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Austria's relations with Russia

BY VASILY ASTROV

Political aspects

The general public opinion in Austria lacks the pronounced negative sentiments towards Russia as are typically observed in many other Central European countries. Austria has never been part of either the Warsaw Pact or COMECON and thus has never been under the Soviet 'sphere of influence' – the presence of the Soviet troops on the Austrian territory in the first years after World War II notwithstanding. However, in concession to the Soviet Union made by the Western powers, the State Treaty of Austria signed in 1955 stipulated its neutral status (preserved until now).

On the EU political scene, Austria has been a staunch advocate of extending and deepening relations with Russia. In line with the Austrian approach, the Partnership and Cooperation Agreement (PCA) between the EU and Russia which expired in 2007 (but has been automatically prolonged ever since) has to be amended and upgraded to reflect the new realities of intense economic cooperation and to extend to issues beyond the already existing 'energy dialogue'. The Austrian approach is that cooperation with Russia should proceed within the framework of the existing 'four common spaces' and envisage a start of free trade negotiations, once Russia has joined the WTO (the latter has been repeatedly delayed). At the same time, while Austria acknowledges Russia as one of the most important strategic partners of the EU, it also puts emphasis on the so-called 'common values' which should form the foundation of EU-Russia cooperation. Similarly to most EU countries, Austria has recognized the independence of Kosovo (in sharp contrast to the Russian foreign policy line) and has repeatedly voiced concerns over the situation with human rights and the media freedom in Russia.

Economic relations

Trade

In the past few years, bilateral trade between Russia and Austria has been expanding strongly. By 2008, the bilateral trade turnover exceeded EUR 5 billion (although in 2009, a severe slump is inevitable against the background of the financial crisis) – see Table 1. The dynamics has been more impressive on the export side, as Austrian exporters took advantage of the booming Russian economy and its surging demand for consumer and investment goods. At the same time, the growth in Austria's imports from Russia (with a temporary dip in 2007 explained by the diversification of Austria's energy supplies away from Russia) reflected first of all the rising prices of energy carriers, which account for the bulk of Russian exports to Austria. In 2009, imports from Russia should fall dramatically on account of both the declining volumes and the plunging price of natural gas, which is linked to the oil price with a 6-months lag. The more vigorous export dynamics meant that since 2007, Austria has been recording surpluses in its trade with Russia which will be probably sustained at least in the medium run in the environment of low energy prices. Despite the recent vibrant dynamics, Russia is still a relatively minor trading partner for Austria, accounting for just about 2% of both exports and imports (and ranking 11th and 14th, respectively, in 2007). Russia as an export destination is relatively important for Austria's chemical industry though, accounting for some 5% of the country's total exports of chemicals.

Some 80% of Austria's imports from Russia are represented by mineral products, largely oil and gas. The share of manufactured products has been on the rise (starting from a low base), but still stands at just above 10%. This structure squares well with Russia's overall narrow pattern of specialization in the world markets and is indicative of the country's relative economic backwardness,

at least when mirrored in export statistics. Predictably, the structure of Austrian exports to Russia is considerably more diversified and focused on manufactured goods with relatively high value-added: machinery, chemical products and manufactured goods combined account for around three-quarters of Austrian exports to Russia, with generally constant shares over time (Table 1).

Table 1

Austria's trade with Russia in 2005-2008

	Imports from Russia			
	2005	**2006**	**2007**	**2008***
Total imports, in EUR million	*2262*	*2399*	*1832*	*2497*
as % of total:				
Food and live animals	0.2	0.2	0.3	0.2
Beverages and tobacco	0.1	0.1	0.1	0.0
Crude materials, inedible	3.6	3.2	3.3	2.8
Mineral fuels	87.1	84.1	77.3	84.1
Oils, fats and waxes	0.0	0.0	0.1	0.0
Chemicals	1.0	1.4	1.4	1.0
Manufactured goods	6.9	9.9	15.8	10.8
Machinery and transport equipment	0.7	0.6	0.9	0.8
Miscellaneous	0.4	0.4	0.7	0.3
Not classified	0.0	0.0	0.0	0.0

	Exports to Russia			
	2005	**2006**	**2007**	**2008***
Total exports, in EUR million	*1701*	*2254*	*2585*	*2971*
as % of total:				
Food and live animals	4.9	5.1	5.0	4.7
Beverages and tobacco	0.6	1.0	1.3	1.3
Crude materials, inedible	0.4	0.6	0.5	0.5
Mineral fuels	0.0	0.0	0.1	0.4
Oils, fats and waxes	0.1	0.1	0.1	0.1
Chemicals	25.7	25.8	25.4	27.5
Manufactured goods	14.0	15.2	15.5	16.2
Machinery and transport equipment	36.9	37.7	37.7	37.4
Miscellaneous	17.4	14.4	14.4	11.8
Not classified	0.0	0.0	0.0	0.0
Trade balance, in EUR million	*-560*	*-144*	*753*	*474*

* preliminary

Source: Own calculations based on data from the Austrian Statistical Agency.

Investments

Over the past few years, bilateral investments between Austria and Russia have been developing relatively dynamically, partly due to the investment-related provisions of the Russia-EU Partnership and Cooperation Agreement (PCA), envisaging *inter alia* the 'national treatment' principle for foreign investors. (In practice, though, various benefits granted by regional Russian authorities to attract foreign investment proved to be more important, whereas on the Austrian side, political considerations appear to have played a role – more on that, see below.)

According to Austrian statistics, the stock of Austrian foreign direct investment (FDI) in Russia has reached some EUR 2 billion (EUR 1.8 billion at the end of 2006). Overall, there are over 1200 Austrian companies operating in Russia, of which 150 have their offices in the country. The biggest Austrian investor in Russia is *Raiffeisen Group*, which owns *Raiffeisenbank Austria* – the biggest foreign-owned bank and the seventh biggest bank in Russia. Apart from operating directly in the Russian market, *Raiffeisen* is doing business with Russian (and Ukrainian) businessmen also via its Austrian subsidiaries. Thus, on behalf of two Ukrainian businessmen, D. Firtash and I. Fursin, *Raiffeisen Investment* holds a 50% equity stake in *RosUkrEnergo* – a Switzerland-registered joint venture with Russian *Gazprombank*, which up until the end of 2008 was the exclusive supplier of (mostly Turkmen) gas to Ukraine.[1] Also, *Raiffeisen Holding* was instrumental in refinancing *Basic Element* of Russia (belonging to oligarch Oleg Deripaska), in order to enable him to retain his 25%+ stake in Austria's *Strabag*, which he had acquired earlier but was on the verge of selling in view of the mounting difficulties stemming from the current financial crisis.

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[1] The new Russian-Ukrainian gas agreement signed in January 2009 eliminated RosUkrEnergo as intermediate trader.

Among other examples of Austrian investments in Russia are the takeover of a paper factory in Syktyvkar by *Mondi Business Paper* in 2002; a particle board and laminate factory of *Kindle Kronospan,* which started production in the Moscow region in 2004; a slab factory in Ivanovo region owned since 2006 by *Egger;* a brick-producing plant in Vladimir region owned by *Wienerberger*, and a tiling plant in Ufa owned by *Lasselsberger*. Besides, two plants – a plant producing window fittings by *Mayer & Co* and a steel mill of *Unger Stahl* – are currently under construction in Kaluga. Other Austrian companies which invested in Russia include *Kronotex, Steyr Motors, Andritz, Meinl European Land*, and *AVL*.

According to statistics of the Austrian National Bank, at the end of 2006 the Russian FDI stock stood at a mere EUR 461 million, accounting for just 0.5% of the total (this share is comparable, e.g., to that of Belgium or Spain). However, just as elsewhere, when it comes to Russian FDI statistics, these figures are to be treated with caution, since the bulk of Russian investments typically go via the so-called 'off-shore zones' (such as Cyprus or the Virgin Islands). The distortion appears to be even greater when one looks at Russian outward FDI statistics. On that basis, the role of Russia as a foreign investor in Austria is negligible: at the end of 2007, the stock of Russian FDI in Austria stood at a negligible EUR 1.4 million, although the country ranked as the tenth most important destination for Russian outward FDI.

Probably a more realistic estimate of the degree of Russian capital involvement in Austria available from the press yields a figure of about EUR 1 billion – only half the stock of Austrian FDI in Russia. So far, the biggest Russian investment project in Austria has been the EUR 1.05 billion worth acquisition of a blocking stake (25%+) in the construction company *Strabag* by *Basic Element*, belonging to the Russian oligarch Oleg Deripaska, in April 2007. The deal may have had also political repercussions, as Mr. Deripaska is believed to be

close to the Russian prime-minister (in 2007 still president) Vladimir Putin. Following the deal, *Strabag* reportedly tripled its order volume in Russia (to EUR 3 billion), as it received preferential access to numerous projects within Russia's booming construction industry, including the airport reconstruction in Sochi ahead of the winter Olympic Games scheduled to take place in 2014. (More recently, some of *Strabag*'s projects in Russia and Kazakhstan such as cement production have been put on hold due to the financial crisis.) In another move (also in 2007), *Basic Element* purchased a EUR 1.1 billion worth 17% stake in *Magna* (the Canadian-registered automotive supplier operating in Austria), although it had to sell its stake a year later under the impact of the financial crisis. Also, a consortium of *Magna* and the Russian state-owned *Sberbank* is currently negotiating over a takeover of a 55% stake in the troubled German carmaker *Opel* (although the German-Russian political relations may play an even bigger role behind the possible deal).

Finally, anecdotal evidence suggests that Austrian banks often serve as a 'safe haven' for (often shady) Russian capital, including that owned by or closely linked to top Russian officials. This is to a large extent due to Austrian banking secrecy laws, which put the country almost at par with e.g. Switzerland or Luxembourg. Official and tourist trips by Russian politicians and businessmen to Austria are often combined with visits to Austrian banks.

Cooperation in the energy sector

Traditionally, Austria has been an importer of both Russian crude oil and natural gas, although the relative share of the latter country in these two product groups is vastly different (see Table 2). It is rather modest when it comes to oil: according to the Austrian Statistical Agency, in 2006 Russia accounted for just 6.6% of Austria's oil imports. Thus, statistically, Russia is Austria's fifth biggest oil supplier, although its real role is probably bigger given that some top spots are occupied by the

transit – rather than the oil-producing – countries. At the same time, the second spot was occupied by oil-producing Kazakhstan, whose share exceeded that of Russia by 2 percentage points.

Table 2

Austria's energy imports in 2006

	Oil		Natural gas
Total imports, EUR bn	7.38	Total imports, EUR bn	2.44
by country, as % of total imports			
Germany	38.4	**Russia**	**62.7**
Kazakhstan	8.6	Norway	15.3
Nigeria	7.0	Germany	11.2
Slovakia	6.6	Italy	4.9
Russia	**6.6**	Belgium	1.8

Source: Austrian Statistical Agency and own calculations.

In terms of natural gas, the importance of Russia for Austria is much greater, standing at 62.7% of Austria's natural gas imports in 2006. This share is considerably above the EU average (24-25%), but below the shares observed e.g. in Hungary, Slovakia, Bulgaria, the Baltic states or Finland. Austria's relatively high dependence on Russian gas is explained by the relative geographical proximity and the existing infrastructure, given that some of the major gas pipelines from Russia to Europe run via Austrian territory, most notably the Bratstvo (Brotherhood) pipeline. Austria was the first West European country to sign a long-term gas contract with the Soviet Union back in 1968 (on the Austrian side, the contract was signed by the state-controlled energy company *OMV*). Since then, the shipments of Russian gas to Austria have been generally reliable,[2] explaining not least the benevolent attitude of the latter country towards energy cooperation with Russia – the current EU debate on energy supply diversification notwithstanding. In 2006, *OMV* signed a new contract with *Gazprom* for 2012-2027, envisaging

supplies of 7 billion cubic metres of natural gas per year. According to the contract terms, 2 out of 3 gas distributors in Austria are *Gazprom*'s subsidiaries, which also have access to the Austrian retail market (similar provisions are envisaged e.g. in *Gazprom*'s contracts with Italy, France and Bulgaria). In particular, *Gazprom* is entitled to sell nearly 50% of consumed gas in several federal provinces (*Bundesländer*) of Austria.

