0.5	0.8	0.6	1.6	2.6	1.5	1.3	0.8	1.1	1.1	0.5	0.9	1.2
Consumer	CMPY	24.4	24.5	24.0	23.0	21.3	19.8	18.8	18.6	17.8	16.6	16.2	17.1	16.0	14.4	14.1	14.9
Consumer	CCPY	26.3	25.9	25.6	25.2	24.7	24.1	23.5	23.0	22.5	16.6	16.4	16.7	16.5	16.1	15.7	15.6
Producer, in industry	PM	2.3	2.1	1.4	2.3	1.2	1.8	1.6	1.4	0.7	2.3	2.6	1.9	1.6	1.1	0.4	.
Producer, in industry	CMPY	26.1	25.9	25.7	24.8	23.7	23.5	22.9	23.0	22.1	22.5	23.6	24.0	23.1	21.9	20.7	.
Producer, in industry	CCPY	26.3	26.3	26.2	26.0	25.7	25.4	25.1	24.9	24.6	22.5	23.0	23.3	23.3	23.0	22.6	.
RETAIL TRADE																	
Turnover	real, CMPY	8.9	-2.2	-0.3	3.6	2.8	2.9	0.3	-1.7	1.1	5.5	3.2	0.7	-1.5	4.9	.	.
Turnover	real, CCPY	0.5	0.0	-0.1	0.5	0.8	1.0	0.9	0.7	0.7	5.5	4.2	2.9	1.6	2.3	.	.
FOREIGN TRADE[3)4)]																	
Exports total (fob), cumulated	EUR mn	4492	5644	6933	8289	9511	10758	12105	13467	14675	1200	2435	3772	4964	6221	7497	.
Imports total (cif), cumulated	EUR mn	5728	7260	8883	10679	12076	13679	15482	17229	18881	1413	2878	4533	6248	8051	9808	.
Trade balance, cumulated	EUR mn	-1237	-1616	-1950	-2390	-2565	-2921	-3377	-3762	-4206	-214	-444	-761	-1284	-1830	-2311	.
Exports to EU (fob), cumulated	EUR mn	3148	3923	4786	5711	6524	7350	8211	9129	9853	811	1680	2593	3382	4254	5119	.
Imports from EU (cif), cumulated	EUR mn	3362	4271	5278	6395	7140	8030	9076	10076	11039	755	1609	2533	3494	4629	5707	.
Trade balance with EU, cumulated	EUR mn	-214	-349	-492	-684	-615	-680	-865	-948	-1186	56	71	60	-111	-375	-589	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	-477	-642	-854	-965	-882	-905	-1059	-1210	-1573	-15	-72	-169	-607	-1057	.	.
EXCHANGE RATE																	
ROL/USD, monthly average	nominal	33102	33491	33392	32979	33094	33116	33242	33545	33654	33448	32884	33134	33703	32502	32616	32677
ROL/EUR, monthly average	nominal	29316	30774	31912	32721	32365	32481	32629	33592	34239	35594	35443	35823	36560	37617	38063	37166
ROL/USD, calculated with CPI[5)]	real, Jan98=100	110.3	109.5	108.0	106.2	106.1	105.7	104.7	102.9	101.4	99.9	98.2	98.5	98.9	94.7	94.4	93.4
ROL/USD, calculated with PPI[5)]	real, Jan98=100	104.2	103.3	101.6	98.4	97.8	96.7	96.3	95.7	95.2	94.2	91.8	93.3	90.4	86.1	86.9	.
ROL/EUR, calculated with CPI[5)]	real, Jan98=100	88.2	91.2	93.4	95.2	93.5	93.6	92.7	93.1	93.8	96.4	95.6	95.8	96.9	99.2	99.6	96.1
ROL/EUR, calculated with PPI[5)]	real, Jan98=100	85.8	88.3	90.2	90.5	88.6	87.5	86.6	87.5	88.8	90.7	88.4	87.8	87.8	89.0	89.6	.
DOMESTIC FINANCE																	
M0, end of period	ROL bn	37683	34997	39615	39106	41257	42334	41324	41688	45578	41543	45773	45868	51575	50214	52535	.
M1, end of period	ROL bn	60373	59796	64366	65733	69383	71435	72319	72822	88305	73802	78289	79941	87820	85019	92145	.
M2, end of period	ROL bn	286066	290629	300912	303477	314850	317333	324933	334584	373713	355721	367402	369451	378595	379098	388499	.
M2, end of period	CMPY	44.0	45.4	44.3	40.3	39.0	35.0	37.2	36.7	38.2	36.9	37.6	34.2	32.3	30.4	29.1	.
Discount rate (p.a.),end of period[6)]	%	34.1	32.2	30.6	28.3	27.2	25.6	23.8	22.2	20.4	19.6	19.2	18.4	17.4	17.9	18.2	18.2
Discount rate (p.a.),end of period[6)7)]	real, %	6.3	5.0	3.9	2.8	2.8	1.7	0.7	-0.7	-1.4	-2.4	-3.6	-4.5	-4.6	-3.3	-2.1	.
BUDGET																	
Central gov.budget balance, cum.	ROL bn	-14009	-14789	-29334	-31292	-29983	-32043	-31386	-39426	-47618	1599	-2275	-7723	-7382	-10330	-16524	.

