wiiw

Wiener Institut für
Internationale
Wirtschaftsvergleiche

The Vienna Institute
for International
Economic Studies

Monthly Report | 6/13

Contents

- **Real Economic Convergence within the EU**

- **R&D and Non-R&D Innovators in the Financial Crisis: the Role of Binding Credit Constraints**

- **Global Output Growth: likely to be Wage-led rather than Profit-led**

- **Monthly Statistics**

Contents

Real economic convergence within the EU

BY RUMEN DOBRINSKY*

Real economic convergence in the sense of the tendency of narrowing the differences in real per capita income between richer and poorer countries over the long run is one of the most intensively researched areas in the growth literature. From within a broad range of approaches and methods, I have chosen to test two of the most widely used ones: 1) the unconditional (absolute) convergence hypothesis and 2) a conditional convergence applying informal cross-section Barro-type regression (Barro and Sala-i-Martin, 1991).

The absolute convergence hypothesis implies a systematic tendency for poorer countries to grow faster than rich ones. It is estimated on the basis of a cross-country regression of per capita income growth between year t and 0, $[y(t)-y(0)]$, on the initial level of per capita income $y(0)$, i.e. $[y(t)-y(0)] = \alpha+\beta y(0)+\varepsilon$, where ε denotes an error term. A negative sign of the estimated β indicates absolute ('beta') convergence. Another widely used indicator is 'sigma' convergence, which measures the tendency of per capita incomes across a group of countries to become more homogenous (in terms of declining standard deviation) over time.

Absolute real economic convergence within the EU has been a well-established fact which is documented and empirically verified in the economic literature. As a general trend, it has continued uninterrupted since the inception of the Community and has endured every new round of EU enlargement, including the biggest ever eastern enlargement of 2004-2007, which brought the number of Member States from 15 to 27.

I present in Figures 1 and 2 empirical evidence on the incidence of beta- and sigma-convergence

within the EU, for the period 1995-2001, based on the most recent available data.

The scatter diagram presented in Figure 1 and the fitted trend line indicate a strong inverse relationship between starting per capita GDP levels and subsequent growth for the period 1995-2011 and a good fit to the observed data. These results can be taken as providing evidence which supports the absolute unconditional convergence within the EU-27 in this period. In accordance with the parameters of the fitted regression, the implied average rate of absolute convergence among the 27 economies in this period has been about 2 per cent per annum.[1] This result is entirely in line with the so-called '2% rule' of convergence, detected already in the very first tests of the convergence hypothesis (see Mankiw et al., 1992). Respectively, the time necessary to move half way to the balanced growth path corresponding to this speed of convergence is around 35 years.
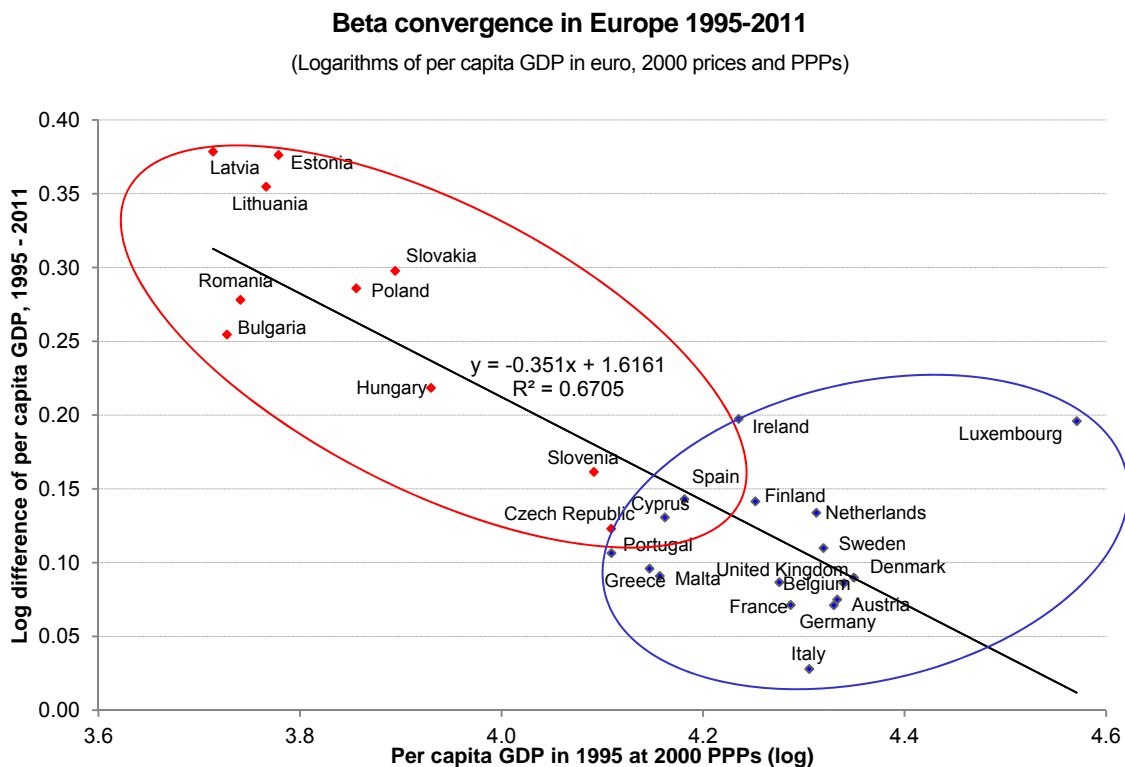
Figure 1 also shows that the EU-10 (the Central and Eastern European EU Member States) are still a 'club' of their own: on average this group of countries still lags considerably behind the EU-17 (the rest of the EU) in terms of the level of their per capita incomes. This feature, as will be shown further in this note, is associated with a number of specific features in their growth – more generally, economic – performance.

Importantly, the process of catching up between the EU-10 and the EU-17 (and hence absolute real convergence within the EU-27) has continued also during the years of the current crisis, albeit at generally lower rates of GDP growth.

---

*   Rumen Dobrinsky is wiiw associate.

[1]   The implied speed of convergence (β) is calculated from the identity: $1 - e^{-\beta T} = b$, where T stands for the duration of the period covered by the regression. Note that in the framework of the Solow growth model β refers to the speed of convergence to steady state and not necessarily to the speed of convergence in per capita incomes (see below). The interpretation of β is as follows: each year the economy moves β% of the remaining distance towards the steady state. E.g., the time τ it takes to move half way to the balanced growth path is calculated as: $\tau = -\ln(0.5)/\beta$.

Figure 1

Beta convergence in Europe 1995-2011

(Logarithms of per capita GDP in euro, 2000 prices and PPPs)

Source: Eurostat; author's calculations.

Figure 2

Sigma convergence in the EU, 1995-2011

(Standard deviations of logarithms of per capita GDP)

Source: Eurostat; author's calculations.

Figure 2 illustrates the evolution of the so-called sigma-convergence (i.e. narrowing of dispersions between countries' per capita income levels) within the EU-27 since 1995 for five subsets of countries. Overall, the main trend during this period has been towards a declining standard deviation of per capita incomes within the EU-27, especially in the period after 2000. Within the EU-10 economies, the pattern of the dispersion of per capita incomes has been uneven: an initial rise in the second half of the 1990s was reversed in the following decade with a steady decline ever since. Within the current euro area (17 countries), the general trend towards narrowing of differences in per capita GDP persisted but there has been a slight reversal since the start of the current crisis. At present the EU-10 is the subset of countries within the EU that features the most pronounced sigma-convergence.

The subsets of countries that do not fully fit into this pattern are the group of the 12 euro area countries (founding states plus Greece) and the group that we denote as EU-17 in this note (current EU members less CEE). In both these subsets of countries the general trend – somewhat paradoxically – has been towards a growing dispersion of per capita incomes and this has been especially pronounced since the start of the current crisis. This outcome is an indirect indication that despite the proclaimed objectives, the institutional arrangements within the euro area did not always promote convergence among the participating countries.

In a next step I expand the scope of this assessment by looking into conditional convergence within the EU. The initial neoclassical interpretation of absolute convergence is rather restricted. The conditional convergence hypothesis implies that for countries to converge to the same growth path, they have to be similar. In the general case when they are not, one needs to control for structural differences among countries in order to observe a negative relationship between actual growth rates and the initial level of per capita income.

The concept of real convergence has been enriched with the hypothesis that the closing of the technological gap between the poor and richer countries is among the key factors for a catch-up process. This idea is embodied in the models of conditional real convergence which relate the process of reduction in per capita income differentials across a group of countries with a set of 'conditioning variables'.

Conditional real convergence is usually tested with different versions of the following basic regression:

$$[y(t)-y(0)] = \alpha + \beta y(0) + \gamma X + \varepsilon \qquad (1)$$

where X is a vector of variables possibly sustaining the economy in a steady state. The set of conditioning variables X should reflect technological progress, also in the sense of the existence of an enabling macroeconomic and institutional environment which supports the closing of the technological gap. The regression is tested on a dataset covering a group of countries which are subject to the convergence test.

The literature abounds with many different approaches to testing conditional convergence. I have chosen for this note the so-called informal cross-section growth regressions. Such growth regressions are often referred to as 'Barro regressions' after Barro (1991), who was the first to apply them.

My choice of such a more informal specification was to a large degree determined by the available statistical data for the testing of the model. The equation was estimated as a cross section over the period 2000-2011. I used the following set of conditioning variables:[2] log percentage difference of real ULC; log difference of gross domestic savings (in % of GDP); log difference of gross domestic plus foreign savings (in % of GDP); log percentage difference in share in world exports. The dependent variable [y(t)-y(0)] is the log difference of per capita

---

[2]   A much wider set of conditioning variables has been tested for the equation but in most cases the estimated coefficients were not statistically significant. The final selection reflects independent variables that were estimated with statistically significant coefficients or at least with signs that correspond to the theoretically expected ones.

GDP at 2000 PPS. This regression should test to what extent the observed convergence within the EU was related to the effect of these conditioning variables.

The estimation results covering the period 2000-2011 are shown in Table 1. Admittedly, the number of observations is very low, undermining to some extent the reliability of the results.

Table 1

Estimation results for conditional real convergence within the EU-27, 2000-2011
(OLS estimations)

Dependent variable: Log difference of per capita GDP at 2000 PPS, 2000 – 2011.

Variables	Equations	1	2	3	4
Logarithm of GDP per capita in 2000 in 2000 PPS		-0.215*** (-3.263)	-0.381*** (-11.266)	-0.193*** (-2.869)	-0.261*** (-5.124)
Log percentage difference of real ULC, 2000-2011		-0.388* (-1.727)	-0.630*** (-2.653)		-0.628** (-1.955)
Log difference of gross domestic savings as % of GDP, 2000-2011		0.111 (1.566)	0.258*** (4.735)	0.068 (0.980)	
Log difference of gross domestic plus foreign savings as % of GDP, 2000-2011					0.276* (1.705)
Log percentage difference in share in world exports, 2000-2011		0.244*** (2.816)		0.301*** (3.604)	
Constant		1.059*** (3.326)	1.862*** (11.539)	0.940*** (2.902)	1.367*** (7.885)
Observations		27	27	27	27
R2		0.919	0.889	0.908	0.806
R2 adjusted		0.904	0.875	0.896	0.781
Implied speed of convergence (β)		1.77	2.93	1.61	2.11
Implied time to move half way to the balanced growth path (τ), years		39	24	43	33

t-statistic in parentheses.

The estimation results indicate that within the set of the selected conditioning variables, real convergence within the EU-27 was mostly conditional on the international competitiveness of the catching-up countries. The two conditioning variables which appear to be most closely associated with the catch-up process are the changes in real ULC and in export performance, both of which are indicative of rising international competitiveness.

Domestic savings (as well as the sum of domestic plus foreign savings) and labour input were estimated with the correct (expected) signs but their coefficients in most cases were not statistically significant. The coefficient on domestic savings was only estimated as significant in versions of the equation which exclude export performance (4 and 5). Somewhat surprisingly (and in contrast to similar studies for other groups of countries), in none of the equation versions that were tested, FDI was estimated to be a statistically significant conditioning variable.

In accordance with the parameters of the estimated equations, the implied average rate of conditional convergence among the 27 economies in this period in the different versions of the equation range from 1.6 to 3.0 per cent per annum but in most cases is around 2 per cent. It is not much different from the estimated speed of absolute convergence as indicated above. Moreover, values close to 3 per cent refer to the equation versions excluding

export performance, one of the key variables conditioning the catch-up process. Note that in the case of the tested model of conditional convergence the speed of convergence β refers both to the speed of convergence to steady state (in the framework of the Solow growth model) and to the speed of real convergence. Put differently, according to our empirical estimations, convergence to steady state would at the same time be accompanied by convergence in per capita incomes.

Summing up the outcomes of the absolute and conditional convergence tests, one could conclude that convergence has been underway within the EU-27 during the past decade. The average speed of convergence has been in the order of 2 percentage points per annum. International competitiveness has been one of the factors bolstering convergence but it has not been a key determinant. It appears that – at least during the period we test – a conventional catch-up process associated with significant differences in the starting levels of per capita incomes has dominated real convergence within the EU.

References

Barro, R. and X. Sala-i-Martin (1991), 'Convergence across States and Regions', *Brookings Papers on Economic Activity*, 1, pp. 107-182.

Mankiw, G., D. Romer and D. Weil (1992), 'A Contribution to the Empirics of Economic Growth', *The Quarterly Journal of Economics*, Vol. 107, No. 2, pp. 407-437.

R&D and non-R&D innovators in the financial crisis: the role of binding credit constraints

BY SANDRA M. LEITNER AND ROBERT STEHRER

It goes beyond mere speculation that R&D activities are one of the key engines of sustained economic growth. Being inherently risky, innovative activities absorb substantial resources without providing the guarantee that invention will eventually materialise. In the face of insufficient own resources to fund innovative activities, entrepreneurs often turn to the capital market to raise funds. Here they often face financing constraints: given innovators' reluctance to disclose sensitive information due to strong appropriability concerns, the relationship between the debtor and potential outside investors is plagued by strong asymmetric information which restricts access to funding. Moreover, the need to provide collateral in credit transactions but the inability of R&D to act as viable collateral – due to its intangible nature – may also give rise to financing constraints. Hence, faced with such constraints, innovators may be forced to postpone or altogether abandon their innovative projects.

The ensuing analysis, based on data for a large group of Latin American countries, sheds some light on i) the presence and effects of binding credit constraints as well as on ii) the effects of the global financial crisis on innovative activities of firms.

