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Regional investment policy impacts on FDI location in Poland

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Regional FDI development in Poland

Poland is the largest country among the new EU Member States (NMS), with almost four times more population than Hungary or the Czech Republic. But the number of FDI projects is only about twice as much as in those countries. As compared to Romania, Poland has two times more inhabitants but received only 10% more projects. Thus, Poland is less penetrated by foreign firms than the smaller NMS; economic growth and exports in Poland do not depend to such a large extent on the performance of foreign subsidiaries. Still the government pursues an active investment promotion policy with special services to foreign investors provided by the Polish Information and Foreign Investment Agency (PAIiIZ) that applies several policy instruments to direct the location of investment projects such as differentiated regional aid, free zones, industrial parks, etc. Geographic conditions such as the settlement network, past industrial structure or closeness to borders limit the influence of policy.

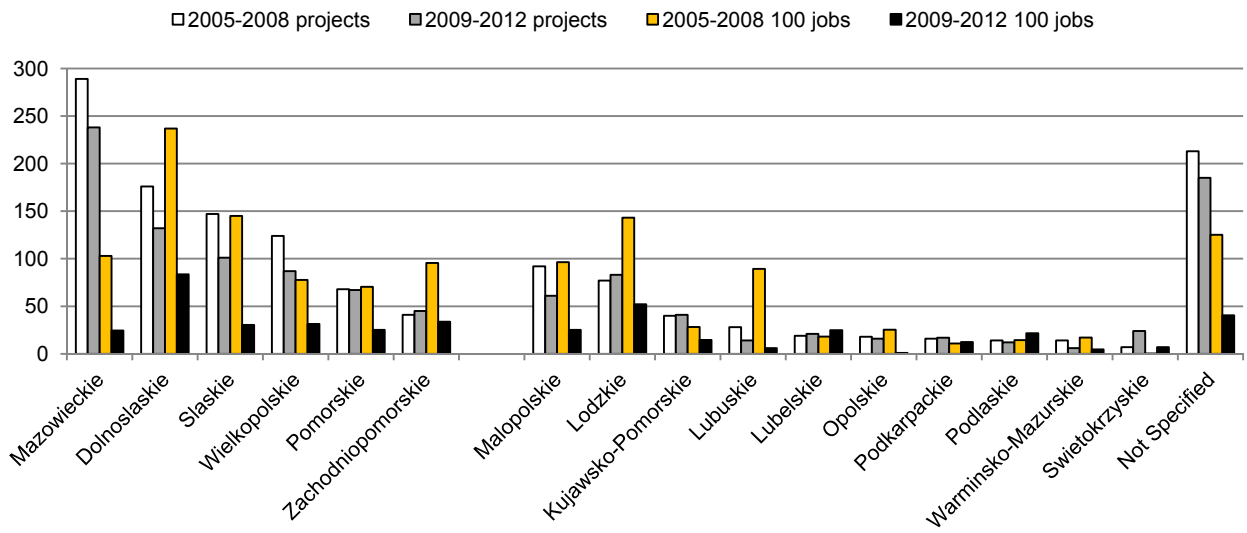
Poland is not only the largest but also the most decentralized country among the NMS. The Mazowieckie region where the capital city Warsaw is located concentrates only one quarter of the country's GDP and also of the FDI projects as opposed to one third or more in the other countries. The industrial regions in Silesia (Dolnośląskie and Śląskie) received similar numbers or even more projects than the Mazowieckie region (Figure 1). Thus the dominance of the capital is not very marked and there are also other agglomerations of production in the country. The difference lies in the structure of projects: FDI projects in Silesia are mainly manufacturing projects while the capital city specializes in services. When investment in manufacturing was falling due to the crisis, the share of the Silesian regions in new projects declined as well. Regional disparities between the voivodships widened in the period 1995-2005 as a result of FDI (Wisniewski, 2005). But regions with structural difficulties and large conurbations could catch up by attracting FDI (the textiles industry region Łódź, or the mining regions of Upper Silesia). The earlier loss-making industries in the Śląskie voivodship were restructured by FDI based on improved infrastructure and skilled labour. The automotive industry became one of the main activities.

Dolnośląskie had the highest share of projects in relation to GDP in most years. Further regions such as Wielkopolskie and Łódzkie have gained shares in the most recent years while the position of most other regions did not improve. Six regions had occasionally higher shares of projects than of GDP and thus a higher FDI project intensity. All the other regions have had low shares of FDI projects and also lower than their shares in GDP. Looking at the differences between regions in terms of number projects and per capita GDP, development is closely related to the size of the biggest city in the region. Successful regions have been those which have a capital of at least half a million inhabitants while the less developed regions had no such concentration of population. This shows that agglomeration of population and economic activity is an important feature determining whether or not a region succeeded in receiving FDI projects. Regions with a smaller number of FDI projects are characterised by both lower GDP and smaller towns. It is worth noting that the most developed Polish regions (voivodships) – Mazowieckie (Warsaw), Śląskie (Katowice) and Wielkopolskie (Poznan) – have received not only the greatest number of new projects but also the highest amounts of FDI inflows.

The crisis-related setback in the number of projects was highest in four of the more developed regions (the first six voivodships in Figure 2). By contrast, there was a significant increase in many of the less developed regions, first of all in Swietokrzyskie but also in Lubelskie and Podkarpatskie. Swietokrzyskie had the lowest number, only seven projects, in the pre-crisis period but 24 in the subsequent period when it ranked 10th among the 16 regions. (It

Figure 1

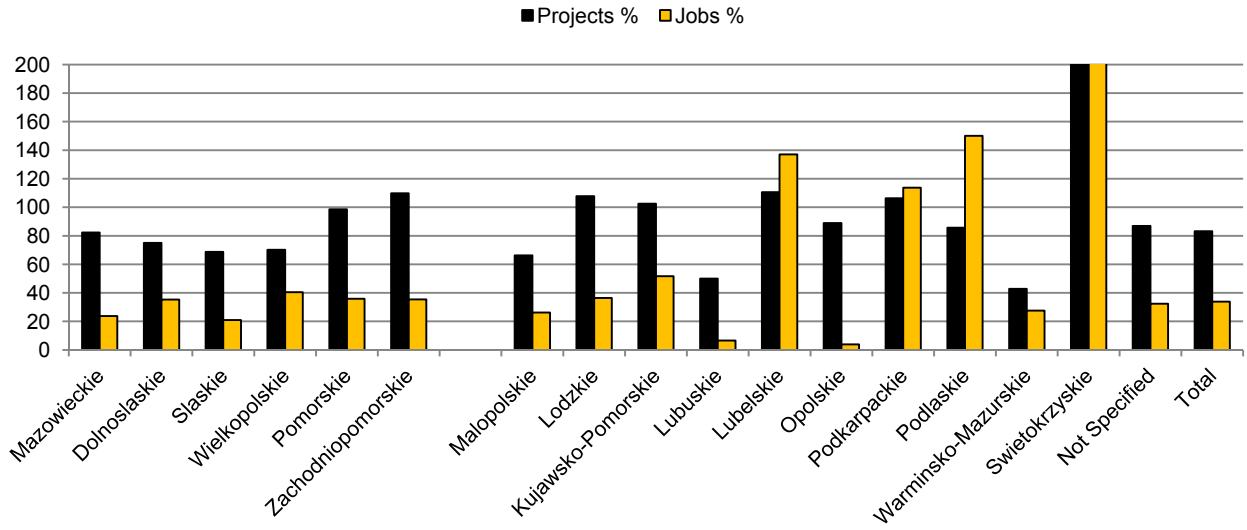
Total number of FDI projects and created jobs by regions in Poland



Source: www.fdimarkets.com.

Figure 2

Change in the number of projects and jobs between 2005-2008 and 2009-2013 by regions in Poland



Source: www.fdimarkets.com.

must be noted that in 2012 five out of eight projects were textile outlets in a new shopping centre.)

Some mid-field regions, such as Lodzkie, could maintain their positions. The most serious setbacks took place in two of the less developed regions, namely Lubuskie and Warminsko-Mazurskie. On the whole the level of economic development has not influenced the success of attracting FDI projects in the past few years.

The impact of regional policy in Poland

Over the past decade one cannot speak of an FDI policy as such, first of all because all investors – both foreign and domestic – have been subject to the same investment conditions. FDI incentives are available not as special subsidies but in the form of promotion and services provided by PAIiIZ and other government and regional agencies aiming at informing and serving potential investors.

Regional policy is formulated at the level of voivodships. In the 2004-2006 period European regional policy targeted rather small NUTS 3 regions. In Poland all regions except for the four most developed city regions (Wroclaw, Krakow, Warszawa and the Gdansk-Gdynia-Sopot conurbation) were allowed to provide aid amounting to 50% of the eligible investment cost (EU Commission, 2004). The situation was similar in the other countries. Starting from 2007, the differentiation shifted to NUTS 2 regions and six out of 16 Polish regions (voivodships) were allowed to provide ceilings of 30% and 40% respectively while the rest of the country enjoyed 50% (see more below). Assuming that in the first couple of years of the 2007-2013 financing period investment projects were based on decisions taken before 2007, the full impact of the new aid limits influenced the location of new investments in the 2009-2012 period. Thus the pre-crisis and crisis years correspond almost exactly to the two regional aid periods.

The size, competence and activity of regional governments may have its own distinct impact on regional development. In the 1999 regional reorganisation, 49 former voivodships were merged into 16 administrative self-governing units which also received the NUTS 2 status in the EU regional policy framework. Findings by Chidlow and Young (2008) suggest that the larger autonomy of the new Polish regions increased the differences between them in their attractiveness for inward foreign investment due to specific institutional and business environment characteristics. But, on the whole, investors followed cost-related advantages. The authors found that those investors for whom agglomeration, knowledge and market factors were the main motives tended to choose the Mazowieckie region (with the capital city). However, investors for whom low-cost inputs such as labour and geographical factors were important favoured other regions.

It is not clear how far regional administrative authorities could influence the development of their voividships. Although the competencies attached to Polish regions are higher than those in Hungary and Romania where NUTS 2 regions have no functions in the state administration, public governance in Poland is found to be rather weak by a thorough study of Kozak (2012). But the annual investment attractiveness surveys (Novicky, 2009 and 2012) of voivodships show that the main factors that have modified the position of regions in recent years in terms of attracting investment projects were the development of transport accessibility, the investors-related activity of the administrations and change in the attractiveness of voivodships. The latter factors may be considered to be the result of the efforts undertaken by regional and local authorities while other factors such as labour market, market size and other social and economic indicators were less influential as they did not change very much over the four-year period.

A major regional development tool shaping the distribution of greenfield and brownfield FDI projects in Poland have been the special economic zones (SEZs). These were established as a vehicle to attract FDI to backward regions as stipulated by the SEZ Act of October 1994. The first SEZ was set up in 1995 in the Podkarpackie region in the South East and the next two in 1996 in the Śląskie and Podlaskie (North East) regions. The process of establishing new zones continued until a total number of 14 had become operational. Later the SEZs were turned into the head organisations of special industrial parks in certain areas with distinct units in several locations; investors fulfilling specific conditions can demand the extension of an SEZ to their plot. In addition, there are also industrial parks providing investment sites with no SEZ status throughout the country.