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 2002 as of December 2001.

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 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total	real, CMPY	4.3	2.8	4.4	7.8	3.4	5.5	3.9	0.8	3.2	4.9	6.5	6.7	7.1	8.5	7.0	7.1
Industry, total	real, CCPY	3.0	3.0	3.2	3.9	3.8	4.0	4.0	3.7	3.7	4.9	5.7	6.0	6.3	7.1	6.8	6.8
Industry, total[1]	real, 3MMA	3.6	3.8	5.0	5.2	.	.	.	.	.	.	.	.	.	.	.	.
Construction, total	real, CMPY	3.3	3.1	2.8	2.4	3.1	1.9	1.7	2.7	3.8	13.7	13.4	13.8	14.7	15.4	14.3	15.0
LABOUR																	
Employment total[2]	th. persons	65700	66000	66500	67000	67500	66900	66300	65800	65200	64700	64100	64400	64600	64900	65200	.
Unemployment, end of period[3]	th. persons	5674	5529	5420	5312	5203	5520	5837	6153	6294	6435	6575	6324	6072	5821	5744	5630
Unemployment rate[3]	%	8.0	7.7	7.5	7.3	7.2	7.6	8.1	8.5	8.8	9.1	9.3	8.9	8.6	8.2	8.1	7.8
WAGES, SALARIES																	
Total economy, gross	RUB	4110.0	4187.0	4460.0	4597.0	4511.0	4521.0	4646.0	4694.0	5738.0	4696.0	4701.0	4986.0	5100.0	5221.0	5550.0	5661.0
Total economy, gross	real, CMPY	20.9	18.0	18.2	18.7	15.9	15.4	14.9	13.8	9.8	9.2	9.9	7.8	8.3	9.8	9.3	8.1
Total economy, gross	USD	132	134	142	146	143	143	147	148	180	148	148	159	163	169	182	186
Total economy, gross	EUR	149	146	149	147	146	146	149	147	177	139	138	147	151	146	156	164
Industry, gross	USD	160	159	165	174	179	173	176	178	207	176	181	190	200	169	182	.
PRICES																	
Consumer	PM	1.2	1.7	0.5	0.7	0.1	0.4	1.1	1.6	1.5	2.4	1.6	1.1	1.0	0.8	0.8	0.7
Consumer	CMPY	16.3	16.2	14.9	15.1	15.2	15.0	15.0	15.2	15.1	14.3	14.8	14.8	14.6	13.6	13.9	13.9
Consumer	CCPY	17.5	17.3	16.8	16.6	16.4	16.3	16.1	16.0	16.0	14.3	14.6	14.6	14.6	14.4	14.3	14.3
Producer, in industry	PM	2.2	2.5	3.1	2.6	1.7	1.2	2.1	1.1	-0.2	0.4	1.4	1.3	1.4	-0.2	0.7	2.2
Producer, in industry	CMPY	7.0	8.7	9.9	11.7	13.6	15.1	17.0	18.0	17.5	17.5	19.5	21.2	20.2	17.1	14.3	13.9
Producer, in industry	CCPY	7.1	7.4	7.9	8.4	9.1	9.8	10.5	11.2	11.8	17.5	18.5	19.4	19.6	19.1	18.2	17.6
RETAIL TRADE																	
Turnover[4]	real, CMPY	9.5	6.1	7.6	10.2	8.6	9.6	9.6	10.0	8.7	8.1	8.5	8.6	9.9	8.3	8.7	.
Turnover[4]	real, CCPY	9.0	8.4	8.3	8.6	8.6	8.7	8.8	8.9	8.9	8.1	8.3	8.4	8.8	8.7	8.7	.
FOREIGN TRADE[5)6)7)]																	
Exports total, cumulated	EUR mn	35274	44553	53155	62480	72646	82622	92940	102326	113173	8897	17918	28522	37926	46624	56068	.