The data

The analysis applied data for a set of Latin American countries comprising Argentina, Bolivia, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay and Venezuela; data were collected as part of the World Bank Enterprise Survey (WBES) component of the Latin American and Caribbean (LAC) Enterprise Surveys 2006 and 2010. The surveys were conducted during the calendar years 2006 and 2007 as well as 2010 and 2011, respectively, but refer to the last complete fiscal years, that is 2005 for WBES-2006 and 2009

for WBES-2010. Generally, Enterprise Surveys have been conducted regularly since 2002 by means of face-to-face interviews with the manager, owner or director of establishments on a three- to four-year rotation with the objective of collecting information about individual firms' business environment, how it is perceived by them, how it changes over time, about various constraints or obstacles to firm performance and growth or the effects a country's business environment on its international competitiveness. Its focus is on private business activities so that establishments with 100 per cent state ownership are excluded from the survey.

To obtain unbiased estimates and to guarantee that the final sample covers establishments from different sectors, each country sample was selected using random sampling, stratified by size, region and industry classification. Data are collected based on three different questionnaires. As the basic version, the Core Questionnaire includes all common questions asked to all establishments from all sectors. The Manufacturing Questionnaire as well as the Service Questionnaire are built upon the Core Questionnaire but add some specific questions relevant to the respective sectors. The subsequent analysis uses data stemming from the Manufacturing Questionnaire only which covers, in more detail, information on innovative efforts and performance of firms, the strategies they pursue to protect their innovations as well as on the competitive business environment they operate in.

All in all, 10,930 firms were covered by the WBES-2006 and 9,536 firms by the follow-up WBES-2010. A total of 3,426 firms were covered in both surveys, of which 2,242 manufacturing firms are subject to the ensuing analysis. About 37% of all manufacturing firms analysed are either micro or small firms with up to 19 employees, 40% are medium-sized with 20 to 99 employees while the remaining 23% are large firms with more than 99 employees. About 13% of all manufacturing firms are part of a larger firm while only some 8% are majority foreign-owned or young. Finally, in terms of trading status, about 8% are exporters only, approximately 25%

are importers only while another 10% are both exporters and importers. The remaining 57% of all manufacturing firms have no international trade relations but cater to domestic markets only.

Two different groups of innovators are identified and analysed: the so-called *R&D innovators*, which assigned resources to R&D development activities performed in-house, as well as *non-R&D innovators*, which did not perform any R&D but still introduced any new or significantly improved products (goods or services) and/or processes (for producing or supplying products) over the last three years.

The analysis uses a self-reported credit-constraint indicator (*fconstr$_{ik}$*) to identify whether and to what extent financing constraints affected the probability of being either an R&D innovator or a non-R&D innovator, both before and during the global financial crisis of 2009. Specifically, firms are considered to be credit-constrained (*fconstr$_{ik}$* = 1) if they did not apply for loans or lines of credit since either i) application procedures were considered too complex, ii) interest rates were considered too unfavourable, iii) collateral requirements were unattainable, iv) the size of the loan and maturity were insufficient, v) they did not think the credit line would have been approved, or vi) due to other reasons not specified in the survey. In contrast, *fconstr$_{ik}$* = 0 if the establishment successfully applied for a line of credit or loan (as reference group).

Between 2005 and 2009, the frequency of R&D innovators increased slightly: of all 2,242 manufacturing firms, 747 firms (or 33%) spent on in-house R&D in 2005 relative to 908 firms (or 40%) in 2009. In contrast, the number of non-R&D innovators declined between 2005 and 2009: in 2005, 676 firms (or 30%) introduced a new product and/or process without performing any R&D compared to only 528 firms (or 24%) in 2009. Hence, there is some indication that firm-level activities that entail lower fixed costs, such as activities of non-R&D performers, may more easily be discontinued or postponed once external conditions worsen and demand plunges. In contrast, due to the generally

high fixed costs of R&D, entrepreneurs are less likely to discontinue their R&D activities.

Furthermore, both in 2005 and 2009, about one fifth of all firms in the manufacturing sector faced credit constraints. The number of R&D innovators and non-R&D innovators is lower among firms that face credit constraints: the frequency of either R&D innovators or non-R&D innovators is some 30% to 40% lower among firms that face credit constraints. Finally, between 2005 and 2009, the frequency of R&D innovators with credit constraints remained unchanged while the frequency of non-R&D innovators with credit constraints slightly decreased.

Credit constraints and the propensity to innovate

To identify whether and to what extent credit constraints affected the probability of being either an R&D innovator or a non-R&D innovator, an econometric model is built and estimated[1].

The model consists of two equations, with the first equation explaining the probability of a firm being an innovator while second equation specifies the probability of a firm being credit-constrained.

Table 1 presents results of the analysis for different samples. Columns (1) and (2) refer to the group of R&D innovators for 2005 and 2009 while columns (3) and (4) refer to the group of non-R&D innovators, again for 2005 and 2009, respectively.

The results in columns (1) and (3) highlight that, prior to as well as during the crisis, credit constraints posed substantial obstacles to the propensity of being an R&D innovator: firms that faced credit constraints had a 3.6% (before the crisis) and 1.8% (during the crisis) lower probability of performing any R&D. Generally, this is in line with similar analyses which find a strong and negative relationship between the presence of financing constraints and a firm's likelihood to conduct R&D. However, the test on the equality of credit-

[1] The formal aspects of the model are described in some detail in the forthcoming *wiiw Working Paper* No. 95.

constraint coefficients for 2005 and 2009 is not rejected, hence there is no evidence that the effects of binding credit constraints were significantly lower during the crisis. This suggests that monetary policies aimed at mobilising extra capital for additional bank loans had no discernible *alleviating* effect on a firm's probability to pursue R&D-based innovative activities. In contrast, non-R&D innovators responded differently to prevailing credit constraints: non-R&D innovators remained unaffected by credit constraints, despite the crisis. Put together, there is evidence that during economically difficult and crisis-stricken times such as the global financial crisis when local and global demand faltered, sales collapsed and firms had to more intensely resort to external sources to fund their resource-intensive innovative activities, R&D innovators faced binding credit constraints which barred them from accessing much-needed resources and forced them to discontinue their innovative efforts. In contrast, non-R&D innovators, whose innovative activities are less costly and resource-intensive but more of a by-product of daily business operations and a result of learning-by-doing dynamics, remained unrestricted by any credit constraints and unaffected by the crisis.

Moreover, the analysis identifies several firm characteristics that are pivotal to any R&D-based or non-R&D-based innovative activities. In particular, probably due to richer and more comprehensive internal funds, before and during the crisis, the propensity to perform formal R&D was significantly higher among medium-sized firms (by about 2%) and large firms (by about 3%). Hence, for R&D innovators, there is evidence in favour of Schumpeter's size–R&D nexus. By contrast, non-R&D based innovative activities appear to be in the domain of smaller and relatively resource-deficient firms.

Additionally, in times of crisis, younger firms tend to be more likely to pursue non-R&D-based innovative activities.

The analysis also demonstrates that group membership and foreign ownership were of vital impor-

tance, with different effects though. Prior to the crisis, firms that were part of a group had a higher probability of performing R&D-based innovative activities but a lower probability of performing non-R&D-based innovative activities. Hence, comparatively easy access to vital group-internal technical knowledge, human resources or funds is conducive to R&D-based innovative activities. However, for non-R&D innovators only, the crisis exerted an equalising effect such that the probability of being a non-R&D innovator became independent of group membership. By contrast, before the crisis, relative to their predominantly domestically-owned counterparts, majority foreign-owned firms were more likely to be innovative without performing any formal R&D (by 3.3%). In the face of the crisis, however, majority foreign-owned firms became less likely to perform non-R&D-based innovative activities but remained more likely to perform R&D-based innovative efforts. This finding is in contrast to previous empirical evidence on the propensity to innovate in studies on different European countries and appears to suggest that possibly due to substantial risks and costs of decentralised R&D activities (in terms of a loss of control or of non-negligible coordination costs) paired with insufficient or poor indigenous technological capabilities, formal R&D-based innovative activities are still predominantly home-country-based. Hence, as predominantly production-oriented entities with scarce or no resources for formal R&D, majority foreign-owned firms appear to rely on or resort to non-R&D-based innovative activities to develop new or significantly improved products and/or processes.

Furthermore, there is supportive evidence that a firm's probability to innovate is affected by its trading status. Particularly, relative to their purely domestic counterparts, internationally trading firms show a significantly higher probability of performing R&D-based innovative activities, irrespective of the crisis. A somewhat different picture emerges for non-R&D based innovative activities: firms that both exported and imported only were less likely to perform non-R&D based innovative activities, both before the crisis (by 1.7%) as well as during the

crisis (by 1.2%). Overall, the emerging patterns seem to suggest that internationally trading firms may have to perform costly adaptive R&D activities to adjust imported or to be exported consumer or producer goods to prevailing conditions (such as specific consumer preferences or legal regulations) on the markets they cater to, costs which non-R&D innovators have severe difficulties shouldering.

Table 1

Probability of being an R&D or non-R&D innovator: 2005 and 2009

Variables	(1) R&D innovator 2005	(2) R&D innovator 2009	(3) Non-R&D innovator 2005	(4) Non-R&D innovator 2009
Constant	-0.451**	-0.247	-0.348**	-0.375**
	(2.42)	(1.42)	(2.05)	(2.10)
Credit constrained (yes=1)	-0.605**	-0.426*	0.407	0.118
	(2.56)	(1.86)	(1.61)	(0.48)
Medium-sized (yes=1)	0.391***	0.434***	-0.182**	-0.148
	(4.23)	(4.75)	(2.13)	(1.64)
Large (yes=1)	0.784***	0.571***	-0.425***	-0.387***
	(5.85)	(4.75)	(3.31)	(3.07)
Young (yes=1)	-0.078	-0.077	0.091	0.288**
	(0.57)	(0.58)	(0.69)	(2.18)
Part of a group (yes=1)	0.261**	0.220*	-0.214*	-0.046
	(2.17)	(1.91)	(1.73)	(0.38)
Majority foreign-owned (yes=1)	-0.174	-0.274*	0.344**	0.308*
	(1.02)	(1.67)	(1.99)	(1.82)
Exporter only (yes=1)	0.315*	0.459**	-0.076	-0.059
	(1.76)	(2.52)	(0.42)	(0.31)
Importer only (yes=1)	0.312***	0.466***	-0.086	-0.161
	(3.29)	(4.96)	(0.89)	(1.63)
Exporter and importer (yes=1)	0.603***	0.747***	-0.456**	-0.361**
	(3.55)	(4.54)	(2.52)	(2.05)
Informal sector practices (Likert scale)	0.061**	0.091***	0.002	-0.041
	(2.15)	(2.97)	(0.06)	(1.30)
Competition: minor (yes=1)	0.397**	0.061	-0.761***	-0.447*
	(2.03)	(0.26)	(3.51)	(1.78)
Competition: moderate (yes=1)	-0.012	0.272	-0.147	-0.248
	(0.06)	(1.41)	(0.74)	(1.19)
Competition: strong (yes=1)	0.100	0.070	-0.004	0.016
	(1.24)	(0.87)	(0.05)	(0.20)
Non-production labour share	-0.042	-0.043	0.014	0.027
	(1.41)	(1.49)	(0.76)	(1.01)
Industry dummies	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES
No of observations	1,361	1,397	1,360	1,398
Rho	0.475	0.237	-0.268	0.0495
Log likelihood	-1318.82	-1315.45	-1385.64	-1286.50

Note: Robust z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. Columns (1) and (2) refer to the R&D innovators for 2005 and 2009, respectively, while columns (3) and (4) refer to non-R&D innovators for 2005 and 2009, respectively. Country and industry dummies are included in all regressions. Dependent variable: probability of being an R&D innovator or a non-R&D innovator.

The degree of competitive pressures firms face on their main product markets also affected their probability to innovate. In particular, firms are found to be more likely to pursue R&D-based innovative activities, at least until the crisis set in: prior to the crisis, competition encouraged formal R&D efforts such that firms which operated on product markets with *minor* competition only had a 2% higher probability of performing R&D-based innovative activities. With the crisis, however, formal R&D efforts

became independent of the degree of product market competition, disrupting any previous competition–R&D nexus. By contrast, product market competition turns out to be detrimental to non-R&D-based innovative activities: irrespective of the crisis, firms showed a lower probability to innovate without performing any formal R&D on product markets with *minor* competition only.

Similarly, firms also responded differently to practices of competitors in the informal sector. Particularly, irrespective of the crisis, firms were more likely to perform R&D-based innovative activities if informal sector practices were more of an obstacle to their current business operations. Hence, innovative efforts may be exerted to gain a competitive edge over firms in the informal sector and to guarantee firm survival and growth. By contrast, informal sector practices had no significant effect on non-R&D-based innovative activities, both before as well as during the crisis.

Finally, the endowment with human capital played no role for the propensity to innovate.

Table 2

Probability of being credit-constrained: 2005 and 2009

	(1)	(2)	(3)	(4)
	R&D	R&D	Non-R&D	Non-R&D
	Innovator	innovator	innovator	innovator
Variables	2005	2009	2005	2009
Constant	0.997**	0.386	0.986**	0.168
	(2.18)	(0.75)	(2.08)	(0.33)
Medium-sized (yes=1)	-0.167*	-0.150	-0.160	-0.156
	(1.72)	(1.47)	(1.64)	(1.52)
Large (yes=1)	-0.423***	-0.315**	-0.426***	-0.337**
	(2.88)	(2.09)	(2.85)	(2.23)
Young (yes=1)	0.080	0.147	0.093	0.140
	(0.52)	(0.94)	(0.59)	(0.90)
Part of a group (yes=1)	-0.093	-0.074	-0.090	-0.064
	(0.64)	(0.49)	(0.60)	(0.42)
Majority foreign-owned (yes=1)	0.153	-0.276	0.167	-0.281
	(0.71)	(1.17)	(0.77)	(1.18)
Exporter	-0.067	-0.284*	-0.053	-0.311*
	(0.42)	(1.66)	(0.33)	(1.80)
Working capital financed by internal funds	-0.004***	-0.002	-0.004***	-0.002
	(3.08)	(1.51)	(3.30)	(1.40)
Credit (yes=1)	-1.082***	-1.243***	-1.095***	-1.246***
	(10.63)	(12.48)	(10.72)	(12.52)
Corruption (Likert scale)	-0.022	0.063*	0.003	0.067**
	(0.69)	(1.91)	(0.09)	(2.04)
Log sales per employee (in US-$)	-0.057	-0.020	-0.060	-0.002
	(1.35)	(0.43)	(1.37)	(0.05)
Industry dummies	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES
No of observations	1,361	1,397	1,360	1,398

Note: Robust z-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Columns (1) and (2) refer to the R&D innovators for 2005 and 2009, respectively, while columns (3) and (4) refer to non-R&D innovators for 2005 and 2009, respectively. Country and industry dummies are included in all regressions.

