



ICEG EUROPEAN CENTER

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**NEWS OF THE MONTH**  
*on EU-8 and CIS*

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## **News of the Month, on EU-8 and CIS**

The ICEG European Center issues its monthly publication, which includes 3-4 brief analyses dealing with underlying macroeconomic and microeconomic issues. The publication focuses on two groups of countries: *Countries of Independent States - CIS* (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan) and *Eight New Member States – EU-8* (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia).

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## Outsourcing business services - the emergence of NMS

Magdolna Sass<sup>1</sup>

While outsourcing of manufacturing activities is relatively old, well known and rather well documented process, the (offshore) outsourcing of various services, among them business activities is a quite new phenomenon, especially in Europe and in the New Member States (NMS), which have been affected by these developments starting from the second half of the nineties.

### What kinds of services are outsourced?

In order to clarify the categories which are used in the analysis, *Table 2* contains the basic definitions.

**Table 1. Main categories of analysis**

Location of production	Internalised	Externalised (outsourcing)
Home country	Production kept in-house at home	Outsourcing (at home)
Foreign country (offshoring)	Intra-firm (captive) offshoring	Offshore outsourcing

*Source: based on UNCTAD, World Investment Report, 2004, p. 148*

The process has been induced by technological developments – in many various ways. As a result of technology developments, fragmentation, division, standardisation, algorithmisation of services processes, evaluation of certain service process elements, digitalisation, coding of information were made possible. After such fragmentation, certain elements of service processes can be separated and they can be done in locations where it can be carried out cheaper, more efficiently, or in a better quality. As a result, certain services became capable for trade, even internationally.

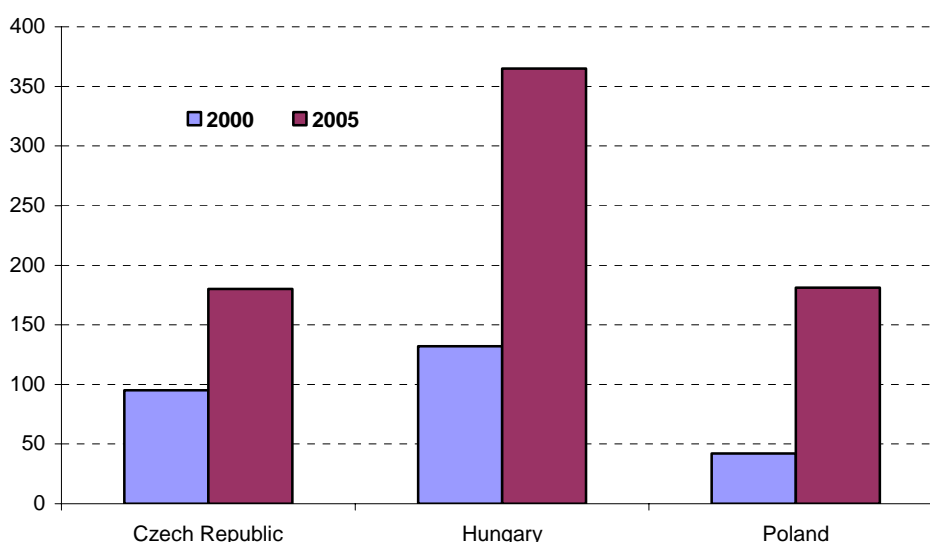
At the company level, the process started out in the nineties, when because of the more and more intense competition, the outsourcing of non-core activities became the dominant tendency, either into own or into independent firms. Thus even these newly established independent companies, carrying out (former) non-core activities, were put into a competitive environment, from which higher efficiency and reduced costs were expected. Other aims were the improvement in the quality of services, timely provision of services, improvement in risk management, access to special skills, improvements in planning and freeing up internal sources due to the outsourcing of non-core activities, because now companies can concentrate on their core activities. This process started in the USA, and gradually reached other companies in developed and developing countries. The following services or certain parts of them are the most often outsourced: IT services (e.g. software development, database services, application development and maintenance), business services (front-office, back-office and other services, among them: sales support, customer services, call centres, telemarketing, payroll services, financial services, supply chain services, HR services etc.).

<sup>1</sup> Magdolna Sass is a senior research fellow of the IE HAS and the ICEG European Center. The article is based on a research financed by OTKA (68435).

