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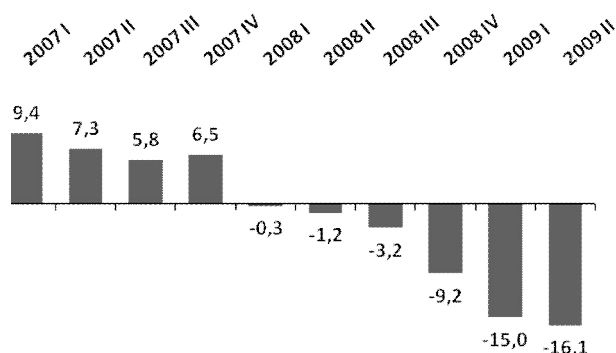
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## Estonia

### Downward trend in economy

According to the revised data of Statistics Estonia, the Estonian GDP decreased by 16.1% during the second quarter of 2009 compared to the corresponding period of the previous year. The falling of the GDP has now continued for six quarters.

### Real growth rate of GDP by quarters in 2007Q1–2009Q2 (y-o-y, %)



Source: Statistics Estonia

The decrease in the GDP has been mainly influenced by a steep decline in both external and domestic demand. Concerning the main economic activities, a deep decline in the value added of manufacturing (-31.0%), construction (-31.0%), and the retail and wholesale trade (-21.0%) had the most significant impacts on the diminishing GDP.

The weak domestic demand reduced the imports to Estonia, which fell by 31.0% in August 2009 compared to August 2008. Estonian exports decreased by 30.0% respectively. Thus the development of Estonian foreign trade reflects the downward trend in the Estonian economy.

### Industrial production contracted

The production of industrial enterprises in Estonia were reduced by 27.9% in August 2008 compared to August 2009, Statistics Estonia reports. The decline was mainly due to the weak demand both in their domestic and external markets.

Manufacturing dropped by 28.8% and production decreased in almost all manufacturing sub-sectors. The sharpest contractions were recorded in the manufacturing of computer, electronic and optical products (-44.9%), building materials (-39.3%), fabricated metal products (-39.0%), and chemicals and chemical products (-35.5%). The manufacturing of food products fell only by 2.7%, due to the decrease of producer prices, and the manufacturing of beverages even grew by 9.6%.

Energy production decreased by 35.2%, of which the production of electricity declined by 39.0% and the production of heat by 17%. Electricity production fell because locally based production in Estonia was partly replaced by imports from Lithuania.

### Decrease in the consumer price index

According to Statistics Estonia, the consumer price index in September 2009 decreased by 1.6% compared to September 2008. With regard to the different commodity groups, the prices for food and non-alcoholic beverages dropped by 6.6%, transport by 5.5%, hotels, cafés and restaurants by 2.6%, alcoholic beverages and tobacco by 0.7%, and recreation and culture by 0.6% y-o-y. On the other hand, price increases were recorded in household goods (2.9%), health (2.8%), education (2.2%), clothing and footwear (1.5%), communications (0.6%), and housing (0.5%).

The consumer price index in September 2009 decreased compared to the previous month as well, by 0.2%. The biggest price fall was seen in the commodity group comprising food and non-alcoholic beverages (down by 1.3%) whereas the biggest growth was seen in clothing and footwear (up by 3.5%).

### Change of the consumer price index in selected commodity groups in September 2009 (%)

Commodity group	y-o-y	Previous month
Food and non-alcoholic beverages	-6.6	-1.3
Clothing and footwear	1.5	3.5
Housing	0.5	0.4
Transport	-5.5	-0.6
Hotels, cafés and restaurants	-2.6	-0.8
TOTAL	-1.6	-0.2

Source: Statistics Estonia

### Some business highlights

- TeliaSonera telecommunications company has increased its ownership in the Estonian teleoperator Eesti Telekom to 97.58%. TeliaSonera has decided to start a redemption procedure to acquire the rest of the shares to secure their full ownership of Eesti Telekom.
- The Swedish Swedbank has to compensate losses of EEK 143 million (EUR 9 million) in total to Estonians that have invested in Swedbank's pension funds. The Estonian investors had intended to invest in low risk funds but instead Swedbank had invested their money to extremely high risk funds without permission.

Estonia - main economic indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GDP (y-o-y %-growth, constant prices)	6.5	8.0	7.2	8.3	10.2	11.2	7.1	-9.7	-16.1	Q2/2009
Industrial production (y-o-y %-growth)	8.9	8.2	11.0	10.5	11.0	7.3	6.1	-6.5	-27.9	8/2009
Inflation (CPI, end of period, y-o-y %-change)	4.2	3.6	1.3	3.0	4.1	4.4	9.6	10.4	-1.6	9/2009
General government budget balance (% of GDP)	0.3	1.5	2.0	2.3	2.3	3.8	2.8	-3.0	n/a	1-12/2008
Gross wage (period average, EUR)	352	393	430	466	555	596	784	838	813	Q2/2009
Unemployment (% end of period)	11.9	11.3	9.3	8.5	7.9	5.9	4.7	5.5	13.5	Q2/2009
Exports (EUR million, current prices)	3698	3642	4003	4770	6190	7647	8028	8454	4117	1-8/2009
Imports (EUR million, current prices)	4798	5079	5715	6704	8213	10576	11278	10872	4741	1-8/2009
FDI inflow (EUR million, current prices)	603	307	822	775	2255	1341	1817	1366	188	1-6/2009
Current account (% of GDP)	-5.6	-10.6	-11.6	-12.5	-10.5	-14.8	-17.4	-9.2	4.9	Q2/2009

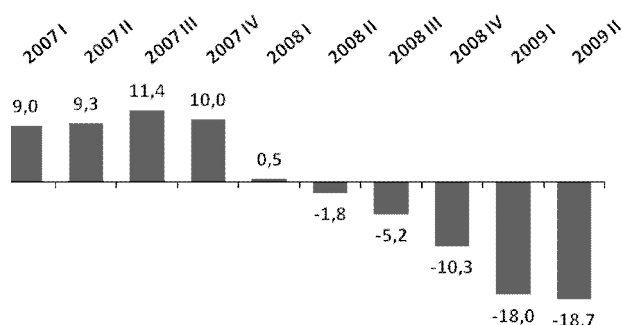
Sources: Statistics Estonia, Bank of Estonia, Eurostat, author's calculations

## Latvia

### Deep recession – GDP down by 18.7%

The overall economic situation in Latvia is the worst of all Baltic Countries. According to the revised data of the Central Statistical Bureau of Latvia, Latvian GDP has dropped by 18.7% during the second quarter of 2009 compared to the corresponding period of 2008. Although the decline was slightly slower than the preliminary data suggested (19.6%), it still remains severe. According to the National Bank of Latvia, severe weakening both in domestic and external demand were the main factors contributing to the downturn. With regard to the main economic activities, the sharpest contractions were recorded in construction (by 29.5%), trade (by 29.0%), manufacturing (by 24.4%) and transport and communications (by 15.0%).