Moreover, Table 2 presents results on the probabilities of being credit-constrained for each of the four specifications in Table 1. The results highlight that the probability of both R&D and non-R&D innovators of being credit-constrained was determined by very similar characteristics, both before as well as during the crisis. Specifically, prior to and during the crisis, it was lower among larger (and more resource-abundant) firms and firms that already used a line of credit or loan and therefore

had a longer-standing and more reputable debtor-creditor relationship with outside creditors, such as banks. Hence, firms that had higher own financial resources at their disposal also faced a lower probability of being credit-constrained. Moreover, firms which financed their working capital requirements predominantly by means of internal funds and therefore had more substantial internal resources at their disposal showed a significantly lower likelihood of being credit-constrained, but only before the crisis struck. As for exporters, they faced a significantly lower likelihood of being credit-constrained, but during the crisis only.

Also during the crisis only, firms which considered corruption an important obstacle to their current business operations were more likely to face credit constraints.

Summary and conclusion

Due to the very nature of innovative activities, innovators frequently encounter binding financing constraints in the course of tapping into (new) external funding sources. Consequently, bereft of crucial resources, many R&D projects share a common fate and are postponed or abandoned altogether, robbing economies of a strong and reliable engine towards sustained growth and development.

Against that backdrop, the analysis sought to shed light on whether and to what extent prevailing financing constraints in the form of binding credit constraints affected firms' probabilities of being innovators, both before as well as during the global financial crisis of 2009. It therefore explicitly identified the role of the banking sector for firm-level innovative activities during the global financial crisis which was characterised by globally collapsing capital markets and swiftly contracting global and local credits markets that risked drying up altogether. Moreover, to also account for the mostly neglected but sizeable group of innovators which introduce innovations without performing any formal R&D, the analysis studied separately constraint responses of the group of formal R&D innovators – which assign resources to R&D development activities performed in-house – as well as of the group of non-R&D innovators – which do not perform any R&D but still develop and introduce new or significantly improved products and/or processes.

For that purpose, the analysis applied data for a set of Latin American countries that were collected as part of the World Bank Enterprise Survey (WBES) component of the Latin American and Caribbean (LAC) Enterprise Surveys 2006 and 2010. Methodologically, a recursive bivariate probit approach was used that incorporates the endogenous nature of the credit constraint condition. Results point to the presence and effects of non-negligible credit constraints: irrespective of the crisis, R&D innovators faced binding credit constraints which rendered them less likely to perform formal R&D. Moreover, there is no evidence that monetary policies aimed at stabilising capital markets during the crisis by mobilising extra capital for additional bank loans improved the probability of pursuing R&D-based innovative activities. By contrast, non-R&D innovators, whose R&D activities are less resource-intensive and risky and more likely the result of learning-by-doing dynamics, remained unrestricted by credit constraints and unaffected by tighter credit markets during the crisis.

In addition, the analysis identified specific firm characteristics that were conducive or obstructive to any R&D or non-R&D activities. It demonstrated that innovative efforts of R&D and non-R&D innovators were driven by an entirely different set of firm characteristics. For *R&D innovators*, there is strong evidence in favour of Schumpeter's 'size–innovation' hypothesis but some indication against his 'competition-curbs-innovation' hypothesis. Furthermore, results also reveal that probably due to insufficient indigenous technological capabilities and the still mainly home country-based nature of R&D, formal R&D efforts were less likely among majority foreign-owned firms. Moreover, group membership and international trading status proved conducive to formal R&D efforts since firms which were part of a group profited from easy access to group-internal technical knowledge, human re-

sources or funds while internationally trading firms had to adapt their products and/or processes to conditions and needs on their major (domestic or foreign) markets. By contrast, *non-R&D-based* innovative activities were more likely among majority foreign-owned or smaller firms while firms that both export and import, faced minor product market competition, were part of a group or considered informal sector practices detrimental to their own business activities were less likely to perform non-R&D innovative activities.

Finally, evidence was found that almost identical firm characteristics determined whether R&D and non-R&D innovators faced any binding credit constraints: the probability of encountering any credit constraints was higher among firms whose business operations were more severely affected by corruption but lower among larger firms, exporters, firms with higher internal funds to dispose of and firms that had longer-standing and therefore most likely more reputable debtor-creditor relationships with outside creditors.

Global output growth: likely to be wage-led rather than profit-led

BY LEON PODKAMINER

Preliminaries

Aggregate gross capital formation (*investment* henceforth) is the central determinant of economic growth. Of course, in the shorter run investment tends to be quite capricious.[1] It responds, rather unpredictably, to psychological factors (e.g. volatile sentiments of entrepreneurs) and to some possibly harder economic influences (e.g. interest rates) – as well as to the perceived opportunities generated by technical progress. Certainly, it is important to go beyond analyses of such short-term – accidental or exogenous – influences and attempt to gain some understanding of the factors possibly responsible for the longer-term dynamics of investment and thus of overall growth.

There has been no shortage of theories and concepts relating to the longer-term trends in investment. For this Note the starting point is the theory linking investment dynamics to the functional distribution of output: i.e. the proportion in which national output (or income) is divided between wages and profits. (The theory abstracts from the fact that income earned by the self-employed – e.g. farmers – is neither profit nor wage.)

The theory, formally initiated around 1990[2], assumes that in the longer run investment is an immutable function of two 'variables': (1) the profit share; (2) the level of production capacity utilisation. Each of these two variables, taken separately, is assumed to exert a positive impact on investment. However, the level of capacity utilisation is higher when the *wage* share is higher (as the consumption propensity out of wage income is 'naturally' higher than the propensity to consume out of

profits). Hence the profit share and the level of capacity utilisation are not independent of each other – actually these two variables are 'antagonistic'. Depending on some (fairly simple) analytical considerations, it is possible – at least in theory – to identify one of the two variables in question as eventually dominant in so far as investment impacts are concerned. If a certain arithmetical inequality is satisfied then the profit share is dominant, otherwise it is the capacity utilisation. In the former case investment (and overall output) growth responds positively to redistribution of income from wages to profits. In the latter case investment (and overall output) growth responds positively to redistribution of income from profits to wages. Not surprisingly, the former case is called an instance of 'profit-led growth', and the latter a 'wage-led growth'.

The ambiguous empirics at the national level

The above-outlined theory does not really allow for the existence of 'external world': hence the abstract economy analysed does not trade with 'the rest of the world'. Nor is it linked to 'the rest of the world' via e.g. capital (including FDI) and capital-related income flows. The fact that transnational corporations' earned profit comes from activities conducted globally, and their investments also cross the borders, must be ignored. Moreover, in the context of progressing integration of national economies (globalisation) growth recorded in some countries has come to depend on the net external demand these countries register – and less on what happens to the domestic demand (be it consumption or investment). In the same vein growth in some other countries could have been divorced from trends in their profit shares or capacity utilisation levels as domestic consumption and investment may have been led by growing foreign indebtedness.

The external impacts listed above have been of growing importance, as amply documented: since the late 1960s growth in separate national economies has been increasingly export-led, or import-fed (as the case might be), in addition to being either wage- or profit-led, while cross-border profit-

---

[1] Sir John Hicks (awarded Nobel Prize in economics in 1972) once remarked that 'investment is a flighty bird … which needs to be controlled'.

[2] See e.g. Bhaduri and Marglin (1990), Setterfield et al. (2002), Bhaduri (2007), Lavoie and Stockhammer (2012).

earning and investment activities have been gaining in importance.[3]

Given the strength of internationalisation of national economies worldwide, it is perhaps not quite surprising that attempts to characterise growth in *separate* countries as being led by either domestic wages or domestic profits have not produced unambiguous econometric results (see Lavoie and Stockhammer, 2012 for a recent review). Of course, the weaknesses of the available statistics may have played a role as well. The measurement of the wage (or profit) shares at the national levels is easy only in theory. In practice this measurement may be problematic if only because of the existence of the self-employed or working owners whose incomes are hard to classify. The emergence of the class of managers whose exorbitant incomes (actually rents extracted) are formally counted as wages blurs the data even further. In addition, the practices of big multinationals (and wealthy individuals) to declare their incomes (if at all) in places offering tax privileges (rather than where they are actually generated) may play havoc to the profit/wage share statistics of *separate* national economies. In consequence the national data may suggest the absence of relationships between reported national profit/wage shares, capacity utili-

sation levels and national investment growth even if such relationships actually exist.

How about the character of *global* growth?

The national statistics on the shares of wages and profits for separate countries leave much to be desired, as discussed above. But there is little doubt that generally the profit shares have been on the rise – at the expense of the wage shares – since the early 1970s. This fact is amply documented in the recent Report of the International Labour Organization (ILO, 2013, pp. 41-60). According to this source, the average share of labour income in 16 high-income OECD countries fell from 75% of the national income in mid-1970s to about 65% by 2010. The decline in the income share was even more pronounced in many emerging markets (including most New EU Member States[4]) – but also in China and India.

While the precise statistics on the share of profits (or wages) for the *global* economy remain to be worked out, there is little doubt that globally the share of wages contracts[5] while the share of profits expands. Now, the question is whether or not this 'stylised development' has been associated with investment acceleration at the global level.

Figure 1

Global investment as per cent of World GDP, 1970-2009
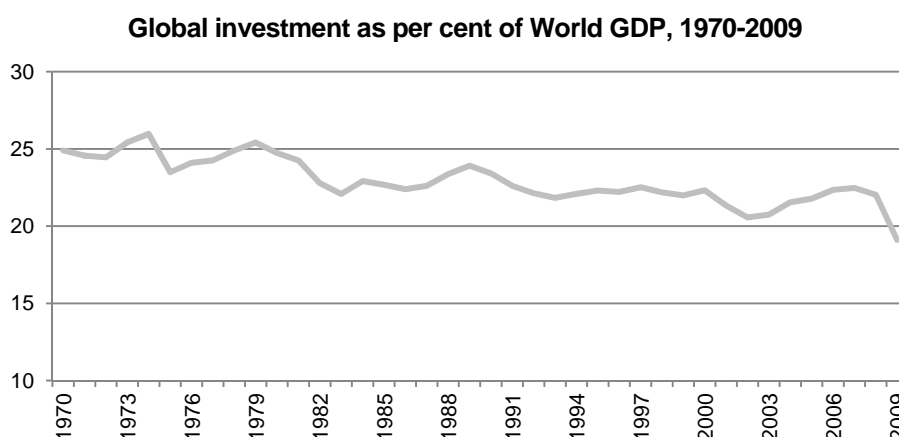
Source: World Development Indicators, World Bank.

---

[3]   In 1990 the worldwide stock of FDI is estimated as amounting to 11% of world output – against 35% in 2010. By 2010 the transnational corporations (TNCs) generated about a quarter of global GDP, while their foreign affiliates generated about one tenth of global GDP and one third of global exports (UNCTAD, 2012, pp. 24-32).

[4]   The strongest decline was registered in Poland where the GDP wage share fell from 68.3% in 1993 to 53.7% by 2011.

[5]   Rough calculations conducted at wiiw (based on Eurostat's World Input-Output Database, WIOD) suggest that the global income wage share oscillated between 53% and 53.5% over the years 1995-2000. Thereafter that share declined continually before stabilising at 51-51.5% after 2007.

Figure 2

Global output growth rates. 1961-2011
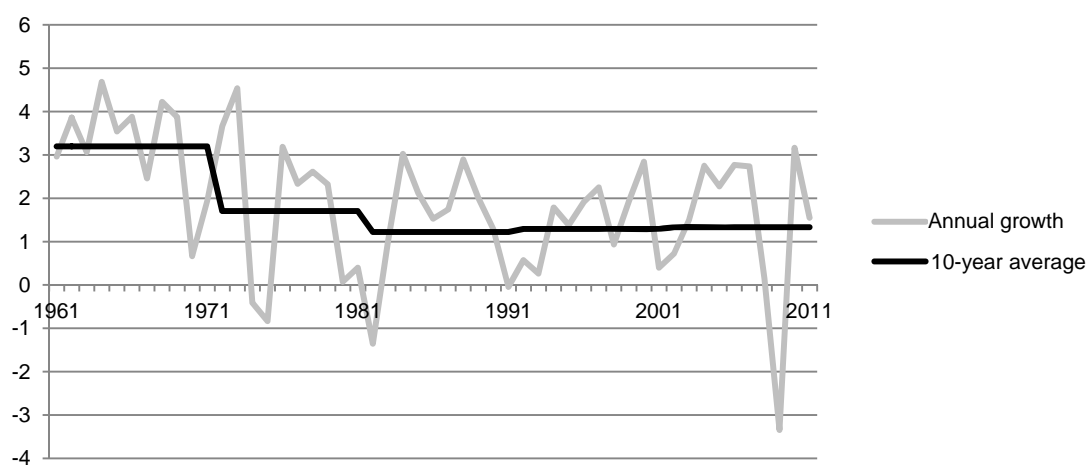
Source: WDI, World Bank.

As it turns out, investment growth has actually been slowing down relative to global output secularly, since the early 1970s. This fact is reflected in the falling share of global investment in global output (Figure 1).

Concluding remarks

The theory explaining investment (and output) growth by reference to the functional distribution of income (between wages and profits) – but abstracting from complications due to progressing globalisation – cannot be reliably tested at the national level. However, the theory could, at least in principle, be tested more reliably at the global level. The stylised fact (rising global share of profits), coupled with a more hard fact (falling global share of investment) suggest that the global economy has been of the wage-led type.

One of the reasons why the global economy's growth has been losing momentum (while at the same time becoming increasingly volatile, as shown in Figure 2) may have been the upset balance between the interests of labour and business – i.e. between wages and profits.

The return to faster, and less volatile, growth globally – and also at the national levels – may require

pronounced changes not only as concerns the introduction of regulations restricting the financial sector's disruptive practices. Also, something may have to be done – at national and international levels – to limit the downward drift in wage shares. The proven rule, once obeyed by economic policy making, that wages must move hand-in-hand with labour productivity needs to be resurrected.

References

Bhaduri, A. (2007), 'On the Dynamics of Profit- and Wage-led Growth', *wiiw Working Papers*, No. 42.

Bhaduri, A. and S. Marglin (1990), 'Unemployment and the real wage: the economic basis for contesting political ideologies', *Cambridge Journal of Economics*, Vol. 14, pp. 375-93.

ILO (2013), *Global Wage Report 2012/13: Wages and Equitable Growth*, Geneva.

Lavoie, M. and E. Stockhammer (2012), 'Wage-led growth: Concept, theories and policies', *ILO Conditions of Work and Employment Series*, No. 41.

Setterfield, M. (ed.) (2002), *The Economics of Demand-Led Growth. Challenging the Supply-side Vision of the Long Run*, Edward Elgar Publishing.

UNCTAD (2011), *World Investment Report 2011*.