## How do NMS take part in the process?

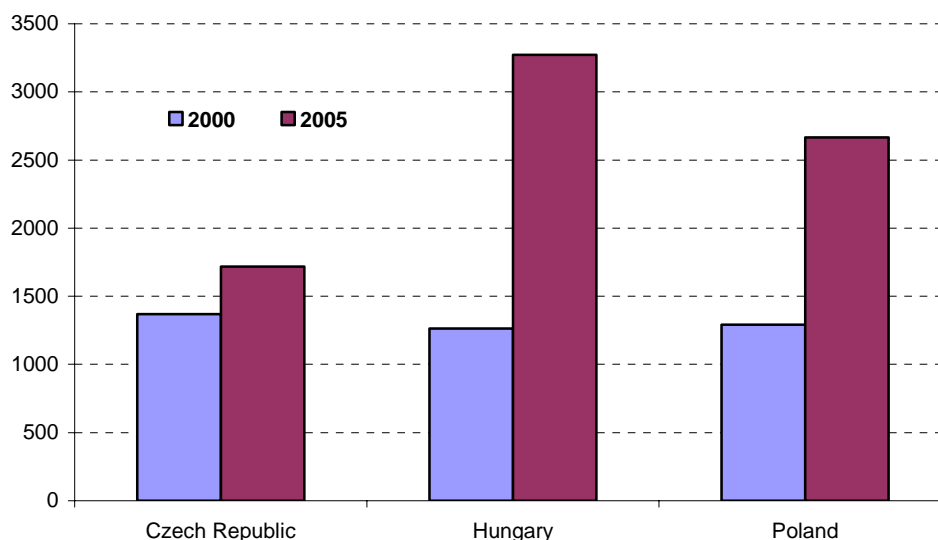
As far as home countries are concerned, the USA took the lead in the eighties-nineties, followed by the United Kingdom, and the Continental Europe joined them only with a relatively large time lag, basically only after 2000. As far as host countries are concerned, the majority of services (offshore) outsourcing is carried out between the developed countries, with India (and to some extent China) rising as new locations. Inside Europe, Ireland is traditionally the most important host country, with Great-Britain, Portugal and Spain playing an important role, but the biggest projects seem to go to India even from Europe. The New Member States of the EU, contrary to what is suggested by the media, do not play a decisive role in hosting services outsourcing projects, however, their role certainly has grown in the last 7-8 years. According to estimations, in Europe, there operate around 1400-1500 such centres. Hungary is host to 45-50 such projects – similarly to Poland and the Czech Republic. Romania (and to a lesser extent, Bulgaria) are relatively new, but quickly emerging locations on the map of business services outsourcing. The Czech Republic, Hungary and Poland started to take part in the process mainly from the second half of the nineties; and a boom in services FDI connected to outsourcing has been recorded from around 2002-2003. However, according to McKinsey and Co., the NMS share in global business services hardly exceeds 1%.

**Chart 1. Export of computer services (263), 2000 and 2005 (USD million)**



Source: UN Service Trade database

There are many methodological problems concerning the measurement of the extent of business services outsourcing. However, just as an illustration to the swiftness and extent of the process, data on the business services exports of these countries are presented, which clearly show the quick growth of the export of certain services from these countries between 2000 and 2005.

**Chart 2. Export of other business services (268), 2000 and 2005, million USD**

Source: UN Service Trade database

## European targets?

Certain NMS have a strong competitive advantage in attracting this kind of projects. Usually, the motivations of choosing a location for services (offshore) outsourcing projects are the same as for the efficiency seeking FDI, however, the weights attached to various factors can be different. The following factors are of special importance from the point of view of investors when choosing an NMS for these activities: geographical proximity (“nearshoring”), well functioning and well developed telecommunications infrastructure (including broadband), access to financial service providers, to providers of certain services; availability of office space (at reasonable prices); existing and enforced rules and regulations (including intellectual property rights); relevantly skilled, educated and relatively cheap labour (usually special emphasis on the knowledge of certain languages, including “small” European languages); possibility of employing local managers within a relatively short time after the start of operation; favourable labour market rules; political and economic stability. One specific factor is the difference in time zones: depending on the nature of the activity, this can be a neutral factor; in some cases outsourcing to the same time zone is preferred, while in other cases, outsourcing must be carried out in a location with a different time zone.

There are well-known company names among those, establishing a firm for outsourcing of services in the above mentioned NMS, some of them by relocating such activities from Western Europe. EDS, IBM, Accenture, SAP, DHL, Capgemini, Genpact, Tata, Morgan Stanley, Deutsche Bank, Barclays, Citibank can be mentioned among others, as the most important investors, together with certain manufacturing companies locating their captive service centres in the region, such as Volvo, GlaxoSmithKline, GE, Philips, HP, Tchibo, Cemex, Exoon Mobil, Diageo, Jabil, InBev, Thomson, Electrolux, Indesit, Philip Morris etc. Two conclusions can be drawn from the list of companies. First, the persistent lead of US companies, both among captive and non-captive outsourcers, is still obvious; second, they concentrate and/or relocate their European activities to a new location inside Europe. However, the dominance of Western European locations still persists. There are signs that Continental European companies slowly catch up with their overseas counterparts in outsourcing their non-core activities to foreign locations, among them increasingly to the New Member States. The Czech Republic, Hungary and Poland seem to be close to their saturation point in terms of the availability of relevantly skilled labour, thus they may give way to the emergence of new regional “stars”, such as Romania for attracting offshore outsourcing of services.

## Favourable external trade performance in Hungary

Ágnes Magai

Hungarian external trade has shown a favourable picture since the EU accession. 2007 was the fourth consecutive year with decreasing merchandise trade deficit. Trade deficit shrank to eighth of the previous year's deficit, close to EUR 300 million, due to dynamic export growth and slight deceleration of import growth.<sup>2</sup> Hungarian economic growth reached historic lows (1.3%) in 2007. Industrial output and dynamic export was the driving force for GDP growth. Net export and gross capital formation contributed positively to GDP growth, while actual final consumption of households and that of government declined as compared to the previous year.