More importantly, Austria is a crucial gas supply hub for a number of European countries. It receives Russian gas by pipeline through Ukraine and Slovakia, and transits some 60 billion cubic metres of gas per year further to countries such as Italy, France, Hungary, Germany, Slovenia and Croatia. Partly, this transit is being operated by *GWH (Gas und Warenhandelsgesellschaft)* – a joint venture between *OMV, Centrex* and *Gazexport*, a 100%-subsidiary of *Gazprom* which holds a 50% stake in *GWH*. Also, *Gazprom* has signed an agreement on the construction of Austria's largest underground gas storage facility with a capacity of 2.4 billion cubic metres at Haidach (near Salzburg) in a consortium with Austria's *RAG* and *Wingas* – a joint venture between *Gazprom* and Germany's *Wintershall*.

Initially, *OMV* and Austria were one of the main driving forces behind the proposed 'Nabucco' pipeline, which would bring natural gas from Central Asia (notably the Caspian basin), Iran, Iraq and possibly Syria and Egypt to Europe. The original idea behind Nabucco was that the pipeline reduces the EU's dependence on Russia by drawing on natural gas deposits outside Russia and transporting this gas circumventing the Russian territory. However, as problems surrounding Nabucco were mounting[3], *OMV* took a

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[2] The major exceptions have been the Russian-Ukrainian gas price disputes in January 2006 and, particularly, in January 2009.

[3] The latter included the questionable economic reasoning, the geopolitical risks in some of the countries involved (separatist problems in Azerbaijan and Georgia and Kurdish terrorist activities in eastern Turkey), the position of Turkey eager to take part of the Nabucco gas for itself and, last but not least, the concerns over the sufficient availability of gas for Nabucco in case Iran (which accommodates the world's

more ambivalent stance, although the optimistic rhetoric surrounding Nabucco has been generally preserved and Austria was one of the signatories to the inter-governmental agreement on Nabucco in Ankara on 13 July 2009.

In particular, since 2007 *OMV* has undertaken at least three Gazprom-friendly moves:

(1) In early 2008, it indicated the possibility of incorporating *Gazprom* into Nabucco by injecting into it Russian gas supplied via the Blue Stream pipeline on the seabed of the Black Sea. If implemented, this move would contradict the original idea behind Nabucco (to diversify European gas supplies away from Russia), but might potentially solve the problem of gas availability for the Nabucco pipeline.

(2) Under the 'Agreement of Intent' signed in November 2008, a 50% stake in the important Baumgarten gas terminal close to Vienna, which is to be expanded and renamed into Central European Gas Hub (CEGH), is to be sold to *Gazprom*.[4] The terminal includes a trading platform and gas storage facilities to be supplied with *Gazprom*'s gas; the stated goal is to transform the terminal into the biggest natural gas hub in Central Europe.

(3) *OMV* has also preliminarily agreed to join the South Stream gas pipeline project sponsored by Russia's Gazprom and Italy's ENI, which would supply Russian gas via the seabed of the Black Sea from Russia to Bulgaria and further to other EU countries, with the northern branch going via Serbia and Hungary to Austria. (The negotiations on a possible deal are currently going on at the time of writing this report.) This potentially means that the Austria-based Baumgarten terminal – originally designated for Nabucco – might be supplied with gas coming from South Stream rather than from Nabucco.

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second largest natural gas reserves, behind Russia) is excluded from the project under pressure from the US.

4   As envisaged in the agreement, upon completion of the transaction in 2009, two of Gazprom's fully-owned subsidiaries – Gazprom Germania and Centrex Europe Energy & Gas – will hold 30% and 20% of CEGH, respectively, with the rest to be shared between OMV (30%) and the Vienna Stock Exchange (20%). However, in any case, the transaction would be subject to approval by the EU regulatory and competition authorities.

The structure of jobs across the EU: some qualitative assessments[*]

BY ROBERT STEHRER, TERRY WARD[**]
AND ENRIQUE FERNÁNDEZ MACÍAS[***]

The number of people in employment in the EU as a whole has tended to increase over the past decade. The proportion of working-age population (those aged 15-64) in employment – the employment rate – has risen almost continuously since the mid-1990s and though the slowdown in economic growth in the early part of the present decade dampened the rate of increase, it did not bring it to an end, unlike in previous such periods. Policy-makers responsible for the European Employment Strategy, which has been raising the employment rate as one its central objectives, point to some success.

The performance in achieving the other main objective of the Employment Strategy, that of improving job quality, remains uncertain. There have been few systematic attempts to throw light on developments as regards this strand of the policy, primarily because of the difficulty of both defining and measuring job quality.

Up to now, the approach adopted in studies of job quality has, for the most part, been to identify the various dimensions of that quality and to try to assess how they have changed over time. The dimensions concerned are many in number. They include pay, productivity, the nature of the employment contract, access to training and the length of working hours as well as more subjective aspects such as job satisfaction, the degree of responsibility for the work undertaken and the

prospects for career advancement. These, it should be evident, vary considerably in terms of their measurability, their relative importance and the extent to which they are likely to be comparable across different countries with different social norms and institutional arrangements.

The analysis of the European labour markets reported here is based on a method which was originally proposed by Joseph Stiglitz in 1996[1], and subsequently refined and expanded by the American sociologist Erik Olin Wright[2]. The basic idea is relatively simple: instead of studying employment changes directly in terms of the number of individuals in work, it considers employment in terms of jobs, which are defined as specific occupations within specific sectors (for instance, secretaries in the construction industry or machine operators in textile manufacturing). Within each national labour market and using the year in the middle of the period being examined as a base, these jobs are ranked according to the median hourly wage or the average educational attainment level of job-holders (which are taken as measures of job quality), and grouped into quintiles (that is, five equal-sized groups ranked in terms of wage or education levels from high to low). The change in the number of people employed in each of these quintiles over a specific period (1995 to 2005 in the case of the present article) indicates where in the wage or skill hierarchy employment is growing and where it is declining or expanding more slowly. In this way, changes in employment can be analysed from both a quantitative perspective (i.e., the change in the number of people employed) and a qualitative perspective (i.e., what kind of jobs are being created and destroyed over the period in terms of their relative wage and educational levels).

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[1] Council of Economic Advisors (1996), 'Job creation and employment opportunities: the United States labour market, 1993-1996', Office of the Chief Economist, Washington DC.

[2] Erik O. Wright and Rachel E. Dwyer (2003), 'Patterns of job expansions in the USA: a comparison of the 1960s and 1990s', *Socio-Economic Review* (2003)1, pp. 289-325.

The relationship between wage hierarchies across the EU

The set of wage quintiles estimated for each country can be correlated with every other country in turn to produce a matrix of correlation coefficients. These indicate that the correlation between the wage hierarchies in each pair of countries is relatively close in nearly all cases, suggesting that – in these broad terms at least – the structure of relative wages is similar in different parts of the EU.

The countries in which relative wages are least well correlated with those in other countries are Estonia, Latvia and Lithuania, particularly the last two. Indeed, for Latvia and Lithuania, the only countries with which there is a reasonably close correlation of the structure of relative wages with each other, this might reflect the fact that these two countries have the lowest levels of GDP per head of those included in the analysis. Accordingly, a somewhat different pattern of balances between supply and demand in the labour market might be expected. The other countries for which the correlation appears to be comparatively weak are Greece and Cyprus, which may reflect their somewhat different structure of economic activity as compared with other EU member states. Apart from the three Baltic States, there is little sign of any significant difference between the wage hierarchies in the new member states and those in the rest of the EU, and accordingly little evidence at this broad level of wage setting arrangements being radically different. The correlation results also indicate that for most countries, the closest relationship in relative wages is with neighbouring or similar countries.

The implication of the correlations is that the wage structure is relatively similar in most EU member states, at least when measured in terms of quintiles. The further implication is that as well as using relative wages in each country as an indicator of job quality and how this is tending to change over time, the possibility is opened up of comparing job quality in different parts of the EU by applying a common measure of relative wages. In other words, the results of the correlation exercise suggest that it is possible to carry out a cross-sectional analysis of job quality on the basis of wage quintiles in addition to a time-series analysis. Moreover, by the same token, the results also suggest the possibility of assessing the change in job quality in the EU as a whole on the same basis.

Differences in the extent of wage dispersion

Although the structure of relative wages may be similar across EU countries, there are still marked differences in the extent of dispersion of wages, between the median wage paid by jobs at the top of the wage hierarchy and that paid by those at the bottom. While this is left out of account in the analysis here since the concern is with relative wage – and education – levels as indicators of relative job quality, it is, nevertheless, of interest to consider variations in wage dispersion across countries, or how much better paid jobs in the upper part of the wage ranking are as compared with those in the lower part.[3]

Figure 1

Wage dispersion in EU member states, 1995-2004

Average gross wage, top quintile/bottom quintile
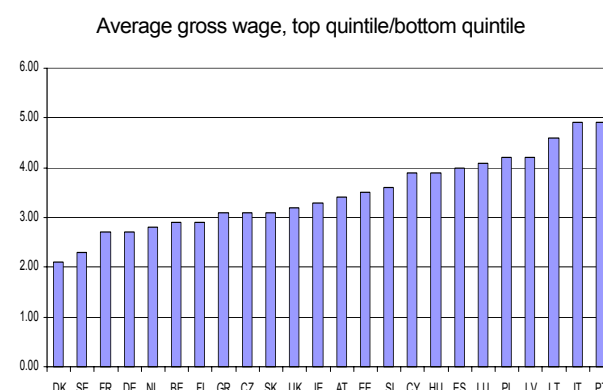
The average hourly wage of jobs in the top quintile of the ranking (ranked by the hourly median wage) relative to that of jobs in the bottom quintile,

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[3] It should be noted that this aspect does not feature in US or other single country studies in this area which focus on relative wages in the economy as a whole rather than on those in different parts or regions of the economy.

therefore, varies from just over 2 in Denmark and Sweden – i.e., the average wage for the former jobs is twice as high as the average for the latter – to close to 5 in Italy and Portugal (Figure 1). In general, the countries with the widest dispersion, with the biggest gap between the highest paid jobs and the lowest paid are those in the south of the EU-15, apart from Greece (in which perhaps surprisingly the extent of wage dispersion is relatively low) and the new member states, apart from the Czech Republic and Slovakia.

EU countries vary markedly, therefore, in terms of the distribution of earnings, which reflects institutional and structural differences (such as in the size of the agricultural sector, which is still substantial in Poland) as well as in education levels (which remain extremely wide in Portugal, where over 70% of those aged 25-64 have no education beyond basic schooling and only just over 10% have a university degree or the equivalent).[4]

The contrast between the structures of wages in relative and absolute terms seems to suggest that similar relative wage structures across countries can co-exist with substantial differences in the absolute extent of wage dispersion – in other words, that a broadly similar structure of relative pay and education levels can be stretched to a greater or lesser extent depending on the underlying characteristics of the economic and social system.