Imports total, cumulated	EUR mn	19891	25003	30201	35692	40908	46099	52000	57581	64051	4259	8883	14230	19823	24797	30123	.
Trade balance, cumulated	EUR mn	15383	19550	22954	26789	31738	36523	40940	44745	49122	4638	9034	14292	18103	21827	25945	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	.	.	14551	.	.	22079	.	.	31091	.	.	11500	.	.	14600	.
EXCHANGE RATE																	
RUB/USD, monthly average	nominal	31.174	31.255	31.405	31.515	31.554	31.627	31.693	31.811	31.837	31.816	31.699	31.453	31.212	30.907	30.469	30.360
RUB/EUR, monthly average	nominal	27.596	28.682	29.965	31.323	30.875	31.006	31.103	31.831	32.443	33.807	34.188	33.952	33.867	35.738	35.594	34.560
RUB/USD, calculated with CPI[8]	real, Jan98=100	153.3	151.1	151.2	150.9	151.4	151.4	150.4	148.6	146.0	143.1	141.4	139.7	136.9	134.3	131.6	130.2
RUB/USD, calculated with PPI[8]	real, Jan98=100	178.4	174.5	170.3	167.0	164.8	164.2	162.4	161.1	161.2	163.5	163.4	164.4	155.7	154.4	152.5	148.7
RUB/EUR, calculated with CPI[8]	real, Jan98=100	122.4	125.5	130.5	135.3	133.4	133.8	133.0	134.1	135.1	137.6	137.5	135.5	134.1	140.4	138.8	133.9
RUB/EUR, calculated with PPI[8]	real, Jan98=100	146.7	148.9	150.7	153.7	149.1	148.3	145.8	147.0	150.4	156.9	157.1	154.3	151.1	159.1	157.2	149.3
DOMESTIC FINANCE																	
M0, end of period	RUB bn	610.3	607.5	645.9	659.7	679.0	672.6	675.8	690.5	763.3	709.0	730.9	749.5	822.4	855.6	918.1	.
M1, end of period	RUB bn	1147.5	1204.1	1254.5	1268.0	1282.1	1301.7	1313.3	1337.4	1499.2	1396.3	1441.4	1513.9	1584.8	1680.9	1823.0	.
M2, end of period	RUB bn	2213.5	2288.3	2356.8	2403.6	2445.2	2494.7	2538.6	2602.7	2843.6	2778.5	2916.5	2991.0	3053.8	3164.1	3340.9	.
M2, end of period	CMPY	31.5	32.3	31.0	30.5	30.7	29.6	28.6	31.1	34.0	35.1	38.6	39.9	38.0	38.3	41.8	.
Refinancing rate (p.a.),end of period	%	23.0	23.0	23.0	23.0	21.0	21.0	21.0	21.0	21.0	21.0	18.0	18.0	18.0	18.0	18.0	16.0
Refinancing rate (p.a.),end of period[9]	real, %	15.0	13.2	12.0	10.1	6.5	5.1	3.4	2.6	3.0	3.0	-1.2	-2.6	-1.9	0.8	3.2	1.9
BUDGET																	
Central gov.budget balance, cum.	RUB bn	132.2	147.9	162.8	209.8	223.5	246.4	213.9	203.4	156.0	70.1	75.1	89.3	127.3	174.8	178.2	.

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) Based on balance of payments statistics.
8) Adjusted for domestic and foreign (US resp. EU) inflation. Values less than 100 mean real appreciation.
9) Deflated with annual PPI.