### Export, import and trade balance developments

Over the course of 2007 volume of merchandise export grew by 16%, import increased by 11% as compared to 2006. It reflects some slowdown of trade expansion, since volume of export increased by 17%, import by 13% in 2006. Dynamic export was bolstered by strong external business cycle, as GDP growth rates of the EU27 (2.9%) and of Germany (2.5%) had a positive impact on Hungarian merchandise export. Import growth has decelerated due to restricted consumption and low level of investments. Difference between export and import growth rates resulted in a fast decreasing deficit in 2007. The trade balance posted EUR 308 million deficit. (In the previous year trade deficit was EUR 2.4 billion.)<sup>3</sup>

Having a closer look on quarterly and monthly data, difference between export-import growth rates seems to diminish at the end of the year. In the first three quarters of 2007 growth rate of export outpaced that of import by 4.4, 4.6 and 4.9 percentage points, respectively. Contrary, last quarter of 2007 already showed some deceleration of export dynamic: export growth rate was only 2.8 percentage point higher than import growth rate. While export growth rate was 19% in the first quarter of 2007, it fell back to 10% in the last quarter. Moreover, in December 2007, difference between export and import growth rates sunk to -0.3 percentage point and a monthly trade deficit of EUR 170 million were registered (*Chart 3*). This can be partly explained by less dynamic export growth of manufactured goods and machinery and transport equipments in the last two months.

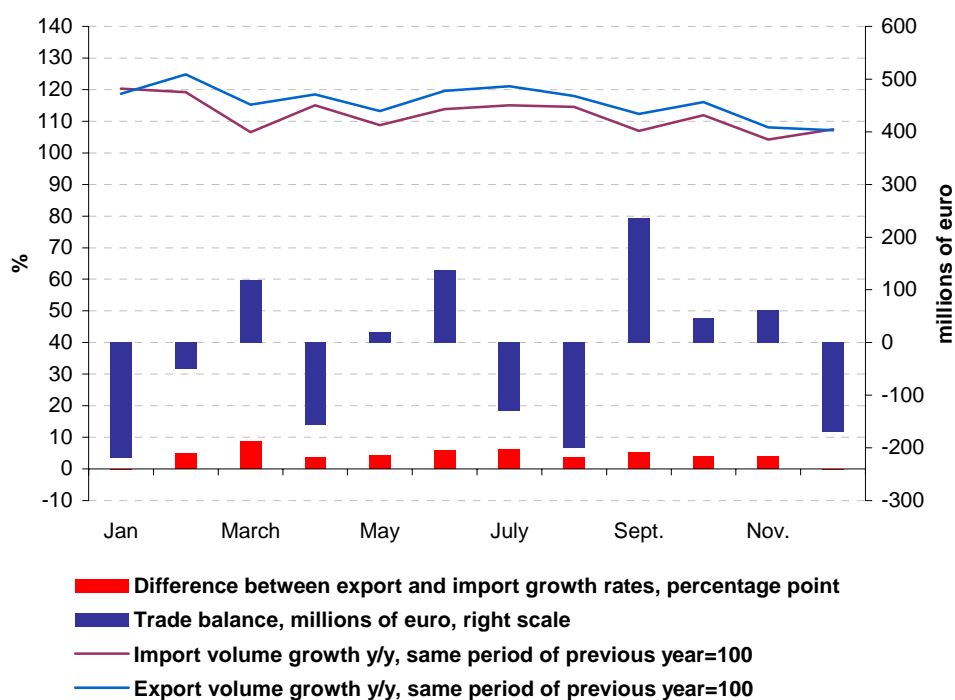
Since 2004, net export has contributed positively to economic growth. In 2005 and 2006 net export increased GDP growth each by 2.8 percentage points. Despite good external trade performance, role of net export declined in 2007 to 1.6 percentage point. Mediocre economic growth in Hungary is mostly based on external demand and not domestic one.

In 2007 the forint price level of the export and import diminished by 5%, thus the terms of trade remained unchanged. The forint was stronger by 5% compared to the euro. In spite of revaluation of national currency export competitiveness didn't worsen.

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<sup>2</sup> Central Statistical Office (KSH)

<sup>3</sup> Financial account statistics represent a surplus of EUR 1.4 billion in merchandise trade in 2007. This is because CSO and Central Bank trade statistics are different due to differences in methodology. However, same trend of external trade can be described with both data.

**Chart 3. Export and import growth and trade balance, 2007**

Source: Central Statistical Office, own calculations

### Commodity pattern of external trade

Outstanding external trade performance was due to dynamic export growth of machinery and transport equipment. The most important main commodity group accounts for 62% of the total Hungarian export. Export value of machinery and transport equipment expanded by 16% in 2007 on yearly basis, resulting a surplus of EUR 6.8 billion, which is EUR 1.2 billion larger than in 2006 (*Table 1*). Increase of import in the category of machineries and transport equipment was 15%. The major surplus (EUR 5.4 billion) was registered in the commodity group of telecommunication equipments. Its export grew dynamically, by 21% on annual basis. Import picked up faster, by 36%, due to intensifying import of telecommunication equipments from South-Asia. Export of road vehicles represents 12% of total Hungarian export that resulted a surplus of EUR 1.5 billion, which was caused by high (37%) export growth as compared to 2006.

Manufactured goods represent 27% of total Hungarian export and 32% of import. In 2007 volume of export increased 8 year-on-year, that of import 9% year-on-year, causing a larger deficit (EUR -3.9 billion) than in 2006. According to statistics<sup>4</sup>, import of chemicals, fertilisers, metals and wood manufactures increased significantly. Export of medical and pharmaceutical products and professional, scientific and controlling instruments expanded considerably (23 and 33%, respectively).

Fuels and electric energy represents 2% of total Hungarian export and 10% of import. Deficit of this category is traditionally high. In 2007 trade deficit of energy posted EUR 4.7 billion, which is smaller than in 2006 (EUR 5.3 billion). This is partly due to 2% decrease of energy import, which can be explained by the diminishment of forint price level.