STATISTICAL ANNEX

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

Conventional signs and abbreviations used

.	data not available
%	per cent
PP	change in % against previous period
CPPY	change in % against corresponding period of previous year
CCPPY	change in % against cumulated corresponding period of previous year
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 (10^6)
bn	billion (10^9)
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		

EUR	euro – national currency for Montenegro and for the euro-area countries Estonia (from January 2011, euro-fixed before), Slovakia (from January 2009, 'euro-fixed before') and Slovenia (from January 2007, 'euro-fixed' before)
USD	US dollar

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

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

B U L G A R I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	-3.8	-1.9	-3.6	1.8	0.8	0.7	3.3	-2.8	-0.6	0.0	2.5	8.3	1.4	-4.8	.
Industry, NACE Rev. 2 [1]	real, CCPPY	-2.4	-2.2	-2.6	-1.7	-1.2	-1.0	-0.4	-0.7	-0.7	-0.6	-0.4	8.3	4.9	1.4	.
Industry, NACE Rev. 2 [1]	real, 3MMA	-2.2	-3.1	-1.3	-0.3	1.1	1.6	0.4	-0.1	-1.1	0.6	3.4	4.0	1.4	.	.
Productivity in industry, NACE Rev. 2 [1]	CCPPY	.	0.8	.	.	2.1	.	.	3.0	.	.	3.4	.	.	.	.
Unit labour costs, exch.r. adj.(EUR) [1]	CCPPY	.	7.1	.	.	5.0	.	.	3.8	.	.	3.3	.	.	.	.
Construction, NACE Rev. 2 [2]	real, CPPY	-9.6	1.6	1.5	4.4	-4.8	3.8	1.4	-4.1	8.8	1.0	-16.9	-2.2	7.0	-7.2	.
Construction, NACE Rev. 2 [2]	real, CCPPY	-3.8	-1.8	-1.0	0.2	-0.8	-0.1	0.1	-0.3	0.6	0.7	-0.8	-2.2	2.1	-1.4	.
LABOUR																
Employed persons, LFS [3]	th. pers., quart. avg	.	2853.2	.	.	2913.7	.	.	3017.1	.	.	2951.8	.	.	.	.
Employed persons, LFS [3]	CPPY	.	-1.8	.	.	-1.1	.	.	-0.6	.	.	-0.7	.	.	.	.
Unemployed persons, LFS [3]	th. pers., quart. avg	.	421.4	.	.	409.5	.	.	393.2	.	.	417.3	.	.	439.0	.
Unemployment rate, LFS [3]	%	.	12.9	.	.	12.3	.	.	11.5	.	.	12.4	.	.	13.3	.
Unemployment, registered	th. persons, eop	376.2	376.6	373.5	360.1	354.8	356.5	351.5	349.4	361.9	372.1	375.8	391.7	392.7	388.5	380.5
Unemployment rate, registered [3]	%, eop	11.5	11.5	11.4	11.0	10.8	10.8	10.7	10.6	11.0	11.3	11.4	11.9	12.0	11.8	11.6
WAGES																
Total economy, gross	BGN	734	768	774	773	764	761	754	777	790	791	828	773	766	796	.
Total economy, gross [4]	real, CPPY	8.9	10.1	7.1	9.1	9.1	7.7	7.1	7.0	8.4	6.4	6.7	2.3	2.1	2.0	.
Total economy, gross	EUR	375	393	396	395	391	389	386	397	404	404	423	395	392	407	.
Industry, gross, NACE Rev. 2	EUR	339	367	360	361	364	358	356	370	359	369	380	363	363	386	.
PRICES																
Consumer - HICP	PP	0.6	0.1	0.2	-0.1	-0.5	1.1	0.6	0.3	-0.1	-0.2	0.3	0.2	0.2	-0.4	-0.4
Consumer - HICP	CPPY	2.0	1.7	2.0	1.8	1.6	2.4	3.1	3.4	3.0	2.7	2.8	2.6	2.2	1.6	0.9
Consumer - HICP	CCPPY	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.3	2.4	2.4	2.6	2.4	2.1	1.8
Producer, in industry, NACE Rev. 2	PP	0.5	0.7	1.7	-1.9	-1.2	1.9	1.5	1.0	-0.3	-0.6	-0.9	-0.5	0.8	-0.9	.
Producer, in industry, NACE Rev. 2	CPPY	3.5	3.2	3.6	3.1	2.2	3.2	6.2	5.6	7.0	5.2	5.0	2.0	2.3	0.7	.
Producer, in industry, NACE Rev. 2	CCPPY	4.1	3.8	3.7	3.6	3.4	3.4	3.7	3.9	4.2	4.3	4.4	2.0	2.2	1.7	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	2900	4620	6240	8105	9876	11742	13613	15428	17288	19257	20793	1778	3436	.	.
Imports total (cif), cumulated	EUR mn	3632	5800	7993	10389	12625	14843	16941	19001	21320	23535	25484	1907	3989	.	.
Trade balance, cumulated	EUR mn	-732	-1181	-1753	-2283	-2749	-3102	-3328	-3572	-4032	-4278	-4691	-129	-553	.	.
Exports to EU-27 (fob), cumulated	EUR mn	1725	2769	3760	4853	5880	7026	8034	9104	10178	11300	12152	1030	2023	.	.
Imports from EU-27 (cif), cumulated	EUR mn	2173	3485	4683	6050	7398	8753	9891	11091	12435	13817	14937	1057	2324	.	.
Trade balance with EU-27, cumulated	EUR mn	-448	-716	-923	-1197	-1518	-1727	-1857	-1987	-2257	-2517	-2785	-27	-301	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-561	.	.	-944	.	.	-29	.	.	-527	.	.	.	.
EXCHANGE RATE																
BGN/EUR, monthly average	nominal	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956
BGN/USD, monthly average	nominal	1.479	1.482	1.486	1.529	1.561	1.592	1.577	1.521	1.507	1.525	1.491	1.472	1.464	1.509	1.501
EUR/BGN, calculated with CPI [5]	real, Jan09=100	100.8	99.9	99.7	99.6	99.2	100.8	100.9	100.7	100.3	100.2	100.2	101.2	101.0	99.6	99.2
EUR/BGN, calculated with PPI [5]	real, Jan09=100	110.1	110.5	112.2	110.4	109.6	111.5	112.4	113.4	113.2	112.7	112.0	111.1	111.6	110.8	.
USD/BGN, calculated with CPI [5]	real, Jan09=100	100.6	99.8	99.4	96.6	94.3	93.7	94.5	97.9	98.8	97.9	100.7	101.9	101.8	98.1	98.2
USD/BGN, calculated with PPI [5]	real, Jan09=100	102.7	102.0	103.7	99.8	97.6	97.4	98.5	102.3	103.4	102.5	104.1	104.4	104.8	100.9	.
DOMESTIC FINANCE																
Currency in circulation	BGN mn, eop	7482	7451	7513	7496	7676	7940	8094	8040	7971	8018	8499	8012	8012	7971	.
M1	BGN mn, eop	21652	21374	21705	21521	21248	22534	22527	22627	22298	22613	23014	22592	23304	23662	.
Broad money	BGN mn, eop	57376	57497	58291	58394	58492	59912	60087	60320	59970	60469	61722	61446	61910	62605	.
Broad money	CPPY	11.6	10.7	11.6	10.9	10.1	9.9	8.8	8.7	8.6	10.1	8.4	7.1	7.9	8.9	.
Central bank policy rate (p.a.) [6]	%, eop	0.18	0.15	0.15	0.14	0.14	0.16	0.08	0.04	0.03	0.04	0.03	0.03	0.01	0.01	0.01
Central bank policy rate (p.a.) [6][7]	real, %	-3.2	-3.0	-3.3	-2.9	-2.1	-3.0	-5.8	-5.2	-6.5	-4.9	-4.8	-1.9	-2.3	-0.7	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	BGN mn	.	-102	.	.	795	.	.	1081	.	.	-624	.	.	.	.

1) Enterprises with 10 and more persons.
2) All public enterprises, private enterprises with 5 and more employees.
3) According to census February 2011.
4) Nominal wages deflated with HICP.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Base interest rate. This is a reference rate based on the average interbank LEONIA rate of previous month (Bulgaria has a currency board).
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

C Z E C H REPUBLIC: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	5.1	0.1	2.2	-2.2	-2.0	5.4	-1.2	-5.7	3.8	-4.3	-11.6	-4.4	-5.8	-6.0	.
Industry, NACE Rev. 2	real, CCPPY	4.2	2.7	2.6	1.6	0.9	1.5	1.2	0.4	0.8	0.2	-0.7	-4.4	-5.1	-5.4	.
Industry, NACE Rev. 2	real, 3MMA	2.7	2.4	0.0	-0.8	0.1	0.5	-0.8	-1.0	-2.1	-4.0	-6.7	-7.2	-5.4	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	1.1	.	.	0.0	.	.	-0.3	.	.	-1.3	.	.	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	.	-0.1	.	.	0.2	.	.	0.2	.	.	2.4	.	.	.	.
Construction, NACE Rev. 2	real, CPPY	-16.2	-8.2	-3.3	-3.6	-10.1	-2.8	-5.1	-10.1	-3.9	-3.9	-19.4	-9.2	2.2	-20.6	.
Construction, NACE Rev. 2	real, CCPPY	-11.4	-10.0	-7.9	-6.7	-7.5	-6.7	-6.4	-7.0	-6.6	-6.3	-7.6	-9.2	-3.4	-10.9	.
LABOUR																
Employed persons, LFS [1]	th. pers., quart. avg	.	4834.9	.	.	4888.1	.	.	4920.6	.	.	4916.6	.	.	.	.
Employed persons, LFS [1]	CPPY	.	0.1	.	.	0.2	.	.	0.5	.	.	0.6	.	.	.	.
Unemployed persons, LFS [1]	th. pers., quart. avg	.	369.2	.	.	350.9	.	.	367.9	.	.	379.3	.	.	393.0	.
Unemployment rate, LFS [1]	%	.	7.1	.	.	6.7	.	.	7.0	.	.	7.2	.	.	7.5	.
Unemployment, registered	th. persons, eop	541.7	525.2	497.3	482.1	474.6	485.6	486.7	493.2	496.8	508.5	545.3	585.8	593.7	587.8	565.2
Unemployment rate, registered [2]	%, eop	9.2	8.9	8.4	8.2	8.1	8.3	8.3	8.4	8.5	8.7	9.4	8.0	8.1	8.0	7.7
WAGES																
Total economy, gross	CZK, quart. avg.	.	24075	.	.	24636	.	.	24520	.	.	27170	.	.	.	.
Total economy, gross [3]	real, CPPY	.	-0.6	.	.	-1.4	.	.	-1.9	.	.	0.7	.	.	.	.
Total economy, gross	EUR, quart. avg.	.	960	.	.	976	.	.	978	.	.	1079	.	.	.	.
Industry, gross, NACE Rev. 2 [4]	EUR, quart. avg.	.	964	.	.	994	.	.	975	.	.	1077	.	.	.	.
PRICES																
Consumer - HICP	PP	0.2	0.3	0.0	0.2	0.2	-0.2	0.0	-0.1	0.3	-0.3	0.0	1.2	0.1	0.1	0.2
Consumer - HICP	CPPY	4.0	4.2	4.0	3.5	3.8	3.3	3.4	3.5	3.6	2.8	2.4	1.8	1.8	1.5	1.7
Consumer - HICP	CCPPY	3.9	4.0	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.5	1.8	1.8	1.7	1.7
Producer, in industry, NACE Rev. 2	PP	-0.6	-0.3	0.2	0.7	0.3	-0.4	-0.3	-0.4	0.4	0.4	-0.5	0.8	-0.1	0.3	.
Producer, in industry, NACE Rev. 2	CPPY	3.8	2.7	2.4	2.5	3.0	2.7	2.4	1.4	1.5	0.9	0.3	0.3	0.8	1.3	.
Producer, in industry, NACE Rev. 2	CCPPY	4.3	3.8	3.4	3.2	3.2	3.1	3.0	2.9	2.7	2.5	2.4	0.3	0.5	0.8	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob),cumulated	EUR mn	19958	31213	41238	51396	61656	71291	80795	91201	102637	113527	121863	9685	19251	29352	.
Imports total (cif),cumulated	EUR mn	17633	27356	36548	45900	55076	63779	72640	81783	91892	101442	109539	8449	16755	25596	.
Trade balance,cumulated	EUR mn	2325	3857	4690	5497	6580	7511	8156	9419	10745	12086	12323	1236	2496	3756	.
Exports to EU-27 (fob), cumulated	EUR mn	16461	25566	33668	41864	50107	57854	65433	73920	83147	91968	98528	7924	15646	23769	.
Imports from EU-27 (cif), cumulated	EUR mn	13305	20740	27445	34291	41195	47891	54508	61377	69140	76417	82279	6353	12766	19525	.
Trade balance with EU-27, cumulated	EUR mn	3156	4826	6223	7573	8912	9963	10925	12543	14006	15551	16249	1571	2880	4244	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	679	.	.	-355	.	.	-2291	.	.	-3735	.	.	.	.
EXCHANGE RATE																
CZK/EUR, monthly average	nominal	25.04	24.68	24.81	25.31	25.64	25.45	25.02	24.75	24.94	25.37	25.21	25.56	25.48	25.66	25.84
CZK/USD, monthly average	nominal	18.94	18.69	18.85	19.79	20.47	20.71	20.18	19.25	19.22	19.77	19.22	19.24	19.07	19.79	19.84
EUR/CZK, calculated with CPI [5]	real, Jan09=100	106.9	107.7	106.6	104.8	103.7	104.7	106.1	106.5	105.8	103.8	104.1	104.8	104.8	103.2	102.6
EUR/CZK, calculated with PPI [5]	real, Jan09=100	101.6	102.4	101.9	100.8	100.3	100.5	101.2	101.8	101.5	100.4	100.8	99.8	99.7	99.3	.
USD/CZK, calculated with CPI [5]	real, Jan09=100	106.6	107.6	106.4	101.6	98.5	97.4	99.4	103.6	104.2	101.4	104.6	105.5	105.6	101.6	101.6
USD/CZK, calculated with PPI [5]	real, Jan09=100	94.8	94.6	94.2	91.1	89.3	87.8	88.7	91.8	92.7	91.3	93.6	93.8	93.6	90.5	.
DOMESTIC FINANCE																
Currency in circulation	CZK bn, eop	378.2	379.2	382.1	382.6	386.5	382.3	382.3	386.4	383.6	387.8	388.9	386.8	388.0	391.6	.
M1	CZK bn, eop	2180.0	2164.2	2180.7	2221.5	2217.2	2258.8	2242.6	2236.2	2286.4	2295.2	2336.3	2344.3	2358.1	2355.0	.
Broad money	CZK bn, eop	2852.3	2846.7	2870.1	2892.8	2883.4	2897.2	2893.4	2888.1	2925.6	2929.8	2971.8	2967.1	2988.5	2991.3	.
Broad money	CPPY	4.2	4.8	4.2	4.6	5.4	5.0	5.4	4.0	5.2	4.6	4.8	5.1	4.8	5.1	.
Central bank policy rate (p.a.) [6]	%, eop	0.75	0.75	0.75	0.75	0.50	0.50	0.50	0.50	0.25	0.05	0.05	0.05	0.05	0.05	0.05
Central bank policy rate (p.a.) [6,7]	real, %	-3.0	-1.9	-1.6	-1.7	-2.4	-2.1	-1.9	-0.9	-1.3	-0.8	-0.2	-0.2	-0.7	-1.3	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	CZK mn	.	-35511	.	.	-49608	.	.	-67802	.	.	-167940	.	.	.	.