The relationship between skill rankings across the EU

Just as in the case of jobs ranked by relative wages, the ranking of jobs in terms of skill content in different countries can also be compared with each other. This is done in the same way as for the structure of relative wages above, namely by calculating the correlation coefficient between the

skill rankings, as measured by quintiles, in each pair of countries in turn. All the pair-wise results turn out to be highly significant in statistical terms. The correlation coefficient is above 0.8 for all pairs of countries, except for the three Baltic States, though even for these counties, they are relatively high. All this suggests that the same kind of job in different countries requires broadly similar skill levels, at least in relative terms, which is perhaps only to be expected.

The similarity of the job rankings across countries is confirmed by more detailed analysis. Workers classified in the same job in different parts of Europe, therefore, tend to have similar relative wages and similar relative education levels. As indicated above, although the wage structures are very different in absolute terms, they seem to be quite similar in relative terms – i.e. in terms of the relative positions of different jobs.

This may relate to the fact that all the countries covered are (more or less) advanced capitalist economies, with in most cases relatively similar employment structures. At the same time, a number of the countries covered – the new member states – have only comparatively recently become market economies and have been undergoing considerable structural change over the past 15-20 years. It is perhaps less expected that these countries would also have much the same ranking of jobs in terms of wages, in particular, as the EU-15 countries. Indeed, apart from the three Baltic States, it is difficult to detect any difference between these countries and the others in terms of the correlations.

Relationship between wage and education rankings of jobs

The ranking of jobs in terms of relative wage and education levels can be used to throw light on the relationship between the two and, accordingly, on the returns to education. The degree of correlation between the two rankings is, therefore, a measure of the match between education and wages, at least in terms of their relative quintile positions in the two distributions of jobs.

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4   For the link between education levels and the distribution of earnings, see A. B. Atkinson (2007), 'The distribution of earnings in OECD countries', *International Labour Review*, Vol. 146, No. 1, pp. 41-60 and for details of the education levels themselves, see OECD (2007), 'Education at a glance 2007', OECD Indicators.

Two points need to be emphasized, however, in relation to this analysis. First, it relates to jobs rather than individuals and, accordingly, takes no account of pay differences (e.g. gender) between individuals in the same jobs. Second, it measures the relative rather than the absolute economic – or financial – return, i.e. the position of a given job with a particular average education level in the relative wage hierarchy.

At the same time, there are advantages of focusing on relative rather than absolute returns in so far as this is intrinsically more comparable across countries than absolute returns, while the fact that the focus is on jobs rather than individuals is likely to reduce the influence of the specific characteristics of individuals on the results.

The correlation between the ranking of jobs by wages and education is relatively close for most countries (the Spearman rank correlation coefficient being over 0.5 in all but 4 countries; see Figure 2).

Latvia, Belgium, Greece, Estonia, Cyprus and Finland show relatively low correlations. The closest correlations (with a rank correlation coefficient of over 0.7) are in the Czech Republic, Slovenia, Germany and Italy.

Another (and more informative) way of considering the correlation between the wage and education ranking of jobs is to examine the division of jobs in each education quintile, as defined above (i.e. the 20% of jobs with the lowest education level, the 20% with the next lowest and so on), between wage quintiles.

In most countries there is a relatively close match between skill and wage quintiles. The lowest wage quintile is not only dominant in the lowest education quintile but also in the second and, in some cases, the third (for instance, in Cyprus, Estonia, France, Latvia and Slovakia). Jobs requiring a high level of education, therefore, typically tend to pay a relatively high wage, or alternatively jobs which pay a high wage demand relatively high education levels. On the other hand, jobs with a relatively low

wage are not necessarily performed by those with the lowest education levels. This indicates an asymmetry in the relationship between the ranking of education and wages: a high level of education seems to be a requirement for accessing high paid jobs, but low paid jobs can effectively be performed by anybody irrespective of their level of education. A university degree does not prevent someone from doing a low level job but having only basic schooling does prevent someone from doing a high level job.

Figure 2

Rank correlation of skills and wages in each country, 1995-2004
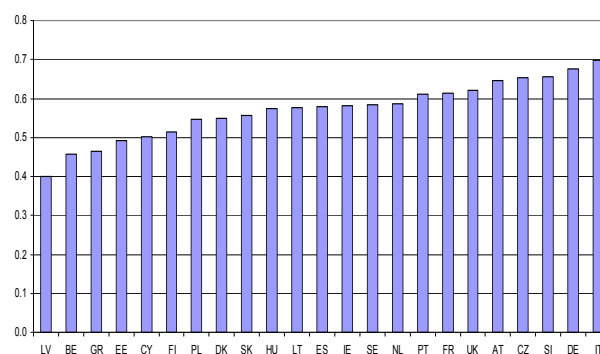
Wage and education ranking of 'men's' and 'women's' jobs

The mismatch between the wage and education ranking of jobs seems to be linked to the division of jobs between men and women. In particular, jobs which are predominantly filled by women tend to have a higher ranking in terms of education than in terms of wage, while for those predominantly filled by men, the opposite is the case. To show this, jobs have been divided between 'female-dominated' ones in which women make up over 65% of those employed in them (around 30% of total employment), 'male-dominated' ones where men make up more than 65% (around 40% of total employment) and 'mixed jobs', the rest (around 30% of total employment).

The results are striking. Predominantly female jobs are ranked higher on average in terms of education than in terms of wages in nearly all countries, while predominantly male jobs are ranked higher in terms

of wages than education. This is the case for all countries except Austria, Germany, Luxemburg and Slovenia, where there is no clear difference between the two types of jobs. For the mixed jobs, there is no clear pattern across countries.

Gender composition of the jobs

A further question arises as to the relative ranking of predominantly men's and predominantly women's jobs in terms of wages and education. This has a bearing, in particular, on the wage gap between men and women, which, as is well known, is significant throughout the EU. The fact that men on average earn more than women does not in itself imply that women tend to be employed in lower paid, and possibly, lower skilled jobs. Instead, it could be the case that women are paid less than men for doing the same kind of job. Examining the relative ranking of jobs which are predominantly filled by men and of those predominantly filled by women throws some light on the issue.

Figures 3 and 4 show the relationship between the average ranking of male- and female-dominated jobs in terms of wages and education levels in each country, the average ranking being calculated as the weighted average of the proportion of each kind of job in each quintile.[5] They indicate that male-dominated jobs tend to have a higher average ranking in terms of wages than female-dominated ones in all countries apart from Slovenia and Hungary – i.e., all countries are above the 45 degree line, except Slovenia which is below and Hungary which is on the line.

In terms of education, the picture is less clear-cut, though in most countries, female-dominated jobs have a higher average ranking than male-dominated jobs, the only exceptions being Austria, the Czech Republic, Germany, the Netherlands

and Luxembourg, where the opposite is the case. Jobs in which women make up the major part of the work force tend, therefore, to have lower wages than jobs in which men make up the major part. The differences, however, are relatively small.

Figure 3

Weighted average of wage-based quintiles of male and female jobs
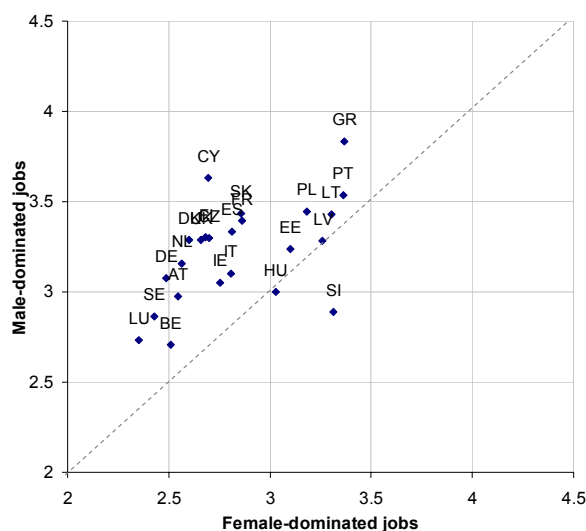
Figure 4

Weighted average of skill-based quintiles of male and female jobs

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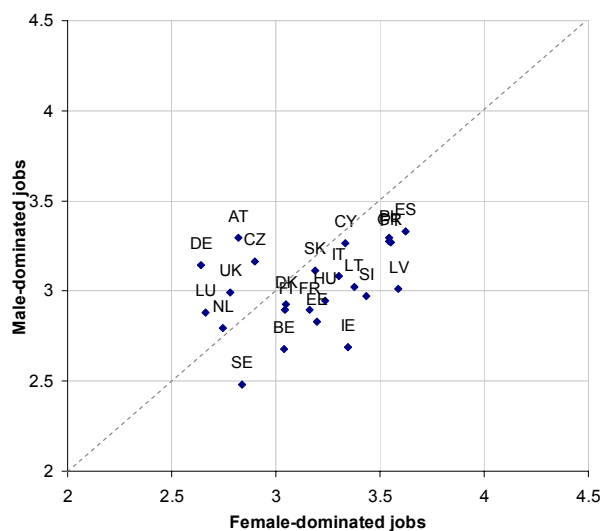
[5] The calculation is similar to that described above, with each quintile being assigned a weight according to its number – i.e. the first quintile having a weight of one, the second a weight of two and so on – and the weights being applied to the proportion of employment in male- or female-dominated jobs in each quintile.

The government expenditure multiplier and its estimation for Poland

BY KAZIMIERZ LASKI

The government expenditure multiplier refers to the change of GDP caused by a change in autonomous government expenditure, the volume of the multiplier depending on coefficients of domestic demand outflows: rate of private savings, rate of net taxation and import intensity. Denoting GDP by Y we get

$$Y = CP + IP + G + X - M,$$

where CP, IP, G, X and M denote private consumption, private investment, government expenditure for goods and services, and exports and imports of goods and non-factor services, respectively. Deducting from both sides TN and CP, where TN stands for government total revenues net of all transfer payments to the non-public sector, we get

$$Y - TN - CP = IP + (G - TN) + (X - M).$$

Taking into account that the difference between disposable GDP, i.e. $Y - TN$, and private consumption CP denotes private savings (of households and private firms) SP, we have

$$SP = IP + (G - TN) + (X - M). \qquad (1)$$

Private savings are thus determined by (but do not themselves determine) the sum of private investment, budget deficit $D = G - TN$, and trade balance $E = X - M$. We write $SP = spY$, $TN = tnY$ and $M = mY$ where the demand outflow coefficients sp, tn and m denote the rate of private savings, the rate of net taxation, and import intensity, respectively. Using these parameters one gets

$$spY = IP + (G - tnY) + (X - mY), \qquad (2)$$

and

$$Y = (IP + G + X)/(sp + tn + m). \qquad (2')$$

Equation (2') is useful when a rise or fall of GDP in some period in the past in any given country is examined and interpreted. However, its use for economic forecasting encounters some important problems. In the course of the present economic crisis, the potential results of a fiscal expansion strategy that would aim at stimulating the economy through increased public spending are much debated. Yet, can we really estimate the volume of an increased government expenditure multiplier on the basis of equation (2')?

It appears that this is not possible. The government expenditure multiplier implied by (2) is $1/(sp + tn + m)$. The coefficients of import intensity expressed in terms of shares of imports in GDP – especially in the case of small and even not so small countries – happen to be quite large. Let us assume, for instance, that the relation M/Y in those countries is some 70-80%. Moreover, let us assume that the sum sp + tn is some 30-40%, which is rather realistic. In this case the sum $(sp + tn + m)$ would tend to be greater than 1, and the multiplier would tend to be smaller than 1. This shows that considering M/Y to represent the import intensity concept to be used in the multiplier analysis would not make sense since inequality $(1 - sp - tn - m)\Delta G < 0$ would mean that a rise in government spending by ΔG would result in a reduction of output of consumer goods.

