

Monthly Report | 8-9/10

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The intensity of competition in Central, East and Southeast Europe: stylized facts and repercussions for sectoral price developments*

BY MARTIN FELDKIRCHER,
REINER MARTIN AND JULIA WÖRZ**

1 Introduction

A number of studies confirm a positive link between the intensity of competition in markets, firm performance and economic development more generally (Gradzewicz and Hagemeyer, 2007; Ospina and Schiffbauer, 2010).¹ Competitive markets encourage the entry of new firms and act as a powerful selection mechanism for existing companies, ensuring that only the most efficient firms survive. As argued by Schumpeter back in 1942, a permanent threat of competition induces the need to innovate, which in turn spurs productivity growth. Competition thus improves the allocation of factors of production across and within sectors and so ultimately contributes to economic growth. This is further corroborated by the view that highly competitive markets will also ensure that consumer needs are best served through an appropriate range of offered varieties, a high quality of products and services and low prices.²

* This article is based on a larger study by M. Feldkircher, R. Martin and J. Wörz (2010), 'Measuring Competition in CESEE: Stylised Facts and Determinants across Countries and Sectors', *Focus on European Economic Integration Q3/10*, OeNB, pp. 38-62. The research was conducted when Reiner Martin was visiting the Foreign Research Division of the OeNB in 2009/10.

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¹ Similar studies focusing on Central, Eastern and Southeastern Europe (CESEE) include e.g. Djankov and Murrell (2002), Carlin, Schaffer and Seabright (2004), Commander and Svejnar (2007), and Fernandes (2009).

² A related strand of the literature looks at the link between competition policy and the degree of competition, see Hölscher and Stephan (2004) and Vagliasindi (2006) in the CESEE context.

To our knowledge there is no paper that systematically looks at the country- or sector-specific differences in indicators of the intensity of competition in Central, East and Southeast Europe (CESEE) although such an analysis is of interest for several reasons: First, the small economic size of most CESEE countries raises the danger of oligopolistic or even monopolistic market structures, which may inter alia have a negative impact on consumer prices. Second, from the beginning of their transformation, the CESEE countries had to (re-)create competitive market structures and functioning competition policies starting from a situation dominated by state-owned monopolies. Third, as a result of the financial and economic crisis, future economic growth in CESEE may have to rely more on domestically generated productivity gains than in the past, when imported capital was readily available and acted as a key driver of growth. Given the above-mentioned positive effects that competitive markets are likely to have on productivity growth and consumer welfare, it is therefore of particular importance to look at indicators for the level of competition in CESEE.

In this article we use the Amadeus firm-level database to provide an overview of two key indicators of competition that are commonly used in the literature, namely profit margins and the concentration of sales, across 27 sectors in 11 CESEE countries (Bulgaria, the Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Poland, Romania, Slovenia and Slovakia) over the period 1999-2007. Section 2 looks at measurement issues relating to these indicators, Section 3 provides stylized facts and Section 4 looks at the link between the intensity of competition and consumer price developments.

2 Measurement issues

Despite a pronounced interest by economic policy on the issue of competition, there is a clear lack of theoretically sound and empirically viable concepts and data to measure competitive pressure. Choosing suitable indicators for the analysis of competition intensity thus involves difficult choices

and compromises. A recent study focusing on the measurement of competition is Creusen et al. (2006), using four measures of competition. The authors find that the different indicators frequently contradict each other as regards changes in the intensity of competition over time, since they respond differently to a reallocation of output from inefficient to efficient firms. The two indicators most commonly used in the literature are concentration measures and profit margins.³ However, in either case the interpretation of a change in the indicator is not free from theoretical ambiguity. Relatively high profit margins would a priori indicate less intense competition, but very low or negative profit margins may also indicate predatory behaviour of (some) market participants. In addition, 'normal' profit margins are likely to depend strongly on the characteristics of the industry and further, profit margins tend to increase over time due to higher cost-effectiveness of surviving firms without a detrimental effect on competition.

Lower concentration as a result of lower entry barriers to a market would normally be seen as an indication of an increase in competition. However, when firms in a market act more aggressively, thus driving out less efficient firms, the subsequent rise in concentration would not automatically imply less competition. This behaviour has recently been observed, for instance, in the telecommunications sector in many Western European countries. A rise in competition tends to increase the market share of more efficient firms. This reallocation effect may even lead to a counterintuitive positive correlation between concentration and competition as well as between profit margins and competition.

This discussion makes clear that one indicator in isolation implies a particularly high risk to yield misleading results. Therefore, we use two alternative indicators of competition: profit margins and a measure of sales concentration.

³ The vast majority of the studies on the link between product market competition and enterprise restructuring surveyed in Djankov and Murrell (2002) use, for example, only one indicator of competition, usually a measure of concentration, e.g. sales concentration.

Looking at the two indicators of competition in combination yields four different scenarios: First, if profit margins and the concentration index both fall, it is likely that the intensity of competition in the market concerned increases. Conversely, if both measures increase it is likely that the intensity of competition decreases. The two 'mixed' scenarios are obviously more difficult to interpret. On balance, however, it would appear more likely that a decline in profit margins indicates an increase in the intensity of competition even if the concentration in the relevant market increases and vice versa. This is due to the fact that more recently and based on theoretical considerations profit margins are by and large seen as the relatively more important indicator of competition, although the above-mentioned caveats in interpretation still apply (Janger and Schmidt-Dengler, 2010; Boone, 2004).

Both our indicators are calculated directly from the Amadeus database. Profit margins (PRMA) are defined as profit and loss before taxes in relation to operating revenue:

$$PRMA = \left(\frac{PLBT}{OPRE} \right) * 100.$$

The Herfindahl index on sales for a given industry sector is defined by the sum of the squared market shares:

$$\sum_{j=1}^N s_j^2$$

with s_j denoting firm j 's share of sales in total industry sales $(a_j / \sum_{j=1}^N a_j)$

and N the number of firms operating in the respective industry sector. For both indicators, lower levels are associated with a higher intensity of competition in the market.

Before turning to the results, we have to explain the particular sector classification which we use in this analysis. This classification was guided by two considerations: Firstly, we wanted to aggregate firms according to how far away from the final consumer they are operating. Thus, we distinguished between manufacturers, wholesale and retail traders. Secondly, we wanted to arrive at

a classification which could be matched as closely as possible to existing HICP subcomponents. Thus, we aggregated 4-digit NACE (rev. 2) codes into 35 sectors, of which we selected 27 for our analysis. The sectors covered in this paper can broadly be divided into manufacturing (containing 7 sectors), wholesale trade (7 sectors), retail trade (7 sectors), consumer services (3 sectors) and business services (3 sectors).

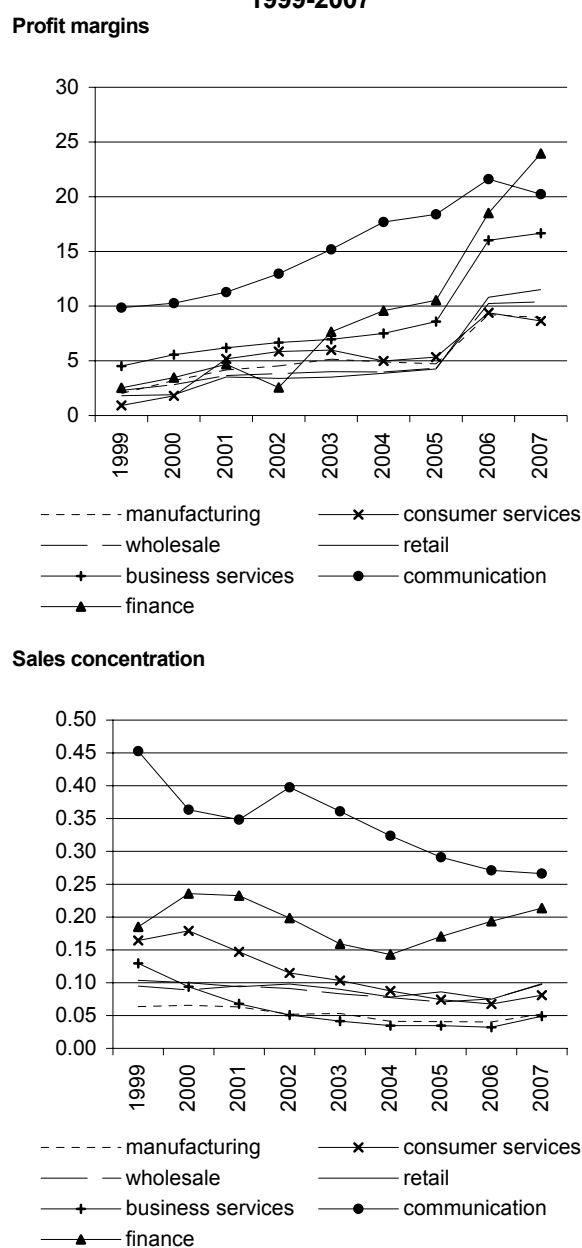
3 The big picture: rising profit margins and falling concentration

We illustrate in Figure 1 the evolution of profit margins and sales concentration ratios for different groups of economic sectors. In general, we see an increase in profit margins, which seems to have accelerated towards the end of the observation period. This is possibly due to the strong growth and catching-up process in the CESEE countries during these years.⁴ Overall the average profit margins for manufacturing, wholesale and retail trade follow each other closely. Profit margins in the business services have continually been higher during our observation period. Particularly profit margins in financial services increased strongly in 2002 and exceeded in 2007 profit margins in the communications sector, the latter being the highest in all years by a rather wide margin. The Herfindahl concentration index declined in all sector groups during most of the period under review, initially in particular in communication, consumer and business services. In the financial services sector the concentration of sales picked up again from 2004.

In order to bring out changes in these indicators which are largely unrelated to the catching-up process, we subtract in Figure 2 for each sector the average change in profit margins and sales concentration. The result suggests that a few sectors, notably housing, water, electricity, gas and other fuels as well as passenger transport and

information services, saw a decrease in profit margins (i.e. an increase in the level of competition) over the period from 1999 relative to the general upward trend in profit margins. In some of these sectors this could be interpreted as a result of the sector-specific regulatory reforms that have taken place in these industries in recent years. Most of the sectors in which the intensity of competition appears to have fallen (i.e. profit margins increased

Figure 1
Evolution of the two competition indicators, 1999-2007

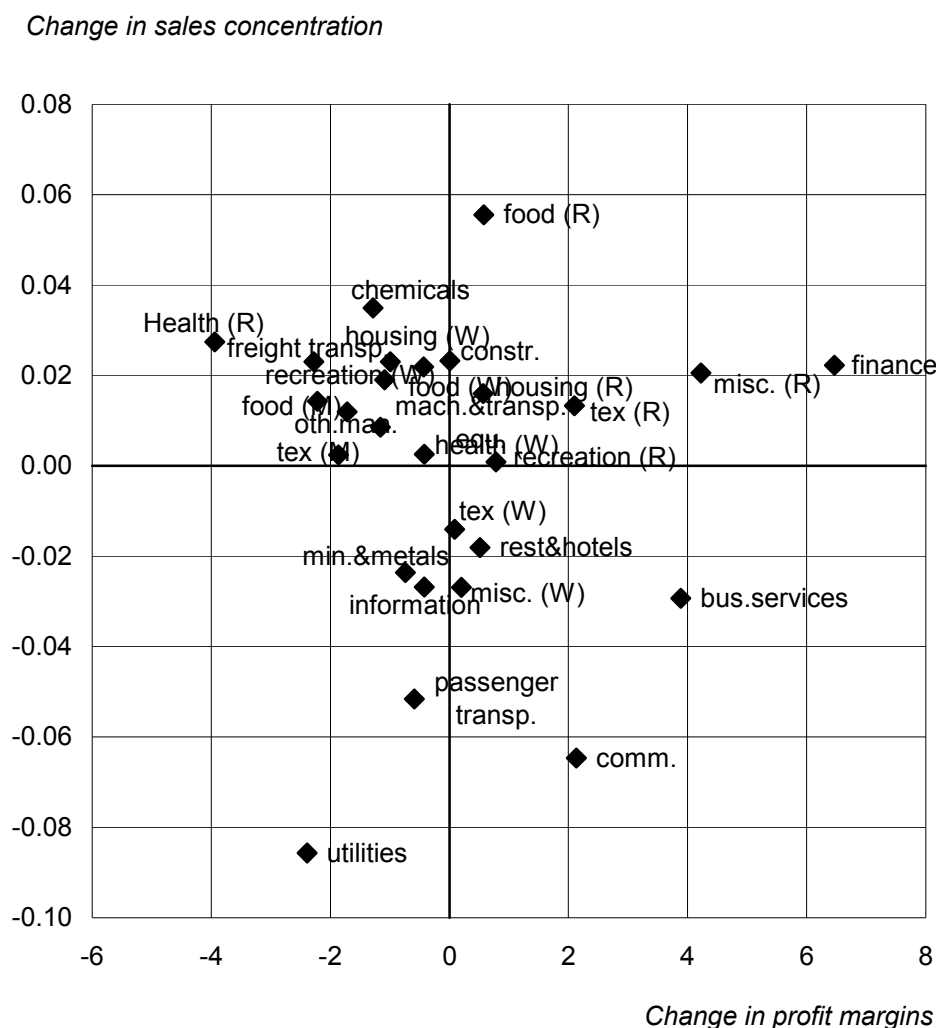


Source: Authors' calculations.

⁴ At the time of writing it was impossible to obtain sufficient data for 2008. It appears very likely, however, that the recession in many CESEE countries starting in late 2008 resulted in a reduction of profit margins.

Figure 2

Relative changes in key competition indicators



Note: Sector-specific deviations from the average change in profit margins and the concentration index between the periods 1999-2001 and 2005-2007; (M) denotes manufacturing, (W) wholesale trade and (R) retail trade.

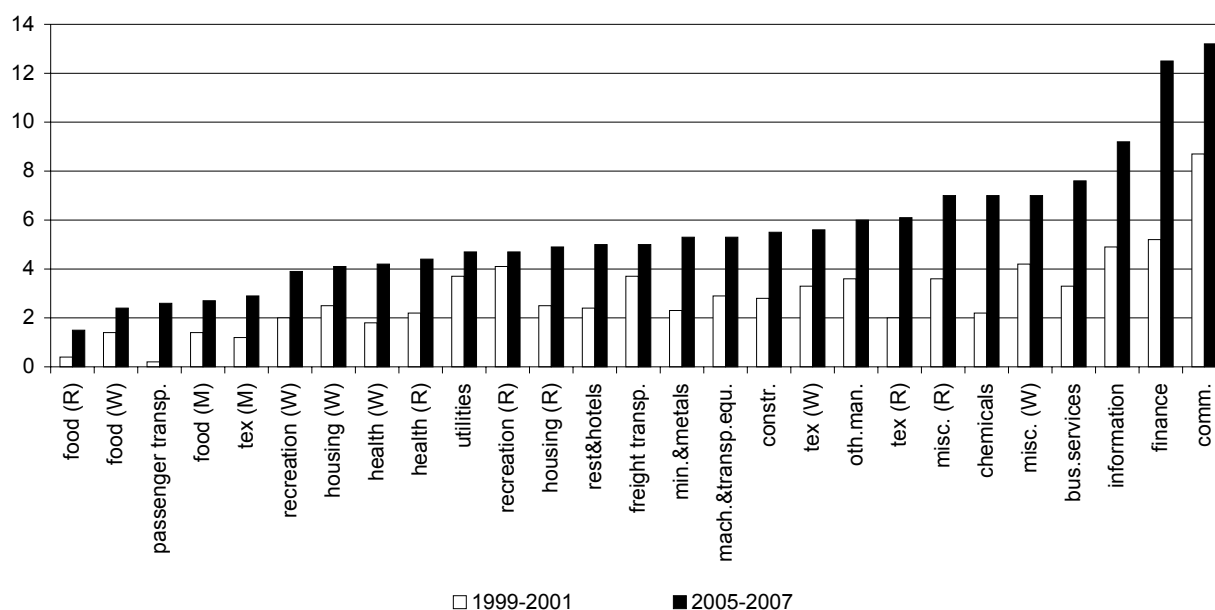
Source: Authors' calculations.

in relative terms) are retail trade sectors as well as the financial sector. In a few other sectors – such as real estate and business services, communication, restaurants and hotels – the intensity of competition is also more likely to have fallen but the picture is less clear given that the two indicators of competition point in opposite directions. The fourth group of sectors consists mainly of manufacturing and wholesale trade industries. For this group, the relative fall in profit margins suggests that on balance the intensity of competition has increased despite the rise in sales concentration.

Since the evolution of profit margins over time may not be a good indicator for the development of market structures in transition economies – given their rapid economic growth over our observation period – we focus more on differences between sectors and countries in the cross-section. As a first striking observation, we find that the distribution across sectors is by far more varied than across countries. Thus, while the degree of competition is highly comparable between individual countries in the region, there are great disparities between individual sectors.

Figure 3

Profit margins by sectors, averages 1999-2001 and 2005-2007



Note: median over all countries for the periods 1999–2001 and 2005–2007; (M) denotes manufacturing, (W) wholesale trade and (R) retail trade.