S L O V A K REPUBLIC: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total	real, CMPY	10.3	3.7	3.8	12.0	6.6	9.8	8.7	8.9	10.9	13.7	7.8	10.6	2.2	2.5	9.6	.
Industry, total	real, CCPY	3.3	3.4	3.5	4.7	4.9	5.4	5.8	6.1	6.5	13.7	10.7	10.7	8.5	7.2	7.6	.
Industry, total	real, 3MMA	4.1	5.8	6.4	7.4	9.4	8.4	9.1	9.5	11.1	10.8	10.7	6.8	5.1	4.8	.	.
Construction, total	real, CMPY	9.9	8.2	-1.5	6.3	1.5	3.8	6.9	8.0	11.7	4.8	0.6	3.6	-0.5	0.0	3.3	.
LABOUR																	
Employment in industry	th. persons	561.9	561.7	564.7	555.5	558.1	562.1	561.4	559.8	549.3	547.8	550.3	554.1	558.2	560.9	563.9	.
Unemployment, end of period[1]	th. persons	521.0	510.2	507.0	505.0	492.6	481.0	478.6	488.0	504.1	509.2	495.4	478.7	450.7	433.1	427.6	422.8
Unemployment rate[1]	%	18.1	17.7	17.6	17.6	17.2	16.6	16.4	16.8	17.5	17.7	17.1	16.5	15.4	14.8	14.6	14.5
Labour productivity, industry	CCPY	4.5	4.1	3.8	4.9	5.1	5.5	5.7	5.9	6.3	12.7	9.5	9.2	7.6	6.5	7.1	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	8.0	7.2	6.1	4.1	3.4	3.2	3.0	2.8	2.4	-4.1	-2.5	-2.7	-0.9	0.7	1.4	.
WAGES, SALARIES																	
Industry, gross	SKK	13674	14314	14663	14567	14053	13822	14484	16558	16097	14332	13466	14223	14526	15071	15835	.
Industry, gross	real, CMPY	3.9	3.1	3.5	7.2	4.3	6.1	2.2	1.7	2.0	-1.3	-2.7	-3.0	-1.4	-2.1	-0.4	.
Industry, gross	USD	290	305	315	325	312	315	340	399	391	365	346	368	383	424	446	.
Industry, gross	EUR	328	333	331	327	320	321	346	399	385	344	321	340	354	367	382	.
PRICES																	
Consumer	PM	0.4	0.2	-0.4	-0.3	0.5	0.3	0.0	0.0	0.7	5.3	0.6	0.4	0.2	0.1	0.4	0.0
Consumer	CMPY	3.6	3.2	2.6	2.0	2.7	2.8	2.9	2.9	3.4	7.3	7.6	8.0	7.7	7.6	8.4	8.7
Consumer	CCPY	4.4	4.2	3.9	3.6	3.5	3.4	3.3	3.3	3.3	7.3	7.5	7.6	7.7	7.6	7.8	7.9
Producer, in industry[2]	PM	0.8	-0.2	-0.4	0.2	0.0	0.1	0.0	-0.3	0.1	5.4	3.1	0.3	-0.1	-0.6	0.0	.
Producer, in industry[2]	CMPY	1.9	2.0	1.4	1.8	2.0	2.2	2.2	2.2	2.3	7.5	8.9	9.2	8.2	7.8	8.2	.
Producer, in industry[2]	CCPY	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	7.5	8.2	8.5	8.5	8.3	8.3	.
RETAIL TRADE[3]																	
Turnover	real, CMPY	4.4	8.8	10.5	5.6	2.9	0.9	6.2	1.7	8.5	-5.0	-3.8	-10.2	-3.4	-7.4	-10.4	.
Turnover	real, CCPY	5.5	6.2	6.9	6.7	6.2	5.9	5.9	5.5	5.8	-5.0	-4.4	-6.3	-5.7	-6.0	-6.8	.
FOREIGN TRADE[4)5)]																	
Exports total (fob),cumulated	EUR mn	4699	5906	7208	8554	9752	11114	12561	13993	15256	1309	2690	4219	5713	7374	9042	.