Most of the SEZs are located in the South of Poland, which is characterised by relatively good infrastructure, large cities and dense population, as well as in the North East of the country (Jones Lang LaSalle, 2013). The voivodships in the centre and the East lack those features. The regional distribution of SEZs thus indicates that it has been more a vehicle of structural restructuring by FDI in regions with good potential than of attracting investments into less developed and sparsely populated areas. Initially many of the potential projects

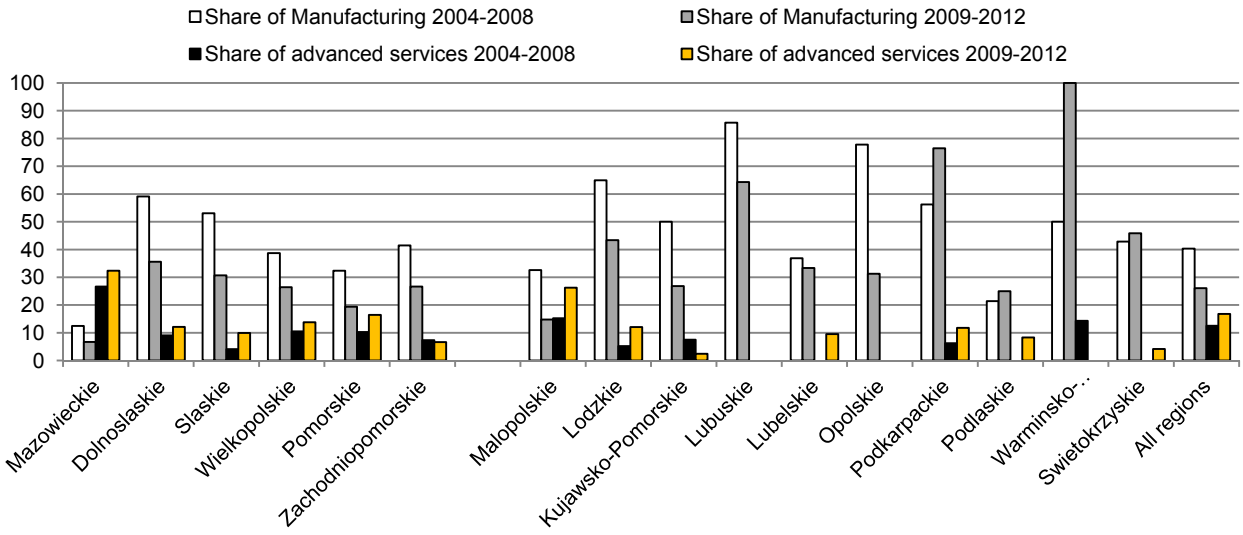
were not large enough in terms of potential capital investment (threshold of eligibility about EUR 2 million) thus in 2001 the threshold was significantly lowered (to EUR 100,000). In more developed areas, such as the vicinity of Cracow and Warsaw (Technopark Modlin), SEZ technology parks were set up and proved successful in attracting a number of projects. As of 2011 (KPMG, 2012) the 14 SEZs operating in Poland are the main hubs of greenfield investments, employing a quarter of a million people (total manufacturing employment is about 2 million) in 1400 companies (both with foreign and domestic capital).

SEZs attracted greenfield investment projects by providing special incentives: low-cost land with developed infrastructure, up to 15 years of corporate income tax holidays and job creation grants as well as exemption from local taxes. The SEZ legislation was modified in 2008 by which the operation of SEZs has been extended to 2020; it is not clear what will happen beyond that date. In fact the uncertainty about the future status of SEZ-related subsidies is one of the main problems of investors in Poland (PAIZ, 2012b). The problem at issue is not the advantages of industrial parks as such, but the related fiscal incentives provided to investors which settle in the zones. The remaining time for tax exemption for newly established businesses may not be long enough for investors to benefit from the maximum amount of subsidies. Most importantly, the corporate income tax holiday should be phased out as it is not easily consolidated with other forms of regional aid to calculate the maximum level. The current policy-relevant question is whether the operation of SEZs should be extended or whether the investment incentives other than tax exemptions will suffice to allow investors to make use of the maximum state aid intensity in the region where they locate. As SEZs do not allow more aid than approved as maximum, the territories of the country outside the SEZs are not necessarily disadvantaged.

For investors inside and outside the SEZs a number of government grants are available in the framework of the Multi-Annual Support Programme tied to size and sector of the investment and the number of jobs created while all incentives must be within the predefined aid intensity. Different employment grants are provided for four kinds of investment: production, modern services, R&D and big investments in other sectors. Investment grants are provided on an individual basis in production and big investments in other sectors. These are complemented by EU grants and human capital development aid.

Figure 3

Share of manufacturing and advanced services projects in Polish regions in the pre-crisis and crisis years



Source: www.fdimarkets.com.

Table 1

Distribution of FDI projects by regions of aid ceiling for large investments in per cent

Low: 30% and 40% of the eligible cost (first six regions in Figures 1 and 2);

High: 50% of the eligible cost (rest of the regions)

		2005-2008	2009-1012	Change, %
Total number of projects				
	Low	61.1	58.3	-21
	High	23.5	25.7	-9
Total job creation				
	Low	56.2	52.2	-68
	High	34.2	38.6	-62
Number of manufacturing projects				
	Low	64.6	56.3	-55
	High	35.4	43.7	-34
Number of advanced services projects				
	Low	83.6	79.6	6
	High	16.4	20.4	38

Source: www.fdimarkets.com.

The main regional development tool is thus the differentiated aid intensity applied by voivodships. In the period 2007-2013, this is 30% of the eligible investment costs in Mazowieckie, 40% in the five other most developed regions and 50% in the rest of the country. The ceilings apply to large investment projects in selected economic activities while SMEs may receive 20 per cent more aid. As was shown in Figure 3, there were regions with increasing and decreasing numbers of projects in both high- and low-subsidy regions. But the overall setback in the crisis years was less severe in the high-subsidy regions (Table 1). Differentiated aid intensities can thus be related to the regional distribution of investments and new jobs. The share of regions with high aid intensity increased in the total number of projects and job creation but still those regions accounted only for slightly more than one quarter of the new projects in the 2009-2012 period.

The two main sectors of the economy which are most relevant for growth and may also benefit from state aid are manufacturing and advanced services[1]. These sectors also follow specific regional distribution patterns in terms of cost optimisation of production, labour and transport. Other sectors such as financial services tend to be registered in the capital city while retail outlets are registered as individual projects in almost all settlements of a certain size and can also not benefit from public aid programmes.

The share of manufacturing in the total number of projects (for which both activity and regional data are available) was 40% in 2005-2008 and this share declined to 26% in the 2009-2012 period. At the same time, the share of advanced services increased from 13% to 17%. The rest of the projects were mainly in the retail sector in both periods. Less developed regions with a lower number of projects show higher shares of manufacturing than the advanced regions especially before the crisis. Advanced regions have higher shares of projects in advanced services the share of which was growing in almost all regions.

As new FDI projects and job creation shifted from manufacturing to business services, the importance of large cities (higher skilled workforce, agglomeration advantages) increased for investors. Although backward regions also profited from this shift, job creation remained very concentrated. The number of jobs in business services increased from less

[1] The projects are classified by their main economic activity, not the NACE category of the company. Advanced services include the following activities: business services, research and development, design-development-planning, headquarters and ICT services.

than fifty thousand in 2008 to hundred thousand in 2012 and the share of the eight large agglomerations stayed dominant with more than 86% (PAIZ, 2012a).

Regional policy options

Recent shifts in the location of FDI projects in Poland show a slow movement away from the more developed voivodships to the less developed regions where higher public aid ceilings are applied. At the same time, new projects concentrate in larger cities making the divide by settlement size more important than by region. This is all the more the case for the growing number of projects and jobs in advanced services driven by agglomeration. Regional policy focusing on NUTS 2 regions is not in a position to address the regional inequalities stemming from this process. The question is whether regional policy wants to counteract the agglomeration effect, or build on it and support the emergence of new agglomerating areas.

One answer could be that NUTS 2 regions are not the proper territorial unit for regional investment (and FDI) policy. In the first place regions with similar and limited competencies do not matter much as investors think in terms of countries with distinct legal and investment environments. As a next step, they immediately look at specific investment sites within countries as it is the location which carries most of the cost factors. A comparison of regions may only be of importance in case the regions offer significantly different business environments. Only NUTS 2 regions with very different subsidy intensities may compete with each other, but even in this case, sites in the various regions are the base of site selection. Too large regions and the dominance of large cities further hinder the effectiveness of policies aiming at a regionally balanced development. More regional equality could be achieved by counteracting the main cause of those differences, the agglomeration effect. But pursuing such a goal may work against the Europe 2020 development goals of increasing competitiveness.

It would be counter-productive to weaken agglomerations which are the main regional engines of growth especially as the role of EU cohesion policy is found inconclusive in achieving cohesion goals. Therefore 'the EU should not be concerned with regional disparities in each country' and 'a large share of the EU budget should go to countries instead of regions at any level of development' (Marzinotto, 2012). EU funds should therefore reinforce rather than substitute national policies, and the disparities stemming from geography and efficient concentration of economic activities should not be weakened.

References

Chidlow, A. and S. Young (2008), 'Regional Determinants of FDI Distribution in Poland', William Davidson Institute Working Paper No. 943.

EU Commission (2004), Regional aid map for the 10 new Member States, http://ec.europa.eu/competition/state_aid/regional_aid/regional_aid.html.

Jones Lang LaSalle (2013), 'Made in Poland; Investors Guide for Manufacturing Companies', http://www.joneslanglasalle.com/MediaResources/EU/Marketing/Poland/Made_In_Poland_e-version.pdf.

Kozak, M. W. (2012), 'Multi-Level Governance: possibilities for implementation in Poland', Zeszyty Naukowe WSEI seria: EKONOMIA, Vol. 1, No. 4, pp. 55-78.

KPMG (2012), *Special Economic Zones*, 2011 Edition.

Marzinotto, B. (2012), 'The growth effects of EU cohesion policy: a meta-analysis', *Bruegel Working Paper* 2012/14, Brussels, October.

Nowicki, M. (ed.) (2009 and 2012), 'Investment Attractiveness on Voivodships and Sub-Regions of Poland', The Gdansk Institute for Market Economics.

PAIZ (2012a), 'Poland, outsourcing cluster in Europe', http://www.paiz.gov.pl/20120917/poland_outsourcing_cluster_in_europe.

PAIZ (2012b), 'Legal barriers in FDI inflow to Poland', http://www.paiz.gov.pl/20120125/legal_barriers_in_fdi_inflow.

Wisniewski, A. (2005), 'The Impact of Foreign Direct Investment on Regional Development in Poland', *IWE-HAS Working Papers*, No. 162, September.

Creating fiscal space in the European Monetary Union

BY JAN TOPOROWSKI*

The recent events in Cyprus represent more than a crisis of state finances that could be solved only by higher taxation of citizens, or lower welfare provision for them. The policy discussion is caught up in a largely formal exchange between peddlers of austerity who play on citizens' fears of debt, taxes and inflation, and 'Keynesians' who see no end to the possibilities of fiscal stimulus. This reveals how much has been lost of the more sophisticated knowledge of the incidence and effects of taxation and government expenditure that was widely understood in the mid-twentieth century.

An excellent example of such more sophisticated understanding is Kalecki's paper 'A Theory of Commodity, Income and Capital Taxation', published in 1937 in the *Economic Journal*, a short paper of remarkable clarity and reason, and praised at the time by Keynes. By 'commodity' taxation, Kalecki meant sales taxes, such as the Value Added Taxes that are so widespread today. Kalecki argued that this simply redistributes income from those in employment to recipients of welfare payments and government employees. In the case of income tax, this also largely redistributes existing consumption. However, he showed that government expenditure financed by a tax on capital, because it is not paid out of income and has no effect on costs, would tend to raise incomes, employment and business investment. He concluded that 'capital taxation is perhaps the best way to stimulate business and reduce unemployment. It has all the merits of financing the state expenditure by borrowing, but it is distinguished from borrowing by the advantage of the state not becoming indebted'.[1]

Kalecki was arguing for a tax on capital that is used to finance additional government expenditure. However, a tax on capital may also be used to repay government debt. David Ricardo had proposed this kind of financial operation in 1819, in speeches to the House of Commons, when he was a Member of Parliament. In an article on 'The Funding System' which he wrote for the *Encyclopaedia Britannica*, Ricardo alluded to the benefits of taxing wealth in order to pay off the national debt. This would, in his view, stimulate business by making the wealthy more liquid (having their holdings of government debt exchanged for money)[2].

Similar arguments were made a century later, in Vienna, in a discussion between the veteran Austrian Marxist Otto Bauer and Joseph Schumpeter. In 1919 they were working in a Socialist government that had inherited the responsibility for Austria's war-time debts, in a country that had been hugely reduced by the Versailles and Trianon settlements, and whose economy had not only been correspondingly reduced, but also thrown by political circumstances into a state of chaos and depression. Bauer and Schumpeter, who were both in the Austrian Government's Committee on Socialisation, were in agreement that the fiscal situation could be alleviated by a levy on bank capital. Bauer wanted to use the levy to drive the banks into insolvency, so that the banks would be taken over by the state. Because banks had large holdings of company stock, this would be an effective way of bringing Austrian business under state control, fulfilling the destiny that Hilferding and Lenin had prescribed for 'finance capital'.

Schumpeter, who had no enthusiasm for socialisation and appears to have been intriguing with conservative circles in Bavaria and Hungary to overthrow Soviet Governments in those countries, had other ideas. With the government in serious financial difficulties, he recommended that the capital levy be used to buy in War bonds, effectively can-

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1 *Collected Works of Michał Kalecki. Volume I, Capitalism Business Cycles and Full Employment*, edited by J. Osiatyński, The Clarendon Press, Oxford, 1990, p. 325.