1) According to census March 2011.
2) From 2013 available job applicants 15-64 in % of working age population 15-64, available job applicants in % of labour force before.
3) Nominal wages deflated with HICP.
4) Including E (electricity, gas, steam, air conditioning supply etc.).
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Two-week repo rate.
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

E S T O N I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	3.2	-5.1	-0.9	-0.1	1.5	-2.4	-3.1	0.2	3.3	1.2	-1.7	5.5	3.6	2.0	.
Industry, NACE Rev. 2	real, CCPPY	3.2	0.1	-0.2	-0.1	0.1	-0.2	-0.6	-0.5	-0.1	0.0	-0.1	5.5	4.6	3.7	.
Industry, NACE Rev. 2	real, 3MMA	0.1	-1.2	-2.1	0.2	-0.3	-1.3	-1.7	0.1	1.6	1.0	1.7	2.5	3.7	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	-2.6	.	.	-2.5	.	.	-3.0	.	.	-2.6	.	.	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	.	11.7	.	.	10.5	.	.	10.7	.	.	10.5	.	.	.	.
Construction, NACE Rev. 2	real, CPPY	.	27.9	.	.	30.0	.	.	14.6	.	.	8.6	.	.	.	.
Construction, NACE Rev. 2	real, CCPPY	.	27.9	.	.	29.1	.	.	22.7	.	.	18.6	.	.	.	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	614.3	.	.	624.3	.	.	634.4	.	.	624.7	.	.	623.1	.
Employed persons, LFS	CPPY	.	3.9	.	.	3.6	.	.	1.1	.	.	1.7	.	.	1.4	.
Unemployed persons, LFS	th. pers., quart. avg	.	79.6	.	.	71.0	.	.	67.9	.	.	63.7	.	.	70.8	.
Unemployment rate, LFS	%	.	11.5	.	.	10.2	.	.	9.7	.	.	9.3	.	.	10.2	.
Unemployment, registered	th. persons, eop	50.1	49.3	47.3	43.6	41.1	39.5	38.7	37.3	38.2	39.1	39.7	42.8	43.9	43.6	41.8
Unemployment rate, registered	%, eop	7.7	7.6	7.3	6.7	6.3	6.1	5.9	5.7	5.9	6.0	6.1	6.6	6.7	6.7	6.4
WAGES																
Total economy, gross	EUR, quart. avg.	.	847	.	.	900	.	.	855	.	.	916	.	.	900	.
Total economy, gross [1]	real, CPPY	.	2.2	.	.	0.7	.	.	1.5	.	.	2.0	.	.	2.4	.
Industry, gross, NACE Rev. 2	EUR, quart. avg.	.	867	.	.	901	.	.	879	.	.	928	.	.	.	.
PRICES																
Consumer - HICP	PP	0.4	1.0	0.4	0.2	0.1	0.3	0.3	0.4	0.1	-0.3	0.0	0.6	0.7	0.8	0.1
Consumer - HICP	CPPY	4.4	4.7	4.3	4.1	4.4	4.1	4.2	4.1	4.2	3.8	3.6	3.7	4.0	3.8	3.4
Consumer - HICP	CCPPY	4.6	4.6	4.5	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.2	3.7	3.9	3.8	3.7
Producer, in industry, NACE Rev. 2	PP	0.4	0.2	0.2	0.0	0.0	0.3	0.7	-0.3	-0.1	0.3	-0.3	5.8	-0.2	1.9	-0.2
Producer, in industry, NACE Rev. 2	CPPY	3.8	3.7	3.0	2.4	1.8	1.8	2.7	2.3	2.2	2.5	2.2	7.3	6.7	8.5	8.1
Producer, in industry, NACE Rev. 2	CCPPY	3.6	3.6	3.5	3.3	3.0	2.8	2.8	2.8	2.7	2.7	2.6	7.3	7.0	7.5	7.6
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	1928	3002	4024	5065	6093	7140	8265	9390	10503	11661	12550	1128	2085	3090	.
Imports total (cif), cumulated	EUR mn	2072	3270	4394	5550	6697	7855	9085	10235	11531	12668	13762	1142	2211	3332	.
Trade balance, cumulated	EUR mn	-144	-268	-369	-485	-604	-714	-820	-845	-1028	-1007	-1212	-13	-126	-242	.
Exports to EU-27 (fob), cumulated	EUR mn	1239	1956	2623	3334	4022	4710	5444	6165	6931	7709	8278	841	1516	2248	.
Imports from EU-27 (cif), cumulated	EUR mn	1646	2572	3452	4333	5252	6199	7208	8181	9206	10139	11015	926	1793	2724	.
Trade balance with EU-27, cumulated	EUR mn	-407	-616	-829	-999	-1230	-1489	-1764	-2016	-2275	-2430	-2737	-85	-277	-476	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-108	.	.	-219	.	.	-155	.	.	-205	.	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average [2]	nominal	0.7562	0.7575	0.7598	0.7819	0.7983	0.8138	0.8065	0.7778	0.7708	0.7795	0.7623	0.7526	0.7486	0.7714	0.7677
EUR/EUR, calculated with CPI [3]	real, Jan09=100	101.3	101.3	101.2	101.5	101.8	102.5	102.5	102.3	102.1	101.9	101.5	103.0	103.3	103.2	103.3
EUR/EUR, calculated with PPI [3]	real, Jan09=100	97.8	97.7	97.7	98.0	98.4	98.5	98.5	98.1	98.1	98.6	98.5	103.9	103.3	105.5	105.2
USD/EUR, calculated with CPI [3]	real, Jan09=100	101.1	101.1	101.0	98.4	96.7	95.3	95.9	99.5	100.5	99.5	102.0	103.7	104.1	101.6	102.3
USD/EUR, calculated with PPI [3]	real, Jan09=100	91.3	90.2	90.3	88.5	87.6	86.1	86.3	88.5	89.6	89.6	91.5	97.6	97.1	96.1	96.6
DOMESTIC FINANCE																
Currency in circulation [4]	EUR mn, eop	2070	2076	2085	2107	2133	2144	2141	2132	2129	2126	2180	2109	2103	2142	.
M1 [4]	EUR mn, eop	5180	5093	5196	5388	5480	5642	5807	5744	5927	5977	6258	6166	6206	6324	.
Broad money [4]	EUR mn, eop	8934	8838	9120	9156	9256	9508	9550	9372	9483	9465	9705	9456	9604	9629	.
Broad money [4]	CPPY	6.7	5.4	8.5	8.0	9.3	11.4	9.8	7.3	8.0	7.0	7.4	6.3	7.5	8.9	.
Central bank policy rate (p.a.) [5]	%, eop	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Central bank policy rate (p.a.) [5,6]	real, %	-2.7	-2.6	-1.9	-1.4	-0.8	-1.1	-1.9	-1.5	-1.4	-1.7	-1.4	-6.1	-5.5	-7.1	-6.8
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	EUR mn	.	-162	.	.	-74	.	.	-6	.	.	-46	.	.	.	.

1) Nominal wages deflated with HICP.
2) Reference rate of ECB.
3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
4) Estonia's contributions to EMU monetary aggregates. M1 and Broad money without currency in circulation.
5) Official refinancing operation rate for euro area (ECB).
6) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

H U N G A R Y: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	1.2	-1.6	-3.0	0.4	0.8	0.9	0.2	-3.5	-1.5	-7.1	-7.7	-1.2	-5.3	-2.9	.
Industry, NACE Rev. 2	real, CCPPY	1.0	0.1	-0.7	-0.5	-0.3	-0.1	-0.1	-0.5	-0.6	-1.3	-1.8	-1.2	-3.3	-3.1	.
Industry, NACE Rev. 2	real, 3MMA	0.1	-1.2	-1.4	-0.6	0.7	0.6	-0.9	-1.7	-4.1	-5.4	-5.4	-4.7	-3.1	.	.
Productivity in industry, NACE Rev. 2	CCPPY	2.0	1.2	0.6	1.1	1.5	1.8	1.9	1.5	1.5	0.9	0.3	-1.1	-3.3	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	-4.1	-2.6	-2.4	-2.5	-3.1	-2.9	-2.3	-1.1	0.4	2.3	3.8	10.2	8.9	.	.
Construction, NACE Rev. 2	real, CPPY	-15.2	-13.9	-3.1	-14.3	-11.9	5.3	-6.4	5.1	-0.8	-13.0	-3.1	-4.7	6.6	9.9	.
Construction, NACE Rev. 2	real, CCPPY	-9.2	-11.1	-9.0	-10.3	-10.6	-8.3	-8.0	-6.2	-5.6	-6.4	-6.0	-4.7	1.4	4.8	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	3791.3	.	.	3876.2	.	.	3935.5	.	.	3908.5	.	.	.	.
Employed persons, LFS	CPPY	.	1.6	.	.	1.8	.	.	2.1	.	.	1.5	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	504.1	.	.	472.2	.	.	457.7	.	.	468.3	.	.	.	.
Unemployment rate, LFS	%	.	11.7	.	.	10.9	.	.	10.4	.	.	10.7	.	.	.	.
Unemployment, registered	th. persons, eop	646.7	591.2	554.5	534.6	524.4	527.6	526.9	526.7	523.0	536.1	569.3	648.5	676.5	620.1	552.0
Unemployment rate, registered	%, eop	14.5	13.3	12.5	12.0	11.8	11.9	11.8	11.8	11.8	12.0	12.8	14.6	15.2	13.9	12.4
WAGES																
Total economy, gross [1]	HUF th	216.5	222.5	220.0	225.4	220.7	225.0	214.7	213.5	217.5	238.4	243.3	224.5	222.5	229.7	.
Total economy, gross [1][2]	real, CPPY	1.0	-2.8	-3.0	0.9	-1.4	1.2	-2.0	-2.5	-1.3	0.1	-0.1	0.0	-0.1	0.9	.
Total economy, gross [1]	EUR	745	761	746	768	752	786	770	751	771	844	851	764	760	758	.
Industry, gross, NACE Rev. 2 [1]	EUR	766	817	807	849	802	812	828	796	823	943	899	800	778	811	.
PRICES																
Consumer - HICP	PP	0.6	0.8	0.8	-0.1	0.0	-0.2	0.1	0.4	0.2	-0.1	0.0	0.2	0.6	0.3	0.3
Consumer - HICP	CPPY	5.8	5.5	5.6	5.4	5.6	5.7	6.0	6.4	6.0	5.3	5.1	2.8	2.9	2.3	1.8
Consumer - HICP	CCPPY	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.7	5.8	5.7	5.7	2.8	2.8	2.7	2.5
Producer, in industry, NACE Rev. 2	PP	-1.3	0.1	0.4	0.7	-1.5	-0.4	-0.4	0.7	-0.5	-0.6	0.5	1.2	0.4	1.6	.
Producer, in industry, NACE Rev. 2	CPPY	6.3	6.4	7.1	7.7	6.8	6.1	5.0	2.5	0.1	-2.8	-1.9	-1.0	0.6	2.1	.
Producer, in industry, NACE Rev. 2	CCPPY	7.0	6.8	6.9	7.0	7.0	6.9	6.6	6.2	5.5	4.7	4.1	-1.0	-0.2	0.6	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	13048	20175	26376	33494	40559	47078	53811	60681	68104	75460	80889	6465	13062	.	.
Imports total (cif), cumulated	EUR mn	11960	18497	24260	30657	36957	43062	49204	55353	62180	68879	74188	6163	12145	.	.
Trade balance, cumulated	EUR mn	1088	1678	2117	2837	3601	4016	4607	5328	5925	6580	6702	302	917	.	.
Exports to EU-27 (fob), cumulated	EUR mn	9887	15306	20133	25487	30776	35793	40729	46035	51687	57320	61288	5015	10045	.	.
Imports from EU-27 (cif), cumulated	EUR mn	8220	12911	17062	21592	26157	30526	34739	39121	43869	48488	52064	4081	8282	.	.
Trade balance with EU-27, cumulated	EUR mn	1667	2395	3071	3895	4619	5267	5990	6913	7819	8831	9223	933	1764	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-22	.	.	510	.	.	1354	.	.	1594	.	.	.	.
EXCHANGE RATE																
HUF/EUR, monthly average	nominal	290.7	292.3	294.8	293.7	293.6	286.3	278.9	284.2	282.1	282.3	285.8	294.0	292.7	303.0	298.7
HUF/USD, monthly average	nominal	219.8	221.4	224.0	229.6	234.4	233.0	224.9	221.1	217.4	220.0	217.8	221.3	219.1	233.7	229.3
EUR/HUF, calculated with CPI [3]	real, Jan09=100	104.5	103.7	103.2	103.6	103.7	106.6	109.2	106.9	107.6	107.6	106.0	104.0	104.7	100.5	102.3
EUR/HUF, calculated with PPI [3]	real, Jan09=100	98.5	97.7	97.1	98.4	97.5	99.4	100.9	99.6	100.0	99.6	99.1	97.1	97.6	95.8	.
USD/HUF, calculated with CPI [3]	real, Jan09=100	104.3	103.6	102.9	100.4	98.6	99.2	102.2	104.0	106.0	105.1	106.5	104.8	105.5	99.0	101.2
USD/HUF, calculated with PPI [3]	real, Jan09=100	92.0	90.3	89.8	89.0	86.8	86.8	88.4	89.8	91.4	90.5	92.0	91.3	91.6	87.3	.
DOMESTIC FINANCE																
Currency in circulation	HUF bn, eop	2530.1	2492.8	2510.1	2493.5	2506.3	2473.0	2412.3	2418.2	2438.7	2457.4	2553.6	2504.0	2507.3	2603.3	.
M1	HUF bn, eop	6936.4	6896.1	6652.4	6801.5	6787.2	6791.9	6800.7	6946.2	7001.6	7034.5	7296.9	7123.2	7202.5	7391.2	.
Broad money	HUF bn, eop	16381.2	16446.7	16150.7	16370.4	16264.5	16146.4	16283.6	16367.8	16574.7	16547.6	16836.5	16697.4	16870.8	17351.9	.
Broad money	CPPY	0.8	1.5	-0.6	0.3	0.1	-1.9	-1.8	-4.1	-3.5	-4.5	-3.3	0.6	3.0	5.5	.
Central bank policy rate (p.a.) [4]	%, eop	7.00	7.00	7.00	7.00	7.00	7.00	6.75	6.50	6.25	6.00	5.75	5.50	5.25	5.00	4.75
Central bank policy rate (p.a.) [4][5]	real, %	0.7	0.6	-0.1	-0.7	0.2	0.9	1.7	3.9	6.2	9.1	7.8	6.6	4.6	2.8	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	HUF bn	.	-216	.	.	-320	.	.	-388	.	.	-558	.	.	.	.

