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# Import intensities of production in the New EU Member States in 1995 and 2006

BY LEON PODKAMINER

Within a short period after the start of their transition, the former European 'planned economies' began to integrate through trade (and later through foreign direct investment) with the European (and global) economy. The volumes of exports and imports have grown much faster than their GDP. In current euro terms, exports and imports have tended to rise at double-digit rates in the longer run. For example, the value of imports rose about 5-fold in Slovakia, Romania and Hungary between the years 1995 and 2006. This trend (occasionally disturbed by temporary setbacks as, for example, during the 2009 global crisis) is reflected in the consistent rise in the GDP shares of exports and imports.

There has been a wealth of easily accessible statistical data on international trade, also for most transition countries. Data on trade transactions are classified according to very many criteria, including their geographical origins/destinations, various commodity classifications, volume, price and quality indices, labour and capital contents, etc. However, it is not easy to distinguish trade transactions by their direct use. Of course, some goods and services commonly imported can be unequivocally considered as serving a single purpose such as final consumption, or investment, or to be used as production inputs (intermediate consumption). But at the usual levels of aggregation the items traded can – and do – serve multiple alternative purposes.

An evaluation of trade transactions distinguished not only by their source (country of origin and economic sector) and their destination (importing country and economic sector), but also by purpose (final consumption, or gross capital formation, or intermediate consumption) is now becoming relatively easy. This is due to the large-scale international collaborative research concerned with the construction and application of the world input-output database (Project WIOD)<sup>1</sup>, in which the Vienna Institute for International Economic Studies takes an active part. The world input-output tables (WIOTs) which are delivered by WIOD, currently covering the years 1995-2006, distinguish 40 countries (including all NMS, Russia and Turkey) and 35 sectors (in total 1400 separate production activities). The WIOTs specify all cross-industry cross-country flows of intermediates (and also of final products).

While the full potential – and limitations<sup>2</sup> – of the WIOTs remain to be researched, some of their preliminary applications may lead to interesting conclusions. In particular, it is possible to assess, tentatively, the intermediate-input intensities of national gross output (not to be confused with the GDP<sup>3</sup>). Table 1 presents such intensities for ten NMS, Turkey and Russia as well as China, Germany and the USA, for the years 1995 and 2006. Table 1 distinguishes between imported and domestic intermediates.

As can be seen, the intermediate-input intensities (both imported and of domestic origin) of gross output differed across countries. There are many factors underlying the differences. Highly developed countries may have lower intermediate-input intensities on account of higher technical efficiency (due to more advanced equipment, more materialsaving technologies and higher labour skills). Besides, in highly developed countries the share of services in gross output tends to be higher (and services tend to require less intermediates per unit

<sup>&</sup>lt;sup>1</sup> See www.wiod.org.

<sup>&</sup>lt;sup>2</sup> The usual limitations inherent in the traditional national inputoutput analysis (e.g. following the assumption of fixedproportions technologies) characterize also the WIOT-based analyses. In addition, all activities captured in WIOTs are expressed in value terms (in current USD, at average official exchange rates). The differences in national price levels for various activities are disregarded.

<sup>&</sup>lt;sup>3</sup> Gross national output equals GDP plus total intermediate consumption. A sector's gross output equals its gross value added plus its intermediate consumption.

#### Intermediate domestic and imported inputs as shares of national gross output in 1995 and 2006 (%)

		1995			2006		Ind	(%)	
	Imported	Domestic	Total	Imported	Domestic	Total	Imported	Domestic	Total
Bulgaria	13.6	40.2	53.8	22.4	37.8	60.1	164.3	94.0	111.8
Czech Rep.	13.4	46.6	60.0	19.7	43.1	62.8	146.4	92.6	104.7
Estonia	18.7	38.8	57.5	21.2	34.5	55.7	113.4	88.9	96.9
Hungary	13.9	38.4	52.2	24.9	31.5	56.4	179.5	82.2	108.0
Lithuania	15.8	36.8	52.6	19.4	28.0	47.4	122.5	76.1	90.1
Latvia	14.4	34.3	48.7	15.9	39.1	55.0	110.7	113.9	113.0
Poland	6.6	44.2	50.8	13.4	40.3	53.8	204.2	91.2	105.8
Romania	10.5	41.8	52.3	13.9	36.8	50.8	133.2	88.1	97.1
Slovakia	15.2	43.8	59.1	25.0	33.5	58.5	164.2	76.4	99.0
Slovenia	13.4	39.7	53.1	19.6	34.5	54.0	146.3	86.8	101.8
Turkey	6.4	35.2	41.6	9.3	39.5	48.8	146.4	112.2	117.5
Russia	4.1	46.3	50.4	4.0	42.8	46.8	97.5	92.4	92.8
China	4.9	55.8	60.7	7.5	58.1	65.6	151.4	104.1	108.0
Germany	6.7	37.9	44.6	11.3	37.3	48.6	168.9	98.3	108.9
USA	3.7	41.5	45.1	5.1	42.2	47.3	138.2	101.8	104.7
Source: WIOTs	1995 and 200	6 (January 201	1 version), o	wn calculations	S.				

of output than goods). On the other hand, in much less developed countries intermediate inputs may be substituted by higher levels of cheap labour employed. Further, large and relatively closed economies may tend to have lower intensities of imported inputs. All in all, there are many factors (possibly acting at cross purposes) which eventually determine the size of input intensities.

Between 1995 and 2006 the intermediate-inputs intensity of imports increased, in most cases very strongly, almost everywhere (Russia was the only exception). In all NMS (except Latvia) this development was associated with the decline in the intensity of the domestically produced intermediates (as in Germany). This development can be interpreted as a result of substitution of domestic inputs by the imported ones. Possibly, such a substitution reflects growing integration of the NMS into the EU (also on account of increased levels of foreign direct investment, rising popularity of outsourcing and cross-border networking). Also, the rise of intensity of imported intermediates, coupled with falling intensity of domestic inputs, can be a reflection of liberalization of international trade and falling trading costs: both processes have certainly taken place between 1995 and 2006.

The intensities of imported inputs in Table 1 are direct ones: they express the value of direct imports of intermediate inputs per unit of gross output (the latter also in value terms). But a part of the gross output produced due to the use of imported intermediates goes back to production, possibly also in other sectors. Domestic intermediate inputs contain some admixture of imported intermediates. To account for such secondary (tertiary, etc.) use of imported intermediates one defines the so-called full (or indirect) intensity coefficients which measure eventual import intensities of the *final use* of goods and services produced nationally.<sup>4</sup>

Intensities in Table 1 allow the computation of some rough (aggregate) estimates of such indirect import intensities at the national level. These estimates measure the compound content of total imports of intermediate goods in aggregate final use of goods and services produced by the national economy.

<sup>&</sup>lt;sup>4</sup> In WIOTs the final use of nationally produced goods and services covers consumption, private and public, plus gross capital formation, realized both at home and abroad (i.e. exported).