Imports total (fob),cumulated	EUR mn	5290	6752	8184	9683	10970	12522	14279	15938	17519	1327	2762	4359	5996	7610	9276	.
Trade balance,cumulated	EUR mn	-591	-846	-976	-1129	-1217	-1408	-1718	-1945	-2263	-17	-72	-140	-284	-236	-234	.
Exports to EU (fob), cumulated	EUR mn	2897	3604	4395	5207	5889	6712	7569	8450	9234	836	1724	2725	3630	4625	5574	.
Imports from EU (fob), cumulated	EUR mn	2655	3383	4123	4909	5542	6323	7216	8054	8815	647	1350	2146	2981	3838	4709	.
Trade balance with EU, cumulated	EUR mn	242	221	272	298	347	388	354	396	418	189	374	578	649	787	865	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	-446	-762	-868	-987	-1018	-1210	-1458	-1619	-1939	-46	-137	-126	-255	.	.	.
EXCHANGE RATE																	
SKK/USD, monthly average	nominal	47.1	46.9	46.5	44.8	45.0	43.8	42.6	41.5	41.1	39.3	39.0	38.7	37.9	35.6	35.5	36.7
SKK/EUR, monthly average	nominal	41.7	43.0	44.3	44.5	44.0	43.0	41.8	41.5	41.8	41.7	42.0	41.8	41.1	41.1	41.5	41.8
SKK/USD, calculated with CPI[6]	real, Jan98=100	107.4	106.6	106.4	102.7	103.1	100.3	97.7	95.0	93.4	84.9	84.4	84.0	82.0	76.8	76.4	79.1
SKK/USD, calculated with PPI[6]	real, Jan98=100	110.6	110.3	110.0	105.9	106.7	104.5	102.4	99.8	98.8	91.1	89.2	90.7	86.1	81.3	81.8	.
SKK/EUR, calculated with CPI[6]	real, Jan98=100	85.6	88.3	91.5	92.0	90.6	88.6	86.3	85.8	86.0	81.5	82.0	81.5	80.1	80.1	80.6	81.2
SKK/EUR, calculated with PPI[6]	real, Jan98=100	90.8	93.8	97.1	97.3	96.3	94.3	91.8	91.1	91.8	87.2	85.6	85.1	83.4	83.6	84.3	.
DOMESTIC FINANCE																	
M0, end of period	SKK bn	78.8	79.0	79.6	79.3	80.4	80.7	81.4	83.1	84.2	84.1	87.2	86.8	86.3	87.0	86.3	.
M1, end of period	SKK bn	210.6	212.1	218.7	219.3	222.5	221.1	222.8	227.0	246.1	234.9	244.1	240.9	242.4	244.8	253.7	.
M2, end of period	SKK bn	662.8	668.7	678.9	692.7	696.3	689.7	694.7	702.8	713.7	702.2	713.2	710.3	711.7	718.7	704.1	.
M2, end of period	CMPY	6.9	8.0	8.6	9.3	8.1	7.5	9.3	7.9	4.9	5.1	5.7	6.7	7.4	7.5	3.7	.
Discount rate (p.a.),end of period[7]	%	8.3	8.3	8.3	8.3	8.3	8.3	8.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Discount rate (p.a.),end of period[7][8]	real, %	6.2	6.1	6.8	6.3	6.1	5.9	5.7	4.3	4.1	-0.9	-2.2	-2.5	-1.6	-1.2	-1.6	.
BUDGET																	
Central gov.budget balance, cum.	SKK mn	-13497	-20825	-24661	-34768	-35706	-32192	-39930	-36488	-51642	-1688	-12985	-17810	-23786	-30580	-27619	-31190