Source: Authors' calculations.

Figure 3 depicts for each sector the median of profit margins across countries. Notably communications and business services (financial, information and other business services) as well as the distribution of miscellaneous goods and services are characterized by high profit margins, suggesting a less competitive environment than in other sectors. Contrary to our initial expectations, we cannot find large systematic differences in the intensity of competition depending on the sector's proximity to the final consumer. While the production of food and beverages appears to be less competitive (as reflected in comparatively high profit margins) than the distribution of food and beverages, the opposite holds true for the textile and clothing sector. Further, profit margins in retail and wholesale trade are rather similar for the same category of goods and services, although wholesale activities tend to show somewhat lower profit margins in general, pointing towards a slightly more competitive market structure.⁵

⁵ In Feldkircher, Martin and Wörz (2010) we analyse in an econometric framework the impact of different determinants behind these developments in competition indicators,

4 Competition and consumer price developments

Finally, we briefly look at the link between competition and consumer price developments. Although inflation is a monetary phenomenon in the long run, other factors (such as variations in aggregate demand, technological changes or commodity price shocks) can influence consumer price developments over shorter horizons. One such factor influencing consumer prices can be the intensity of competition. More specifically, so-called 'market power inflation' occurs when firms operate in an environment that is characterized by a lack of competition (e.g. in monopolistic markets or via collusion with competitors).⁶ A positive correlation

including the stage of economic development, the speed of catching-up economic integration through exporting activity and FDI, country and market size, and the EBRD transition score with respect to competition policy as indicator for the regulatory framework.

⁶ Janger and Schmidt-Dengler (2010) analyse this relationship in 15 OECD members and find that enhanced competition can help to stabilize inflation also in the longer term.

COMPETITION

Table 1

Inflation and competition intensity

	(1)	(2)	(3)	(4)	(5)	(6)
ln(PRMA)	0.3181 *** 2.12	0.3299 *** 2.19	0.3859 *** 2.49	0.4418 *** 2.65	0.4407 *** 2.64	0.4011 *** 2.49
Trend		-0.5964 ** -1.97	-0.5725 ** -1.96	-0.4153 -1.28	-0.5272 -1.51	-0.5803 *** -2.09
ln(GDP p.c.)			-3.6012 *** -3.74	-4.7344 *** -2.8	-5.9113 *** -3.01	-3.5656 *** -3.95
EBRD				-4.8773 -1.34		
EBRD competition					-0.2762 -0.15	
Sales concentration						-0.1044 -0.73
Constant	4.6793 *** 7.08	7.9861 *** 3.96	38.3133 *** 4.23	63.8036 ** 3.23	57.8336 *** 3.36	37.7347 *** 4.45
No. of obs.	2034	2034	1904	1708	1708	1904
no. of groups	119	119	109	96	96	109
R ² within	0.0038	0.0038	0.0056	0.0068	0.0068	0.0058
R ² between	0.0106	0.0476	0.2005	0.2354	0.2202	0.2043
R ² overall	0.0003	0.044	0.1459	0.1621	0.152	0.1487

Note: Random effects panel estimation with individual sectors as the time dimension; robust standard errors used, t-values given below coefficients. ***, ** and * indicate significance at the 1%, 5% and 10% level, respectively.

between our competition indicators and inflation can thus be interpreted as evidence for market power inflation in our sample.

In line with this, we find that in a cross-section framework lower profit margins – reflecting more intense competition – correspond to lower inflation rates across countries and sectors. Not surprisingly, however, this relationship cannot be observed over time. Whereas profit margins in the CESEE countries tended to increase during the strong growth and convergence process taking place until 2007, inflation rates tended to decline in most countries in the region, inter alia due to increasing macroeconomic stability including improved monetary policy.

In order to substantiate this view, we specify a simple regression model across countries and sectors, treating every year as an independent set of observations. Our dependent variable is the sector-specific inflation rate, which we regress on the log of profit margins as our preferred measure of competition intensity (column 1 in Table 1). We include a time trend to capture the catching-up

process (column 2). We further control for the level of per capita GDP (in logs), which rose considerably over the period (column 3). We add some further control variables, which all prove to be insignificant (columns 4-6): the overall transition score published by the EBRD is used to control for the progress made towards becoming a fully functioning market economy; the progress made in competition policy is captured by the EBRD competition policy indicator; and finally our alternative competition indicator, sales concentration, is added to fully capture the intensity of competition.

The robust and positive correlation between inflation and profit margins suggests that market power inflation – i.e. inflation caused by firms exploiting their weak competitive environment – plays a non-negligible role for inflation developments in CESEE. Our control variables also exhibit the expected signs: richer countries show lower levels of inflation, the time trend is negative, reflecting the fall in inflation rates. However, when the EBRD indicators of transition progress are included, this effect vanishes, possibly

due to multicollinearity. The sales concentration is not systematically related to inflation.

5 Conclusions

Using two alternative indicators for the intensity of competition – profit margins and sales concentration – we obtain some stylized facts on the evolution of competition in CESEE. At first sight there appear to be some contradictions in the findings. While concentration ratios have fallen (pointing towards more intense competition), profit margins have increased (pointing towards less intense competition). The latter can, however, be attributed predominantly to the rapid catching-up process and the accompanying rise in per-capita income levels and overall welfare in the CESEE countries during the observation period.

Therefore, it appears more reasonable to look at relative levels of competition between sectors and countries. Our analysis reveals that the intensity of competition in the region is relatively homogenous across countries. This may be due to their common history, the transition process of the 1990s followed by the EU accession process. At the same time, we find large differences in the level of competition prevailing in individual sectors. Some service sectors – i.e. communications and finance – show particularly low levels of competition, while others – often manufacturing sectors as well as food trade – are characterized by a much higher degree of competition.

While we cannot draw a general picture of the competitive situation in the CESEE region without referring to individual industrial sectors or service activities, the preliminary findings on the relationship between competition and inflation suggest a generally positive link between competition intensity and consumer price inflation. In other words, more intense competition in a market appears to go hand in hand with lower inflation. This in turn suggests that the effectiveness of competition policy in the CESEE countries, but most likely also in other countries, is one of the factors impacting inflation developments.

References

- Boone, J. (2004), 'A New Way to Measure Competition', *CEPR Discussion Paper* No 4330.
- Carlin, W., M. Schaffer and P. Seabright (2004), 'A Minimum of Rivalry: Evidence from Transition Economies on the Importance of Competition for Innovation and Growth', *Contributions to Economic Analysis & Policy*, Vol. 3, No. 1, Article 17.
- Commander, S. and J. Svejnar (2007), 'Do Institutions, Ownership, Exporting and Competition Explain Firm Performance? Evidence from 26 Transition Countries', *IZA Discussion Paper* No. 2637.
- Creusen, H., B. Minne and H. van der Wiel (2006), 'Measuring competition in the Netherlands – a comparison of indicators over the period 1993-2001', *CPB Memorandum* 163, September.
- Djankov, S. and P. Murrell (2002), 'Enterprise Restructuring in Transition: A Quantitative Survey', *Journal of Economic Literature*, Vol. XL (September), 739-792.
- Fernandes, A. M. (2009), 'Structure and Performance of the Service Sector in Transition Economies', *Economics of Transition*, Vol. 17, No. 3, pp. 467-501.
- Gradzewicz, M. and J. Hagemeyer (2007), 'Impact of competition and business cycles on the behaviour of monopolistic markups in the Polish economy', *MPRA Paper* No. 15759.
- Hölscher, J. and J. Stephan (2004), 'Competition Policy in Central Eastern Europe in the Light of EU Accession', *Journal of Common Market Studies*, Vol. 42, No. 2, pp. 321-345.
- Janger, J. and P. Schmidt-Dengler (2010), 'Zusammenhang zwischen Wettbewerb und Inflation', *Geldpolitik und Wirtschaft*, Q1/10, pp. 56-69.
- Ospina, S. and M. Schiffbauer (2010), 'Competition and Firm Productivity: Evidence from Firm-Level Data', *IMF Working Paper* WP/10/67.
- Schumpeter, J. (1942), *Capitalism, Socialism and Democracy*.
- Vagliasindi, M. (2006), 'Does Competition Policy Implementation Affect the Intensity of Competition?', European Bank for Reconstruction and Development, London.

Exchange market pressure contagion in CESEE

BY MARIO HOLZNER

There are many approaches to empirically analyse financial crisis contagion in Central, East and Southeast Europe (CESEE). This article reports the outcomes of research based on the updated approach by Gelos and Sahay (2000) who calculated a monthly Exchange Market Pressure (EMP) index for a number of CESEE countries to detect peaks of financial crisis development. Subsequently they have used this information for further analysis of contagion effects using also Granger causality tests in order to see whether exchange market pressures precede or follow specific countries.

The EMP index methodology

Based on Girton and Roper (1977), Eichengreen, Rose and Wyplosz (1996) have developed the following index of exchange market pressure, slightly modified by Gelos and Sahay (2000):

$$EMP_{it} = \left[(\alpha \% \Delta E_{it}) + (\beta \Delta (I_{it} - \bar{I}_i)) - (\gamma (\% \Delta R_{it} - \% \Delta \bar{R}_i)) \right],$$

where E_{it} denotes the price of a euro in country i 's currency at time t , I is the short-term interest rate and R is the ratio of international reserves to M1. The bars denote country means, Δ denotes a change from one period to another and $\% \Delta$ a percentage change from one period to another. The weights attached to the three components of the index (α , β and γ) are the inverse of the standard deviation for each series, in order to equalize volatilities.

The data

Monthly data were collected for the following 19 CESEE countries as well as the euro area and the USA: Albania (al), Bosnia and Herzegovina (ba), Bulgaria (bg), Czech Republic (cz), Estonia (ee), Croatia (hr), Hungary (hu), Lithuania (lt), Latvia (lv), Macedonia (mk), Montenegro (mn),

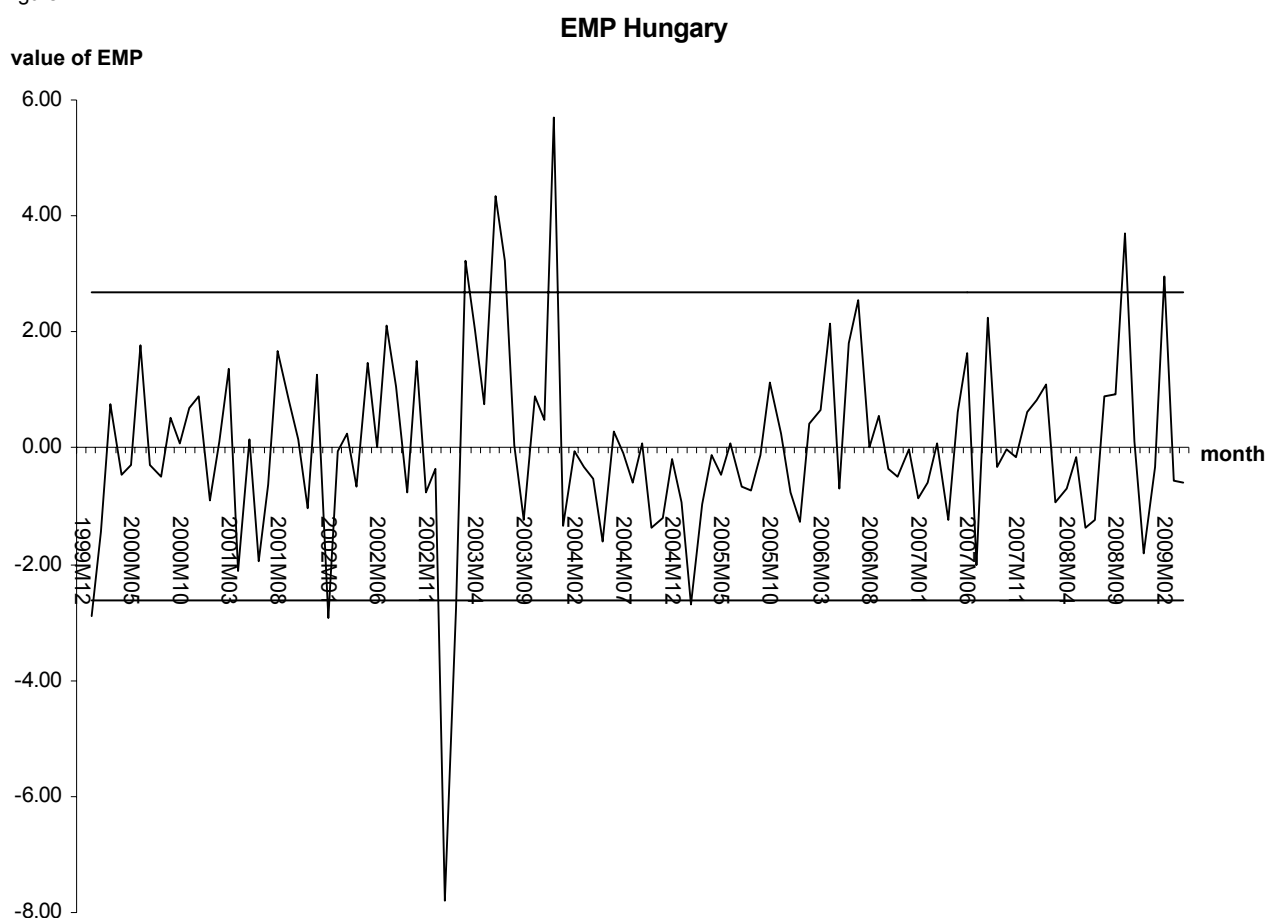
Poland (pl), Romania (ro), Serbia (rs), Russia (ru), Slovenia (si), Slovakia (sk), Turkey (tr) and Ukraine (ua). Except for Bosnia and Herzegovina, Macedonia, Montenegro and Serbia, data for the whole period of January 2000 to April 2009 were found. Exchange rate data were obtained from the wiiw Monthly Database, Eurostat and national central banks. From the same sources interest rate data were received. In most cases these are overnight money market rates. However, in the case of Slovenia, Estonia and Romania the maturity was three months. For Bosnia and Herzegovina and Macedonia these were interest rates of short-term loans to enterprises. In the case of Serbia only the central bank's discount rate was available. Again, data on international reserves and M1 were taken from the wiiw Monthly Database, Eurostat and national central banks.

The EMP index results exemplified

Figure 1 shows the EMP indices for Hungary. There are two horizontal lines in Figure 1. The upper line in the area of positive EMP values represents a depreciation crisis threshold. The threshold was calculated as the mean of the country's EMP plus 1.645 times its standard deviation. Under normally distributed errors, this is equivalent to a one-sided confidence level of 5 per cent. The EMP values can rise above that threshold for various reasons: nominal exchange rate devaluation, increases in the short-run interest rate or a fall in international reserves as a share of M1. Consequently the lower horizontal line in the negative area represents a significant appreciation threshold, which can be passed with the exactly opposite preconditions.

Turbulent exchange market pressure developments of the year 2003 coincide with economic imbalances after the government of Prime Minister Viktor Orbán and its excessive expenditure policies. In mid-January 2003 a speculative attack was launched against the intervention band of the Hungarian forint by foreign investors who expected that the central bank and the government could be forced to move the intervention band upwards, allowing for a further appreciation of the forint. The central bank

Figure 1



intervened, and allegedly EUR 5 billion or more was bought up in the course of the intervention. To stop further speculative actions the central bank decreased the interest rates (Richter, 2003a). Thus, for January 2003 we find a heavy downward amplitude of the EMP index directly caused by a strong increase in the international reserves and a fall of the overnight money market rate.

Later on we observe in March, June, July and December 2003 significant increases of the exchange market pressure, caused by exchange rate depreciation, interest rate increases and a drop in international reserves. By early 2003 the Hungarian economy entered an unsustainable growth path, characterized by declining but still high domestic absorption and deteriorating competitiveness amidst weak external demand. The central bank's policy relying on a strong forint in fighting inflation had failed: the forint became weaker and was also officially devalued. This was

also seen as a response to the discouraging first-quarter macroeconomic data. In reaction to the currency's depreciation the central bank raised the interest rates several times (Richter, 2003b).

Finally, after a period of more than four years of relatively stable and low exchange market pressures, the country was hit by the international financial crisis. In October 2008 and in February 2009 the currency had to depreciate heavily. As a result the EMP index jumped above the depreciation threshold.

Correlation and contagion

Table 1 shows the pairwise correlation matrix for the CESEE EMP indices. Only those correlation coefficients are presented which passed the 5% significance level. The correlation coefficients are rather low. In fact there is only one correlation coefficient above 50% (for Romania and Russia).