	19	95	20	06	Index 2006	
	А	В	А	В	А	В
Bulgaria	29.4	29.9	56.0	47.2	190.3	157.9
Czech Rep.	33.6	33.8	52.8	48.9	157.4	144.7
Estonia	44.0	38.4	47.9	44.5	108.8	115.9
Hungary	29.0	31.5	57.0	58.5	196.7	185.7
Lithuania	33.4	33.1	36.9	37.5	110.3	113.3
Latvia	28.0	31	35.4	32.4	126.2	104.5
Poland	13.4	17.2	29.0	27.7	217.2	161.0
Romania	21.9	24.2	28.3	27.6	129.2	114.0
Slovakia	37.2	39.2	60.2	61	161.9	155.6
Slovenia	28.5	28.1	42.6	43.7	149.3	155.5
Turkey	10.9	12.8	18.2	18.1	167.2	141.4
Russia	8.3	9.3	7.5	9.5	90.8	102.2
China	12.6	14.3	21.7	19.5	172.7	136.4
Germany	12.1	13.8	21.9	24.1	181.9	174.6
USA	6.7	9.1	9.6	9.3	143.9	102.2

#### Full national import intensities (imports/final use output) in 1995 and 2006 (%)

Source: Own calculations, based on WIOTs for 1995 and 2006. Column A reports intensities derived via the simplified formula described, Column B reports intensities accounting for the sectoral structures of individual economies and their links with other countries.

The formula for the computation of such estimates is quite simple:

whole array (or 'vector') of full import intensities for all sectors and countries equals

#### D\*(I-A)<sup>-1</sup>

Full import intensity = 100\*Direct import intensity / (100-Total direct intensity)

Full import intensities for 1995 and 2006 computed with the above formula are shown in Columns A in Table 2.

Admittedly, the intensities in Columns A are only rough estimates of the actual full import intensities. The underlying formula does not take account of the internal (sectoral) structures of individual countries and the differences in direct input intensities (both imported and domestic) across various activities.

A better way to calculate the full national import intensities requires, first, the computation of full import intensities for individual (sectoral) activities and, second, averaging of these full sectoral import intensities. Computation of full import intensities at the sectoral level requires application of the methods of fairly advanced algebra, well known from the traditional input-output analysis. Specifically, the where D is the vector of direct import intensities (across sectors and countries) and A is the inputoutput matrix.  $(I-A)^{-1}$  is the so-called Leontief Inverse<sup>5</sup>. In this article we are interested only in some segments of the D\* $(I-A)^{-1}$  vector, namely those for the NMS and other countries now considered.

Table 3 shows direct and full sectoral import intensities for the Czech Republic (results for other countries may be obtained on request).

The total full import intensities for the Czech Republic in 1995 and 2006 (weighted averages from the last row of Table 3) are 33.8% and 48.9% respectively. These numbers feature in Table 2, Columns B. Columns B in Table 2 report the full import intensities for the remaining countries of interest –

<sup>&</sup>lt;sup>5</sup> A single Leontief Inverse for any year delivers, simultaneously, data that are used for the computation of full sectoral import intensities for all remaining 39 participating countries).

# Direct and full import intensities for the Czech Republic, 1995 and 2006 (%) and the gross output and final use weights

		Inter	nsities			Weights				
	19	95	20	006	19	95	20	06		
	<b>D</b> :re_et <sup>1</sup> )	<b>–</b> 2)	Dire et <sup>1</sup> )	<b>-</b> <sup>2)</sup>	Gross	Final	Gross	Final		
	Direct	Full /	Direct	Full /	output	use	output	use		
Agriculture etc.	8.2	23.7	11.9	28.7	0.043	0.057	0.023	0.017		
Mining	9.0	24.3	13.5	30.0	0.017	0.034	0.010	0.002		
Food etc.	10.5	30.8	8.9	24.9	0.062	0.042	0.039	0.060		
Textiles	23.4	49.1	28.9	78.3	0.022	0.022	0.011	0.013		
Leather, Footwear	23.5	47.9	32.4	88.9	0.005	0.003	0.001	0.002		
Wood Products	9.6	27.5	12.4	34.0	0.010	0.015	0.011	0.002		
Paper , Printing	17.5	38.6	21.1	58.4	0.017	0.024	0.017	0.010		
Coke, Petroleum	45.2	61.4	74.5	189.5	0.017	0.025	0.015	0.007		
Chemicals	24.3	48.1	28.3	76.4	0.021	0.031	0.021	0.014		
Rubber, Plastics	32.6	62.9	35.1	101.3	0.011	0.015	0.026	0.008		
Non-Metallic Minerals	12.5	32.3	16.3	41.9	0.019	0.029	0.019	0.004		
Basic Metals	20.2	45.3	28.5	81.3	0.067	0.099	0.061	0.011		
Machinery, Nec	18.4	42.9	31.6	91.4	0.034	0.037	0.039	0.048		
Electrical and Optical Equipment	31.0	59.2	53.9	173.5	0.030	0.036	0.071	0.070		
Transport Equipment	22.8	53.9	36.1	114.2	0.027	0.027	0.067	0.079		
Manufacturing, Nec; Recycling	13.6	34.8	21.6	61.9	0.014	0.015	0.016	0.020		
Electricity, Gas, Water	10.2	29.0	31.7	67.6	0.062	0.082	0.039	0.046		
Construction	12.9	35.9	11.0	31.9	0.097	0.067	0.087	0.114		
Retail Sale: Vehicles, Fuel	10.1	28.0	13.1	30.7	0.017	0.020	0.014	0.008		
Wholesale Trade	8.9	23.3	7.0	14.8	0.049	0.048	0.049	0.035		
Retail Trade, Except of Motor Vehicles	7.2	19.4	4.7	9.4	0.025	0.022	0.027	0.025		
Hotels etc	7.1	20.3	5.7	13.4	0.021	0.010	0.015	0.026		
Inland Transport	8.0	23.2	9.4	21.3	0.035	0.038	0.032	0.019		
Water Transport	13.2	31.7	18.2	54.2	0.001	0.002	0.000	0.000		
Air Transport	11.1	29.7	21.9	61.9	0.003	0.003	0.004	0.003		
Other Transport Activities	13.5	27.5	10.6	25.5	0.028	0.024	0.028	0.028		
Post and Telecom	11.8	23.5	6.1	11.9	0.014	0.017	0.019	0.015		
Financial Intermediation	6.8	18.6	7.1	16.7	0.026	0.040	0.028	0.020		
Real Estate Activities	5.0	16.6	8.2	19.3	0.046	0.031	0.042	0.065		
Renting, Other Business Activities	12.2	27.3	7.8	18.0	0.055	0.058	0.066	0.017		
Public Administration	4.9	14.0	3.8	6.6	0.030	0.006	0.030	0.070		
Education	4.6	13.0	5.1	8.3	0.022	0.003	0.020	0.047		
Health and Social Work	12.4	27.2	10.9	20.8	0.025	0.003	0.023	0.055		
Other Community Services	11.2	27.2	7.6	17.3	0.024	0.016	0.028	0.043		
TOTAL (weighted average)	13.4	33.8	19.7	48.9	1.000	1.000	1.000	1.000		

1) Imports per gross output. - 2) Imports per final use (final use = consumption plus gross fixed capital formation domestic and abroad). Source: Own calculations based on WIOT 1995, 2006, January 2011 version.

all derived in the same way as the intensities for the Czech Republic. (Of course, the weights and sectoral import intensities for other countries are different from those for the Czech Republic.)

Reassuringly, it transpires that both ways of calculating the national full import intensities (Table 2) produce reasonably similar results. Table 2 suggests the following conclusions:

 Generation of final use goods and services (final supply) in most NMS is highly dependent on supplies of foreign intermediate inputs. Slovakia and Hungary are most dependent on such imports. Poland's dependence is lower – but is increasing swiftly.