The root of the problem lies in the fact that import intensity in equation (2') is defined as M/Y, while for the estimation of the government multiplier an import intensity defined as M/FG would be more useful, where FG stands for the value of final goods $CP + IP + G + X$. Considering that Y is smaller than FG, the fraction M/Y is significantly greater that the fraction M/FG.

Moreover, $FG = (CP + IP + G) + X = A + X$, where A stands for domestic absorption, $(CP + IP + G)$. As we shall see soon, it is also useful to know the volumes of imports that serve both domestic absorption, M_A, and exports, M_X, respectively. Then we can define import intensity of domestic

absorption, m_A, where $m_A = M_A/A$, and import intensity of exports, m_X, where $m_X = M_X/X$.

Now, separating imports into two parts from equation (2) we get:

$$spY = IP + (G - tnY) + (X - M_A - M_X)$$

$$spY = IP + (G - tnY) + (X - m_AA - m_XX)$$

$$Y = [IP + G + (X - m_AA - m_XX)]/(sp + tn) \qquad (3)$$

On the assumption that neither private investment IP nor exports X change, and also assuming that demand outflow coefficients are roughly constant, at least locally, the change in GDP, ΔY, generated by a change in government expenditure by ΔG would be

$$\Delta Y = (\Delta G - m_A\Delta A)/(sp + tn) \qquad (4)$$

Considering that A = Y – E, we have: $\Delta A = \Delta Y - \Delta E$ and if $\Delta E = 0$, then $\Delta A = \Delta Y$. Therefore equation (4) takes the form

$$\Delta Y = (\Delta G - m_A\Delta Y)/(sp + tn),$$

$$\Delta Y = \Delta G/(sp + tn + m_A) \qquad (5)$$

Although strictly speaking equation (5) is valid for $\Delta E = 0$ only, also for $\Delta E \neq 0$ it is a good approximation of the value of the government expenditure multiplier. When government expenditures increase by ΔG, in the first round of the multiplier process incomes of firms producing goods and services for the government increase by the same value. Parts of those new incomes flow out towards private savings $sp\Delta G$, net taxation $tn\Delta G$, and imports $m\Delta G$ respectively, while the rest equal to $(1 - sp - tn - m_A)\Delta G$ would be spent on consumer goods, thereby starting the next round of the multiplier process. At the end of the multiplier process GDP would increase by ΔY in accordance with (5).

The main difficulty in estimating the volume of the multiplier is to find the right values of the parameters sp, tn and m_A that can be used for macroeconomic projections. It should be clear that any estimations of those parameters are uncertain because the future is largely uncertain. Hence data averaged for a longer periods (e.g. for 2000-2008) would be more reliable than those calculated for a single year, even if it is the last year preceding the annual forecasting. However, in this article we take, as the first approximation, the data for 2008 only, as in the times of economic crisis the more distant past is a poor index for forecasting the immediate future.

The parameter sp can be found in the national accounts directly. The parameter tn can be assessed from national accounts according to the definition D = G – TN (as TN = G – D). However, M_A and m_A have to be estimated, and this is by no means easy. The allocation of imports between the part serving domestic absorption and the part serving exports would be possible with input-output tables and the matrix of technical coefficients. As these tables become available only with rather long time-lags, those allocations will be estimated only in rough approximation. Its method will first be illustrated in terms of the following thought experiment. Let us assume that exports and imports each represent 50 per cent of GDP. Hence if Y happens to be, say, 200 billion euro, exports X would be 100 billion euro, imports M would be 100 billion euro, and the foreign trade would be balanced. We therefore assume that domestic absorption A, equal to the sum of (CP + IP + G), would be 200 billion euro and equal to Y; however, the value of output of final goods, FG, is the sum A + X, i.e. it is 200 + 100 = 300 billion euro.

We now make the rather heroic assumption that import intensities of both A and X are identical. Then imports worth 100 billion euro can be distributed between $M_A = 66.6$ billion euro and $M_X = 33.3$ billion euro, making both import intensities equal, $m_A = m_X = 0.33$ i.e. 33.3%. Thus the import intensity of domestic absorption to be put in (5) is much less than the coefficient m = M/Y = 100/200, i.e. 50% (as implied in equation (2)).

Our estimate of the import intensity of domestic absorption is most probably too high, in the first place because identical import intensities of A and

X have been assumed. Indeed the value of domestic absorption is very close to that of the GDP, and half of the GDP in the countries regularly reviewed by wiiw consists of services, the import intensity of which is very low. Also the import intensity of agriculture and residential building is rather low. On the other hand, a large part of exports is accounted for by industrial goods, very often of high import intensity. Therefore it would be commendable to assume an import intensity of X higher (probably much higher) than the import intensity of domestic absorption. Thus import intensity m_A would be lower (probably much lower) than that which follows from the assumption of identical import intensities of A and X. And with lower m_A, the government expenditure multiplier in (5) would be higher. Of course, direct information on the value of the import intensity of exports should be used if only it were available for any given country.

The government expenditure multiplier for Poland, based on data for 2008, has been estimated by Jerzy Osiatynski, Jolanta Zieba and the present author. They found the rate of private saving sp to be 18.8%, the rate of net taxes tn to be 19.9% and the import intensity of A to be in the range between 0.182 (on the assumption that the import intensity of exports is 0.6) and 0.303 (when identical import intensities of A and X are assumed), i.e. between 18.2 and 30.3 per cent.

Indeed, 2008 exports were 39.8% of GDP and imports 43.5% of GDP. Hence the export surplus E was -3.7% of GDP. The domestic absorption A was 103.7% of GDP and the production of final goods FG consisted of A (103.7% of GDP) and of exports X (39.8% of GDP). Hence FG was equal to 143.5% of GDP. Assuming the same import intensity of A and X we get m_A, the import intensity of A, as 0.435/1.435 = 0.303, i.e. 30.3%. Thus the sum $(sp + tn + m_A)$ has been estimated at 0.188 + 0.199 + 0.303 = 0.69, and the minimum multiplier of government expenditure would be 1.45.

The import intensity of exports in Poland is estimated at 60% of exports.[1] Using this estimate the authors have estimated the part of imports serving exports at 0.6(0.398) = 0.24; hence the part of imports serving absorption was 0.189 and the import intensity of domestic absorption was (0.189/1.037) = 0.182. Thus the sum $(sp + tn + m_A)$ equals in that case 0.188 + 0.199 + 0.182 = 0.579 and the government expenditure multiplier increases to 1.73.

The government expenditure multiplier in Poland calculated on the basis of the 2008 data should therefore be placed between 1.45 and 1.73. It is also worthwhile noting that fiscal stimulus consists as a rule of a combination of a rise in government expenditure and a reduction of budget revenues through lowering taxes. The multiplier related to the latter cannot be easily defined. If tax reduction increases the net incomes of social groups with low propensity to save, the multiplier, although weaker than that of government expenditure, would be relatively high. If, on the other hand, tax reduction increases the net incomes of social groups with very high propensity to save, the resulting multiplier would be very weak. The consequences of a reduction of taxes on profits in periods of business crisis is even more difficult to assess. In any case, in Poland, the multiplier of a fiscal stimulus containing both a rise in government expenditure and a reduction of its revenues would be lower than that ranging between 1.45 and 1.73.

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[1] On the basis of data for SITC commodity group 7 (machinery and transport equipment) Jan Przystupa estimates total import intensity of total exports at 0.7 (see his 'Bad Weather Scenarios', *Nowe Życie Gospodarcze*, 4 May 2009, in Polish). The import intensity of the automobile industry is as high as that of Group 7. In the absence of input-output tables for recent years in Poland, no precise calculation of the import intensity of total exports is possible, however, according to Polish experts opinion it is close to 0.6.

STATISTICAL ANNEX

Selected monthly data on the economic situation in Southeast Europe, Russia and Ukraine

Conventional signs and abbreviations

used in the following section on monthly statistical data

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

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

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A L B A N I A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
LABOUR																
Employment, end of period	th. persons	939.3	.	.	965.9	.	.	969.9	.	.	974.1	.	.	.	.	.
Employment, end of period	CMPY	100.7	.	.	103.5	.	.	103.6	.	.	103.7	.	.	.	.	.
Unemployment, end of period	th. persons	140.8	.	.	140.0	.	.	140.1	.	.	141.5	.	.	.	.	.
Unemployment rate	%	13.0	.	.	12.7	.	.	12.6	.	.	12.7	.	.	.	.	.
PRICES																
Consumer	PM	0.9	-0.4	-1.0	-0.8	-0.6	0.6	1.1	0.1	-0.1	0.9	0.4	0.7	0.6	-0.1	-0.8
Consumer	CMPY	4.6	4.4	4.2	4.0	3.7	2.5	2.7	2.9	2.6	2.2	2.1	1.8	1.6	1.9	2.1
Consumer	CCPY	3.7	3.9	4.0	4.0	3.9	3.8	3.6	3.6	3.5	3.4	2.1	2.0	1.8	1.8	1.9
Producer, in industry	PM	0.1	0.6	0.4	0.5	-0.3	-0.3	0.6	-1.0	0.0	0.0	-2.3	0.1	0.3	.	.
Producer, in industry	CMPY	7.7	7.0	7.3	7.9	7.4	6.8	7.2	4.1	4.2	4.2	-0.8	-1.4	-1.3		.
Producer, in industry	CCPY	7.4	7.3	7.3	7.4	7.4	7.3	7.3	7.0	6.7	6.5	-0.8	-1.1	-1.2		.
FOREIGN TRADE [1)2)]																
Exports total (fob), cumulated	EUR mn	207	290	373	467	557	621	708	786	860	917	53	111	172	.	.
Imports total (cif), cumulated	EUR mn	787	1071	1371	1669	1977	2269	2571	2917	3232	3582	222	482	739	.	.
Trade balance, cumulated	EUR mn	-580	-781	-998	-1202	-1419	-1648	-1862	-2130	-2372	-2665	-169	-371	-566	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-267	-413	-530	-631	-707	-828	-862	-1018	-1146	-1319	-120	-247	-334	.	.
EXCHANGE RATE																
ALL/USD, monthly average	nominal	80.32	77.79	78.45	78.52	77.24	81.12	85.65	92.82	96.84	90.96	94.62	100.65	100.50	98.83	.
ALL/EUR, monthly average	nominal	124.59	122.68	122.08	122.03	121.87	121.44	123.05	123.13	123.29	123.18	125.18	128.79	130.67	130.46	.
USD/ALL, calculated with CPI[3)]	real, Jan04=100	129.2	132.0	128.6	126.2	126.9	122.0	117.0	109.1	106.5	115.6	111.1	104.6	105.2	106.7	.
USD/ALL, calculated with PPI[3)]	real, Jan04=100	122.7	125.4	121.2	119.3	118.0	115.7	111.5	107.6	108.4	119.5	112.6	106.9	108.1	.	.
EUR/ALL, calculated with CPI[3)]	real, Jan04=100	108.9	109.7	108.4	107.2	106.8	107.8	107.3	107.3	107.4	108.7	108.1	105.2	103.9	103.7	.
EUR/ALL, calculated with PPI[3)]	real, Jan04=100	111.9	113.3	112.9	112.2	110.8	111.4	110.7	110.5	112.3	114.2	110.3	107.5	106.8	.	.
DOMESTIC FINANCE																
M0, end of period	ALL bn	146.8	146.2	145.0	145.8	150.8	152.3	152.7	165.3	173.3	195.8	196.7	200.2	201.0	202.8	.
M1, end of period	ALL bn	215.2	215.6	215.8	219.4	226.0	226.8	228.0	239.7	250.1	282.9	275.4	272.4	272.0	275.3	.
M2, end of period	ALL bn	754.5	759.4	758.2	773.7	787.1	808.3	820.4	806.6	800.4	815.7	816.7	810.9	805.3	810.5	.
M2, end of period	CMPY	10.0	10.3	10.1	13.4	13.6	12.7	14.6	12.2	11.7	7.2	7.6	6.4	6.7	6.7	.
NB base rate (p.a.),end of period	%	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.8	5.8	5.8	5.8	5.8
NB base rate (p.a.),end of period [4)]	real, %	-1.4	-0.7	-1.0	-1.5	-1.1	-0.5	-0.9	2.0	1.9	1.9	6.6	7.2	7.1	.	.
BUDGET																
General gov.budget balance, cum.	ALL bn	10352	9341	5921	-2431	-5587	-8904	-8395	-16786	-21894	-57518	1459	-3452	-3753	.	.