2 *The Works and Correspondence of David Ricardo. Volume IV, Pamphlets and Papers 1815-1823*, edited by P. Sraffa and M.H. Dobb, Cambridge University Press, Cambridge, 1951, pp. 196-197.

celling them. This would raise the price of government bonds and create a more liquid market for them. In the end, the socialisation drive, and the capital levy that was to finance it, petered out in acrimonious parliamentary procedure.[3]

A tax on 'financialisation'

These historical considerations point to a simple and practical way of alleviating the crisis in Europe. This could be done by indebted governments' imposing a small annual tax of 1 or 2 per cent on the balance sheets of all registered companies above some minimum size that would exclude small businesses. The tax would be in proportion to the total value of all assets or liabilities, with deductions for industrial or commercial assets and equipment. In effect the tax would fall mostly on financial intermediaries, and on non-financial companies holding financial assets. This would therefore be a tax on 'financialisation', that is on the financial balance sheets that have proliferated with credit innovation and deregulation.

The tax could be used by the Debt Management Offices of indebted governments to buy in, at full value, the government debt held by banks. This would support the government bond market, causing yields to fall in the market, and thereby easing financing pressure on governments. By concentrating buying on bonds of particular maturities, the fiscal authorities could manage the yield curve for government bonds. By improving the price and liquidity of government bonds, the tax and bond buy-back would improve the balance sheets of banks as well as the balance sheet of the government.

A number of possible objections may be easily shown to be groundless. First of all, it may be objected that this kind of tax would discourage the holding of government bonds. But, on the contrary, far from discouraging the holding of government bonds, the buy-back part of the scheme would actually encourage the holding of government bonds, because these would have a more assured liquidity and a higher value. If anything, the tax would discourage the holding of financial assets that are not liabilities of the government. But by allowing deductions for industrial and commercial assets, the tax would increase the incentive to invest in the real economy, as opposed to the financial markets.

A second objection is that the tax would be passed on to bank borrowers, and would thereby discourage financing for productive purposes. As previously mentioned, the greater inducement to invest because of deductions for productive assets, would more than offset this discouragement, since any increase in the cost of borrowing would not affect investment financed by drawing on reserves. In any case, strictly speaking such a tax could only affect banks' margin between deposit and lending rates. There is no convincing empirical evidence to show that this margin, let along the absolute cost of borrowing, affects investment in any way. Moreover, as financial assets and liabilities proliferate with financial development, more and more borrowing is done by banks themselves in the inter-bank market. If banks pass on the tax to their borrowers, they would increasingly be passing it on to each other and a growing proportion of this tax would be paid by financial intermediaries. In this way a tax on financial balance sheets would truly be a tax on 'financialisation'.

A third objection might be that such a tax would make financial intermediaries less liquid. However, in fact it would make those intermediaries holding government bonds more liquid, because those bonds would be repaid. Those intermediaries that do not hold bonds that are bought back by the government, would of course be paying taxes and not receiving the liquidity benefits of having long-term bonds repaid. In effect the scheme would recycle financial intermediaries' own liquidity towards those intermediaries holding government bonds. In so far as this would stabilise government finances there would be social benefits in a scheme that improves governments' and banks' balance sheets. In ex-

[3] Christian Seidl, 'The Bauer-Schumpeter Controversy on Socialization', *History of Economic Ideas*, II/1992/2, pp. 41-69. I am grateful to Riccardo Bellofiore who has made available to me his copy of this article.

treme cases, banks may have to reach into their reserves to pay the tax. But this should not affect their solvency as long as banks can borrow and lend among themselves and the central bank is prepared to accept non-government collateral.

A related, but more serious, objection is that such a scheme would drain equity out of financial intermediaries or banks. Liquidity in the system of intermediation would remain constant, as previously indicated, but assets in the form of government bonds held by financial intermediaries would be reduced as the bonds are bought back by the government and effectively cancelled. The reduction in total asset value would have to be deducted from the banks' or intermediaries' equity.

In practice the reduction in equity would be much less because it would be offset by reduced provisions (transfers to reserves against potential losses in assets) that financial intermediaries would make as a result of the operation of the scheme. In the first place, there would be reduced provisions due to the stabilisation and increase in the value of government debt that would arise as that debt is bought in at full value. Secondly, as the overall liquidity of the banking system improves, with the more rapid circulation of banks' existing liquidity, banks would be able to reduce their provisions against illiquidity in the financial system. Thirdly, the greater incentive to invest will encourage investment by non-financial firms. This higher investment will improve the liquidity of non-bank private sector borrowers. In turn this would reduce bad debts, and allow banks to decrease their provisions for bad debts.

A fifth objection is that the tax may be evaded. This is certainly true for taxes on profits where profits may be easily manipulated by transfer pricing, but also, with financial development, by management of debt liabilities, payments on which are treated as costs, rather than as taxable profits. However, it is less possible to do this with balance sheet totals. If anything, tax avoidance by debt management tends to increase the size of financial balance sheets. Some of the tax lost due to debt management could therefore be recouped by a balance sheet tax. Emigration is also less of a threat to balance sheets. A bank may transfer its country of domicile, as the Hong Kong and Shanghai Bank did in the early 1990s. But it cannot transfer its balance sheet unless it liquidates its business in a given country. As long as financial markets have the prospects of future profits, financial intermediaries will keep the balance sheets that they hope will capture those profits.

How it might work in Europe

A tax on financial balance sheets dedicated to buying in government bonds has the advantage that it can be applied within the European Monetary Union without changing the Maastricht Treaty, whose inflexible provisions have contributed to the present crisis. Governments within the European Monetary Union have Debt Management Offices within finance ministries that can, with national parliamentary authority, levy a balance sheet tax, handing over the proceeds of the tax to the DMO to use them in order to buy in bonds issued by that office. No supranational fiscal authority would be required and many governments, including that of the UK, already impose taxes on bank balance sheets. But these are only a tiny fraction of the taxes that could be raised. The tax and buy-back scheme would have to operate at a national level, because it is only the national government that could buy back and cancel its own debt. A Europe-wide fiscal authority, taxing all financial balance sheets across Europe and buying in government bonds would be able to buy in governments bonds and then forgive them. But it is likely that depositors and shareholders of banks in a country with a low level of government debt would object to their financial balance sheets being taxed in order to cancel the debt of a more highly indebted government of another country in the European Union. This political objection would not apply at a national level.

But there is another reason why a scheme such as this is not only necessary, but essential to the future of Europe. This is to fill an important institu-

tional gap that was created when the monetary institutions for the European Union were being planned and established in the 1990s and at the turn of the century. At the time it was believed that the only function of a central bank should be the conduct of monetary policy, and the issuing of money. The other functions of central banks were believed to be either unnecessary, in the case of the original function of central banks to manage government debt markets, or were transferred elsewhere, in the case of bank regulation. The resulting institutional set-up means that Europe now has a central bank without a government, and governments without central banks. The function of managing government debt markets could be effectively recovered by extending the responsibilities of national debt management offices to include ensuring the liquidity of the secondary markets in government bonds. Indeed, it is most efficient for the institution that sells government bonds to the primary market to have responsibility for managing the secondary market, because that institution is best placed to cancel, on buy back, the bonds that it issues.

The European economy, and the institutions that are supposed to regulate it, are in a mess. A capital levy on financial balance sheets, used to buy back and cancel government debt, would not get Europe out of this mess. But it would buy time for more effective measures to be introduced, measures that are currently held back because of what has been made to look like a financial crisis of the state that need not be so critical. In the present circumstances, a financial balance sheet tax should be welcomed by financial intermediaries and corporations as a small price to pay for improving the balance sheets of banks and governments.

Is there evidence of increasing fragmentation in the banking system of the euro area?

OLGA PINDYUK AND CODRUTA BOAR*

Banking markets integration is one of the key aspects of the EU economic integration, especially crucial for the euro area countries. One of the negative consequences of the high fragmentation of banking markets is that it creates an uneven playing field for companies facing varying borrowing costs in different countries. The impact of banking markets fragmentation on the competitiveness of companies becomes more pronounced when barriers to trade are reduced. In particular, it affects small and medium-sized enterprises (SMEs), for which banking loans in their home country are a primary source of external financing – which makes it easier for international banks to segment markets.

The market for a given financial instrument can be considered fully integrated if all economic agents with the same relevant characteristics acting in the market face a single set of rules when they decide to deal with those financial instruments, have equal access to the set of financial instruments and are also treated equally when they are active in the market (Adam et al., 2002). Measuring the degree of banking markets integration is quite data-demanding as for a precise measure it is important to compare assets which have the same level of risk and generate identical cash flows.

There are three broad categories of indicators of banking markets integration (Vodova, 2009):

- based on price (interest rates and costs of transactions);
- based on quantity (using proxies for determinants of supply and demand for banking products); and
- news-based (using variables for common and local news and testing whether local new information can explain changes in interest rates).

We opt for the first type of measures as it is least demanding with respect to data – Eurostat data on loan interest rates for euro area countries are used. We examine interest rates on loans to non-financial corporations whose value is up to EUR 1 million, assuming that small-sized loans are obtained primarily by SMEs. We can distinguish between loans of three different maturities – 1 year, 3 years, and 5 years. The data are monthly for the period of 2003M1-2013M2.

We calculate the standard deviation of interest rates for each month in our sample as a measure of banking markets integration. This indicator can be interpreted as follows: falling standard deviation indicates convergence in interest rates, and thus an increasing degree of markets' integration (ideally in fully integrated markets the law of one price should hold). Of course, standard deviation is a very rough measure of markets' fragmentation as it does not take into account many factors that can possibly contribute to diverging dynamics of interest rates – such as varying taxation rules, banking market structures, sovereign risks, and also a difference between bank products inside an aggregated category. Still, it can provide sufficiently interesting insights.

Figure 1 below presents the results of our calculations. Falling values of standard deviation prior to the crisis indicate ongoing convergence in small loans markets of the euro area's members. However, starting from 2008, there has been a noticeable increase in standard deviations for loans of all three maturities, with short-term loans' interest rates diverging most strongly recently.

For robustness check, we also deflated interest rates with CPI to remove consumer price volatility effects – the trends are virtually the same for the deflated interest rates as well.

Figure 2 shows how the interest rates on small loans with maturity between 1 and 5 years[1] changed between 2008 and 2013. At the beginning

* Codruta Boar's research visit to the wiiw was in the framework of the E2012-03 Pro Practice project.

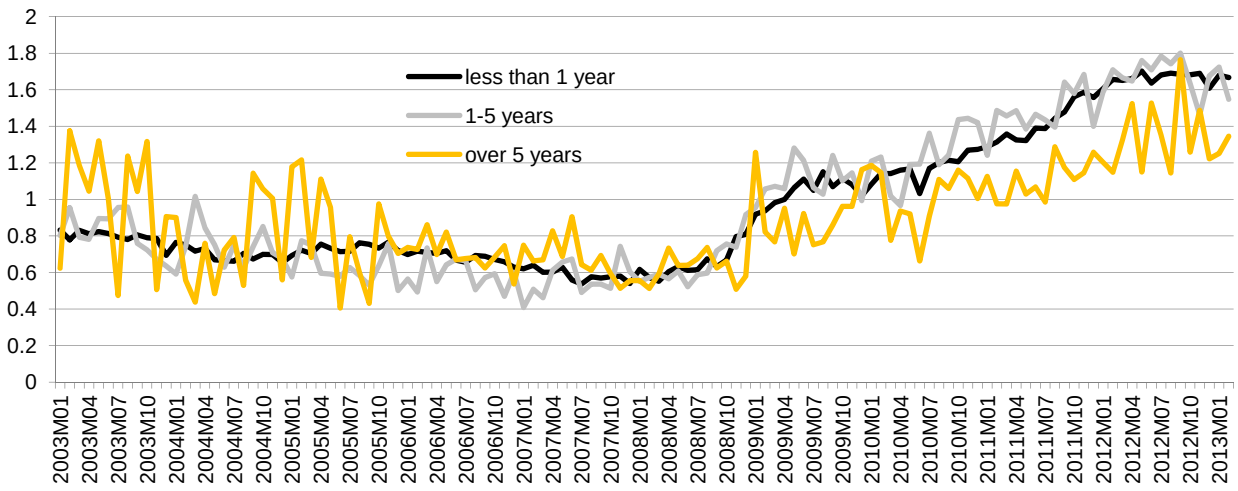
[1] This maturity is most common for loans to SMEs. See, e.g., Hernandez-Canovas and Koeter-Kant (2011).

of 2011, there was much less dispersion among the euro area's members in this regard, with most countries having loan interest rates set at about 6%; only Cyprus, Portugal, and Ireland did have their interest rates at a higher level of around 7%.