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

2) Based on revised index schema of 2000, excluding VAT and excise taxes.

3) According to NACE (52 - retail trade), excluding VAT.

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

8) Deflated with annual PPI.

S L O V E N I A: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total	real, CMPY	9.6	0.1	-1.9	4.6	0.1	6.8	1.5	0.6	2.8	-1.9	2.8	1.4	-2.4	-0.8	2.5	.
Industry, total	real, CCPY	3.7	2.9	2.1	2.5	2.2	2.7	2.6	2.4	2.4	-1.9	0.4	0.8	-0.1	-0.2	0.2	.
Industry, total	real, 3MMA	2.6	2.5	0.9	0.9	4.0	2.9	2.9	1.5	0.4	1.1	0.7	0.5	-0.6	-0.3	.	.
Construction, total[1]	real, CMPY	-0.1	-4.8	-8.0	-1.2	-5.3	0.6	-3.6	-0.1	2.2	-8.3	-10.0	-4.7	-1.5	-1.1	.	.
LABOUR																	
Employment total	th. persons	784.3	785.3	785.6	783.9	782.6	784.5	785.1	785.2	781.9	776.0	776.8	778.5	778.3	779.3	780.4	.
Employees in industry[2]	th. persons	219.8	219.6	219.3	218.2	217.5	217.3	217.5	217.6	215.9	.	.	.	.	.	.	.
Unemployment, end of period	th. persons	102.7	101.1	100.1	101.7	102.2	103.4	104.5	101.7	99.6	101.6	100.6	98.8	97.1	95.3	94.4	.
Unemployment rate[3]	%	11.6	11.4	11.3	11.5	11.6	11.7	11.7	11.5	11.3	11.6	11.5	11.3	11.1	10.9	10.8	.
Labour productivity, industry	CCPY	6.9	6.2	5.4	5.9	5.6	6.0	5.9	5.6	5.6	0.3	2.6	3.1	2.2	2.2	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	-2.6	-1.7	-1.0	-1.1	-1.0	-1.2	-0.9	-0.7	-0.1	4.4	1.6	0.7	1.6	1.6	.	.
WAGES, SALARIES																	
Total economy, gross	th. SIT	228.8	231.1	229.2	232.1	236.1	236.2	239.9	252.9	262.1	247.1	241.5	243.7	246.9	249.3	248.2	.
Total economy, gross	real, CMPY	2.0	2.1	2.5	3.0	1.7	2.9	2.1	0.9	4.4	2.4	1.9	1.1	2.5	2.3	2.1	.
Total economy, gross	USD	901	939	967	1016	1015	1016	1029	1103	1159	1136	1126	1134	1151	1236	1242	.
Total economy, gross	EUR	1019	1026	1014	1024	1039	1036	1049	1103	1140	1071	1044	1051	1063	1070	1063	.
Industry, gross	USD	767	806	816	877	865	869	890	966	1006	970	947	964	982	1055	.	.
PRICES																	
Consumer	PM	1.4	0.3	-0.2	0.5	0.1	0.8	0.5	0.0	0.6	1.0	0.5	0.7	0.5	0.5	0.3	0.5
Consumer	CMPY	8.4	7.5	6.8	7.2	7.3	7.2	7.2	6.7	7.2	6.6	6.2	6.3	5.3	5.5	6.0	6.0
Consumer	CCPY	8.2	8.0	7.8	7.7	7.7	7.6	7.6	7.5	7.5	6.6	6.4	6.3	6.1	5.9	6.0	6.0
Producer, in industry	PM	0.4	0.1	0.2	0.2	0.2	0.1	0.3	0.3	0.6	0.2	-0.2	0.1	0.3	0.5	0.1	0.0
Producer, in industry	CMPY	5.7	5.7	5.6	5.3	5.2	4.9	4.2	4.1	3.7	3.6	2.8	2.5	2.4	2.8	2.7	2.5
Producer, in industry	CCPY	5.8	5.7	5.7	5.7	5.6	5.5	5.4	5.3	5.1	3.6	3.2	3.0	2.8	2.8	2.8	2.8
RETAIL TRADE[4]																	
Turnover	real, CMPY	2.8	2.2	5.1	7.1	4.0	7.8	5.6	3.9	6.7	4.5	8.9	0.9	7.2	6.5	.	.
Turnover	real, CCPY	3.5	3.2	3.6	4.1	4.1	4.5	4.6	4.6	4.8	4.5	6.7	4.5	5.2	5.5	.	.