Trade in food, beverages and tobacco intensified significantly in 2007. Volume of export grew by 16%, that of import by 12%. Export of cereals and cereal preparation almost doubled, since large part of the intervention

<sup>4</sup> Central Statistical Office



supply was sold abroad. This caused almost about EUR 0.5 billion surplus in the trade balance. In the commodity group of food, beverages and tobacco a surplus of EUR 1.4 billion was registered, which is more than half a billion euro higher as compared to 2006. Bad weather conditions caused higher than expected import in dairy products and eggs as well as vegetables and fruits. Increasing global price levels of agricultural products pushed up the value of trade in agricultural products.

In the case of crude materials, trade surplus almost doubled as compared to 2006. Export grew by 16%, import by 11%.

**Table 2. Import and export of main commodity groups, 2007**

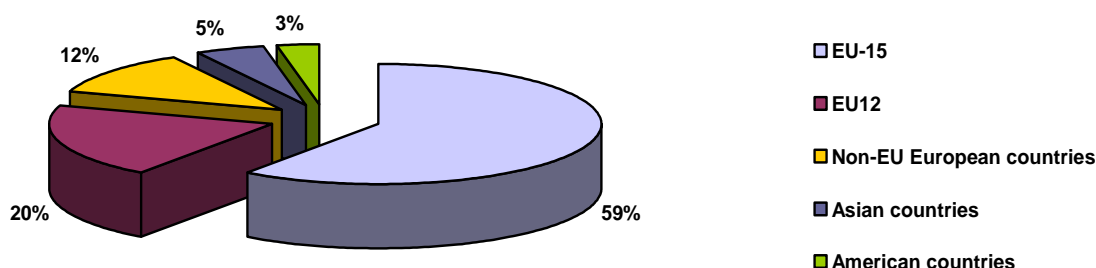
Categories	Import	Export	Balance	Import growth	Export growth
	EUR million			Percentage change on previous year=100	
<b>Machinery and transport equipment</b>	35 888	42 677	6 789	115	116
<b>Manufactured goods</b>	22191	18 248	-3 943	112	112
<b>Fuels and electric energy</b>	6 623	1 956	-4 667	98	134
<b>Food, beverages and tobacco</b>	2 905	4 267	1 362	119	132
<b>Crude materials</b>	1 161	1 313	152	112	117
<b>TOTAL</b>	<b>68 769</b>	<b>68 461</b>	<b>-308</b>	<b>112</b>	<b>116</b>

Source: Central Statistical Office

## Geographical distribution of export and import

Main export market of Hungarian products is the European Union; nearly 80% of the total export goes there. Hungarian companies sold almost half of their commodities in five Western European countries: Germany (28%), Italy (5.5%), France (4.7%), Austria (4.5%) and United Kingdom (4.4%). Since 2004, the role of new member states in Hungarian export increased significantly. Hungarian companies exported 29% more into new member states as compared to 2006<sup>5</sup>, while growth rate of export to EU15 picked up by 12%. In 2007 Slovakia became the fourth, Romania the sixth most important destination of Hungarian products, both surpassing Austria. Dynamic export growth (28%) was experienced also in relation of non-EU countries, particularly towards Russia, Ukraine and Serbia.

**Chart 4. Division of Hungarian export products by countries of destination, 2007**



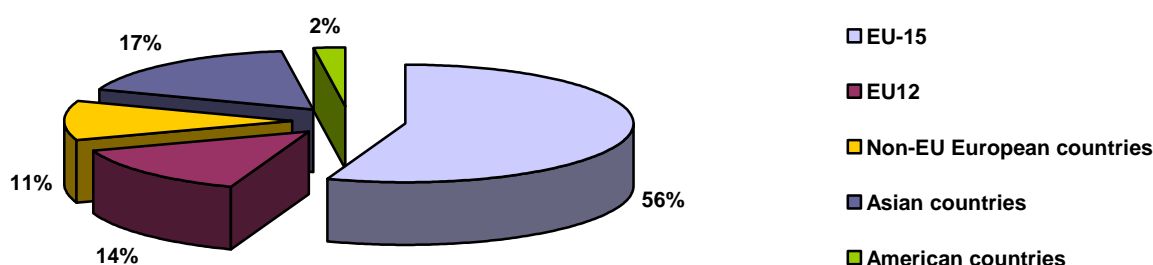
Source: Central Statistical Office

<sup>5</sup> 6 percentage points of that increase can be attributed to Romania and Bulgaria joined the EU in 2007

Role of EU seems to be less dominant in Hungarian import. 70% of the total import stems from the EU27. The most important EU trade partners considering import are: Germany (27%), Austria (6%), Italy (5%), the Netherlands (4%) and France (4%). Import from new member states increased by 17% in 2007. Czech, Polish and Slovakian companies proved to be the most active exporters towards Hungary among EU12 countries. Russia, the main source of energy import, is the second most important trade partner of Hungary in import relation. Weight of non-European countries in Hungarian import has increased in the last few years. China is the fourth most important import partner of Hungary. Also Republic of Korea, Taiwan, Japan and Hong Kong raised their exports in manufactured goods and machineries and transport equipments towards Hungary. One part of Asian export belongs to intermediate goods that are being built in Hungarian export products.

In 2007 Hungary posted EUR 6.08 billion surplus towards European Union and EUR 0.48 billion towards non-EU European countries. Trade with Asian countries resulted in a huge deficit (EUR 8.5 billion).

