

Wiener Institut für Internationale Wirtschaftsvergleiche The Vienna Institute for International Economic Studies

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- Financial Balances of the Private, Foreign and Public Sectors: Long-term Tendencies for the EU
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### Financial balances of the private, foreign and public sectors: longterm tendencies for the European Union

BY ROMAN RÖMISCH

Austerity is looming at the EU's horizon as politicians seek to induce some stability to the economies, while at the same time more and more economists warn that the envisaged austerity policies alone might lead the EU into the abyss of depression. This article will support the latter arguments with simple empirical results. All this article uses is a fundamental macroeconomic identity to analyse the development of public deficit in the EU over time.

This identity states that the balance of the private sector (i.e. the difference between savings and investments of households and private companies), at any point in time, has to be identical with the sum of public deficits (i.e. the difference between government expenditures and tax revenues) and net exports (i.e. exports minus imports). More formally this identity can be expressed as:

$$(SP_t - IP_t) = (G_t - T_t) + (X_t - M_t)$$

This identity must hold for any economy: SP<sub>t</sub> are private savings and IP<sub>t</sub> private investments, (G<sub>t</sub>-T<sub>t</sub>) is the government balance defined as the difference between government expenditures and tax revenues. Finally (X<sub>t</sub>-M<sub>t</sub>) is the foreign balance, i.e. exports minus imports.

The identity shows the financing interrelationships between the sectors of the economy, as aggregate net investments (net borrowing) of one sector have to be financed by other sectors where savings exceed investments. The private sector has been put on the left side of the equation since, under typical conditions, the private sector tends to save more than it invests, and thus acts as a source of finance – especially for the government sectors. The difference between exports and imports represents the net transfer of assets or debts between domestic and foreign economies. Importantly, this macroeconomic identity states that balanced or even positive public budgets are inevitably linked to either a net surplus in foreign trade or a deficit or debt-making of the private sector, or to some combination of both. Theory also tells us that keeping balanced public budgets over a prolonged period of time is a difficult task as, firstly, the attempt at being a net exporter (especially in the case of the EU) is going to end up in a selfdefeating beggar-thy-neighbour policy. Secondly, there are strong arguments for the unwillingness of the private sector to indebt itself over a longer period of time. On the contrary, expectations are that the private sector tends to accumulate outside wealth, which creates a permanent tension to the goal of sustained balanced public budgets (given that net exports are zero globally). Thus, economic theory puts some doubt on the feasibility of current European fiscal policies, at least in the medium to the long run.

To analyse the feasibility from an empirical point of view we use data on the macroeconomic financial balances for the EU<sup>1</sup> in the period 1995 to 2010. These are ex-post data, and we therefore can use them to analyse trends of the relation between the public, private and external sectors in the economy as the data stem from a period when the Maastricht criteria were in place and thus budget deficits an important issue.

To begin with, Figure 1 illustrates the basic macroeconomic identity that net private savings (NPS, i.e. private savings minus private investment) have to be equal to net exports (E) plus public deficit (D) (a positive value for D indicates a public deficit, budget surpluses would be represented by a negative D).

Figure 1 shows the following stylized facts:

- In no year from 1995 to 2010 did the EU on aggregate have a budget surplus, i.e. D was always positive.
- In no year were private balances  $(SP_t IP_t)$  continuous accumulation of net outside financial assets.

For data reasons the EU is defined here as EU-23, i.e. EU-27 excluding Bulgaria, Ireland, Luxembourg and Malta.

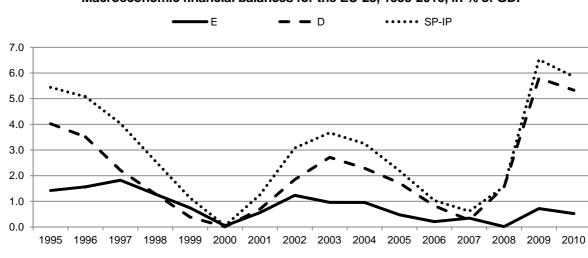
• In each year the EU had a small positive E, i.e. a trade surplus with the rest of the world.

One the one hand these numbers put some doubt on the feasibility of a stronger and sustainable fiscal discipline in the EU, as even over the longer run there seems to be an inherent tendency of the governments to indebt themselves as the private sector tends to accumulate outside wealth.

On the other hand the numbers also show that from the macroeconomic balances point of view there is some room for fiscal austerity, basically made possible through a trade surplus with the rest of the world, which would allow the private sector to be a net saver even if public budgets are balanced or in surplus (provided that it is smaller than the net exports).

There are two years, 2000 and 2007, in which the EU came close to the goal of a balanced budget, so that in principle, based on these numbers, the feasibility of a stronger fiscal discipline cannot be excluded, and the question arises under which conditions it may occur.

For this it is illustrative to link the financial balances to economic growth, as is shown in Figure 2 that combines net private savings with the growth of GDP.

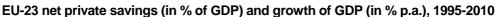


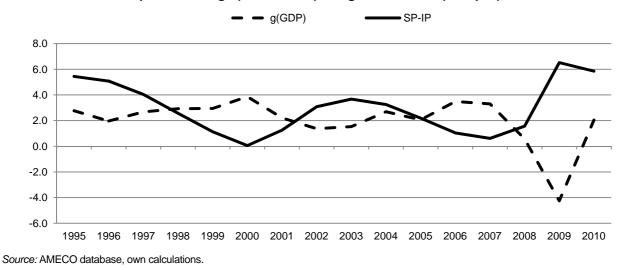
Macroeconomic financial balances for the EU-23, 1995-2010, in % of GDP

Source: AMECO database, own calculations.



Figure 1





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From Figure 2 the following stylized fact are apparent in the EU:

- Periods of high economic growth are connected to reduction in net private savings.
- In periods of relatively low growth private savings are higher than private investment, and hence net private savings are positive.

These results become even more instructive if one splits the balance of the private sector into its components private savings and private investments and connects both to the growth of GDP as is shown in Figure 3.

Figure 3 shows two stylised facts:

Figure 3

- There is an inverse relationship between private savings and economic growth. In periods of high growth the private saving rate decline (and hence the rate of consumption increases), while during phases of low growth private saving increase.
- There is a positive relationship between economic growth and private investment, as phases of high growth are phases of high investment levels, while in period of low growth investment rates are also low.

This empirical result just shows the well-known fact that private investments – in combination with private consumption – have the leading role in the

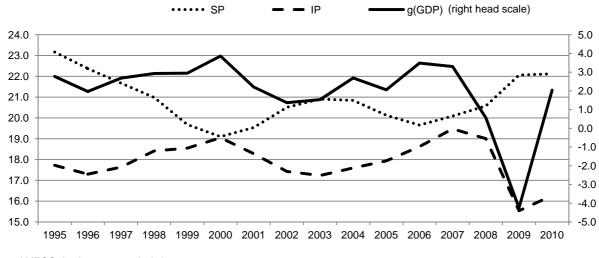
business cycle and thus are the key determinants of economic growth. This is also emphasized by the correlation of the year-to-year change in the private sector balance (i.e.  $\Delta$ (SP-IP)) and the change in the growth rate of GDP (i.e.  $\Delta$ g(GDP)), as well as the correlation of the latter with the change in the private investment rate (i.e.  $\Delta$ IP) only (see Figure 4 and Figure 5).

To deepen the analysis a bit we split the EU private sector balance into the balance of the company sector and of the households, and also divide each balance into its components: company (household) investments (IC<sub>t</sub> and IH<sub>t</sub> respectively) and company (household) savings (SC<sub>t</sub> and SH<sub>t</sub>), and relate both to the growth of EU GDP again (see Figure 6 and Figure 7). More formally we use the fact that:

$$(SP_t - IP_t) = (SH_t - IH_t) + (SC_t - IC_t)$$

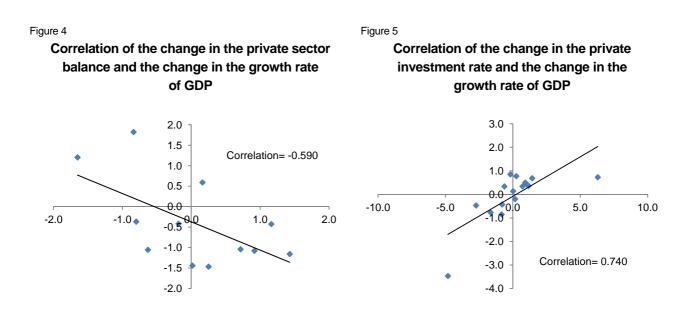
The stylized facts derived from Figure 6 are:

- There is a high correlation between the level of company investments and the growth of GDP over the whole period 1995-2010.
- Company savings and GDP dynamics are inversely related, but only weakly so.
- Over a prolonged period of time (from 1995-2007) there is also an inverse relationship between company savings and company investments.



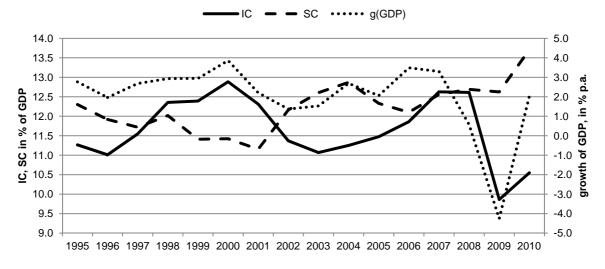
#### EU-23 private investment and private savings (in % of GDP) and growth of GDP (in % p.a.), 1995-2010

Source: AMECO database, own calculations.





EU-23 company investments and savings (in % of GDP), GDP growth (in % p.a.), 1995-2010



Source: AMECO database, own calculations.

Figure 7 shows two stylized facts:

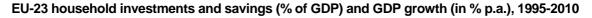
- There tends to be no correlation between household investments and growth of GDP.
- Household savings and GDP growth are weakly inversely related to each other, as there is a slight tendency for GDP to increase as household savings decline (and hence consumption increases), while GDP declines with increasing saving rates.

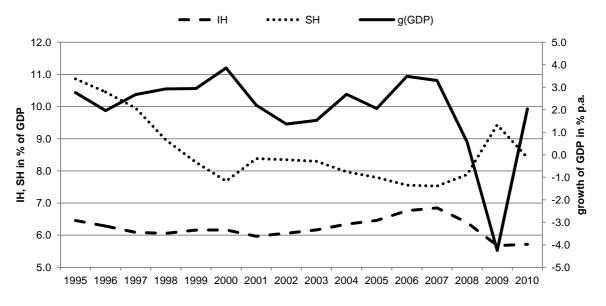
Given these facts, we may now relate the other two elements of the fundamental identity to the growth of GDP of the EU (see Figure 8). From Figure 8 two stylized facts are apparent:

- Government deficit in the EU is highly countercyclical, i.e. deficits tend to be lowest in the years of high economic growth and vice versa.
- Net exports also tend to be counter-cyclical as in the periods of good growth performance E tends to be lower than in other years.

Figure 8 strongly emphasizes the connection between the size of the sectors' financial balances and the dynamics in the EU economy. Years of high growth are connected with low D and low net private savings, while in low growth years both D and net private savings tend to be high. There is of course an issue of causality. A straightforward explanation, from the effective demand point of view, is that activities in the private sector, i.e. either increasing private investments or reduced private savings equalling higher consumption, are driving economic development, while the size of the government deficits is dependent on growth, e.g. because of automatic stabilizers that drive up public expenditures and lower tax revenues during years of weaker growth, while during periods of higher growth tax revenues increase faster than public expenditures thus reducing the public deficit.

#### Figure 7

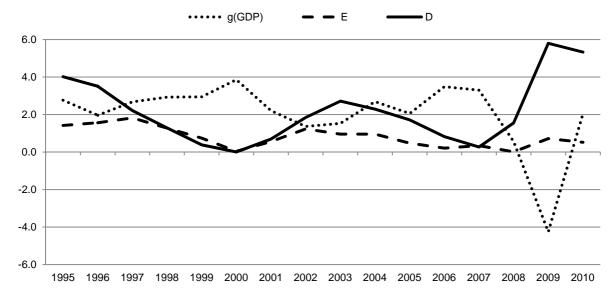




Source: AMECO database, own calculations.

Figure 8





Source: AMECO database, own calculations.

To support this Figure 9 splits government deficit D into its two components government expenditures G and tax revenues T and relates both to the growth of EU GDP.

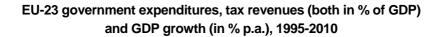
From this two stylized facts are derived:

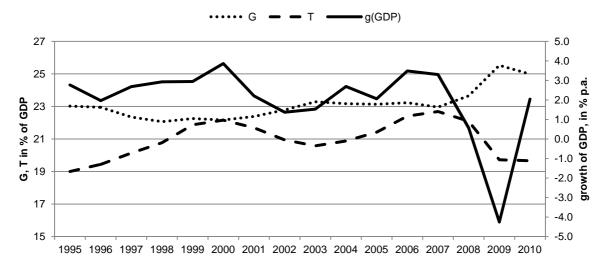
- There is only a weak negative correlation between government expenditures and the growth rate of GDP, suggesting that automatic stabilizers (e.g. unemployment benefits) are if only modestly affected by the state of the EU's economy.
- By contrast, over the whole period 1995-2010 tax revenues are highly correlated with economic growth and moreover tend to fluctuate much more strongly over the turn of a business cycle than government expenditures.

Overall therefore the empirical analysis provides some evidence that, firstly, it is private activities and company investments in particular that are the driving factor behind economic growth in the EU over the period 1995-2010. Secondly, it may also be put forward that the size of public deficits in the EU was dependent on the dynamics of the economy and not vice versa as during periods of high growth deficits tended to be low – importantly, because of high tax revenues and not because of cuts in government expenditures – while the opposite was the case during periods of low growth.

From that it follows that it does not necessarily take a miracle to achieve balanced public budgets – it just takes an economic upswing. This however might be a miracle, given that advocating tighter fiscal discipline – that a) was not necessarily related to higher growth in the past decade and b) tends to depress economic sentiments, effective demand and hence private investment propensities – is just neglecting fundamental economic principles.

#### Figure 9





Source: AMECO database, own calculations.

### Labour hoarding during the crisis: evidence for selected new member states from the Financial Crisis Survey\*

BY SANDRA M. LEITNER AND ROBERT STEHRER

During economic downturns, labour hoarding becomes an attractive human resource strategy if sizeable search and training costs render hiring and training new workers too costly. This article sheds light on the prevalence and extent of labour hoarding in five new EU member states and Turkey during the global financial crisis, which spread quickly after the bankruptcy of Lehman Brothers in September 2008. It applies a unique firm-level panel, constructed by merging the World Bank Financial Crisis Survey (FCS) with the Business Environment and Enterprise Performance survey (BEEPs) and demonstrates that labour hoarding was a widely used strategy among entrepreneurs during the crisis. Furthermore, labour hoarding was particularly frequent among innovators whose substantial R&D-related training costs and extensive search costs for knowledgeable and experienced R&D personnel rendered labour hoarding more cheap.

# Effects of the global financial crisis in the new member states

Before the financial crisis spread globally and hit the global economy with full force in 2009, the new EU member states (EU-12 henceforth) and Turkey were steadily catching up with the EU-15 countries. Between 2001 and 2008, average real GDP growth in the EU-12 and Turkey amounted to around 5% and 4.5%, respectively. Within the region, the Baltic states emerged as growth champions with average growth rates of around 7% while Malta was at the bottom end of economic growth with an average growth rate of around 2% only. However, after the collapse of Lehman Brothers in September 2008, the EU-12 countries and Turkey were sucked into the vortex of the global financial crisis and real GDP took a nosedive. Until the onset of the global financial crisis, labour markets in the EU had performed and developed fairly well. In 2007, the average employment rate in the group of EU-12 countries approached 65% while the unemployment rate was 7.7%. Across the EU-12 countries, unemployment rates differed greatly and were highest in Slovakia with about 11%, followed by Poland with about 10% and Hungary just below the 8% threshold. In contrast, with around 4%, unemployment rates were lowest in Cyprus and Lithuania (Table 1). And with almost 9%, the unemployment rate was relatively high in Turkey.

However, labour markets started to deteriorate from mid-2008 onwards and in 2009, when real GDP hit rock bottom, unemployment rates soared. The Baltic states, which suffered the most pronounced plunge in real GDP growth, also experienced the strongest increases in unemployment of around 10 percentage points between 2007 and 2009.

The partly dramatic plunges in real GDP notwithstanding, the rise in unemployment was comparatively moderate, a phenomenon attributable to widespread labour hoarding during the recession. Figure 1 approaches the issue differently and compares changes in real GDP to changes in employment for 2009 and 2010 for all EU-12 member countries plus Turkey. It highlights that in the crisis year of 2009, in the majority of countries considered, the contraction in real GDP far exceeded the drop in employment - a clear indication of labour hoarding. Specifically, real GDP dropped by between 2% and almost 18% while employment fell by between 0.3% and 13% only. Turkey enjoyed an exceptional position as employment expanded (slightly) despite deteriorating GDP growth. In 2010, when recovery was on the way already and the majority of economies (except for Latvia and Romania) returned to positive growth, employment recovered only slowly in Cyprus, Hungary, Malta and Poland while in Turkey employment kept its

<sup>\*</sup> This article is based on S. M. Leitner and R. Stehrer, 'Labour Hoarding during the Crisis: Evidence for Selected New Member States from the Financial Crisis Survey', forthcoming as *wiiw Working Paper* No. 84.

impetus and rose even further. The former pattern points to the presence of labour hoarding during the 2010 recovery year. In contrast, despite growing GDP, employment contracted even further in Bulgaria, the Czech Republic, Latvia, Slovakia and Slovenia.