By the beginning of 2013, 7 euro area members had their interest rates on loans to non-financial corporations at below 4%, while in Spain, Slovenia, Portugal, Greece, and Ireland the interest rates ranged from 6% up to 7.5% (Ireland).

Figure 1

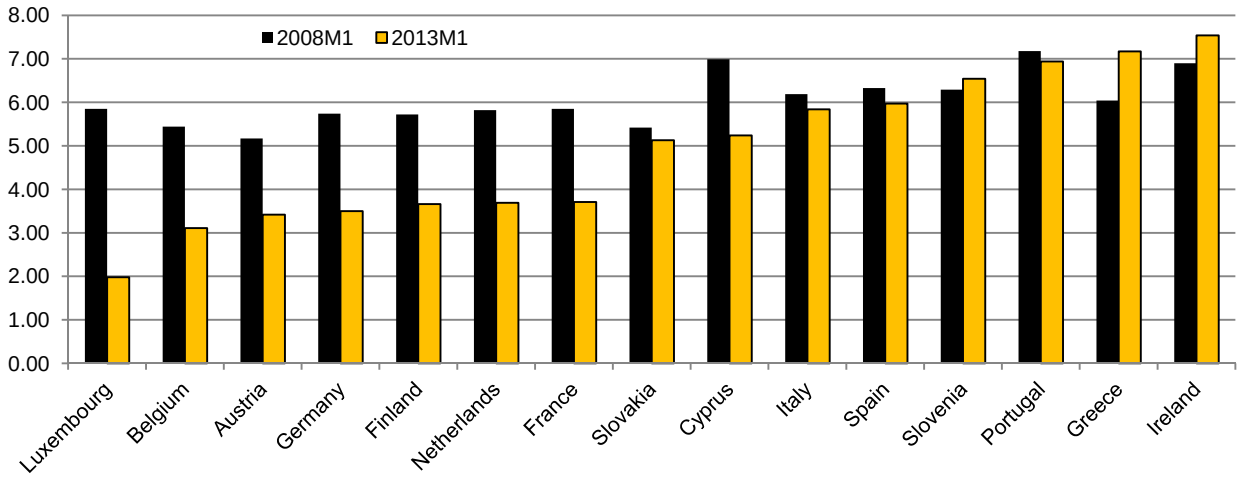
Standard deviation of euro area members' nominal interest rates on loans to non-financial corporations, value below 1 EUR million, for different maturities



Source: Eurostat, authors' calculations.

Figure 2

Interest rates on loans to non-financial corporations, value below 1 EUR million, maturity between 1 and 5 years, %



Source: Eurostat. (Malta is not included due to the scarcity of data.)

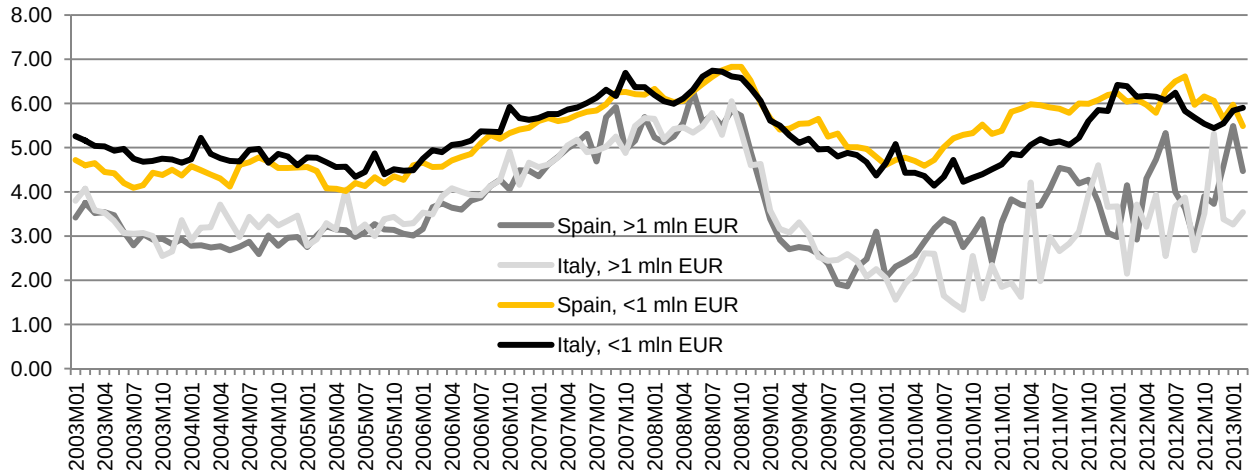
Naturally, differences in interest rates reflect to some extent sovereign risks in the most troubled economies of the euro area. However, since mid-2012 there has been a decoupling between sovereign risks (measured by spreads between yields on sovereign 10-year debt) and loan interest rates. For instance, spreads between Spanish and Italian debt and the German equivalent have narrowed significantly (Atkins, 2013), but, as can be seen from Figure 3, this was not reflected in the loans'

interest rates dynamics. In this figure we present interest rates on loans to Spanish and Italian companies with maturity between 1 and 5 years, and of different sizes (below and above 1 EUR million). There are two main messages to learn from the figure. First, there has been no significant reduction in interest rates since mid-2012, in particular for smaller-size loans. Second, interest rates on bigger loans have been usually lower than on smaller ones, and the difference between the interest rates increased starting from 2008, which implies that smaller borrowers are in a less favourable situation compared to larger companies.

To conclude, our analysis contributes to the evidence that the banking sector in the euro area still remains rather fragmented. Bank lending rates are much higher in the weakest economies than they are in the core, and this is only partially explained by sovereign risks differences. Liquidity provided by the ECB to the Europeans banks over the past few years had little impact on borrowing costs for companies in the economically struggling members of the euro area (and also on their access to loans in general). Addressing this issue is one of the goals of the currently negotiated banking union of the euro area.

Figure 3

Interest rates on loans to non-financial corporations, maturity between 1 and 5 years, for different loan sizes, %



Source: Eurostat.

References

Adam, K., T. Jappelli, A, M. Menichini, M. Padula and M. Pagano (2002), 'Analyse, Compare, and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union', Report to the European Commission.

Atkins, R. (2013), 'Blow for ECB as Wider Loan Rates Hit South', *Financial Times*, 31 March.

Baele, L. et al. (2004), 'Measuring Financial Integration in the Euro Area', *ECB Occasional Paper Series*, No. 14, April.

Davies, G. (2013), 'How Can the ECB Fight Fragmentation of the Eurozone?', *Financial Times*, 17 April.

Goyal, R., M. Prodhan, R. Leckow et al. (2013), 'A Banking Union for the Euro Area', *IMF Discussion Papers*.

Hernandez-Canovas, G., and J. Koeter-Kant (2011), 'SME Financing in Europe: Cross-Country Determinants of Debt Maturity', *Small Business Journal*, Vol. 29, No. 5, pp. 489-507.

Rughoo, A. and N. Sarantis (2011), 'Integration in European Retail Banking: Evidence from Savings and Lending Rates to Non-Financial Corporations', London Metropolitan University, Centre for EMEA Banking, Finance & Economics, *Working Paper Series* No. 23/11.

Sorin Gabriel, A. and A. Avadanei (2010), 'The Implications of European Retail Banking Integration on Small and Medium-Sized Enterprises Financing. An Overview', Proceedings of the Management of International Business and Economic Systems (MIBES) 2010 conference.

Vajanne, L. (2007), 'Integration in Euro Area Retail Banking Markets – Convergence of Credit Interest Rates', Bank of Finland Research Discussion Papers, 27-2007.

Vodova, P. (2009), 'Measuring the Integration of Credit Markets', Munich Personal RePEc Archive.

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.

A L B A N I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
LABOUR																
Employment total, registered	th. pers., quart. avg	.	.	933.3	.	.	933.3	.	.	922.5	.	.	927.5	.	.	.
Employment total, registered	CPPY	.	.	1.4	.	.	0.4	.	.	-0.8	.	.	-0.5	.	.	.
Unemployment, registered	th. pers., quart. avg	.	.	143.4	.	.	143.1	.	.	141.8	.	.	141.8	.	.	.
Unemployment rate, registered	%	.	.	13.3	.	.	13.3	.	.	13.3	.	.	13.3	.	.	.
WAGES																
Total economy, gross [1]	ALL	.	.	48800	.	.	48800	.	.	51270	.	.	51500	.	.	.
Total economy, gross [1]	real, CPPY	.	.	6.1	.	.	5.3	.	.	4.7	.	.	4.7	.	.	.
Total economy, gross [1]	EUR	.	.	350.5	.	.	350.3	.	.	371.8	.	.	368.6	.	.	.
PRICES																
Consumer	PP	0.7	1.3	0.4	-0.1	-0.8	-0.8	-0.2	0.4	0.2	0.2	0.2	0.9	1.0	1.1	0.3
Consumer	CPPY	1.6	0.6	1.0	1.6	1.9	2.2	2.7	2.8	2.6	2.4	2.5	2.4	2.7	2.5	2.4
Consumer	CCPPY	1.6	1.1	1.1	1.2	1.3	1.5	1.7	1.8	1.9	1.9	2.0	2.0	2.7	2.6	2.5
Producer, in industry	PP	1.1	0.3	0.3	-0.7	-0.1	-0.1	-1.1	0.0	0.2	0.2	0.0	0.0	.	.	.
Producer, in industry	CPPY	2.2	2.6	2.8	1.6	1.4	1.3	0.5	0.4	0.6	0.1	0.0	0.1	.	.	.
Producer, in industry	CCPPY	2.2	2.4	2.5	2.3	2.1	2.0	1.8	1.6	1.5	1.4	1.2	1.1	.	.	.
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	97	206	326	455	593	721	864	990	1128	1265	1404	1532	130	243	381
Imports total (cif), cumulated	EUR mn	268	536	853	1138	1457	1790	2137	2470	2805	3138	3466	3801	245	484	756
Trade balance, cumulated	EUR mn	-171	-329	-527	-684	-863	-1069	-1274	-1480	-1676	-1874	-2062	-2269	-115	-240	-375
FOREIGN FINANCE																
Current account, cumulated [2]	EUR mn	-108	-195	-290	-368	-441	-542	-597	-684	-785	-861	-954	-1021	.	.	.
EXCHANGE RATE																
ALL/EUR, monthly average	nominal	138.32	139.35	140.03	139.98	139.44	138.51	137.46	137.35	138.89	139.72	139.71	139.72	139.49	139.75	139.78
ALL/USD, monthly average	nominal	107.10	105.32	105.97	106.35	108.96	110.48	111.77	110.79	108.10	107.78	109.01	106.57	104.96	104.61	107.81
EUR/ALL, calculated with CPI [3]	real, Jan09=100	92.3	92.3	91.2	90.8	90.6	90.5	91.4	91.5	90.1	89.5	89.8	90.3	92.1	92.5	92.0
EUR/ALL, calculated with PPI [3]	real, Jan09=100	86.9	86.1	85.6	84.9	85.4	86.3	85.8	85.3	84.4	84.1	84.3	84.5	.	.	.
USD/ALL, calculated with CPI [3]	real, Jan09=100	89.9	92.2	91.3	90.7	87.9	86.1	85.1	85.7	87.6	88.1	87.7	90.7	92.8	93.3	90.6
USD/ALL, calculated with PPI [3]	real, Jan09=100	79.2	80.4	79.2	78.6	77.2	76.9	75.1	74.7	76.1	76.8	76.6	78.5	.	.	.
DOMESTIC FINANCE																
Currency outside banks	ALL bn, eop	188.2	187.4	185.6	186.1	186.3	187.5	188.3	188.9	187.7	185.5	186.0	192.7	184.7	185.1	.
M1	ALL bn, eop	265.2	265.9	264.7	267.0	268.0	269.4	270.6	272.3	272.6	268.6	267.4	281.2	267.8	270.7	.
M2	ALL bn, eop	1061.2	1067.1	1070.3	1077.4	1084.9	1092.6	1101.2	1118.9	1118.1	1118.4	1116.2	1123.4	1113.3	1118.3	.
M2	CPPY, eop	8.1	9.1	8.8	8.3	8.7	8.3	8.4	8.1	6.8	6.2	5.6	5.0	4.9	4.8	.
Central bank policy rate (p.a.) [4]	%, eop	4.50	4.50	4.25	4.25	4.25	4.25	4.00	4.00	4.00	4.00	4.00	4.00	3.75	3.75	3.75
Central bank policy rate (p.a.) [4][5]	real, %, eop	2.2	1.9	1.4	2.6	2.8	2.9	3.5	3.6	3.4	3.9	4.0	3.9	.	.	.
BUDGET																
General gov.budget balance, cum.	ALL bn	1713	-7058	-9571	-11597	-17885	-21133	-20889	-23715	-26024	-25726	-35274	-45856	-200	-9451	.