### Real growth rate of GDP by quarters in 2007Q1–2009Q2 (y-o-y, %)



Source: Central Statistical Bureau of Latvia

According to the Bank of Latvia's forecast, the future growth of the Latvian economy will depend on external and domestic developments alike. If the economic recovery trend in the U.S. and in Europe is durable and if the Latvian government succeeds in restoring confidence in the stability of Latvia's economy, year-on-year growth in GDP could be expected towards the end of 2010. However, the overall economic decline in 2009 is still likely to be sharp, around an 18% to 19% decrease in GDP.

The deep fall in Latvian foreign trade reflects the economic situation in the country. According to the Central Statistical Bureau of Latvia, the foreign trade turnover at current prices in August 2009 totalled LVL 627.1 million (EUR 884.7 million), which is 36.4% lower than in August 2008. Exports have decreased by 27.0% y-o-y and imports by 42.1% y-o-y. In January–August 2009 the foreign trade turnover value was 35.7% less than during the corresponding period of the previous year.

### Fall in industrial production

Industrial production output in August 2009 declined by 12.5% compared to August 2008. The most notable decreases were recorded in manufacturing (-13.2%) and in electricity and gas supply (-12.0%). In turn, mining and

quarrying increased by 9.5%. With regard to the manufacturing sub-sectors, particularly bad figures were noted in the manufacture of machinery and equipment (-66.1%), the manufacture of other transport equipment (the building of ships and boats, the manufacture of railway locomotives and rolling stock), down by 46.2%, and the manufacture of parts of motor vehicles, trailers and semi-trailers (-43.3%). On the other hand, growth was recorded in the manufacture of wood and cork articles, except furniture (up by 24.9%), in the manufacture of chemicals and chemical products (up by 12.0%), and in the manufacture of pulp, paper and paper products (up by 2.8%).

During the first eight months of 2009 industrial production output has slumped by 19.2% compared to the corresponding period of the previous year.

### Slight increase in inflation

According to the Central Statistical Bureau of Latvia, the annual consumer price inflation grew slightly in September 2009. The consumer price index increased by 0.5% compared to the same month of the previous year. The price increases were recorded in alcoholic beverages and tobacco (21.2%), health care (17.5%), education (10.6%), housing, water, electricity, gas and fuels (2.0%), and recreation and culture (2.0%). In turn, the prices for clothing and footwear decreased by 8.3%, transport by 4.9%, food by 4.7%, hotels and public catering by 4.2%, communication by 1.9%, and furnishing, household equipment and operation by 1.7%.

Compared to the previous month, the consumer price index decreased by 0.2%. However, the average annual inflation, which is a vital indicator for meeting the euro criteria, was still high at 6.7%.

### Change of the consumer price index in selected commodity groups in September 2009 (%)

Commodity group	y-o-y	Previous month
Food	-4.7	-1.3
Clothing and footwear	-8.3	6.8
Housing, water, electricity, gas, fuels	2.0	-0.8
Transport	-4.9	-0.7
Hotels and public catering	-4.2	-2.1
TOTAL	0.5	-0.2

Source: Central Statistical Bureau of Latvia

### Some business highlights

- The European Bank for Reconstruction and Development (EBRD) has become Parex bank's shareholder by acquiring a 25% plus one share ownership. The EBRD plans to further increase its investment in the bank to LVL 57.5 million (EUR 82.1 million) in total.
- The already signed agreement on the development of the Riga International Airport will be suspended by a Latvian government's decision. The development plan included a construction of a passenger terminal that could serve 30 million passengers per year. According to Transport Minister Kaspars Gerhards, the plan now feels unrealistic and doesn't fit the current situation in the aviation sector.

Latvia - main economic indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GDP (y-o-y %-growth, constant prices)	8.0	6.5	7.2	8.5	10.6	12.2	10.3	-10.3	-18.7	Q2/2009
Industrial production (y-o-y %-growth)	6.9	5.8	6.5	6.0	5.6	4.8	0.5	-6.7	-12.5	8/2009
Inflation (CPI, end of period, y-o-y %-change)	3.2	1.4	3.6	7.3	7.0	6.8	14.1	15.4	0.5	9/2009
General government budget balance (% of GDP)	-2.1	-2.3	-1.6	-1.0	-0.4	-0.2	0.0	-4.0	n/a	1-12/2008
Gross wage (period average, EUR)	282	297	298	314	350	430	683	678	668	Q2/2009
Unemployment (% end of period)	12.9	11.6	10.3	10.3	8.7	6.8	5.4	9.9	17.2	Q2/2009
Exports (EUR million, current prices)	2232	2416	2559	3204	4085	4594	5727	6202	3085	1-8/2009
Imports (EUR million, current prices)	3910	4284	4634	5671	6879	8828	10986	10534	4223	1-8/2009
FDI inflow (EUR million, current prices)	n/a	223	248	489	568	1324	1797	909	50	1-3/2009
Current account (% of GDP)	-7.6	-6.6	-8.1	-12.9	-12.3	-21.1	-22.8	-12.6	14.2	Q2/2009

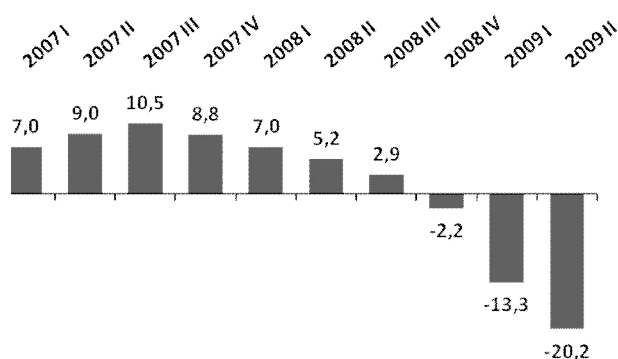
Sources: Central Statistical Bureau of Latvia, Bank of Latvia, Eurostat, author's calculations

## Lithuania

### Rapid slump in economy

The Lithuanian GDP development has been somewhat different than in her Baltic neighbours. Positive numbers were still being recorded in GDP growth rate in the third quarter of 2008 but from the beginning of 2009 the GDP has decreased sharply. According to the revised data of Statistics Lithuania, their GDP plummeted by -20.2% during the second quarter of 2009 compared to the corresponding period of 2008. Thus the economic downturn in Lithuania started relatively late but has recently turned into a deep recession.