1) Enterprises with 5 and more employees.
2) Nominal wages deflated with HICP.
3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
4) Base rate (two-week NB bill).
5) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

L A T V I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	12.5	6.1	3.8	6.1	7.8	7.7	9.4	-1.4	7.9	3.7	1.4	1.8	-6.5	-7.0	.
Industry, NACE Rev. 2 [1]	real, CCPPY	11.8	9.7	8.2	7.7	7.7	7.7	7.9	6.8	6.9	6.6	6.2	1.8	-2.3	-4.0	.
Industry, NACE Rev. 2 [1]	real, 3MMA	9.7	7.3	5.3	5.9	7.2	8.3	5.1	5.3	3.4	4.4	2.4	-1.0	-4.0	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	4.5	.	.	3.2	.	.	2.2	.	.	1.3	.	.	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	.	0.0	.	.	2.0	.	.	3.2	.	.	4.1	.	.	.	.
Construction, NACE Rev. 2	real, CPPY	.	28.5	.	.	23.5	.	.	8.3	.	.	9.3	.	.	10.0	.
Construction, NACE Rev. 2	real, CCPPY	.	28.5	.	.	25.2	.	.	16.1	.	.	13.7	.	.	10.0	.
LABOUR																
Employed persons, LFS [2]	th. pers., quart. avg	.	857.6	.	.	877.4	.	.	905.1	.	.	902.3	.	.	898.3	.
Employed persons, LFS [2]	CPPY	.	2.6	.	.	2.2	.	.	3.4	.	.	2.9	.	.	4.7	.
Unemployed persons, LFS [2]	th. pers., quart. avg	.	166.7	.	.	168.9	.	.	141.8	.	.	144.6	.	.	131.9	.
Unemployment rate, LFS [2]	%	.	16.3	.	.	16.1	.	.	13.5	.	.	13.8	.	.	12.8	.
Unemployment, registered	th. persons, eop	133.4	132.2	127.8	122.0	117.6	114.7	111.5	108.3	105.7	104.4	104.1	107.5	107.7	107.1	102.8
Unemployment rate, registered [3]	%, eop	11.8	11.7	11.3	12.3	11.9	11.6	11.3	11.0	10.7	10.6	10.5	10.9	10.9	10.8	10.4
WAGES																
Total economy, gross	LVL	459	475	479	478	485	494	485	470	486	477	513	.	.	.	.
Total economy, gross [4]	real, CPPY	1.0	-0.6	1.3	1.1	1.5	2.7	1.5	0.4	3.8	1.2	1.0	.	.	.	.
Total economy, gross	EUR	657	681	685	685	696	709	697	675	698	685	737	.	.	.	.
Industry, gross, NACE Rev. 2	EUR	630	671	661	676	696	727	689	675	687	666	748	.	.	.	.
PRICES																
Consumer - HICP	PP	0.2	0.6	0.7	0.0	0.0	-0.4	-0.4	0.4	-0.2	-0.1	0.1	-0.2	-0.1	0.5	0.0
Consumer - HICP	CPPY	3.3	3.2	2.8	2.3	2.1	1.9	1.9	1.9	1.6	1.5	1.6	0.6	0.3	0.3	-0.4
Consumer - HICP	CCPPY	3.3	3.3	3.2	3.0	2.8	2.7	2.6	2.5	2.4	2.3	2.3	0.6	0.5	0.4	0.2
Producer, in industry, NACE Rev. 2	PP	0.2	-0.5	0.8	-0.5	0.3	0.7	0.6	-0.2	0.3	-0.1	0.2	0.2	-0.2	0.1	.
Producer, in industry, NACE Rev. 2	CPPY	7.6	6.3	4.3	2.8	2.4	2.4	2.6	2.8	3.2	3.6	3.9	2.1	1.7	2.3	.
Producer, in industry, NACE Rev. 2	CCPPY	7.9	7.3	6.6	5.8	5.2	4.8	4.5	4.3	4.2	4.1	4.1	2.1	1.9	2.0	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	1539	2411	3207	4096	4963	5843	6838	7857	8957	10073	10970	815	1656	.	.
Imports total (cif), cumulated	EUR mn	1956	3058	4115	5214	6340	7472	8664	9797	11106	12332	13386	1003	1983	.	.
Trade balance, cumulated	EUR mn	-417	-648	-907	-1118	-1376	-1629	-1826	-1941	-2149	-2258	-2415	-188	-327	.	.
Exports to EU-27 (fob), cumulated	EUR mn	1005	1570	2119	2700	3256	3807	4444	5067	5783	6471	6964	550	1101	.	.
Imports from EU-27 (cif), cumulated	EUR mn	1436	2291	3105	3947	4845	5761	6728	7665	8702	9656	10455	742	1482	.	.
Trade balance with EU-27, cumulated	EUR mn	-431	-721	-986	-1246	-1590	-1954	-2284	-2598	-2919	-3186	-3491	-192	-381	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-149	.	.	-297	.	.	-403	.	.	-371	.	.	.	.
EXCHANGE RATE																
LVL/EUR, monthly average	nominal	0.699	0.698	0.699	0.698	0.697	0.696	0.696	0.696	0.696	0.696	0.697	0.698	0.700	0.701	0.701
LVL/USD, monthly average	nominal	0.528	0.529	0.531	0.546	0.556	0.567	0.562	0.542	0.537	0.543	0.531	0.525	0.524	0.541	0.538
EUR/LVL, calculated with CPI [5]	real, Jan09=100	96.8	96.5	96.5	96.7	97.0	97.1	96.4	96.1	95.7	95.7	95.4	95.8	95.0	94.5	94.6
EUR/LVL, calculated with PPI [5]	real, Jan09=100	98.9	98.2	98.7	98.6	99.6	100.2	100.1	99.8	100.2	100.3	100.7	100.4	99.9	99.5	.
USD/LVL, calculated with CPI [5]	real, Jan09=100	96.6	96.2	95.9	93.4	91.8	90.1	90.3	93.3	93.8	92.7	94.5	96.1	95.9	92.5	93.1
USD/LVL, calculated with PPI [5]	real, Jan09=100	92.3	90.7	91.2	89.1	88.6	87.5	87.7	90.0	91.5	91.2	93.5	94.3	93.4	90.7	.
DOMESTIC FINANCE																
Currency in circulation	LVL mn, eop	1021	1021	1028	997	1029	1043	1052	1063	1053	1058	1082	1035	1014	1012	.
M1	LVL mn, eop	4337	4304	4279	4217	4361	4431	4499	4526	4603	4722	4832	4862	4870	4750	.
Broad money	LVL mn, eop	6643	6510	6549	6527	6612	6657	6723	6633	6683	6803	6846	6825	6869	6773	.
Broad money	CPPY	1.5	-0.1	1.5	-0.3	2.0	3.3	3.3	2.3	4.0	5.1	2.8	3.7	3.4	4.0	.
Central bank policy rate (p.a.) [6]	%, eop	3.50	3.50	3.50	3.50	3.50	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Central bank policy rate (p.a.) [6][7]	real, %	-3.8	-2.6	-0.8	0.7	1.1	0.6	0.4	-0.3	-0.6	-1.0	-1.3	0.4	0.8	0.2	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	LVL mn	.	88	.	.	131	.	.	311	.	.	-194	.	.	.	.

1) Enterprises with 20 and more persons.
2) According to census March 2011.
3) From May 2012 based on census March 2011.
4) Nominal wages deflated with HICP.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Refinancing rate.
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

L I T H U A N I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	2.4	4.9	8.4	-17.3	-1.7	5.4	10.2	4.2	13.4	8.0	5.0	8.6	1.3	9.0	.
Industry, NACE Rev. 2 [1]	real, CCPPY	1.8	2.8	4.1	-0.2	-0.5	0.4	1.6	1.9	3.1	3.6	3.7	8.6	5.0	6.3	.
Industry, NACE Rev. 2 [1]	real, 3MMA	2.8	5.1	-1.6	-3.8	-4.5	4.6	6.6	9.2	8.5	8.8	7.2	5.0	6.3	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	2.3	.	.	-0.1	.	.	2.9	.	.	4.7	.	.	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	.	0.9	.	.	3.8	.	.	0.8	.	.	-1.2	.	.	.	.
Construction, NACE Rev. 2	real, CPPY	.	7.9	.	.	0.8	.	.	-10.7	.	.	-15.0	.	.	-4.6	.
Construction, NACE Rev. 2	real, CCPPY	.	7.9	.	.	3.3	.	.	-3.3	.	.	-7.2	.	.	-4.6	.
LABOUR																
Employed persons, LFS [2]	th. pers., quart. avg	.	1252.2	.	.	1286.9	.	.	1302.2	.	.	1272.8	.	.	1267.2	.
Employed persons, LFS [2]	CPPY	.	1.3	.	.	1.7	.	.	3.1	.	.	0.8	.	.	1.2	.
Unemployed persons, LFS [2]	th. pers., quart. avg	.	211.6	.	.	196.2	.	.	182.7	.	.	190.1	.	.	209.0	.
Unemployment rate, LFS [2]	%	.	14.5	.	.	13.3	.	.	12.3	.	.	13.0	.	.	14.2	.
Unemployment, registered	th. persons, eop	243.1	244.0	229.3	211.5	208.6	208.4	205.6	202.3	196.4	204.0	210.2	228.3	229.9	230.3	213.4
Unemployment rate, registered [3]	%, eop	11.8	11.8	11.1	10.5	10.4	10.3	10.2	10.0	10.6	11.0	11.4	12.3	12.4	12.4	11.5
WAGES																
Total economy, gross	LTL	.	2138	.	.	2154	.	.	2171	.	.	2232	.	.	2233	.
Total economy, gross [4]	real, CPPY	.	-0.4	.	.	-0.6	.	.	-0.6	.	.	-0.4	.	.	2.2	.
Total economy, gross [4]	EUR	.	619	.	.	624	.	.	629	.	.	646	.	.	647	.
Industry, gross, NACE Rev. 2	EUR	.	634	.	.	646	.	.	648	.	.	655	.	.	656	.
PRICES																
Consumer - HICP	PP	0.4	1.0	0.6	0.1	0.0	0.0	0.2	0.7	-0.2	-0.2	-0.1	0.2	-0.1	0.3	0.3
Consumer - HICP	CPPY	3.7	3.7	3.3	2.6	2.6	2.9	3.4	3.3	3.2	2.8	2.9	2.7	2.3	1.6	1.4
Consumer - HICP	CCPPY	3.6	3.6	3.5	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.7	2.5	2.2	2.0
Producer, in industry, NACE Rev. 2	PP	1.3	1.9	-0.5	-0.3	-4.3	2.6	2.9	0.2	-1.6	-1.7	-0.5	1.1	1.2	-1.2	-1.2
Producer, in industry, NACE Rev. 2	CPPY	8.5	7.1	5.3	5.3	1.9	2.6	6.7	5.6	3.8	1.8	1.9	0.9	0.8	-2.3	-2.9
Producer, in industry, NACE Rev. 2	CCPPY	9.2	8.5	7.6	7.2	6.3	5.7	5.9	5.8	5.6	5.3	5.0	0.9	0.8	-0.2	-0.9
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	3296	5125	6967	8515	10363	12235	14362	16458	18805	21027	23070	1888	3823	.	.
Imports total (cif), cumulated	EUR mn	3848	5985	7983	9663	11685	13788	15993	18326	20762	23025	25075	2148	4198	.	.
Trade balance, cumulated	EUR mn	-552	-860	-1016	-1148	-1322	-1553	-1632	-1868	-1957	-1998	-2005	-260	-375	.	.
Exports to EU-27 (fob), cumulated	EUR mn	2198	3354	4466	5334	6402	7545	8860	10207	11586	12827	13963	1179	2262	.	.
Imports from EU-27 (cif), cumulated	EUR mn	1947	3161	4328	5560	6782	7986	9186	10394	11772	13087	14240	1039	2185	.	.
Trade balance with EU-27, cumulated	EUR mn	251	193	137	-226	-380	-441	-326	-187	-186	-260	-276	140	77	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-782	.	.	-365	.	.	-448	.	.	-167	.	.	.	.
EXCHANGE RATE																
LTL/EUR, monthly average	nominal	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453	3.453
LTL/USD, monthly average	nominal	2.611	2.616	2.623	2.700	2.757	2.810	2.785	2.686	2.661	2.692	2.632	2.598	2.585	2.663	2.651
EUR/LTL, calculated with CPI [5]	real, Jan09=100	98.6	98.5	98.7	98.8	98.9	99.3	99.2	99.3	98.8	98.8	98.4	99.3	98.9	98.3	98.6
EUR/LTL, calculated with PPI [5]	real, Jan09=100	120.8	122.6	121.8	121.7	117.1	119.9	122.5	122.5	120.8	119.0	118.7	119.5	120.6	119.3	117.8
USD/LTL, calculated with CPI [5]	real, Jan09=100	98.5	98.2	98.1	95.5	93.6	92.2	92.9	96.4	96.8	95.7	97.5	99.7	99.8	96.3	97.0
USD/LTL, calculated with PPI [5]	real, Jan09=100	112.7	113.2	112.6	110.0	104.2	104.7	107.3	110.5	110.3	108.1	110.2	112.3	113.3	108.7	108.2
DOMESTIC FINANCE																
Currency in circulation	LTL mn, eop	9568	9568	9599	9636	9785	9922	9975	10058	10066	10113	10329	10164	10296	10468	.
M1	LTL mn, eop	30557	30844	31322	31544	31847	32579	32858	32562	33715	34348	35894	34730	35350	35673	.
Broad money	LTL mn, eop	50164	50144	50646	51065	51206	52029	52304	52293	52994	53301	54150	52866	53862	54347	.
Broad money	CPPY	5.3	5.1	6.1	6.1	5.6	5.8	5.5	4.4	5.6	5.1	7.2	5.7	7.4	8.4	.
Central bank policy rate (p.a.) [6]	%, eop	0.94	0.79	0.79	0.76	0.75	0.71	0.62	0.56	0.55	0.53	0.52	0.39	0.34	0.34	0.36
Central bank policy rate (p.a.) [6][7]	real, %	-7.0	-5.9	-4.3	-4.3	-1.1	-1.9	-5.7	-4.8	-3.1	-1.2	-1.4	-0.5	-0.4	2.7	3.4
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	LTL mn	.	-1538	.	.	-2145	.	.	-2422	.	.	-3780	.	.	.	.