EXCHANGE MARKET PRESSURE

Table 1 Pairwise EMP cross country correlation coefficients, significant at the 5% level

	al	ba	bg	cz	ee	hr	hu	lt	lv	mk	mn	pl	ro	rs	ru	si	sk	tr	ua	
al	1.00																			
ba		1.00																		
bg			1.00																	
cz				1.00																
ee					1.00															
hr						1.00														
hu							0.29	1.00												
lt	0.19						0.19	0.19	1.00											
lv	0.34								0.24	1.00										
mk	0.23										1.00									
mn	0.33											1.00								
pl				0.22		0.24	0.31	0.25	0.21				1.00							
ro		0.21				0.28	0.34	0.29	0.22				0.23	1.00						
rs												0.32		1.00						
ru						0.28		0.32				0.21	0.51	0.27	1.00					
si																1.00				
sk													0.25				1.00			
tr				-0.21				0.20							0.26			1.00		
ua	0.32									0.23	0.32	0.29		0.28	0.19					1.00

Figure 2

EMP index scatterplot, Romania and Russia

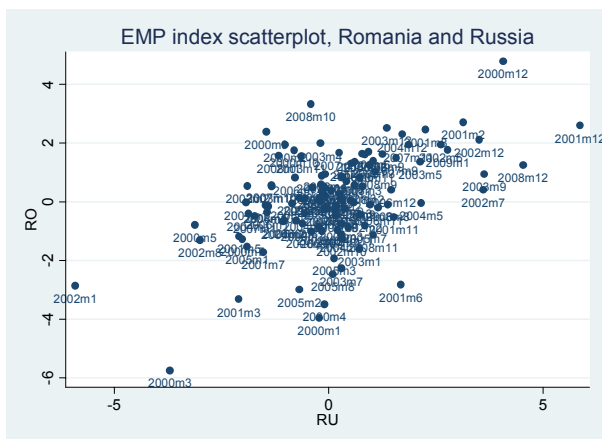


Figure 3

EMP index scatterplot, Romania and Hungary

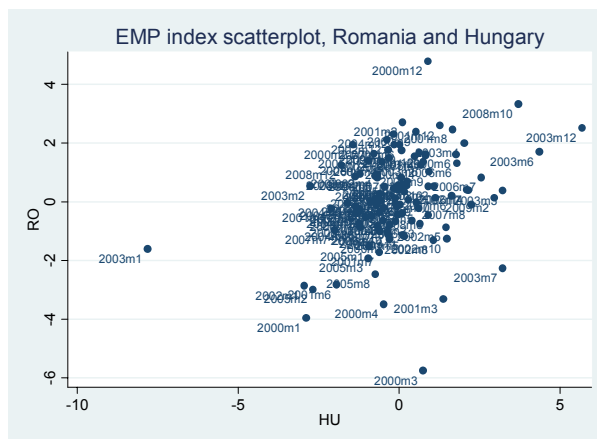


Figure 4

EMP index scatterplot, Albania and Latvia

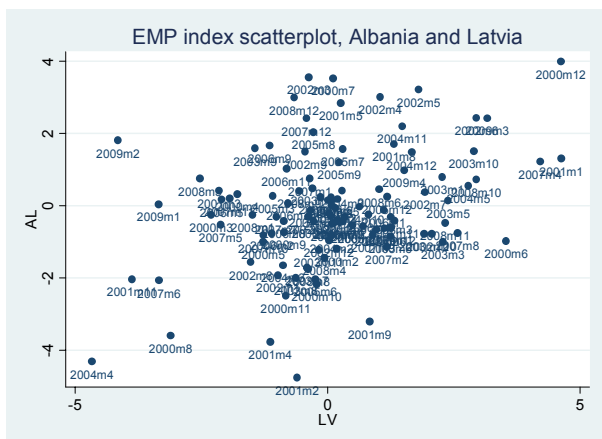
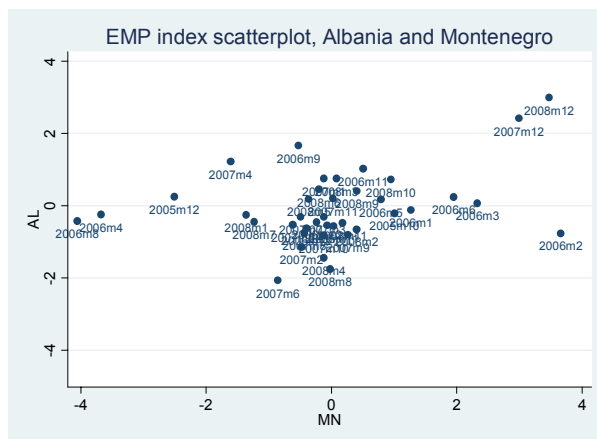


Figure 5

EMP index scatterplot, Albania and Montenegro



There are three coefficients above 33%: for Romania and Hungary, Albania and Latvia, and Albania and Montenegro.

The scatter plots of these pairs with the highest correlation coefficients are presented in Figures 2-5. Apart from the relationship of the Romanian and Russian EMP, all other EMPs are really only weakly correlated. While the pairs of Romania and Russia, Romania and Hungary as well as Albania and Montenegro might be explained either by neighbourhood and/or economic ties, it is hard to interpret how Albania and Latvia could have synchronized EMP time series. It is worth noting that in the last months of 2008 as well as in December 2000 all of the six countries had high EMP index values, being probably influenced by international capital outflows from the emerging markets worldwide.

However, given that we are more interested in the short-run contagion within the CESEE countries, we introduce the Granger causality tests that allow for time lags. This may give us a hint at which countries might be considered trigger countries and which countries simply follow the crises. A vector autoregression model (VAR) for a balanced panel of countries that have all data points from January 2000 to April 2009 is then employed. This model also includes, as exogenous variables, the EMP time series of the euro area and the USA. This should rule out international effects and focus on the contagion within the CESEE countries only. A lag structure of one month was chosen according to Akaike's information criterion (AIC).

Using the results of the VAR, a set of pairwise Granger causality tests were performed for each equation in the VAR. In Table 2 we present all the Granger causality pairs that are significant at the 5% significance level (as indicated by the P-value), thus determining whether one time series is useful in forecasting another. Here we show the same list, once by Granger-caused country and once by Granger-causing country, in alphabetical order.

Table 2

Granger causality by granger caused country			Granger causality by granger causing country		
Granger caused	by	P-value	Granger caused	by	P-value
al	cz	0.035	ro	bg	0.015
bg	cz	0.015	al	cz	0.035
cz	lt	0.04	bg	cz	0.015
ee	hr	0.042	pl	ee	0.035
hr	si	0.007	ro	ee	0.019
hu	lt	0.01	ee	hr	0.042
hu	tr	0.011	cz	lt	0.04
hu	ro	0.046	hu	lt	0.01
lt	tr	0.008	ro	pl	0.037
lv	ro	0.014	ru	pl	0.004
lv	si	0.018	tr	pl	0.013
pl	sk	0.029	hu	ro	0.046
pl	ee	0.035	lv	ro	0.014
ro	bg	0.015	hr	si	0.007
ro	ee	0.019	lv	si	0.018
ro	pl	0.037	ru	si	0.001
ru	si	0.001	pl	sk	0.029
ru	pl	0.004	tr	sk	0.015
tr	pl	0.013	hu	tr	0.011
tr	sk	0.015	lt	tr	0.008

While quite a few countries' EMP indices are Granger-caused by some other country's EMP, it is clear that some follow others more often. Hungary and Romania are both Granger-caused by other countries three times and Latvia, Poland, Russia and Turkey two times.

In terms of trigger countries we find the EMPs of Poland and Slovenia to Granger-cause three other countries' EMP. The Czech Republic, Estonia, Lithuania, Romania, Slovakia and Turkey are Granger-causing two other countries.

Clearly, the results of the Granger causality tests are hard to interpret. One wonders why, e.g., turbulence in the Slovenian exchange market would cause troubles in the Russian exchange market, or in the Latvian for that matter. At this point it has to be noted that despite its name, Granger causality does not imply true causality. Thus, for instance, common third processes with different lags could drive the measure of Granger causality of two time series analysed.

In any case, here we measure past developments over the last decade. Future channels of contagion may be completely different. Our strongest result might be on the relationship between Hungary and Romania, as this was also a pair with a stronger correlation of the EMP indices. The Hungarian EMP is in addition also Granger-caused by the Romanian EMP. The reasons for this particular relationship seem to be somewhat peculiar as these economies have quite different structures, levels of development and foreign direct investment. However, what they share is a floating exchange rate system, while many other CESEE countries have a currency board or a de facto fixed exchange rate system. Contrary to other floaters, such as the Czech Republic and Poland, these two countries also have high inflation and thus high interest levels in common. In addition they share a certain level of political instability perceived. These might be the reasons for a certain interrelationship of their EMP indices.

Conclusions

To sum up, most countries' EMP indices seem to follow some idiosyncratic paths. Correlations between the individual countries' exchange market pressures are rather weak, with the exception of a few country pairs. A few countries follow more often other countries in their exchange market. These are: Hungary, Romania, Latvia, Poland, Russia and Turkey. A few others are also trigger countries in financial contagion within the CESEE region. These are: Poland, Slovenia, the Czech Republic, Estonia, Lithuania, Romania, Slovakia and Turkey.

It can be concluded that the statistical measures employed do not reveal any systematic contagion originating from a certain group of countries. In any case, the interpretation of the results is quite difficult. This also holds true for the special case of Hungary and Romania, which, apart from showing a stronger correlation of their EMPs, are also appearing in the list of significant pairwise results of the Granger causality test, where the Romanian EMP happens to granger-cause the Hungarian one. This may be attributed to some similarities such as a floating exchange rate system, quite high

inflation and interest rates and a certain level of perceived political instability. Particularly in the case of the Hungarian EMP time series, it can be observed that, apart from international crises, national cyclical expansionary budgetary policies have quite a distinct effect on the exchange market.

It remains as a stylized policy recommendation, that countries with a floating exchange rate regime should try to avoid a higher rate of inflation and interest, caused e.g. by an irresponsible fiscal policy regime, in order not to experience a higher degree of international financial contagion.

References

- Eichengreen, B., A. K. Rose and C. Wyplosz (1996), 'Contagious Currency Crisis', *NBER Working Paper*, No. 5681.
- Gelos, G. and R. Sahay (2000), 'Financial Market Spillovers in Transition Economies', *IMF Working Paper*, No. 00/71.
- Girton, L. and D. Roper (1977), 'A Monetary Model of Exchange Market Pressure Applied to Postwar Canadian Experience', *American Economic Review*, Vol. 67, pp. 537-548.
- Richter, S. (2003a), 'Hungary: the election year is over, repair of damages may begin', in: L. Podkaminer et al. (eds), 'Transition Countries Resist Global Slowdown: Productivity Gains Offset Effects of Appreciation', *wiiw Research Reports*, No. 293, pp. 69-73.
- Richter, S. (2003b), 'Hungary: corrective measures to stop drifting', in: P. Havlik et al. (eds), 'Transition Countries in 2003: Reforms and Restructuring Keep the Global Economic Slowdown at Bay', *wiiw Research Reports*, No. 297, pp. 61-64.

Scenarios for Ukraine's medium- and long-term development

BY VASYL YURCHYSHYN*

Losses of Ukraine's economy during the crisis

From the beginning of the millennium until the autumn of 2008, Ukraine witnessed quite positive economic dynamics, with average growth reaching 7.5%. Thereafter, the global economic and financial crisis caused a huge negative pressure on Ukraine.

The decline in real GDP in 2009 – by 15.1% (industrial production: -22%, construction: -45.9%, transport: -48%; fixed investment: -46.2%) – was mainly the result of the collapse of exports, the credit crunch and reduced domestic savings along with a shortage of own resources of the corporate sector. These negative results destroyed sources needed and the stimulus for the transformation of infrastructure and for modernization.

Public finances deteriorated in 2008-2009, with a high general government deficit (at about UAH 70 billion or 7.5% of GDP in 2009)¹. For reasons of stability, the National Bank of Ukraine (NBU) attempted to restrict the money supply but, due to poor policy coordination, the fiscal policy remained lax in 2009. Thus, the NBU monetized the fiscal deficit by repurchasing T-bills (amounting 8.4% of GDP in 2009), in parallel with the sterilization of USD 4 billion liquidity (6% of M3) of the banking sector. The resultant crowding-out effect (fall of domestic credit to private sector) increased liquidity risks and the growth of the non-

performance loans' (NPL) share in bank portfolios to 34%. Moreover, with more than half of all outstanding loans in the Ukrainian banking system denominated in foreign currencies, both borrowers and commercial banks were exposed to currency risks, which resulted in the loss of public confidence in the banking system.

In 2009 merchandise imports declined by 44%, exports by 37%. As a result, the current account deficit narrowed to 1.9% of GDP in 2009 (as against 7% of GDP or USD 13 billion in 2008).

The huge current account deficit in 2008 and the drop in FDI in 2009 due to the escalating economic crisis in Ukraine were among the critical factors of the economic decline in 2008-2009. Highly concentrated and uncompetitive exports and a worsening investment climate significantly reduced external resources for economic growth.²

Table 1

Ukraine's external debt

USD billion (as of the beginning of the year)

	2008	2009	2010
Government	11.9	12.0	17.8
NBU (central bank)	0.5	4.7	6.2
Banking system	30.9	39.5	30.8
Corporate	33.6	41.3	44.1
Total	80.0	101.7	104.0

Source: NBU.

Total external debt increased to USD 104 billion (as of the beginning of 2010) – around 85% of GDP, with sovereign debt rising by 49% (to USD 18 billion) during 2009 (see Table 1). At the same time, the banking system visibly improved its debt position. Over the past several years, Ukraine had borrowed excessively from abroad to finance the sharply increased domestic consumption and investments. The international liquidity crisis led to a reversal of capital flows, which drained liquidity in the banking sector and depressed credit,

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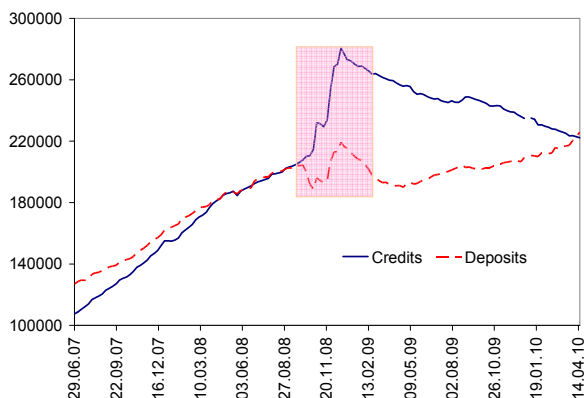
¹ The consolidated budget deficit was reported at about 4% of GDP in 2009. However, if includes the public funds used to recapitalize commercial banks and the state-run natural gas company Naftogaz (about 5% of GDP) and the extra expenditures to cover the pension fund deficit, the overall fiscal deficit in 2009 totalled about 11.5% of GDP.

² Disbursements of IMF stand-by tranches of USD 6.1 billion and financial support from other IFIs (WB, EBRD, etc.) helped to cover Ukraine's external financing gap in 2009.

investment and consumption. All of this took a heavy toll on economic activities in the country.

The banking sector is underdeveloped and unstable, although the loans-to-GDP ratio (total loans to non-financial customers) rose from 48.5% at the end of 2008 to 52.7% in 2009, but mainly due to the GDP decline. Credits to households fell from 54.9% of total credit portfolios in 2008 to 48.8% in 2009. This represented a real shock for businesses and households, after several years of rapid growth of crediting (Figure 1).

Figure 1
Credits and deposits of households,
UAH million



Source: NBU.

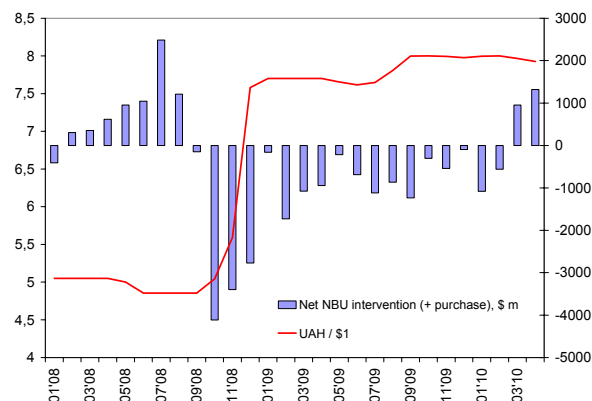
In the coming two to three years, the prospects for an at least partial restoration of the positive growth dynamics of private deposits in the banking system are poor, due to serious mistakes of the country's central bank during the crisis developments in the autumn of 2008, and the persisting strong mistrust in the NBU policy.³

Over several years (from 2001) Ukraine followed a de facto fixed exchange rate regime. During that period inflation remained high. Sooner or later, this loss of competitiveness should have been restored

³ The authorities failed to control the use of the liquidity support that was provided initially to a number of banks in the crisis period. It appears that these funds were used not to revive domestic lending as initially expected, but were used to buy foreign exchange to transfer it abroad. That contributed to the high depreciation pressure on the hryvnia.

through corresponding exchange rate adjustments. The crisis in the autumn of 2008 caused a crash for UAH purchasing power and the NBU was obliged to spend a huge amount of reserves to prevent further losses (Figure 2).

Figure 2
NBU interventions (right scale) to support
UAH/USD exchange rate (left scale)



Source: NBU.

Ukraine: recovery in early 2010

Following the sharp decline in GDP in 2009, Ukraine now has made some steps towards recovery. There is supportive external demand that has a positive impact on the exporting sectors and helps to sustain economic recovery. However, the chances that the former major sources of economic growth (domestic consumption based on wider access to credit resources, and exports resting on a favourable pricing situation) will further ensure GDP growth are very low.