- 2. The three Baltic countries and Romania are relatively less dependent and/or have shown low dynamics of dependence on imports of production inputs. This suggests that the pace of production integration of these countries lags (at least as of 2006) behind that of other NMS. Very high trade and current account deficits that had developed in these countries in the course of the previous decade represented inflated imports of final (consumption and investment) goods and services, leaving imports of productive inputs at little changed levels in relation to final supply produced.
- The levels of import dependence of Turkey, China and Germany are similar – and much lower than in the main NMS countries. However, the import dependence of these countries is rising swiftly (especially in Germany, with which the main NMS are integrating).
- 4. Finally, the two continental-size economies: Russia and the USA are essentially independent in terms of imports of intermediates. This may reflect the sizes of these two economies, as well as the fact that both are experiencing deindustrialization of some sort (Russia on account of specialization in mining, the USA on account of rising imports of manufactured consumer goods from East Asia).

# A note on social indicators for MENA and transition countries

BY MARIO HOLZNER

This note briefly compares some social indicators for the 8 Mediterranean Middle East and North Africa (MENA) countries<sup>1</sup> with those for the 10 new EU member states of Central and Eastern Europe (CEE), the 7 Western Balkan Countries (WBC) and the 12 post-Soviet countries of the Commonwealth of Independent States (CIS).

Not unlike the WBC and CIS countries, the MENA countries are located at the periphery of the European Union (EU). The MENA countries are now in a process of transition that in many respects resembles the challenges experienced by CIS, WBC or CEE countries some twenty years ago.<sup>2</sup> As elsewhere, the transition in MENA is likely to result in some economic and political liberalization, possibly followed by gradual integration with the EU. Higher migration from MENA to the EU might follow. The future social conditions are likely to affect the migration rates. Of course, it is still too early to predict the directions of the evolution of social conditions in MENA. However, it is possible to reflect on recent years (mostly covering the period 2000-2009) referring to the Development Indicators available from the World Bank<sup>3</sup>.

# Demography

Age dependency ratios are relatively high throughout the region. The ratio of dependents, i.e. people younger than 15 or older than 64, to the workingage population (those aged 15-64) stands at around 45% in transition countries and is about 10 percentage points higher in the MENA region. Apart from that, the transition countries mostly deal with an ever aging society while in MENA the number of young dependents is huge. MENA societies are still growing which is reflected in fertility rates (births per woman) close to 3 while most CIS countries manage to keep population stable and CEE and WBC mostly shrink with fertility rates around 1.5. Unsurprisingly, in the MENA countries almost a third of the population is younger than 14. This is double the rate as compared to the CEE countries. The WBC and CIS countries are somewhere in between the figures for MENA and CEE countries.

## Labour market

Differences can also be found on the labour markets. The labour participation rate (population aged 15+) is the lowest in the MENA region with only half of the working-age population participating in the labour force. In the other regions this figure is closer to 60%. In terms of unemployment rates MENA, CEE and CIS economies display quite similar levels of around 10%. The outliers are the WBCs with more than double that figure. This is similar in terms of youth unemployment where MENA, CEE and CIS countries have rates of around 20%, while again this figure is more than double that value in the WBCs. However, there are many missing observations which make a comparison of averages difficult.

# **Educational levels**

In terms of education the MENA countries are lagging behind. Secondary school enrolment is at about 80% in MENA but almost 100% in CEE. WBC and CIS countries lie in between. Differences are more pronounced in tertiary school enrolment rates. Tertiary school enrolment in MENA makes up only about one third of its officially corresponding age group. This rate is double the size in CEE. The WBC and CIS countries are once again in between. Also the social systems are less developed in the MENA region. Social contributions as a share of government revenues account for only about 10% in the countries of the MENA region where data on this item are available. This item is threefold larger in the CEE and WBC area and about double the size in the CIS.

<sup>&</sup>lt;sup>1</sup> Here, MENA is defined to consist of Algeria, Egypt, Lebanon, Libya, Morocco, Syria, Tunisia and West Bank-Gaza.

<sup>&</sup>lt;sup>2</sup> For more details see, e.g., P. Havlik and S. Richter (2011), 'MENA in transition: any lessons from CESEE?', *wiiw Monthly Report*, No. 7, pp. 1-7.

<sup>&</sup>lt;sup>3</sup> Source: World Development Indicators (WDI).

## **Employment structure**

In MENA economies the agricultural sector accounts for about one third of the employment. This is a value similar to the WBCs and the CIS countries. In the CEE countries the share of agricultural employment has been declining over the past decade to below 10%. MENA countries tend to be quite militarized. Almost 4% of their labour force is employed in the armed forces. In the WBCs this share was similar at the beginning of the 2000s but declined steadily to a level below 1%, indicating the end of military conflicts and authoritarian regimes in the Balkans at the end of the 1990s. In the CEE and CIS countries this share is rather constant at between 1% and 1.5%.

## Inequality

Information on inequality in MENA is fairly scarce. Moreover, data on inequality in the MENA countries come from different surveys which are mostly expenditure-based (while surveys for other countries tend to be income-based). Scarce data on the Gini index in the MENA region suggest values of around 35 to 40. Thus inequality appears to be somewhat higher than in CEE, WBC and CIS countries where the Gini index ranges between 30 and 35.

#### **Migration rates**

One would expect that, given the large size of young population, the lack of an adequate educational and social system, the existence of militarized and oppressive societies and significant economic inequality would act as push factors for emigration. However, MENA countries on average do not show high levels of net outward migration. On the contrary, mainly due to the fact that Syria took in many refugees from Irag, on average (unweighted) the MENA region displays a slightly positive net migration rate as a share of population for both available five-year periods up to 2005 and 2010. In absolute figures total net migration for the MENA region was negative and stood at about -130,000 for the period 2006-2010, a value comparable to the total net value for the CEE region. Negative net migration rates are only large for Morocco with about 1.5% of the population leaving the country in both periods. For the average CEE country net migration is rather balanced. While the WBCs were an area of emigration in the first half of the 2000s, this trend came to an end in the second half with net figures close to being balanced. The CIS region lost, throughout the 2000s, about 2% of its population due to migration. It might well be that pull factors for migration are different for the population of the MENA region as compared to its peers with migration policies in the industrial world being more obstructive for immigrants from MENA.

# **Three crises**

BY VLADIMIR GLIGOROV

There are quite a number of explanations for financial and economic crises. Three of those may be useful for policy analysis and choices in the ongoing crisis in the EU.

## Euro area crisis is not (yet) a currency crisis

In the current crisis of the euro area, it has been suggested by Paul Krugman (2011), Paul De Grauwe (2011) and others that it should be understood as a currency crisis. This is a good opportunity to highlight the distinction between a banking crisis and a currency crisis. This is important because the policy implications are different.

What is a currency crisis? Irrespective of the way it emerges, it invariably involves a speculative attack against a currency, which is a bet that it will devalue. It takes the form of a sell-off of the endangered currency, e.g. the euro is exchanged for dollars. As long as this does not involve the central bank, the exchange rate of the euro will fluctuate as some will speculate against and other for the euro. As soon as the central bank needs to sell dollars in order to support the exchange rate of the euro, an attack on the euro can be launched, which means that an increasing number of speculators will be selling euros with the ECB remaining the only buyer in the end. As it will go via the sell-off of euro-denominated public debt too, the ECB may choose to hike the interest rate in addition to its interventions in the foreign exchange market in order to attract more demand for euro-denominated bonds. The attack ends with either the ECB giving up and stopping the intervention or with the speculators cutting their losses and buying back euro securities.