1) Excluding private sector.

2) BOP 6th edition.

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

4) One-week repo rate.

5) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating national statistics.

B O S N I A and H E R Z E G O V I N A: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	-1.7	-8.7	-7.4	-1.8	-1.7	-5.3	-6.9	-3.6	-4.3	-5.9	-3.3	-0.5	2.0	11.1	6.9
Industry, NACE Rev. 2	real, CCPPY	-1.7	-5.2	-6.0	-4.9	-4.2	-4.4	-4.8	-4.6	-4.6	-4.7	-4.6	-4.3	2.0	6.3	6.6
Industry, NACE Rev. 2	real, 3MMA	-5.7	-6.0	-5.9	-3.7	-3.0	-4.7	-5.3	-4.9	-4.6	-4.6	-3.3	-0.7	3.8	6.6	.
LABOUR																
Employees total, registered [1]	th. persons, avg	689.1	687.1	688.7	690.0	689.6	690.4	689.0	687.0	688.3	687.2	686.7	685.1	651.3	648.4	.
Employees total, registered [1]	CPPY	-0.7	-0.9	-0.4	-0.2	-0.3	-0.4	-0.6	-0.4	-0.7	-0.6	-0.4	-0.4	0.3	0.1	.
Unemployment, registered	th. persons, eop	541.4	543.6	542.7	540.3	537.0	538.2	539.4	545.9	545.5	546.0	547.8	550.3	554.7	554.5	.
Unemployment rate, registered	%, eop	44.0	44.2	44.1	43.9	43.7	43.8	43.9	44.3	44.2	44.3	44.4	44.5	46.0	46.1	.
WAGES																
Total economy, gross	BAM	1287	1278	1286	1286	1306	1283	1292	1298	1268	1299	1300	1299	1294	1272	.
Total economy, gross	real, CPPY	1.9	0.7	-1.2	-0.7	0.1	-1.6	0.5	-0.6	-2.6	0.2	-0.8	-1.4	-0.7	-1.4	.
Total economy, gross	EUR	658	653	658	658	668	656	661	664	648	664	665	664	662	650	.
PRICES																
Consumer	PP	0.9	0.4	0.4	-0.4	-0.1	-0.5	-0.5	0.3	0.8	0.6	-0.1	0.0	0.3	0.0	0.1
Consumer	CPPY	2.5	2.4	2.1	2.3	1.9	1.9	1.4	1.8	2.3	2.3	1.9	1.8	1.3	1.0	0.6
Consumer	CCPPY	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.0	1.3	1.1	0.9
Producer, in industry [2]	PP	0.4	0.4	-0.2	0.0	0.2	0.0	0.0	0.2	0.1	0.1	-0.1	-0.3	.	.	.
Producer, in industry [2]	CPPY	1.6	1.2	0.4	2.6	3.2	2.8	0.8	1.3	1.0	1.1	0.8	0.9	.	.	.
Producer, in industry [2]	CCPPY	1.6	1.4	1.1	1.5	1.8	2.0	1.8	1.7	1.7	1.6	1.5	1.5	.	.	.
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	286	554	902	1237	1598	1978	2334	2657	3008	3361	3715	4018	310	641	990
Imports total (cif), cumulated	EUR mn	510	991	1743	2415	3088	3749	4447	5139	5834	6592	7211	7799	522	1098	1753
Trade balance, cumulated	EUR mn	-224	-438	-841	-1178	-1490	-1772	-2114	-2481	-2826	-3230	-3496	-3781	-212	-458	-763
Exports to EU-27 (fob), cumulated	EUR mn	186	356	561	753	953	1164	1365	1541	1769	1974	2182	2349	196	393	593
Imports from EU-27 (cif), cumulated	EUR mn	234	473	810	1129	1441	1764	2086	2395	2717	3059	3363	3659	247	517	823
Trade balance with EU-27, cumulated	EUR mn	-48	-117	-249	-376	-488	-600	-721	-854	-947	-1085	-1181	-1310	-51	-124	-230
FOREIGN FINANCE																
Current account, cumulated [3]	EUR mn	.	.	-291	.	.	-613	.	.	-984	.	.	-1253	.	.	.
EXCHANGE RATE																
BAM/EUR, monthly average	nominal	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956
BAM/USD, monthly average	nominal	1.517	1.480	1.481	1.486	1.523	1.563	1.590	1.581	1.523	1.508	1.526	1.493	1.474	1.462	1.509
EUR/BAM, calculated with CPI [4]	real, Jan09=100	99.9	99.8	99.2	98.3	98.3	98.0	97.8	97.8	98.0	98.3	98.3	98.0	99.1	98.7	97.9
EUR/BAM, calculated with PPI [4]	real, Jan09=100	93.4	93.4	92.8	92.7	93.1	93.6	93.4	92.9	92.8	93.0	93.1	93.1	.	.	.
USD/BAM, calculated with CPI [4]	real, Jan09=100	96.6	98.9	98.5	97.6	95.1	92.4	90.5	90.8	94.6	96.2	95.4	97.7	99.0	99.0	95.8
USD/BAM, calculated with PPI [4]	real, Jan09=100	84.5	86.5	85.3	85.2	83.9	82.7	81.2	80.7	83.2	84.5	84.1	85.9	.	.	.
DOMESTIC FINANCE																
Currency outside banks	BAM mn, eop	2298	2323	2330	2363	2329	2357	2417	2429	2421	2406	2364	2414	2337	2358	.
M1	BAM mn, eop	6104	6047	6076	6130	6111	6071	6301	6350	6209	6195	6046	6143	6073	6080	.
M2	BAM mn, eop	14313	14340	14307	14416	14465	14499	14659	14768	14741	14850	14748	14911	14860	14863	.
M2	CPPY, eop	4.9	5.4	4.6	5.0	5.1	5.2	4.3	4.1	4.3	5.0	4.4	3.4	3.8	3.6	.

1) From 2013 new methodology.

2) Domestic output prices.

3) BOP 6th edition.

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

Source: wiiw Monthly Database incorporating national statistics.

C R O A T I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	-3.5	-2.7	-9.2	-9.3	-3.7	-6.9	-4.0	2.2	-10.5	-4.4	-4.3	-8.4	5.1	-2.9	.
Industry, NACE Rev. 2 [1]	real, CCPPY	-3.5	-3.1	-5.4	-6.4	-5.8	-6.0	-5.7	-4.8	-5.5	-5.4	-5.3	-5.5	5.1	0.9	.
Industry, NACE Rev. 2 [1]	real, 3MMA	-2.6	-5.4	-7.3	-7.4	-6.6	-4.9	-3.1	-4.4	-4.5	-6.4	-5.7	-3.1	-2.5	.	.
Productivity in industry, NACE Rev. 2 [1]	CCPPY	-1.4	-0.7	-2.9	-3.8	-3.0	-2.9	-2.4	-1.2	-1.7	-1.4	-1.1	-1.2	11.4	6.8	.
Unit labour costs, exch.r. adj.(EUR) [1]	CCPPY	2.8	2.1	3.7	4.3	3.9	3.3	3.0	1.8	2.1	2.3	1.7	1.7	-7.7	.	.
Construction, NACE Rev. 2 [1]	real, CPPY	-5.6	-17.0	-11.9	-9.4	-7.3	-14.4	-7.0	-10.3	-17.5	-3.8	-10.3	-18.8	-2.0	5.1	.
Construction, NACE Rev. 2 [1]	real, CCPPY	-5.6	-11.5	-11.7	-11.1	-10.3	-11.0	-10.4	-10.4	-11.2	-10.5	-10.5	-11.1	-2.0	1.4	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg.	.	.	1394.2	.	.	1465.3	.	.	1522.2	.	.	1402.1	.	.	.
Employed persons, LFS	CPPY	.	.	-5.6	.	.	-1.0	.	.	-0.8	.	.	-5.2	.	.	.
Unemployed persons, LFS	th. pers., quart. avg.	.	.	273.3	.	.	248.7	.	.	258.0	.	.	307.0	.	.	.
Unemployment rate, LFS	%	.	.	16.5	.	.	14.6	.	.	14.6	.	.	18.1	.	.	.
Employment total, registered	th. persons, avg	1135.5	1143.8	1148.5	1155.1	1163.9	1171.8	1173.6	1168.8	1160.5	1150.8	1140.5	1129.0	1118.5	1113.3	.
Unemployment, registered	th. persons, eop	334.4	343.0	339.9	323.7	306.1	294.9	298.7	301.6	311.1	333.4	347.0	358.2	372.0	375.4	.
Unemployment rate, registered	%, eop	19.6	20.1	20.0	19.1	18.0	17.3	17.5	17.7	18.3	19.6	20.4	21.1	21.7	21.9	21.6
WAGES																
Total economy, gross	HRK	7846	7702	7958	7767	7978	7909	7794	7977	7702	7890	8079	7894	7974	7863	.
Total economy, gross	real, CPPY	1.5	1.6	-1.2	-2.3	-1.3	-3.6	-1.9	-3.0	-5.2	-2.8	-4.8	-4.5	-3.4	-2.7	.
Total economy, gross	EUR	1040	1016	1055	1036	1060	1048	1040	1065	1037	1052	1072	1048	1054	1037	.
Industry, gross, NACE Rev. 2	EUR	931	906	954	926	971	950	947	967	921	974	993	945	957	.	.
PRICES																
Consumer	PP	-0.4	0.6	1.5	0.8	1.7	-0.6	-1.0	0.5	1.4	0.4	-0.2	-0.1	0.1	0.3	0.3
Consumer	CPPY	1.2	1.3	2.0	2.6	3.9	3.8	3.4	4.0	5.0	4.8	4.4	4.7	5.2	4.9	3.7
Consumer	CCPPY	1.2	1.3	1.5	1.8	2.2	2.5	2.6	2.8	3.0	3.2	3.3	3.4	5.2	5.1	4.6
Producer, in industry, NACE Rev. 2 [2]	PP	0.9	2.0	0.6	0.6	1.5	-0.4	0.0	1.5	1.0	0.1	-1.1	0.0	-0.4	0.3	0.1
Producer, in industry, NACE Rev. 2 [2]	CPPY	5.9	6.3	6.1	6.2	7.1	7.0	6.9	7.8	8.9	8.4	6.6	6.8	5.4	3.7	3.2
Producer, in industry, NACE Rev. 2 [2]	CCPPY	5.9	6.1	6.1	6.1	6.3	6.4	6.5	6.7	6.9	7.1	7.0	7.0	5.4	4.5	4.1
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	667	1348	2254	2974	3791	4579	5423	6264	7051	8019	8928	9610	606	1291	.
Imports total (cif), cumulated	EUR mn	1109	2329	3892	5237	6690	8045	9561	10908	12202	13714	15047	16165	1129	2353	.
Trade balance, cumulated	EUR mn	-443	-981	-1638	-2262	-2899	-3466	-4139	-4644	-5151	-5695	-6119	-6555	-523	-1063	.
Exports to EU-27 (fob), cumulated	EUR mn	415	832	1297	1745	2225	2643	3149	3603	4093	4697	5220	5613	382	816	.
Imports from EU-27 (cif), cumulated	EUR mn	694	1476	2482	3399	4293	5143	6047	6848	7646	8540	9370	10101	677	1423	.
Trade balance with EU-27, cumulated	EUR mn	-280	-644	-1185	-1654	-2068	-2500	-2899	-3245	-3553	-3843	-4149	-4487	-296	-607	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	.	-1585	.	.	-1872	.	.	701	.	.	35	.	.	.
EXCHANGE RATE																
HRK/EUR, monthly average	nominal	7.547	7.579	7.540	7.494	7.529	7.547	7.494	7.487	7.427	7.500	7.536	7.529	7.568	7.582	7.586
HRK/USD, monthly average	nominal	5.847	5.733	5.709	5.691	5.871	6.027	6.089	6.042	5.788	5.784	5.876	5.747	5.701	5.665	5.847
EUR/HRK, calculated with CPI [3]	real, Jan09=100	94.5	94.1	95.1	96.0	97.2	96.5	96.6	96.8	98.4	97.5	97.0	96.7	97.0	96.8	96.1
EUR/HRK, calculated with PPI [3]	real, Jan09=100	102.2	103.3	104.0	105.1	106.5	106.3	106.9	107.9	109.6	108.8	107.2	107.6	106.2	106.0	106.1
USD/HRK, calculated with CPI [3]	real, Jan09=100	91.4	93.4	94.4	95.2	94.0	91.1	89.5	90.1	95.0	95.5	94.2	96.4	97.1	97.1	94.2
USD/HRK, calculated with PPI [3]	real, Jan09=100	92.5	95.8	95.6	96.7	95.9	94.1	93.0	93.9	98.2	98.8	96.9	99.2	99.1	99.2	96.3
DOMESTIC FINANCE																
Currency outside banks	HRK bn, eop	16.1	16.0	16.2	16.4	16.8	17.8	18.7	18.7	17.9	17.1	16.7	16.9	16.4	16.4	.
M1	HRK bn, eop	48.6	47.9	46.9	47.3	48.7	50.5	52.6	52.2	51.9	50.8	50.5	52.8	49.9	49.6	.
Broad money	HRK bn, eop	254.3	253.8	252.1	252.6	254.9	255.2	259.9	263.0	261.3	262.2	263.1	263.8	261.1	261.2	.
Broad money	CPPY, eop	1.6	1.9	2.6	3.2	3.4	3.3	3.2	2.6	2.1	2.5	3.0	3.2	2.7	2.9	.
Central bank policy rate (p.a.) [4]	%, eop	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Central bank policy rate (p.a.) [4][5]	real, %, eop	1.0	0.6	0.8	0.8	-0.1	0.0	0.1	-0.8	-1.8	-1.3	0.4	0.2	1.5	3.2	3.7
BUDGET																
Central gov. budget balance, cum. [6]	HRK mn	-1256	-1647	-4047	-3866	-4895	-5824	-7193	-7256	-8641	-8233	-8256	-11180	.	.	.