One important factor for the recent positive developments and an optimistic outlook for the coming months is the consolidation of the political power under the leadership of the president, which should help Ukraine's economic environment to become more predictable and transparent, and make national businesses and international investors more optimistic about Ukraine's prospects.

Political consolidation. After the presidential elections a quick consolidation of power by the winner occurred. A new parliamentary coalition was

formed, led by the party of the president – the Party of Regions (PR). A new government was formed primarily from representatives of PR, implying the consolidation of the executive branch of power as well. Rotation on the regional level provided the possibility for the government and president to pursue a new consolidated policy on the regional level. The president and the government are now able to realize their initiatives under the support of the ‘friendly’ coalition.

The political consolidation should create more certainty for businesses and investors concerning Ukraine’s future prospects. However, the endurance test of the governmental power will come in late October 2010, when the elections for local Ukrainian authorities will be held. Clearly, before that date the government will avoid harsh stabilization steps, by conducting financial and commodity interventions to balance the domestic demand. The maintenance of economic control in the interim period will result in an increase in the influence of political power.

Economic improvements. Against the low comparative base of the previous year (industrial output declined by 31.8% in the first quarter of 2009), industrial output grew by 12.6% in January–April 2010, with double-digit growth in the main industries: metallurgy +22.2% year-on-year, oil-chemical industry +23.8%, machine building +28.0%.

In April to May, a further reduction of inflationary pressure was observed, with 0.3% and 0.6% deflation in those two months. The balance of payments continued to improve: both current account and capital account ran surpluses. The surplus on the current account is estimated at USD 109 million, international reserves grew by USD 600 million. The national currency appreciated slightly.

Public finances remained under significant strain during the first months of 2010. Despite a stronger recovery, the budget revenues performance was quite weak. The consolidated budget deficit

amounted to 2% of GDP in the first quarter of 2010. However, the official deficit did not include pension fund and Naftogaz imbalances as well as bank recapitalization spending; hence, the broad fiscal deficit can be estimated at about 7-8% of GDP. The deficit was primarily financed by new domestic borrowing. The lion’s share of government T-bills was purchased by the NBU, implying indirect monetization of the budget deficit.

Under conditions of decreasing world demand for Ukrainian exports, the main trade and investment flows have been reoriented towards Russia and the CIS. Since the dynamics of the Ukrainian economy seriously depend on the dynamics of the Russian economy, the problems experienced by the latter may complicate Ukraine’s prospects of economic recovery in the short or even medium run. Meanwhile, in the short run (in 2010) it is reasonable to expect: further improvement of the current account balance, reflecting price cuts for imported gas; lower inflation (less than 10% year-on-year) in the event of a postponed rise in gas tariffs for households and industries; the discount for imported gas will support the price competitiveness of basic exporting industries which will expand resources for macroeconomic stabilization; and price stabilization will continue due to hryvnia appreciation (declining pressure from the current account). At the same time it should be mentioned that the state measures to support the economy inevitably mean a substantial increase in the government’s role in business. This may result in politicization, de-institutionalization and monopolization of the economy and curtailment of private initiatives.

Institutional outlook. Recently Ukraine has continued to lose competitiveness, first of all due to weak institutions, public management and politicization of economic decisions, which is confirmed by international ratings. In particular, general observations from *Doing Business 2010* summarize the following aspects: the quality of the business environment in Ukraine remains unsatisfactory – the country is ranked 145th out of 183 countries in terms of Ease of Doing Business;

domestic and foreign businesses still face an onerous burden of excessive and costly regulatory, licensing and taxation procedures; and the weak investment climate continues to hold back the development of the Ukrainian private sector, restraining the growth of investment, employment, output and welfare.

As for economic growth, as mentioned earlier, the past sources (that is, major increases in domestic consumption and exports) are unlikely to be the main drivers for Ukraine's GDP growth in the future. Therefore, in order to accelerate economic development, the authorities will have to find new ways to increase domestic and foreign direct investments, which will encourage output and productivity growth. This means that the authorities will need to demonstrate that Ukraine's investment climate is rapidly changing for the better.

Collaboration with the IMF as the basis for economic recovery

To stimulate economic development, a new government programme was prepared and presented to the public, businesses and investors at the beginning of June 2010 (see Box 1).

The programme is very ambitious and seemingly too optimistic, taking into account available resources and current governmental practices. Moreover, previous attempts at reforms have shown that the Ukrainian government has no particular experiences and incentives for the independent introduction of systemic transformation. These factors might lead to two basic scenarios for the development of Ukraine in the medium and long run (see below). A successful implementation of the new programme will mean fruitful cooperation with the IMF and other IFIs, as well as rapid economic growth and social development. Postponement or delay of the reforms will push Ukraine into slow and poor economic activities, at least in the medium term.

It is clear that overcoming the effects of the fall in the medium and long term can only be achieved by

Box 1

Main priorities of the new programme for economic reforms

The Committee for Economic Reforms has been established under the new president to create and deliver an economic reform programme for 2010-2014. Among the main priorities of the programme are: (i) setting a framework for ensuring long-term macroeconomic stability; (ii) keeping inflation low; (iii) stabilizing public finances; and (iv) developing a more sustainable financial sector. In the pursuit of these, the major directions of the reform plan are as follows:

- introducing mid-term budgetary planning and fiscal rules, in order to stabilize the budget throughout the economic cycle;
- balancing the pension fund: measures aimed at enhancing systematic solidarity in the pension granting and indexation mechanism, as well as introducing mandatory state pension insurance by 2014;
- as for monetary policy, its main goal will be to bring core CPI inflation to single digits from 2010;
- consolidating the banking sector and improving banking supervision, in order to make the financial sector more sustainable in the future.

The government is focussing its attempts on reducing the budget deficit and expanding revenue sources (via such means as introducing taxes on luxury products, and hiking excise rates and royalties for natural resources extraction). Aiming to bring public finances back to a sustainable position without choking off the nascent economic recovery, the government announced that the overall deficit would not exceed 6% of GDP (including the state monopoly Naftogaz). A significant reduction is expected for the quasi-fiscal deficit of Naftogaz: from USD 4.2 billion in 2009 to USD 0.3 billion in 2010. The necessary measures include also a 100% increase in gas tariffs for regional district heating companies and the population.

Source: http://www.kmu.gov.ua/control/uk/publish/article?art_id=243337174&cat_id=243337165.

having dealt with a number of internal and external negative factors such as: decrease of the working-age population; outdated production capacities; and increased international competition and protectionism.

At the same time, it is necessary to identify and recognize the risks concerning institutional

developments. Government measures designed to support certain sectors of the economy will inevitably lead to a significant increase in the state's role in economic life (including growth of the share of state ownership in enterprises and banks). This may result in growing monopolization of markets, reduced efficiency in the use of resources and restriction of private initiative, etc.

The required reforms must bring a meaningful and long-lasting transformation and should include: a fundamental transformation ensuring the stability and predictability of the legislature and the judiciary; a set of measures aiming to deregulate and liberalize business activities through a radical reduction of red tape, as well as streamlining and simplification of the regulatory environment; measures to promote and diversify exports; a broad revision of the national energy policy, which should improve energy infrastructure, increase the efficiency of energy consumption, diversify energy supply (including incentives for a broad adoption of alternative energy sources) and strengthen competition in the energy sector; measures aiming to encourage entrepreneurship and the development of small businesses, by supporting a competitive and growing private sector, reducing the costs of doing business, de-regulating and strengthening corporate governance; and entry into free trade agreements with other countries. The proposed Deep Free Trade Agreement with the European Union would bring Ukraine into the supply chain of Europe and promote exports.

Under these conditions, a crucially important role will be played by the programme of cooperation between Ukraine and the IMF, designed to support the process of economic recovery in Ukraine which, although started, is yet extremely fragile. Restoring cooperation with the IMF means also improving collaboration with the World Bank and the EU, which would give investors a positive signal concerning the reduction of macroeconomic risks. *Vice versa*, the failure to adopt the programme for cooperation between Ukraine and the IMF would mean increasing economic imbalances, capital

outflow, and social losses.⁴ This becomes particularly important in the wake of a new wave of financial turmoil in the eurozone that might impose some additional constraints on financing to Ukraine.

At the same time there exists a significant internal risk to further Ukraine-IMF cooperation: the relevant agreement can be postponed until after the local elections in the autumn of 2010. Despite this risk we expect the agreement with the IMF to be reached within the next months.

Economic developments scenarios for Ukraine

In the meantime, the current modest progress in economic recovery and financial improvement creates a false impression concerning the possibility of further delays in profound economic reforms that are aimed at overcoming the chronic imbalances of the financial system. The 'relaxation' of the urgency of the current need for funds may push the IMF to postpone actions to be taken to open a credit application, which might be seen as unpopular in Ukraine.⁵ As a result, the reforms may be generally postponed for an indefinite period. Very quickly, this will lead to frustrated businesses and investors and, consequently, to new socio-economic losses.

Information about a refusal of the IMF to grant credit to Ukraine or on terminating cooperation with

⁴ Experts expressed high confidence that in late May 2010 the IMF mission would take a positive decision on the Ukraine-IMF programme and would provide a loan tranche of USD 3-5 billion. However, until mid-June (when this publication was prepared), Ukraine has not demonstrated real willingness as concerns fiscal consolidation and transparency, as opposed to most European countries that have expanded measures to strengthen fiscal and financial stability. In these circumstances, the visit of the IMF mission to Ukraine, as well as the prospects of restoring full cooperation between Ukraine and the IMF, have been postponed.

⁵ On 9 June the president of Ukraine had talks with IMF representatives in Kiev. During the meetings, discussions were focused on fiscal policies to achieve the 2010 fiscal target, public debt decline and structural reforms, in particular in the financial and energy sectors, to set Ukraine on a path towards stability and growth. The meetings restarted on 21 June when a full IMF mission came to Kiev.

Ukraine may create negative informational perceptions. It will consequently have negative secondary effects, which are themselves able to provoke a deterioration of economic conditions such as phasing out funding by other international financial institutions (e.g. World Bank, EBRD); reducing the sovereign ratings of Ukraine and rising costs of foreign borrowing; complications in restructuring sovereign and corporate debts; outflow of short-term capital; reorientation of the population towards purchasing (foreign) currencies as a result of rising devaluation expectations.

In fact the cooperation between Ukraine and the IMF, followed by the confident implementation of reforms, or the delay to them, defines the two main scenarios of the medium- and long-term development of Ukraine. As Ukraine is a small, open economy, foreign capital flows are extremely sensitive toward changes in investors' sentiments, precipitating a highly deteriorating effect on the economy. Besides, the Ukrainian banking system remains very vulnerable to solvency risks that restrict resources for growth and development. Thus, the fruitfulness of the Ukraine-IMF relationship is crucial for the implementation of these scenarios.⁶

The optimistic scenario is associated with the establishment and consistent implementation of a system transformation that during five to seven years should radically improve the economic and investment environment of Ukraine and set it on a path of sustainable long-term development. Unfortunately, experience from previous years indicates a low likelihood of this scenario. Therefore, a second scenario seems to be more realistic. The realistic scenario is characterized by slow and cautious improvements which are not too risky for the government, mainly supporting the

current structure of the economy but not providing significant incentives for improving productivity and incomes of the population. The macroeconomic outlook for both scenarios is presented in Table 2.

Realistic scenario. This scenario is the more likely one, with 3-4% growth of GDP in the years to come. Our realistic scenario assumes that the global economy remains weak, but the process of recovery continues to strengthen in 2010-2012. This means that external demand for Ukrainian products (of the metal and chemical industries) remains weak and unpredictable. At the same time weak domestic demand, relatively stable world crude oil prices (we assume that in medium term the oil price will stabilize at about the current level) and a 30% discount for imported gas will help to curb imports of goods, which will lead to a significant narrowing of the current account deficit (in fact, to a balanced current account)

Ukraine's public finances will be in high deficit in the short term. According to some estimates, Ukraine's total hidden consolidated deficit in 2010 is projected to exceed 10% of GDP. This figure includes 5.3% primary revenue deficit, about 3% for the gas monopoly Naftogaz (if there is no increase in utility tariffs), 1.5% for the pension fund deficit and more than 2% for bank recapitalization⁷.

Under these conditions the depreciation pressure will remain quite strong but the NBU will continue to support the hryvnia. However, tight international liquidity conditions and global risk aversion imply that the inflow of foreign capital (both in the form of FDI and loans) will remain modest. In particular, FDI inflows are projected at USD 4-5 billion yearly. This means that Ukraine's attractiveness for investors remains depressed and that productivity and efficiency of the economy are frozen at the current insufficient level.

⁶ Here we do not consider the more pessimistic scenario, where Ukraine faces a combination of deep global slowdown (due to expanding crisis in the eurozone) and imbalanced domestic macroeconomic policies. In such a case the demand for Ukrainian export goods would decline sharply, capital outflow would speed up, the budget would run a sizeable deficit, and a weaker currency and sharp reduction in household incomes would push the economy into a new wave of deep recession.

⁷ Source: 'IMF may not restart lending unless politicians tame deficit', *Kyiv Post*, May 2010.

Table 2

Realistic and optimistic scenarios for Ukraine

	2008	2009	Realistic			Optimistic		
			2010	2011	2012	2010	2011	2012
GDP, %	2.1	-15.1	3.5	4.0	3.5	5.0	6.0	5.5
Nominal GDP, UAH bn	950.5	914.7	1046	1220	1400	1070	1300	1550
Nominal GDP, USD bn	181.0	113.9	129.1	151.6	175.0	133.9	164.6	198.7
GDP per capita, ZSD	3927	2482	2826	3331	3863	2930	3617	4387
CPI, % yoy, eop	22.3	12.3	12.0	10.8	9.8	12.0	10.8	9.8
UAH/USD, average	5.25	8.03	8.10	8.05	8.0	7.99	7.9	7.8
Budget balance, UAH bn	-25.8	-68.1	-69.0	-65.0	-63.0	-58.0	-52.0	-51.0
Budget balance, % GDP	-2.7	-7.4	-6.6	-5.3	-4.5	-5.4	-4.1	-3.3
CAB, USD bn	-12.8	-1.8	-1.5	-1.0	-1.0	-1.0	-1.7	-1.5
CAB, % GDP	-7.1	-1.6	-1.1	-0.7	-0.6	-0.7	-1.0	-0.8
FDI, USD bn	9.9	4.7	4.2	5.0	4.8	5.5	7.5	6.5
CA balance+FDI, USD mn	-2.9	2.9	2.7	4.0	3.8	4.5	5.8	5.0
FX Reserves, USD bn, eop	31.5	26.5	24.0	22.0	22.0	25.0	28.0	32.0
Population, million	46.1	45.9	45.7	45.5	45.3	45.7	45.5	45.3

Meanwhile external debt repayments, including sovereign debt, seem quite manageable for 2010-2012⁸ (Table 3). In particular, in 2010, there is only one sizeable FX debt repayment (of about USD 400 million, on a yen-denominated Eurobond) that falls due at the end of the year. Total FX debt repayments start to rise in 2012 and peak in 2013 (at USD 7.9 billion, of which USD 2.6 billion will be due to the IMF).⁹

Table 3

External debt redemption

USD million

	2010	2011	2012
Eurobond market*, total	1765	3011	3258
... including			
Sovereign	642	816	680
Quasi-sovereign	245	973	718
Syndicated loan market	1755	2228	2267

* Including interest and principal.

Source: Investment Capital Ukraine LLC, March 2010.

Optimistic scenario

According to this scenario the global economy enters a soft but relatively stable recovery path and the eurozone economy diminishes its imbalances. As for Ukraine, the key precondition for this scenario is that the government stabilization packages are implemented, first of all in the budgetary sphere (see Box 2). In this scenario, foreign exchange requirements will be balanced (due to the IMF and World Bank financing) and the exchange rate will even appreciate. Moreover, the continuation of the IMF programme will help to maintain investors' confidence at a comfortable level, which facilitates the refinancing of maturing external liabilities of the private sector. The current account may even worsen but will still run a rather small deficit, reflecting the expansion of domestic demand and modest improvements in the economic environment¹⁰, with additional benefits from cheaper energy imports¹¹. Thus, in the

¹⁰ Ukraine can even benefit from euro depreciation in so far as technology imports from the EU becomes cheaper.

¹¹ In April 2010 Ukraine and Russia agreed on a 30% discount on the price of gas imported to Ukraine. Thus, the average price for imported gas is now estimated at about USD 230-245 per 1000m³ in 2010 compared to the previous USD 335 per 1000 m³. Lower gas prices will particularly benefit the natural gas-intensive chemical industry and metallurgy, thus giving stronger impetus to the recovery of the Ukrainian economy. See, e.g., O. Pogarska and

⁸ For more details see 'Investment Capital Ukraine LLC', March 2010.

⁹ Source: 'EMEA: A (relative) paragon of fiscal stabilization', Credit Suisse, February 2010.

medium term, the current account deficit will stabilize at about USD 1.5-2 billion or about 1% of GDP in 2011-2012. FDI inflows, particularly due to an expansion of privatization processes that peak in 2011, will stimulate economic growth and support the private sector in rolling over maturing external debts.