Do current developments in the euro area look like a currency crisis? At the moment they do not. What is happening is a sell-off of euro-denominated GIPSI (Greece, Ireland, Portugal, Spain and Italy) bonds and a migration to German and similarly secure euro bonds (for simplicity I will just consider two types of bonds: GIPSI and Germanesque). So, GIPSI creditors are moving out of their debt and moving into Germanesque debt. This is not a bet against the currency, which would be a bet that the euro was going to devalue. This is a bet that GIPSIs will default on their debts. So, this development within the euro area is to be analysed as a banking crisis.

If it were a currency crisis, interest rates on all euro-denominated debts would increase. This is not happening. What is happening is a run on GIPSI banks that are exposed to government bonds, currently at different speeds to be sure. A large portion of debt, if the run continues, will eventually end up being owned by the ECB. Why? If a bank owns GIPSI bonds it can sell them at an ever larger discount, which would be a loss for the bank, or they can be used as collateral to borrow money from the ECB and invest it in more safe assets. So, the ECB ends up with GIPSI debts as its assets. It can issue liabilities, increase reserves, or ask for recapitalization. Or it can give up and refuse to accept the GIPSI-backed collateral. (This would effectively drive GIPSIs out the euro monetary union.)

# It is a banking crisis

If this were a currency crisis, it could end by euro devaluing. This may yet happen if the ECB refuses to refinance euro debt and euro member states refuse to back the ECB. That could lead to a run on the euro, which would mean that interest rates on Germanesque bonds would start to rise too. If that were to happen, the euro would devalue and the crisis would be over. Money that went out into dollars would flow back into euros.

This being, at least so far, a banking crisis,<sup>1</sup> the solution is some kind of guarantee that would stop

<sup>&</sup>lt;sup>1</sup> It is usually seen as a public debt crisis or a crisis of the sovereign. It is still a banking crisis because the crisis of public debt means that banks have bad investments in the sovereign, so it is rational for the depositors to run for their money which means that it makes sense for the banks to try to push the bad sovereign onto the central bank.

the run on the banks. That clearly involves increased fiscal obligations on the part of the treasuries of the euro area countries. Some are proposing that this could be mitigated by a tax on the banks, which could take the form of a fund that could be used to stabilize the banking system in this and future incidents. The guarantee could also take the form of the Stabilization Fund, e.g. the European Stability Mechanism (ESM) which is to become operational in 2013, an improved version of which would issue a euro bond and intervene in the market for bonds (the latter has already been approved and should start to happen after ratification by the euro member states). It addition, the ECB could also increase its ability to intervene in the money market via open market operations (which is now already happening).

## Management of public debt

That leaves the issue of public debt management unsolved, however. The systemic assumption, underlined by the no-bail-out clause, is that the EU cannot default, as it cannot borrow, while implicitly euro member states can default (this has now happened as a 'selective default' of Greek public debt). It would be important to reduce the risk of the banking crisis causing a euro member state to default – as this can spill over to other member states, and in the end affect the entire EU. In principle, that would require proper financial regulation and a set of fiscal rules. What are the choices for the fiscal rules?

Currently, those are ceilings on the fiscal deficit and the public debt at the level of EU member states without the ability of the EU or the eurozone to run countercyclical fiscal policy. For the latter, the ECB provides a functional alternative as it manages the interest rate taking into account the growth rate. The EU is also aware that it needs policies to affect the long-run growth rate, which is what it attempts with programmes such as the Lisbon Agenda or Europe 2020. The instruments for the achievement of these programmatic goals are structural reforms, but the EU has not had all that much success with those since the establishment of the monetary union. That could in principle change. The interest rate policy cannot be expected to change, however. The ECB will calculate with some real interest rate in its policy function that will be either close to the German growth rate or slightly above it - the latter was the case for the whole period before the crisis. With that interest rate, less developed countries will be able to enjoy a growth rate which is above the EU average and will be on the path of catching-up growth. In order for that growth not to get misallocated, as happened in the pre-crisis period in the EMU member states, fiscal rules are not really essential. Those can be easily calibrated to individual countries once an appropriate stable or long-term level of public debt to GDP ratio is chosen. How that is to be done is not an easy question, but certainly countries will differ in their choices.

The key issue will be to manage the development of private debt and of the allocation of cross-border investments. That will require the European Stabilization Fund to come to financial rescue in the case of possible systemic risks developing. Some smart taxation (or regulation), for instance when it comes to investments in real estate or in some other bubbly areas, may need to become operational. It has to be smart because not all bubbles should be discouraged. Probably a greater role for taxes on intrinsically scarce resources, that is rents earned on them, would be advisable, but fast growing innovative sectors should not be discouraged.

The latest agreement to strengthen the ESM and to essentially sketch a bankruptcy procedure and a guarantee scheme for GIPSI debt is a step in the direction of dealing with the banking crisis. In that context, the decision to push for the recapitalization of the banking sector is another move in the same direction. The remaining steps are to deal with the systemic risk in the banking sector, to enable the ECB to be more active on the money market, and to further strengthen fiscal integration in the eurozone and the EU.

#### **Policy choices**

There is still room for a currency crisis. The importance of the distinction between a banking crisis and a currency crisis is that policy implications are quite different. Those who think that there is a currency crisis in the eurozone are expecting, and some also recommending, the dissolution of the euro monetary union. Those who see a debt crisis suggest both that the ECB should act as a lender of last resort to the full extent needed and that there should be adequate fiscal support coupled with significant financial reform.

To see what a euro currency crisis entails, it may make sense to assume that the global governance system collapses and there is a run on national currencies. One possible outcome is a prolonged period of competitive devaluations with a significant rise of protectionist measures. This will produce relative winners and losers, but there is a distinct possibility that the game will be a negative sum one so that in absolute terms everybody will lose. The same risk would have to be faced if the euro area were to disintegrate. The other possibility is that there is a euro crisis of a kind that is well known from the theory of currency crises. There might be a run on the euro, which would lead to devaluation. Given that inflation is not a serious threat, and a somewhat faster increase of prices would not have adverse effects anyway, that would certainly help the euro area and its most vulnerable member states. The probability for that happening is limited because there are not very many alternative investment opportunities. If that is true, that should reassure the ECB to act more aggressively to guarantee the public debts in the euro area.

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# STATISTICAL ANNEX

# Selected data on FDI in Central, East and Southeast Europe

(taken from the wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011)

Table 1	FDI inflow, EUR million, 2002-2010
Table 2	FDI outflow, EUR million, 2002-2010
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#### FDI inflow, EUR million<sup>1)</sup>

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	980	1851	2736	3152	6222	9052	6728	2412	1639
Czech Republic	9012	1863	4007	9374	4355	7634	4415	2110	5121
Estonia	307	822	771	2307	1432	1991	1180	1209	1197
Hungary <sup>2)</sup>	3185	1888	3439	6172	5454	2852	4896	1495	1208
Latvia	269	271	513	568	1326	1698	863	68	264
Lithuania	772	160	623	826	1448	1473	1396	124	475
Poland <sup>3)</sup>	4371	4067	10237	7112	12711	15902	9736	8493	6900 <sup>4</sup>
Romania	1212	1946	5183	5213	9061	7250	9496	3489	2695
Slovakia	4397	1914	2441	1952	3741	2618	3200	-36	397
Slovenia	1722	271	665	473	513	1106	1330	-419	630
New Member States-10	26227	15051	30614	37148	46264	51576	43239	18945	20525
Albania	141	157	278	213	259	481	675	706	827
Bosnia and Herzegovina	282	338	567	493	611	1520	636	177	48
Croatia	1138	1762	950	1468	2768	3679	4218	2096	440
Macedonia	112	100	261	77	345	506	400	145	221
Montenegro	76	44	53	384	496	683	656	1099	564
Serbia	521	1300	772	1268	3392	2513	2018	1410	1003
Southeast Europe	2271	3701	2880	3903	7871	9381	8603	5633	3104
Belarus	262	152	132	245	282	1304	1486	1354	1018
Moldova	89	65	118	153	191	390	484	92	150
Russia	3660	7041	12422	10336	23675	40237	51177	26254	31215
Ukraine	734	1260	1380	6263	4467	7220	7457	3453	4893
European CIS	4744	8519	14052	16997	28615	49152	60604	31152	37276
Total region	33242	27271	47546	58048	82749	110110	112447	55730	60905

Bulgaria: equity capital + reinvested earnings from 1997 + loans from 1996.