1) Based on cumulated national currency and converted with the average exchange rate.
2) Cumulation starting January and ending December each year.
3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
4) Deflated with annual PPI.

B O S N I A and H E R Z E G O V I N A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total[1]	real, CMPY	-1.6	6.6	5.5	8.1	9.8	5.5	11.6	10.6	14.8	40.9	-9.2	-6.3	4.5	6.0	.
Industry, total[1]	real, CCPY	5.3	5.5	5.5	6.0	6.6	6.4	7.0	7.4	8.1	11.0	-9.2	-6.1	-2.5	-0.4	.
Industry, total[1]	real, 3MMA	5.4	3.5	6.7	7.8	7.8	9.0	9.2	12.3	22.1	15.5	8.5	-3.7	1.4	.	.
LABOUR																
Employees[2]	th. persons	702.1	703.8	704.6	708.0	708.5	707.9	709.3	709.5	709.6	706.8	704.3	704.4	702.7	.	.
Employees[2]	CMPY	103.5	103.6	103.6	103.5	102.6	102.5	102.1	102.1	102.4	101.3	100.9	100.7	100.1	.	.
Unemployment, end of period[3]	th. persons	509.6	499.9	494.0	489.7	488.4	484.8	480.3	477.6	479.3	483.3	488.5	491.7	493.3	.	.
Unemployment rate	%	42.1	41.5	41.2	40.9	40.8	40.6	40.4	40.2	40.3	40.6	41.0	41.1	41.2	.	.
WAGES, SALARIES																
Total economy, gross	BAM	1074	1094	1115	1108	1130	1131	1148	1155	1149	1183	1191	1206	1203	.	.
Total economy, gross	real, CMPY	8.4	8.5	8.1	6.8	8.5	7.2	9.4	10.1	9.1	13.2	16.4	11.7	11.2	.	.
Total economy, gross	EUR	549	559	570	567	578	578	587	591	587	605	609	617	615	.	.
PRICES																
Consumer	PM	1.0	-0.4	0.9	0.9	0.1	0.1	0.1	0.7	-0.6	-0.6	-0.1	-0.1	-0.1	-1.2	-0.1
Consumer	CMPY	7.1	7.4	8.2	9.6	9.9	9.5	8.8	7.3	5.5	3.8	2.3	1.8	0.7	0.0	-1.0
Consumer	CCPY	6.4	6.7	7.0	7.4	7.8	8.0	8.1	8.0	7.8	7.4	2.3	2.1	1.6	1.2	0.8
FOREIGN TRADE[4)5)]																
Exports total (fob), cumulated	EUR mn	801	1092	1399	1713	2037	2317	2632	2930	3206	3433	197	410	635	853	.
Imports total (cif), cumulated	EUR mn	2016	2758	3488	4217	4985	5692	6446	7235	7864	8465	421	903	1431	1984	.
Trade balance, cumulated	EUR mn	-1215	-1667	-2090	-2505	-2947	-3375	-3814	-4305	-4659	-5033	-224	-493	-796	-1131	.
Exports to EU-27 (fob), cumulated	EUR mn	458	619	800	977	1151	1295	1464	1631	1783	1894	116	232	354	467	.
Imports from EU-27 (cif), cumulated	EUR mn	893	1247	1588	1915	2266	2590	2965	3371	3695	3996	205	457	715	977	.
Trade balance with EU-27, cumulated	EUR mn	-435	-628	-788	-939	-1115	-1295	-1501	-1740	-1912	-2102	-89	-225	-361	-510	.
FOREIGN FINANCE																
Current account, cumulated[4]	EUR mn	-376	.	.	-887	.	.	-1398	.	.	-1879	.	.	.	.	.
EXCHANGE RATE																
BAM/USD, monthly average	nominal	1.263	1.242	1.257	1.258	1.240	1.304	1.362	1.464	1.537	1.457	1.468	1.531	1.502	1.480	1.433
BAM/EUR, monthly average	nominal	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956
USD/BAM, calculated with CPI[6]	real, Jan04=100	123.4	124.3	122.9	122.7	124.0	118.5	113.7	107.6	103.8	110.0	108.6	103.5	105.2	105.2	108.3
EUR/BAM, calculated with CPI[6]	real, Jan04=100	104.3	103.4	103.7	104.2	104.4	104.6	104.4	105.1	104.8	104.4	104.9	104.3	103.8	102.2	102.0
DOMESTIC FINANCE																
M0, end of period	BAM mn	2061	2134	2125	2076	2152	2168	2131	2279	2139	2302	2083	2063	2016	2105	.
M1, end of period	BAM mn	6006	6089	6071	6032	6144	6242	6198	6045	5876	5995	5730	5662	5562	5529	.
M2, end of period	BAM mn	12402	12608	12726	12793	13079	13275	13426	12759	12645	12775	12548	12565	12483	12462	.
M2, end of period	CMPY	18.1	17.4	15.8	14.3	14.9	14.7	14.8	7.5	6.0	4.3	2.6	2.3	0.7	-1.2	.

1) Federation of B&H and Republic Srpska weighted by wiiw.
2) Sum of employees in Federation of B&H, Republic Srpska and District Brcko, calculated by wiiw.
3) Sum of unemployed persons in Federation B&H, Republic Srpska and District Brcko, calculated by wiiw.
4) Based on cumulated national currency and converted with the average exchange rate.
5) Cumulation starting January and ending December each year.
6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

C R O A T I A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total[1)2)]	real, CMPY	0.1	6.9	-2.1	7.2	1.9	-4.5	3.0	-0.7	-3.5	-1.5	-14.1	-12.4	-6.6	-7.1	.
Industry, total[1)2)]	real, CCPY	4.8	5.3	3.7	4.3	3.9	2.9	2.9	2.5	1.9	1.6	-14.1	-13.3	-10.9	-9.9	.
Industry, total[1)2)]	real, 3MMA	4.9	1.5	3.8	2.2	1.5	0.2	-0.7	-0.5	-1.9	.	.	-11.0	-8.7	.	.
Construction, total,effect.work.time[1)2)]	real, CMPY	5.8	21.4	6.5	14.8	15.0	2.0	18.0	10.6	7.8	16.1	-5.6	-1.9	6.1	.	.
LABOUR																
Employment total	th. persons	1238.6	1245.9	1256.0	1264.6	1270.8	1270.7	1267.4	1262.9	1257.2	1247.6	1234.4	1227.0	1224.4	1223.9	.
Employees in industry	th. persons	296.2	296.0	296.3	296.1	295.8	295.3	294.7	294.4	293.3	290.6	266.4	264.5	262.7	260.4	.
Unemployment, end of period	th. persons	255.5	245.2	232.8	222.3	219.7	219.3	222.2	228.5	233.7	240.5	254.3	262.8	267.2	263.8	.
Unemployment rate	%	14.5	13.9	13.2	12.5	12.4	12.3	12.6	12.9	13.2	13.7	14.3	14.8	15.0	14.9	.
Labour productivity, industry[1)2)]	CCPY	5.6	6.3	4.8	5.4	5.2	4.2	4.3	4.1	3.7	3.5	-7.5	-6.2	-3.4	-2.1	.
Unit labour costs, exch.r. adj.(EUR)[1)2)]	CCPY	2.9	2.6	4.2	3.1	3.4	3.9	4.2	4.6	4.6	5.2	10.1	6.0	4.3	.	.
WAGES, SALARIES																
Total economy, gross	HRK	7404	7395	7625	7478	7580	7489	7526	7621	7829	7868	7709	7597	7816	.	.
Total economy, gross	real, CMPY	0.5	1.4	0.9	-1.6	-1.1	-1.6	2.7	1.4	-0.6	5.4	1.3	-0.7	1.7	.	.
Total economy, gross	EUR	1019	1018	1051	1032	1048	1041	1056	1065	1096	1093	1047	1022	1052	.	.
Industry, gross[2)]	EUR	930	942	980	954	980	946	984	1004	1000	1027	932	905	941	.	.
PRICES																
Consumer	PM	0.6	0.7	1.1	0.7	0.1	-0.3	0.2	-0.1	-0.1	-0.6	1.2	0.6	0.2	0.8	0.0
Consumer	CMPY	5.7	5.7	6.4	7.6	8.4	7.4	6.4	5.9	4.7	2.9	3.4	4.2	3.8	3.9	2.7
Consumer	CCPY	5.9	5.9	6.0	6.2	6.5	6.7	6.6	6.6	6.4	6.1	3.4	3.8	3.8	3.8	3.6
Producer, in industry[2)]	PM	0.8	0.4	1.3	1.3	2.4	-0.1	-0.1	-1.1	-1.5	-1.3	-0.1	0.2	-1.2	0.5	.
Producer, in industry[2)]	CMPY	7.6	7.7	8.7	9.6	12.0	11.0	10.3	8.8	6.5	4.7	1.8	1.8	-0.1	-0.1	.
Producer, in industry[2)]	CCPY	7.6	7.5	7.8	8.1	8.6	9.0	9.1	9.0	8.8	8.4	1.8	1.8	1.1	0.8	.
FOREIGN TRADE[3)4)]																
Exports total (fob), cumulated	EUR mn	2177	2980	3822	4618	5631	6387	7270	8068	8868	9572	516	1242	1893	2525	.
Imports total (cif), cumulated	EUR mn	4860	6816	8615	10516	12432	14032	15958	17774	19344	20817	1040	2262	3706	5032	.
Trade balance, cumulated	EUR mn	-2683	-3836	-4793	-5898	-6801	-7645	-8688	-9705	-10476	-11245	-524	-1020	-1813	-2507	.
Exports to EU-27 (fob), cumulated	EUR mn	1360	1833	2319	2852	3426	3841	4386	4903	5407	5843	301	811	1192	1575	.
Imports from EU-27 (cif), cumulated	EUR mn	3062	4391	5539	6770	8000	8966	10171	11386	12379	13360	600	1387	2308	3154	.
Trade balance with EU-27, cumulated	EUR mn	-1702	-2558	-3219	-3918	-4574	-5124	-5785	-6483	-6972	-7517	-300	-577	-1116	-1579	.
FOREIGN FINANCE																
Current account, cumulated[5)]	EUR mn	-2550	.	.	-4373	.	.	-2514	.	.	-4454	.	.	.	.	.
EXCHANGE RATE																
HRK/USD, monthly average	nominal	4.689	4.606	4.664	4.665	4.580	4.797	4.955	5.355	5.609	5.377	5.529	5.803	5.710	5.625	5.408
HRK/EUR, monthly average	nominal	7.267	7.266	7.255	7.247	7.230	7.196	7.126	7.158	7.141	7.197	7.363	7.431	7.427	7.418	7.358
USD/HRK, calculated with CPI[6)]	real, Jan04=100	129.7	132.1	130.9	130.5	132.4	126.5	122.8	114.7	111.5	116.8	114.5	109.2	111.0	113.3	117.5
USD/HRK, calculated with PPI[6)]	real, Jan04=100	117.1	117.8	114.4	113.6	115.6	113.9	111.4	107.6	106.3	113.4	110.4	106.4	107.6	109.2	.
EUR/HRK, calculated with CPI[6)]	real, Jan04=100	109.5	109.8	110.5	110.9	111.4	111.6	112.6	112.0	112.6	111.2	110.7	109.7	109.6	110.3	111.1
EUR/HRK, calculated with PPI[6)]	real, Jan04=100	106.9	106.5	106.6	106.9	108.5	109.4	110.5	109.7	110.2	109.7	107.6	107.0	106.3	107.8	.
DOMESTIC FINANCE																
M0, end of period	HRK bn	15.3	15.8	16.2	16.9	17.6	17.6	16.6	17.0	16.8	17.1	16.6	16.1	15.8	16.3	.
M1, end of period	HRK bn	52.8	52.7	53.2	54.4	55.5	55.7	53.7	52.7	51.1	55.2	49.6	46.8	46.6	46.4	.
Broad money, end of period	HRK bn	211.6	212.9	212.9	216.0	221.2	226.4	226.9	223.5	218.1	225.0	221.5	221.4	218.6	218.8	.
Broad money, end of period	CMPY	14.4	13.8	12.3	11.1	9.9	9.2	14.7	9.3	5.0	4.4	6.3	5.7	3.3	2.8	.
Discount rate (p.a.),end of period	%	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Discount rate (p.a.),end of period[7)]	real, %	1.3	1.2	0.3	-0.5	-2.7	-1.8	-1.2	0.2	2.3	4.1	7.1	7.1	9.1	9.1	.
BUDGET																
Central gov. budget balance, cum.[8)]	HRK mn	1383	3062	2992	2957	3772	3633	3159	3680	2660	-2878	-819	-2237	-3401	.	.