### Real growth rate of GDP by quarters in 2007Q1–2009Q2 (y-o-y, %)



Source: Statistics Lithuania

According to Statistics Lithuania, all business activities and non-market services made negative results during the second quarter of 2009. The biggest decreases were recorded in the value added of construction (-46.1%), industry and energy (-25.3%), trade, transport and communication (-21.4%), and financial intermediation, real estate and other business (-17.8%).

### Unemployment rises

Economic decline and the fast decrease in the number of job vacancies have increased unemployment figures in Lithuania. In the second quarter of 2009 the unemployment rate increased 1.7 percentage points to 13.6%, Statistics Lithuania reports. The male unemployment rate reached 16.7%, due to the significant decline in the number of persons employed in industry and construction. The female unemployment rate was somewhat lower, 10.4%. The youth (aged 15–24) unemployment rate remained high at 29.9%.

The number of unemployed persons in Lithuania is predicted to skyrocket in 2010, reports the Lithuanian Ministry of Finance. According to the Ministry's projection, the unemployment rate in Lithuania in 2010 might reach 19.8%.

### Decline in Lithuanian foreign trade

According to Statistics Lithuania, Lithuanian exports in January–August 2009 went down by 32.3% compared to the corresponding period of the previous year and totalled LTL 25.6 billion (EUR 7.4 billion). Imports, in turn, dropped by 42.7% and totalled LTL 28.9 billion (EUR 8.4 billion). Thus the Lithuanian foreign trade deficit was LTL 3.3 billion (EUR 1.0 billion), 73.8% lower than during the same period in 2008.

Statistics Lithuania reports that the decrease in exports was mainly influenced by the decline in the exports of petroleum oils and oils obtained from bituminous minerals (-44.5%), fertilizers (-50.5%), vehicles other than railway or tramway rolling stock (-45.0%), and electrical machinery and equipment (-45.1%). On the other hand, the drop in imports was mainly caused by the decline in the imports of crude petroleum (-44.8%), vehicles other than railway or tramway rolling stock (-72.4%), and boilers, machinery and mechanical appliances (-50.3%).

During the first eight months of 2009 the most important export commodity groups were mineral products with 22.0% share of total exports, products of the chemical or allied industries (9.6%), and machinery, mechanical appliances and electrical equipment (9.6%). The most significant import groups were mineral products (30.1%), products of the chemical or allied industries (12.6%), and machinery, mechanical appliances and electrical equipment (12.0%). The largest share of Lithuanian exports went to Russia (12.8%), Latvia (10.2%), Germany (9.6%) and Estonia (7.2%). The key import partners were Russia (31.2%), Germany (11.1%), Poland (10.0%) and Latvia (6.2%). The EU's share of Lithuanian exports was 64.9% and imports 58.0%.

### Change of the consumer price index in selected commodity groups in September 2009 (%)

Commodity group	y-o-y	Previous month
Food and non-alcoholic beverages	-2.0	0.0
Clothing and footwear	-9.7	3.9
Housing, water, electricity, gas etc.	10.5	0.5
Transport	-4.3	-0.8
Hotels, cafés and restaurants	3.7	-0.5
TOTAL	2.7	0.6

Source: Statistics Lithuania

### Some business highlights

■ TeliaSonera telecommunications company has increased its ownership in its subsidiary, the Lithuanian teleoperator TEO LT. TeliaSonera now controls a 68% share of votes in TEO LT. TeliaSonera has received a permission from the Lithuanian competition authorities to acquire full ownership of the company.

Lithuania - main economic indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GDP (y-o-y %-growth, constant prices)	6.6	6.9	10.3	7.3	7.9	7.8	8.9	3.0	-20.2	Q2/2009
Industrial production (y-o-y %-growth)	16.0	3.1	16.1	10.8	7.3	8.9	7.2	2.7	-13.2	8/2009
Inflation (CPI, end of period, y-o-y %-change)	2.0	-1.0	-1.3	2.9	3.0	3.8	8.1	10.9	2.7	9/2009
General government budget balance (% of GDP)	-2.0	-1.4	-1.3	-1.5	-0.5	-0.3	-1.2	-3.2	n/a	1-12/2008
Gross wage (period average, EUR)	274	293	311	335	421	459	594	672	629	Q2/2009
Unemployment (% end of period)	17.4	13.8	12.4	11.4	8.3	5.6	4.3	5.8	13.6	Q2/2009
Exports (EUR million, current prices)	4778	5526	6158	7478	9502	11250	12522	16074	7411	1-8/2009
Imports (EUR million, current prices)	6767	7943	8526	9959	12446	15384	14341	21026	8374	1-8/2009
FDI inflow (EUR million, current prices)	516	772	160	623	826	1448	1645	1223	426	1-6/2009
Current account (% of GDP)	-4.7	-5.1	-6.8	-7.7	-7.2	-10.8	-13.7	-11.6	0.4	Q1/2009

Sources: Statistics Lithuania, Bank of Lithuania, Eurostat, author's calculations

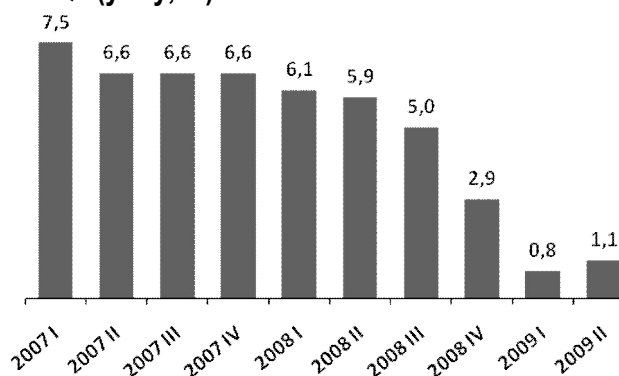


## Poland

### GDP growth rate stays positive

Poland hasn't been hit as hard by the economic crisis as many other countries. The preliminary data of the Central Statistical Office of Poland shows that the Polish GDP continued to grow slightly, by 1.1%, during the second quarter of 2009 compared to the corresponding period of the previous year. According to Eurostat, Poland was the only EU country to achieve economic growth during this period.