Moreover, as the crisis unfolded, numerous economies implemented flexibility-enhancing labour market policies such as short-time working schemes to cushion negative effects on labour markets, particularly to contain the extent of job losses. Consequently, between 2008 and 2009, average hours worked dropped by 1.7% in the EU-12 (relative to a drop of 1.5% in the EU-15). But crisis-related reductions in average hours worked differed across sectors and were most pronounced in industry and construction, where average hours worked contracted by 3.4% and 2.8%, respectively. In contrast, agriculture and public administration, education and health experienced a minor drop in average hours worked of 0.3% only.

Table 1

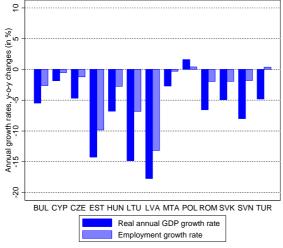
| Annual unem | ployment rates | (2000-2011) |
|-------------|----------------|-------------|
|-------------|----------------|-------------|

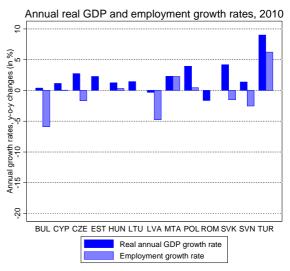
| Country           | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Bulgaria          | 16.4 | 19.5 | 18.2 | 13.7 | 12.1 | 10.1 | 9.0  | 6.9  | 5.6  | 6.8  | 10.2 | 11.1 |
| Cyprus            | 4.8  | 3.9  | 3.5  | 4.1  | 4.6  | 5.3  | 4.6  | 3.9  | 3.7  | 5.3  | 6.2  | 7.8  |
| Czech Republic    | 8.7  | 8.0  | 7.3  | 7.8  | 8.3  | 7.9  | 7.2  | 5.3  | 4.4  | 6.7  | 7.3  | 6.8  |
| Estonia           | 13.6 | 12.6 | 10.3 | 10.0 | 9.7  | 7.9  | 5.9  | 4.7  | 5.5  | 13.8 | 16.9 | 12.5 |
| Hungary           | 6.4  | 5.7  | 5.8  | 5.9  | 6.1  | 7.2  | 7.5  | 7.4  | 7.8  | 10.0 | 11.2 | 10.9 |
| Latvia            | 13.7 | 12.9 | 12.2 | 10.5 | 10.4 | 8.9  | 6.8  | 6.0  | 7.5  | 17.1 | 18.7 | 15.4 |
| Lithuania         | 16.4 | 16.5 | 13.5 | 12.5 | 11.4 | 8.3  | 5.6  | 4.3  | 5.8  | 13.7 | 17.8 | 15.4 |
| Malta             | 6.7  | 7.6  | 7.4  | 7.7  | 7.2  | 7.3  | 6.9  | 6.5  | 6.0  | 6.9  | 6.9  | 6.4  |
| Poland            | 16.1 | 18.3 | 20.0 | 19.7 | 19.0 | 17.8 | 13.9 | 9.6  | 7.1  | 8.2  | 9.6  | 9.7  |
| Romania           | 6.8  | 6.6  | 7.5  | 6.8  | 8.0  | 7.2  | 7.3  | 6.4  | 5.8  | 6.9  | 7.3  | 7.4  |
| Slovakia          | 18.8 | 19.3 | 18.7 | 17.6 | 18.2 | 16.3 | 13.4 | 11.1 | 9.5  | 12.0 | 14.4 | 13.4 |
| Slovenia          | 6.7  | 6.2  | 6.3  | 6.7  | 6.3  | 6.5  | 6.0  | 4.9  | 4.4  | 5.9  | 7.3  | 8.1  |
| Turkey            |      |      |      |      |      | 9.2  | 8.7  | 8.8  | 9.7  | 12.5 | 10.7 | 8.8  |
| Source: Eurostat. |      |      |      |      |      |      |      |      |      |      |      |      |

Figure 1



Annual real GDP and employment growth rates, 2009





Source: wiiw Database.

#### Data and methodology

In this article the phenomenon of labour hoarding is considered from a firm-level perspective. The analysis applies a unique firm-level panel, constructed by merging the World Bank Financial Crisis Survey (FCS) with the Business Environment and Enterprise Performance survey (BEEPs), a joint initiative of the World Bank (WB) and the European Bank for Reconstruction and Development (EBRD).

The FCS was designed and developed to capture the effects of the global financial crisis on sales and supplies, employment, finance and R&D expenditure of private firms in six countries, comprising Bulgaria, Hungary, Latvia, Lithuania, Romania and Turkey. It was conducted in three consecutive waves between 2009 and 2010: the first wave was carried out in June/July 2009, the second wave in February/March 2010 and the third wave in May/June 2010. The FCS firm sample represents a subsample of firms interviewed in the 2009 round of the BEEPs and is representative of the private non-agricultural formal economy.<sup>1</sup>

The BEEPs collects information on the quality of individual firms' business environment, how it is perceived by them, how it changed over time, identifies various constraints or obstacles to firm performance and growth, and captures the effects a country's business environment has on firms' international competitiveness. So far, the survey was conducted in four consecutive waves in 1999-2000, 2002, 2005 and 2009 and collected comparative firm panel data for a broad group of transition economies. Country samples are representative of the overall non-agricultural economy<sup>2</sup> and were selected using random sampling with replacement,

stratified by firm size, business sector and geographic region.

The ensuing analysis uses a merged firm panel comprising BEEPs data from the 2009 round, referring to 2007 and (partly) to 2004, and FCS data from the 1<sup>st</sup> and the 3<sup>rd</sup> waves, referring to mid-2009 and mid-2010, respectively. As such, BEEPs data refer to the pre-crisis period while FCS data refer to the post-crisis recovery period and capture effects of and responses to the global financial crisis.

The focus of the analysis rests on labour productivity responses to the crisis as captured by the difference between the annual sales growth rate and the annual employment growth rate. Specifically, the 2009 BEEPs asked respondents to provide information on the total number of permanent, full-time employees at the end of 2007 as well as of 2004, from which annualized average employment growth rates were calculated for the pre-crisis period. Similarly, the 1<sup>st</sup> (and 3<sup>rd</sup>) wave of the FCS collected data on the total number of permanent, full-time employees at the end of the last completed month (i.e. mid-2009 and mid-2010) which were used to calculate the annual employment growth rate for the post-crisis period. Furthermore, the 2009 round of the BEEPs also collects data on total annual sales for the fiscal years 2004 and 2007 which were transformed into annualized average sales growth rates for the pre-crisis period. For the sake of comparability and compatibility, information on sales were taken from the 3<sup>rd</sup> wave of the FCS which asked respondents to indicate how sales for the last completed month in 2010 have changed compared to the same month in 2009 (i.e. from mid-2009 to mid-2010): whether sales have increased (by how much in %), decreased (by how much in %) or remained the same. All in all, labour productivity (sales per employee) growth rates vary widely. Outliers were eliminated according to the three-sigma rule so that extreme values in excess of 380 or smaller -100 were eliminated and excluded from the analysis.

Methodologically, a random-effects feasible generalized least squares estimator (FGLS) is applied

<sup>&</sup>lt;sup>1</sup> In Turkey, the first FCS wave (2009) covers the manufacturing sector only, while the following two waves refer to the overall private sector.

<sup>&</sup>lt;sup>2</sup> The non-agricultural economy comprises all manufacturing sectors (ISIC rev. 3.1: group D), the construction sector (ISIC rev. 3.1: group F), the service sector (ISIC rev. 3.1: groups G and H) as well as the transport, storage and communications sector (ISIC rev. 3.1: group I).

which assumes that none of the explanatory variables is correlated with the unobserved effect.

Specifically, the following model is estimated:

 $grL_{it}^{P} = \alpha_{0} + \beta_{1}t + \gamma_{A}X_{Ait} + \delta_{B}(t * X_{Ait}) + \upsilon Y_{it} + \omega Z_{it} + u_{it}$ (1)

where grLP<sub>it</sub> is the annual labour productivity growth rate of firm i at time t. More specifically, for the 2004-2007 pre-crisis period,  $grLP_{it}$  is the annualized average labour productivity growth rate, while for the post-crisis period,  $grLP_{it}$  refers to the annual labour productivity growth rate between 06/07 2009 and 06/07 2010. t is a dummy variable which is equal to 1 for the crisis-period and 0 otherwise and captures the effects of the global financial crisis on labour productivity.  $X_{Ait}$  is a matrix of A firm characteristics,  $Y_{it}$  is a vector of 17 ISIC rev. 3.1 sector dummies while  $Z_{it}$  is a vector of 5 country dummies that are assumed to capture, among other things, the roles of product market conditions or labour market institutions and regulations on sales and employment fluctuations. Finally,  $U_{it}$  represents the error term. Generally, there is evidence of labour hoarding if labour productivity growth is significantly lower during the crisis than before when entrepreneurs hang on to their workers so that any decline in sales far exceeds cuts in employment.

As for firm characteristics, a dummy for exporter status is included for firms whose sales from exporting domestically produced goods and tradable services exceed a minimum threshold of 10% of total sales. Given their exposure to fierce international competition, the obstacles and difficulties they encounter with opening up and penetrating new foreign markets or their need to comply with and adapt to international quality and technical standards, exporters make high operational and technical demands on their employees. Therefore, strong emphasis may be put on training and human resource development, resulting in high training costs as well as substantial firing costs due to the considerable loss of firm-specific knowledge and human capital of dismissal. Hence, faced with temporarily lower demand, exporters may pursue a strategy of massive labour hoarding.

Moreover, labour hoarding is less pronounced in smaller firms which, during economic downturns, face relatively high opportunity costs of capital and therefore see a strong need to conserve their working capital. Similarly, substantial labour hoarding may be more common and widespread among innovators which face sizeable training and search costs. Given their uncertain and novel nature, innovative activities are highly resource- and knowledge-intensive. Hence, to satisfy the very specific R&D needs of their employers, R&D staff has to (continuously) undergo specific training to acquire particular crucial state-of-the-art technological knowledge. Moreover, due to the innovator's specialized R&D needs, it may be more difficult and time- and cost-intensive to find the proper match so that search costs may also be very large. The firm's innovator status is captured by means of a dummy variable which is equal to 1 if, prior to the crisis, the establishment has spent on R&D activities (either in-house or outsourced). As for the period after the crisis, the FCS does not directly gather information on establishments' expenditure on R&D but instead surveys whether, over the last 3 to 12 months (i.e. between 2009q1 and 2010q1 or between 2008 and 2009), R&D spending has either increased, remained unchanged or decreased. Hence, for the post-crisis period, the innovator dummy is equal to 1 only if establishments reported a decrease in R&D spending, as only in this case, R&D expenditure were positive before and innovators were identifiable without a doubt. In contrast, the dummy was set equal to 0 if R&D spending either increased or remained the same, as R&D expenditure may have been zero before so that non-innovators would erroneously have been classified as innovators.

Traditionally, labour hoarding has been considered to be a dominant strategy among state-owned firms which face 'softer budget constraints' and can therefore afford to over-employ or hoard labour, despite falling demand. Specifically, in the light of non-negligible budgetary support of loss-making state-owned firms in terms of substantial crosssubsidies or easy credits, the maintenance of idle surplus labour becomes a viable employment strategy. To capture the idea that labour hoarding may be more pronounced among (majority) stateowned firms, a dummy variable is included which is set equal to 1 if the state or government owns more than 50% of a firm.

In addition, a dummy variable is included for majority foreign-owned firms (with more than 50% owned by private foreign individuals, companies or organizations) to capture that the strong pressure that weighs heavily on foreign-owned firms to adjust more flexibly and cost-efficiently to changing competitive forces emerging in the international arena gives rise to lower labour hoarding but to stronger and quicker labour adjustments. Finally, the degree of labour hoarding may also crucially depend on firm age. Younger, more recently established firms that are still in their infancy and therefore at the beginning of their learning and growth trajectories are more vulnerable to external macroeconomic shocks. Hence, firm sales are expected to drop more substantially in response to contracting demand. Moreover, younger firms may have invested substantially in training activities of their workforce to meet their administrative and technical needs, to raise overall firm productivity and profitability and to guarantee survival and sustainable and continuous growth. However, since training activities take time to take noticeable effect, productivity improvements may not have materialized vet so that in the face of high (sunk) training costs, younger firms tend to hoard labour once sales drop to also benefit from their training investments. A dummy variable is included in the analysis to account for the role of firm age on labour hoarding. It is set equal to 1 if the firm was younger than 5 years of age before the crisis set in and 0 otherwise.

#### **Results and conclusions**

Results of the analysis are presented in Table 2 below, for three different samples separately. Column (1) looks at the overall firm sample and highlights that during the financial crisis labour productivity growth was significantly lower by around 19 percentage points. Hence, overall, during the crisis labour hoarding was a massively used strategy as employers abstained from drastically cutting their labour forces despite the dramatic slump.

Moreover, during the financial crisis, labour hoarding was significantly more common among innovators only which suffered on average almost 13 percentage points lower labour productivity growth. This finding is supportive of the idea that due to substantial training and search costs they incur, innovators avoid massive lay-offs but instead turn to labour hoarding to cope with temporary losses in demand and sales, experiencing a temporary drop in labour productivity along the way.

In addition, in order to throw light on potentially diverging patterns and strategies of labour hoarding among firms that operate in different sectors, columns (2) to (4) look at three sectors separately, namely the manufacturing sector (ISIC rev. 3.1: section D), the services sector (comprising retail only) as well as the so-called other sector (comprising wholesale, IT, hotels and restaurants, services of motor vehicles, construction and transport), Generally, the results reveal that during the financial crisis, labour hoarding was strongest in the manufacturing sector, followed by the services sector and the 'other' sector. Moreover, there is evidence that massive labour hoarding among innovators was a phenomenon of the other sector only where due to labour hoarding, labour productivity growth among innovators was on average almost 15 percentage points lower during the crisis.

In contrast, no evidence is found that either exporter status, firm size or ownership status affected the degree of labour hoarding among selected emerging economies during the global financial crisis. Table 2

#### Estimation results for different samples

Dep.Var.: labour productivity growth rates

| Variables                   | Whole sample       | Manufacturing    | Services   | Other              |
|-----------------------------|--------------------|------------------|------------|--------------------|
|                             | (1)                | (2)              | (3)        | (4)                |
| Constant                    | 10.644***          | 9.637*           | 18.713***  | 9.314              |
|                             | (2.73)             | (1.79)           | (3.31)     | (1.58)             |
| Time                        | -18.774***         | -21.133***       | -21.160*** | -14.803**          |
|                             | (5.52)             | (3.84)           | (3.46)     | (2.32)             |
| Exporter                    | 3.031              | 1.919            | -10.347    | 2.356              |
|                             | (1.14)             | (0.58)           | (-1.00)    | (0.41)             |
| Time*exporter               | 1.378              | 4.596            | 26.472     | -1.070             |
|                             | (0.31)             | (0.79)           | (1.36)     | (0.12)             |
| Medium-sized                | 0.262              | 3.961            | -4.655     | 0.064              |
|                             | (0.11)             | (1.06)           | (0.93)     | (0.01)             |
| Time*medium-sized           | 0.381              | -0.376           | 6.534      | -3.036             |
|                             | (0.09)             | (0.06)           | (0.80)     | (-0.38)            |
| Large                       | -1.123             | 4.184            | -7.747     | -3.105             |
|                             | (0.41)             | (1.02)           | (1.39)     | (0.62)             |
| Time*large                  | 6.573              | 0.038            | 13.108     | 13.085             |
|                             | (1.44)             | (0.01)           | (1.40)     | (1.54)             |
| Innovator                   | 4.149**            | 2.623            | 2.985      | 7.856**            |
|                             | (1.99)             | (0.86)           | (0.69)     | (1.98)             |
| Time*innovator              | -13.362***         | -8.031           | -23.321*** | -15.437**          |
|                             | (3.31)             | (1.35)           | (2.67)     | (2.11)             |
| Majority state-owned        | -5.071<br>(0.36)   | -3.614<br>(0.15) |            | -3.934<br>(0.23)   |
| Time*majority state-owned   | 43.829**<br>(2.10) | 4.262<br>(0.11)  |            | 52.412**<br>(2.09) |
| Majority foreign-owned      | -0.228             | 3.444            | 1.706      | -5.605             |
|                             | (0.06)             | (0.60)           | (0.20)     | (0.83)             |
| Time*majority foreign-owned | 4.817              | -0.346           | -8.298     | 21.194**           |
|                             | (0.80)             | (0.04)           | (0.63)     | (2.02)             |
| Young                       | 4.513              | 4.567            | 0.228      | 7.288              |
|                             | (1.34)             | (0.91)           | (0.04)     | (1.11)             |
| Time*young                  | -8.472             | -5.441           | -11.343    | -11.748            |
|                             | (1.55)             | (0.69)           | (1.10)     | (1.02)             |
| Country dummies             | YES                | YES              | YES        | YES                |
| Industry dummies            | YES                | YES              | NO         | YES                |
| No. of observations         | 2,529              | 1,216            | 623        | 690                |
| Adj. R²                     | 0.135              | 0.156            | 0.202      | 0.116              |

*Note:* Robust z-statistics in parentheses, \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Country and industry dummies are included but coefficients are not reported here to conserve space but are available upon request. The manufacturing sector comprises section D (ISIC rev. 3.1), the services sector refers to retail only while the so-called other sector covers wholesale, IT, hotels and restaurants, services of motor vehicles, construction and transport.