**Chart 5. Division of Hungarian import products by countries of origin, 2007**



Source: Central Statistical Office

## Prospects

Favourable external climate fuelled Hungarian export in 2007, while slowdown of European economic growth affected negatively export performance at the end of the year. In spite of that, for January and February 2008 external trade and industrial statistics showed dynamic export growth again. In February trade balance registered a surplus of EUR 149 million. German economy performed well last year and export hit new records. In the first two months of 2008 German export growth rate was better than expected. This is important from Hungary's point of view, since almost 30% of total export goes to Germany and large part of them are intermediate goods. Hungary's export performance therefore strongly depends on the export outlook of the biggest European economy. Forecasted strong economic growth and rising demand of neighbour countries (Slovakia, Romania, Croatia, Serbia and Ukraine) and Russia may anticipate good Hungarian export outlook for 2008, particularly because export growth rate was already high towards these countries in the last year. Nearing WTO accession of Ukraine and Russia is expected to boost external trade with Hungary. Over 2008 export growth rate is expected to slow down some due to worsening global outlooks, but export remains an important driving force for the Hungarian economy.

## Growth paradox in Armenia

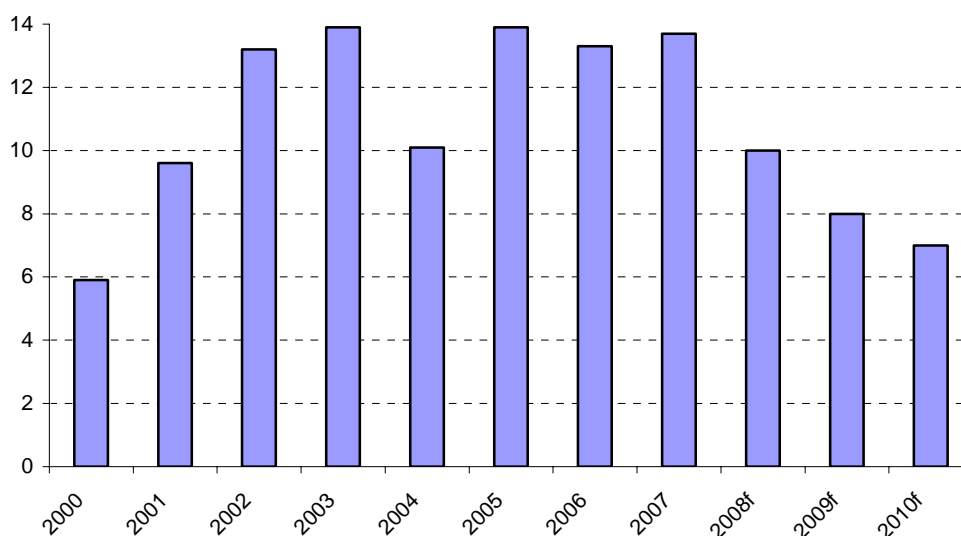
*Mihály Borsi*

In recent years Armenia has become one of the fastest growing economies in the world<sup>6</sup>, recording a double-digit growth rate for the sixth consecutive year in 2007. Economic growth was 13.7% in 2007 (13.3% in 2006), which is regarded the most productive year for the small Caucasian economy, fuelled by a continuous boom in construction and services sectors. Although today's Armenia is characterised by rising household incomes, increasing number of private investments and a significant reduction of poverty, the seemingly strong macroeconomic performance does not reflect qualitative developments concerning the economic competitiveness of the country. The double-digit rate projected for medium term is questionable due to the structure of the GDP. Moreover, the extreme growth of the "Caucasian tiger" might take negative effects on the establishment of a real competitive economy in the near future.

### Double-digit growth rate

Among such countries as Azerbaijan, Turkmenistan and China, Armenia's economic performance showed impressive quantitative results in terms of GDP growth, registering a double-digit rate each year since 2002. The volume of GDP was AMD 3.14 trillion (around USD 10.2 billion), with a 13.7% economic growth in 2007.<sup>7</sup>

**Chart 6. Factual and expected real GDP growth of Armenia, 2000-2010 (%)**



Note: f means forecast

Source: State Statistics Committee of the Republic of Armenia, IMF estimations

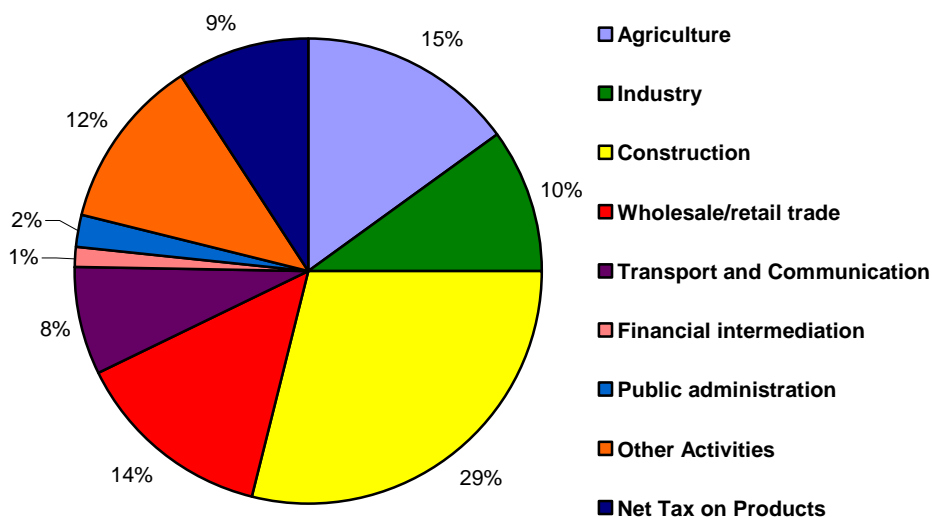
The region's strong performance could be explained by booming commodity exports and continuous large inflows of foreign direct investment (FDI) and remittances. Main contributors to the robust growth were construction, agriculture and services (non-tradable) sectors, with an 18.4%, 9.6% and 12.4% increase, respectively. Increase in construction was due to new investment in industrial production and a boom in