FOREIGN TRADE[5][6]																	
Exports total (fob), cumulated	EUR mn	3621	4539	5459	6444	7168	8172	9217	10153	10966	846	1752	2741	3722	4646	5586	.
Imports total (cif), cumulated	EUR mn	3863	4847	5766	6754	7518	8529	9576	10607	11574	868	1896	2991	4026	5084	6073	.
Trade balance total, cumulated	EUR mn	-241	-308	-306	-309	-351	-357	-359	-454	-608	-22	-144	-250	-304	-438	-487	.
Exports to EU (fob), cumulated	EUR mn	2251	2785	3328	3905	4307	4903	5517	6069	6506	557	1106	1702	2281	2835	3381	.
Imports from EU (cif), cumulated	EUR mn	2626	3307	3956	4641	5138	5825	6543	7226	7871	572	1253	1998	2698	3414	4092	.
Trade balance with EU, cumulated	EUR mn	-374	-523	-628	-736	-831	-922	-1026	-1157	-1366	-15	-147	-297	-417	-579	-711	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	64	71	146	192	236	368	458	484	375	97	65	-20	-2	-73	-59	.
EXCHANGE RATE																	
SIT/USD, monthly average	nominal	254.0	246.1	237.1	228.3	232.6	232.5	233.2	229.2	226.2	217.5	214.5	214.8	214.4	201.7	199.8	205.8
SIT/EUR, monthly average	nominal	224.6	225.3	226.0	226.7	227.4	228.0	228.7	229.3	230.0	230.7	231.3	231.9	232.4	233.0	233.5	234.1
SIT/USD, calculated with CPI[7]	real, Jan98=100	118.8	114.8	110.9	106.4	108.6	107.9	107.8	106.0	103.7	99.1	98.1	98.1	97.2	90.8	89.9	92.1
SIT/USD, calculated with PPI[7]	real, Jan98=100	122.0	118.2	113.7	109.6	111.7	112.2	113.1	110.7	108.4	106.0	106.5	109.4	105.4	98.6	98.4	101.4
SIT/EUR, calculated with CPI[7]	real, Jan98=100	94.8	95.1	95.6	95.3	95.6	95.4	95.4	95.8	95.7	95.2	95.3	95.2	95.1	94.9	94.9	94.7
SIT/EUR, calculated with PPI[7]	real, Jan98=100	100.2	100.6	100.6	100.8	101.0	101.4	101.4	101.0	100.9	101.5	102.4	102.8	102.2	101.5	101.5	101.8
DOMESTIC FINANCE																	
M0, end of period	SIT bn	134.3	135.1	146.0	137.2	140.0	138.6	141.4	140.6	143.1	137.8	139.2	142.0	147.2	150.2	.	.
M1, end of period	SIT bn	489.5	502.8	524.1	509.4	509.6	525.5	510.8	556.9	563.4	525.1	536.8	546.7	557.1	577.6	643.8	.
Broad money, end of period	SIT bn	3010.4	3036.4	3025.5	3061.0	3080.7	3100.6	3223.9	3353.0	3371.9	3319.5	3336.5	3330.8	3355.4	3362.5	3420.9	.
Broad money, end of period	CMPY	27.9	26.0	23.7	23.6	22.5	21.3	23.2	23.9	17.2	14.0	13.9	12.1	11.5	10.7	13.1	.
Discount rate (p.a.),end of period[8]	%	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.25	7.25	7.25	6.50	6.50	6.50	5.50	5.50
Discount rate (p.a.),end of period[9]	real, %	1.9	1.9	2.0	2.3	2.4	2.7	3.4	3.5	3.4	3.5	4.3	3.9	4.0	3.6	2.7	2.9
BUDGET																	
General gov.budget balance, cum.	SIT bn	-117.2	-122.5	-174.3	-163.6	-158.4	-162.4	-159.6	-173.0	-157.6	3.8	-21.3	-30.3	-12.3	.	.	.