### Real growth rate of GDP by quarters in 2007Q1–2009Q2 (y-o-y, %)



Source: Central Statistical Office of Poland

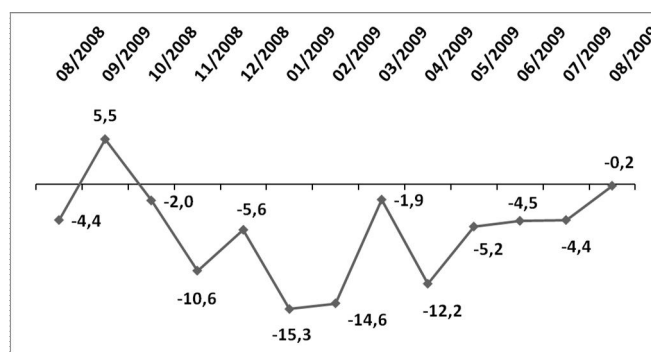
The growth in GDP has been mainly supported by foreign trade, although Polish foreign trade has been falling sharply during this year. According to the Central Statistical Office data, exports dropped by 22.5% and imports by 30.1% during the first half of 2009 compared to the corresponding period of 2008.

On the other hand, domestic demand in Poland has weakened severely due to collapsing private consumption and shrinking business investments, and therefore it cannot support the growth. Thus the development of the Polish economy in the near future depends very much on global economic development, which still remains very uncertain.

### Improving trend in industrial output

The data on Polish industrial output indicates some signs of recovery. According to the Central Statistical Office, Polish industrial output in August 2009 decreased only by 0.2% compared to August 2008. This is the fourth month in a row when the pace of decline in industrial output has been slowing down. During January–August 2009 Polish industrial output has decreased by 6.5% compared to the corresponding period of the previous year. Industrial output decreased in 19 out of 34 sectors.

### Industrial output in August 2008–August 2009 (y-o-y, %)



Source: Central Statistical Office of Poland

With regard to the main industrial sectors, mining and quarrying contracted the most, by 13.3% y-o-y. Electricity, gas, steam and air conditioning supply declined slightly by 2.0%. On the other hand, manufacturing increased by 0.6% and water supply, sewage treatment, waste disposal and land rehabilitation rose by 1.1% y-o-y.

Concerning the manufacturing sub-sectors, the most notable decreases in output were recorded in other transport equipment (-29.1%), basic metals (-22.4%), machinery and equipment (-13.6%), and leather and related products (-10.9%). In turn, in the computers, electronic and optical products sub-sector output grew significantly by 28.9%. Among the expanding sub-sectors were also beverages (up by 16.1%), printing and the reproduction of recorded media (up by 11.6%), paper and paper products (up by 11.2%), and wood, cork, straw and wicker products (up by 11.1%).

### Some business highlights

- The Polish-German RWE company plans to invest PLN 2.1 billion (EUR 500 million) in wind farms in Poland by 2015, with a total power generating capacity of 300 MW. The company has already started to build a wind park in the Podlasie province in North-East Poland, which is planned to be in operation during this autumn.
- Also a Danish manufacturer of wind turbines, Nordex, plans to construct a wind farm in Poland. The wind farm, situated in the Orlea area, will consist of two separate sites and include 15 turbines in total, with a combined power generating capacity of 37.5 MW. The investment will be worth of PLN 250 million (EUR 60 million) and construction will start in 2010.
- The British-Italian corporation AgustaWestland has agreed to buy 87% of the Polish PZL-Swidnik company which produces helicopters and airplane components. After this acquisition AgustaWestland will own 93.2% of the company. The acquisition has to pass antitrust approval before coming into operation. The value of the deal has not been disclosed, but it has been estimated to be around PLN 332 million (EUR 79 million).
- An Italian manufacturer of pre-coated steel products, Lampre, will start a factory of metal sheets in Kutno, Poland. The investment will be worth PLN 96 million (EUR 23 million). The factory will start to operate in two years and will employ 100–120 people.

Poland - main economic indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GDP (y-o-y %-growth, constant prices)	1.1	1.4	3.8	5.3	3.5	6.2	6.7	4.8	1.1	Q2/2009
Industrial production (y-o-y %-growth)	0.6	1.1	8.3	12.6	4.1	5.7	9.7	3.5	-0.2	8/2009
Inflation (CPI, end of period, y-o-y %-change)	3.6	0.8	1.7	4.4	0.7	1.4	4.0	4.2	3.4	9/2009
General government budget balance (% of GDP)	-3.7	-3.3	-2.9	-3.3	-6.1	-3.9	-1.9	-3.9	n/a	1-12/2008
Gross wage (period average, EUR)	557	544	497	505	591	692	825	821	693	Q2/2009
Unemployment (% end of period)	18.5	19.7	19.3	18.0	16.7	12.2	11.4	9.5	10.8	8/2009
Exports (EUR billion, current prices)	40.4	43.4	47.5	59.7	71.4	87.5	101.1	114.6	60.6	1-8/2009
Imports (EUR billion, current prices)	56.2	58.3	60.4	71.4	80.6	100.0	118.8	139.3	66.5	1-8/2009
FDI inflow (EUR billion, current prices)	6.4	4.4	3.7	10.0	8.3	15.1	12.8	11.1	3.7	1-7/2009
Current account (% of GDP)	-2.9	-2.6	-2.1	-3.5	-1.7	-2.3	-3.7	-5.4	0.5	Q1/2009

Sources: Central Statistical Office of Poland, National Bank of Poland, Eurostat, author's calculations