# The European banking crisis and spillover effects in the countries of CESEE revisited

BY LEATH AL OBAIDI\* AND MARIO HOLZNER

A chapter on the European banking crisis and its spillover effects in the countries of Central East and Southeast Europe (CESEE)<sup>1</sup> contained in wiiw's *Current Analyses and Forecasts* No. 9 in March 2012 received quite some attention, including suggestions for further research. This paper follows up with some new results.

#### Main trends in deleveraging

Bank of International Settlements data have been used to analyse the extent of deleveraging in CE-SEE. The data are derived from the consolidated banking statistics on an ultimate risk basis (the country of ultimate risk is defined as the country in which the guarantor of a financial claim resides and/or the country in which the head office of a legally dependent branch is located). The period covered in our analysis includes June 2008 as the pre-crisis period, September 2008 as the beginning of the crisis and December 2011 as the latest available data point. Data are denominated in euro.

In the figures below we take a closer look at the activities of Western European banks in the GIIPS (Greece, Italy, Ireland, Portugal, Spain) as well as in the CESEE countries in relative and absolute terms. The first two figures show the structure and dynamics of the change of the consolidated foreign claims of European banks in the GIIPS region. All of these countries registered a substantial decrease in foreign claims of more than 30% from the start of the crisis as compared to the pre-crisis period. None of the creditors were willing to increase their exposure. Italy experienced the mildest relative decrease of their exposure: a drop of 30%. The most striking

dynamic was recorded in Greece, where Western European banks reduced their claims on this country by nearly 70%. The German, French and Belgian banks deleveraged most out of the GIIPS countries, relatively to their prior investment of June 2008. In Greece almost half of the deleveraging is due to Swiss banks' reduction of claims.<sup>2</sup>

Figure 2 presents the absolute numbers of the change of consolidated foreign claims on banks in the GIIPS countries. Ireland, Italy and Spain are the countries with the highest level of decrease of foreign claims in the banking sector of over EUR 200 billion, while for Greece and Portugal the decrease of foreign exposure is below EUR 120 billion.

Figures 3 and 4 show the same indicators for the CESEE countries. Things appear less dramatic in this region. The majority of countries experienced a decrease of foreign claims of about 30%. German and Swiss banks have been swiftest in withdrawing from the region. They account for the largest chunk of deleveraging in CESEE. Macedonia and Montenegro are special cases in the region: They are the only countries that have experienced, in net relative terms, a substantial increase (101% and 49% respectively) in foreign claims.<sup>3</sup> This is mostly due to Austrian banks' involvement. In numbers, however, it is just a net amount of EUR 249 million in Macedonia and EUR 242 million in Montenegro. Albania (just positive by EUR 66 million net) experienced the smallest increase of Western European exposure. The Czech Republic has also experienced a positive increase of foreign bank claims of EUR 6.8 billion net by Austrian and French banks.

In comparison to the GIIPS the amount of reductions in foreign claims in CESEE was on average very small, below EUR 5 billion per country. Hungary and Poland were the only countries to suffer a net decrease in foreign claims above EUR 10 billion. However, Poland experienced an increase in foreign claims by British, Swedish, French and Austrian

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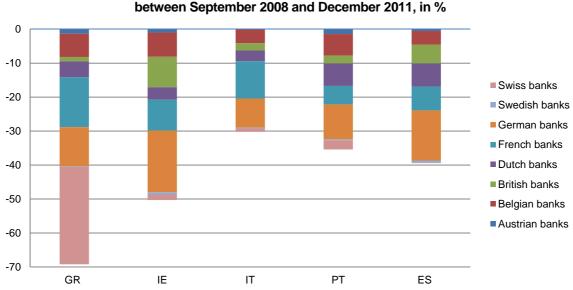
<sup>&</sup>lt;sup>1</sup> O. Pindyuk and M. Holzner, 'The European banking crisis and spillover effects in the countries of CESEE', *wiiw Current Analyses and Forecasts*, No. 9, March 2012, pp. 54-61.

<sup>&</sup>lt;sup>2</sup> Foreign claims include cross-border claims and local claims of foreign affiliates in both foreign and local currency.

<sup>&</sup>lt;sup>3</sup> In the figure the bars for these countries go beyond the borders of the diagram.

banks, while Hungary suffered a decrease in foreign claims by banks from all Western European countries. It is interesting to note that the European banks, even those whose foreign claim structures are similar, have targeted different countries to run on. In Montenegro in particular an almost full withdrawal of lending by German banks was outweighed by Austrian and Swiss banks. Swedish banks have decreased their claims especially on Latvia, Lithuania and Estonia and increased instead in Poland. In summary, although the CESEE banking sectors have suffered some deleveraging of 14%, it has been quite small-scale in comparison to the GIIPS countries (40%) where the financial crisis effects appear to be more severe. While Austrian, British and French banks seem to be willing to increase their claims in CESEE, German and Swiss banks are strongly reducing their exposure in almost all the countries.

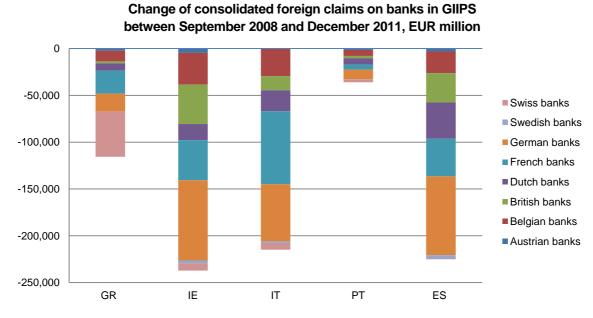
Figure 1



Change of euro-denominated consolidated foreign claims on banks in GIIPS between September 2008 and December 2011, in %

Source: BIS, own calculations.

Figure 2



Source: BIS, own calculations.

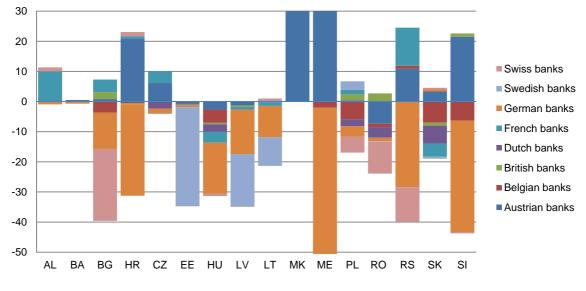
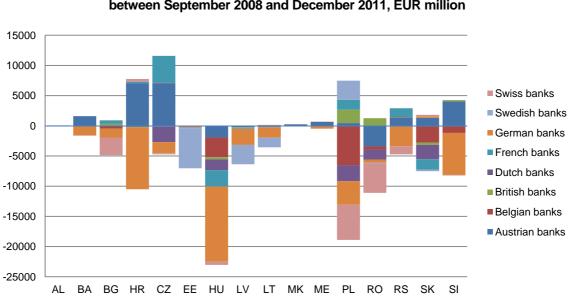


Figure 3

Change of euro-denominated consolidated foreign claims on banks in CESEE between September 2008 and December 2011 to the base total exposure in June 2008, in %

Source: BIS, own calculations.

Figure 4



Change of consolidated foreign claims on banks in CESEE between September 2008 and December 2011, EUR million

Source: BIS, own calculations.

Another important observation is that during the crisis the Western European banking centres have behaved quite differently. Dissimilarities in their decision regarding change of exposure to the CE-SEE countries might be attributed to the banks' subjective perceptions of risk (rather than based on objective indicators) and the varying performance

of individual banks in a given CESEE country. It is the aim of the following section to determine whether there has been a spillover effect from the GIIPS to the CESEE countries and whether local (missing) demand (among other potential explanatory variables) is an important factor in explaining deleveraging.

#### **Determinants of deleveraging**

Besides the general reduction of credit to emerging markets for reasons of a change in risk awareness, it is widely assumed that those banks that were deeply involved in countries overly hit by the crisis have found it necessary to reduce their exposure to other emerging markets as well on account of unexpected losses in the former countries. This spillover effect is also termed 'common lender effect'.

Following the methodology of van Rijckeghem and Weder (2003)<sup>4</sup>, we wish to distinguish between those two effects for a group of 16 CESEE countries. One dimension of the panel data is by European creditor countries - not by time. The creditor countries in question are Austria, Belgium, France, Germany, the Netherlands, Sweden, Switzerland and the United Kingdom. The general public perceives the GIIPS countries Greece, Ireland, Italy, Portugal and Spain as the five countries whose economies triggered negative spillover effects throughout emerging Europe. Those five countries have not been included as creditor countries in the panel. They act as 'ground-zero countries' with the potential to cause spillover effects via banking centres that are heavily involved in their economies.

The estimated panel data model has the following structure:

# $\Delta Exposure_{ci} = a Exposure_{ci} + b Exposure_{c0} + cMacro_{i} + dTrade_{i} + \varepsilon_{ci},$

where  $\Delta Exposure_{ci}$  is the change in the lending of the creditor country's banking sector c to the CESEE country *i* over the period September 2008 to December 2011 as a share of the pre-crisis (June 2008) overall exposure to Emerging Europe (CE-SEE + GIIPS). *Exposure<sub>ci</sub>* represents the pre-crisis share of the creditor country's claims on the respective CESEE country in overall exposure to Emerging Europe. The common lender variable is defined as *Exposure<sub>c0</sub>*. It corresponds to the pre-crisis share of the creditor countries' claims on the GIIPS countries in overall exposure to Emerging Europe. A set of Macroi control variables consist of the current account and government balance share in GDP for the year 2007, as well as a real effective exchange rate appreciation calculated as a percentage change between the averages of the respective indices in the period 2004-2006 and the year 2007. A fixed exchange rate country dummy variable has also been included. Finally  $Trade_i$  stands for the 2007 export shares of the respective CESEE country to the GIIPS countries in order to check for possible trade-based contagion effects. These are the explanatory variables for our baseline specification 1. Furthermore, in a second specification we add the cumulative real GDP growth rate of country *i* during the crisis (2008-2011) in order to test for a possible demand effect. The data on exposure come from the BIS database on consolidated claims on an ultimate risk basis. The macro control variables are taken from the Eurostat and wijw databases and the trade data from the UN Comtrade database.

The results of the robustly estimated random effects model are summarized in Table 1. Two specifications were estimated: one baseline specification and one including the cumulative growth rate as a proxy for local credit demand. In the first specification, we find a negative and significant result for the major deleveraging process throughout Europe's periphery. For every additional percentage point of precrisis relative exposure of the creditor countries' banking sector to the respective CESEE country, more than a tenth of a percentage point left those countries in the period September 2008 to December 2011, indicating a general wake-up call in line with a revised risk assessment of the region.

There is a common lender effect visible among those creditor countries' banks that prior to the crisis were heavily involved in GIIPS countries, at a significance level of ten per cent only. For each creditor's euro of claims on GIIPS countries before the crisis, their exposure to CESEE economies during the crisis was reduced by one cent. Thus, the negative spillover is minuscule. Of the macro control variables none proved to be significant. Finally, financial contagion did not occur via the trade channel. The coef-

<sup>&</sup>lt;sup>4</sup> C. Van Rijckeghem and B. Weder (2003), 'Spillover through banking centres: a panel data analysis of bank flows', *Journal of International Money and Finance*, Vol. 22, No. 4, pp. 483-509.

ficient of the CESEE pre-crisis trade share with the GIIPS countries is insignificant.

In the second specification with the additional variable of cumulative growth, we again find only two coefficients to remain significant. The own-country general deleveraging effect as well as the GIIPS countries' common lender effect are still significant at the 5 and 10 per cent level respectively and have the same values as in specification 1. The coefficient of the cumulative growth rate is insignificant. Hence we find weak local demand for credit not to be a factor determining the deleveraging process in CESEE.

Comparing our results with the second specification in Pindyuk and Holzner (2012) we can observe the following differences. The use of euro- rather than US dollar-denominated claims data (together with the other changes in the specification) has reduced the size of the own-country general deleveraging effect by about a quarter, which is attributable to the euro devaluation of about 8% against the dollar in

- . . .

the period of analysis. Furthermore the GIIPS countries' common lender effect is of the same size as the creditors' Greece exposure coefficient in the original Pindyuk and Holzner (2012) article but of less significance. Also the overall R<sup>2</sup> has dropped to about 20%, which is only half of the original level of explanatory power. This probably reflects the missing Hungarian ground-zero variable, whose positive and significant coefficient was interpreted as an indicator of the success of the Vienna initiative, which was mostly pursued by Austrian banks in the region who have by and large withstood the general deleveraging process in CESEE.

Overall, the revised estimations have confirmed the general trend of deleveraging in CESEE although at a slower pace than initially expected. The reasons for this seem to be rather related to the general deleveraging process going on throughout Europe and to a much lower extent due to spillover effects from the crisis hot spots in the GIIPS countries. Reduced local demand for credits does not seem to be at the root of the deleveraging process in CESEE.

| Table 1  | Spillover model    |                    |
|--|--------------------|--------------------|
|  | Spillover model    |                    |
|  | Specification 1    | Specification 2    |
| Constant   | 0.27<br>(0.639)    | 0.11<br>(0.852)    |
| Relative exposure to emerging market                         | -0.12<br>(0.036)** | -0.12<br>(0.038)** |
| Creditor's GIIPS exposure                                    | -0.01<br>(0.085)*  | -0.01<br>(0.077)*  |
| Current account balance share in GDP                         | 0.03<br>(0.314)    | -0.02<br>(0.867)   |
| Government balance share in GDP                              | 0.03<br>(0.734)    | -0.02<br>(0.867)   |
| Real effective exchange rate appreciation                    | 0.01<br>(0.779)    | 0.00<br>(0.874)    |
| Fixed exchange rate regime dummy                             | 0.30<br>(0.244)    | 0.50<br>(0.193)    |
| Export share to GIIPS  | 0.02<br>(0.164)    | 0.01<br>(0.317)    |
| Cumulative growth rate                                       | -                  | 0.03<br>(0.363)    |
| Overall R <sup>2</sup><br>Observations<br>Creditor countries | 0.21<br>129<br>8   | 0.22<br>129<br>8   |

Note: Numbers in brackets refer to p-values; \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively.

#### STATISTICAL ANNEX

# Selected monthly data on the economic situation in Central, East and Southeast Europe

#### Conventional signs and abbreviations used

| %per centPPchange in % against previous periodCPPYchange in % against corresponding period of previous year              |
|--|
|  |
| CPPY change in % against corresponding period of previous year   |
|  |
| CCPPY change in % against cumulated corresponding period of previous year  |
| 3MMA 3-month moving average, change in % against previous year   |
| NACE Rev. 2 Statistical classification of economic activities in the European Community, Rev. 2 (2008)                   |
| NACE Rev. 1 Statistical classification of economic activities in the European Community, Rev. 1 (1990) / Rev. 1.1 (2002) |
| LFS Labour Force Survey  |
| CPI Consumer Price Index   |
| HICP Harmonized Index of Consumer Prices (for new EU member states)  |
| PPI Producer Price Index   |
| EDP Excessive Deficit Procedure  |
| M1 Currency outside banks + demand deposits / narrow money (ECB definition)  |
| M2 M1 + quasi-money / intermediate money (ECB definition)  |
| M3 Broad money   |
| p.a. per annum   |
| mn million (10 <sup>6</sup> )  |
| bn billion (10 <sup>9</sup> )  |
| avg average  |
| eop end of period  |
| NCU National Currency Unit (including 'euro-fixed' series for euro-area countries)                                       |

The following national currencies are used:

| ALL | Albanian lek             | HUF | Hungarian forint | RON | Romanian leu      |
|-----|--------------------------|-----|------------------|-----|-------------------|
| BAM | Bosnian convertible mark | LVL | Latvian lats     | RSD | Serbian dinar     |
| BGN | Bulgarian lev            | LTL | Lithuanian litas | RUB | Russian rouble    |
| CZK | Czech koruna             | MKD | Macedonian denar | UAH | Ukrainian hryvnia |
| HRK | Croatian kuna            | PLN | Polish zloty     |     |                   |
|     |                          |     |                  |     |                   |

EUReuro – national currency for Montenegro and for the euro-area countries Estonia (from January 2011, euro-fixed<br/>before), Slovakia (from January 2009, 'euro-fixed before) and Slovenia (from January 2007, 'euro-fixed' before)USDUS dollar

Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

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|  |                       | 2011   |        |        |        |        |        |        |        |        |        | 2012   |        | (update | d end of J | une 2012) |
|--|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|------------|-----------|
|  |                       | Mar    | Apr    | Мау    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    | Jan    | Feb    | Mar     | Apr        | Мау       |
| LABOUR                                     |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Employment total, registered               | th. pers., quart. avg | 920.4  |        |        | 929.5  |        |        | 929.9  |        |        | 932.4  |        |        | 933.3   |            |           |
| Employment total, registered               | CPPY                  | 2.2    |        |        | 2.7    |        |        | 1.5    |        |        | 1.7    |        |        | 1.4     |            |           |
| Unemployment, registered                   | th. pers., quart. avg | 142.8  |        |        | 142.1  |        |        | 142.1  |        |        | 143.0  |        |        | 143.4   |            |           |
| Unemployment rate, registered              | %                     | 13.5   |        |        | 13.3   |        |        | 13.3   |        |        | 13.3   |        |        | 13.3    |            |           |
| WAGES                                      |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Total economy, gross 1)                    | ALL                   | 45500  |        |        | 45500  |        |        | 47660  |        |        | 48000  |        |        | 48800   |            |           |
| Total economy, gross 1)                    | real, CPPY            | 4.1    |        |        | 2.1    |        |        | 3.3    |        |        | 4.0    |        |        | 6.1     |            |           |
| Total economy, gross 1)                    | EUR                   | 326.3  |        |        | 321.0  |        |        | 340.2  |        |        | 342.8  |        |        | 350.5   |            |           |
| PRICES                                     |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Consumer                                   | PP                    | -0.1   | -0.6   | -1.1   | -1.1   | -0.7   | 0.3    | 0.4    | 0.4    | 0.1    | 1.0    | 0.7    | 1.3    | 0.4     | -0.1       | -0.8      |
| Consumer                                   | CPPY                  | 4.3    | 4.1    | 4.2    | 3.9    | 3.6    | 3.1    | 2.8    | 3.0    | 2.9    | 1.7    | 1.6    | 0.6    | 1.0     | 1.6        | 1.9       |
| Consumer                                   | CCPPY                 | 4.0    | 4.0    | 4.1    | 4.0    | 4.0    | 3.9    | 3.8    | 3.7    | 3.6    | 3.5    | 1.6    | 1.1    | 1.1     | 1.2        | 1.3       |
| Producer, in industry                      | PP                    | 0.1    | 0.4    | 0.1    | 0.0    | -0.3   | 0.0    | 0.0    | 0.6    | 0.2    | -0.1   | 1.1    | 0.3    | 0.3     |            |           |
| Producer, in industry                      | CPPY                  | 2.3    | 3.0    | 3.6    | 3.2    | 2.3    | 2.2    | 2.0    | 2.2    | 2.3    | 1.8    | 2.2    | 2.6    | 2.8     |            |           |
| Producer, in industry                      | CCPPY                 | 3.1    | 3.0    | 3.2    | 3.2    | 3.0    | 2.9    | 2.8    | 2.8    | 2.7    | 2.6    | 2.2    | 2.4    | 2.5     |            |           |
| FOREIGN TRADE, customs statistics          |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Exports total (fob), cumulated             | EUR mn                | 371    | 471    | 585    | 698    | 825    | 921    | 1042   | 1163   | 1282   | 1401   | 97     | 206    | 326     | 454        |           |
| Imports total (cif), cumulated             | EUR mn                | 830    | 1154   | 1478   | 1807   | 2148   | 2479   | 2801   | 3138   | 3472   | 3876   | 268    | 535    | 849     | 1136       |           |
| Trade balance, cumulated                   | EUR mn                | -459   | -683   | -894   | -1109  | -1323  | -1558  | -1760  | -1975  | -2190  | -2475  | -170   | -329   | -524    | -682       |           |
| FOREIGN FINANCE                            |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Current account, cumulated                 | EUR mn                | -221   | -316   | -445   | -543   | -607   | -701   | -797   | -910   | -1039  | -1145  | -86    | -170   | -259    |            |           |
| EXCHANGE RATE                              |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| ALL/EUR, monthly average                   | nominal               | 140.14 | 141.48 | 141.80 | 141.97 | 139.92 | 139.85 | 140.49 | 140.81 | 140.97 | 138.30 | 138.32 | 139.35 | 140.03  | 139.98     | 139.44    |
| ALL/USD, monthly average                   | nominal               | 100.17 | 97.89  | 98.79  | 98.65  | 97.98  | 97.48  | 102.02 | 102.76 | 103.82 | 105.08 | 107.10 | 105.32 | 105.97  | 106.35     | 108.96    |
| EUR/ALL, calculated with CPI <sup>2)</sup> | real, Jan09=100       | 92.8   | 90.8   | 89.6   | 88.6   | 89.6   | 89.7   | 89.1   | 89.0   | 88.8   | 91.1   | 92.3   | 92.3   | 91.2    | 90.8       | 90.5      |
| EUR/ALL, calculated with PPI 2)            | real, Jan09=100       | 85.4   | 84.3   | 84.3   | 84.2   | 84.9   | 85.1   | 84.4   | 84.7   | 84.6   | 86.3   | 86.5   | 85.7   | 85.1    |            |           |
| USD/ALL, calculated with CPI 2)            | real, Jan09=100       | 98.2   | 99.1   | 96.8   | 95.9   | 95.8   | 96.3   | 92.2   | 92.2   | 91.4   | 91.4   | 89.9   | 92.2   | 91.3    | 90.7       | 87.9      |
| USD/ALL, calculated with PPI 2)            | real, Jan09=100       | 83.5   | 84.2   | 83.1   | 83.3   | 83.4   | 84.4   | 80.5   | 81.4   | 80.6   | 80.2   | 79.2   | 80.4   | 79.2    |            |           |
| DOMESTIC FINANCE                           |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| Currency outside banks                     | ALL bn, eop           | 185.5  | 187.9  | 187.9  | 189.3  | 190.2  | 189.6  | 188.9  | 186.6  | 187.2  | 194.9  | 188.2  | 187.4  | 185.6   | 186.1      |           |
| M1   | ALL bn, eop           | 263.8  | 265.4  | 264.8  | 267.7  | 269.6  | 271.8  | 268.9  | 267.2  | 269.1  | 276.9  | 265.2  | 265.9  | 264.7   | 267.0      |           |
| M2   | ALL bn, eop           | 983.5  | 994.6  | 998.5  | 1008.8 | 1015.6 | 1034.7 | 1046.9 | 1053.4 | 1057.1 | 1070.1 | 1061.2 | 1067.1 | 1070.2  | 1077.4     |           |
| M2   | CPPY, eop             | 10.8   | 12.2   | 11.2   | 11.8   | 11.2   | 10.1   | 10.4   | 10.6   | 10.0   | 9.2    | 8.1    | 9.1    | 8.8     | 8.3        |           |
| Central bank policy rate (p.a.) 3)         | %, eop                | 5.25   | 5.25   | 5.25   | 5.25   | 5.25   | 5.25   | 5.00   | 5.00   | 4.75   | 4.75   | 4.50   | 4.50   | 4.25    | 4.25       | 4.25      |
| Central bank policy rate (p.a.) 3)4)       | real, %, eop          | 2.9    | 2.1    | 1.6    | 2.0    | 2.9    | 3.0    | 3.0    | 2.7    | 2.4    | 2.9    | 2.2    | 1.9    | 1.4     |            |           |
| BUDGET                                     |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |
| General gov.budget balance, cum.           | ALL bn                | -11780 | -15909 | -20427 | -26909 | -30764 | -31190 | -31630 | -31718 | -38274 | -45877 | 1713   | -7058  | -9571   | -11475     |           |
|  |                       |        |        |        |        |        |        |        |        |        |        |        |        |         |            |           |

#### A L B A N I A: Selected monthly data on the economic situation 2011 to 2012

1) Excluding private sector.

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

3) One-week repo rate.

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 2011 to 2012

|                                     |                  | 2011  |       |       |       |       |       |       |       |       |       | 2012  |       | (updated | d end of Ju | ine 2012) |
|-------------------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|-----------|
|                                     |                  | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   | Jan   | Feb   | Mar      | Apr         | May       |
| PRODUCTION                          |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Industry, total <sup>1)</sup>       | real, CPPY       | 8.8   | 3.0   | 2.5   | 9.5   | 10.2  | 4.3   | 1.3   | 0.4   | 5.3   | 0.9   | -7.0  | -12.8 | -8.6     | -4.9        |           |
| Industry, total <sup>1)</sup>       | real, CCPPY      | 11.2  | 9.0   | 7.6   | 7.9   | 8.3   | 7.7   | 7.0   | 6.3   | 6.2   | 5.7   | -7.0  | -9.8  | -9.4     | -8.3        |           |
| Industry, total <sup>1)</sup>       | real, 3MMA       | 6.4   | 4.8   | 5.0   | 7.4   | 8.0   | 5.3   | 2.0   | 2.3   | 2.2   | -0.3  | -6.3  | -9.5  | -8.8     |             |           |
| LABOUR                              |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Employees total, registered         | th. persons, avg | 694.1 | 693.9 | 694.2 | 695.3 | 695.7 | 692.5 | 693.4 | 691.5 | 689.7 | 687.9 | 689.1 | 687.1 | 688.7    | 690.0       |           |
| Employees total, registered         | CPPY             | -0.7  | -0.8  | 2.5   | 2.7   | 2.7   | 2.4   | 1.9   | 0.8   | 0.5   | -1.6  | -1.0  | -1.2  | -0.8     | -0.6        |           |
| Unemployment, registered            | th. persons, eop | 530.1 | 529.4 | 526.8 | 526.0 | 528.5 | 531.1 | 530.0 | 530.9 | 532.5 | 536.7 | 541.4 | 543.6 | 542.7    | 540.3       |           |
| Unemployment rate, registered       | %, eop           | 43.3  | 43.3  | 43.1  | 43.1  | 43.2  | 43.4  | 43.3  | 43.4  | 43.6  | 43.8  | 44.0  | 44.2  | 44.1     | 43.9        |           |
| WAGES                               |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Total economy, gross                | BAM              | 1275  | 1266  | 1281  | 1280  | 1268  | 1283  | 1273  | 1268  | 1287  | 1294  | 1287  | 1278  | 1286     | 1286        |           |
| Total economy, gross                | real, CPPY       | 1.0   | 0.0   | 1.5   | 1.5   | 0.3   | 1.3   | 0.3   | 0.8   | 1.0   | 0.4   | 1.9   | 0.7   | -1.2     | -0.7        |           |
| Total economy, gross                | EUR              | 652   | 647   | 655   | 654   | 648   | 656   | 651   | 648   | 658   | 662   | 658   | 653   | 658      | 658         |           |
| PRICES                              |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Consumer                            | PP               | 0.7   | -0.6  | 0.2   | -0.5  | 0.0   | -0.1  | 0.3   | 0.5   | 0.3   | 0.1   | 0.9   | 0.4   | 0.4      | -0.4        | -0.1      |
| Consumer                            | CPPY             | 3.9   | 4.0   | 4.2   | 3.8   | 3.9   | 3.9   | 4.0   | 3.7   | 3.7   | 3.1   | 2.5   | 2.4   | 2.1      | 2.3         | 1.9       |
| Consumer                            | CCPPY            | 3.3   | 3.5   | 3.6   | 3.6   | 3.7   | 3.7   | 3.8   | 3.7   | 3.7   | 3.7   | 2.5   | 2.4   | 2.3      | 2.3         | 2.2       |
| Producer, in industry <sup>2)</sup> | PP               | 0.5   | -2.1  | -0.4  | 0.4   | 2.0   | -0.3  | 0.4   | 0.0   | 0.2   | -0.4  | 0.4   | 0.4   | -0.2     | 0.0         |           |
| Producer, in industry 2)            | CPPY             | 5.1   | 4.1   | 3.1   | 4.0   | 5.8   | 4.9   | 4.5   | 2.2   | 2.2   | 1.4   | 1.6   | 1.2   | 0.4      | 2.6         |           |
| Producer, in industry 2)            | CCPPY            | 4.3   | 4.2   | 4.0   | 4.0   | 4.3   | 4.3   | 4.4   | 4.1   | 3.9   | 3.7   | 1.6   | 1.4   | 1.1      | 1.5         |           |
| FOREIGN TRADE, customs statistics   |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Exports total (fob), cumulated      | EUR mn           | 1009  | 1370  | 1723  | 2084  | 2438  | 2781  | 3156  | 3511  | 3871  | 4204  | 286   | 554   | 902      | 1237        | 1599      |
| Imports total (cif), cumulated      | EUR mn           | 1739  | 2396  | 3051  | 3775  | 4460  | 5125  | 5851  | 6561  | 7223  | 7938  | 510   | 991   | 1742     | 2415        | 3087      |
| Trade balance, cumulated            | EUR mn           | -730  | -1026 | -1328 | -1691 | -2022 | -2343 | -2695 | -3049 | -3352 | -3734 | -224  | -437  | -841     | -1177       | -1488     |
| Exports to EU-27 (fob), cumulated   | EUR mn           | 558   | 756   | 961   | 1181  | 1406  | 1587  | 1800  | 1998  | 2196  | 2372  | 186   | 356   | 561      | 753         | 953       |
| Imports from EU-27 (cif), cumulated | EUR mn           | 782   | 1077  | 1393  | 1780  | 2152  | 2437  | 2764  | 3098  | 3407  | 3719  | 234   | 473   | 810      | 1129        | 1441      |
| Trade balance with EU-27, cumulated | EUR mn           | -224  | -321  | -432  | -599  | -747  | -850  | -964  | -1100 | -1211 | -1348 | -48   | -117  | -249     | -376        | -488      |
| FOREIGN FINANCE                     |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Current account, cumulated          | EUR mn           | -163  |       |       | -472  |       |       | -755  |       |       | -1142 |       |       | -268     |             |           |
| EXCHANGE RATE                       |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| 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     |
| BAM/USD, monthly average            | nominal          | 1.399 | 1.356 | 1.361 | 1.360 | 1.369 | 1.365 | 1.416 | 1.428 | 1.439 | 1.482 | 1.517 | 1.480 | 1.481    | 1.486       | 1.527     |
| EUR/BAM, calculated with CPI 3)     | real, Jan09=100  | 100.1 | 98.9  | 99.0  | 98.6  | 99.0  | 98.7  | 98.4  | 98.6  | 98.7  | 98.5  | 99.9  | 99.8  | 99.2     | 98.3        | 98.3      |
| EUR/BAM, calculated with PPI 3)     | real, Jan09=100  | 94.9  | 92.1  | 91.9  | 92.3  | 93.7  | 93.7  | 93.6  | 93.6  | 93.5  | 93.4  | 93.0  | 92.9  | 92.3     | 92.2        |           |
| USD/BAM, calculated with CPI 3)     | real, Jan09=100  | 105.1 | 107.1 | 106.4 | 106.0 | 105.2 | 105.1 | 101.5 | 101.4 | 101.0 | 98.4  | 96.6  | 98.9  | 98.5     | 97.6        | 94.9      |
| USD/BAM, calculated with PPI 3)     | real, Jan09=100  | 92.1  | 91.2  | 90.1  | 90.6  | 91.4  | 92.1  | 88.9  | 89.3  | 88.6  | 86.5  | 84.5  | 86.5  | 85.2     | 85.1        |           |
| DOMESTIC FINANCE                    |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |
| Currency outside banks              | BAM mn, eop      | 2164  | 2240  | 2191  | 2206  | 2317  | 2317  | 2253  | 2241  | 2237  | 2366  | 2298  | 2323  | 2330     | 2363        |           |
| M1                                  | BAM mn, eop      | 5821  | 5917  | 5897  | 5890  | 6049  | 6124  | 6069  | 6051  | 5987  | 6186  | 6104  | 6047  | 6076     | 6130        |           |
| M2                                  | BAM mn, eop      | 13672 | 13728 | 13768 | 13783 | 14049 | 14181 | 14133 | 14144 | 14133 | 14418 | 14313 | 14340 | 14307    | 14416       |           |
| M2                                  | CPPY, eop        | 5.8   | 5.0   | 5.0   | 5.2   | 6.0   | 5.0   | 5.8   | 5.3   | 4.3   | 5.8   | 4.9   | 5.4   | 4.6      | 5.0         |           |
|                                     |                  |       |       |       |       |       |       |       |       |       |       |       |       |          |             |           |

1) Federation of B&H and Republic Srpska weighted by wiiw.

2) Domestic output prices.