Box 2

Expected tax reforms

Ukraine's authorities are planning to finish off and approve the Tax Code in 2010. This is provided for in the Economic Reform Programme for 2010-2014.

The implementation of the tax reform will take place in three stages: First, bringing together the tax accounting and general accounting (by the end of 2010); reimbursing the debts for the value-added tax (VAT) by the state funds; and (starting from 1 August) reimbursing the VAT in time.

In the second stage, the reduction of inefficient taxes and fees (including a simplified taxation system for small businesses) and the introduction of a single social contribution are planned (until late 2012). In addition, the introduction of a property tax is envisaged, as well as reforming the tax administration – first of all, VAT – and introducing a mechanism for environmental taxation.

The third stage of reforming the tax system (until late 2014) requires a phased reduction of profits tax and the transition to a system of payments for mineral extraction with the application of rental income.

Among the steps necessary in the process of reforming the tax system are also gradual increases in the rate of unified social contributions for wage earners.

Source: 'Tax reform in Ukraine: three stages', <http://mignews.com.ua/en/articles/27679.html>.

Conclusions

Both scenarios may materialize and both are challenging. At the same time, restructuring the management system, eradicating corruption, increasing responsibility and new governance require significantly more time. It is important to note that the realization of the optimistic scenario is much more complicated, since a variety of macroeconomic tasks to be resolved in the post-crisis period will be added to the problems of

structural and institutional transformation, which are principally new for Ukraine. Thus, in order to jumpstart the economic recovery under the conditions of the problems of post-crisis stabilization, Ukraine should develop those sectors that are characterized by a significant growth potential, as well as the efficient use of labour resources. Even if some 'traditional' sectors (i.e. the metallurgical or chemical industries) remain an important component of the economy, they will not continue to be a driving force for the development of the whole economy unless the companies change their production or recycling processes for those with a high level of value-added. This is, however, quite difficult, as such a demand should be created by the rather inflexible large domestic customers. Partially, this may be achieved by the planned projects associated with the Euro 2012 football championship.

In fact, the situation in industry depends to a large extent on the success in implementing the Euro 2012. If Ukraine can establish positive collaboration and give economic guarantees to investors, significant improvements in infrastructure can be expected. This involves in particular the construction sector, including the construction of roads. Even in the metallurgical sector, external demand may be partially substituted by domestic consumption. Otherwise, if the Euro 2012 programme does not work properly, Ukraine will remain hostage to the external business cycle. The demand for the country's export-oriented products and services will remain weak.

At the same time, there is a high potential in some sectors of the economy that might materialize either thanks to positive economic dynamics of the whole economy or to Ukraine's geographical position. In the medium and long term, these sectors are logistics, tourism, construction, and the automobile industry (including their services). The most significant potential is in logistics, where coherent development requires the harmonization of customs procedures with neighbouring countries and a significant increase in the quality of roads, transport services and infrastructure.

Markets and morals

BY KAZIMIERZ POZNANSKI*

The discussion on the nature of the financial world crisis takes place in the context of a debate about the state of economic theory. Some economists have turned to the so-far disfavoured arguments of the Austrian – or evolutionary – economics, mainly because of its attention to institutions that seems lacking in the pre-crisis consensus. But the focus on institutions is not the most distinctive feature of the Austrian school of Hayek, Mises and Schumpeter. The Austrian school differs from Liberalism and Marxism, the two major schools in economics, mainly by its treatment of morality as the foundation of institutions. The moral aspect has largely been lost in the Liberal or Marxist approach. The Austrians claim that without morality neither markets nor states can work properly.

Morals of choice

First, one needs a definition of morality. This is defined as the concern for the well-being of others as opposed to self-interest. Each action by any individual affects someone else. All actions have moral consequences, for they can hurt others or aid them. Morality calls for aiding others and thus hurting oneself since by aiding others, a given individual raises their chances of survival and lowers his/her own ones.

By stressing the pursuit of gain as the sole motivation behind individual actions, the Liberal school excludes moral concerns. However, initially Liberalism used to put enormous stress on moral concerns, including Adam Smith in his early writings. To him, market agents are not driven so much by personal gain as by the so-called fellowship and search for recognition. Eventually the moralistic tone within Liberalism had been lost, with Smith reneging on his early thoughts. In his

later works Smith would call for complete self-dependence by individuals as a precondition for highest efficiency of market allocation. For this reason, he would go as far as to oppose any form of association between individuals as an unnecessary distortion, including even sport clubs. He stopped however short of banning family as a form of association – as he did not pay any attention to the family.

This shift to a value-free view of markets is one of the reasons for the critical evaluation of what has become of Liberalism. For Austrians, Liberalism moved away from acknowledging the universal role of morality as something jointly shared by nations or communities. When individuals are free to neglect others, morality is suspended. The moral issue also separated Austrians from Marxists. Along with economic change come different – consecutive – stages or epochs of history, with each one bringing a different set of values in place of the existing principles of morality. In other words, to the Marxists, change in the moral framework of society is a sort-of collective choice. The most drastic of the choices that societies go through is claimed to be the shift from capitalism to communism that cuts societies off from their ancient moral roots. The notion that progress can be achieved by dispensing with the whole moral tradition is what the Austrians found most objectionable in the Marxists (as well as the implication that once this critical step is taken and communism replaces capitalism there will be no need for a further change in morality to take place, itself a fundamentalist thought).

Codes of nature

To Austrians morality is a given. This follows from the fact that it serves to assist survival. Each individual aims not only to maintain his/her life but also to extend it beyond his/her death by having children. Morality can be gauged by its impact on the demographics of a given community, tribe or nation. Hayek makes this point when discussing the question of how to measure the effectiveness of various social systems and thus their underlying

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morality. To him, the most comprehensive indicator of a system's effectiveness is the rate of growth of the populations living under given rules. He adds that through the differential demographic rates populations operating under more effective moral codes marginalize – in terms of numbers – those who are stuck with less effective ones.

Taking the broad definition of survival – one encompassing one's existence as well as procreation – it is clear that morality is not a matter of choice. Even if the life of a single living individual may not require aiding by others, procreation does, since people – like other species – are not self-born. They are born by others whose decision to give life at a cost to themselves is a moral choice. Without the moral commitment to offering the gift of life, life would stop in its first cycle. Another obvious rule must be that parents have a child only if ready to ensure its survival until its adulthood. A further rule is that, after reaching adulthood, children reciprocate by taking care of parents, and the above-mentioned examples of aiding others are replicated throughout the whole moral system.

These basic morals can be called 'natural morality' and this is the category where the Austrian view of morality falls in with the obvious implication that morality is carried through tradition. Morality is carried over from one generation to another without questioning its rationale. Its only rationale is that it has served one generation and should equally serve another. And, it is not authority coming from power but from the status that parents enjoy given their greater experience and wisdom.

It is the moral tradition that links together various societies through history and therefore, as Hayek argues, there is a compelling reason for seeing all human history as representing one and the same general system of institutions to be best called civilization.

Origins of the market

The underlying belief in a moral basis of human actions is apparent in various economic theories advanced by the Austrian school, including their

view of the origins of the market economy, or capitalism. The most influential of the Austrian arguments on the origination of capitalism was formulated by Schumpeter in 'Capitalism, Socialism and Democracy'. The major point he makes is that capitalism needs capitalists but they are also its greatest enemies since like any other social system to function capitalism needs an adequate moral basis which capitalists cannot provide.

When social institutions such as the market are created and then maintained, there is a cost to it to be borne by someone. This poses a dilemma for individual capitalists since to survive competition they must cut all kinds of costs to maximize profits. The ones feeling a moral obligation to pay their share for the common good would be rooted out of the market. In other words, being moral is not what makes a capitalist survive in the market setting. According to Schumpeter, capitalists bring with themselves a new class of intellectuals who attack capitalism. They do not produce any marketable value and therefore can survive only on financial support from capitalists (a claim that might look as inconsistent with the picture of capitalists as living for profit only). But what intellectuals produce does not serve capitalism since with their rationalist mind intellectuals engage in critical analysis of social reality to offer visions of superior alternative systems.

It follows that for capitalism to come into being and keep on going there must be some alternative social group to bring the necessary moral concerns in. If capitalism cannot provide it on its own, the only other way is for its predecessor – feudalism – to instil into it the moral setting. Schumpeter implies that feudalism possesses the moral basis lacking in capitalism. Capitalism has to 'borrow' this from feudalism rather than 'bury' it as assumed in the Liberal and Marxist theories. What capitalism needs in particular is the strong attachment to private property as one of its two – aside from competition – building elements. Capitalists are not interested in fully exercising ownership of production as much as in securing profits from their capital regardless of who is in charge. A remedy is to bring in from

feudalism a stratum whose members possess an unshakable attachment to property and this group, Schumpeter argues, are the peasants. To peasants their land is like a sacred good that it would be morally unacceptable to subject to market exchange, whatever potential gain.

Capitalism needs more, since for private property to be enjoyed capitalists need someone to protect it from seizure, also by foreign invaders. In Schumpeter's view, capitalists would not risk their lives for repelling such invaders and would not even be willing to tax themselves for the purpose of setting a military force. This is why capitalism again needs feudalism – in this case the latter's aristocracy, which basically is a military class. What makes members of the aristocracy ready to sacrifice their lives for the cause of defence is a moral obligation, with the military service being an honour.

Where there is private property there is inequality of income, or wealth, due to differences in individual productivity or/and luck. If inequality stems from these forces, it works as a stimulant to make agents – capitalists and workers alike – increase their productive efforts. But even if this is the case, there might be a backlash against it by those having less and capitalists cannot do much about it, nor can they count on intellectuals. To protect capitalism against this backlash, capitalism needs another feudal stratum – the clergy, since religion presents hierarchy as a sort of natural, morally obvious.

Agents of the market

To make sure, what Schumpeter says of feudal classes as protectors of capitalism is not that capitalists have no morals. He only argues that given their moral make-up they do not share with peasants, aristocracy and clergy the kind of concerns that are critical for the existence of capitalism. He argues that capitalists display certain moral dispositions, the simple reason being that no social strata can be fully exempted from moral concerns.

When examining Liberalism and Marxism, Schumpeter finds their description of capitalists mechanical and thus inadequate, since this is not what they all are like. Within these two prevailing perspectives, all capitalists follow the logic of the market that makes them act rationally so that they deservingly can be called 'rational agents'. As rational agents, capitalists are passive executors focused on immediate choices with immediate consequences that relate to the maximization of what Schumpeter calls 'static efficiency'.

Schumpeter agrees with this characterization but only regarding one part of the capitalist stratum whose members he calls 'capitalists' while recognizing another segment – labelled 'entrepreneurs'. The latter are a very different breed, since their role is to rearrange existing production resources through innovations, novel or updated types of products and methods. In their pursuit of 'dynamic efficiency' through untried ideas entrepreneurs take risks which the 'capitalists' as 'rational actors' shy away from.

Defining 'capitalists' as rational agents, Liberals and Marxists imply that to comply with market forces they cannot allow any concerns but efficiency. This does not have to be the case with the Schumpeterian entrepreneur. Since entrepreneurs are not rational actors they can be affected by moral concerns and thus be moral agents.

There is another important aspect, namely that – as described by Schumpeter – entrepreneurs can be driven by concerns that go beyond their private gain and bring societal gain into economic calculations. The realization that innovations benefit not only entrepreneurs but also society is actually, as Schumpeter postulates, on the mind of entrepreneurs, frequently even treating this moral concern as their primary motive behind.

Fate of markets

Like the Liberals and Marxists, the Austrians have tackled the issue of the possible collapse of

capitalism, most of the Austrians siding with the Liberals that capitalism will not collapse. An important exception is Schumpeter, who came up with the argument that like any other system capitalism may (but does not have to) collapse. This made him move towards the Marxists' position except that he rejected its claim that capitalism is doomed to collapse no matter what. He linked this potential collapse with the erosion of morals rather than with material decline as stressed by Marxist economists.

There are in fact three theories of the possible demise of capitalism that can be drawn from Schumpeter's work. First, the feudal classes needed for capitalism to function may lose their moral influence over society. He was actually convinced that such a decline of the protective strata was already advanced at the time of his writing. This was because the shift from farming to manufacturing led to the undercutting of prices of land as the major source of wealth for all three feudal groups.

Second, there is the central point on entrepreneurs as the real movers behind capitalism with their acceptance of risk involved in innovations. To engage in risk-taking they have to find others who are willing to help them raise the capital needed to set up enterprises. However, with the shift of production from enterprises to corporations comes bureaucratization that makes this access to funds more difficult. He was convinced that due to this the capitalism he observed was heading for an irreversible loss of entrepreneurial spirit.

Third, the fate of capitalism was also linked to the condition of the family whose welfare he finds to be the major motivating factor of those who – as capitalists – provide capital or – as entrepreneurs – restructure capital. When the family goes into disrepair and the divorce rate increases and/or mutual obligations of parents and children are loosened up, the motivation for hard work will subside. Again, to Schumpeter this sort of decline of the family under capitalism was something already well underway in countries like England.

All the three forces of capitalist destruction lead to the increasing expectation that the state and not the market is the solution to economic problems. If protective strata are gone, protection will be sought in the state (e.g. by replacing the military class of the aristocrats with a national – conscript, or professional – army). When risk-aversion replaces risk-taking, the reduction of innovation risks will be accomplished by turning innovations to the state. Finally, with the crisis of the family individuals will start expecting the state to take over their primal functions, such as education, pensions, or health care.

Given the above, Schumpeter argues, capitalist societies will embark on what he called the 'march of socialism', where socialism is defined as any system where preference is given to the state over the market. This will reflect a fundamental moral shift from the values that support the market to the values that support the state. The essence is the shift from treating self-dependence through the market as a moral imperative to the moral right to a good life to be delivered by the state. Importantly, such shift in mentality precludes a need for a revolution, since it is pursued within all social groups. If this is what people want, the state-based systems (including communism) will work since to work any system needs just a moral legitimacy. In Schumpeter's view, socialism cannot match the efficiency ensured by capitalism, but people may still prefer socialism if they value the security of state welfare programmes more than the wealth from higher efficiency. While this view represents a drastic departure from the position taken by Mises and Hayek that socialism is not feasible for efficiency reasons, it is in line with the argument developed by Janos Kornai in his 'Economics of Shortage' that explains why socialism was a viable system.

Conclusions

Re-examined, Austrian (also called evolutionary) economics can be defined as moral economics. Morals are considered the basis of economic institutions, market and state alike. Taking morals as a principal force shaping economic life, as well

as the way morality is conceptualized, both separate Austrians from competing schools, such as Liberalism and Marxism. Contrasted with the Austrian school, these two dominant perspectives appear to share a lot of common ground. Not surprisingly, among the economists who point today to the moral roots of the recent world crisis, many show Austrian influence, among them Krugman and Stiglitz. They both admit debt to Schumpeter, his theories of innovations and imperfect information respectively. Their willingness to stress the role of morals in the economic realm and to take a moral stance is another lesson they draw from Schumpeter and Austrians in general, an example

being Krugman's repeated claim that the United States has sled into 'crony capitalism' which, given the sheer scale of its shaky financial sector, makes it a main source of world instability. The ideas of Austrian economics deserve to be taken very seriously also in 'transition economics'. The differences in the performance of the various post-socialist countries are difficult to understand without allowing for the differences in the moral values they inherited from the past. By the same token, the economic prospects of the individual transition countries may primarily depend on the evolution of their institutions – including moral attitudes.

STATISTICAL ANNEX

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

PLEASE NOTE: As of March 2010, time series for the new EU member states previously taken from national sources have been replaced by Eurostat data and methodology (mostly from 2000 onwards). A detailed description of the changes is available online at <http://mdb.wiiw.ac.at>.

This change enables you to compare the wiiw monthly data with Eurostat data on other EU countries.

Conventional signs and abbreviations

used in the following section on monthly statistical data

.	data not available		
%	per cent		
PP	change in % against previous period		
CPPY	change in % against corresponding period of previous year		
CCPPY	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		
LFS	Labour Force Survey		
CPI	consumer price index		
HICP	harmonized index of consumer prices (for new EU member states)		
PPI	producer price index		
p.a.	per annum		
mn	million (10 ⁶)		
bn	billion (10 ⁹)		
avg	average		
eop	end of period		
ALL	Albanian lek	MKD	Macedonian denar
BAM	Bosnian convertible mark	PLN	Polish zloty
BGN	Bulgarian lev	RON	Romanian leu
CZK	Czech koruna	RSD	Serbian dinar
HRK	Croatian kuna	RUB	Russian rouble
HUF	Hungarian forint	UAH	Ukrainian hryvnia
EUR	euro (also the national currency for Montenegro, Slovakia and Slovenia)		
USD	US dollar		
M1	currency outside banks + demand deposits / narrow money (ECB definition)		
M2	M1 + quasi-money / intermediate money (ECB definition)		
M3	broad money		

Sources of statistical data: Eurostat, national statistical offices and central banks; wiiw estimates.