## St. Petersburg

### Economy: deepening of the crisis

In August 2009 certain slight improvements were observed in the Russian economy: a strengthening of the rouble and month-on-month growth of national industrial output, as the most outstanding examples. Despite this performance, St. Petersburg's economy continued to be rather gloomy. Industrial production of the region kept on falling: down by 24.0% in January-August 2009, y-o-y. Even these results for industry were slightly artificial: natural monopolies, supplying energy, water and gas to the megapolis of St. Petersburg, experienced a 14.3% increase of monetary revenues, whereas the whole regional manufacturing sector had lost 29.9% of its output in January-August 2009, y-o-y. Construction went down in the same period of 2009 by 22.2%, y-o-y; in August 2009 the reduction in the sector reached 33.8% compared to the corresponding month of 2008. A more than expected contraction of 14.1% was reported by regional retail trade in August 2009, y-o-y. The reason for this was the decrease of the private incomes of St. Petersburg's residents: during January-July 2009 the latter declined by 6.8%, y-o-y. Another demand-sensitive sector, namely catering, reduced its monthly revenue in August 2009 by 25.4% y-o-y; in January-August 2009 by 18.2%, y-o-y. Even companies from the communication sector, which in the first quarter of 2009 raised its output due to higher tariffs on services supplied by regional monopolies, lost 4.0% of its revenues in August 2009 compared to the corresponding month a year ago. The only slight increase was observed in the transport sector: it increased revenues by 1.4% in August 2009, y-o-y, and by 8.4% in January-August 2009, y-o-y. This, however, was a result of raising prices on transport services, as the physical volume of cargoes carried in the first eight months of 2009 decreased by 18.2%, y-o-y. The number of passengers transferred during January-August 2009 by regional transport companies fell by 3.7%, y-o-y. The only actually positive development in the region was the lowering of the inflation. If the current downward trend will not change until the end of 2009, regional inflation might become significantly lower than a year ago.

### Construction: prices continue to fall

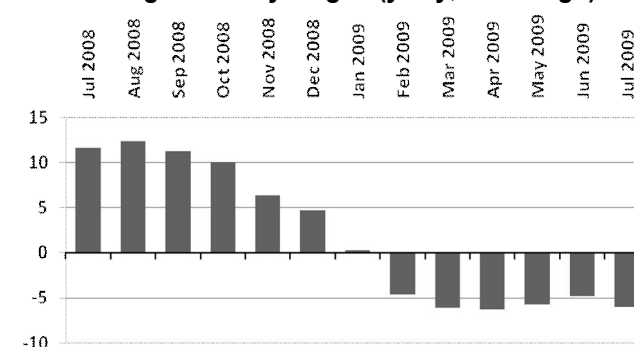
Real estate prices in St. Petersburg kept decreasing by 0.5-1.0% per week. Since early October 2008 till October, 5, 2009, the average per metre price of residential space fell by 37.7%, from RUB 132 800 (EUR 3036) down to RUB 82 410 (EUR 1884). Some of construction companies expected the market to revive in the autumn, as this was traditionally a high season for real estate in St. Petersburg. However, the market remained stagnant. Certain revival of construction activity in March-July 2009 was followed by a sharp fall of August 2009: both the metric volumes and the monetary value of construction works dived, by 25.5% and 33.8% y-o-y, respectively. The fall in August was especially deep in the field of residential construction: the number of apartments finalised in the last summer month decreased by 87.1% compared to August 2008. This might have been just an exception. Nevertheless, one of the regional builders, namely YIT Lentek, forecasted a significant reduction of real estate

supply in the region closer to the end of 2009, at least on the primary market, which might push the prices up.

### Incomes and wages decline

The economic crisis led to a significant contraction of real disposable incomes of St. Petersburg's residents. Incomes were falling constantly since August 2008 twelve months in a row with the minor exception of May 2009, when the indicator experienced a sudden 7.9% y-o-y increase. Income dynamics closely correlated with the change of real average wages in the region; the latter had been falling since February 2009.

### Real average monthly wages (y-o-y, %-change)



Source: Petrostat, 2009

The structure of private expenditures has changed significantly within the first seven months of 2009: the share of incomes spent on goods and services went from 182.4% in January, when people also used their savings to finance the purchase of goods, down to a minimum of 68.2% in July 2009. The highest salaries in July 2009 were received in air transport, the financial sector and the extractive industry. The lowest wage level was observed in secondary education, hotel service and social care.

### Some business highlights

- Russia's Ministry of Transport confirmed that a project of building the new federal motorway between St. Petersburg and Moscow would be finally launched. The construction would, overall, cost approximately RUB 175 billion (EUR 4 billion). The project would be financed by bank VTB, Russia's Pension Fund, and a pool of private investors. Fundraising for the project would be conducted by issuing special "infrastructural" bonds
- A tender on the renovation and development of Pulkovo airport, which serves as a main air harbour for St. Petersburg, was won by a consortium of three investors: Russian bank VTB, German company Fraport, and Greek investor Horizon Air Investments. VTB would hold the controlling stock of the project. The total budget of this project is expected to be RUB 56.9 billion (EUR 1.3 billion).
- St. Petersburg leading machine-building plant, namely Elektrosila, a part of Silovyje Machinery holding, won the tender on producing power equipment for Adler Power Plant, a key energy supplier of Sochi Olympics 2014. Elektrosila cooperates in this project with Ansaldo Energia, an Italian machine-building company, which would also supply equipment for a new power plant in Adler.
- During the first half of 2009 St. Petersburg's banks generated RUB 8.7 billion (EUR 199 million) of losses, whilst in the corresponding period of 2008 they managed to earn RUB 12.6 billion (EUR 288 million) of profits. The worst results of January-June 2009 were reported by banks KIT-Finance and Svjaz-Bank, while the two best performers of the same months of 2009 turned out to be state-owned banks: North-West Sberbank and VTB North-West.

St Petersburg - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GRP of St Petersburg (y-o-y %-growth, constant prices)	10.5	4.5	17.7	8.4	7.2	8.4	8.4	9.1	8.7	n/a	1-12/2008
Industrial production (y-o-y %-growth)	26.2	0.2	31.4	5.8	14.1	4.2	-7.0	10.0	4.1	-24.0	1-8/2009
Regional inflation (CPI, y-o-y %-change)	23.5	16.3	16.6	13.0	12.7	12.0	10.0	10.9	14.9	14.5	1-8/2009
Gross average wage (monthly, EUR)	n/a	n/a	217	209	285	344	407	510	667	554	7/2009
Unemployment (% average annual)	7.9	4.4	3.5	4.3	2.8	2.4	2.4	2.0	2.0	4.1	1-8/2009
Exports (EUR million, current prices)	2736	2134	1839	2428	3210	3953	5499	12978	16055	4395	H1/2009
Imports (EUR million, current prices)	2693	4423	5158	5123	5560	8081	10299	15093	17475	5446	H1/2009
FDI inflow (EUR million, current prices)	158	127	89	62	90	200	512	567	581	162	Q1/2009

Source: Petrostat, Rosstat, Central Bank of Russia, European Central Bank, author's calculations