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

|  |                        |              |              |              |              |              |               |               |               |               |               |             |              | (update      | d end of Ju  | une 2012)  |
|--|------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|-------------|--------------|--------------|--------------|------------|
|  |                        | 2011         |              |              |              |              |               |               |               |               |               | 2012        |              |              |              |            |
|  |                        | Mar          | Apr          | May          | Jun          | Jul          | Aug           | Sep           | Oct           | Nov           | Dec           | Jan         | Feb          | Mar          | Apr          | Мау        |
| PRODUCTION   |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Industry, NACE Rev. 2 1)   | real, CPPY             | -3.0         | 0.2          | 1.2          | 1.8          | -0.6         | -4.5          | -2.3          | 2.1           | -0.3          | -1.8          | -3.5        | -2.8         | -9.3         | -9.4         |            |
| Industry, NACE Rev. 2 <sup>1)</sup>  | real, CCPPY            | -3.6         | -2.6         | -1.8         | -1.2         | -1.1         | -1.5          | -1.6          | -1.2          | -1.1          | -1.2          | -3.5        | -3.1         | -5.4         | -6.5         |            |
| Industry, NACE Rev. 2 <sup>1)</sup>  | real, 3MMA             | -1.8         | -0.6         | 1.0          | 0.8          | -1.1         | -2.4          | -1.5          | -0.2          | 0.0           | -1.8          | -2.6        | -5.4         | -7.3         |              |            |
| Productivity in industry, NACE Rev. 21)  | CCPPY                  | 0.2          | 1.3          | 2.1          | 2.6          | 2.7          | 2.3           | 2.2           | 2.5           | 2.7           | 2.6           | -1.8        | 0.8          | -2.1         | -3.3         |            |
| Unit labour costs, exch.r. adj.(EUR) 1)  | CCPPY                  | -2.1         | -3.0         | -3.4         | -3.9         | -4.3         | -3.6          | -3.4          | -3.7          | -3.5          | -3.5          | 3.2         | 0.6          | 3.0          |              |            |
| Construction, NACE Rev. 2 1)   | real, CPPY             | -9.7         | -15.3        | -7.9         | -8.5         | -12.5        | -8.9          | -7.5          | -7.4          | -6.4          | -8.8          | -5.7        | -17.3        | -12.5        | -10.0        |            |
| Construction, NACE Rev. 2 1)   | real, CCPPY            | -8.5         | -10.3        | -9.8         | -9.6         | -10.0        | -9.9          | -9.6          | -9.4          | -9.1          | -9.1          | -5.7        | -11.8        | -12.0        | -11.5        |            |
| LABOUR   |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Employed persons, LFS  | th. pers., quart. avg. | 1476.4       |              |              | 1480.0       |              |               | 1534.4        |               |               | 1479.2        |             |              |              |              |            |
| Employed persons, LFS  | CPPY                   | -5.6         |              |              | -3.5         |              |               | -0.4          |               |               | -3.2          |             |              |              |              |            |
| Unemployed persons, LFS  | th. pers., quart. avg. | 245.7        |              |              | 230.7        |              |               | 213.3         |               |               | 237.4         |             |              | 293.0        |              |            |
| Unemployment rate, LFS   | %                      | 14.3         |              |              | 13.6         |              |               | 12.3          |               |               | 13.9          |             |              | 17.1         |              |            |
| Employment total, registered   | th. persons, avg       | 1150.3       | 1159.5       | 1165.7       | 1172.7       | 1176.3       | 1175.9        | 1170.3        | 1161.7        | 1155.0        | 1144.6        | 1135.5      | 1129.3       | 1128.8       | 1135.2       | 1143.7     |
| Unemployment, registered   | th. persons, eop       | 330.1        | 308.9        | 298.7        | 287.5        | 287.6        | 285.3         | 283.7         | 293.9         | 302.1         | 315.4         | 334.4       | 343.0        | 339.9        | 323.7        | 306.1      |
| Unemployment rate, registered  | %, eop                 | 19.3         | 18.2         | 17.5         | 16.9         | 16.8         | 16.7          | 16.8          | 17.4          | 17.9          | 18.7          | 19.6        | 20.1         | 20.0         | 19.1         | 18.0       |
| WAGES  |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Total economy, gross   | HRK                    | 7894         | 7750         | 7778         | 7907         | 7680         | 7910          | 7740          | 7744          | 8131          | 7891          | 7846        | 7702         | 7958         | 7767         |            |
| Total economy, gross   | real, CPPY             | -1.8         | -0.5         | -1.0         | -0.1         | -0.9         | 0.6           | 0.4           | -1.4          | 0.4           | -1.0          | 1.5         | 1.6          | -1.2         | -2.3         |            |
| Total economy, gross   | EUR                    | 1068         | 1053         | 1052         | 1067         | 1035         | 1061          | 1034          | 1035          | 1086          | 1051          | 1040        | 1016         | 1055         | 1036         | •          |
| Industry, gross, NACE Rev. 2   | EUR                    | 957          | 934          | 945          | 973          | 930          | 959           | 931           | 925           | 1011          | 953           | 932         | 907          | 954          | •            |            |
| PRICES   |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Consumer   | PP                     | 0.8          | 0.2          | 0.3          | -0.5         | -0.5         | -0.1          | 0.4           | 0.6           | 0.2           | -0.4          | -0.4        | 0.6          | 1.5          | 0.8          | 1.7        |
| Consumer   | CPPY                   | 2.6          | 2.4          | 2.5          | 2.0          | 1.9          | 2.0           | 2.2           | 2.6           | 2.6           | 2.1           | 1.2         | 1.3          | 2.0          | 2.6          | 3.9        |
| Consumer   | CCPPY                  | 2.2          | 2.3          | 2.3          | 2.3          | 2.2          | 2.2           | 2.2           | 2.2           | 2.3           | 2.3           | 1.2         | 1.3          | 1.5          | 1.8          | 2.2        |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup>   | PP                     | 0.8          | 0.6          | 0.6          | -0.3         | 0.1          | 0.7           | 0.0           | 0.5           | 0.5           | -0.2          | 0.9         | 2.0          | 0.6          | 0.6          | 1.5        |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup><br>Producer, in industry, NACE Rev. 2 <sup>2)</sup> | CPPY<br>CCPPY          | 6.8<br>6.3   | 6.7<br>6.4   | 6.8<br>6.5   | 6.0<br>6.4   | 6.1<br>6.4   | 6.6<br>6.4    | 6.1<br>6.4    | 6.4<br>6.4    | 7.0<br>6.4    | 5.7<br>6.4    | 5.9<br>5.9  | 6.3<br>6.1   | 6.1<br>6.1   | 6.2<br>6.1   | 7.1<br>6.3 |
| -  | CONT                   | 0.5          | 0.4          | 0.5          | 0.4          | 0.4          | 0.4           | 0.4           | 0.4           | 0.4           | 0.4           | 5.7         | 0.1          | 0.1          | 0.1          | 0.5        |
| FOREIGN TRADE, customs statistics  | EUD ma                 | 2104         | 2111         | 2002         | 4704         | FF 4.4       | / 21.4        | 7001          | 0000          | 0750          | 0500          | (/7         | 1224         | 2227         | 2055         |            |
| Exports total (fob), cumulated<br>Imports total (cif), cumulated                                     | EUR mn<br>EUR mn       | 2194<br>3812 | 3111<br>5204 | 3892<br>6716 | 4724<br>8098 | 5544<br>9585 | 6314<br>10825 | 7201<br>12309 | 8009<br>13742 | 8752<br>15099 | 9590<br>16278 | 667<br>1109 | 1324<br>2328 | 2227<br>3891 | 2955<br>5241 |            |
| Trade balance, cumulated   | EUR mn                 | -1618        | -2093        | -2824        | -3374        | -4041        | -4511         | -5108         | -5733         | -6347         | -6688         | -442        | -1004        | -1663        | -2286        |            |
| Exports to EU-27 (fob), cumulated  | EUR mn                 | 1315         | 1898         | 2273         | 2684         | 3161         | 3472          | 4113          | 4439          | 4845          | 5238          | 411         | 823          | 1288         | 1736         |            |
| Imports from EU-27 (cif), cumulated  | EUR mn                 | 2203         | 3030         | 3624         | 4377         | 5143         | 5845          | 6699          | 7500          | 8291          | 8987          | 667         | 1461         | 2467         | 3384         |            |
| Trade balance with EU-27, cumulated  | EUR mn                 | -888         | -1133        | -1351        | -1693        | -1982        | -2372         | -2586         | -3060         | -3446         | -3749         | -256        | -638         | -1178        | -1648        |            |
| FOREIGN FINANCE  |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Current account, cumulated   | EUR mn                 | -1644        |              |              | -2003        |              |               | 482           |               |               | -446          |             |              |              |              |            |
|  | Lorentia               | 1011         |              |              | 2000         |              |               | 102           |               |               |               |             |              |              |              |            |
| EXCHANGE RATE<br>HRK/EUR, monthly average  | nominal                | 7.394        | 7.362        | 7.391        | 7.412        | 7.420        | 7.455         | 7.487         | 7.483         | 7.488         | 7.507         | 7.547       | 7.579        | 7.540        | 7.494        | 7.529      |
| HRK/USD, monthly average   | nominal                | 5.285        | 5.105        | 5.142        | 5.149        | 5.193        | 5.192         | 5.421         | 5.468         | 5.513         | 5.689         | 5.847       | 5.733        | 5.709        | 5.691        | 5.871      |
| EUR/HRK, calculated with CPI <sup>3)</sup>   | real, Jan09=100        | 97.9         | 97.9         | 97.7         | 97.0         | 96.8         | 96.1          | 95.5          | 95.8          | 95.8          | 94.8          | 94.5        | 94.1         | 95.1         | 96.0         | 97.2       |
| EUR/HRK, calculated with PPI <sup>3)</sup>   | real, Jan09=100        | 102.6        | 102.8        | 103.1        | 102.5        | 102.1        | 102.5         | 101.7         | 102.3         | 102.5         | 102.2         | 101.7       | 102.7        | 103.4        | 104.6        | 105.6      |
| USD/HRK, calculated with CPI <sup>3)</sup>   | real, Jan09=100        | 102.8        | 105.9        | 105.0        | 104.4        | 102.9        | 102.6         | 98.5          | 98.5          | 98.0          | 94.7          | 91.4        | 93.4         | 94.4         | 95.2         | 94.0       |
| USD/HRK, calculated with PPI 3)  | real, Jan09=100        | 99.7         | 101.9        | 101.1        | 100.8        | 99.7         | 101.1         | 96.6          | 97.5          | 97.1          | 94.7          | 92.5        | 95.8         | 95.5         | 96.6         | 95.8       |
| DOMESTIC FINANCE   |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Currency outside banks   | HRK bn, eop            | 15.0         | 15.5         | 15.8         | 16.8         | 18.1         | 17.8          | 17.1          | 16.5          | 16.4          | 16.7          | 16.1        | 16.0         | 16.2         | 16.4         |            |
| M1   | HRK bn, eop            | 49.1         | 50.4         | 50.5         | 52.8         | 53.9         | 54.0          | 51.2          | 51.0          | 50.9          | 52.9          | 49.2        | 48.4         | 47.4         | 47.8         |            |
| Broad money  | HRK bn, eop            | 229.3        | 228.9        | 230.7        | 232.5        | 236.9        | 241.4         | 241.2         | 241.4         | 241.7         | 241.1         | 237.7       | 236.2        | 235.5        | 236.7        |            |
| Broad money  | CPPY, eop              | 3.3          | 3.1          | 3.6          | 3.5          | 4.4          | 4.2           | 3.7           | 3.8           | 4.0           | 3.5           | 2.5         | 2.0          | 2.7          | 3.4          |            |
| Central bank policy rate (p.a.) 4)   | %, eop                 | 6.00         | 6.00         | 6.00         | 6.00         | 6.00         | 6.00          | 6.00          | 6.00          | 6.00          | 6.00          | 6.00        | 6.00         | 6.00         | 6.00         | 6.00       |
| Central bank policy rate (p.a.) 4)5)   | real, %, eop           | -0.7         | -0.7         | -0.7         | 0.0          | -0.1         | -0.5          | -0.1          | -0.3          | -1.0          | 0.3           | 0.1         | -0.3         | -0.1         | -0.1         | -1.1       |
| BUDGET   |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |
| Central gov. budget balance, cum. 6)   | HRK mn                 | -5340        | -6026        | -7321        | -8617        | -9542        | -9436         | -10297        | -10133        | -11982        | -15394        | -1256       | -1647        | -1466        | -3866        |            |
|  |                        |              |              |              |              |              |               |               |               |               |               |             |              |              |              |            |

#### C R O A T I A: Selected monthly data on the economic situation 2011 to 2012

1) Enterprises with 20 and more employees.

2) Domestic output prices. Including E - electricity, gas, steam, air conditioning supply etc.

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

4) Average weighted repo rates.

5) Deflated with annual PPI.

6) Consolidated central government budget.