1) In business entities with more than 20 persons employed.
2) From January 2009 according to NACE rev. 2.
3) Based on cumulated national currency and converted with the average exchange rate.
4) Cumulation starting January and ending December each year.
5) Calculated from USD to NCU to EUR using the official average exchange rate.
6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
7) Deflated with annual PPI.
8) Consolidated central government budget.

M A C E D O N I A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total[1]	real, CMPY	-1.4	6.2	17.6	12.2	14.7	8.5	13.7	-9.9	-2.9	-10.1	-16.7	-11.3	-4.8	-7.8	.
Industry, total[1]	real, CCPY	5.8	5.9	8.3	9.0	9.9	9.7	10.2	7.8	6.8	5.5	-16.7	-13.9	-10.8	-10.0	.
Industry, total[1]	real, 3MMA	3.8	7.2	11.9	14.8	11.8	12.4	3.7	0.2	-7.7	-9.6	-12.6	-10.8	-7.9	.	.
LABOUR																
Employees[1]	th. persons	255.9	256.8	257.9	257.8	258.2	257.4	256.9	255.8	255.6	254.5	251.8	250.6	249.8	.	.
Employees in industry[1]	th. persons	88.4	88.8	89.3	89.2	89.1	88.4	87.8	86.9	86.0	83.6	82.0	80.6	79.5	.	.
Unemployment, quarterly average[2]	th. persons	319.9	.	.	310.4	.	.	305.3	.	.	306.0	.	.	.	.	.
Unemployment rate[2]	%	34.8	.	.	33.8	.	.	33.0	.	.	33.5	.	.	.	.	.
Labour productivity, industry[1]	CCPY	6.0	6.1	8.5	9.6	10.5	10.5	11.0	8.8	8.0	6.7	-13.8	-10.4	-6.7	-5.7	.
Unit labour costs, exch.r. adj.(EUR)[1]	CCPY	0.4	-0.1	-2.4	-2.9	-3.7	-4.0	-4.2	-2.4	-1.8	-0.4	24.2	20.7	16.2	.	.
WAGES, SALARIES																
Total economy, gross	MKD	25289	25412	25612	25673	25739	25758	27513	27758	27507	28323	29586	29433	29602	.	.
Total economy, gross	real, CMPY	-0.4	-1.2	-0.3	0.1	0.5	0.5	3.9	0.9	3.2	7.0	14.7	17.8	16.7	.	.
Total economy, gross	EUR	413	414	418	420	421	421	450	454	448	461	482	479	480	.	.
Industry, gross	EUR	361	365	368	374	370	372	384	389	375	398	394	381	394	.	.
PRICES																
Consumer	PM	0.8	0.4	0.2	0.3	-0.9	-0.2	-0.2	0.7	0.2	0.3	-0.6	-0.2	0.3	-0.2	1.0
Consumer	CMPY	8.8	8.8	8.3	8.7	8.1	7.2	6.0	6.2	5.0	4.1	1.8	0.8	0.3	-0.3	0.5
Consumer	CCPY	9.5	9.7	9.6	9.7	9.7	9.5	9.3	9.0	8.7	8.3	1.8	1.3	1.0	0.6	0.6
Producer, in industry	PM	2.5	0.7	3.4	2.8	2.3	-2.2	-0.3	-3.3	-6.8	-1.4	-3.0	0.5	-0.2	1.3	1.0
Producer, in industry	CMPY	11.7	10.7	14.4	15.7	17.2	13.8	14.4	9.2	-0.9	-1.8	-5.9	-5.1	-7.7	-7.1	-9.3
Producer, in industry	CCPY	10.5	10.5	11.3	12.1	12.8	13.0	13.1	12.7	11.4	10.3	-5.9	-5.5	-6.2	-6.4	-7.0
FOREIGN TRADE[3)4)]																
Exports total (fob), cumulated	EUR mn	612	842	1102	1352	1619	1820	2062	2293	2489	2665	114	250	400	556	.
Imports total (cif), cumulated	EUR mn	1054	1442	1857	2299	2761	3149	3525	3947	4319	4661	267	567	880	1193	.
Trade balance, cumulated	EUR mn	-442	-600	-755	-947	-1142	-1328	-1463	-1655	-1829	-1995	-153	-317	-480	-637	.
Exports to EU-27 (fob), cumulated	EUR mn	385	524	662	803	984	1100	1240	1373	1503	1609	72	155	240	319	.
Imports from EU-27 (cif), cumulated	EUR mn	469	664	864	1078	1306	1478	1665	1871	2058	2241	122	279	437	598	.
Trade balance with EU-27, cumulated	EUR mn	-84	-140	-202	-275	-322	-378	-424	-498	-556	-632	-50	-123	-196	-278	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-173	-235	-282	-383	-417	-432	-450	-544	-732	-851	-104	-191	-341	.	.
EXCHANGE RATE																
MKD/USD, monthly average	nominal	39.54	38.90	39.37	39.33	38.79	40.79	42.59	45.79	48.27	48.56	46.08	48.07	47.41	46.41	45.35
MKD/EUR, monthly average	nominal	61.21	61.37	61.23	61.17	61.18	61.18	61.17	61.20	61.41	61.41	61.40	61.41	61.72	61.35	61.71
USD/MKD, calculated with CPI[5]	real, Jan04=100	117.9	119.6	117.5	116.8	116.8	111.3	106.4	100.7	97.6	98.3	102.5	97.6	99.1	100.8	103.9
USD/MKD, calculated with PPI[5]	real, Jan04=100	114.6	115.4	114.5	115.5	116.9	112.3	108.4	103.0	95.6	97.1	99.5	96.7	98.6	101.5	103.8
EUR/MKD, calculated with CPI[5]	real, Jan04=100	99.7	99.4	99.2	99.2	98.4	98.2	97.8	98.4	98.6	99.1	99.1	98.4	97.8	97.9	98.2
EUR/MKD, calculated with PPI[5]	real, Jan04=100	104.8	104.4	106.8	108.6	109.9	108.0	107.7	105.0	99.2	99.4	96.9	97.5	97.3	100.0	.
DOMESTIC FINANCE																
M0, end of period	MKD bn	15.7	16.3	16.4	16.2	16.7	16.4	16.5	16.6	15.8	17.6	15.9	15.3	14.6	14.8	14.4
M1, end of period	MKD bn	44.5	46.3	48.2	49.4	48.5	50.0	50.2	49.2	49.3	54.1	49.6	48.9	46.8	46.8	47.3
Broad money, end of period[6]	MKD bn	178.5	183.1	187.2	189.7	192.7	197.4	197.9	195.3	190.2	195.5	192.7	192.8	190.4	192.5	190.8
Broad money, end of period[6]	CMPY	25.3	23.3	22.8	21.4	20.1	22.3	22.0	19.6	13.8	11.2	9.4	7.6	6.6	5.1	2.0
NB discount rate (p.a.), end of period	%	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
NB discount rate (p.a.), end of period[7]	real, %	-4.6	-3.8	-6.9	-7.9	-9.1	-6.4	-6.9	-2.4	7.4	8.5	13.1	12.3	15.4	14.7	17.4
BUDGET																
General gov.budget balance, cum.[8]	MKD mn	4259	4698	4238	4002	4906	6370	10383	10473	7577	-3852	310	-1398	.	.	.

1) In business entities with more than 10 persons employed.
2) Based on labour force survey.
3) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.
4) Cumulation starting January and ending December each year.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) M2 plus restricted deposits (in denar and in foreign currency) plus non-monetary deposits over 1 year.
7) Deflated with annual PPI.
8) Central government budget plus extra-budgetary funds

M O N T E N E G R O: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total	real, CMPY	2.4	-8.1	-9.9	5.6	3.5	-4.8	12.0	-21.1	-7.2	-20.3	-4.7	-18.8	-15.9	-18.6	-25.6
Industry, total	real, CCPY	11.1	6.2	3.0	3.4	3.4	2.4	3.5	0.7	-0.1	-2.1	-4.7	-12.3	-13.6	-14.7	-16.5
Industry, total	real, 3MMA	4.2	-4.9	-4.3	-0.2	1.3	3.7	-5.1	-5.8	-16.3	-11.2	-15.2	-13.6	-17.7	-19.6	.
LABOUR																
Employment[1]	th. persons	162.6	162.3	166.0	170.1	168.9	168.5	167.7	168.6	169.1	169.2	169.3	169.7	170.6	172.5	.
Employment in industry	th. persons	34.7	33.4	34.0	34.4	34.1	34.1	33.9	33.9	34.3	34.7	33.2	32.9	31.6	31.5	.
Unemployment, end of period	th. persons	31.3	30.3	30.0	29.1	28.7	28.1	28.3	28.7	28.6	28.4	28.9	29.3	29.2	28.6	.
Unemployment rate	%	16.1	15.7	15.3	14.6	14.5	14.3	14.4	14.5	14.5	14.4	14.6	14.7	14.6	14.2	.
Labour productivity, industry	CCPY	13.2	9.2	6.2	6.5	6.6	5.6	6.9	4.0	2.8	0.4	-1.4	-8.8	-8.5	-9.6	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	1.4	4.3	7.5	9.0	9.1	10.0	8.7	11.5	13.3	16.2	17.4	25.6	22.6	20.5	.
WAGES, SALARIES																
Total economy, gross	EUR	578	588	602	623	610	625	630	621	629	651	655	650	642	647	651
Total economy, gross	real, CMPY	13.4	12.0	13.4	12.6	13.5	14.5	14.2	10.3	9.9	9.9	10.3	5.3	5.1	4.3	3.1
Industry, gross	EUR	607	612	671	730	673	679	720	683	716	704	718	708	650	607	.
PRICES																
Consumer	PM	0.4	0.8	0.7	1.7	0.0	0.1	1.0	0.0	-0.6	1.0	-0.2	0.7	0.4	0.6	0.1
Consumer	CMPY	8.7	8.8	8.7	9.9	10.8	10.6	8.4	7.4	6.2	6.9	4.9	5.3	5.5	4.8	4.9
Consumer	CCPY	7.2	7.6	7.8	8.2	8.6	8.8	8.8	8.6	8.4	7.4	4.9	5.1	5.2	5.6	5.4
Producer, in industry	PM	2.8	0.5	1.1	5.5	0.1	1.2	-1.0	-0.1	-0.8	-5.2	-1.2	0.0	-1.6	0.3	.
Producer, in industry	CMPY	16.4	15.1	16.5	22.7	17.2	19.0	17.6	17.2	12.9	6.9	5.7	4.7	0.6	0.1	.
Producer, in industry	CCPY	16.2	15.9	16.1	17.2	17.2	17.4	17.4	17.4	17.0	16.1	5.7	5.2	3.6	2.7	.
FOREIGN TRADE[2]																
Exports total (fob), cumulated	EUR mn	111	.	.	270	.	.	419	.	.	530	.	.	.	.	.
Imports total (cif), cumulated	EUR mn	431	.	.	999	.	.	1561	.	.	1971	.	.	.	.	.
Trade balance, cumulated	EUR mn	-321	.	.	-729	.	.	-1141	.	.	-1441	.	.	.	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-309	.	.	-655	.	.	-499	.	.	-976	.	.	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average	nominal	0.644	0.635	0.643	0.643	0.634	0.668	0.696	0.751	0.785	0.744	0.755	0.782	0.766	0.758	0.733
USD/EUR, calculated with CPI[3]	real, Jan04=100	82.6	81.6	82.5	83.1	81.6	86.3	90.9	99.1	105.0	101.5	102.5	106.3	104.3	103.7	100.0
USD/EUR, calculated with PPI[3]	real, Jan04=100	81.5	79.5	79.0	81.8	78.7	86.7	90.4	102.9	112.2	104.3	104.9	109.7	106.5	105.1	.
BUDGET																
General gov.budget balance, cum.	EUR mn	42	.	.	81	.	.	157	.	.	51	.	.	38	.	.