1) Enterprises with 20 and more employees.

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

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

4) Discount rate of NB.

5) Deflated with annual PPI.

6) Consolidated central government budget.

Source: wiiw Monthly Database incorporating national statistics.

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

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2 [1]	real, CPPY	-6.9	-8.1	-3.5	1.5	-3.1	-1.4	-1.1	0.2	-9.0	-0.1	1.1	-3.9	4.3	6.5	4.2
Industry, NACE Rev. 2 [1]	real, CCPPY	-6.9	-7.5	-6.0	-4.0	-3.8	-3.4	-3.0	-2.6	-3.4	-3.0	-2.6	-2.8	4.3	5.4	4.9
Industry, NACE Rev. 2 [1]	real, 3MMA	-2.9	-6.0	-3.2	-1.7	-1.0	-1.9	-0.8	-3.4	-3.0	-2.6	-1.0	0.1	1.6	4.9	.
Productivity in industry, NACE Rev. 2 [1]	CCPPY	-5.8	-5.9	-4.8	-2.6	-2.3	-1.7	-1.2	-0.5	-1.0	-0.3	-0.1	-0.3	4.5	4.9	4.0
Unit labour costs, exch.r. adj.(EUR) [1]	CCPPY	7.1	6.5	5.3	3.6	3.3	2.4	1.9	1.1	1.4	0.9	0.7	1.0	-1.6	-2.1	.
Construction, total, effect. work. time	real, CPPY	-0.6	-25.0	-12.6	-9.7	-7.2	-10.1	-4.5	-9.8	-16.2	-14.4	-15.8	-12.1	24.7	.	.
Construction, total, effect. work. time	real, CCPPY	-0.6	-13.4	-13.1	-12.2	-11.1	-10.9	-10.0	-9.9	-10.7	-11.1	-11.6	-11.6	24.7	.	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	.	643.6	.	.	648.2	.	.	652.5	.	.	657.8	.	.	.
Employed persons, LFS	CPPY	.	.	-0.9	.	.	0.8	.	.	0.6	.	.	2.9	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	.	297.3	.	.	294.2	.	.	288.2	.	.	290.3	.	.	.
Unemployment rate, LFS	%, avg	.	.	31.6	.	.	31.3	.	.	30.7	.	.	30.6	.	.	.
WAGES																
Total economy, gross	MKD	30768	30257	30876	30444	30636	30323	30469	30777	30556	30875	30595	31466	31090	30644	.
Total economy, gross	real, CPPY	-3.4	-1.9	0.8	-1.2	-2.4	-4.3	-2.2	-3.4	-4.3	-4.3	-4.3	-4.1	-2.6	-2.1	.
Total economy, gross	EUR	500	492	502	495	497	492	495	500	497	502	497	512	505	497	.
Industry, gross, NACE Rev. 2	EUR	413	395	404	405	414	407	416	422	414	424	413	423	425	405	.
PRICES																
Consumer	PP	1.2	0.5	0.4	1.1	-0.3	-0.5	-0.9	1.5	1.4	0.2	0.0	0.0	0.3	0.2	0.1
Consumer	CPPY	3.4	2.9	1.4	2.2	2.0	2.1	2.3	3.7	5.3	5.3	4.6	4.7	3.8	3.5	3.1
Consumer	CCPPY	3.4	3.1	2.5	2.5	2.4	2.3	2.3	2.5	2.8	3.1	3.2	3.3	3.8	3.7	3.5
Producer, in industry, NACE Rev. 2 [2]	PP	0.3	1.7	1.5	0.1	-0.6	0.2	-2.2	3.4	1.8	-0.8	-0.2	0.2	-0.3	-0.1	-0.4
Producer, in industry, NACE Rev. 2 [2]	CPPY	6.4	5.2	3.7	2.8	2.8	3.8	2.6	4.1	6.5	5.9	5.9	5.4	4.8	2.9	1.0
Producer, in industry, NACE Rev. 2 [2]	CCPPY	6.4	5.8	5.1	4.5	4.1	4.1	3.9	3.9	4.2	4.4	4.5	4.6	4.8	3.9	2.9
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	212	449	717	957	1236	1513	1787	2035	2305	2579	2852	3114	230	461	719
Imports total (cif), cumulated	EUR mn	369	725	1166	1624	2077	2472	2885	3292	3695	4156	4613	5063	375	739	1137
Trade balance, cumulated	EUR mn	-158	-277	-449	-667	-840	-959	-1098	-1257	-1389	-1577	-1762	-1948	-144	-278	-418
Exports to EU-27 (fob), cumulated	EUR mn	129	290	464	609	778	949	1123	1264	1430	1602	1777	1954	162	330	521
Imports from EU-27 (cif), cumulated	EUR mn	202	370	620	908	1176	1416	1686	1927	2163	2455	2709	2958	194	403	640
Trade balance with EU-27, cumulated	EUR mn	-73	-80	-156	-299	-398	-467	-563	-663	-734	-853	-932	-1004	-32	-73	-120
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-51	-80	-130	-208	-242	-217	-164	-157	-155	-199	-238	-291	-48	-73	.
EXCHANGE RATE																
MKD/EUR, monthly average	nominal	61.50	61.50	61.50	61.54	61.63	61.61	61.57	61.50	61.50	61.50	61.50	61.50	61.50	61.60	61.66
MKD/USD, monthly average	nominal	47.68	46.54	46.57	46.73	48.00	49.22	50.05	49.71	47.88	47.40	47.97	46.94	46.36	46.04	47.51
EUR/MKD, calculated with CPI [3]	real, Jan09=100	98.7	98.7	98.1	98.7	98.3	98.0	97.5	98.7	99.4	99.4	99.5	99.2	100.3	100.0	99.0
EUR/MKD, calculated with PPI [3]	real, Jan09=100	116.3	117.8	119.1	118.9	118.3	119.2	116.4	119.7	121.7	120.9	120.9	121.4	120.6	119.9	119.3
USD/MKD, calculated with CPI [3]	real, Jan09=100	95.4	97.8	97.4	97.9	95.1	92.5	90.2	91.6	96.0	97.3	96.5	98.9	100.2	100.3	97.0
USD/MKD, calculated with PPI [3]	real, Jan09=100	105.2	109.1	109.3	109.3	106.6	105.3	101.1	103.9	109.0	109.7	109.2	111.9	112.5	112.0	108.3
DOMESTIC FINANCE																
Currency outside banks	MKD bn, eop	18.2	18.3	17.9	18.1	18.4	18.8	20.4	19.6	19.2	18.8	18.3	20.1	18.9	18.8	20.7
M1	MKD bn, eop	60.2	59.8	59.3	60.9	59.8	61.2	63.3	62.4	63.2	63.8	62.2	65.9	62.6	64.1	66.2
Broad money	MKD bn, eop	255.3	256.2	257.6	256.3	257.1	258.5	263.2	261.7	260.5	262.3	263.0	266.3	265.0	268.7	270.5
Broad money	CPPY, eop	10.0	9.7	9.8	9.3	8.0	8.0	7.3	6.0	6.3	6.1	5.7	4.4	3.8	4.9	5.0
Central bank policy rate (p.a.) [4]	%, eop	4.00	4.00	4.00	3.97	3.71	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.49	3.48	3.42
Central bank policy rate (p.a.) [4][5]	real, %, eop	-2.2	-1.2	0.3	1.1	0.9	-0.1	1.1	-0.4	-2.6	-2.0	-2.1	-1.6	-1.3	0.5	2.3
BUDGET																
General gov.budget balance, cum. [6]	MKD mn	-1429	-3300	-4530	-4419	-5419	-8047	-9928	-10147	-12025	-13224	-14613	-17767	-2876	-6593	-11421

1) Enterprises with 10 and more persons employed.

2) Domestic output prices.

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

4) Central bank bills (28-days).

5) Deflated with annual PPI.

6) Central government budget plus extra-budgetary funds.

Source: wiiw Monthly Database incorporating national statistics.

M O N T E N E G R O: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	-24.5	-14.7	-4.0	20.8	4.8	-19.5	-1.7	-5.5	-15.8	-24.4	-6.0	17.0	1.6	-3.1	10.4
Industry, NACE Rev. 2	real, CCPPY	-24.5	-19.7	-14.7	-7.1	-5.2	-7.4	-6.6	-6.5	-7.6	-9.4	-9.1	-7.0	1.6	-0.8	3.3
Industry, NACE Rev. 2	real, 3MMA	-26.5	-14.7	-0.5	6.7	1.9	-5.9	-8.7	-7.9	-15.5	-15.6	-5.4	4.0	5.2	3.3	.
Productivity in industry, NACE Rev. 2	CCPPY	-17.2	-11.8	-6.2	1.7	3.7	1.2	2.0	2.5	0.4	-2.4	-2.8	-1.1	-1.0	-3.0	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	16.1	14.4	11.8	4.3	2.5	6.2	4.7	4.0	6.1	8.5	8.5	6.5	-2.5	0.9	.
LABOUR																
Employed persons, LFS [1]	th. pers., quart. avg	.	.	193.0	.	.	196.7	.	.	211.6	.	.	197.4	.	.	.
Employed persons, LFS [1]	CPPY	.	.	3.8	.	.	-1.0	.	.	4.6	.	.	1.4	.	.	.
Unemployed persons, LFS [1]	th. pers., quart. avg	.	.	50.3	.	.	49.1	.	.	48.9	.	.	51.3	.	.	.
Unemployment rate, LFS [1]	%	.	.	20.7	.	.	20.0	.	.	18.8	.	.	20.6	.	.	.
Employees total, registered	th. persons, avg	160.9	162.0	162.6	163.7	165.8	162.6	173.1	173.0	169.9	168.7	168.6	167.5	167.4	167.4	.
Unemployment, registered	th. persons, eop	31.3	31.5	31.6	31.3	30.1	29.4	28.7	28.5	28.3	29.5	30.7	31.2	31.9	32.6	.
Unemployment rate, registered	%, eop	16.3	16.3	16.3	16.1	15.4	15.3	14.2	14.6	14.3	14.9	15.4	15.7	16.0	16.3	.
WAGES																
Total economy, gross	EUR	754	739	730	733	727	722	716	716	721	717	713	741	734	734	723
Total economy, gross	real, CPPY	-6.2	-5.9	-1.6	0.8	-1.6	-1.9	-3.4	-2.9	-3.0	-4.1	-6.0	-2.3	-6.6	-3.8	-4.1
Industry, gross, NACE Rev. 2	EUR	904	920	901	910	880	936	842	873	883	868	911	907	873	912	.
PRICES																
Consumer	PP	0.8	1.0	0.4	0.5	0.4	0.2	0.2	0.4	0.4	1.1	-0.1	-0.3	-0.1	0.1	0.4
Consumer	CPPY	4.1	4.2	2.7	3.1	3.5	3.9	4.4	4.0	4.4	5.2	5.2	5.1	4.2	3.3	3.3
Consumer	CCPPY	4.1	4.2	3.7	3.6	3.5	3.6	3.7	3.6	3.8	3.9	4.1	4.1	4.2	3.7	3.6
Producer, in industry [2]	PP	1.0	0.4	-0.3	0.1	-0.2	1.8	0.0	4.2	-1.5	0.4	-0.1	-0.4	-0.1	0.2	-0.1
Producer, in industry [2]	CPPY	-0.6	-0.8	-1.5	-0.2	-0.3	1.8	0.9	5.1	3.5	4.3	2.8	5.7	4.6	3.9	4.2
Producer, in industry [2]	CCPPY	-0.6	-0.7	-1.0	-0.8	-0.7	-0.3	-0.1	0.6	0.9	1.2	3.4	1.9	4.6	4.3	4.2
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	27	51	85	116	151	182	214	245	276	302	334	367	28	59	.
Imports total (cif), cumulated	EUR mn	100	206	398	549	717	887	1065	1238	1386	1545	1681	1820	110	224	.
Trade balance, cumulated	EUR mn	-72	-155	-313	-433	-566	-705	-851	-993	-1110	-1243	-1347	-1454	-82	-164	.
Exports to EU-27 (fob), cumulated	EUR mn	9	16	25	35	49	59	68	74	84	91	99	105	7	19	.
Imports from EU-27 (cif), cumulated	EUR mn	41	86	153	211	279	342	409	477	530	594	645	702	37	81	.
Trade balance with EU-27, cumulated	EUR mn	-32	-69	-128	-176	-230	-282	-341	-404	-447	-502	-546	-597	-30	-62	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	.	-237	.	.	-490	.	.	-327	.	.	-587	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average	nominal	0.775	0.756	0.758	0.760	0.782	0.798	0.814	0.806	0.778	0.771	0.780	0.762	0.753	0.749	0.771
EUR/EUR, calculated with CPI [3]	real, Jan09=100	98.9	99.3	98.7	98.7	99.2	99.5	100.1	100.2	99.9	100.8	100.8	100.2	100.9	100.5	100.0
EUR/EUR, calculated with PPI [3]	real, Jan09=100	91.7	91.6	91.0	90.9	91.0	93.1	92.9	96.1	94.5	95.0	95.1	95.0	94.6	94.4	94.3
USD/EUR, calculated with CPI [3]	real, Jan09=100	101.2	99.3	99.2	99.7	103.1	105.6	108.1	106.9	103.1	103.3	104.9	102.5	100.8	99.5	102.7
USD/EUR, calculated with PPI [3]	real, Jan09=100	87.9	85.7	84.5	85.1	88.1	92.6	94.2	96.0	90.4	90.4	92.1	89.9	88.2	87.1	89.7
DOMESTIC FINANCE																
Central bank policy rate (p.a.) [4]	%, eop	9.02	9.00	8.99	8.93	8.91	8.89	8.87	8.87	8.86	8.82	8.83	8.83	8.80	8.81	.
Central bank policy rate (p.a.) [4][5]	real, %, eop	9.7	9.9	10.6	9.1	9.2	7.0	7.9	3.6	5.2	4.3	5.9	3.0	4.0	4.7	.
BUDGET																
General gov.budget balance, cum.	EUR mn	.	.	-41	.	.	-125	.	.	-90	.	.	-12	.	.	.