<sup>6</sup> In 2007 Armenia was ranked the fifth in the world with the GDP annual growth rate

<sup>7</sup> AMD (Armenian Dram) is the official currency of the Republic of Armenia

office and residential development. Building of Hydro Power Plants and the construction of the second part of the Armenia-Iran gas pipeline were the most notable developments in the energy sector. The share of industrial production and services together made up nearly 50% of the GDP. Industry (excluding energy sector) – generating 15.7% of the GDP in 2007 - remaining the weakest sector of the economy, provided only 0.6% growth in the GDP, with a 2.6% increase of the aggregate output compared to 2006.

**Chart 7. The Structure of GDP by production approach (2007 Q4)**



Source: State Statistics Committee of the Republic of Armenia, own calculations

Lower performance of the industry sector is the result of the constant decline in the diamond-cutting industry, which Armenia relied upon the most lately. The continuous downturn in the global trade in refined diamonds had negative effects on foreign trade, since it's considered one of Armenia's main export items.

Rapid economic growth has led to an increase in per capita incomes and a significant reduction in poverty, which was followed by strong growth of domestic demand, mainly private sector consumption and investments. Real growth of total private spending was 12.8% in 2007, while consumption increased by 11.3% due to the nearly 20% real growth of household incomes. Although overall levels of poverty still remain high, the proportion of Armenians living below the poverty line has fallen from 50% to below 27% - while real wages have doubled - since the start of the double-digit growth in 2002, according to the government. Real growth and rising domestic demand was also fuelled by large external capital inflows in the form of remittances from the so-called Diaspora Armenians<sup>8</sup> and investments of migrants, especially in real estates. Remittances to Armenia reached USD 1.32 billion in 2007, accounting for 14% of the country's GDP. External inflows – FDI and donor financing from international institutions<sup>9</sup>, such as the International Monetary Fund, World Bank, European Bank for Reconstruction and Development – have become an important source of external finance for the development and modernisation of the Armenian economy, making a considerable contribution to the reconstruction of infrastructure, telecommunications and utilities sectors and other public projects. Moreover, large-scale remittances cover mostly the financing of the gradually increasing current-account deficit, - as a non-debt generating capital inflow - although it remains a question, whether it is sustainable in medium terms. The huge imbalance in 2007 was a result of the almost

<sup>8</sup> Armenians living abroad

<sup>9</sup> Loans to Armenia since 1993 exceeded USD 1.1 billion

50% jump in imports to USD 2.2 billion, while exports only rose at a significantly lower rate of 23.7% to USD 1.22 billion.

### **Potential risks**

After changing its monetary system to an inflation targeting regime on 1 January 2006, price levels in Armenia decreased and was followed by an economic upsurge. Privatisation and market liberalisation began, establishing a favourable investment climate in the country; the short-term seemed to be prosperous, but inflationary issues were on the rise. Although the target band was set by the government and the Central Bank to  $4 \pm 1.5\%$ , massive external inflows – as a result of the attractive economic environment - put considerable pressure on the economy. Consumer prices increased by 6.6% year-on-year, exceeding the targeted four percent in 2007, which was still the lowest among the annual inflation of CIS countries; average inflation of consumer prices in CIS countries was 15% in the observed period.

Meanwhile, growth in wages and household incomes led to higher consumption and an increase in import product prices. Even more, the massive inflow appreciated the nominal exchange rate by 10% against the US dollar that especially affected households relying on remittances, as their value began to erode when converted into national currency. According to the Central Bank of Armenia, about one-third of the population's income originates from these personal transfers. To limit real exchange rate appreciation, reforms in fiscal policy and policies concerning domestic competition are needed, while maintaining exchange rate flexibility. With the change of the monetary system a prudent fiscal system was introduced, however, tighter fiscal and monetary policies are necessary to limit upcoming inflationary pressures. Tax administration is one of the areas of structural reforms that should be solved in the near future in order to be able to continue government spending on social programmes and poverty issues. In addition, the government adopted a five-year policy programme to reduce poverty to 12% by 2012; however, implementation of social reforms still appears to lag behind that of macroeconomic reforms in Armenia.

### **Competitiveness and main priorities**

Concerning the competitiveness of the country, current economic growth is not as qualitative as quantitative in the context of international economy. The most critical issue is the inequality within the borders of Armenia. The distribution of money is uneven both in terms of geography and social layers of the population. Money is centralised in Yerevan, while other regions remain poor and insecure. Improvement of the welfare of the poor is covered by the aforementioned remittances that are no guarantee for the future, since they rather depend on the economy of the countries of origin. Present economic growth is accounted for by the same source of income, instead of a well-developed competitive real sector. In terms of its income and expenditure components, the growth rate boosts due to gross profit and consumption of the rich social layers. The competitiveness of the exporting sector is declining at the same time because of the weak performance and limits of the fiscal sector.