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) According to NACE (52 - retail trade, 50 - repair of motor vehicles), excluding turnover tax.

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) From October 2001 main refinancing rate.

9) Deflated with annual PPI.

U K R A I N E: Selected monthly data on the economic situation 2002 to 2003

(updated end of Aug 2003)

		2002									2003						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																	
Industry, total[1]	real, CMPY	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Industry, total	real, CCPY	6.2	5.5	5.9	6.2	6.1	6.2	6.0	6.3	7.0	11.6	10.8	10.7	11.4	11.7	12.4	.
Industry, total[1]	real, 3MMA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LABOUR																	
Unemployment, end of period	th. persons	1087.0	1051.0	1023.4	1005.2	1002.8	991.8	980.0	999.4	1034.2	1061.0	1100.9	1109.4	1107.3	1057.8	1012.7	.
Unemployment rate[2]	%	4.0	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.8	3.9	4.0	4.0	4.0	3.9	3.7	.
WAGES, SALARIES [1]																	
Total economy, gross	UAH	355.8	358.9	377.4	398.1	390.1	391.1	397.5	395.7	442.9	400.6	391.2	415.5	422.6	439.3	476.2	.
Total economy, gross	real, CMPY	20.6	16.9	20.0	22.7	19.5	21.1	19.1	18.8	17.7	25.0	16.2	12.3	14.7	17.8	19.1	.
Total economy, gross	USD	67	67	71	75	73	73	75	74	83	75	73	78	79	82	89	.
Total economy, gross	EUR	76	74	74	75	75	75	76	74	82	71	68	72	73	72	76	.
Industry, gross	USD	.	87	89	96	95	95	97	95	104	99	96	103	105	108	.	.
PRICES																	
Consumer	PM	1.4	-0.3	-1.8	-1.5	-0.2	0.2	0.7	0.7	1.4	1.5	1.1	1.1	0.7	0.0	0.1	-0.1
Consumer	CMPY	2.1	1.4	-1.1	-0.9	-0.9	-1.1	-0.6	-0.4	-0.6	-0.1	2.5	4.3	3.6	3.9	5.9	7.4
Consumer	CCPY	3.3	2.9	2.2	1.8	1.5	1.2	1.0	0.9	0.8	-0.1	1.2	2.2	2.6	2.8	3.3	3.9
Producer, in industry	PM	1.2	1.5	2.2	1.0	-0.4	0.3	0.2	0.2	0.0	0.5	0.7	2.1	0.3	0.3	0.0	1.0
Producer, in industry	CMPY	0.5	2.0	4.0	5.0	4.6	4.9	5.8	5.3	5.8	6.8	6.8	9.9	8.9	7.6	5.3	5.3
Producer, in industry	CCPY	-0.1	0.3	0.9	1.5	1.9	2.2	2.6	2.8	3.1	6.8	6.8	7.8	8.1	8.0	7.5	7.2
RETAIL TRADE																	
Turnover[3]	real, CCPY	18.0	18.1	16.1	15.6	15.5	14.8	14.9	14.7	14.8	11.6	12.6	12.4	11.9	.	16.5	.
FOREIGN TRADE[4][5]																	
Exports total (fob), cumulated	EUR mn	6089	7581	9054	10539	12040	13770	15552	17206	19004	1402	2899	4607	.	7809	9330	.
Imports total (cif), cumulated	EUR mn	5662	7047	8519	10044	11512	13001	14632	16098	17967	1265	2633	4225	.	7392	8928	.
Trade balance, cumulated	EUR mn	427	534	535	495	527	770	920	1108	1037	137	266	383	.	417	402	.
FOREIGN FINANCE																	
Current account, cumulated	USD mn	.	.	1453	.	.	2207	.	.	3173	.	.	1082	.	.	.	.
EXCHANGE RATE																	
UAH/USD, monthly average	nominal	5.327	5.328	5.329	5.329	5.329	5.330	5.330	5.330	5.332	5.333	5.334	5.334	5.334	5.333	5.333	5.332
UAH/EUR, monthly average	nominal	4.712	4.865	5.079	5.288	5.211	5.229	5.228	5.338	5.422	5.645	5.752	5.758	5.786	6.125	6.225	6.066
UAH/USD, calculated with CPI[6]	real, Jan98=100	164.6	165.1	168.3	171.0	171.9	171.9	171.0	169.9	167.1	165.3	164.8	164.0	162.6	162.2	162.4	162.5
UAH/USD, calculated with PPI[6]	real, Jan98=100	152.9	150.6	147.6	146.5	147.4	147.9	148.8	148.3	148.1	150.2	151.7	152.6	147.3	146.6	148.0	146.5
UAH/EUR, calculated with CPI[6]	real, Jan98=100	131.1	136.2	144.8	152.9	151.1	151.8	151.0	153.2	154.0	158.1	160.0	158.9	158.8	168.2	170.9	166.7
UAH/EUR, calculated with PPI[6]	real, Jan98=100	125.3	127.6	130.2	134.4	133.1	133.4	133.2	135.2	137.7	143.3	145.6	143.0	142.6	149.9	152.2	146.8
DOMESTIC FINANCE																	
M0, end of period	UAH mn	20980	20394	21441	22561	23568	23655	23713	24064	26434	24707	25503	26002	27650	27879	29375	30100
M1, end of period	UAH mn	30672	30670	32494	34037	35367	36504	36373	36514	40244	37877	38974	41615	42743	43447	46815	.
Broad money, end of period	UAH mn	48389	48813	51195	53913	56294	57729	58697	59575	64532	62853	64945	69731	72509	73977	79034	80800
Broad money, end of period	CMPY	41.9	38.8	38.5	44.3	47.1	45.6	44.0	43.5	41.7	44.1	44.2	47.3	49.8	51.6	54.4	49.9
Refinancing rate (p.a.),end of period	%	10.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Refinancing rate (p.a.),end of period[7]	real, %	9.5	7.9	5.7	2.9	3.2	3.0	2.1	2.6	1.1	0.2	0.2	-2.6	-1.8	-0.6	1.6	1.6
BUDGET																	
General gov.budget balance, cum.	UAH mn	564.2	1626.6	1366.6	1851.7	2409.7	2722.6	3284.8	3828.3	1726.9	1451.1	2194.3	1871.3	2348.1	3375.2	2510.9	.

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.

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