1) Excluding individual farmers.
2) Cumulation starting January and ending December each year.
3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

S E R B I A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total	real, CMPY	2.1	2.5	2.1	2.0	5.0	-4.4	2.3	-3.0	-2.7	-9.0	-16.3	-17.9	-13.0	-19.9	.
Industry, total	real, CCPY	5.5	4.7	4.2	3.8	4.0	2.9	2.8	2.2	1.7	0.7	-16.3	-17.1	-15.7	-16.8	.
Industry, total	real, 3MMA	5.1	2.2	2.2	3.0	0.8	0.9	-1.7	-1.2	-4.9	-9.0	-14.1	-15.7	-16.9	.	.
LABOUR																
Employees total	th. persons	1432.0	1429.0	1428.0	1426.0	1424.0	1423.0	1425.0	1426.0	1424.0	1423.0	1416.0	1413.0	1411.0	.	.
Employees in industry	th. persons	445.0	443.0	441.0	438.0	437.0	435.0	435.0	432.0	430.0	427.0	421.0	421.0	420.0	.	.
Unemployment, end of period	th. persons	795.1	789.0	773.3	756.5	744.8	733.7	726.5	717.4	718.3	727.6	736.8	749.7	758.4	.	.
Unemployment rate	%	25.2	25.1	24.7	24.4	24.1	23.8	23.6	23.4	23.5	23.7	24.0	24.3	24.6	.	.
Labour productivity, industry	CCPY	11.3	10.3	9.4	8.9	9.0	7.8	7.6	7.1	6.8	5.7	-12.3	-13.2	-11.3	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	1.0	3.8	5.4	6.2	7.1	9.1	9.5	9.5	9.4	9.2	4.4	5.6	2.0	.	.
WAGES, SALARIES																
Total economy, gross	RSD	42873	45355	44835	45608	46115	46222	46015	47883	46944	53876	40245	43341	42213	45304	.
Total economy, gross	real, CMPY	3.3	5.4	2.7	1.0	3.5	6.7	5.6	6.3	3.5	3.5	-6.9	-9.3	-9.9	-7.8	.
Total economy, gross[1]	EUR	521	566	544	577	599	605	601	563	526	608	428	462	445	476	.
Industry, gross[1]	EUR	448	488	473	515	526	537	528	488	456	515	390	412	394	.	.
PRICES																
Consumer	PM	1.6	1.8	1.6	0.5	-1.1	0.1	0.9	1.9	0.0	-0.8	2.4	1.3	0.4	0.9	2.1
Consumer	CMPY	14.4	15.3	15.2	15.4	14.4	11.2	10.2	11.8	10.0	7.7	9.3	9.9	9.0	8.3	8.9
Consumer	CCPY	13.4	13.9	14.2	14.4	14.4	14.0	13.5	13.3	13.0	12.6	9.3	9.6	9.4	9.1	9.1
Producer, in industry	PM	1.7	1.0	1.2	1.2	1.0	0.8	-0.3	0.1	-0.4	-0.6	-1.6	1.8	0.9	1.0	1.4
Producer, in industry	CMPY	14.1	14.3	13.0	13.6	14.8	14.9	13.7	12.9	11.1	9.3	4.9	6.0	5.2	5.2	5.4
Producer, in industry	CCPY	13.0	13.4	13.3	13.3	13.5	13.7	13.7	13.6	13.4	13.0	4.9	5.4	5.3	5.3	5.3
FOREIGN TRADE[2)3)]																
Exports total (fob), cumulated	EUR mn	1674	2295	2976	3661	4404	5057	5732	6338	6850	7379	355	764	1269	1721	.
Imports total (cif), cumulated	EUR mn	3611	4990	6344	7753	9184	10395	11787	13088	14133	15330	629	1505	2561	3489	.
Trade balance, cumulated	EUR mn	-1937	-2694	-3368	-4093	-4780	-5338	-6055	-6749	-7283	-7951	-274	-741	-1292	-1768	.
Exports to EU-27 (fob), cumulated	EUR mn	857	1162	1481	1919	2192	2419	2812	3088	3332	3556	174	378	608	809	.
Imports from EU-27 (cif), cumulated	EUR mn	1897	2664	3437	4211	5052	5602	6336	7031	7589	8190	333	817	1382	1906	.
Trade balance with EU-27, cumulated	EUR mn	-1040	-1502	-1956	-2293	-2860	-3182	-3524	-3944	-4257	-4633	-158	-440	-774	-1098	.
FOREIGN FINANCE																
Current account, cumulated[4]	EUR mn	-1054	-1881	-2403	-3049	-3663	-4068	-4597	-5050	-5383	-5956	-75	-361	-798	-940	.
EXCHANGE RATE																
RSD/USD, end of month	nominal	52.13	51.46	53.09	50.01	49.40	51.79	53.78	66.33	69.02	62.90	72.86	73.68	71.59	71.64	67.74
RSD/EUR, end of month	nominal	82.31	80.13	82.43	78.98	76.99	76.44	76.60	84.99	89.20	88.60	94.10	93.81	94.78	95.24	94.72
USD/RSD, calculated with CPI[5]	real, Jan04=100	149.0	152.8	149.3	157.7	157.1	150.6	146.5	122.2	119.7	131.6	115.9	115.5	119.1	119.9	129.1
USD/RSD, calculated with PPI[5]	real, Jan04=100	127.3	128.2	122.1	128.6	128.3	127.4	123.7	106.0	106.6	120.5	102.5	104.2	108.9	109.4	116.0
EUR/RSD, calculated with CPI[5]	real, Jan04=100	121.3	126.3	123.9	129.5	131.4	132.6	133.1	122.2	116.9	116.9	113.5	114.7	113.6	113.6	116.6
EUR/RSD, calculated with PPI[5]	real, Jan04=100	112.0	115.3	111.9	116.8	119.8	122.2	121.7	110.7	106.9	108.7	101.1	103.5	103.8	105.2	.
DOMESTIC FINANCE																
M0, end of period	RSD bn	70.3	72.4	74.1	69.5	69.2	70.5	71.6	77.3	80.6	90.0	81.8	82.6	78.1	84.3	.
M1, end of period	RSD bn	227.2	225.8	230.6	225.5	213.6	218.3	222.0	222.8	223.5	241.1	212.1	227.3	210.2	216.1	.
Broad money, end of period[6]	RSD bn	953.5	942.8	979.0	947.2	936.5	966.7	985.1	974.3	1000.3	992.7	1005.6	1026.6	1015.6	1037.2	.
Broad money, end of period[6]	CMPY	42.5	39.3	39.4	33.7	25.6	23.7	24.5	23.0	13.9	9.8	7.4	9.3	6.5	10.0	.
NB discount rate (p.a.),end of period	%	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
NB discount rate (p.a.),end of period[7]	real, %	-4.9	-5.1	-4.0	-4.4	-5.5	-5.6	-4.5	-3.9	-2.3	-0.8	3.5	2.4	3.2	3.2	3.0
BUDGET																
Central gov.budget balance, cum.	RSD mn	-729	-7945	-16885	-19146	-10637	-17219	-17983	-17412	-32179	-54600	-834	-10722	-13511	-28804	.

1) Calculation from NCU to EUR using the official end of month exchange rate.
2) Based on cumulated national currency and converted with the end of month exchange rate.
3) Cumulation starting January and ending December each year.
4) Until 2008 calculated from USD to NCU to EUR using the official end of month exchange rate.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Excluding government deposits, excluding frozen foreign currency savings deposits.
7) Deflated with annual PPI.