The case of Armenia is a unique situation considering its extreme economic growth and uncompetitive economy. Uneven distribution of income continues to broaden differences between social layers, while the upper-classes remain the winners of the current economic growth. Poverty reduction, fiscal reforms and the focus on price stability should be set the highest on the agenda. GDP growth projected by the International Monetary Fund (IMF) is 10% year-on-year in 2008, on the back of strong activity in construction, transportation, telecommunication, and industrial sectors. Nevertheless, new strategic plans are indispensable in order to stop the increasing inequality in Armenia.

## Energy related general crisis in Tajikistan

*Tamás Borkó*

Tajikistan has experienced severe energy shortage that have threatened the country with both collapse of economic growth, but also with humanitarian disaster originated from poor diversification of the economy, of the energy supply, and from fragile social conditions.

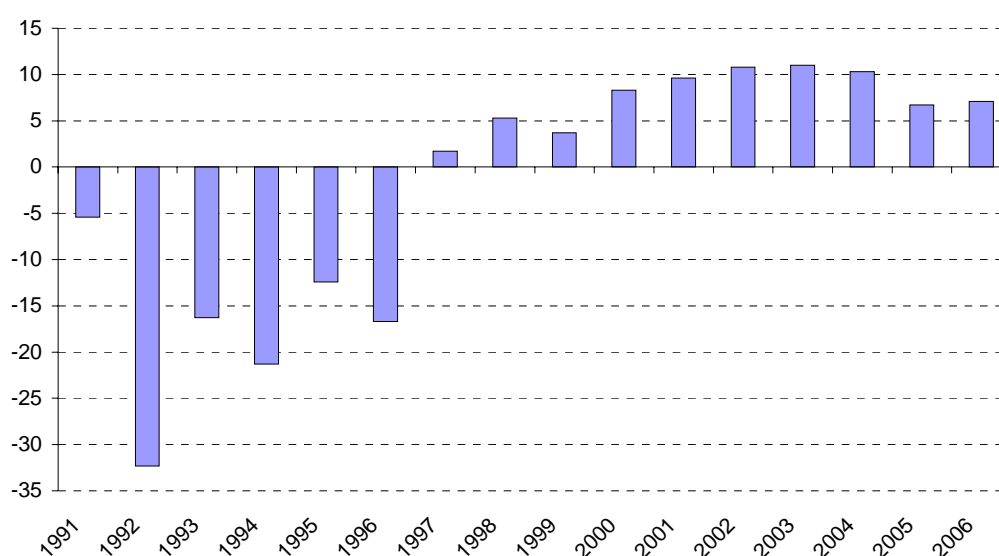
### Determining factors

The energy problem has international and domestic explanations. As for the first one, the whole world faces significant challenges concerning energy market influenced by excess demand (economic and weather related consumption), supply-side bottlenecks (refining, production, transport capacities and conflicts in oil-producing countries).

Parallel, Tajikistan is lacking diversified energy resources as its domestic electricity generation depends primarily on hydroelectric power. As the latest winter proved to be the coldest in last decade, hydropower plants were undersupplied with water remaining capacities unutilised. The frozen rivers meant problem also for drinking-water supply of the population. Heavy snowfalls additionally meant obstacles for transportation causing in particular regions food supply problems.

The neighbour Central Asian countries face their own energy shortages, thus the supplement of the missing energy and electricity has not been possible. This led to serious electricity and water-supply problems that influences negatively not only the countryside but also the cities, even the capital Dushanbe. However, this is not simply an energy crisis, but also a case when the whole economy and society can experience serious collapse, taking into consideration Tajikistan's breakable economic and social balance. This in turn can lead even to political turmoil.

**Chart 8. Real GDP growth, 1991-2006 (%)**



Source: CCA Review, August 2007

## Preconditions

As it was mentioned before, the economic, political and social conditions are not really stable in the country. As concerning the economy, while the real GDP growth show promising rates (*Chart 8*) particularly since 2000, this performance is unlikely sustainable. In 2006, the level of GDP was still under 70% that of in 1991.

The industrial sector is technologically underdeveloped, while the agricultural sector's contribution to growth and also to serious environmental problems is significant. Investment activities are inefficient, mainly publicly ordered, while foreign capital and its positive spill-over effects are unknown in the country. While Tajikistan seems relatively opened<sup>10</sup> (export-import to GDP) economy comparing with other Central Asian countries, its foreign trade is undiversified and extremely concentrated, mainly based on 60-80% of agricultural raw materials (like cotton) and aluminium. (*Table 3*)

**Table 3. Structure of merchandise trade by main product groups in Central Asian countries, 1996-2005 (% of total)**

Countries	Product group	Export		Import	
		1996	2005	1996	2005
<b>Kazakhstan</b>	Primary commodities	67.7	87.3	35.8	21.7
	Manufactured goods	32.3	12.0	64.2	78.3
<b>Kyrgyzstan</b>	Primary commodities	61.2	35.0	52.2	47.8
	Manufactured goods	38.5	27.5	47.7	52.1
<b>Tajikistan</b>	<b>Primary commodities</b>	<b>83.1</b>	<b>85.3</b>	<b>64.5</b>	<b>48.2</b>
	<b>Manufactured goods</b>	<b>16.9</b>	<b>14.2</b>	<b>35.5</b>	<b>51.8</b>
<b>Turkmenistan</b>	Primary commodities	91.6	94.0	29.3	7.7
	Manufactured goods	8.4	6.0	70.7	92.3
<b>Uzbekistan</b>	Primary commodities	77.8	66.5	25.4	9.3
	Manufactured goods	17.5	28.4	74.6	90.7

Note: remaining % of total exports and imports are other products, Source: UNCTAD, own calculations

From political economy point of view that country is still operates as an administrative-command economy. The conditions in favour of competition, foreign capital attraction are not in force. The corruption is very high.<sup>11</sup> (*Table 4*) The level of democracy, the protection of property rights is low, deregulation and privatisation efforts are insufficient.