Czech Republic: equity capital + reinvested earnings from 1998 + loans from 1998.

Estonia: equity capital + reinvested earnings + loans.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Latvia: equity capital + reinvested earnings from 1996 + loans from 1996.

Lithuania: equity capital + reinvested earnings from 1995 + loans from 1997.

Poland: equity capital + reinvested earnings + loans from 1991.

Romania: equity capital + reinvested earnings from 2003 + loans from 1998.

Slovakia: equity capital + reinvested earnings from 1995 + loans from 1995.

Slovenia: equity capital + reinvested earnings from 1994 + loans from 2001.

Albania: equity capital + reinvested earnings from 2008 + loans from 1999. Bosnia and Herzegovina: equity capital + reinvested earnings from 2004 + loans from 2004. Croatia: equity capital + reinvested earnings from 1997 + loans from 1997. Macedonia: equity capital + reinvested earnings from 2003 + loans from 1996. Montenegro: equity capital cash + loans from 2006. Serbia: equity capital + reinvested earnings from 2007 + loans.

Belarus: equity capital + reinvested earnings from 1997 + loans from 2000. Moldova: equity capital + reinvested earnings from 1997 + loans from 1995. Russia: equity capital + reinvested earnings from 1998 + loans from 1997. Ukraine: equity capital + reinvested earnings from 2002 + loans from 2003.

1) Excluding Special Purpose Entities (SPEs). So far only Hungary and Poland provide data including/excluding SPEs. - 2) The respective values including SPEs in 2005-2010 are: 16239, 15709, 51015, 49590, 2545, -31805. - 3) The respective values including SPEs in 2005-2010 are: 8330, 15741, 17242, 10128, 9896, 7319. - 4) wijw estimate.

Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011 based on respective National Banks according to balance of payments statistics.

#### FDI outflow, EUR million<sup>1)</sup>

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	29	23	-166	249	141	206	516	-86	180
Czech Republic	219	183	817	-15	1170	1184	2959	684	1285
Estonia	140	137	217	556	882	1276	760	1109	291
Hungary <sup>2)</sup>	296	1463	892	1756	3127	2643	2087	1938	628
Latvia	3	44	89	103	136	270	166	-45	12
Lithuania	18	34	212	278	232	437	229	156	97
Poland <sup>3)</sup>	228	269	757	1549	4092	2680	2905	4214	3200 4)
Romania	18	36	56	-24	337	204	189	-62	146
Slovakia	12	219	-17	120	408	438	362	311	247
Slovenia	166	421	441	516	687	1317	949	121	114
New Member States-10	1128	2829	3297	5087	11212	10654	11122	8341	6200
Albania			11	3	8	11	55	26	-10
Bosnia and Herzegovina			1	0	3	20	9	-7	35
Croatia	607	106	279	192	207	211	973	889	-153
Macedonia	0	0	1	2	0	-1	-9	8	1
Montenegro	0	5	2	4	26	115	74	33	22
Serbia	21	105	-2	18	70	692	193	38	143
Southeast Europe	629	216	292	219	314	1049	1295	987	39
Belarus	-218	1	1	2	2	11	21	73	33
Moldova	0	0	-1	0	-1	13	11	5	3
Russia	3736	8606	11085	10240	18454	33547	37934	31407	39174
Ukraine	-5	12	3	221	-106	491	690	116	555
European CIS	3513	8619	11088	10463	18349	34062	38656	31602	39764
Total region	5270	11664	14677	15769	29875	45764	51072	40929	46003

Bulgaria: equity capital + reinvested earnings from 1999 + loans from 1997.

Czech Republic: equity capital + reinvested earnings from 1998 + loans from 1998.

Estonia: equity capital + reinvested earnings from 1996 + loans from 1993.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Latvia: equity capital + reinvested earnings from 1996 + loans.

Lithuania: equity capital + reinvested earnings from 1997 + loans from 1997.

Poland: equity capital + reinvested earnings + loans from 1996.

Romania: equity capital + reinvested earnings from 2005 + loans from 2005. Slovakia: equity capital + reinvested earnings from 1995 + loans from 1995.

Slovenia: equity capital + reinvested earnings from 1994 + loans from 2001.

Albania: equity capital + reinvested earnings from 2008 + loans from 2006. Bosnia and Herzegovina: equity capital + reinvested earnings from 2006 + loans. Croatia: equity capital + reinvested earnings from 1997 + loans from 1997. Macedonia: equity capital.

Montenegro: equity capital cash + loans from 2010.

Serbia: equity capital + reinvested earnings from 2007 + loans.

Belarus: equity capital+ reinvested earnings from 2008 + loans from 2002.

Moldova: equity capital + loans.

Russia: equity capital + reinvested earnings from 1997 + loans from 1997.

Ukraine: equity capital + loans from 2005.

1) See footnote 1) in Table 1. - 2) The respective values including SPEs in 2005-2010 are: 10126, 14964, 48709, 48152, 2705, -34073. - 3) The respective values including SPEs in 2005-2010 are: 2767, 7122, 4020, 3072, 3715, 3557. - 4) wiiw estimate.

Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011 based on respective National Banks according to balance of payments statistics.

#### Inward FDI stock, EUR million<sup>1)</sup>

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	3927	5045	7421	11756	17830	25770	31611	34141	35901
Czech Republic	36884	35852	42035	51424	60621	76338	81302	87330	97191
Estonia	4035	5553	7374	9561	9644	11406	11870	11283	12269
Hungary 2)	34575	38329	45134	51644	60876	65044	62828	68577	68522
Latvia	2676	2630	3324	4159	5702	7466	8126	8073	8250
Lithuania	3818	3968	4690	6921	8377	10283	9280	9759	10166
Poland 3)	46139	45896	63332	75231	91072	115980	110419	122520	138000 4)
Romania	7482	9661	15040	21884	34512	42771	48797	49984	52396
Slovakia	8563	12617	16068	19968	25517	29058	36226	34887	37000 4)
Slovenia	3948	5047	5580	6134	6822	9765	11236	10500	11242
New Member States-10	152046	164597	209998	258681	320973	393880	411694	437054	470938
Albania		357	612	846	1054	1689	1986	2700	3500 4)
Bosnia and Herzegovina	799	1463	2058	2542	3109	4599	5167	5305	5700 <sup>4)</sup>
Croatia	5794	6809	9114	12332	20782	30612	22191	24958	25725
Macedonia	1161	1292	1610	1769	2099	2545	2969	3141	3300 4)
Montenegro	81	125	178	562	1058	1741	2396	3496	4060
Serbia	776	2076	2848	4116	7508	10021	13463	14642	15780
Southeast Europe	8610	12121	16420	22167	35610	51205	48172	54242	58065
Belarus	1585	1519	1510	2014	2077	3044	4778	5952	7436
Moldova	611	571	620	862	957	1254	1811	1849	2141
Russia	68046	77371	89752	151817	201770	335564	145786	222139	250000 4)
Ukraine	5709	6055	7061	14553	17559	25905	33336	36282	43663
European CIS	75952	85515	98944	169245	222363	365766	185710	266223	303241
Total region	236608	262234	325362	450094	578946	810852	645577	757518	832243

Bulgaria: equity capital + reinvested earnings from 1997 + loans from 1996; cumulated inflows until 1997.