1) Sold production.
2) According to census March 2011.
3) In % of working age population.
4) Nominal wages deflated with HICP.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) VILIBOR one-month interbank offered rate (Lithuania has a currency board).
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

P O L A N D: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2 [1)2)]	real, CPPY	4.6	0.9	2.6	4.2	0.9	5.2	0.2	-4.8	4.7	-0.6	-9.6	0.4	-2.1	-2.9	.
Industry, NACE Rev. 2 [1)2)]	real, CCPPY	6.5	4.4	4.0	4.0	3.5	3.7	3.3	2.3	2.5	2.2	1.2	0.4	-0.9	-1.6	.
Industry, NACE Rev. 2 [1)2)]	real, 3MMA	4.4	2.6	2.5	2.6	3.4	2.1	-0.1	0.0	-0.3	-1.7	-3.3	-3.9	-1.6	.	.
Productivity in industry, NACE Rev. 2 [2)]	CCPPY	7.0	5.0	4.7	4.8	4.3	4.6	4.1	3.1	3.4	3.1	2.1	1.4	0.2	.	.
Unit labour costs, exch.r. adj.(EUR) [1)2)]	CCPPY	-8.7	-5.4	-5.4	-6.1	-5.9	-6.2	-5.1	-3.3	-2.5	-1.3	0.6	3.5	5.6	.	.
Construction, NACE Rev. 2 [2)]	real, CPPY	11.9	3.2	7.9	5.6	-5.2	-8.8	-5.1	-17.9	-3.6	-5.4	-24.9	-16.1	-11.4	-18.5	.
Construction, NACE Rev. 2 [2)]	real, CCPPY	21.4	13.6	11.8	10.0	6.2	3.2	1.9	-1.4	-1.7	-2.1	-5.2	-16.1	-13.8	-15.6	.
LABOUR																
Employed persons, LFS [3)]	th. pers., quart. avg	.	15397	.	.	15607	.	.	15722	.	.	15636	.	.	.	.
Employed persons, LFS [3)]	CPPY	.	0.2	.	.	0.2	.	.	0.2	.	.	0.2	.	.	.	.
Unemployed persons, LFS [3)]	th. pers., quart. avg	.	1808.6	.	.	1712.8	.	.	1718.0	.	.	1757.4	.	.	1958.0	.
Unemployment rate, LFS [3)]	%	.	10.5	.	.	9.9	.	.	9.9	.	.	10.1	.	.	11.3	.
Unemployment, registered	th. persons, eop	2168.2	2141.9	2072.6	2013.9	1964.4	1953.2	1964.7	1979.0	1994.9	2058.1	2136.8	2295.7	2336.7	2314.5	2255.7
Unemployment rate, registered	%, eop	13.4	13.3	12.9	12.6	12.3	12.3	12.4	12.4	12.5	12.9	13.4	14.2	14.4	14.3	14.0
WAGES																
Total economy, gross [2)]	PLN	3568	3771	3720	3618	3754	3700	3686	3641	3718	3781	4112	3680	3710	3833	3830
Total economy, gross [2)4)]	real, CPPY	-0.1	-0.2	-0.6	0.2	0.0	-1.5	-1.1	-2.1	-0.6	0.0	0.2	-1.2	2.7	0.6	2.1
Total economy, gross [2)]	EUR	853	911	890	843	874	884	901	881	905	915	1004	888	890	922	926
Industry, gross, NACE Rev. 2	EUR	861	933	900	858	914	907	926	892	913	958	1072	902	919	942	938
PRICES																
Consumer - HICP	PP	0.4	0.5	0.6	0.2	0.2	-0.5	-0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.3	0.3
Consumer - HICP	CPPY	4.4	3.9	4.0	3.6	4.2	4.0	3.8	3.8	3.4	2.7	2.2	1.6	1.2	1.0	0.8
Consumer - HICP	CCPPY	4.3	4.2	4.1	4.0	4.1	4.1	4.0	4.0	3.9	3.8	3.7	1.6	1.4	1.3	1.2
Producer, in industry, NACE Rev. 2	PP	-0.6	0.1	0.9	0.5	-0.5	-0.3	0.0	0.5	-0.7	-0.2	-0.6	-0.1	0.3	-0.2	.
Producer, in industry, NACE Rev. 2	CPPY	5.7	4.1	4.3	5.1	4.3	3.6	3.0	2.0	1.1	0.1	-0.8	-1.0	-0.1	-0.4	.
Producer, in industry, NACE Rev. 2	CCPPY	6.6	5.8	5.4	5.3	5.2	4.9	4.7	4.4	4.0	3.7	3.3	-1.0	-0.6	-0.5	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	22547	35044	46597	58345	70014	81949	93729	106113	120007	132716	142762	11792	23851	.	.
Imports total (cif), cumulated	EUR mn	24931	38378	50815	63797	76243	88854	101011	113644	127669	141040	152569	12151	23890	.	.
Trade balance, cumulated	EUR mn	-2384	-3334	-4218	-5452	-6229	-6905	-7281	-7531	-7662	-8324	-9807	-359	-39	.	.
Exports to EU-27 (fob), cumulated	EUR mn	17743	27387	36238	45207	54033	62874	71596	80965	91243	100870	108107	9109	17842	.	.
Imports from EU-27 (cif), cumulated	EUR mn	16621	25945	34415	43159	51657	60351	68442	76923	86427	95302	102500	8112	16098	.	.
Trade balance with EU-27, cumulated	EUR mn	1121	1442	1824	2048	2376	2523	3154	4042	4816	5568	5607	997	1744	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-4521	.	.	-6722	.	.	-10011	.	.	-13484	.	.	.	.
EXCHANGE RATE																
PLN/EUR, monthly average	nominal	4.184	4.137	4.178	4.294	4.297	4.184	4.093	4.135	4.107	4.132	4.096	4.142	4.170	4.157	4.136
PLN/USD, monthly average	nominal	3.164	3.134	3.174	3.357	3.431	3.405	3.301	3.216	3.166	3.221	3.122	3.117	3.121	3.206	3.175
EUR/PLN, calculated with CPI [5)]	real, Jan09=100	105.3	105.9	104.9	102.4	102.7	105.3	107.0	105.4	106.0	105.6	106.2	105.9	104.8	104.5	105.4
EUR/PLN, calculated with PPI [5)]	real, Jan09=100	103.9	104.7	104.4	102.3	102.2	104.6	106.1	105.4	105.6	104.9	105.4	103.8	103.1	103.3	.
USD/PLN, calculated with CPI [5)]	real, Jan09=100	105.1	105.8	104.7	99.3	97.5	98.0	100.2	102.5	104.5	103.2	106.7	106.7	105.7	102.9	104.4
USD/PLN, calculated with PPI [5)]	real, Jan09=100	96.9	96.7	96.5	92.5	91.0	91.3	93.0	95.1	96.4	95.4	97.9	97.5	96.8	94.1	.
DOMESTIC FINANCE																
Currency in circulation	PLN bn, eop	98.2	99.9	101.3	102.3	103.8	103.0	103.1	103.2	102.7	101.7	102.5	101.1	102.4	105.8	107.5
M1	PLN bn, eop	455.7	454.3	448.7	464.0	462.7	464.9	458.4	457.3	452.8	457.4	484.8	476.9	484.5	487.4	493.7
Broad money	PLN bn, eop	872.1	874.5	870.7	884.2	884.7	886.9	895.5	892.7	902.4	901.8	921.9	913.5	920.3	932.0	935.2
Broad money	CPPY	12.4	9.1	10.2	11.1	11.0	11.0	9.8	7.6	8.0	5.7	4.5	4.4	5.5	6.6	7.4
Central bank policy rate (p.a.) [6)]	%, eop	4.50	4.50	4.50	4.75	4.75	4.75	4.75	4.75	4.75	4.50	4.25	4.00	3.75	3.25	3.25
Central bank policy rate (p.a.) [6)7)]	real, %	-1.2	0.4	0.2	-0.3	0.5	1.1	1.7	2.7	3.6	4.4	5.1	5.1	3.9	3.7	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	PLN mn	.	-4443	.	.	-19801	.	.	-26861	.	.	-62716	.	.	.	.

1) Sold production.
2) Enterprises with 10 and more employees.
3) According to census March 2011.
4) Nominal wages deflated with HICP.
5) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
6) Reference rate (7-day open market operations rate).
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

R O M A N I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	1.6	0.3	0.8	5.4	1.9	4.1	1.7	-0.6	6.3	2.3	1.3	6.0	7.2	1.4	.
Industry, NACE Rev. 2 [1]	real, CCPPY	2.8	1.8	1.6	2.4	2.3	2.6	2.5	2.1	2.5	2.5	2.4	6.0	6.6	4.7	.
Industry, NACE Rev. 2 [1]	real, 3MMA	1.8	0.8	2.2	2.7	3.8	2.6	1.7	2.5	2.6	3.4	3.2	4.9	4.7	.	.
Productivity in industry, NACE Rev. 2	CCPPY	-0.3	-1.2	-1.4	-0.6	-0.6	-0.3	-0.3	-0.5	0.0	0.0	-0.1	3.7	4.2	2.7	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	3.1	3.2	2.5	1.4	1.1	0.5	0.3	0.4	0.0	0.1	0.2	-1.0	-1.3	0.0	.
Construction, NACE Rev. 2 [1]	real, CPPY	12.1	1.8	17.3	20.7	-3.8	-2.7	7.4	-6.0	-3.9	2.3	-10.2	-9.1	-5.7	0.9	.
Construction, NACE Rev. 2 [1]	real, CCPPY	9.2	6.2	9.5	12.4	8.3	6.3	6.4	4.5	3.3	3.2	1.4	-9.1	-7.3	-4.1	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	9018.8	.	.	9361.9	.	.	9456.9	.	.	9213.6	.	.	.	.
Employed persons, LFS	CPPY	.	-0.6	.	.	1.7	.	.	2.4	.	.	1.9	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	740.1	.	.	692.6	.	.	688.4	.	.	683.8	.	.	692.0	.
Unemployment rate, LFS	%	.	7.6	.	.	6.9	.	.	6.8	.	.	6.9	.	.	7.0	.
Unemployment, registered	th. persons, eop	473.9	454.5	425.8	409.9	404.1	429.0	441.2	442.2	456.1	476.3	493.8	513.3	510.4	492.4	467.1
Unemployment rate, registered	%, eop	5.4	5.2	4.8	4.6	4.6	4.9	5.0	5.0	5.2	5.4	5.6	5.8	5.8	5.6	5.3
WAGES																
Total economy, gross [1]	RON	2028	2126	2140	2109	2140	2147	2117	2122	2139	2173	2343	2138	2144	2231	.
Total economy, gross [1][2]	real, CPPY	1.6	0.8	1.6	3.0	3.3	2.8	1.5	-0.2	1.5	1.3	1.4	0.6	0.8	0.5	.
Total economy, gross [1]	EUR	466	487	489	475	480	471	469	471	469	480	522	488	489	508	.
Industry, gross, NACE Rev. 2 [1][3]	EUR	464	493	504	489	481	485	477	478	473	484	532	482	479	506	.
PRICES																
Consumer - HICP	PP	0.7	0.5	0.1	0.3	-0.1	0.5	0.5	1.1	0.2	-0.1	0.3	0.9	0.4	0.1	0.0
Consumer - HICP	CPPY	2.7	2.5	1.9	2.0	2.2	3.1	4.0	5.4	5.0	4.4	4.6	5.1	4.8	4.4	4.4
Consumer - HICP	CCPPY	2.7	2.7	2.5	2.4	2.4	2.5	2.7	3.0	3.2	3.3	3.4	5.1	5.0	4.8	4.7
Producer, in industry, NACE Rev. 2	PP	0.6	0.5	0.8	0.2	0.1	0.8	0.9	0.5	0.7	-0.4	-0.1	1.1	0.3	-0.4	.
Producer, in industry, NACE Rev. 2	CPPY	4.8	4.6	5.1	5.4	4.9	5.0	5.9	5.8	6.3	5.4	4.8	5.7	5.4	4.5	.
Producer, in industry, NACE Rev. 2	CCPPY	4.9	4.8	4.9	5.0	5.0	5.0	5.1	5.2	5.3	5.3	5.3	5.7	5.6	5.2	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	7001	11062	14596	18597	22351	26120	29636	33467	37646	41860	45006	3722	7593	.	.
Imports total (cif), cumulated	EUR mn	7969	12779	17236	22264	26955	31469	35998	40661	45948	50587	54626	4018	8097	.	.
Trade balance, cumulated	EUR mn	-968	-1718	-2640	-3667	-4603	-5350	-6362	-7194	-8302	-8727	-9619	-296	-505	.	.
Exports to EU-27 (fob), cumulated	EUR mn	5171	8020	10429	13249	15914	18535	20842	23576	26589	29535	31586	2626	5356	.	.
Imports from EU-27 (cif), cumulated	EUR mn	5892	9447	12681	16286	19738	23207	26359	29861	33864	37333	40147	2988	6098	.	.
Trade balance with EU-27, cumulated	EUR mn	-721	-1427	-2252	-3037	-3824	-4672	-5517	-6285	-7274	-7797	-8561	-362	-742	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-561	.	.	-2549	.	.	-4224	.	.	-5264	.	.	.	.
EXCHANGE RATE																
RON/EUR, monthly average	nominal	4.351	4.367	4.379	4.441	4.463	4.555	4.518	4.502	4.562	4.527	4.490	4.384	4.384	4.392	4.378
RON/USD, monthly average	nominal	3.290	3.308	3.327	3.473	3.563	3.707	3.643	3.502	3.517	3.529	3.422	3.299	3.282	3.388	3.361
EUR/RON, calculated with CPI [4]	real, Jan09=100	104.9	103.9	103.2	102.2	101.7	100.5	101.5	102.4	101.0	101.9	102.7	107.1	107.0	105.9	106.3
EUR/RON, calculated with PPI [4]	real, Jan09=100	102.3	102.1	102.4	101.4	101.6	100.1	101.1	101.8	101.3	101.9	102.8	106.0	106.0	105.5	.
USD/RON, calculated with CPI [4]	real, Jan09=100	104.7	103.8	103.0	99.0	96.7	93.5	95.1	99.6	99.5	99.5	103.2	107.8	107.9	104.3	105.3
USD/RON, calculated with PPI [4]	real, Jan09=100	95.5	94.3	94.7	91.6	90.4	87.5	88.6	91.9	92.5	92.6	95.5	99.7	99.6	96.2	.
DOMESTIC FINANCE																
Currency in circulation	RON mn, eop	31108	30879	31281	31478	31895	32884	32890	32977	31715	31877	31477	30298	30851	31693	32379
M1	RON mn, eop	86184	84934	86543	86601	87840	89494	88807	89253	87826	88222	89020	86017	85754	88787	89226
Broad money	RON mn, eop	217688	216281	218512	220628	216931	221464	220291	221013	220465	220767	222018	219336	219495	225317	225751
Broad money	CPPY	9.9	10.2	11.2	11.3	8.5	8.3	7.2	5.7	6.2	5.4	2.7	1.2	0.8	4.2	3.3
Central bank policy rate (p.a.) [5]	%, eop	5.50	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
Central bank policy rate (p.a.) [5][6]	real, %	0.7	0.7	0.2	-0.2	0.3	0.3	-0.6	-0.5	-1.0	-0.2	0.4	-0.4	-0.1	0.7	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	RON mn	.	-2509	.	.	-6348	.	.	-7162	.	.	-16822	.	.	.	.