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To receive your personal password, please go to <http://mdb.wiiw.ac.at>

BULGARIA: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																
Industry, NACE Rev. 2 ¹⁾	real, CPPY	-22.0	-18.2	-18.7	-15.8	-21.1	-16.5	-10.8	-12.1	-2.0	-9.8	-0.1	-1.7	-1.6	2.1	.
Industry, NACE Rev. 2 ¹⁾	real, CCPPY	-19.1	-18.9	-18.9	-18.5	-18.8	-18.6	-17.9	-17.4	-2.0	-6.0	-3.9	-3.3	-3.0	-2.1	.
Industry, NACE Rev. 2 ¹⁾	real, 3MMA	-20.1	-19.6	-17.7	-18.6	-17.9	-16.2	-13.2	-8.8	-8.4	-3.9	-3.8	-1.1	-0.3	.	.
Construction, NACE Rev. 2 ²⁾	real, CPPY	-14.9	-8.4	-14.4	-17.1	-19.4	-25.7	-21.9	-23.0	-29.2	-29.0	-20.7	-22.8	-17.2	-17.5	.
Construction, NACE Rev. 2 ²⁾	real, CCPPY	-8.6	-8.6	-9.5	-10.5	-11.5	-13.0	-13.8	-14.5	-29.2	-29.1	-26.1	-25.3	-23.7	-22.6	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	3300.1	.	.	3280.0	.	.	3171.6	.	.	3011.3	.	.	.	.
Employed persons, LFS	CCPPY	.	-1.5	.	.	-2.3	.	.	-3.2	.	.	-7.7	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	222.6	.	.	234.5	.	.	272.8	.	.	341.0	.	.	.	.
Unemployment rate, LFS	%	.	6.3	.	.	6.7	.	.	7.9	.	.	10.2	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	-11.2	.	.	-10.6	.	.	-8.5	.	.	7.4	.	.	7.4	.
WAGES																
Total economy, gross	BGN	585	587	578	576	594	594	600	625	611	610	636	643	640	636	.
Total economy, gross	real, CPPY	13.0	11.1	10.7	10.7	10.2	10.1	9.7	8.6	7.8	8.5	7.3	5.2	6.2	5.7	.
Total economy, gross	EUR	299	300	296	295	304	304	307	320	312	312	325	329	327	325	.
Industry, gross, NACE Rev. 2	EUR	296	299	294	294	298	302	302	312	305	304	323	319	320	327	.
PRICES																
Consumer - HICP	PP	0.0	0.1	-0.1	0.1	-0.2	0.2	0.2	0.3	0.6	0.3	0.4	1.2	0.0	-0.4	0.5
Consumer - HICP	CCPY	3.0	2.6	1.0	1.3	0.2	0.3	0.9	1.6	1.8	1.7	2.4	3.0	3.0	2.5	3.2
Consumer - HICP	CCPPY	4.4	4.1	3.7	3.4	3.0	2.7	2.5	2.5	1.8	1.7	1.9	2.2	2.4	2.4	2.5
Producer, in industry, NACE Rev. 2 ³⁾	PP	0.8	0.5	-1.1	0.2	1.4	-0.9	0.5	1.2	1.8	0.0	1.3	2.2	1.7	-0.2	0.6
Producer, in industry, NACE Rev. 2 ³⁾	CCPY	-6.9	-7.5	-10.8	-10.9	-8.9	-9.6	-5.9	0.9	2.9	4.0	5.2	8.1	9.1	8.4	10.2
Producer, in industry, NACE Rev. 2 ³⁾	CCPPY	-4.7	-5.2	-6.0	-6.7	-6.9	-7.2	-7.1	-6.5	2.9	3.5	4.0	5.1	5.9	6.3	6.8
FOREIGN TRADE ⁴⁾																
Exports total (fob), cumulated	EUR mn	4419	5419	6447	7429	8479	9693	10808	11787	920	1922	3043	4184	5399	.	.
Imports total (cif), cumulated	EUR mn	6809	8225	9644	10954	12337	13895	15312	16726	1154	2326	3831	5388	6993	.	.
Trade balance, cumulated	EUR mn	-2390	-2806	-3197	-3525	-3858	-4202	-4504	-4939	-234	-405	-789	-1204	-1594	.	.
Exports to EU-27 (fob), cumulated	EUR mn	2879	3495	4223	4831	5530	6293	6996	7585	548	1192	1843	2481	3234	.	.
Imports from EU-27 (cif), cumulated	EUR mn	4056	4938	5787	6535	7404	8345	9214	10082	646	1428	2327	3167	4074	.	.
Trade balance with EU-27, cumulated	EUR mn	-1177	-1443	-1565	-1703	-1873	-2052	-2218	-2497	-98	-235	-484	-687	-839	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-2647	.	.	-2450	.	.	-3196	.	.	-522	.	.	.	.
EXCHANGE RATE																
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
BGN/USD, monthly average	nominal	1.433	1.395	1.388	1.371	1.343	1.320	1.311	1.338	1.370	1.429	1.441	1.459	1.557	1.602	1.532
EUR/BGN, calculated with CPI ⁵⁾	real, Jan07=100	111.7	111.6	111.9	111.7	111.5	111.5	111.5	111.5	112.6	112.6	112.2	112.9	112.8	112.2	113.1
EUR/BGN, calculated with PPI ⁵⁾	real, Jan07=100	106.1	106.4	105.9	105.6	107.3	105.9	106.2	107.4	108.4	108.1	108.8	110.2	111.6	111.1	111.7
USD/BGN, calculated with CPI ⁵⁾	real, Jan07=100	118.1	120.4	121.0	122.5	124.6	126.9	127.8	125.9	123.2	118.5	117.4	117.1	109.7	106.2	111.7
USD/BGN, calculated with PPI ⁵⁾	real, Jan07=100	111.2	112.6	113.0	112.9	117.5	117.7	117.6	116.2	113.1	109.1	108.1	108.4	102.9	100.5	.
DOMESTIC FINANCE																
Currency in circulation	BGN mn, eop	6961	7012	7100	7086	6925	6839	6779	7115	6755	6718	6663	6632	6663	6761	.
M1	BGN mn, eop	17555	17909	17684	17870	17686	17366	17739	18124	17686	18252	17395	17592	17743	18068	.
Broad money	BGN mn, eop	45204	45578	45867	46233	46464	46595	46802	47731	47493	48465	48392	48613	48879	49245	.
Broad money	CCPY	4.7	3.7	1.7	1.0	1.6	4.3	6.4	4.2	5.4	7.9	7.7	7.9	8.1	8.0	.
BNB base rate (p.a.)	%, eop	2.3	2.4	2.2	1.7	1.6	1.5	0.6	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2
BNB base rate (p.a.) ⁶⁾	real, %	9.8	10.7	14.6	14.1	11.5	12.2	7.0	-0.3	-2.5	-3.7	-4.7	-7.3	-8.2	-7.5	.
BUDGET																
General gov. budget balance ⁷⁾ , cum.	BGN mn	.	-271	.	.	-997	.	.	-2570	.	.	-1117	.	.	.	.

1) Enterprises with 10 and more persons.

2) All public enterprises, private enterprises with 5 and more employees.

3) Data refer to industry total compared to previously published domestic producer prices.

4) From 2007 intra-/extra-EU trade methodology.

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

6) Deflated with annual PPI.

7) According to ESA'95 excessive deficit procedure.

C Z E C H REPUBLIC: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	-22.0	-12.8	-17.8	-9.4	-12.1	-7.4	-0.2	2.3	5.0	6.9	10.2	10.9	16.9	9.7	.
Industry, NACE Rev. 2	real, CCPY	-20.3	-19.0	-18.8	-17.8	-17.2	-16.2	-14.8	-13.6	5.0	6.0	7.5	8.4	10.0	10.0	.
Industry, NACE Rev. 2	real, 3MMA	-19.0	-17.5	-13.5	-13.2	-9.7	-6.8	-2.1	2.2	4.7	7.5	9.4	12.5	12.3	.	.
Construction, NACE Rev. 2	real, CPPY	0.6	0.8	-3.7	0.4	3.7	-1.0	5.6	1.2	-25.3	-23.6	-17.0	-15.2	0.6	-4.6	.
Construction, NACE Rev. 2	real, CCPY	-5.1	-3.8	-3.8	-3.1	-2.2	-2.0	-1.1	-0.9	-25.3	-24.4	-21.4	-19.4	-14.3	-12.2	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	4941.3	.	.	.	4921.7	.	.	4927.3	.	.	4829.2	.	.	.	.
Employed persons, LFS	CCPPY	-0.7	.	.	.	-1.1	.	.	-1.4	.	.	-2.4	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	333.9	.	.	.	387.0	.	.	385.0	.	.	422.5	.	.	.	.
Unemployment rate, LFS	%	6.3	.	.	.	7.3	.	.	7.3	.	.	8.1	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	-10.3	.	.	.	-7.3	.	.	-3.1	.	.	16.6	.	.	.	.
WAGES																
Total economy, gross	CZK, quart. avg.	22971	.	.	.	23192	.	.	25565	.	.	22748	.	.	.	.
Total economy, gross	real, CPPY	1.7	.	.	.	4.2	.	.	4.4	.	.	1.8	.	.	.	.
Total economy, gross	EUR, quart. avg.	861	.	.	.	906	.	.	986	.	.	879	.	.	.	.
Industry, gross, NACE Rev. 2 ¹⁾	EUR, quart. avg.	846	.	.	.	884	.	.	960	.	.	862	.	.	.	.
PRICES																
Consumer - HICP	PP	0.1	0.0	-0.4	-0.2	-0.4	-0.3	0.1	0.1	1.2	0.1	0.2	0.4	0.2	0.0	0.3
Consumer - HICP	CCPY	0.9	0.8	-0.1	0.0	-0.3	-0.6	0.2	0.5	0.4	0.4	0.4	0.9	1.0	1.0	1.6
Consumer - HICP	CCPPY	1.3	1.2	1.0	0.9	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.8
Producer, in industry, NACE Rev. 2 ²⁾	PP	-0.8	-0.2	-1.2	-0.2	-0.7	0.6	0.2	0.4	0.4	-0.2	-0.3	0.7	1.3	0.8	.
Producer, in industry, NACE Rev. 2 ²⁾	CCPY	-1.6	-1.5	-2.2	-3.8	-4.9	-4.0	-2.9	-2.2	-3.4	-5.3	-3.1	-1.3	0.8	1.8	.
Producer, in industry, NACE Rev. 2 ²⁾	CCPPY	0.7	0.4	0.0	-0.5	-1.0	-1.3	-1.4	-1.5	-3.4	-4.4	-3.9	-3.3	-2.5	-1.8	.
FOREIGN TRADE ³⁾																
Exports total (fob), cumulated	EUR mn	31899	38906	45690	52032	59723	67323	74984	81317	6685	13798	22391	30273	38278	46920	.
Imports total (cif), cumulated	EUR mn	29634	35916	42159	48076	55113	62109	69171	75408	6118	12684	20612	27912	35447	43685	.
Trade balance, cumulated	EUR mn	2265	2990	3531	3955	4610	5214	5812	5910	566	1114	1779	2361	2831	3235	.
Exports to EU-27 (fob), cumulated	EUR mn	27103	32972	38708	44058	50577	57068	63559	68841	5728	11773	18982	25639	32405	39608	.
Imports from EU-27 (cif), cumulated	EUR mn	22871	27845	32812	37429	42989	48514	54005	58780	4610	9656	15808	21332	26891	32996	.
Trade balance with EU-27, cumulated	EUR mn	4231	5127	5896	6629	7588	8554	9554	10061	1118	2117	3174	4308	5514	6612	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-248	.	.	-1175	.	.	-1465	.	.	621	.	.	.	.
EXCHANGE RATE																
CZK/EUR, monthly average	nominal	26.73	26.55	25.79	25.65	25.35	25.86	25.81	26.09	26.13	25.98	25.54	25.31	25.66	25.78	25.33
CZK/USD, monthly average	nominal	19.58	18.94	18.31	17.97	17.41	17.45	17.31	17.85	18.31	18.98	18.82	18.88	20.42	21.12	19.83
EUR/CZK, calculated with CPI ⁴⁾	real, Jan07=100	107.0	107.6	110.8	110.9	111.7	109.0	109.1	107.7	109.3	109.6	110.9	111.8	110.3	109.8	112.3
EUR/CZK, calculated with PPI ⁴⁾	real, Jan07=100	100.9	101.1	103.4	103.3	104.1	102.3	102.4	101.6	101.0	101.1	101.8	102.6	102.0	102.1	.
USD/CZK, calculated with CPI ⁴⁾	real, Jan07=100	113.2	116.1	119.8	121.6	124.9	124.1	125.1	121.6	119.5	115.4	116.1	116.0	107.3	103.9	110.9
USD/CZK, calculated with PPI ⁴⁾	real, Jan07=100	105.7	107.0	110.4	110.5	113.9	113.6	113.3	109.9	105.3	102.0	101.2	101.0	94.1	92.3	.
DOMESTIC FINANCE																
Currency in circulation	CZK bn, eop	358.8	354.3	352.4	351.4	351.3	353.2	354.2	353.5	353.6	354.2	351.6	353.2	354.2	356.5	.
M1	CZK bn, eop	1691.5	1723.6	1702.2	1736.1	1722.2	1732.7	1781.7	1771.8	1765.0	1775.6	1803.9	1796.2	1893.1	1902.8	.
Broad money	CZK bn, eop	2737.9	2680.9	2669.7	2659.5	2623.5	2651.0	2665.2	2709.1	2671.5	2666.7	2681.7	2727.2	2764.2	2755.3	.
Broad money	CCPY	10.6	9.1	6.4	4.5	3.2	2.6	1.7	0.3	-1.6	-2.3	-0.7	0.3	1.0	2.8	.
Discount rate (p.a.)	%, eop	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Discount rate (p.a.) ⁵⁾	real, %	2.2	2.0	2.8	4.3	5.4	4.5	3.3	2.5	3.8	5.8	3.4	1.5	-0.5	-1.5	.
BUDGET																
General gov. budget balance ⁶⁾ , cum.	CZK mn	.	-76250	.	.	-132602	.	.	-213744	.	.	-53179	.	.	.	.

1) Including E (electricity, gas, steam, air conditioning supply etc.).

2) Data refer to industry total compared to previously published domestic producer prices.

3) From 2004 intra-/extra-EU trade methodology.

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

5) Deflated with annual PPI.

6) According to ESA'95 excessive deficit procedure.