#### M A C E D O N I A: Selected monthly data on the economic situation 2011 to 2012

|  |                       | 2011  |       |       |       |       |       |       |       |        |        | 2012  |       | (updated | d end of Ju | ine 2012) |
|--|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|----------|-------------|-----------|
|  |                       | Mar   | Apr   | Мау   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov    | Dec    | Jan   | Feb   | Mar      | Apr         | May       |
| PRODUCTION                                       |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Industry, NACE Rev. 2 1)                         | real, CPPY            | 24.4  | 11.8  | 6.9   | -1.9  | 5.5   | 0.9   | -2.4  | -3.9  | -5.3   | -4.7   | -8.0  | -8.8  | -8.5     | -7.2        | -5.4      |
| Industry, NACE Rev. 2 1)                         | real, CCPPY           | 13.8  | 13.2  | 11.8  | 9.2   | 8.5   | 7.5   | 6.3   | 5.2   | 4.1    | 3.3    | -8.0  | -8.4  | -8.4     | -8.1        | -7.5      |
| Industry, NACE Rev. 2 <sup>1)</sup>              | real, 3MMA            | 15.7  | 14.0  | 5.3   | 3.4   | 1.5   | 1.4   | -1.8  | -3.9  | -4.7   | -5.8   | -7.0  | -8.4  | -8.1     | -7.0        |           |
| Productivity in industry, NACE Rev. 21)          | CCPPY                 | 12.7  | 11.4  | 9.6   | 6.8   | 6.2   | 5.2   | 4.0   | 3.0   | 2.3    | 1.8    | -6.9  | -6.8  | -7.2     | -6.8        | -6.1      |
| Unit labour costs, exch.r. adj.(EUR) 1)          | CCPPY                 | -8.4  | -7.8  | -6.3  | -3.4  | -3.0  | -1.9  | -1.0  | 0.0   | 0.7    | 0.8    | 8.4   | 7.5   | 8.1      | 8.1         |           |
| Construction, total, effect. work. time          | real, CPPY            | 14.9  | 9.0   | 16.2  | 6.1   | 9.8   | 17.5  | 21.7  | 24.8  | 16.4   | 11.6   | -0.6  | -24.9 | -12.7    |             |           |
| Construction, total, effect. work. time          | real, CCPPY           | 12.7  | 11.7  | 12.6  | 11.4  | 11.2  | 12.0  | 13.1  | 14.3  | 14.5   | 14.2   | -0.6  | -13.4 | -13.1    |             |           |
| LABOUR   |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Employed persons, LFS                            | th. pers., quart. avg | 649.6 |       |       | 642.8 |       |       | 648.6 |       |        | 639.3  |       |       | 643.7    |             |           |
| Employed persons, LFS                            | CPPY                  | 5.5   |       |       | 2.5   | •     | •     | 0.0   |       |        | -3.1   | •     | -     | -0.9     | •           |           |
| Unemployed persons, LFS                          | th. pers., quart. avg | 294.6 |       |       | 2.5   |       | •     | 293.8 |       |        | 298.0  | •     |       | 297.4    |             | •         |
| Unemployment rate, LFS                           | %, avg                | 31.2  |       |       | 31.4  |       |       | 31.2  |       |        | 31.8   |       |       | 31.6     |             |           |
|  | 70, 849               | 51.2  |       |       | 51.4  |       |       | 51.2  |       |        | 51.0   |       |       | 51.0     |             |           |
| WAGES  |                       | 0004/ | 00170 | 0070/ |       | 00500 | 00745 |       | 00/00 | 00504  |        | 007/0 | 00057 | 0007/    |             |           |
| Total economy, gross                             | MKD                   | 30216 | 30172 | 30736 | 30990 | 30528 | 30715 | 30340 | 30680 | 30591  | 31338  | 30768 | 30257 | 30876    | 30444       |           |
| Total economy, gross                             | real, CPPY            | -4.0  | -4.3  | -4.5  | -1.1  | -1.5  | -2.0  | -3.1  | -2.1  | -2.8   | -3.0   | -3.4  | -1.9  | 0.8      | -1.2        |           |
| Total economy, gross                             | EUR                   | 491   | 490   | 500   | 503   | 495   | 499   | 493   | 499   | 497    | 509    | 500   | 492   | 502      | 495         |           |
| Industry, gross, NACE Rev. 2                     | EUR                   | 401   | 395   | 409   | 409   | 415   | 422   | 416   | 415   | 411    | 417    | 413   | 395   | 404      | 403         |           |
| PRICES   |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Consumer   | PP                    | 1.7   | 0.3   | -0.2  | -0.6  | -0.8  | -0.1  | -0.1  | 0.3   | 0.6    | -0.1   | 1.2   | 0.5   | 0.4      | 1.1         | -0.3      |
| Consumer   | CPPY                  | 5.2   | 4.8   | 5.2   | 4.1   | 3.8   | 3.6   | 3.4   | 3.3   | 3.5    | 2.8    | 3.4   | 2.9   | 1.4      | 2.2         | 2.0       |
| Consumer   | CCPPY                 | 4.1   | 4.3   | 4.5   | 4.4   | 4.3   | 4.2   | 4.1   | 4.1   | 4.0    | 3.9    | 3.4   | 3.1   | 2.5      | 2.5         | 2.4       |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup> | PP                    | 3.3   | 1.2   | -0.9  | -0.6  | -1.0  | 1.3   | -0.4  | -0.2  | 0.1    | 0.4    | 0.1   | 2.4   | 1.8      | -0.1        | -0.7      |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup> | CPPY                  | 15.3  | 13.2  | 10.7  | 10.9  | 9.5   | 11.1  | 10.1  | 8.7   | 10.4   | 8.3    | 5.1   | 5.8   | 4.3      | 3.0         | 3.2       |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup> | CCPPY                 | 13.6  | 13.5  | 12.9  | 12.6  | 12.1  | 12.0  | 11.8  | 11.5  | 11.4   | 11.1   | 5.1   | 5.5   | 5.1      | 4.5         | 4.3       |
| FOREIGN TRADE, customs statistics                |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Exports total (fob), cumulated                   | EUR mn                | 715   | 994   | 1280  | 1539  | 1778  | 2057  | 2371  | 2657  | 2923   | 3200   | 192   | 444   | 701      | 933         |           |
| Imports total (cif), cumulated                   | EUR mn                | 1211  | 1653  | 2057  | 2451  | 2860  | 3289  | 3728  | 4126  | 4582   | 5038   | 324   | 718   | 1133     | 1587        |           |
| Trade balance, cumulated                         | EUR mn                | -496  | -660  | -777  | -912  | -1082 | -1231 | -1357 | -1468 | -1659  | -1838  | -132  | -274  | -432     | -655        |           |
| Exports to EU-27 (fob), cumulated                | EUR mn                | 458   | 630   | 774   | 923   | 1061  | 1219  | 1399  | 1611  | 1770   | 1941   | 117   | 287   | 454      | 593         |           |
| Imports from EU-27 (cif), cumulated              | EUR mn                | 656   | 880   | 1110  | 1341  | 1558  | 1774  | 2039  | 2259  | 2495   | 2738   | 182   | 368   | 607      | 892         |           |
| Trade balance with EU-27, cumulated              | EUR mn                | -198  | -250  | -336  | -418  | -498  | -555  | -639  | -648  | -725   | -798   | -65   | -81   | -153     | -299        |           |
| FOREIGN FINANCE                                  |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Current account, cumulated                       | EUR mn                | -200  | -242  | -242  | -260  | -267  | -240  | -213  | -188  | -247   | -201   | -43   | -69   | -116     | -179        |           |
| EXCHANGE RATE                                    |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| MKD/EUR, monthly average                         | nominal               | 61.52 | 61.52 | 61.53 | 61.61 | 61.62 | 61.51 | 61.50 | 61.50 | 61.50  | 61.51  | 61.50 | 61.50 | 61.50    | 61.54       | 61.63     |
| MKD/USD, monthly average                         | nominal               | 43.99 | 42.64 | 42.83 | 42.81 | 43.14 | 42.91 | 44.54 | 44.91 | 45.31  | 46.60  | 47.68 | 46.54 | 46.57    | 46.73       | 48.00     |
| EUR/MKD, calculated with CPI <sup>3)</sup>       | real, Jan09=100       | 99.6  | 99.2  | 99.0  | 98.2  | 97.9  | 97.8  | 97.0  | 97.0  | 97.4   | 97.0   | 98.7  | 98.7  | 98.1     | 98.7        | 98.3      |
| EUR/MKD, calculated with PPI 3)                  | real, Jan09=100       | 116.5 | 116.9 | 116.1 | 115.3 | 113.6 | 115.6 | 114.7 | 114.4 | 114.2  | 114.9  | 114.0 | 116.1 | 117.7    | 117.5       | 116.5     |
| USD/MKD, calculated with CPI 3)                  | real, Jan09=100       | 104.5 | 107.4 | 106.2 | 105.7 | 103.9 | 104.1 | 100.0 | 99.7  | 99.5   | 96.8   | 95.4  | 97.8  | 97.4     | 97.9        | 95.1      |
| USD/MKD, calculated with PPI 3)                  | real, Jan09=100       | 113.1 | 115.8 | 113.7 | 113.2 | 110.8 | 113.7 | 108.8 | 109.1 | 108.0  | 106.3  | 103.6 | 108.2 | 108.6    | 108.5       | 105.7     |
| DOMESTIC FINANCE                                 |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |
| Currency outside banks                           | MKD bn, eop           | 15.9  | 16.8  | 17.3  | 17.0  | 18.1  | 17.6  | 17.2  | 17.0  | 16.6   | 19.3   | 18.2  | 18.3  | 17.9     | 18.1        | 18.4      |
| M1   | MKD bn, eop           | 54.1  | 57.2  | 58.2  | 58.0  | 57.8  | 58.0  | 57.5  | 57.5  | 56.1   | 61.3   | 60.2  | 59.8  | 59.3     | 60.9        | 59.8      |
| Broad money                                      | MKD bn, eop           | 234.7 | 234.4 | 238.0 | 239.4 | 245.4 | 247.0 | 245.1 | 247.3 | 248.9  | 255.0  | 255.3 | 256.2 | 257.6    | 256.3       | 257.1     |
| Broad money                                      | CPPY, eop             | 11.4  | 9.0   | 8.5   | 8.6   | 13.5  | 12.3  | 10.5  | 10.2  | 8.6    | 9.7    | 10.0  | 9.7   | 9.8      | 9.3         | 8.0       |
| Central bank policy rate (p.a.) 4)               | %, eop                | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  | 4.00   | 4.00   | 4.00  | 4.00  | 4.00     | 3.97        | 3.71      |
| Central bank policy rate (p.a.) <sup>4)5)</sup>  | real, %, eop          | -9.8  | -8.2  | -6.0  | -6.3  | -5.1  | -6.4  | -5.5  | -4.3  | -5.8   | -4.0   | -1.0  | -1.7  | -0.3     | 0.9         | 0.5       |
|  | . sait 10, oop        | ,     | 0.2   | 0.0   | 0.0   | 0.1   | 0.1   | 0.0   |       | 0.0    |        |       |       | 0.0      | 0.7         | 2.0       |
| BUDGET   |                       | 272/  | 2402  | 64/1  | 7700  | 0001  | 0005  | 0201  | 00/5  | 10527  | 11400  | 1400  | 2200  | 4500     | 4410        | E 410     |
| General gov.budget balance, cum. 6)              | MKD mn                | -3726 | -3403 | -6461 | -7732 | -9001 | -9225 | -9391 | -9865 | -10537 | -11483 | -1429 | -3300 | -4530    | -4419       | -5419     |
|  |                       |       |       |       |       |       |       |       |       |        |        |       |       |          |             |           |

1) Enterprises with 10 and more persons employed.

2) Domestic output prices.

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

4) Central bank bills (28-days).

5) Deflated with annual PPI.

6) Central government budget plus extra-budgetary funds.

|  |                       |             |       |       |       |       |       |       |       |       |       |             |       | (updated | l end of Ju | ine 2012) |
|--|-----------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|----------|-------------|-----------|
|  |                       | 2011<br>Mar | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   | 2012<br>Jan | Feb   | Mar      | Apr         | May       |
|  |                       | Widi        | 7 tpi | widy  | Sun   | 501   | nug   | ocp   | 000   | 1407  | Dec   | 5011        | 100   | Widi     | 7 tpi       | way       |
| PRODUCTION                                     |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Industry, total                                | real, CPPY            | -10.3       | -20.4 | -24.4 | -18.7 | 0.2   | 18.0  | -2.1  | -4.2  | -15.9 | -37.1 | -24.5       | -14.7 | -4.0     | -3.9        | 0.0       |
| Industry, total                                | real, CCPPY           | -0.5        | -5.6  | -9.1  | -10.8 | -9.1  | -6.5  | -6.0  | -5.8  | -6.8  | -10.1 | -24.5       | -19.8 | -14.7    | -12.4       | -10.5     |
| Industry, total                                | real, 3MMA            | -8.2        | -18.1 | -21.1 | -13.9 | -1.8  | 4.4   | 2.8   | -7.7  | -20.7 | -26.6 | -26.6       | -14.7 | -7.8     | -2.9        |           |
| Productivity in industry                       | CCPPY                 | 21.7        | 10.0  | 2.8   | -1.2  | -0.7  | 1.2   | 1.3   | 1.2   | -0.1  | -3.9  |             |       |          |             |           |
| Unit labour costs, exch.r. adj.(EUR)           | CCPPY                 | -8.0        | 3.1   | 7.8   | 10.8  | 9.8   | 6.7   | 5.7   | 4.9   | 6.0   | 9.3   |             |       |          |             |           |
| LABOUR   |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Employed persons, LFS                          | th. pers., quart. avg | 186.0       |       |       | 198.6 |       |       | 202.2 |       |       | 194.7 |             |       | 193.0    |             |           |
| Employed persons, LFS                          | CPPY                  | -10.5       |       |       | -1.8  |       |       | -4.6  |       |       | -7.5  |             |       | 3.8      |             |           |
| Unemployed persons, LFS                        | th. pers., quart. avg | 50.0        |       |       | 49.4  |       |       | 49.1  |       |       | 42.9  |             |       | 50.3     |             |           |
| Unemployment rate, LFS                         | %                     | 21.2        |       |       | 19.9  |       |       | 19.5  |       |       | 18.1  |             |       | 20.7     |             |           |
| Employment total, registered                   | th. persons, avg      | 158.8       | 159.7 | 162.9 | 168.2 | 170.6 | 168.0 | 164.4 | 163.4 | 162.7 | 162.5 | 160.9       | 162.0 | 162.6    | 163.8       | 165.8     |
| Unemployment, registered                       | th. persons, eop      | 32.7        | 32.2  | 30.9  | 29.8  | 29.1  | 29.1  | 29.4  | 30.2  | 30.6  | 30.6  | 31.3        | 31.5  | 31.6     | 31.3        | 30.1      |
| Unemployment rate, registered                  | %, eop                | 17.1        | 16.8  | 16.0  | 15.1  | 14.6  | 14.8  | 15.2  | 15.6  | 15.8  | 15.8  | 16.3        | 16.3  | 16.3     | 16.1        | 15.4      |
| WAGES  |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Total economy, gross                           | EUR                   | 722         | 705   | 714   | 708   | 710   | 709   | 712   | 711   | 721   | 722   | 754         | 739   | 730      | 733         | 727       |
| Total economy, gross                           | real, CPPY            | 0.3         | -1.9  | -5.3  | -3.2  | -1.1  | -9.1  | -4.1  | -3.4  | -2.3  | -8.6  | -5.5        | -5.1  | -0.6     | 1.7         | -0.9      |
| Industry, gross, NACE Rev. 2                   | EUR                   | 790         | 828   | 823   | 825   | 820   | 827   | 835   | 863   | 902   | 876   | 904         | 920   | 901      | 795         | 772       |
| PRICES   |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Consumer                                       | PP                    | 2.0         | 0.0   | -0.1  | -0.5  | -0.3  | 0.7   | -0.1  | 0.2   | -0.2  | -0.2  | 0.8         | 1.0   | 0.4      | 0.5         | 0.4       |
| Consumer                                       | CPPY                  | 3.8         | 3.7   | 3.7   | 3.6   | 3.1   | 3.7   | 3.5   | 3.5   | 3.1   | 2.8   | 3.3         | 3.3   | 1.7      | 2.2         | 2.7       |
| Consumer                                       | CCPPY                 | 2.5         | 2.8   | 3.0   | 3.1   | 3.1   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.3         | 3.3   | 2.8      | 2.6         | 2.6       |
| Producer, in industry <sup>1)</sup>            | PP                    | 0.4         | 0.0   | -0.2  | -0.3  | 0.7   | 0.0   | 0.1   | -0.4  | -0.1  | -1.6  | 1.0         | 0.4   | -0.3     | 0.1         | -0.2      |
| Producer, in industry <sup>1</sup> )           | CPPY                  | 5.6         | 4.7   | 1.9   | 2.2   | 3.6   | 3.2   | 3.2   | 2.8   | 2.8   | 1.0   | -0.6        | -0.8  | -1.5     | -0.2        | -0.3      |
| Producer, in industry 1)                       | CCPPY                 | 4.3         | 4.4   | 3.9   | 3.6   | 4.3   | 3.5   | 3.5   | 3.4   | 3.4   | 3.2   | -0.6        | -0.7  | -1.0     | -0.8        | -0.7      |
| FOREIGN TRADE, customs statistics              |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Exports total (fob), cumulated                 | EUR mn                | 111         | 147   | 180   | 213   | 247   | 289   | 332   | 380   | 418   | 454   | 27          | 51    | 85       | 116         | 150       |
| Imports total (cif), cumulated                 | EUR mn                | 353         | 499   | 658   | 843   | 1019  | 1192  | 1365  | 1516  | 1660  | 1823  | 100         | 207   | 377      | 528         | 695       |
| Trade balance, cumulated                       | EUR mn                | -242        | -352  | -478  | -630  | -772  | -902  | -1033 | -1136 | -1242 | -1369 | -72         | -155  | -292     | -412        | -545      |
| Exports to EU-27 (fob), cumulated              | EUR mn                | 84          | 92    | 112   | 130   | 141   | 163   | 186   | 209   | 220   | 227   | 9           | 16    | 25       | 35          | 84        |
| Imports from EU-27 (cif), cumulated            | EUR mn                | 141         | 198   | 256   | 318   | 380   | 437   | 499   | 551   | 604   | 662   | 37          | 83    | 150      | 208         | 276       |
| Trade balance with EU-27, cumulated            | EUR mn                | -57         | -106  | -144  | -188  | -239  | -274  | -312  | -342  | -383  | -435  | -29         | -66   | -125     | -173        | -191      |
| FOREIGN FINANCE                                |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Current account, cumulated                     | EUR mn                | -187        |       |       | -441  |       |       | -372  |       |       | -634  |             |       | -217     |             |           |
| EXCHANGE RATE                                  |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| EUR/USD, monthly average                       | nominal               | 0.714       | 0.692 | 0.697 | 0.695 | 0.701 | 0.697 | 0.726 | 0.730 | 0.738 | 0.759 | 0.775       | 0.756 | 0.758    | 0.760       | 0.782     |
| EUR/EUR, calculated with CPI <sup>2)</sup>     | real, Jan09=100       | 99.8        | 99.2  | 99.1  | 98.6  | 98.8  | 99.2  | 98.5  | 98.4  | 98.0  | 97.5  | 98.9        | 99.3  | 98.7     | 98.7        | 99.2      |
| EUR/EUR, calculated with PPI <sup>2)</sup>     | real, Jan09=100       | 94.1        | 93.3  | 93.3  | 93.0  | 93.3  | 93.5  | 93.2  | 92.8  | 92.5  | 91.2  | 91.3        | 91.1  | 90.4     | 90.4        | 90.3      |
| USD/EUR, calculated with CPI <sup>2)</sup>     | real, Jan09=100       | 94.4        | 90.9  | 91.0  | 90.4  | 90.8  | 90.7  | 94.2  | 95.1  | 96.0  | 98.8  | 101.2       | 99.3  | 99.2     | 99.7        | 103.1     |
| USD/EUR, calculated with PPI 2)                | real, Jan09=100       | 82.3        | 78.2  | 78.2  | 77.8  | 78.8  | 78.9  | 82.0  | 83.1  | 83.8  | 85.6  | 87.9        | 85.7  | 84.5     | 85.0        | 88.0      |
| DOMESTIC FINANCE                               |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |
| Central bank policy rate (p.a.) 3)             | %, eop                | 9.02        | 9.04  | 9.01  | 9.06  | 9.07  | 9.06  | 9.06  | 9.05  | 9.10  | 9.06  | 9.02        | 9.00  | 8.99     | 8.93        | 8.91      |
| Central bank policy rate (p.a.) <sup>3,4</sup> | real, %, eop          | 3.2         | 4.1   | 7.0   | 6.7   | 5.3   | 5.7   | 5.7   | 6.1   | 6.1   | 8.0   | 9.02        | 9.00  | 10.6     | 9.1         | 9.2       |
| BUDGET   | . Juli 10, 00p        | 0.2         |       |       | 0.7   | 0.0   | 0.7   | 0.7   | 0.1   | 0.1   | 0.0   |             |       | . 0.0    |             |           |
| General gov.budget balance, cum.               | EUR mn                | -55         |       |       | -52   |       |       | -64   |       |       | -137  |             |       | -51      |             |           |
| General gov.buuger balance, tulli.             | LONIIII               | -00         |       |       | -32   | •     | •     | -04   |       |       | -137  |             | •     | -01      |             |           |
|  |                       |             |       |       |       |       |       |       |       |       |       |             |       |          |             |           |

#### M O N T E N E G R O: Selected monthly data on the economic situation 2011 to 2012

1) Domestic output prices.

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

3) Average weighted lending interest rate of commercial banks (Montenegro uses the euro as national currency).

4) Deflated with annual PPI.