1) According to census April 2011.

2) Domestic output prices.

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

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

5) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating national statistics.

S E R B I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	-2.8	-12.9	-3.2	-2.2	-3.1	-4.0	-4.0	-0.8	-6.8	1.6	-3.3	0.8	2.5	13.2	0.8
Industry, NACE Rev. 2	real, CCPPY	-2.8	-8.0	-6.2	-5.2	-4.8	-4.6	-4.5	-4.1	-4.4	-3.8	-3.7	-3.3	2.5	7.7	5.1
Industry, NACE Rev. 2	real, 3MMA	-5.0	-6.2	-5.9	-2.8	-3.1	-3.7	-3.0	-4.0	-2.1	-2.9	-0.3	-0.2	5.0	5.1	.
Productivity in industry, NACE Rev. 2	CCPPY	-1.6	-6.8	-4.7	-3.7	-3.2	-0.1	-0.5	-0.4	-1.1	-0.7	-0.8	-0.6	4.0	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	4.9	14.2	11.7	8.9	6.4	1.1	0.6	0.0	-0.5	-1.1	-0.5	-0.8	-6.9	.	.
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	.	.	.	.	2157.6	.	.	.	.	.	2299.1	.	.	.
Employed persons, LFS	CPPY	.	.	.	.	.	-5.4	.	.	.	.	.	3.4	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	.	.	.	.	740.0	.	.	.	.	.	665.5	.	.	.
Unemployment rate, LFS	%	.	.	.	.	.	25.5	.	.	.	.	.	22.4	.	.	.
Employees total, registered	th. persons, avg	1338.0	1338.0	1339.0	1342.0	1341.0	1345.0	1345.0	1343.0	1343.0	1344.0	1343.0	1342.0	1336.0	.	.
Unemployment, registered	th. persons, eop	764.2	777.1	782.7	775.3	762.6	755.0	752.6	751.6	751.5	752.7	755.4	761.5	778.6	.	.
Unemployment rate, registered	%, eop	28.1	28.4	28.7	28.4	28.1	27.9	27.8	27.8	27.9	27.9	28.0	28.2	28.7	.	.
WAGES																
Total economy, gross	RSD	50829	55505	56125	58465	56206	58712	57240	58503	55903	57733	58914	65165	54447	60199	.
Total economy, gross	real, CPPY	1.4	6.9	9.2	4.1	10.1	1.9	-0.4	1.8	-5.7	-3.3	-1.0	-4.9	-4.9	-3.4	.
Total economy, gross	EUR	484	513	506	524	495	507	491	496	480	507	524	574	486	541	.
Industry, gross, NACE Rev. 2	EUR	487	498	498	513	471	495	482	492	459	496	512	547	472	.	.
PRICES																
Consumer [1]	PP	0.1	0.8	1.1	0.6	1.4	1.1	0.1	1.6	2.3	2.8	0.0	-0.4	0.6	0.5	0.0
Consumer [1]	CPPY	5.6	4.9	3.2	2.7	3.9	5.5	6.1	7.9	10.3	12.7	11.9	12.2	12.8	12.4	11.2
Consumer [1]	CCPPY	5.6	5.2	4.5	4.1	4.0	4.3	4.5	5.0	5.6	6.3	6.8	7.8	12.8	12.6	12.1
Producer, in industry, NACE Rev. 2 [2]	PP	0.4	0.8	1.8	0.1	-0.5	0.1	0.5	2.1	1.1	-0.5	-0.7	0.1	-0.1	0.1	0.2
Producer, in industry, NACE Rev. 2 [2]	CPPY	6.9	5.8	5.9	3.4	3.3	3.4	3.8	6.2	7.0	6.4	7.0	7.9	7.5	5.8	4.4
Producer, in industry, NACE Rev. 2 [2]	CCPPY	6.9	6.3	6.2	5.5	5.0	4.7	4.6	4.8	5.1	6.6	5.5	5.6	7.5	6.7	5.9
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	554	1075	1858	2587	3338	4137	4896	5619	6396	7244	8084	8841	665	1408	.
Imports total (cif), cumulated	EUR mn	1020	2095	3104	4287	5554	6745	7998	9139	10292	11630	12906	14299	1062	2195	.
Trade balance, cumulated	EUR mn	-466	-1021	-1245	-1700	-2216	-2608	-3102	-3519	-3896	-4386	-4821	-5459	-397	-787	.
Exports to EU-27 (fob), cumulated	EUR mn	351	666	1114	1531	1969	2436	2850	3235	3681	4181	4704	5136	445	926	.
Imports from EU-27 (cif), cumulated	EUR mn	533	1108	1907	2627	3360	4128	4873	5564	6271	7097	7854	8602	587	1294	.
Trade balance with EU-27, cumulated	EUR mn	-182	-442	-793	-1096	-1391	-1692	-2023	-2329	-2590	-2916	-3150	-3466	-142	-368	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-259	-645	-1174	-1387	-1621	-1913	-2033	-2177	-2459	-2682	-2747	-3152	-176	-289	.
EXCHANGE RATE																
RSD/EUR, monthly average	nominal	105.04	108.10	110.90	111.63	113.60	115.77	116.46	117.86	116.40	113.94	112.42	113.59	111.98	111.37	111.71
RSD/USD, monthly average	nominal	81.41	81.62	83.91	84.75	88.94	92.24	94.67	95.14	90.52	87.86	87.91	56.58	84.30	83.22	86.20
EUR/RSD, calculated with CPI [3]	real, Jan09=100	102.0	99.4	97.0	96.5	96.2	95.5	95.4	95.5	98.3	102.9	104.5	102.6	105.6	106.2	105.0
EUR/RSD, calculated with PPI [3]	real, Jan09=100	113.2	110.3	109.1	108.3	106.2	104.8	104.5	104.7	107.0	108.9	109.8	109.0	110.1	110.5	110.3
USD/RSD, calculated with CPI [3]	real, Jan09=100	99.2	99.3	96.9	96.3	93.1	90.9	88.8	89.3	95.6	101.3	101.7	157.7	106.2	107.2	103.3
USD/RSD, calculated with PPI [3]	real, Jan09=100	103.0	103.1	100.8	100.1	95.8	93.4	91.4	91.6	96.5	99.4	99.5	154.9	103.4	103.9	100.6
DOMESTIC FINANCE																
Currency outside banks	RSD bn, eop	107.2	111.2	106.9	109.0	102.1	105.3	109.8	110.2	111.0	101.6	100.7	110.5	95.9	99.3	102.1
M1	RSD bn, eop	275.2	286.3	266.4	275.6	262.2	269.0	275.2	277.1	290.2	273.3	277.7	308.7	278.9	300.0	311.6
Broad money [4]	RSD bn, eop	1483.0	1522.8	1499.7	1531.2	1574.7	1588.6	1607.5	1616.9	1607.6	1580.2	1612.5	1641.8	1580.2	1612.9	1622.7
Broad money [4]	CPPY, eop	12.0	16.4	14.0	19.0	22.3	18.1	15.5	15.0	13.8	11.9	10.6	9.4	6.6	5.9	8.2
Central bank policy rate (p.a.) [5]	%, eop	9.50	9.50	9.50	9.50	9.50	10.00	10.25	10.50	10.50	10.75	10.95	11.25	11.50	11.75	.
Central bank policy rate (p.a.) [5][6]	real, %, eop	2.4	3.5	3.4	5.9	6.0	6.4	6.2	4.0	3.3	4.1	3.7	3.1	3.7	5.6	.
BUDGET																
Central gov.budget balance, cum.	RSD mn	-10428	-41633	-52741	-82903	-89274	-111197	-111175	-123086	-145164	-147916	-161351	-191979	-6988	-35279	-49816

1) According to COICOP classification.

2) Domestic output prices.

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

4) Excluding frozen foreign currency savings deposits of households.

5) Two-week repo rate.

6) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating national statistics.