Czech Republic: equity capital + reinvested earnings from 1997 + loans from 1997.

Estonia: equity capital + reinvested earnings + loans.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Latvia: equity capital + reinvested earnings + loans.

Lithuania: equity capital + reinvested earnings + loans from 1996. From 2005 joint stock companies

valued at market value (book value before).

Poland: equity capital + reinvested earnings + loans from 1992.

Romania: equity capital + reinvested earnings from 2003 + loans from 1994.

Slovakia: equity capital + reinvested earnings + loans.

Slovenia: equity capital + reinvested earnings + loans.

Albania: equity capital + reinvested earnings + loans.

Bosnia and Herzegovina: equity capital + reinvested earnings from 2003 + loans from 2003; cumulated inflows until 2002.

Croatia: equity capital + reinvested earnings from 1997 + loans from 1997; cumulated inflows until 1997.

Macedonia: equity capital + reinvested earnings + loans.

Montenegro: equity capital cash + loans from 2006; cumulated inflows from 2001.

Serbia: equity capital + reinvested earnings + loans; cumulated inflows until 2007.

Belarus: equity capital + reinvested earnings + loans from 2002.

Moldova: equity capital + reinvested earnings from 1997 + loans from 1994.

Russia: equity capital + reinvested earnings from 1998 + loans from 1997; cumulated inflows until 1999.

Ukraine: equity capital + reinvested earnings + loans from 2002; cumulated inflows until 1999.

1) See footnote 1) in Table 1. - 2) The respective values including SPEs in 2005-2010 are: 74725, 91003, 133420, 182193, 183756, 159168. - 3) The respective values including SPEs in 2004-2010 are: 63601, 76785, 95554, 121280, 116634, 129128, 144557. - 4) 2010: wiiw estimate.

Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011 based on respective National Banks according to international investment position.

#### Outward FDI stock, EUR million<sup>1)</sup>

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	38	42	-129	105	344	552	1034	937	1112
Czech Republic	1405	1808	2760	3061	3810	5812	9002	10275	11615
Estonia	645	816	1040	1639	2732	4188	4765	4596	4512
Hungary <sup>2)</sup>	2068	2782	4412	6601	9394	11801	14250	15620	17574
Latvia	58	92	175	238	363	638	742	620	634
Lithuania	57	96	310	608	793	1072	1413	1610	1581
Poland <sup>3)</sup>	1390	1700	2188	3750	6393	9113	10847	13939	19000 <sup>4)</sup>
Romania	138	165	200	181	668	842	1054	970	1112
Slovakia	522	663	618	504	1006	1267	2113	1904	2200 4)
Slovenia	1445	1880	2224	2789	3452	4917	5677	5485	5690 <sup>4)</sup>
New Member States-10	7767	10043	13799	19474	28954	40201	50896	55954	65030
Albania			8	8	31	51	105	100	100 4)
Bosnia and Herzegovina									
Croatia	1607	1627	1563	1730	1833	2580	3750	4557	3109
Macedonia	38	34	40	53	29	46	61	67	70 <sup>4)</sup>
Montenegro	0	5	7	11	37	152	226	259	281
Serbia	37	142	140	158	227	919	2736	2748	2958
Southeast Europe	1681	1808	1758	1959	2158	3748	6877	7730	6517
Belarus	4	5	6	12	14	31	52	56	101
Moldova	23	19	18	21	18	28	41	45	51
Russia	59854	72687	78741	123498	164292	252859	152964	266608	30000 4)
Ukraine	139	133	146	396	261	4136	4969	5065	5998
European CIS	60019	72844	78910	123927	164586	257055	158025	271775	36150
Total region, Poland incl.SPE	69467	84694	94467	145360	195698	301005	215799	335459	107698

Bulgaria: equity capital + reinvested earnings + loans.

Czech Republic: equity capital + reinvested earnings from 1997 + loans from 1997.

Estonia: equity capital + reinvested earnings + loans.

Hungary: equity capital + reinvested earnings from 1995 + loans from 1995.

Latvia: equity capital + reinvested earnings + loans. From 2000 change in methodology and range of entities

regarded as residents.

Lithuania: equity capital + reinvested earnings + loans from 1996. From 2005 joint stock companies

valued at market value (book value before).

Poland: equity capital + reinvested earnings + loans from 1996.

Romania: equity capital + reinvested earnings + loans from 2004.

Slovakia: equity capital + reinvested earnings + loans. Slovenia: equity capital + reinvested earnings + loans.

Sioverna. equity capital + reinvested earnings + ioan

Albania: equity capital + reinvested earnings + loans from 2008.

Bosnia and Herzegovina: not available.

Croatia: equity capital + reinvested earnings + loans.

Macedonia: equity capital + reinvested earnings + loans.

Montenegro: equity capital cash; cumulated outflows from 2001.

Serbia: equity capital + reinvested earnings + loans; cumulated outflows until 2007.

Belarus: equity capital + reinvested earnings + loans from 2001.

Moldova: equity capital + loans from 1995.

Russia: equity capital + reinvested earnings from 1998 + loans from 1997; cumulated outflows until 1999. Ukraine: equity capital + reinvested earnings + loans from 2005; cumulated outflows until 1999.

1) See footnote 1) in Table 1. - 2) The respective values including SPEs in 2005-2010 are: 25981, 43378, 90710, 134316, 127590, 103815. - 3) The respective values including SPEs in 2004-2010 are: 2457, 5304, 10875, 14413, 17062, 20547, 27573. - 4) 2010: wiiw estimate.

Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011 based on respective National Banks according to international investment position.

## Inward FDI stock per capita in EUR

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	500	647	956	1523	2322	3373	4156	4514	4784
Czech Republic	3615	3511	4113	5016	5893	7354	7767	8312	9238
Estonia	2975	4110	5473	7110	7184	8506	8856	8420	9156
Hungary	3409	3789	4470	5125	6048	6475	6263	6849	6856
Latvia	1148	1134	1441	1813	2499	3288	3594	3590	3713
Lithuania	1103	1151	1369	2034	2475	3055	2770	2931	3134
Poland	1207	1202	1659	1972	2389	3043	2895	3210	3600
Romania	344	445	694	1013	1600	1987	2270	2329	2442
Slovakia	1592	2345	2984	3705	4731	5380	6693	6431	6800
Slovenia	1979	2528	2793	3062	3394	4858	5529	5130	5492
New Member States-10	1480	1605	2051	2530	3143	3858	4031	4281	4618
Albania		114	195	269	334	533	622	800	1100
Bosnia and Herzegovina	209	382	536	661	809	1197	1345	1380	1500
Croatia	1304	1533	2053	2776	4681	6901	5004	5635	5800
Macedonia	574	636	791	867	1027	1245	1448	1530	1600
Montenegro	131	201	285	902	1695	2780	3811	5549	6429
Serbia	104	278	382	554	1015	1360	1836	2004	2164
Southeast Europe	400	563	763	1030	1656	2383	2242	2528	2700
Belarus	163	157	159	212	219	314	502	627	784
Moldova	169	158	172	240	267	351	508	519	602
Russia	469	537	626	1063	1419	2363	1027	1565	1700
Ukraine	119	127	149	310	376	559	722	789	954
European CIS	368	417	485	835	1101	1814	923	1325	1500
Total region	716	797	993	1378	1778	2493	1988	2335	2600
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Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011.