**Table 4. Corruption Perception Index, 2006-2007**

Countries	2006		2007	
	CPI score	Country rank	CPI score	Country rank
<b>Kazakhstan</b>	2.6	111	2.1	150
<b>Kyrgyzstan</b>	2.2	142	2.1	150
<b>Tajikistan</b>	2.2	142	2.1	150
<b>Turkmenistan</b>	2.2	142	2.0	162
<b>Uzbekistan</b>	2.1	151	1.7	175

Source: Transparency International, CPI table

<sup>10</sup> See Openness and the structure of international trade in CCA countries in Caucasus and Central Asia Review, November 2007 [http://www.icegec.hu/eng/publications/docs/cca\\_review/CCA\\_Review\\_November2007.pdf](http://www.icegec.hu/eng/publications/docs/cca_review/CCA_Review_November2007.pdf)

<sup>11</sup> See Corruption and some economic consequences in the CIS countries in News of the Month on EU-8 and CIS, January 2008 [http://www.icegec.hu/eng/publications/docs/news/news\\_2008\\_january.pdf](http://www.icegec.hu/eng/publications/docs/news/news_2008_january.pdf)

Finally, severe social problems are apparent. Investigating the Human Development Index of the UNDP in 2005, one can see that a very large gap exists between the HDI position and that of determined purely by the GDP per capita. While Botswana possesses the same position by HDI, its GDP per capita is more than ten times higher. However, it is fair to mention that both in HDI and GDP terms, Tajikistan is the poorest country in the region, following Kyrgyzstan and Uzbekistan. In recent years due to favourable growth performances, the positions and the poverty situation improved, while its main challenges were not solved.

## Energy balance

Investigating the electricity production, Tajikistan generated KWh 17 billion electricity in 2005 by the Energy Information Association. The production structure is extremely biased towards hydroelectric power, as almost 98% of total is generated by the contribution of water. The remaining insignificant part is produced by conventional thermal power plants. Only some countries of the world, like Paraguay, Mozambique, Albania, and Kyrgyzstan have such structure. In Central Asia, completely missing are nuclear power plants and alternative ways of electricity production like solar, wind, wood and waste exploitation. Kazakhstan and Turkmenistan exploit their fossil fuel deposits in thermo power plants. Tajikistan either lacks natural resources capable for other ways of production or not in situation to involve alternative, technologically developed and thus expensive methods.

**Table 5. Net electricity generation by type in Central Asian countries, 2005 (billion KWh)**

<i>Countries</i>	<b>Conventional Thermal</b>	<b>Hydroelectric</b>	<b>Nuclear</b>	<b>Other</b>	<b>Total</b>
<b>Kazakhstan</b>	56.5	7.8	0.0	0.0	64.2
<b>Kyrgyzstan</b>	1.0	14.1	0.0	0.0	15.1
<b>Tajikistan</b>	<b>0.4</b>	<b>16.5</b>	<b>0.0</b>	<b>0.0</b>	<b>16.9</b>
<b>Turkmenistan</b>	12.1	0.0	0.0	0.0	12.1
<b>Uzbekistan</b>	39.1	6.1	0.0	0.0	45.2
<b>World Total</b>	<b>11 455.3</b>	<b>2 900.0</b>	<b>2 625.6</b>	<b>369.7</b>	<b>17 350.6</b>

*Note: Other = Geothermal, Solar, Wind, Wood and Waste*

*Source: Energy Information Administration*

Concerning demand side, Tajikistan is able more or less to supply its economy in normal times. By 2005 data Tajikistan net electricity imports were closed to zero. Due to changing weather and world market conditions this balance was broken, as the hydro power plants were not able to ensure the needed volumes, while as other countries, like Turkmenistan, Uzbekistan and Kyrgyzstan (main import origins of Tajikistan) also had to face increasing consumption and electricity shortages.

**Table 6. Electricity exports and imports in Central Asian countries, 2005 (KWh billion)**

<i>Country</i>	<b>Imports</b>	<b>Exports</b>
<b>Kazakhstan</b>	4.6	4.0
<b>Kyrgyzstan</b>	0.0	2.7
<b>Tajikistan</b>	4.5	4.3
<b>Turkmenistan</b>	0.0	2.9
<b>Uzbekistan</b>	11.1	11.2
<b>World Total</b>	<b>612.9</b>	<b>613.3</b>

*Source: Energy Information Administration*



## **Consequences and future steps**

It is clear that country needs to make steps in the diversification not only of electricity generation, but also of import sources. The diversification of electricity production is possible by two ways. Extra budgetary resources has to be devoted for building conventional power plant capacities, even if they will need imports of raw materials (coal, crude oil, natural gas). The import of electricity is possible only from neighbour countries, because of shortages of electricity transportation facilities. Building nuclear power plants has no real possibility.