1) Enterprises with 4 and more employees.
2) Nominal wages deflated with HICP.
3) Including E (electricity, gas, steam, air conditioning supply etc.).
4) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
5) One-week repo rate.
6) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

S L O V A K I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	7.5	8.0	8.0	10.9	8.4	14.5	11.7	10.5	11.8	7.9	-7.9	5.0	0.8	-4.1	.
Industry, NACE Rev. 2	real, CCPPY	6.9	7.3	7.5	8.2	8.2	9.0	9.3	9.4	9.7	9.5	8.1	5.0	2.9	0.3	.
Industry, NACE Rev. 2	real, 3MMA	7.3	7.8	9.0	9.1	11.1	11.3	12.1	11.3	10.1	4.3	1.9	-0.6	0.3	.	.
Productivity in industry, NACE Rev. 2	CCPPY	6.6	6.9	7.3	8.1	8.2	9.0	9.4	9.6	10.1	10.2	8.9	7.2	4.8	2.1	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	-0.6	-1.7	-2.6	-3.1	-3.6	-4.4	-4.9	-5.4	-5.7	-5.8	-4.5	-3.9	-2.3	0.7	.
Construction, NACE Rev. 2	real, CPPY	-8.0	-11.0	-16.8	-8.0	-12.1	-11.2	-13.7	-15.3	-11.0	-13.3	-16.5	-14.1	-4.2	-16.5	.
Construction, NACE Rev. 2	real, CCPPY	-8.0	-9.3	-11.7	-10.7	-11.0	-11.1	-11.5	-12.0	-11.9	-12.1	-12.5	-14.1	-9.1	-12.1	.
LABOUR																
Employed persons, LFS[1]	th. pers., quart. avg	.	2324.7	.	.	2334.7	.	.	2342.8	.	.	2313.7	.	.	.	.
Employed persons, LFS[1]	CPPY	.	1.2	.	.	0.7	.	.	0.5	.	.	-0.1	.	.	.	.
Unemployed persons, LFS[1]	th. pers., quart. avg	.	381.1	.	.	368.6	.	.	371.8	.	.	390.4	.	.	405.0	.
Unemployment rate, LFS[1]	%	.	14.1	.	.	13.6	.	.	13.7	.	.	14.4	.	.	15.1	.
Unemployment, registered	th. persons, eop	411.8	408.4	397.9	392.3	395.7	399.1	398.4	402.5	410.4	419.4	425.9	435.4	437.1	431.4	422.1
Unemployment rate, registered	%, eop	13.8	13.7	13.4	13.2	13.3	13.3	13.2	13.4	13.7	13.9	14.4	14.8	14.7	14.7	14.4
WAGES																
Total economy, gross	EUR, quart. avg.	.	770	.	.	793	.	.	784	.	.	875	.	.	.	.
Total economy, gross[2]	real, CPPY	.	-0.7	.	.	-2.0	.	.	-1.8	.	.	-0.4	.	.	.	.
Industry, gross, NACE Rev. 2	EUR	788	838	817	888	868	849	837	820	844	987	930	842	801	869	.
PRICES																
Consumer - HICP	PP	0.2	0.3	0.2	0.1	0.2	0.0	0.0	0.3	0.4	0.1	-0.1	0.7	0.0	0.0	0.0
Consumer - HICP	CPPY	4.0	3.9	3.7	3.4	3.7	3.8	3.8	3.8	3.9	3.5	3.4	2.5	2.2	1.9	1.7
Consumer - HICP	CCPPY	4.0	4.0	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	2.5	2.4	2.2	2.1
Producer, in industry, NACE Rev. 2	PP	1.0	1.0	0.0	0.1	-0.6	-0.4	1.0	0.5	-0.1	-0.5	-0.2	0.1	-0.6	0.0	.
Producer, in industry, NACE Rev. 2	CPPY	2.3	2.5	1.7	1.5	1.2	1.3	1.7	2.3	2.3	1.8	1.9	1.8	0.2	-0.7	.
Producer, in industry, NACE Rev. 2	CCPPY	2.2	2.3	2.1	2.0	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.0	0.4	.
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob),cumulated	EUR mn	9437	14949	20093	25589	31048	36151	41166	46869	53058	59001	63431	4864	9937	.	.
Imports total (fob),cumulated	EUR mn	9003	14337	19295	24467	29614	34446	39541	45011	50747	56474	60870	4587	9294	.	.
Trade balance,cumulated	EUR mn	433	611	798	1122	1434	1705	1625	1858	2311	2527	2561	276	644	.	.
Exports to EU-27 (fob), cumulated	EUR mn	8161	12751	17041	21573	26065	30299	34515	39264	44481	49517	53237	4149	8347	.	.
Imports from EU-27 (fob), cumulated	EUR mn	6631	10550	14268	18152	22066	25796	29550	33491	37809	41852	45024	3394	6875	.	.
Trade balance with EU-27, cumulated	EUR mn	1530	2200	2774	3420	3998	4503	4965	5773	6672	7665	8213	755	1472	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	372	.	.	854	.	.	1182	.	.	1613	.	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average[3]	nominal	0.7562	0.7575	0.7598	0.7819	0.7983	0.8138	0.8065	0.7778	0.7708	0.7795	0.7623	0.7526	0.7486	0.7714	0.7677
EUR/EUR, calculated with CPI[4]	real, Jan09=100	99.5	98.8	98.5	98.7	99.1	99.4	99.1	98.8	98.9	99.1	98.7	100.2	99.7	98.8	98.9
EUR/EUR, calculated with PPI[4]	real, Jan09=100	95.2	95.7	95.6	95.9	95.8	95.3	95.5	95.8	95.9	95.6	95.6	95.3	94.5	94.6	.
USD/EUR, calculated with CPI[4]	real, Jan09=100	99.3	98.6	98.3	95.7	94.1	92.5	92.8	96.1	97.4	96.8	99.2	100.9	100.5	97.3	97.9
USD/EUR, calculated with PPI[4]	real, Jan09=100	88.8	88.4	88.4	86.7	85.3	83.2	83.7	86.4	87.6	86.9	88.8	89.6	88.8	86.2	.
DOMESTIC FINANCE																
Currency in circulation[5]	EUR mn, eop	7467	7485	7525	7627	7711	7750	7726	7690	7679	7657	7768	7598	7565	7707	.
M1[5]	EUR mn, eop	26056	25749	25666	26267	26200	26626	26585	26633	26571	26985	28374	27656	27620	27738	.
Broad money[5]	EUR mn, eop	40994	41334	41573	42347	41644	42019	41990	41871	41961	42262	43536	42940	43434	43595	.
Broad money[5]	CPPY	1.5	3.0	2.8	4.1	1.9	3.3	1.4	1.9	2.5	2.4	6.6	5.9	6.0	5.5	.
Central bank policy rate (p.a.)[6]	%, eop	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Central bank policy rate (p.a.)[6)7)]	real, %	-1.3	-1.5	-0.7	-0.5	-0.2	-0.5	-1.0	-1.5	-1.5	-1.0	-1.2	-1.0	0.5	1.4	.
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	EUR mn	.	-873	.	.	-1562	.	.	-1944	.	.	-3107	.	.	.	.

1) According to census May 2011.
2) Nominal wages deflated with HICP.
3) Reference rate of ECB.
4) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
5) Slovakia's contributions to EMU monetary aggregates. M1 and Broad money including currency in circulation.
6) Official refinancing operation rate for euro area (ECB).
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

S L O V E N I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of May 2013)

		2012 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	3.2	-3.7	2.1	-3.8	-2.7	3.5	3.2	-6.7	5.1	-4.8	-7.6	0.5	-0.4	-5.7	.
Industry, NACE Rev. 2	real, CCPPY	1.7	-0.3	0.3	-0.6	-1.0	-0.4	0.0	-0.8	-0.2	-0.6	-1.2	0.5	0.1	-2.0	.
Industry, NACE Rev. 2	real, 3MMA	-0.3	0.3	-2.0	-1.6	-1.2	1.1	-0.4	0.2	-2.3	-2.3	-4.0	-2.4	-2.0	.	.
Productivity in industry, NACE Rev. 2	CCPPY	.	-0.7	.	.	-1.0	.	.	-0.5	.	.	-0.2	.	.	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	.	4.4	.	.	4.3	.	.	3.4	.	.	2.8	.	.	.	.
Construction, NACE Rev. 2 [1]	real, CPPY	-24.3	-3.1	-13.6	-23.9	-11.7	-19.5	-14.4	-6.5	-22.5	-26.1	-14.7	-22.5	-13.0	-31.8	.
Construction, NACE Rev. 2 [1]	real, CCPPY	-22.9	-15.3	-14.8	-17.0	-16.0	-16.6	-16.3	-15.0	-15.9	-17.0	-16.8	-22.5	-17.9	-24.0	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	926.9	.	.	920.5	.	.	925.4	.	.	922.3	.	.	.	.
Employed persons, LFS	CPPY	.	-0.2	.	.	-1.9	.	.	-2.0	.	.	-1.2	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	86.7	.	.	81.8	.	.	93.0	.	.	96.9	.	.	103.0	.
Unemployment rate, LFS	%	.	8.6	.	.	8.2	.	.	9.2	.	.	9.5	.	.	10.2	.
Unemployment, registered	th. persons, eop	115.0	110.9	109.1	106.8	105.6	106.9	106.1	105.4	110.9	111.5	118.1	124.3	124.1	122.6	.
Unemployment rate, registered	%, eop	12.4	12.0	11.8	11.6	11.5	11.7	11.6	11.5	12.1	12.2	13.0	13.6	13.6	13.4	.
WAGES																
Total economy, gross	EUR	1523	1535	1519	1536	1501	1498	1513	1489	1516	1612	1535	1524	1498	1520	.
Total economy, gross [2]	real, CPPY	-0.8	-1.7	-1.9	-1.0	-3.6	-2.7	-3.8	-4.7	-2.7	-5.1	-3.7	-3.1	-4.5	-3.1	.
Industry, gross, NACE Rev. 2	EUR	1440	1442	1397	1436	1408	1415	1445	1393	1451	1609	1451	1470	1447	1466	.
PRICES																
Consumer - HICP	PP	0.6	1.0	1.2	0.3	-0.6	-0.8	0.8	1.2	0.3	-0.2	-0.2	-0.6	0.7	0.3	0.6
Consumer - HICP	CPPY	2.8	2.4	2.9	2.4	2.4	2.6	3.1	3.7	3.2	2.8	3.1	2.8	2.9	2.2	1.6
Consumer - HICP	CCPPY	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.7	2.8	2.8	2.8	2.8	2.9	2.7	2.4
Producer, in industry, NACE Rev. 2	PP	-0.5	0.4	0.4	0.2	0.1	0.0	-0.1	0.3	0.0	0.0	-0.2	0.0	0.1	0.1	0.1
Producer, in industry, NACE Rev. 2	CPPY	0.8	0.7	0.7	1.0	0.7	0.8	0.4	0.7	0.8	0.7	0.4	0.4	1.1	0.8	0.5
Producer, in industry, NACE Rev. 2	CCPPY	1.6	1.3	1.2	1.2	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.4	0.7	0.7	0.7
FOREIGN TRADE, customs statistics, EU definition																
Exports total (fob), cumulated	EUR mn	3857	6156	8237	10402	12668	14767	16659	18792	21054	23281	25041	1944	3968	.	.
Imports total (cif), cumulated	EUR mn	4007	6346	8389	10509	12681	14718	16653	18682	20919	23051	24914	2065	4067	.	.
Trade balance total, cumulated	EUR mn	-150	-189	-152	-106	-13	50	7	110	135	230	127	-120	-100	.	.
Exports to EU-27 (fob), cumulated	EUR mn	2789	4403	5835	7316	8869	10259	11508	12984	14541	16083	17223	1381	2758	.	.
Imports from EU-27 (cif), cumulated	EUR mn	2629	4235	5622	7053	8501	9905	11176	12555	14074	15481	16747	1352	2706	.	.
Trade balance with EU-27, cumulated	EUR mn	160	168	213	263	368	355	332	430	467	602	476	28	52	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	28	.	.	278	.	.	542	.	.	817	.	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average [3]	nominal	0.7562	0.7575	0.7598	0.7819	0.7983	0.8138	0.8065	0.7778	0.7708	0.7795	0.7623	0.7526	0.7486	0.7714	0.7677
EUR/EUR, calculated with CPI [4]	real, Jan09=100	99.2	99.2	99.9	100.3	99.8	99.3	99.7	100.3	100.2	100.2	99.6	99.9	100.2	99.5	100.1
EUR/EUR, calculated with PPI [4]	real, Jan09=100	95.8	95.8	96.0	96.4	97.0	96.9	96.1	96.2	96.3	96.5	96.5	96.1	95.9	96.1	96.2
USD/EUR, calculated with CPI [4]	real, Jan09=100	99.0	99.1	99.7	97.2	94.8	92.4	93.4	97.5	98.8	97.9	100.1	100.6	101.0	98.0	99.1
USD/EUR, calculated with PPI [4]	real, Jan09=100	89.4	88.5	88.8	87.1	86.4	84.6	84.2	86.8	87.9	87.7	89.6	90.3	90.1	87.6	88.3
DOMESTIC FINANCE																
Currency in circulation [5]	EUR mn, eop	3583	3599	3582	3645	3697	3713	3692	3691	3654	3663	3733	3624	3623	3678	.
M1 [5]	EUR mn, eop	8603	8504	8762	8761	8817	8883	8968	8920	8886	8964	8918	8897	8850	8836	.
Broad money [5]	EUR mn, eop	19903	19838	19895	19875	19898	19906	19846	19622	19531	19682	19366	19532	19589	19825	.
Broad money [5]	CPPY	4.6	5.1	5.2	3.8	3.8	2.9	2.5	1.2	0.2	0.5	-1.4	-1.0	-1.6	-0.1	.
Central bank policy rate (p.a.) [6]	%, eop	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Central bank policy rate (p.a.) [6][7]	real, %	0.2	0.2	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3	0.4	-0.3	0.0	0.2
BUDGET, ESA'95 EDP																
General gov.budget balance, cum.	EUR mn	.	-454	.	.	-791	.	.	-1255	.	.	-1418	.	.	.	.

1) Enterprises with 20 and more employees or turnover limits and output of some non-construction enterprises.
2) Nominal wages deflated with HICP.
3) Reference rate of ECB.
4) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
5) Slovenia's contributions to EMU monetary aggregates. M1 and Broad money without currency in circulation.
6) Official refinancing operation rate for euro area (ECB).
7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Index of subjects – June 2012 to June 2013