In 2002 and 2004 average wage is for December; in 2003, 2005, 2006, 2007 and 2008 wage is for November of corresponding year

## Leningrad region

### Economy: outstanding recovery

Being one of the leaders of post-Soviet Russia's economic boom, Leningrad province rose already in 1999, when the country's national economy was still stagnant. This phenomenon gained fresh ground after the new global crisis of 2008–2009. When the Russian economy showed the very first signs of improvement, Leningrad province managed to respond with much more impressive recovery signals. Whilst industrial production in January-August is still down 7.9% y-o-y, the output of industry in August 2009 alone decreased by 3.8% only. Construction, one of the main victims of the current crisis, reported an insignificant fall of 0.7% in January-August, y-o-y. The reduction in construction activity was much weaker in the region than in Russia in general, and a huge 21.8% growth of residential buildings' space finalised in January-August 2009 y-o-y (and a 59.3% increase of finalised space in August alone) could prove the sector being relatively crisis-resistant. Regional agriculture continued to recover: it expanded by 6.3% in January-August 2009 and by 12.5% in August alone, y-o-y. Communication went up by 12.6% in January-August 2009, maintaining almost stable growth during the whole reviewed period of 2009. But the best performance in January-August 2009 was reported by the regional transport sector, which grew 17.3% in the first eight months of 2009, y-o-y. In August 2009 transport increased by 24.1% compared to August 2008. Not only the monetary value of transport services, but also the physical volumes of cargoes carried in tonnes rose by 2.7% in January-August 2009, y-o-y. A drop of 1.3% was observed in regional retail trade in January-August, y-o-y. This was a consequence of declining real incomes: the latter had lost 4.7% in the first seven months of 2009 y-o-y; and the decrease of incomes in July 2009 alone was 6.1% compared to the corresponding month a year ago. And last, but not least, is the fact that investment activity, being a pre-condition for all types of economic growth, was increasing in the region during the period under review: in January-August non-financial investment grew 9.8% y-o-y, in August the increase accounted for 0.4% compared to August 2008.

### Agriculture: a good harvest

Recovery by the regional agricultural sector was a result of two basic pre-conditions: the global economic crisis, increasing the competitiveness of regional production versus imported food, and huge state-sponsored projects in agriculture. In addition to this, the summer of 2009 brought rather good crops, so that production of grain in September 2009 more than doubled compared to the same month a year earlier. Vegetable crops in September 2009 grew 10.1%, y-o-y. But most important are changes in livestock farming patterns. Despite a relatively small 2.0% y-o-y increase of total meat production in January-August 2009, the sub-sector of pork production is showing good results. Whereas cattle stock in Leningrad province remained almost stagnant, by early September 2009 hog stock grew over 60% compared to September 1st, 2008. The reason was the profitability of hog farming in the region, requiring a comparatively small investment and having a short production cycle.

Leningrad region - main economic indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	as of
GRP of Leningrad Province (y-o-y %-growth, constant prices)	12.8	8.5	16.3	14.6	8.8	8.3	8.1	8.5	7.6	n/a	1-12/2008
Industrial production (y-o-y %-growth)	26.8	10.7	35.6	20.9	10.3	5.9	26.9	2.6	1.0	-7.9	1-8/2009
Regional inflation (CPI, y-o-y %-change)	23.5	19.6	14.8	13.0	14.9	12.0	9.9	9.3	15.5	15.4	1-8/2009
Gross average wage (monthly, EUR)	105	141	152	173	190	259	324	403	492	436	7/2009
Unemployment (% average annual)	12.7	10.8	9.6	9.2	7.5	7.8	6.2	3.3	3.2	9.2	1-8/2009
Exports (EUR million, current prices)	1786	2350	2301	2580	3886	4862	5443	6078	7870	2309	H1/2009
Imports (EUR million, current prices)	328	810	939	1061	1372	2562	2858	4759	5932	1336	H1/2009
FDI inflow (EUR million, current prices)	222	266	122	104	107	179	288	277	258	347	Q1/2009

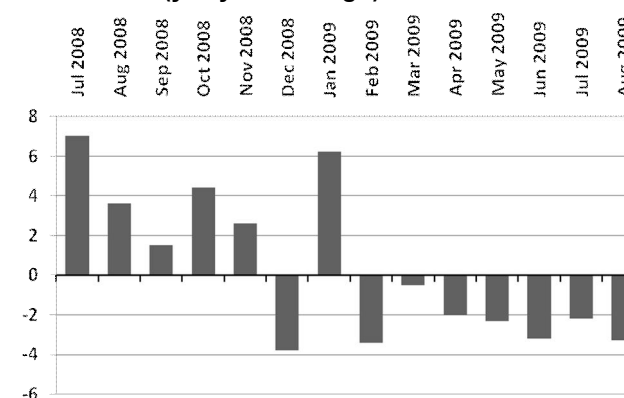
Source: Petrostat, Rosstat, Central Bank of Russia, European Central Bank, author's calculations

In 2000-2008 average wage is for November of corresponding year

### Retail trade: the outsider

Retail trade was, in the pre-crisis period, one of the drivers of regional economic growth. The key peculiarity of the sector was its linkage with the huge retail market of neighbouring St. Petersburg. A number of the largest hypermarkets, e.g. those of IKEA and Auchan, were built on Leningrad province's territory close to the border with St. Petersburg, thus enjoying lower taxation by the province compared to that in the city. However, during the crisis this excessive dependence by regional trade on St. Petersburg's consumers created problems for the province, as the recession struck the city's economy more heavily. After January's crisis-driven final sales, the regional retail trade moved into a long recession cycle, which according to August data seems to be deepening.

### Retail trade (y-o-y, %-change)



Source: Petrostat, 2009

Another reason for that was the aforementioned decline of real incomes in the region and rapidly increasing unemployment, which reached a level of 9.2% by early September 2009. Moreover, salaries in Leningrad province tended to contract faster, than incomes: in July 2009 the average real wage was 7.9% lower than in July 2008.