HUNGARY: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009									2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
PRODUCTION																	
Industry, NACE Rev. 2	real, CPPY	-22.2	-18.8	-19.4	-19.8	-14.7	-13.0	-7.0	1.5	3.0	8.1	4.0	9.6	13.7	15.2	.	
Industry, NACE Rev. 2	real, CCPY	-23.4	-22.6	-22.2	-21.9	-21.0	-20.2	-19.0	-17.6	3.0	5.5	5.0	6.1	7.6	8.9	.	
Industry, NACE Rev. 2	real, 3MMA	-22.8	-20.1	-19.3	-17.8	-15.6	-11.7	-6.9	-1.4	4.1	5.0	7.1	8.9	12.9	.	.	
Construction, NACE Rev. 2	real, CPPY	-10.0	15.0	-5.5	-6.7	-1.5	-2.9	-14.1	-6.4	-15.3	-12.5	-6.5	-15.8	-10.2	-19.6	.	
Construction, NACE Rev. 2	real, CCPY	-6.1	-2.0	-2.5	-3.2	-2.9	-2.9	-4.1	-4.4	-15.3	-13.7	-10.8	-12.3	-11.8	-13.6	.	
LABOUR																	
Employed persons, LFS	th. pers., quart. avg	.	3797.1	.	.	3783.5	.	.	3782.8	.	.	3719.3	.	.	.	.
Employed persons, LFS	CCPY	.	-2.0	.	.	-2.5	.	.	-2.5	.	.	-1.2	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	401.7	.	.	436.2	.	.	442.0	.	.	497.8	.	.	.	.
Unemployment rate, LFS	%	.	9.6	.	.	10.3	.	.	10.5	.	.	11.8	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPY	-14.6	-13.1	-12.1	-11.5	-10.3	-9.3	-8.0	-6.6	14.5	16.4	14.5	14.2	14.5	14.5	.	
WAGES																	
Total economy, gross ¹⁾	HUF th	200.0	201.7	197.3	190.4	191.1	193.5	215.8	220.8	206.9	193.5	220.3	202.8	198.5	202.8	.	
Total economy, gross ¹⁾	real, CPPY	-1.3	-2.6	-3.2	-4.2	-3.8	-5.6	-7.9	-5.1	0.3	-4.5	3.4	-4.3	-5.4	-4.2	.	
Total economy, gross ¹⁾	EUR	710	719	725	705	703	721	797	808	768	714	830	764	717	720	.	
Industry, gross, NACE Rev. 2 ¹⁾	EUR	697	717	723	709	719	730	821	800	723	717	803	789	745	749	.	
PRICES																	
Consumer - HICP	PP	1.5	0.0	1.4	-0.5	-0.2	-0.2	0.5	-0.2	1.5	0.2	0.6	0.9	0.7	0.2	0.0	
Consumer - HICP	CCPY	3.8	3.7	4.9	5.0	4.8	4.2	5.2	5.4	6.2	5.6	5.7	5.7	4.9	5.0	3.6	
Consumer - HICP	CCPPY	3.0	3.1	3.4	3.6	3.7	3.8	3.9	4.0	6.2	5.9	5.8	5.8	5.6	5.5	5.2	
Producer, in industry, NACE Rev. 2	PP	-1.9	0.0	-1.5	-0.4	0.0	0.0	0.4	0.1	2.5	0.8	-0.2	1.8	3.7	1.4	.	
Producer, in industry, NACE Rev. 2	CCPY	5.9	6.3	5.2	4.1	3.0	-0.3	0.3	1.2	0.9	-1.4	-2.1	1.5	7.3	8.8	.	
Producer, in industry, NACE Rev. 2	CCPPY	7.1	6.9	6.7	6.4	6.0	5.3	4.9	4.6	0.9	-0.3	-0.9	-0.3	1.2	2.5	.	
FOREIGN TRADE ²⁾																	
Exports total (fob), cumulated	EUR mn	23343	28472	33568	37873	43545	49274	55135	60036	4865	10153	16384	22084	27786	.	.	
Imports total (cif), cumulated	EUR mn	21933	26730	31457	35553	40830	46104	51522	56034	4582	9492	15076	20269	25538	.	.	
Trade balance, cumulated	EUR mn	1410	1742	2111	2321	2715	3170	3613	4002	283	661	1307	1814	2249	.	.	
Exports to EU-27 (fob), cumulated	EUR mn	18555	22595	26570	29900	34357	38943	43610	47345	3887	8014	12825	17309	21799	.	.	
Imports from EU-27 (cif), cumulated	EUR mn	15141	18488	21829	24634	28332	31975	35640	38561	3143	6474	10306	13914	17463	.	.	
Trade balance with EU-27, cumulated	EUR mn	3414	4108	4741	5266	6025	6968	7969	8783	743	1541	2519	3395	4336	.	.	
FOREIGN FINANCE																	
Current account, cumulated	EUR mn	.	-465	.	.	-140	.	.	248	.	.	98	.	.	.	.
EXCHANGE RATE																	
HUF/EUR, monthly average	nominal	281.9	280.5	272.1	270.1	271.8	268.5	270.9	273.2	269.4	271.2	265.4	265.5	276.8	281.5	283.8	
HUF/USD, monthly average	nominal	206.5	200.1	193.1	189.3	186.7	181.2	181.7	187.0	188.8	198.2	195.6	198.1	220.3	230.6	222.2	
EUR/HUF, calculated with CPI ³⁾	real, Jan07=100	96.3	96.6	101.5	101.4	100.5	101.4	100.8	99.5	102.8	102.0	104.1	104.5	100.8	99.2	98.7	
EUR/HUF, calculated with PPI ³⁾	real, Jan07=100	95.1	95.3	97.3	97.2	96.8	97.6	96.9	96.1	99.1	99.0	100.3	101.2	100.2	99.5	.	
USD/HUF, calculated with CPI ³⁾	real, Jan07=100	101.8	104.3	109.8	111.2	112.3	115.4	115.6	112.3	112.4	107.4	109.0	108.4	98.0	93.9	97.5	
USD/HUF, calculated with PPI ³⁾	real, Jan07=100	99.6	100.9	103.9	103.9	105.9	108.5	107.3	103.9	103.3	99.9	99.6	99.5	92.3	90.0	.	
DOMESTIC FINANCE																	
Currency in circulation	HUF bn, eop	2125.1	2089.8	2042.7	2030.2	2002.0	1996.0	2003.7	2039.2	2013.8	2024.8	1993.1	2026.5	2083.0	2150.1	.	
M1	HUF bn, eop	5923.9	5982.8	5812.2	5931.8	5920.7	5795.0	5900.7	6121.5	5853.6	5893.0	5941.9	5944.7	6147.9	6346.1	.	
Broad money	HUF bn, eop	15895.1	15878.9	15736.7	15930.1	15809.8	15772.1	15792.2	15975.3	15754.1	15886.9	15955.9	16215.5	16263.7	16465.9	.	
Broad money	CCPY	10.3	11.9	7.0	9.3	7.5	5.9	4.7	3.4	0.9	1.0	0.0	1.9	2.3	3.7	.	
NBH base rate (p.a.)	%, eop	9.5	9.5	8.5	8.0	7.5	7.0	6.5	6.3	6.0	5.8	5.5	5.3	5.3	5.3	5.3	
NBH base rate (p.a.) ⁴⁾	real, %	3.4	3.0	3.1	3.8	4.4	7.3	6.2	5.0	5.0	7.3	7.8	3.7	-2.0	-3.3	.	
BUDGET																	
General gov. budget balance ⁵⁾ , cum.	HUF bn	.	-507	.	.	-751	.	.	-1035	.	.	-259	.	.	.	.

1) Enterprises with 5 and more employees.

2) From 2004 intra-/extra-EU trade methodology.

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

4) Deflated with annual PPI.

5) According to ESA'95 excessive deficit procedure.

POLAND: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																
Industry, NACE Rev. 2 ¹⁾²⁾	real, CPPY	-5.2	-4.4	-4.5	0.1	-1.2	-1.3	9.9	7.4	8.5	9.2	12.5	9.7	13.5	14.5	.
Industry, NACE Rev. 2 ¹⁾²⁾	real, CCPY	-9.9	-9.0	-8.3	-7.4	-6.7	-6.1	-4.7	-3.8	8.5	8.9	10.2	10.1	10.8	11.4	.
Industry, NACE Rev. 2 ¹⁾²⁾	real, 3MMA	-7.4	-4.7	-3.0	-1.9	-0.8	2.2	5.0	8.6	8.4	10.2	10.6	11.9	12.6	.	.
Construction, NACE Rev. 2 ²⁾	real, CPPY	0.3	0.6	10.6	11.0	5.7	2.7	9.9	3.2	-15.3	-24.7	-10.9	-6.2	2.3	9.5	.
Construction, NACE Rev. 2 ²⁾	real, CCPY	1.8	1.6	3.2	4.3	4.5	4.3	4.8	4.6	-15.3	-20.3	-16.7	-13.6	-9.7	-5.4	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	15846	.	.	16026	.	.	15885	.	.	15574	.	.	.	.
Employed persons, LFS	CCPPY	.	1.1	.	.	0.8	.	.	0.4	.	.	-0.9	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	1355.1	.	.	1404.3	.	.	1471.3	.	.	1838.9	.	.	.	.
Unemployment rate, LFS	%	.	7.9	.	.	8.1	.	.	8.5	.	.	10.6	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	-4.8	-3.6	-2.7	-1.5	-0.6	0.1	1.5	2.5	12.7	12.7	13.7	13.1	13.4	13.6	.
WAGES																
Total economy, gross ²⁾	PLN	3194	3288	3362	3269	3283	3312	3404	3652	3231	3288	3493	3399	3347	3404	3433
Total economy, gross ²⁾	real, CPPY	-0.2	-1.9	-0.4	-1.0	-0.4	-1.5	-1.3	2.9	-3.3	-0.5	1.9	0.5	2.4	1.1	0.2
Total economy, gross ²⁾	EUR	724	729	782	791	790	786	817	881	794	819	898	876	825	829	841
Industry, gross, NACE Rev. 2	EUR	720	737	779	788	789	769	836	907	787	837	908	870	835	841	850
PRICES																
Consumer - HICP	PP	0.6	0.2	0.3	-0.4	0.0	0.2	0.3	0.0	0.4	0.4	0.3	0.4	0.3	0.3	-0.2
Consumer - HICP	CCPY	4.2	4.2	4.5	4.3	4.0	3.8	3.8	3.8	3.9	3.4	2.9	2.7	2.3	2.4	1.9
Consumer - HICP	CCPPY	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.9	3.7	3.4	3.2	3.0	2.9	2.8
Producer, in industry, NACE Rev. 2	PP	-0.3	0.6	-1.4	-0.4	-0.2	0.4	-0.3	-0.2	0.4	0.0	-0.1	1.2	1.9	1.0	0.3
Producer, in industry, NACE Rev. 2	CCPY	4.3	4.5	3.3	2.7	2.1	2.5	2.3	2.4	0.3	-2.2	-2.3	-0.3	1.8	2.3	4.1
Producer, in industry, NACE Rev. 2	CCPPY	5.4	5.3	5.0	4.7	4.4	4.2	4.0	3.9	0.3	-1.0	-1.4	-1.1	-0.5	-0.1	0.5
FOREIGN TRADE ³⁾																
Exports total (fob), cumulated	EUR mn	38068	46092	54227	61593	70771	80181	89014	96396	8102	16962	27070	36642	46142	.	.
Imports total (cif), cumulated	EUR mn	41732	50528	59552	67785	77289	87222	96659	105123	8761	18381	29586	39862	50273	.	.
Trade balance, cumulated	EUR mn	-3664	-4436	-5325	-6192	-6518	-7042	-7645	-8727	-659	-1419	-2517	-3220	-4130	.	.
Exports to EU-27 (fob), cumulated	EUR mn	30567	36865	43154	48943	56253	63838	70771	76428	6555	13578	21537	29090	36742	.	.
Imports from EU-27 (cif), cumulated	EUR mn	30321	36656	43086	48894	55868	63065	69902	75732	6091	12756	20792	28032	35236	.	.
Trade balance with EU-27, cumulated	EUR mn	246	209	68	49	385	773	869	696	464	822	745	1058	1507	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-1114	.	.	-2276	.	.	-5041	.	.	-1064	.	.	.	.
EXCHANGE RATE																
PLN/EUR, monthly average	nominal	4.410	4.508	4.297	4.131	4.158	4.215	4.165	4.144	4.070	4.014	3.891	3.878	4.057	4.106	4.081
PLN/USD, monthly average	nominal	3.231	3.217	3.050	2.895	2.856	2.845	2.792	2.836	2.852	2.933	2.867	2.893	3.229	3.363	3.196
EUR/PLN, calculated with CPI ⁴⁾	real, Jan07=100	91.5	89.4	94.5	97.7	97.0	95.7	97.0	97.1	99.8	101.2	103.9	104.2	99.7	98.7	99.3
EUR/PLN, calculated with PPI ⁴⁾	real, Jan07=100	91.9	90.2	93.9	96.8	96.3	95.0	95.6	95.9	97.1	98.2	100.5	101.2	98.1	97.6	98.5
USD/PLN, calculated with CPI ⁴⁾	real, Jan07=100	96.7	96.6	102.2	107.1	108.4	109.0	111.2	109.7	109.1	106.5	108.8	108.0	97.0	93.4	98.1
USD/PLN, calculated with PPI ⁴⁾	real, Jan07=100	96.3	95.5	100.2	103.6	105.4	105.5	105.8	103.6	101.3	99.1	99.9	99.6	90.4	88.3	93.3
DOMESTIC FINANCE																
Currency in circulation	PLN bn, eop	92.1	92.3	91.5	91.0	89.7	89.4	88.2	89.8	87.9	88.0	88.6	89.5	92.1	93.0	.
M1	PLN bn, eop	359.9	370.6	363.7	371.1	372.8	378.6	381.5	388.8	381.3	383.4	389.6	388.3	409.0	415.2	.
Broad money	PLN bn, eop	685.4	693.7	689.4	685.4	691.3	711.2	699.9	720.3	711.0	715.6	721.5	721.2	737.8	742.8	.
Broad money	CCPY	14.2	14.4	11.9	9.0	9.6	11.9	8.0	8.1	6.3	5.1	5.5	6.1	7.7	7.1	.
Discount rate (p.a.)	%, eop	4.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Discount rate (p.a.) ⁵⁾	real, %	-0.3	-0.7	0.5	1.0	1.6	1.2	1.4	1.3	3.4	6.1	6.2	4.1	1.9	1.6	.
BUDGET																
General gov. budget balance ⁶⁾ , cum.	PLN mn	.	-35661	.	.	-48397	.	.	-95728	.	.	-8492	.	.	.	.

1) Sold production.

2) Enterprises with 10 and more employees.

3) From 2004 intra-/extra-EU trade methodology.

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

5) Deflated with annual PPI.

6) According to ESA'95 excessive deficit procedure.

ROMANIA: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																
Industry, NACE Rev. 2 ¹⁾	real, CPPY	-10.1	-4.5	-4.1	-5.7	-3.4	-2.7	5.3	11.6	6.1	-0.4	7.0	7.8	6.0	6.7	.
Industry, NACE Rev. 2 ¹⁾	real, CCPY	-11.8	-10.5	-9.6	-9.2	-8.5	-7.9	-6.7	-5.5	6.1	2.7	4.3	5.2	5.3	5.6	.
Industry, NACE Rev. 2 ¹⁾	real, 3MMA	-8.2	-6.2	-4.7	-4.3	-3.8	-0.4	4.0	7.5	5.6	4.3	4.9	6.9	6.8	.	.
Construction, NACE Rev. 2	real, CPPY	-24.9	-4.4	-17.1	-24.6	-22.5	-26.2	-18.4	-6.9	-10.5	-27.7	-23.3	-14.4	-17.3	-5.2	.
Construction, NACE Rev. 2	real, CCPY	-9.5	-8.4	-10.0	-12.5	-14.1	-15.7	-16.0	-15.1	-10.5	-19.8	-21.3	-19.3	-18.9	-15.7	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	9381.3	.	.	9527.1	.	.	9026.9	.	.	8934.3	.	.	.	.
Employed persons, LFS	CCPPY	.	-1.0	.	.	-1.0	.	.	-1.3	.	.	-1.2	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	626.6	.	.	698.9	.	.	731.1	.	.	787.2	.	.	.	.
Unemployment rate, LFS	%	.	6.3	.	.	6.8	.	.	7.5	.	.	8.1	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	0.5	2.6	4.3	5.2	6.5	7.7	9.3	11.0	27.0	21.8	22.3	22.4	21.7	21.2	.
WAGES																
Total economy, gross ¹⁾	RON	1855	1887	1901	1845	1860	1881	1866	2023	1967	1940	2074	1973	1962	1951	.
Total economy, gross ¹⁾	real, CPPY	2.8	2.6	2.3	1.7	1.2	0.5	-3.3	-4.5	1.7	1.1	3.5	-1.9	1.3	-0.9	.
Total economy, gross ¹⁾	EUR	445	448	451	437	438	439	435	478	475	471	508	478	470	460	.
Industry, gross, NACE Rev. 2 ²⁾	EUR	409	414	431	419	425	419	419	469	430	431	479	452	450	449	.
PRICES																
Consumer - HICP	PP	0.0	0.2	-0.1	-0.2	0.4	0.4	0.7	0.3	1.7	0.2	0.2	0.3	0.1	0.2	2.6
Consumer - HICP	CCPY	5.9	5.9	5.0	4.9	4.9	4.3	4.6	4.7	5.2	4.5	4.2	4.2	4.4	4.3	7.1
Consumer - HICP	CCPPY	6.6	6.4	6.2	6.1	5.9	5.8	5.7	5.6	5.2	4.8	4.6	4.5	4.5	4.5	4.9
Producer, in industry, NACE Rev. 2	PP	0.4	0.6	-0.6	0.7	0.2	0.3	0.6	-0.2	1.0	0.2	0.9	1.3	1.3	0.4	.
Producer, in industry, NACE Rev. 2	CCPY	1.3	-0.1	-1.7	-1.2	-1.3	-0.8	2.5	4.1	3.2	2.8	4.4	5.6	6.5	6.2	.
Producer, in industry, NACE Rev. 2	CCPPY	4.2	3.5	2.7	2.2	1.8	1.5	1.6	1.8	3.2	3.0	3.5	4.0	4.5	4.8	.
FOREIGN TRADE ³⁾																
Exports total (fob), cumulated	EUR mn	11085	13643	16451	18661	21270	24009	26768	29116	2343	4917	7957	10845	13841	.	.
Imports total (cif), cumulated	EUR mn	15009	18322	21682	24648	28396	32047	35648	38891	2798	6007	9942	13692	17657	.	.
Trade balance, cumulated	EUR mn	-3924	-4679	-5231	-5987	-7126	-8037	-8880	-9775	-456	-1090	-1985	-2847	-3816	.	.
Exports to EU-27 (fob), cumulated	EUR mn	8289	10181	12256	13781	15785	17924	20017	21630	1771	3702	5925	8004	10191	.	.
Imports from EU-27 (cif), cumulated	EUR mn	11087	13589	16011	18072	20838	23595	26247	28511	1975	4279	7190	9904	12746	.	.
Trade balance with EU-27, cumulated	EUR mn	-2798	-3409	-3755	-4291	-5053	-5671	-6230	-6880	-205	-577	-1265	-1900	-2555	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-2417	.	.	-3484	.	.	-5167	.	.	-1483	.	.	.	.
EXCHANGE RATE																
RON/USD, monthly average	nominal	3.055	3.006	2.994	2.956	2.913	2.894	2.876	2.893	2.900	3.010	3.012	3.081	3.324	3.476	3.337
RON/EUR, monthly average	nominal	4.170	4.213	4.218	4.218	4.242	4.287	4.290	4.228	4.138	4.120	4.087	4.131	4.177	4.243	4.261
USD/RON, calculated with CPI ⁴⁾	real, Jan07=100	93.9	94.9	95.3	96.2	97.9	98.9	100.0	99.9	101.0	97.5	97.3	95.2	88.3	84.6	90.4
USD/RON, calculated with PPI ⁴⁾	real, Jan07=100	99.9	100.3	101.0	101.5	103.7	104.1	103.9	102.7	101.4	98.5	98.0	96.5	90.1	87.1	.
EUR/RON, calculated with CPI ⁴⁾	real, Jan07=100	88.8	87.9	88.1	87.7	87.6	86.8	87.2	88.5	92.4	92.6	92.9	91.8	90.7	89.4	91.5
EUR/RON, calculated with PPI ⁴⁾	real, Jan07=100	95.4	94.7	94.6	94.8	94.8	93.7	93.9	95.0	97.2	97.6	98.6	98.1	97.7	96.3	.
DOMESTIC FINANCE																
Currency in circulation	RON mn, eop	24171	24204	24455	24430	23865	23731	23762	23948	23800	24650	24230	24772	25515	.	.
M1	RON mn, eop	79911	81649	81430	82871	80538	78286	78652	79291	76535	76900	76405	76372	78583	54393	.
Broad money	RON mn, eop	177409	180207	181320	184128	183732	184185	185579	189464	185794	187745	189839	190922	192650	167620	.
Broad money	CCPY	12.7	11.5	12.4	13.5	10.6	13.3	12.6	8.8	5.5	6.5	8.3	8.3	8.6	-7.0	.
Discount rate (p.a.) ⁵⁾	% eop	10.0	9.7	9.5	9.0	8.5	8.5	8.0	8.0	8.0	7.5	7.3	7.0	6.5	6.3	6.3
Discount rate (p.a.) ⁵⁾⁶⁾	real, %	8.6	9.9	11.4	10.3	9.9	9.3	5.3	3.7	4.6	4.5	2.7	1.3	0.0	0.0	.
BUDGET																
General gov. budget balance ⁷⁾ , cum.	RON mn	.	-17591	.	.	-28423	.	.	-40791	.	.	-9027	.	.	.	.