Table 6

## FDI inflow as a percentage of gross fixed capital formation

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bulgaria	31.5	53.0	65.9	52.6	85.1	102.5	56.5	23.9	19.4
Czech Republic	41.0	8.6	17.6	37.6	15.5	23.8	12.5	6.9	16.8
Estonia	13.3	29.9	25.8	64.3	29.7	36.5	25.6	40.4	44.3
Hungary	19.5	11.4	18.5	30.2	27.8	13.3	21.5	7.7	6.4
Latvia	11.4	11.1	16.7	14.3	25.3	23.9	12.8	1.7	8.2
Lithuania	25.3	4.6	15.4	17.4	24.0	18.2	17.0	2.7	10.8
Poland	11.1	11.6	27.7	16.0	23.8	23.7	12.0	12.9	10.0
Romania	11.7	17.2	39.0	27.5	36.2	19.2	21.3	11.3	9.7
Slovakia	61.9	26.2	29.9	19.1	31.7	18.2	20.0	-0.3	3.0
Slovenia	30.4	4.4	9.8	6.5	6.2	11.6	12.4	-4.9	7.8
New Member States-10	23.5	13.7	25.3	25.7	27.3	24.4	17.9	10.0	11.0
Albania	7.9	7.7	12.7	8.8	9.3	15.9	20.0	21.7	28.5
Bosnia and Herzegovina			27.4	19.7	25.1	46.1	16.5	6.1	1.6
Croatia	19.1	23.5	11.8	16.7	27.1	32.8	32.3	18.7	4.4
Macedonia	16.9	14.6	33.8	9.7	37.4	43.3	28.4	10.9	16.2
Montenegro	38.4	21.8	18.4	117.8	105.5	78.7	55.6	137.8	70.6
Serbia	26.3	44.8	21.1	32.9	69.2	36.4	26.0	20.4	14.3
Southeast Europe	21.5	27.8	16.9	20.9	36.2	35.4	28.1	21.4	12.4
Russia	5.6	10.0	14.2	9.5	16.2	20.2	20.3	13.6	12.8
Ukraine	8.5	13.8	11.7	41.3	21.1	25.2	23.0	22.4	24.7

Source: wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2011.

## Inward FDI stock in NMS-10 by major home countries

as of December 2009, share in per cent

	BG	cz	EE	HU	LV	LT	PL	RO	SK	SI	NMS-10
Austria	18.8	12.1	1.1	13.6	2.3	0.7	3.5	18.1	17.0	49.1	11.6
Belgium	1.1	4.2	0.4	2.7	0.5	0.6	3.0	2.2	3.0	3.2	2.8
Cyprus	5.4	3.3	2.6	2.6	4.1	2.5	1.9	4.7	3.7	1.5	3.1
Denmark	0.8	0.7	1.9	0.8	6.9	10.0	2.4	0.2	1.2	0.9	1.5
Finland	0.1	0.1	22.6	1.2	4.1	4.7	1.0	0.3	0.2	0.2	1.3
France	2.2	6.3	1.5	5.1	0.7	2.2	11.1	8.5	4.5	6.5	7.0
Germany	5.9	13.7	1.3	21.9	6.4	10.2	16.1	13.4	13.5	5.5	14.3
Greece	8.9	0.0	0.1	0.0		0.0	0.0	6.6	0.0	0.1	1.4
Hungary	3.1	0.4	0.0		0.0	0.2	0.2	1.6	5.7	0.5	1.0
Italy	1.5	1.0	0.3	-7.4	0.4	0.2	4.0	5.1	5.2	5.6	1.5
Japan	0.1	1.3	0.0	1.2	0.0		0.9	0.2	0.2	0.3	0.8
Luxembourg	1.8	6.8	1.7	6.7	2.5	2.1	8.6	1.3	3.8	2.3	5.6
Netherlands	16.9	29.6	9.0	17.9	5.7	6.9	17.7	21.8	28.6	5.3	20.4
Norway	0.4	0.1	3.4	0.7	3.0	3.7	0.1	0.1	0.5	-	0.5
Russia	2.9	0.3	3.0	1.7	4.6	6.4	0.1	0.0	-0.3	0.1	0.9
Spain	2.7	3.7	0.3	1.4	0.4	0.0	3.2	1.7	0.6	0.1	2.3
Sweden	0.3	1.1	39.6	0.7	13.8	11.7	5.0	0.3	0.8	0.4	3.4
Switzerland	1.9	4.9	1.2	3.2	1.1	2.6	0.4	4.2	1.1	9.1	2.6
United Kingdom	8.5	1.3	2.4	1.5	2.0	1.5	3.6	1.0	0.6	1.2	2.5
United States	2.7	3.3	1.2	4.2	3.8	2.6	6.5	2.1	2.1	0.7	4.0
Other countries	14.1	5.9	6.5	20.4	37.7	31.2	10.7	6.5	8.0	7.5	11.5
EU-15	71.8	80.9	82.9	67.1	50.3	51.8	81.8	80.8	79.5	80.3	77.1
EU-27	85.4	88.2	87.7	70.2	76.5	78.8	85.0	88.7	95.4	83.3	83.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total, EUR mn	34141	87330	11283	68577	8073	9759	129128	49984	34887	10500	443662

CZ: Czech Republic, HU: Hungary, PL: Poland, SK: Slovakia, SI: Slovenia, BG: Bulgaria, RO: Romania, EE: Estonia, LV: Latvia, LT: Lithuania, NMS: New Member States.

## Inward FDI stock in SEE-6, Russia and Ukraine by major home countries

as of December 2009, share in per cent

	<b>AL</b> 2008	BA	HR	МК	ME	RS	SEE-6	RU	UA
Austria	8.7	27.6	29.8	11.5	8.4	20.3	24.0	•	6.5
Belgium			0.6	0.0	1.1	0.5	0.5		0.2
Croatia		14.3		1.8	-0.5	2.2	2.1		
Cyprus			0.4	1.5	8.7	-0.3	0.8	30.8	22.5
France			4.8	0.8	1.1	3.8	3.4	2.0	4.1
Germany	2.9	4.7	14.0	2.0	3.0	11.3	10.5	7.2	16.5
Greece	41.3		0.0	12.1	1.2	12.6	5.3		0.8
Hungary			7.8	12.4	9.3	2.7	5.9		1.8
Italy	7.5	2.0	3.1	1.8	13.7	6.5	4.5		2.5
Liechtenstein			0.7	2.0	0.7	-0.4	0.4		0.2
Luxembourg			5.6	2.0	0.9	3.1	3.7	1.1	0.7
Netherlands		1.7	14.8	16.7	0.4	9.3	10.7	26.7	9.9
Russia		6.4	0.3	0.0	14.1	4.2	2.8		6.4
Serbia		16.3	0.0	2.7	-4.7		1.6		
Slovenia		12.3	4.3	12.5	3.3	5.0	5.6		0.1
Sweden			0.9	0.1	0.1	0.1	0.5		3.2
Switzerland		3.8	1.5	6.4	9.1	2.6	2.8		2.0
Turkey	14.4	1.9	0.0	1.6	-	-0.1	0.8		0.3
United Kingdom			3.8	3.5	8.2	2.7	3.3	3.3	5.8
United States	12.4		0.9	1.6	1.3	1.1	1.4		3.3
Other countries	12.8	9.0	6.8	7.1	20.6	12.8	9.6	29.0	13.5
EU-15		40.3	78.4	48.7	41.9	70.1	64.9		51.1
EU-27	65.9	53.9	91.8	78.0	68.2	80.3	81.7		78.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total, EUR mn	1986	5305	24958	3141	3504	10948	49842	75995	27935

AL: Albania, BA: Bosnia and Herzegovina, HR: Croatia, MK: Macedonia, ME: Montenegro, RS: Serbia, SEE: Southeast Europe, RU: Russia, UA: Ukraine.