### Some business highlights

- The first phase of constructing two new nuclear reactors for Leningrad Nuclear Plant (LAES) was completed; it included basement and related infrastructures. The first of the new reactors would be launched in 2013. Investment in the project during January–September 2009 accounted for RUB 14.4 billion (EUR 330 million).
- A wood-processing plant MM-Efimovsky was launched in Boksitogorsk, Leningrad province. This was a joint project by the Austrian company Mayr-Melnhof Holz and St. Petersburg developer LSR Group. The plant would supply wooden boards to both the construction sector and furniture producers. Investment in the project totalled RUB 3.5 billion (EUR 80 million).
- Concrete-producer Bazel-Cement-Pikalevo and a local gas supplier, namely Peterburgregiongaz, agreed upon Bazel's debt on consumed gas. The conflict between the gas monopoly and Bazel's enterprise led to stopping supplies to the whole municipality of Pikalevo, which resulted in huge social tensions between residents and the local authorities of this town.
- The CEO of the Stevedore Company of Vysotsk, a seaport located near Vyborg, announced that this port would process some new cargoes other than coal which is its main speciality today. The port's renovation, ending in 2010, would enable Vysotsk to process other types of cargoes, e.g. containers.



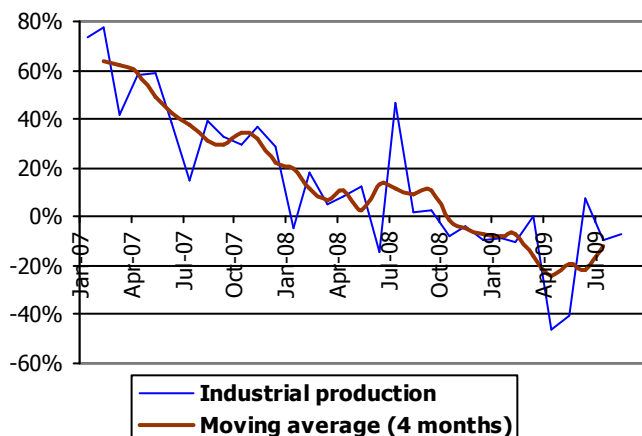
## Kaliningrad region

### Economy has hit the bottom

The signs that Kaliningrad's economy hit rock bottom this summer were reinforced by the latest data from Kaliningradstat. Industrial output fell by 13.2% in the first 8 months of the year but it was an improvement by 2.7 percentage points compared with the results for the first 6 months. It was helped by the increased production of electricity and heat in July and August. In the remaining months of the year industrial production figures are likely to improve further. One reason for this is a better access to credit and visible general economic stabilisation; the other is a large fall in production at the end of the last year that lowers the comparison base.

Manufacturing remains depressed because of a severe contraction in the production of consumer electronics and cars: in January-August, the production of cars dropped by 42% and the production of TVs – by 75% to the same period of 2008. The crisis has dealt a huge blow to contract manufacturing in Kaliningrad and it is not obvious that it will be able to recover fully in the next few years. The looming expiration of import tariff benefits in 2016, which helped to establish this sector in Kaliningrad in the first place, substantially reduce incentives for companies to invest in new facilities and plants, even after the current crisis is over.

### Industrial production (y-o-y, %)



Source: Kaliningradstat (2009)

### Growth rates by sectors (y-o-y, %)

	2009 Jan-Aug	2008 Jan-Aug
Industrial production	-13.2	6.5
Extraction industries	-4.3	-0.8
Manufacturing	-25.3	13.2
Electricity, gas and water	-9.8	7.5
Construction	-5.9	47.2
Retail trade	-3.0	15.5

Source: Kaliningradstat (2008–2009)

Kaliningrad - main economic indicators	2002	2003	2004	2005	2006	2007	2008	2009	as of
GRP (y-o-y %-growth, constant prices)	9.5	9.3	12.6	3.6	15.3	19.9	9.7	n/a	1-12/2008
Industrial production (y-o-y %-growth)	4.2	4.7	22.5	27.4	66.6	34.8	2.5	-13.2	1-8/2009
Inflation (CPI, end of period, y-o-y %-change)	9.8	17.5	11.7	11.1	7.9	11.2	15.2	11.1	8/2009
Gross wage (period average, EUR)	125	137	155	193	285	358	430	364	6-7/2009
Unemployment (% end of period, LFS data)	7.2	7.6	6.5	6.6	4.5	3.4	8.7	11.6	Q2/2009
Exports (EUR million, current prices)	497	507	876	1470	2025	3666	765	95	Q1/2009
Imports (EUR million, current prices)	1701	1894	2419	3283	4275	5714	6564	841	Q1/2009
'Exports' to Russia (EUR million, current prices)	802	989	1449	1901	2471	3901	3805	n/a	1-12/2008
FDI inflow (EUR million, current prices)	6.3	12.4	18.0	15.1	16.9	117.9	109.4	11.3	Q1/2009

Source: Kaliningrad Statistical Office, RosStat, Central Bank of Russia, author's calculations

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### Disposable income starts to grow

Probably the strongest sign of improving economic conditions is the growth of real disposable incomes that started in May (y-o-y) although for the first 7 months of the year disposable incomes were still down by 0.6%. Last year, household incomes began to fall also in May even before the impact of the economic crisis became apparent in Kaliningrad. It might be that this year it signals that the recession is ending. It is not exactly clear from statistical data what is driving this growth since real wages are still falling – in July they were 5.0% lower than a year ago. It seems, however, that public sector spending has definitely played a positive role.

Unemployment data was quite positive as well – in July and August the number of registered unemployed started to decrease.

### Consumer inflation continues to decline

Consumer prices in both July and August fell on the month-to-month basis, pushed down mainly by the seasonal declines in food prices. The annual rate of consumer price inflation dropped to 11.1% in August 2009 – the lowest rate since November 2007. Unlike 2008, this year food price growth was the slowest among the other components of CPI (5.8% in the first 8 months). Service prices increased the most (by 11.6% in the first 8 months) but their increases were still lower than last year. Growth in non-food prices was slightly higher than the last year (8.2% in the first 8 months of this year vs. 7.9% in the same period of 2008).

Producer prices rose much more steeply – by 24.4% to August 2008.