R U S S I A: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, total	real, CPPY	3.7	6.4	2.0	1.2	3.6	2.0	3.4	2.1	1.9	1.8	1.8	1.4	-0.9	-2.3	2.4
Industry, total	real, CCPPY	3.7	5.0	3.9	3.3	3.3	3.1	3.1	3.0	2.9	2.8	2.7	2.6	-0.9	-1.6	-0.2
Industry, total	real, 3MMA	4.1	3.9	3.1	2.3	2.3	3.0	2.5	2.5	1.9	1.8	1.6	0.8	-0.5	-0.2	.
Construction, total	real, CPPY	8.5	4.6	2.9	4.5	5.4	4.0	1.0	1.2	-5.2	6.6	0.6	1.6	1.4	0.3	0.2
Construction, total	real, CCPPY	8.5	6.5	5.0	4.9	5.0	4.7	4.0	3.6	2.3	2.8	2.6	2.4	1.4	0.8	0.6
LABOUR																
Employed persons, LFS [1]	th. pers., avg	70124	70099	70005	71021	72361	72441	72476	72757	72385	71697	71639	71540	70730	71001	70967
Employed persons, LFS [1]	CPPY	1.3	0.8	0.4	1.7	1.6	1.3	1.0	0.9	0.4	0.9	0.8	0.7	0.9	1.3	1.4
Unemployed persons, LFS [1]	th. pers., avg	4751	4658	4699	4205	3994	3981	3963	3814	3844	3888	3949	3825	4477	4337	4252
Unemployment rate, LFS [1]	%, avg	6.3	6.2	6.3	5.6	5.2	5.2	5.2	5.0	5.0	5.1	5.2	5.1	6.0	5.8	5.7
Unemployment, registered	th. persons, eop	1298.0	1331.0	1313.0	1254.0	1185.0	1127.0	1086.0	1068.0	1022.0	987.0	1017.0	1065.0	1073.0	1099.0	1053.0
Unemployment rate, registered	%, eop	1.7	1.8	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.5	1.4
WAGES																
Total economy, gross	RUB	23746	24036	25487	25800	26385	27494	26684	25718	25996	26803	27448	36450	26840	26620	28483
Total economy, gross	real, CPPY	10.3	12.0	8.3	10.5	11.7	9.1	7.0	5.3	3.9	6.5	6.1	4.2	5.5	3.2	4.4
Total economy, gross	EUR	583	609	657	665	670	667	667	650	643	665	681	905	667	659	713
Industry, gross [2]	EUR	544	569	610	614	622	589	627	625	602	623	616	521	613	604	.
PRICES																
Consumer	PP	0.5	0.4	0.6	0.3	0.5	0.9	1.2	0.1	0.6	0.5	0.3	0.5	1.0	0.6	0.3
Consumer	CPPY	4.2	3.8	3.8	3.7	3.7	4.4	5.6	6.0	6.6	6.6	6.5	6.6	7.1	7.3	7.0
Consumer	CCPPY	4.2	4.0	3.9	3.8	3.8	3.9	4.1	4.4	4.6	4.8	5.0	5.1	7.1	7.2	7.2
Producer, in industry [3]	PP	-0.2	1.1	2.2	0.7	-2.4	-0.9	-1.1	5.1	4.8	-1.6	-1.2	-1.1	-0.4	0.8	0.5
Producer, in industry [3]	CPPY	9.4	6.9	7.8	6.4	2.8	4.3	5.1	7.0	11.6	8.8	6.5	5.2	5.0	4.7	3.1
Producer, in industry [3]	CCPPY	9.4	8.1	8.0	7.6	6.6	6.2	6.1	6.2	6.8	7.0	6.9	6.8	5.0	4.9	4.3
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	30876	64561	100043	133883	168935	201163	234412	267454	300985	336594	371617	407850	28957	60136	.
Imports total (cif), cumulated	EUR mn	13920	31760	52289	71298	91936	112217	135037	157654	177536	201102	223520	246031	14601	32606	.
Trade balance, cumulated	EUR mn	16955	32800	47754	62585	77000	88946	99376	109800	123449	135493	148097	161819	14356	27530	.
FOREIGN FINANCE																
Current account, cumulated [4]	EUR mn	.	.	29878	.	.	42944	.	.	48361	.	.	58199	.	.	21103
EXCHANGE RATE																
RUB/EUR, monthly average	nominal	40.730	39.490	38.800	38.820	39.380	41.230	40.030	39.560	40.450	40.320	40.310	40.290	40.260	40.390	39.950
RUB/USD, monthly average	nominal	31.510	29.880	29.370	29.470	30.650	32.910	32.500	31.970	31.520	31.090	31.410	30.740	30.260	30.160	30.800
EUR/RUB, calculated with CPI [5]	real, Jan09=100	119.5	123.1	124.8	124.5	123.4	119.1	124.6	125.8	123.0	123.7	124.2	124.5	126.8	126.7	127.3
EUR/RUB, calculated with PPI [5]	real, Jan09=100	145.9	151.3	156.7	157.5	151.9	144.6	147.0	155.3	158.9	157.1	155.6	154.3	153.3	153.5	156.0
USD/RUB, calculated with CPI [5]	real, Jan09=100	114.5	120.8	122.6	122.3	118.2	111.3	114.3	115.6	117.4	119.8	119.4	122.9	125.8	125.9	123.3
USD/RUB, calculated with PPI [5]	real, Jan09=100	130.9	138.8	142.5	143.3	135.7	126.7	126.6	133.5	140.8	141.0	139.2	140.9	141.9	142.2	140.0
DOMESTIC FINANCE																
Currency outside banks	RUB bn, eop	5670.7	5713.0	5704.3	5831.5	5856.4	6003.9	5976.3	5980.0	5969.2	5931.3	5975.4	6430.1	6078.9	6140.9	.
M1	RUB bn, eop	12301.2	12285.6	12273.2	12230.8	12353.7	12621.3	12470.9	12293.8	12375.0	12305.2	12459.4	13753.6	13172.8	13249.9	.
M2	RUB bn, eop	27993.7	28084.4	28345.8	28504.3	29045.7	29340.8	29267.5	29410.0	29512.1	29807.3	30046.9	32226.4	31653.3	32190.9	.
M2	CPPY, eop	20.9	19.5	20.1	20.2	21.0	20.1	19.2	18.0	15.0	16.7	14.3	12.1	13.1	14.6	.
Central bank policy rate (p.a.) [6]	%, eop	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.25	8.25	8.25	8.25	8.25	8.25
Central bank policy rate (p.a.) [6][7]	real, %, eop	-1.3	1.0	0.2	1.5	5.1	3.6	2.8	1.0	-3.2	-0.5	1.6	2.9	3.1	3.3	5.0
BUDGET																
Central gov.budget balance, cum.	RUB bn	27.2	-199.6	-70.2	-51.3	132.1	270.7	285.1	532.4	671.2	723.8	793.7	-37.0	-15.6	-169.0	.

1) Revised data according to census October 2010.

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

3) Domestic output prices.

4) BOP 6th edition.

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 national statistics.

U K R A I N E: Selected monthly data on the economic situation 2012 to 2013

(updated end of Apr 2013)

		2012												2013		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PRODUCTION																
Industry, NACE Rev. 2	real, CPPY	2.4	3.0	0.3	1.3	3.1	0.1	1.6	-2.0	-3.9	-2.5	-2.2	-5.6	-3.7	-5.9	-5.2
Industry, NACE Rev. 2	real, CCPPY	2.4	2.7	1.8	1.7	2.0	1.7	1.6	1.2	0.6	0.2	0.0	-0.5	-3.7	-4.8	-4.9
Industry, NACE Rev. 2	real, 3MMA	3.0	1.8	1.5	1.5	1.5	1.6	-0.1	-1.5	-2.8	-2.9	-3.4	-3.8	-5.1	-4.9	.
Productivity in industry [1]	CCPPY	2.6	2.5	1.6	1.6	1.8	1.6	1.6	1.1	0.4	0.3	0.2	-0.3	.	.	.
Unit labour costs, exch.r. adj.(EUR) [1]	CCPPY	17.7	18.9	17.3	18.3	19.6	20.9	22.0	23.3	23.1	22.6	22.3	21.5	.	.	.
Construction, NACE Rev. 2	real, CCPPY	17.8	9.2	6.2	7.1	9.0	6.0	2.0	-0.8	-2.1	-3.8	-6.4	-8.3	-7.6	-8.4	-16.8
LABOUR																
Employed persons, LFS	th. pers., quart. avg	.	.	20040	.	.	20541	.	.	20856	.	.	19980	.	.	.
Employed persons, LFS	CPPY	.	.	-0.3	.	.	0.8	.	.	0.4	.	.	-0.2	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	.	1845	.	.	1576	.	.	1469	.	.	1739	.	.	.
Unemployment rate, LFS	%	.	.	8.4	.	.	7.1	.	.	6.6	.	.	8.0	.	.	.
Employees total, registered [1]	th. persons, avg	10598	10602	10613	10613	10579	10595	10592	10554	10536	10527	10469	10359	10195	10210	10208
Unemployment, registered	th. persons, eop	521	547	531	486	465	447	438	427	416	400	441	507	565	589	572
Unemployment rate, registered [2]	%, eop	1.9	2.0	1.9	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.6	1.8	2.0	2.1	2.0
WAGES [1]																
Total economy, gross	UAH	2722	2799	2923	2942	3015	3109	3151	3073	3064	3110	3098	3377	3000	3044	3212
Total economy, gross	real, CPPY	14.2	16.2	13.3	15.5	17.8	16.2	14.7	14.1	12.0	14.0	13.8	10.8	10.4	9.3	10.8
Total economy, gross	EUR	264	265	278	280	294	311	321	311	299	300	302	322	283	284	310
Industry, gross [3]	EUR	312	312	319	322	342	346	366	367	346	351	349	364	334	338	357
PRICES																
Consumer	PP	0.2	0.2	0.3	0.0	-0.3	-0.3	-0.2	-0.3	0.1	0.0	-0.1	0.2	0.2	-0.1	0.0
Consumer	CPPY	3.7	3.0	1.9	0.6	-0.5	-1.2	-0.1	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.5	-0.8
Consumer	CCPPY	3.7	3.4	2.9	2.3	1.7	1.2	1.0	0.9	0.8	0.7	0.6	0.6	-0.2	-0.4	-0.5
Producer, in industry [4]	PP	-0.8	0.8	1.1	3.7	0.2	0.7	-2.9	0.5	0.2	-1.5	0.0	-1.5	0.3	-1.6	2.2
Producer, in industry [4]	CPPY	11.8	7.5	6.5	6.8	4.3	4.5	1.3	1.3	0.3	0.6	0.0	0.4	1.5	-0.9	0.2
Producer, in industry [4]	CCPPY	11.8	9.6	8.5	8.1	7.3	6.8	6.0	5.4	4.8	4.3	3.9	3.6	1.5	0.3	0.3
FOREIGN TRADE, customs statistics																
Exports total (fob), cumulated	EUR mn	4128	7878	12333	16734	21602	25970	30636	35332	39635	44574	49162	53523	3858	7864	.
Imports total (cif), cumulated	EUR mn	4173	9296	14553	20074	25979	31535	37364	43216	48587	54525	59897	65851	3846	8542	.
Trade balance, cumulated	EUR mn	-45	-1418	-2220	-3340	-4377	-5565	-6728	-7884	-8953	-9951	-10736	-12328	12	-678	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	.	-1568	.	.	-4505	.	.	-7718	.	.	-11485	.	.	-1326
EXCHANGE RATE																
UAH/EUR, monthly average	nominal	10.301	10.544	10.533	10.511	10.265	10.012	9.829	9.890	10.248	10.373	10.256	10.486	10.597	10.700	10.365
UAH/USD, monthly average	nominal	7.990	7.989	7.986	7.987	7.991	7.993	7.993	7.993	7.993	7.993	7.993	7.993	7.993	7.993	7.993
EUR/UAH, calculated with CPI [5]	real, Jan09=100	116.0	112.9	112.2	111.9	114.4	117.1	119.5	117.9	113.2	111.6	112.9	110.2	110.2	108.6	111.1
EUR/UAH, calculated with PPI [5]	real, Jan09=100	140.1	137.3	138.5	143.6	147.8	153.4	151.4	150.1	144.9	141.2	143.1	138.2	136.7	132.8	140.1
USD/UAH, calculated with CPI [5]	real, Jan09=100	111.7	111.4	110.9	110.6	110.3	110.2	110.1	109.2	108.8	108.9	109.2	109.7	109.7	108.6	108.4
USD/UAH, calculated with PPI [5]	real, Jan09=100	126.3	126.7	126.6	131.5	132.9	135.2	131.1	130.0	129.2	127.8	128.9	127.2	127.0	123.8	126.6
DOMESTIC FINANCE																
Currency outside banks	UAH bn, eop	184.6	186.5	187.9	194.5	194.8	200.4	201.5	200.8	199.8	195.0	190.9	203.2	198.0	201.4	206.1
M1	UAH bn, eop	302.7	300.0	308.6	315.8	313.6	319.0	323.6	318.6	321.0	312.8	302.1	323.2	326.5	329.8	337.5
Broad money	UAH bn, eop	675.5	679.7	691.3	703.7	701.1	710.4	721.0	725.1	731.7	729.7	729.0	773.2	780.1	788.1	800.9
Broad money	CPPY, eop	12.4	12.3	11.3	10.2	10.2	8.9	9.7	9.1	10.5	9.5	11.6	12.8	15.5	16.0	15.9
Central bank policy rate (p.a.) [6]	%, eop	7.75	7.75	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Central bank policy rate (p.a.) [6][7]	real, %, eop	-3.6	0.2	1.0	0.7	3.1	2.9	6.1	6.1	7.1	6.8	7.5	7.1	5.9	8.5	7.3
BUDGET																
General gov.budget balance, cum.	UAH mn	2069	4759	-712	-6384	-4803	-9743	-18868	-14833	-21262	-29184	-33915	-50730	-615	-1283	-5684

1) Enterprises with 10 and more employees.

2) Ratio of unemployed to average working age population.

3) From 2013 NACE Rev. 2.

4) Domestic output prices. From 2013 NACE Rev. 2.

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

6) Discount rate.

7) Deflated with annual PPI.

Source: wiiw Monthly Database incorporating national statistics.

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