#### S E R B I A: Selected monthly data on the economic situation 2011 to 2012

|  |                          | 2011         |               |               |              |              |              |              |               |              |              | 2012       |             | (update      | d end of Ju   | une 2012)   |
|--|--------------------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|------------|-------------|--------------|---------------|-------------|
|  |                          | Mar          | Apr           | May           | Jun          | Jul          | Aug          | Sep          | Oct           | Nov          | Dec          | Jan        | Feb         | Mar          | Apr           | Мау         |
| PRODUCTION   |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Industry, NACE Rev. 2  | real, CPPY               | 7.1          | 0.7           | 5.3           | 3.3          | -3.3         | -0.5         | -1.8         | -1.0          | 2.2          | 0.1          | -2.8       | -12.9       | -3.2         | -2.2          |             |
| Industry, NACE Rev. 2  | real, CCPPY              | 5.7          | 4.4           | 4.6           | 4.3          | 3.2          | 2.7          | 2.1          | 1.8           | 1.8          | 1.7          | -2.8       | -8.0        | -6.2         | -5.2          |             |
| Industry, NACE Rev. 2  | real, 3MMA               | 4.5          | 4.4           | 3.1           | 1.7          | -0.2         | -1.9         | -1.1         | -0.2          | 0.4          | 0.0          | -5.0       | -6.2        | -5.9         |               |             |
| Productivity in industry, NACE Rev. 2  | CCPPY                    | 9.5          | 8.2           | 8.3           | 7.9          | 6.7          | 6.2          | 5.3          | 4.7           | 4.6          | 4.3          | -1.3       | -6.5        | -4.6         |               |             |
| Unit labour costs, exch.r. adj.(EUR)   | CCPPY                    | 0.8          | 1.8           | 2.1           | 4.3          | 5.7          | 7.1          | 8.7          | 9.7           | 10.0         | 10.3         | 4.6        | 13.9        | 11.6         |               |             |
| LABOUR   |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Employed persons, LFS  | th. pers., quart. avg    |              |               |               | 2281.9       |              |              |              |               |              | 2224.5       |            |             |              |               |             |
| Employed persons, LFS  | CPPY                     |              |               |               | -5.4         |              |              |              |               |              | -6.6         |            |             |              |               |             |
| Unemployed persons, LFS  | th. pers., quart. avg    |              |               |               | 650.4        |              |              |              |               |              | 691.8        |            |             |              |               |             |
| Unemployment rate, LFS   | % (m. poros), quarti arg |              |               |               | 22.2         |              |              |              |               |              | 23.7         |            |             |              |               |             |
| Employees total, registered  | th. persons, avg         | 1349.0       | 1347.0        | 1345.0        | 1343.0       | 1341.0       | 1339.0       | 1337.0       | 1337.0        | 1336.0       | 1335.0       | 1334.0     | 1333.0      | 1333.0       |               |             |
| Unemployment, registered   | th. persons, eop         | 773.9        | 769.8         | 764.1         | 756.3        | 749.1        | 746.0        | 742.6        | 737.9         | 735.1        | 745.2        | 764.2      | 777.1       | 782.7        |               |             |
| Unemployment rate, registered  | %, eop                   | 28.1         | 28.0          | 27.9          | 27.7         | 27.5         | 27.4         | 27.4         | 27.3          | 27.2         | 27.5         | 28.0       | 28.4        | 28.5         |               |             |
| WAGES  |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Total economy, gross   | RSD                      | 49633        | 54532         | 49064         | 54616        | 54164        | 53285        | 53838        | 52944         | 53239        | 61116        | 50829      | 55505       | 56125        | 54532         |             |
| Total economy, gross   | real, CPPY               | -6.6         | -2.2          | -7.3          | 1.3          | -1.1         | 1.4          | 1.6          | 1.1           | 2.3          | 3.8          | 1.4        | 6.9         | 9.2          | -2.9          |             |
| Total economy, gross   | EUR                      | 480          | 538           | 499           | 547          | 529          | 521          | 532          | 526           | 519          | 594          | 484        | 513         | 506          | 489           |             |
| Industry, gross, NACE Rev. 2   | EUR                      | 469          | 512           | 491           | 540          | 507          | 511          | 512          | 520           | 497          | 565          | 487        | 498         | 498          | 107           |             |
| , ,  | 2011                     | 107          | 012           |               | 010          | 007          | 011          | 0.2          | 012           |              | 000          | 107        | 170         | 170          |               |             |
| PRICES   | 00                       | 2.4          |               | 0.4           | 0.0          | 0.5          | 0.0          | 0.0          |               | 0.0          | 0.7          | 0.1        | 0.0         | 1.1          | 0 (           | 1.1         |
| Consumer 1)  | PP                       | 2.6          | 1.1           | 0.4           | -0.3         | -0.5         | 0.0          | 0.2          | 0.4           | 0.9          | -0.7         | 0.1        | 0.8         | 1.1          | 0.6           | 1.4         |
| Consumer <sup>1)</sup>   | CPPY                     | 14.1         | 14.7          | 13.4          | 12.7         | 12.1         | 10.5         | 9.3          | 8.7           | 8.1          | 7.0          | 5.6        | 4.9         | 3.2          | 2.7           | 4.8         |
| Consumer <sup>1)</sup>   | CCPPY<br>PP              | 12.7<br>1.9  | 13.2<br>2.5   | 13.2<br>-0.5  | 13.1<br>0.0  | 13.0<br>0.1  | 12.7<br>-0.3 | 12.3<br>0.4  | 11.9<br>-0.3  | 12.1<br>0.3  | 11.0<br>0.4  | 5.6        | 5.2<br>0.8  | 4.5<br>1.8   | 4.4<br>0.1    | 4.3<br>-0.5 |
| Producer, in industry, NACE Rev. 2 <sup>2)</sup><br>Producer, in industry, NACE Rev. 2 <sup>2)</sup> | CPPY                     | 1.9          | 2.5<br>18.5   | -0.5<br>17.0  | 15.8         | 15.5         | -0.3<br>13.4 | 12.3         | -0.3<br>11.2  | 10.3         | 0.4<br>9.7   | 0.4<br>6.9 | 0.8<br>5.8  | 5.9          | 3.4           | -0.5<br>3.3 |
| Producer, in industry, NACE Rev. 2 <sup>27</sup><br>Producer, in industry, NACE Rev. 2 <sup>29</sup> | CCPPY                    | 17.1         | 17.9          | 17.0          | 15.6         | 17.1         | 16.7         | 12.5         | 15.7          | 10.3         | 9.7<br>14.2  | 6.9        | 6.3         | 6.2          | 5.5           | 5.0         |
| ,  | CONT                     | 17.7         | 17.7          | 17.7          | 17.4         | 17.1         | 10.7         | 10.2         | 15.7          | 13.2         | 14.2         | 0.7        | 0.5         | 0.2          | 5.5           | 5.0         |
| FOREIGN TRADE, customs statistics  |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Exports total (fob), cumulated   | EUR mn                   | 1966         | 2690          | 3362          | 4123         | 4860         | 5569         | 6279         | 7005          | 7734         | 8438         | 552        | 1072        | 1856         | 2584          |             |
| Imports total (cif), cumulated   | EUR mn                   | 3389         | 4555          | 5751          | 6892         | 8111         | 9202         | 10428        | 11652         | 12982        | 14403        | 1027       | 2113        | 3121         | 4305          | •           |
| Trade balance, cumulated   | EUR mn                   | -1423        | -1865<br>1627 | -2389<br>2014 | -2769        | -3251        | -3634        | -4148        | -4647<br>4055 | -5248        | -5965        | -475       | -1041       | -1266        | -1721<br>1531 |             |
| Exports to EU-27 (fob), cumulated<br>Imports from EU-27 (cif), cumulated                             | EUR mn<br>EUR mn         | 1222<br>1804 | 2458          | 3128          | 2456<br>3780 | 2878<br>4457 | 3247<br>5122 | 3650<br>5856 | 6601          | 4482<br>7302 | 4867<br>8034 | 351<br>538 | 666<br>1120 | 1114<br>1907 | 2627          |             |
| Trade balance with EU-27, cumulated  | EUR mn                   | -582         | -831          | -1113         | -1324        | -1579        | -1875        | -2206        | -2547         | -2820        | -3167        | -187       | -454        | -793         | -1097         |             |
|  | LOIVIIII                 | -302         | -031          | -1115         | -1324        | -1377        | -1075        | -2200        | -2347         | -2020        | -5107        | -107       | -434        | -775         | -1077         |             |
| FOREIGN FINANCE  | FUD                      | 7/0          | 000           | 4040          | 1000         | 4500         | 47.44        | 00/5         |               | 0.170        | 00/0         | 074        |             | 4450         | 4070          |             |
| Current account, cumulated   | EUR mn                   | -760         | -932          | -1213         | -1382        | -1590        | -1741        | -2065        | -2320         | -2473        | -2969        | -271       | -647        | -1159        | -1372         | •           |
| EXCHANGE RATE  |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| RSD/EUR, monthly average   | nominal                  | 103.32       | 101.44        | 98.24         | 99.80        | 102.39       | 102.25       | 101.21       | 100.60        | 102.68       | 102.93       | 105.04     | 108.10      | 110.90       | 111.63        | 113.60      |
| RSD/USD, monthly average   | nominal                  | 73.85        | 70.27         | 68.67         | 69.35        | 71.63        | 71.30        | 73.52        | 73.45         | 75.71        | 78.15        | 81.41      | 81.62       | 83.91        | 84.75         | 88.94       |
| EUR/RSD, calculated with CPI 3)  | real, Jan09=100          | 103.4        | 105.8         | 109.6         | 107.7        | 104.9        | 104.8        | 105.4        | 106.1         | 104.8        | 103.4        | 102.0      | 99.4        | 97.0         | 96.5          | 96.1        |
| EUR/RSD, calculated with PPI 3)  | real, Jan09=100          | 113.7        | 117.7         | 121.1         | 119.3        | 115.9        | 115.9        | 117.1        | 117.4         | 115.1        | 115.5        | 112.7      | 109.8       | 108.4        | 107.7         | 105.3       |
| USD/RSD, calculated with CPI 3)  | real, Jan09=100          | 109.2        | 115.2         | 117.9         | 116.5        | 112.1        | 112.3        | 109.0        | 109.8         | 107.6        | 103.7        | 99.2       | 99.3        | 96.9         | 96.3          | 93.1        |
| USD/RSD, calculated with PPI 3)  | real, Jan09=100          | 111.0        | 117.4         | 118.9         | 117.9        | 113.8        | 114.8        | 111.5        | 112.7         | 109.4        | 107.4        | 103.0      | 103.1       | 100.7        | 100.1         | 95.6        |
| DOMESTIC FINANCE   |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Currency outside banks   | RSD bn, eop              | 81.3         | 86.3          | 78.6          | 84.3         | 94.6         | 89.3         | 94.2         | 87.9          | 92.8         | 114.2        | 107.2      | 111.2       | 106.9        | 109.0         | 102.1       |
| M1   | RSD bn, eop              | 230.0        | 233.0         | 233.4         | 236.9        | 253.6        | 256.1        | 256.4        | 255.5         | 263.8        | 293.7        | 275.2      | 286.3       | 266.4        | 275.6         | 262.2       |
| Broad money 4)   | RSD bn, eop              | 1315.6       | 1287.2        | 1287.3        | 1344.8       | 1391.7       | 1405.8       | 1412.2       | 1412.0        | 1457.6       | 1500.4       | 1483.0     | 1522.8      | 1499.7       | 1531.2        | 1574.7      |
| Broad money 4)   | CPPY, eop                | 8.0          | 5.0           | 0.7           | 3.7          | 4.5          | 9.1          | 8.1          | 6.2           | 7.0          | 10.3         | 12.0       | 16.4        | 14.0         | 19.0          | 22.3        |
| Central bank policy rate (p.a.) 4)5)   | %, eop                   | 12.25        | 12.50         | 12.50         | 12.00        | 11.75        | 11.75        | 11.25        | 10.75         | 10.00        | 9.75         | 9.50       | 9.50        | 9.50         | 9.50          | 9.50        |
| Central bank policy rate (p.a.) 5)6)   | real, %, eop             | -4.1         | -5.1          | -3.8          | -3.3         | -3.2         | -1.5         | -0.9         | -0.4          | -0.3         | 0.0          | 2.4        | 3.5         | 3.4          | 5.9           | 6.0         |
| BUDGET   |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |
| Central gov.budget balance, cum.   | RSD mn                   | -27836       | -44997        | -49507        | -67261       | -83786       | -94037       | -97015       | -108633       | -119938      | -132534      | -10428     | -41633      | -52741       | -82902        | -89274      |
|  |                          |              |               |               |              |              |              |              |               |              |              |            |             |              |               |             |

1) From 2011 according to COICOP classification.

2) Domestic output prices.

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

4) Excluding frozen foreign currency savings deposits of households.

5) Two-week repo rate.

6) Deflated with annual PPI.

| R U S S I A: Selected monthly | data on the economic | situation 2011 to 2012 |
|-------------------------------|----------------------|------------------------|
|-------------------------------|----------------------|------------------------|