## Inward FDI stock in NMS-10 by economic activities

as of December 2009, share in per cent

	BG	CZ	EE	HU	LV	LT	PL	RO	SK	SI	NMS-10
NACE Rev. 1:								2008	2008	2007	
A_B Agric., forestry, fishing	0.5	0.2	0.6	0.6	2.6	0.8	0.5	1.0	0.2	0.1	0.5
C Mining and quarrying	0.9	2.6	0.5	0.4	0.6	0.5	0.2	4.0	1.0	0.1	1.3
D Manufacturing	16.3	32.0	14.4	24.7	11.5	27.4	31.7	31.5	36.0	26.9	28.8
E Electricity, gas, water	4.9	8.0	3.8	4.4	3.4	7.9	4.1	5.5	12.3	3.0	5.8
F Construction	7.8	1.4	1.5	0.9	2.2	1.9	2.5	3.7	2.2	0.8	2.5
G Trade and repair etc.	13.5	9.9	11.2	13.6	13.4	13.3	15.8	12.2	11.7	13.1	13.1
H Hotels, restaurants	1.7	0.5	0.6	0.6	1.1	0.7	0.4	0.4	0.6	0.2	0.6
I Transport, communication	11.4	5.2	5.4	8.6	7.6	14.0	5.7	6.8	5.2	3.4	6.8
J Financial intermediation	18.3	20.4	30.1	10.4	29.1	14.6	18.5	20.5	19.7	40.4	18.8
K Real estate, business act.	23.8	16.2	30.5	33.0	21.7	15.9	17.5	13.7	10.9	11.5	19.4
L Public admin., defence etc.	0.0	0.0			0.0						0.0
M Education	0.0	0.0	0.0		0.1	0.2				0.0	0.0
N Health, social work	0.0	0.2	0.0		0.0				0.2	0.0	0.1
O Other community act.	0.5	1.1	1.0		1.4	0.6			0.2	0.4	0.4
Other activities (A-O)	0.4		0.4	0.6	5.3	0.1	1.0	0.7		0.2	0.6
Private purch. of real estate		2.2		2.2		2.0	2.1				1.4
Total by activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total by activities, EUR mn	34141	87330	11268	68577	8073	9759	129128	48798	36226	9765	443065
NACE Rev. 2:	BG	cz	EE	HU	LV	LT	PL	RO	SK	SI	NMS-10
A Agric forestry fishing		02	0.6			0.9		11		0.1	
B Mining and quarrying	•	2.6	0.0		•	0.0	•	44		0.1	•
C Manufacturing	•	31.4	14 1		•	26.5	•	31.1	•	17.3	•
D Electricity das steam etc	•	7.3	3.3	•	•	7.9	•	54	•	2.6	•
E Water supply, waste manag	•	0.8	0.0		•	0.2	•	0.4	•	0.3	•
E Construction	•	1.8	2.2		•	3.1	•	7 1	•	1.0	•
G Trade and repair	•	9.7	11.0		•	13.3	•	12.3	•	15.7	•
H Transportation storage	•	0.7	47		•	2.0	•	14	•	1 1	•
LAccommod food serv act	•	0.5	0.6		•	0.7	•	0.4	•	0.3	•
Information communication	•	5.8	1 9		•	12.8	•	6.5	•	23	•
K Financial insurance act	•	20.2	32.5		•	14.6	•	19.0	•	45.2	•
I Real estate activities	•	87	12.0	•	•	11.0	•	5.8	•	2.5	•
M Prof scientific techn act	•	5.9	12.1		•	27	•	3.8	•	2.0	•
N Admin support serv act	•	1.2	23		•	13	•	0.8		03	•
O Public admin. defence etc	•	1.2	2.0	•	•	1.0	•	0.0	•	0.0	•
P Education	•	0.0	. 0.0		•	. 0.0	•	0.0	•	. 0.0	•
O Human health soc work	•	0.0	0.0	•	•	0.0	•	0.0	•	0.0	•
R Arts entert recreation	•	0.2	0.0	•	•	0.2		0.0	•	0.0	•
S Other service activities	•	0.0	0.1	•	•	0.5	•	0.1	•	01	•
T Act of househ as employers	•	0.3	0.2	•	•	0.1	•	0.0	•	0.1	•
Other activities (A-U)	•	0.0	0.0	•	•	•	•		•	80	•
Private nurch of real estate	•	วว	0.4	•	•	20	•		•	0.9	
Total by activities	•	ے.ے 100.0	100.0		:	2.0 100.0		100.0	•	100.0	•
Total by activities FUR mn		87330	11283			9750		49962		10500	
Total by douvides, Lon Init	•	0,000	11205	•	·	0700	·	40002	•	10000	

## Inward FDI stock in SEE-4, Russia and Ukraine by economic activities

as of December 2009, share in per cent

	<b>AL</b> 2008	BA	HR	<b>MK</b> 2008	SEE-4	RU	UA
NACE Rev. 1 classification:							
A_B Agriculture, hunting, forestry, fishing	-2.4	0.2	0.4	1.0	0.2	1.2	2.0
C Mining and quarrying	0.9	1.4	2.2	5.7	2.3	22.7	2.6
D Manufacturing	16.1	31.0	22.0	29.9	23.7	34.0	29.8
E Electricity, gas and water supply	0.2	0.3	0.7	5.5	1.1	2.8	0.8
F Construction	15.4	0.8	1.5	3.9	2.4	2.5	5.5
G Wholesale, retail trade, repair of veh.etc.	7.1	10.2	16.2		13.4	10.4	10.8
H Hotels and restaurants	1.0	0.9	2.5		1.9	0.4	1.1
I Transport, storage and communication	23.5	15.7	8.7		9.9	3.9	4.1
J Financial intermediation	33.4	33.7	37.8		33.7	5.2	31.0
K Real estate, renting & business activities	4.0	2.7	7.2		5.8	16.1	10.7
L Public administr., defence, comp.soc.sec.			0.1		0.0		0.0
M Education	0.1				0.0	0.0	0.0
N Health and social work	0.0	0.2	0.0		0.0	0.1	0.3
O Other community, social & pers.services	0.9	0.1	0.8		0.6	0.8	1.4
Other not elsewhere classified activities		2.8		53.9	5.0		
Private purchase & sales of real estate	•	•					
Total by activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total by activities, EUR mn	1986	5305	24958	2969	35218	75995	27935

# Guide to wiiw statistical services on Central, East and Southeast Europe

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