R U S S I A: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total	real, CMPY	6.6	9.2	6.7	0.8	3.1	4.8	6.4	1.7	-8.7	-10.2	-16.0	-13.2	-13.7	-16.8	-17.0
Industry, total	real, CCPY	6.2	6.9	6.9	5.8	5.4	5.4	5.5	5.1	3.7	2.4	-16.0	-14.6	-14.2	-14.9	-15.3
Industry, total	real, 3MMA	7.7	7.5	5.5	3.5	2.9	4.8	4.2	-0.3	-5.8	-11.5	-13.0	-14.2	-14.6	-15.8	.
Construction, total	real, CMPY	27.0	21.8	17.2	16.2	12.1	6.4	9.8	5.9	6.3	-15.7	-16.8	-20.7	-20.2	-16.3	-21.9
LABOUR[1]																
Employment total, quarterly average	th. persons	69491	.	.	71631	.	.	72136	.	.	70603	.	.	67664	.	.
Unemployment, quarterly average	th. persons	5308	.	.	4097	.	.	4472	.	.	5289	.	.	7107	.	.
Unemployment rate	%	7.1	.	.	5.4	.	.	5.8	.	.	7.0	.	.	9.5	.	.
WAGES, SALARIES																
Total economy, gross	RUB	16172	16538	16643	17715	17758	17244	17739	17643	17598	21681	17119	17098	18129	18009	18190
Total economy, gross	real, CMPY	14.6	15.9	13.0	12.2	14.3	13.0	12.8	10.4	5.5	2.9	2.2	-2.3	-1.8	-3.9	-2.8
Total economy, gross	EUR	440	446	451	481	482	476	488	500	507	571	404	374	400	407	417
Industry, gross[2]	EUR	419	421	424	440	459	460	461	471	479	456	352	334	355	368	.
PRICES																
Consumer	PM	1.2	1.4	1.4	1.0	0.5	0.4	0.8	0.9	0.8	0.7	2.4	1.7	1.3	0.7	0.6
Consumer	CMPY	13.3	14.2	15.1	15.1	14.7	15.0	15.0	14.2	13.8	13.3	13.5	14.0	14.2	13.3	12.5
Consumer	CCPY	12.8	13.2	13.6	13.8	14.0	14.1	14.2	14.2	14.2	14.1	13.5	13.7	13.9	13.7	13.5
Producer, in industry	PM	0.7	4.5	3.5	4.9	5.4	0.5	-5.0	-6.6	-8.4	-7.6	-3.4	5.1	2.9	2.4	0.6
Producer, in industry	CMPY	26.7	26.9	24.7	27.6	33.5	31.5	25.7	17.5	4.3	-7.0	-11.6	-7.7	-5.7	-7.6	-10.2
Producer, in industry	CCPY	25.7	26.0	25.7	26.1	27.2	27.8	27.5	26.5	24.3	21.4	-11.6	-9.6	-8.3	-8.1	-8.6
FOREIGN TRADE[3][4]																
Exports total, cumulated	EUR mn	72460	97933	125288	153418	183299	213498	243488	272340	296478	318011	13435	27764	43675	59548	.
Imports total, cumulated	EUR mn	36614	51754	66329	81540	98562	115266	132689	150846	165887	181572	6551	15889	25744	35572	.
Trade balance, cumulated	EUR mn	35846	46179	58959	71879	84737	98232	110799	121494	130591	136439	6883	11874	17931	23976	.
FOREIGN FINANCE																
Current account, cumulated[5]	EUR mn	25405	.	.	41987	.	.	61653	.	.	69824	.	.	8486	.	.
EXCHANGE RATE																
RUB/USD, monthly average	nominal	23.761	23.513	23.730	23.638	23.351	24.135	25.286	26.356	27.311	28.136	31.520	35.760	34.680	33.560	32.070
RUB/EUR, monthly average	nominal	36.786	37.064	36.892	36.799	36.839	36.260	36.340	35.286	34.739	37.993	42.377	45.710	45.280	44.260	43.620
USD/RUB, calculated with CPI[6]	real, Jan04=100	163.5	166.5	166.0	166.6	168.7	164.5	158.4	154.9	153.6	151.7	138.1	123.2	128.4	133.3	140.0
USD/RUB, calculated with PPI[6]	real, Jan04=100	182.5	189.7	188.8	195.0	202.9	203.8	186.9	176.8	164.2	152.6	131.9	123.3	131.7	138.7	144.4
EUR/RUB, calculated with CPI[6]	real, Jan04=100	138.1	138.4	140.1	141.3	141.9	144.8	145.3	150.9	155.1	143.1	132.2	123.9	126.3	129.7	132.3
EUR/RUB, calculated with PPI[6]	real, Jan04=100	166.7	171.5	176.0	182.9	190.6	195.5	185.4	179.9	170.3	146.2	127.2	124.1	129.6	136.9	.
DOMESTIC FINANCE																
M0, end of period	RUB bn	3475.5	3601.4	3656.2	3724.9	3807.2	3887.4	3904.2	3962.2	3793.1	3794.8	3312.7	3301.6	3278.3	3410.1	.
M1, end of period	RUB bn	7716.1	7304.4	7533.2	7814.1	7777.3	7963.2	8005.2	7549.1	7518.1	7591.4	6591.2	6515.1	6551.7	6649.3	.
M2, end of period	RUB bn	14918.3	14851.5	15395.9	15926.6	15760.2	16195.6	16067.8	15460.3	15421.3	16774.7	16381.7	16393.6	16308.4	16360.4	.
M2, end of period	CMPY	36.9	32.7	29.5	32.4	30.4	31.1	26.6	21.8	14.2	14.7	14.0	11.9	9.3	10.2	.
Refinancing rate (p.a.), end of period	%	10.3	10.5	10.5	10.8	11.0	11.0	11.0	11.0	12.0	13.0	13.0	13.0	13.0	12.5	12.0
Refinancing rate (p.a.), end of period[7]	real, %	-13.0	-12.9	-11.4	-13.2	-16.9	-15.6	-11.7	-5.5	7.3	21.5	27.8	22.5	19.8	21.8	24.7
BUDGET																
Central gov. budget balance, cum.	RUB bn	600.0	1139.2	1311.7	1375.1	2118.9	2347.2	2561.5	2783.4	2511.2	1707.5	376.5	132.5	-29.7	.	.

1) Based on labour force survey.
2) Manufacturing industry only (D according to NACE).
3) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.
4) Cumulation starting January and ending December each year.
5) Calculated from USD to NCU to EUR using the official average exchange rate.
6) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
7) Deflated with annual PPI.

U K R A I N E: Selected monthly data on the economic situation 2008 to 2009

(updated end of Jun 2009)

		2008 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	Apr	May
PRODUCTION																
Industry, total	real, CMPY	5.8	8.3	8.3	5.2	5.1	-0.5	-4.5	-19.8	-28.6	-26.6	-34.1	-31.6	-30.4	-31.8	-31.8
Industry, total	real, CCPY	7.8	8.0	8.0	7.5	7.3	6.3	5.1	2.2	-0.7	-3.1	-34.1	-32.8	-31.9	-31.9	-31.9
Industry, total	real, 3MMA	8.5	7.5	7.3	6.2	3.3	0.0	-8.3	-17.6	-25.0	-29.8	-30.8	-32.0	-31.3	-31.3	.
Construction, total	real, CCPY	1.7	0.0	-1.1	-1.2	-2.1	-2.6	-7.2	-9.6	-13.0	-16.0	-57.6	-57.3	-56.7	-55.6	-55.8
LABOUR																
Employees[1]	th. persons	11467	11459	11430	11441	11451	11428	11387	11358	11210	10982	10863	10815	10799	10748	.
Employees in industry[1]	th. persons	3249	3231	3211	3206	3197	3185	3169	3156	3104	3023	2970	2946	2924	2888	.
Unemployment, end of period	th. persons	639.6	611.7	573.0	538.1	518.7	509.5	513.6	530.1	639.9	844.9	900.6	906.1	879.0	808.8	736.3
Unemployment rate	%	2.3	2.2	2.0	1.9	1.8	1.8	1.8	1.9	2.3	3.0	3.2	3.2	3.1	2.9	2.6
Labour productivity, industry[1]	CCPY	9.7	9.9	9.9	9.5	9.4	8.5	7.3	4.5	1.8	-0.3	-28.0	-26.3	-25.0	-24.7	.
Unit labour costs, exch.r. adj.(EUR)[1]	CCPY	6.9	6.0	6.2	7.3	8.3	10.1	12.9	17.0	19.0	16.7	6.1	5.2	5.3	5.6	.
WAGES, SALARIES[1]																
Total economy, gross	UAH	1702	1735	1774	1883	1930	1872	1916	1917	1823	2001	1665	1723	1818	1845	.
Total economy, gross	real, CMPY	9.6	8.9	6.0	6.5	7.1	6.3	7.9	5.5	0.4	-2.3	-10.5	-12.7	-9.6	-8.0	.
Total economy, gross	EUR	218	218	229	250	253	257	274	284	238	195	162	175	181	181	.
Industry, gross	EUR	250	248	260	272	284	296	313	313	253	201	181	194	204	201	.
PRICES																
Consumer	PM	3.8	3.1	1.3	0.8	-0.5	-0.1	1.1	1.7	1.5	2.1	2.9	1.5	1.4	0.9	0.5
Consumer	CMPY	26.2	30.2	31.1	29.3	26.8	26.0	24.6	23.2	22.3	22.3	22.3	20.9	18.1	15.6	14.7
Consumer	CCPY	22.5	24.4	25.8	26.4	26.4	26.4	26.2	25.8	25.5	25.2	22.3	21.6	20.4	19.1	18.2
Producer, in industry	PM	6.6	6.6	3.7	4.2	3.6	1.8	-1.8	-1.4	-6.5	-0.4	0.2	1.8	1.1	0.4	-0.7
Producer, in industry	CMPY	31.7	37.5	39.4	43.7	46.4	47.0	42.7	37.7	27.5	23.0	20.5	19.1	13.0	6.4	1.9
Producer, in industry	CCPY	26.9	29.6	31.7	33.7	35.6	37.1	37.8	37.8	36.8	35.5	20.5	19.8	17.4	14.4	11.6
FOREIGN TRADE[2)3)]																
Exports total (fob), cumulated	EUR mn	9195	12750	16806	21257	26120	30589	35195	39539	42540	45561	1843	3944	6401	8749	.
Imports total (cif), cumulated	EUR mn	10824	17610	22577	27688	33308	38738	44580	50231	54491	58163	1542	4489	7508	10233	.
Trade balance, cumulated	EUR mn	-1629	-4860	-5771	-6431	-7188	-8150	-9385	-10692	-11950	-12602	300	-544	-1107	-1484	.
FOREIGN FINANCE																
Current account, cumulated[4]	EUR mn	-2472	-3670	.	-4616	.	.	-6036	.	.	-8838	.	.	-627	.	.
EXCHANGE RATE																
UAH/USD, monthly average	nominal	5.050	5.050	4.986	4.852	4.843	4.845	4.853	5.043	6.004	7.581	7.700	7.700	7.700	7.700	7.653
UAH/EUR, monthly average	nominal	7.813	7.962	7.757	7.535	7.641	7.291	6.985	6.755	7.651	10.242	10.290	9.859	10.046	10.175	10.390
USD/UAH, calculated with CPI[5]	real, Jan04=100	159.4	163.4	166.3	170.6	169.2	169.6	171.4	169.4	147.2	120.2	121.3	122.6	124.0	124.9	125.9
USD/UAH, calculated with PPI[5]	real, Jan04=100	168.1	176.4	179.9	188.8	191.2	201.0	199.2	199.6	164.7	134.6	133.1	136.7	139.2	139.0	137.4
EUR/UAH, calculated with CPI[5]	real, Jan04=100	134.7	135.8	140.3	145.0	142.4	149.1	156.9	165.0	148.4	113.4	116.8	123.1	122.1	121.2	119.2
EUR/UAH, calculated with PPI[5]	real, Jan04=100	153.7	159.5	167.5	177.6	179.6	192.4	197.4	203.0	170.5	128.9	129.1	137.5	137.0	136.9	.
DOMESTIC FINANCE																
M0, end of period	UAH bn	109.8	116.1	118.8	124.7	130.9	134.0	133.6	146.3	141.3	154.8	150.2	147.5	147.1	150.7	153.0
M1, end of period	UAH bn	183.7	188.6	189.0	201.1	207.8	212.6	214.8	217.2	209.3	225.1	214.9	210.3	212.5	213.7	217.8
Broad money, end of period	UAH bn	416.0	429.6	429.7	450.6	467.2	474.9	477.7	481.1	483.8	515.7	492.7	470.9	463.8	465.1	468.2
Broad money, end of period	CMPY	52.7	52.2	49.1	48.7	47.4	44.4	37.2	35.8	32.3	30.2	25.9	18.3	11.5	8.3	9.0
Refinancing rate (p.a.),end of period	%	10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Refinancing rate (p.a.),end of period[6]	real, %	-16.5	-18.6	-19.7	-22.1	-23.5	-23.8	-21.5	-18.7	-12.1	-9.0	-7.1	-6.0	-0.9	5.3	9.9
BUDGET																
General gov.budget balance, cum.	UAH mn	5670	5360	11843	6544	6643	14415	11762	7348	5558	-14183	2605	1291	-74	.	.

1) Excluding small firms.
2) Based on cumulated USD and converted using the ECB EUR/USD average foreign exchange reference rate.
3) Cumulation starting January and ending December each year.
4) Calculated from USD to NCU to EUR using the official average exchange rate.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Deflated with annual PPI.

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