|                                      |                  | 2011    |         |         |         |         |         |         |         |         |         | 2012    |         | (update | d end of J | une 2012 |
|--------------------------------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|----------|
|                                      |                  | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     | Jan     | Feb     | Mar     | Apr        | Мау      |
| PRODUCTION                           |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Industry, total                      | real, CPPY       | 5.5     | 4.7     | 4.2     | 5.8     | 5.1     | 6.1     | 3.8     | 3.6     | 3.9     | 2.4     | 3.8     | 6.4     | 2.0     | 1.3        | 3.7      |
| Industry, total                      | real, CCPPY      | 6.1     | 5.7     | 5.4     | 5.5     | 5.4     | 5.5     | 5.3     | 5.1     | 5.0     | 4.8     | 3.8     | 5.1     | 4.0     | 3.3        | 3.4      |
| Industry, total                      | real, 3MMA       | 5.3     | 4.8     | 4.9     | 5.0     | 5.7     | 5.0     | 4.5     | 3.8     | 3.3     | 3.3     | 4.1     | 4.0     | 3.1     | 2.3        | 0.1      |
| Construction, total                  | real, CPPY       | 4.2     | -1.9    | 1.9     | 2.5     | 12.8    | 5.5     | 4.8     | 8.2     | 5.9     | 6.7     | 11.7    | 6.8     | -0.7    | 3.8        |          |
| Construction, total                  | real, CCPPY      | 1.6     | 0.5     | 0.8     | 1.2     | 3.7     | 4.0     | 4.1     | 4.7     | 4.8     | 5.1     | 11.7    | 9.2     | 5.2     | 4.8        |          |
| LABOUR                               | Tedi, COPPT      | 1.0     | 0.5     | 0.0     | 1.2     | 3.7     | 4.0     | 4.1     | 4.7     | 4.0     | 5.1     | 11.7    | 9.2     | J.Z     | 4.0        |          |
| Employed persons, LFS                | th. pers., avg   | 69613   | 69721   | 71011   | 71430   | 71629   | 72013   | 71965   | 70828   | 70970   | 70933   | 69968   | 69917   | 69800   | 70864      | 72077    |
|                                      | CPPY             |         | 1.3     | 1.1     | 0.6     | 1.1     | 1.1     | 1,1903  | 0.5     | 1.0     | 1.9     | 1.2     | 0,5     |         |            |          |
| Employed persons, LFS                |                  | 2.0     |         |         |         |         |         |         |         |         |         |         |         | 0.3     | 1.6        | 1.5      |
| Unemployed persons, LFS              | th. pers., avg   | 5352    | 5411    | 4855    | 4612    | 5013    | 4672    | 4615    | 4805    | 4766    | 4643    | 4911    | 4824    | 4874    | 4372       | 4093     |
| Unemployment rate, LFS               | %, avg           | 7.1     | 7.2     | 6.4     | 6.1     | 6.5     | 6.1     | 6.0     | 6.4     | 6.3     | 6.1     | 6.6     | 6.5     | 6.5     | 5.8        | 5.4      |
| Unemployment, registered             | th. persons, eop | 1643.0  | 1604.0  | 1515.0  | 1425.0  | 1384.0  | 1327.0  | 1263.0  | 1216.0  | 1223.0  | 1286.0  | 1298.0  | 1331.0  | 1313.0  | 1254.0     | 1185.0   |
| Unemployment rate, registered        | %, eop           | 2.2     | 2.1     | 2.0     | 1.9     | 1.8     | 1.7     | 1.7     | 1.6     | 1.6     | 1.7     | 1.7     | 1.8     | 1.8     | 1.7        | 1.6      |
| WAGES                                |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Total economy, gross                 | RUB              | 22673   | 22519   | 22779   | 24137   | 23598   | 23051   | 23468   | 23602   | 24296   | 32809   | 23746   | 24036   | 25487   | 25800      | 26058    |
| Total economy, gross                 | real, CPPY       | 0.5     | 0.8     | 2.4     | 1.2     | 1.5     | 2.7     | 4.1     | 4.9     | 5.8     | 10.3    | 10.3    | 12.0    | 8.3     | 10.5       | 10.4     |
| Total economy, gross                 | EUR              | 570     | 555     | 568     | 600     | 591     | 560     | 557     | 550     | 580     | 791     | 583     | 609     | 657     | 665        | 662      |
| Industry, gross 1)                   | EUR              | 526     | 524     | 530     | 543     | 559     | 537     | 525     | 517     | 531     | 635     | 544     | 568     | 610     | 614        |          |
| PRICES                               |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Consumer                             | PP               | 0.6     | 0.4     | 0.5     | 0.2     | 0.0     | -0.2    | 0.0     | 0.5     | 0.4     | 0.4     | 0.5     | 0.4     | 0.6     | 0.3        | 0.5      |
| Consumer                             | CPPY             | 9.6     | 9.7     | 9.7     | 9.5     | 9.0     | 8.2     | 7.3     | 7.3     | 6.9     | 6.1     | 4.2     | 3.8     | 3.8     | 3.7        | 3.7      |
| Consumer                             | CCPPY            | 9.6     | 9.6     | 9.6     | 9.6     | 9.5     | 9.4     | 9.1     | 8.9     | 8.7     | 8.5     | 4.2     | 4.0     | 3.9     | 3.8        | 3.8      |
| Producer, in industry <sup>2)</sup>  | PP               | 1.4     | 2.0     | 1.1     | -2.3    | -1.0    | 4.6     | -0.7    | 1.7     | 1.6     | 0.2     | -0.2    | 1.1     | 2.1     | 0.6        | -2.4     |
| Producer, in industry <sup>2)</sup>  | CPPY             | 21.6    | 20.2    | 18.4    | 19.3    | 17.4    | 18.9    | 19.6    | 19.0    | 15.9    | 14.9    | 12.2    | 9.7     | 10.5    | 9.0        | 5.2      |
| Producer, in industry <sup>2</sup>   | CCPPY            | 21.4    | 21.1    | 20.5    | 20.3    | 19.9    | 19.8    | 19.8    | 19.7    | 19.3    | 18.9    | 12.2    | 11.0    | 10.8    | 10.3       | 9.3      |
| FOREIGN TRADE, customs statistics    |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Exports total (fob), cumulated       | EUR mn           | 81415   | 112562  | 142920  | 173235  | 202367  | 233155  | 264611  | 297821  | 332516  | 371005  | 30967   | 64757   | 100278  | 133929     |          |
| Imports total (cif), cumulated       | EUR mn           | 44389   | 62397   | 81250   | 99594   | 117715  | 137654  | 156555  | 176839  | 197398  | 219182  | 14067   | 32023   | 52482   | 71303      |          |
| Trade balance, cumulated             | EUR mn           | 37026   | 50164   | 61671   | 73642   | 84653   | 95500   | 108056  | 120982  | 135119  | 151823  | 16900   | 32023   | 47796   | 62626      |          |
|                                      | EURINI           | 37020   | 30104   | 01071   | / 3042  | 04005   | 90000   | 106030  | 120902  | 120119  | 101020  | 10900   | 32734   | 47790   | 02020      |          |
| FOREIGN FINANCE                      |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Current account, cumulated           | EUR mn           | 22519   |         |         | 37721   |         |         | 50333   | •       |         | 71325   |         |         | 32256   |            |          |
| EXCHANGE RATE                        |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| RUB/EUR, monthly average             | nominal          | 39.770  | 40.560  | 40.100  | 40.230  | 39.930  | 41.180  | 42.150  | 42.940  | 41.880  | 41.480  | 40.730  | 39.490  | 38.800  | 38.820     | 39.380   |
| RUB/USD, monthly average             | nominal          | 28.430  | 28.100  | 27.870  | 27.980  | 27.900  | 28.770  | 30.490  | 31.350  | 30.860  | 31.450  | 31.510  | 29.880  | 29.370  | 29.470     | 30.650   |
| EUR/RUB, calculated with CPI 3)      | real, Jan09=100  | 120.7   | 118.1   | 120.0   | 119.9   | 121.3   | 117.2   | 113.7   | 111.8   | 115.0   | 116.1   | 119.6   | 123.2   | 124.8   | 124.5      | 123.4    |
| EUR/RUB, calculated with PPI 3)      | real, Jan09=100  | 145.8   | 144.6   | 148.1   | 144.3   | 143.4   | 145.7   | 140.8   | 140.4   | 146.0   | 148.0   | 149.0   | 154.6   | 159.9   | 160.6      | 154.5    |
| USD/RUB, calculated with CPI 3)      | real, Jan09=100  | 125.6   | 126.7   | 127.8   | 127.7   | 127.9   | 123.5   | 116.3   | 114.0   | 116.4   | 114.9   | 114.7   | 120.9   | 122.8   | 122.5      | 118.4    |
| USD/RUB, calculated with PPI 3)      | real, Jan09=100  | 140.2   | 142.0   | 144.0   | 140.3   | 138.8   | 141.8   | 132.5   | 132.7   | 136.8   | 135.7   | 134.5   | 142.7   | 146.3   | 147.0      | 139.0    |
| DOMESTIC FINANCE                     |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Currency outside banks               | RUB bn, eop      | 4918.2  | 5071.3  | 5079.8  | 5192.2  | 5306.6  | 5343.0  | 5420.4  | 5420.1  | 5475.2  | 5938.6  | 5670.7  | 5713.0  | 5704.3  | 5831.5     |          |
| M1                                   | RUB bn, eop      | 10436.3 | 10451.9 | 10540.8 | 10907.0 | 10909.0 | 11043.4 | 11291.7 | 11072.6 | 11301.8 | 12820.9 | 12259.4 | 12246.1 | 12245.9 | 12201.8    |          |
| M2                                   | RUB bn, eop      | 23641.1 | 23737.4 | 24034.8 | 24455.0 | 24580.8 |         |         | 25559.4 | 26332.3 | 28814.9 |         | 28144.6 | 28411.8 | 28589.2    |          |
| M2                                   | CPPY, eop        | 23041.1 | 20.4    | 19.5    | 19.0    | 18.3    | 18.8    | 20000.0 | 18.8    | 19.1    | 20014.7 | 20004.0 | 19.7    | 20411.0 | 20007.2    |          |
| Central bank policy rate (p.a.) 4)   | %, eop           | 8.00    | 8.00    | 8.25    | 8.25    | 8.25    | 8.25    | 8.25    | 8.25    | 8.25    | 8.00    | 8.00    | 8.00    | 8.00    | 8.00       | 8.00     |
| Central bank policy rate (p.a.) 4)5) | real, %, eop     | -11.2   | -10.2   | -8.5    | -9.3    | -7.8    | -9.0    | -9.5    | -9.1    | -6.6    | -6.0    | -3.8    | -1.6    | -2.3    | -0.9       | 2.7      |
| BUDGET                               |                  |         |         |         |         |         |         |         |         |         |         |         |         |         |            |          |
| Central gov.budget balance, cum.     | RUB bn           | 178.1   | 163.1   | 385.2   | 703.5   | 756.2   | 788.7   |         |         |         |         | 27.2    | -199.6  | -70.2   |            |          |

1) Manufacturing industry only (D according to NACE Rev. 1).

2) Domestic output prices.

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

4) Refinancing rate.

5) Deflated with annual PPI.

#### U K R A I N E: Selected monthly data on the economic situation 2011 to 2012

|   |                            |        |        |        |        |        |        |        |                |                |        |        |        | (update | d end of J     | une 2012) |
|---|----------------------------|--------|--------|--------|--------|--------|--------|--------|----------------|----------------|--------|--------|--------|---------|----------------|-----------|
|   |                            | 2011   |        |        |        |        |        |        |                |                |        | 2012   |        |         |                |           |
|   |                            | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct            | Nov            | Dec    | Jan    | Feb    | Mar     | Apr            | Мау       |
| PRODUCTION                                      |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Industry, total                                 | real, CPPY                 | 8.8    | 6.0    | 9.5    | 9.9    | 9.8    | 10.5   | 7.3    | 5.2            | 4.4            | 0.2    | 2.4    | 1.7    | -1.1    | 0.0            | 1.0       |
| Industry, total                                 | real, CCPPY                | 10.3   | 9.2    | 9.2    | 9.4    | 9.4    | 9.6    | 9.3    | 8.8            | 8.4            | 7.6    | 2.4    | 2.1    | 0.9     | 0.7            | 0.8       |
| Industry, total                                 | real, 3MMA                 | 8.9    | 8.1    | 8.5    | 9.8    | 10.1   | 9.2    | 7.6    | 5.6            | 3.3            | 2.3    | 1.4    | 0.9    | 0.2     | 0.0            |           |
| Productivity in industry 1)                     | CCPPY                      | 11.9   | 10.5   | 10.5   | 10.6   | 10.6   | 10.7   | 10.4   | 10.0           | 9.6            | 8.9    | 2.2    | 2.2    | 1.2     | 1.2            | 1.4       |
| Unit labour costs, exch.r. adj.(EUR) 1)         | CCPPY                      | 13.0   | 10.8   | 7.8    | 5.0    | 3.4    | 2.7    | 2.9    | 3.9            | 4.5            | 5.4    | 18.1   | 19.4   | 18.0    | 19.0           | 20.3      |
| Construction, total                             | real, CCPPY                | 6.8    | 11.2   | 13.3   | 14.7   | 13.5   | 13.0   | 11.6   | 11.9           | 12.7           | 11.0   | 2.5    | -0.5   | -2.7    | -3.0           | 0.3       |
| LABOUR  |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Employed persons, LFS                           | th. pers., quart. avg      | 20108  |        |        | 20387  |        |        | 20783  |                |                | 20019  |        |        | 20040   |                |           |
| Employed persons, LFS                           | CPPY                       | 0.1    |        |        | 0.2    |        |        | 0.0    |                |                | 0.8    |        |        | -0.3    |                |           |
| Unemployed persons, LFS                         | th. pers., quart. avg      | 1925   |        |        | 1696   |        |        | 1531   |                |                | 1779   |        |        | 1845    |                |           |
| Unemployment rate, LFS                          | %                          | 8.7    |        |        | 7.7    |        |        | 6.9    |                |                | 8.2    |        |        | 8.4     |                |           |
| Employees total, registered 1)                  | th. persons, avg           | 10546  | 10565  | 10540  | 10554  | 10562  | 10541  | 10537  | 10539          | 10498          | 10396  | 10598  | 10602  | 10613   | 10613          | 10579     |
| Unemployment, registered                        | th. persons, eop           | 614    | 580    | 549    | 506    | 470    | 432    | 405    | 379            | 413            | 483    | 521    | 547    | 531     | 486            | 465       |
| Unemployment rate, registered 2)                | %, eop                     | 2.2    | 2.1    | 2.0    | 1.8    | 1.7    | 1.6    | 1.5    | 1.4            | 1.5            | 1.8    | 1.9    | 2.0    | 1.9     | 1.7            | 1.7       |
| WAGES 1)  |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Total economy, gross                            | UAH                        | 2531   | 2533   | 2573   | 2708   | 2749   | 2694   | 2737   | 2729           | 2727           | 3054   | 2722   | 2799   | 2923    | 2942           | 3015      |
| Total economy, gross                            | real, CPPY                 | 11.4   | 9.9    | 5.3    | 2.0    | 5.0    | 8.5    | 10.0   | 11.5           | 10.2           | 11.1   | 14.2   | 16.2   | 13.3    | 15.5           | 17.8      |
| Total economy, gross                            | EUR                        | 228    | 221    | 224    | 236    | 242    | 236    | 248    | 250            | 252            | 290    | 264    | 265    | 279     | 280            | 294       |
| Industry, gross                                 | EUR                        | 279    | 261    | 266    | 270    | 280    | 283    | 297    | 300            | 296            | 337    | 312    | 312    | 321     | 322            | 342       |
| PRICES  |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Consumer  | PP                         | 1.4    | 1.3    | 0.8    | 0.4    | -1.3   | -0.4   | 0.1    | 0.0            | 0.1            | 0.2    | 0.2    | 0.2    | 0.3     | 0.0            | -0.3      |
| Consumer  | CPPY                       | 7.7    | 9.4    | 11.0   | 11.9   | 10.6   | 8.9    | 5.9    | 5.4            | 5.2            | 4.6    | 3.7    | 3.0    | 1.9     | 0.6            | -0.5      |
| Consumer  | CCPPY                      | 7.7    | 8.1    | 8.7    | 9.2    | 9.4    | 9.4    | 9.0    | 8.6            | 8.3            | 8.0    | 3.7    | 3.4    | 2.9     | 2.3            | 1.7       |
| Producer, in industry 3)                        | PP                         | 2.1    | 3.4    | 2.6    | 0.5    | 0.1    | 0.5    | 1.2    | -1.8           | 0.6            | -1.8   | -0.8   | 0.8    | 1.1     | 3.7            | 0.2       |
| Producer, in industry 3)                        | CPPY                       | 20.4   | 20.9   | 18.8   | 20.0   | 20.4   | 19.9   | 21.2   | 16.2           | 17.3           | 14.1   | 11.8   | 7.5    | 6.5     | 6.8            | 4.3       |
| Producer, in industry 3)                        | CCPPY                      | 20.0   | 20.2   | 19.9   | 19.9   | 20.0   | 20.0   | 20.1   | 19.7           | 19.5           | 19.0   | 11.8   | 9.6    | 8.5     | 8.1            | 7.3       |
| FOREIGN TRADE, customs statistics               |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Exports total (fob), cumulated                  | EUR mn                     | 11228  | 15114  | 19090  | 23381  | 27133  | 31166  | 35489  | 39681          | 44281          | 49144  | 4128   | 7878   | 12333   | 16734          |           |
| Imports total (cif), cumulated                  | EUR mn                     | 13546  | 17900  | 22623  | 27345  | 31922  | 36959  | 42307  | 47793          | 53430          | 59357  | 4173   | 9296   | 14553   | 20074          |           |
| Trade balance, cumulated                        | EUR mn                     | -2318  | -2786  | -3533  | -3965  | -4789  | -5793  | -6818  | -8112          | -9149          | -10213 | -45    | -1418  | -2220   | -3340          |           |
| FOREIGN FINANCE                                 |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| Current account, cumulated                      | EUR mn                     | -981   |        |        | -1960  |        |        | -3561  |                |                | -6469  |        |        | -1026   |                |           |
| EXCHANGE RATE                                   |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| UAH/EUR, monthly average                        | nominal                    | 11.093 | 11.487 | 11.476 | 11.468 | 11.379 | 11.417 | 11.030 | 10.914         | 10.839         | 10.544 | 10.301 | 10.544 | 10.459  | 10.511         | 10.265    |
| UAH/USD, monthly average                        | nominal                    | 7.944  | 7.965  | 7.975  | 7.973  | 7.971  | 7.971  | 7.973  | 7.975          | 7.984          | 7.990  | 7.990  | 7.989  | 7.988   | 7.987          | 7.991     |
| EUR/UAH, calculated with CPI 4)                 | real, Jan09=100            | 107.6  | 104.6  | 105.5  | 106.0  | 105.9  | 104.9  | 108.0  | 108.8          | 109.5          | 112.4  | 116.0  | 112.9  | 113.0   | 111.9          | 114.3     |
| EUR/UAH, calculated with PPI 4)                 | real, Jan09=100            | 126.8  | 125.6  | 129.1  | 129.9  | 130.6  | 131.0  | 136.7  | 135.6          | 137.0          | 138.6  | 139.5  | 136.6  | 138.6   | 142.9          | 146.6     |
| USD/UAH, calculated with CPI <sup>4</sup> )     | real, Jan09=100            | 112.4  | 112.8  | 113.1  | 113.6  | 112.1  | 111.3  | 111.2  | 111.5          | 111.6          | 111.9  | 111.7  | 111.4  | 110.9   | 110.6          | 110.3     |
| USD/UAH, calculated with PPI 4)                 | real, Jan09=100            | 122.5  | 123.9  | 126.3  | 127.2  | 126.8  | 128.4  | 129.6  | 128.8          | 129.2          | 127.9  | 126.3  | 126.7  | 126.4   | 131.4          | 132.7     |
| DOMESTIC FINANCE                                |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
|   |                            | 179.5  | 185.2  | 184.7  | 187.7  | 194.0  | 194.0  | 189.9  | 188.4          | 184.2          | 192.7  | 184.6  | 186.5  | 187.9   | 194.5          | 194.8     |
| Currency outside banks<br>M1                    | UAH bn, eop<br>UAH bn, eop | 296.9  | 305.1  | 300.6  | 309.6  | 311.7  | 311.1  | 304.6  | 304.3          | 184.2<br>294.8 | 311.0  | 302.7  | 300.0  | 308.6   | 194.5<br>315.8 | 313.6     |
| Broad money                                     | UAH bh, eop                | 621.4  | 638.4  | 636.2  | 652.4  | 657.0  | 664.4  | 662.3  | 504.5<br>666.4 | 294.0<br>653.5 | 685.5  | 675.5  | 679.7  | 691.3   | 703.7          | 701.1     |
| Broad money                                     | CPPY, eop                  | 25.7   | 25.0   | 22.0   | 22.3   | 19.3   | 19.5   | 16.4   | 15.7           | 13.8           | 14.7   | 12.4   | 12.3   | 11.3    | 10.2           | 10.2      |
| Central bank policy rate (p.a.) 5)              | %, eop                     | 7.75   | 7.75   | 7.75   | 7.75   | 7.75   | 7.75   | 7.75   | 7.75           | 7.75           | 7.75   | 7.75   | 7.75   | 7.50    | 7.50           | 7.50      |
| Central bank policy rate (p.a.) <sup>5)6)</sup> | real, %, eop               | -10.5  | -10.9  | -9.3   | -10.2  | -10.5  | -10.1  | -11.1  | -7.3           | -8.1           | -5.6   | -3.6   | 0.2    | 1.0     | 0.7            | 3.1       |
| BUDGET  | ·····                      |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |
| General gov.budget balance, cum.                | UAH mn                     | -712   | -2916  | 146    | -11711 | -8145  | -2105  | -3119  | -8040          | -7535          | -23058 | 2069   | 4759   | -712    | -6384          | -4803     |
| 1) Enterprises with 10 and more employees.      |                            |        |        |        |        |        |        |        |                |                |        |        |        |         |                |           |

2) Ratio of unemployed to average working age population.

3) Domestic output prices.

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

5) Discount rate.

6) Deflated with annual PPI.

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