1) Enterprises with 4 and more employees.

2) Including E (electricity, gas, steam, air conditioning supply etc.).

3) From 2007 intra-/extra-EU trade methodology.

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

5) Reference rate of RNB.

6) Deflated with annual PPI.

7) According to ESA'95 excessive deficit procedure.

S L O V A K REPUBLIC: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010						
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	-24.6	-18.3	-21.4	-8.1	-7.4	-7.1	2.5	12.5	19.3	20.2	19.5	20.3	28.8	23.8	.
Industry, NACE Rev. 2	real, CCPY	-22.0	-21.3	-21.4	-19.9	-18.5	-17.3	-15.6	-13.8	19.3	19.7	19.7	19.8	21.6	22.0	.
Industry, NACE Rev. 2	real, 3MMA	-20.7	-21.4	-16.2	-12.4	-7.5	-4.2	1.5	10.6	17.3	19.7	20.0	22.7	24.2	.	.
Construction, NACE Rev. 2	real, CPPY	-3.9	-0.3	-5.6	0.1	-16.9	-21.9	-13.3	-18.2	-8.1	-19.6	-12.9	-1.2	-8.8	-6.6	.
Construction, NACE Rev. 2	real, CCPY	-11.4	-9.2	-8.6	-7.4	-8.7	-10.3	-10.6	-11.3	-8.1	-14.5	-13.9	-10.0	-9.7	-9.0	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	2378.5	.	.	2366.9	.	.	2329.6	.	.	2283.1	.	.	.	.
Employed persons, LFS	CCPPY	.	-0.6	.	.	-1.8	.	.	-2.8	.	.	-4.5	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	302.4	.	.	339.2	.	.	374.9	.	.	407.4	.	.	.	.
Unemployment rate, LFS	%	.	11.3	.	.	12.5	.	.	13.9	.	.	15.2	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	-11.0	-9.3	-8.5	-6.2	-3.9	-2.0	0.3	2.5	39.9	38.5	36.0	34.1	34.2	32.8	.
WAGES																
Industry, gross, NACE Rev. 2 ¹⁾	EUR	739	775	752	728	743	761	874	839	744	736	779	772	779	829	.
Industry, gross, NACE Rev. 2	real, CPPY	-1.8	2.2	0.3	1.7	1.7	2.5	4.9	6.4	3.9	6.2	7.2	6.0	4.6	6.3	.
PRICES																
Consumer - HICP	PP	0.1	0.0	-0.1	-0.2	-0.1	0.2	0.3	-0.1	0.1	0.0	0.1	0.4	0.1	0.0	0.1
Consumer - HICP	CPPY	1.1	0.7	0.6	0.5	0.0	-0.1	0.0	0.0	-0.2	-0.2	0.3	0.7	0.7	0.7	1.0
Consumer - HICP	CCPPY	1.9	1.7	1.5	1.4	1.2	1.1	1.0	0.9	-0.2	-0.2	0.0	0.2	0.3	0.3	0.4
Producer, in industry, NACE Rev. 2 ²⁾	PP	-0.9	0.1	-0.5	-0.1	-0.1	0.0	0.6	-0.2	-1.0	-0.7	0.7	0.9	0.8	0.4	0.6
Producer, in industry, NACE Rev. 2 ²⁾	CPPY	-8.3	-7.5	-8.3	-8.2	-7.9	-8.2	-5.4	-3.7	-3.0	-4.5	-2.7	-1.1	0.5	0.8	1.9
Producer, in industry, NACE Rev. 2 ²⁾	CCPPY	-6.0	-6.3	-6.6	-6.8	-6.9	-7.0	-6.9	-6.6	-3.0	-3.7	-3.4	-2.8	-2.2	-1.7	-1.2
FOREIGN TRADE ³⁾																
Exports total (fob), cumulated	EUR mn	15476	18757	21856	25021	28763	32927	36854	40128	3116	6587	10725	14599	.	.	.
Imports total (fob), cumulated	EUR mn	15532	18865	21991	24991	28556	32392	36246	39648	3102	6594	10633	14365	.	.	.
Trade balance, cumulated	EUR mn	-55	-108	-135	30	207	535	608	480	14	-7	92	234	.	.	.
Exports to EU-27 (fob), cumulated	EUR mn	13292	16070	18655	21344	24602	28225	31670	34441	2707	5605	9085	12354	.	.	.
Imports from EU-27 (fob), cumulated	EUR mn	11614	14115	16448	18708	21377	24270	27172	29621	2173	4748	7727	10501	.	.	.
Trade balance with EU-27, cumulated	EUR mn	1678	1955	2207	2636	3226	3955	4498	4820	533	857	1358	1852	.	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-948	.	.	-1266	.	.	-2023	.	.	-246	.	.	.	.
EXCHANGE RATE ¹⁾																
EUR/USD, monthly average	nominal	0.7326	0.7135	0.7098	0.7009	0.6867	0.6749	0.6705	0.6843	0.7007	0.7307	0.7370	0.7459	0.7959	0.8191	0.7831
EUR/EUR, calculated with CPI ⁴⁾	real, Jan07=100	114.2	114.0	114.4	113.8	113.7	113.7	113.8	113.4	114.1	113.7	113.0	112.9	112.8	112.7	113.1
EUR/EUR, calculated with PPI ⁴⁾	real, Jan07=100	106.9	106.8	106.9	106.3	106.5	106.1	106.5	106.2	104.2	103.2	103.2	103.3	103.6	103.7	104.3
USD/EUR, calculated with CPI ⁴⁾	real, Jan07=100	120.8	123.1	123.7	124.8	127.1	129.4	130.5	128.1	124.7	119.6	118.3	117.1	109.7	106.7	111.7
USD/EUR, calculated with PPI ⁴⁾	real, Jan07=100	112.0	113.0	114.1	113.8	116.6	117.9	117.9	114.8	108.7	104.1	102.5	101.6	95.5	93.8	98.8
DOMESTIC FINANCE																
Currency in circulation ¹⁾⁵⁾	EUR mn, eop	6635	6645	6724	6690	6665	6697	6770	6984	6798	6819	6927	6946	7002	7065	.
M1 ¹⁾⁵⁾	EUR mn, eop	23304	23495	23326	22926	23121	22883	23570	24478	23500	23783	24052	24001	24796	24891	.
Broad money ¹⁾⁵⁾	EUR mn, eop	39631	38668	38295	38245	37795	37558	37871	38872	38256	38874	39044	39740	40048	39348	.
Broad money ¹⁾⁵⁾	CCPY	.	.	.	.	.	.	.	.	-5.2	-2.6	-1.2	1.0	1.1	1.8	.
Discount rate (p.a.) ⁶⁾	%, eop	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Discount rate (p.a.) ⁶⁾⁷⁾	real, %	10.2	9.2	10.2	10.0	9.7	10.1	6.7	4.8	4.1	5.7	3.8	2.2	0.5	0.2	.
BUDGET																
General gov. budget balance ¹⁾⁸⁾ , cum.	EUR mn	.	-1694	.	.	-2502	.	.	-4289	.	.	-937	.	.	.	.

1) Slovakia has introduced the Euro from 1 January 2009.

2) Data refer to industry total compared to previously published domestic producer prices.

3) From 2004 intra-/extra-EU trade methodology.

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

5) From January 2009 Slovakia's contributions to EMU monetary aggregates.

6) From January 2009 ECB official refinancing operation rate.

7) Deflated with annual PPI.

8) According to ESA'95 excessive deficit procedure.

SLOVENIA: Selected monthly data on the economic situation 2009 to 2010

(updated end of Aug 2010)

		2009								2010							
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
PRODUCTION																	
Industry, NACE Rev. 2	real, CPPY	-22.3	-21.4	-20.8	-17.6	-16.7	-19.5	-1.7	4.8	-8.7	-1.1	8.5	9.3	14.6	10.3	.	
Industry, NACE Rev. 2	real, CCPY	-21.4	-21.4	-21.3	-20.9	-20.4	-20.3	-18.8	-17.3	-8.7	-4.9	-0.2	2.1	4.5	5.5	.	
Industry, NACE Rev. 2	real, 3MMA	-24.5	-21.5	-20.1	-18.4	-18.0	-13.2	-7.0	-2.0	-1.8	-0.2	5.6	10.8	11.4	.	.	
Construction, NACE Rev. 2 ¹⁾	real, CPPY	-20.8	-15.9	-20.8	-19.5	-32.0	-28.3	-18.3	-9.5	-11.4	-24.2	-19.8	-17.8	-15.5	-16.9	.	
Construction, NACE Rev. 2 ¹⁾	real, CCPY	-19.9	-19.1	-19.4	-19.4	-21.2	-22.1	-21.8	-21.0	-11.4	-18.3	-18.9	-18.6	-17.9	-17.7	.	
LABOUR																	
Employed persons, LFS	th. pers., quart. avg	.	980.5	.	.	998.3	.	.	982.2	.	.	964.8	.	.	.	.
Employed persons, LFS	CCPPY	.	-1.0	.	.	-1.4	.	.	-1.6	.	.	0.3	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	57.7	.	.	65.3	.	.	67.1	.	.	73.9	.	.	.	.
Unemployment rate, LFS	%	.	5.6	.	.	6.2	.	.	6.4	.	.	7.1	.	.	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	-14.5	.	.	-12.5	.	.	-8.2	.	.	9.6	.	.	.	.
WAGES																	
Total economy, gross	EUR	1415	1429	1424	1415	1434	1448	1571	1488	1448	1431	1499	1483	1475	1492	.	
Total economy, gross	real, CPPY	3.5	4.6	4.4	0.6	2.4	1.5	-0.5	0.0	0.4	2.0	3.4	1.5	1.7	2.2	.	
Industry, gross, NACE Rev. 2	EUR	1195	1231	1236	1223	1252	1280	1430	1319	1285	1263	1395	1330	1311	1339	.	
PRICES																	
Consumer - HICP	PP	0.6	0.5	-0.8	0.1	-0.1	0.1	0.8	-0.4	-0.6	0.3	1.0	1.1	0.4	0.2	-0.6	
Consumer - HICP	CCPY	0.5	0.2	-0.6	0.1	0.0	0.2	1.8	2.1	1.8	1.6	1.8	2.7	2.4	2.1	2.3	
Consumer - HICP	CCPPY	1.3	1.1	0.9	0.8	0.7	0.6	0.8	0.9	1.8	1.7	1.7	2.0	2.1	2.1	2.1	
Producer, in industry, NACE Rev. 2 ²⁾	PP	-0.6	0.3	-0.2	0.1	0.3	0.0	-0.3	-0.2	0.1	0.4	0.3	0.7	1.3	0.3	0.2	
Producer, in industry, NACE Rev. 2 ²⁾	CCPY	-1.7	-2.4	-3.1	-3.4	-2.9	-2.4	-2.1	-1.4	-1.7	-1.5	-0.4	0.8	2.8	2.8	3.3	
Producer, in industry, NACE Rev. 2 ²⁾	CCPPY	0.2	-0.2	-0.7	-1.0	-1.2	-1.3	-1.4	-1.4	-1.7	-1.6	-1.2	-0.7	0.0	0.5	0.9	
FOREIGN TRADE ³⁾																	
Exports total (fob), cumulated	EUR mn	7625	9236	10845	12117	13850	15610	17312	18768	1445	3020	4985	6754	8598	.	.	
Imports total (cif), cumulated	EUR mn	7663	9195	10800	12190	13908	15688	17438	19004	1453	3066	5015	6823	8755	.	.	
Trade balance total, cumulated	EUR mn	-38	41	45	-73	-57	-77	-126	-237	-9	-47	-30	-70	-157	.	.	
Exports to EU-27 (fob), cumulated	EUR mn	5324	6453	7538	8382	9614	10844	12036	12998	1099	2252	3652	4932	6235	.	.	
Imports from EU-27 (cif), cumulated	EUR mn	5311	6426	7596	8590	9809	11093	12332	13476	987	2065	3443	4688	6018	.	.	
Trade balance with EU-27, cumulated	EUR mn	14	27	-58	-207	-195	-249	-295	-478	112	186	209	244	217	.	.	
FOREIGN FINANCE																	
Current account, cumulated	EUR mn	.	-240	.	.	-475	.	.	-526	.	.	-94	.	.	.	.
EXCHANGE RATE																	
EUR/USD, monthly average ⁴⁾	nominal	0.7326	0.7135	0.7098	0.7009	0.6867	0.6749	0.6705	0.6843	0.7007	0.7307	0.7370	0.7459	0.7959	0.8191	0.7831	
EUR/EUR, calculated with CPI ⁵⁾	real, Jan07=100	103.4	103.7	103.4	103.1	103.0	102.9	103.5	102.8	102.7	102.6	102.9	103.6	103.8	104.0	103.6	
EUR/EUR, calculated with PPI ⁵⁾	real, Jan07=100	99.9	99.9	100.2	99.9	100.5	100.1	99.5	99.3	98.5	98.6	98.3	98.1	98.9	98.9	99.1	
USD/EUR, calculated with CPI ^{4/5)}	real, Jan07=100	109.4	112.0	111.8	113.0	115.1	117.2	118.7	116.1	112.3	108.0	107.8	107.4	101.0	98.4	102.4	
USD/EUR, calculated with PPI ^{4/5)}	real, Jan07=100	104.7	105.7	107.0	106.9	110.0	111.3	110.2	107.3	102.8	99.5	97.6	96.5	91.2	89.5	93.9	
DOMESTIC FINANCE																	
Currency in circulation	EUR mn, eop	3136	3131	3166	3147	3151	3172	3182	3288	3228	3235	3276	3273	3310	3339	.	
M1	EUR mn, eop	7184	7419	7135	7279	7340	7224	7330	7419	7449	7429	7617	7663	7976	8159	.	
Broad money	EUR mn, eop	18606	18652	18244	18237	18241	18077	18115	18185	18250	18001	18168	18127	18359	18622	.	
Broad money	CCPY	13.6	12.4	9.3	9.4	6.9	7.4	3.7	0.7	0.8	0.3	-1.3	-0.2	-1.3	-0.2	.	
Discount rate (p.a.) ⁶⁾	%, eop	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Discount rate (p.a.) ^{6/7)}	real, %	2.7	3.5	4.2	4.6	4.0	3.5	3.2	2.4	2.7	2.5	1.4	0.2	-1.7	-1.7	-2.2	
BUDGET																	
General gov. budget balance ⁸⁾ , cum.	EUR mn	.	-1121	.	.	-1463	.	.	-1915	.	.	-786	.	.	.	.

1) Enterprises with 20 and more employees or turnover limits and output of some non-construction enterprises.

2) Data refer to industry total compared to previously published domestic producer prices.

3) From 2004 intra-/extra-EU trade methodology.

4) Reference rate from ECB.

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

6) From January 2007 ECB official refinancing operation rate.

7) Deflated with annual PPI.

8) According to ESA'95 excessive deficit procedure.

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