### Some business highlights

- Kaliningrad's airline, KD-Avia, finally stopped its flights, lost its aviation licence and filed for bankruptcy despite the fact that the federal government transferred RUR 4 billion to the Kaliningrad regional government to bail the airline out. KD-Avia's shareholders, creditors and the regional government could not agree on the terms of the bail-out, so KD-Avia has not received the funds.
- The regional government initially indicated its intention to use the provided funds to create a new Kaliningrad-based airline but later dropped the idea.
- The second largest Kaliningrad-based retailer, Vester, has failed to pay all of its bondholders and a Russian business daily, Kommersant, reported that Russia's largest bank, Sberbank, agreed to take a controlling stake in the retailer in exchange for restructuring its debts.
- Lithuanian refrigerator producer, Snaige, decided to close down its Kaliningrad plant because of the losses on the Russian market.
- Gazprom finished construction of the second branch Minsk-Vilnius-Kaunas-Kaliningrad gas pipeline that will allow it to almost double their natural gas supply capacity to Kaliningrad.
- German producer of baby foods, HiPP, opened a new plant in Mamonovo (near the Polish border). Total investment in the plant amounted to approximately EUR 10 million. The plant has received tax benefits as a resident of the Kaliningrad Special Economic Zone.
- The Russian federal government issued a decree (№ 1353-p) approving the construction of the Baltic nuclear power station near Neman (close to the border with Lithuania).

## Baltic Sea cooperation – from strategies to results

By Matti Vanhanen

The Baltic Sea and the surrounding region face severe challenges which require urgent and determined action. I want to emphasise word "action". We do not save the Baltic Sea or boost its economy alone by giving statements or preparing papers. We need concrete actions.

Policy papers and action plans are important and useful tools for us to define priorities and actions needed. The EU's Baltic Sea Strategy and the accompanying action plan are valuable documents to summarise what needs to be done and to guide our actions. However, without concrete actions the documents will lose their relevance.

We know what should be done, and now is the time to do it. But no government can do it alone. In order to get real results we need cooperation of all coastal states, and in some cases of a wider catchment area which includes e.g. Belarus. We need cooperation in all levels and fora – from international organisations to individual citizens. In addition to policy decisions we can all make difference by our own choices.

With this action-oriented approach in mind we have launched together with President of the Republic Tarja Halonen and the Baltic Sea Action Group, chaired by Ilkka Herlin, a joint initiative: The Baltic Sea Action Summit 2010, held in Helsinki in February 2010. The initiative builds on a strong public-private partnership and concrete commitments.

The Summit will not be just any summit meeting. It will be a meeting of commitments and actions to save the Baltic Sea. Governments, public institutions, private enterprises and non-governmental organisations from the Baltic Sea region are invited to make concrete commitments facilitating the recovery of the sea. Several actors, international corporations among them, have already joined the process by making a commitment to environmentally sound practices and donating their know-how, products and funds.

What kind of commitments can we make? We do not have to invent those actions. The Baltic Sea Action Plan by the Helsinki Commission, adopted in November 2007, includes a number of recommendations and actions needed to restore the good environmental status of the Baltic Sea. There are actions and concrete recommendations in four areas: eutrophication, maritime actions, hazardous waste and biodiversity.

The HELCOM Action Plan introduced a totally new approach to the prevention of eutrophication as it determined a ceiling on the nutrient loads that the sea can take. Based on the ceiling, each country was given a specific reduction target. It is of crucial importance to reach those well-defined targets. There cannot be any excuses to backtrack from the commitments already made.

The state of the Baltic Sea is alarming and we all have to improve our performance. We all have homework to do. In order to enhance actions Finland can and should take, we have prepared a Government report on Baltic Sea policy. In the programme we have over 70 concrete and practical actions to improve the protection of the marine environment and maritime safety, as well as to enhance economic cooperation. Some of these actions we can take nationally, some with our neighbours and some actions require EU-level, regional or international cooperation. What is important is to know what needs to be done and then find the best forum to implement it.

In Finland we have already taken efficient measures to improve industrial processes and the treatment of municipal wastewaters. We have reached the level where we can no longer achieve any major reductions in discharges. Additional measures would not be cost-efficient any longer. However, it has been much more difficult and slower to cut discharges from agriculture, forestry and scattered settlements where you cannot apply technical solutions and add new devices. So, we have basically done the easy things and now we need to scatter additional measures from smaller streams, which is always much more difficult.

No country can save the Baltic Sea alone. We need cooperation and joint efforts. The European Union has many efficient tools at its disposal. The EU's Baltic Sea Strategy will help us to use the EU toolbox more efficiently and coordinate various actions and programmes better. We have a long tradition of good cooperation in the whole Baltic Sea area and we need to build on those foundations.

In addition to public level actions we need cooperation and contribution of other actors, that is, private companies, non-governmental organisations and private citizens. The Baltic Sea Action Summit brings into the picture these private and non-governmental actors. Even if it is not evident from the first sight what these actors could do to the benefit of the Baltic Sea, there is almost always something one can do in their own area of expertise.

The success of our Baltic Sea measures will not be judged by words but by deeds. It is concrete results that count. I invite you all to take part in the work to save the Baltic Sea.

*Matti Vanhanen*

*Prime Minister of Finland*



## The Baltic Sea region at the crossroads of culture and economy

By Laine Jänes

Cooperation among countries situated by the Baltic Sea is active, and cultural contacts are in most cases so self-evident that we may not always even notice this interaction. But now the Nordic and Baltic countries as well as North-Western Russia have begun to focus on stepping up cooperation in the field of creative industries, which creates completely new opportunities for merging creativity and enterprise when increasing the attractiveness and competitiveness of the entire region.

The Baltic Sea region stands out in the European Union with higher than average indicators of culture consumption, people working and companies operating in creative industries and the proportion of creative industries in the gross national product. Nordic countries are also Europe's frontrunners in innovation and introducing new technologies. The region, with its rich heritage, vibrant cultural life, innovative ideas and modern technology, has all the makings of becoming the leader in creative industries in the whole of Europe.

The role of culture and creativity in increasing economic growth and employment is one of the central subjects in the relevant European Union policies, and cooperation in these matters has been very active in the interaction among Baltic Sea countries. Inventive and innovative business that is based on traditional skills and honours the uniqueness of cultural environments is certainly a great potential for the region.

Europe has been talking about creative industries already for more than 20 years. The Baltic Sea region may have had a slow start, but today's developments are definitely promising. Creative industries networks have already tied the Nordic countries and Baltic countries into a well-functioning network. We are also actively contributing to developments at European Union level. We are currently preparing a cultural and creative industries cooperation platform within the Northern Dimension, which brings together the European Union, Iceland, Norway and Russia in achieving common goals.

On the one hand, cultural cooperation within the Northern Dimension supports direct contacts among cultural actors, organising various festivals and joint events and sharing the region's diverse cultural traditions, and on the other hand, it creates the environment for implementing the ideas and projects born at the crossroads of culture and economy and for finding new sources of financing. Involved in this process are ministries, international organisations, potential investors and, naturally, cultural actors representing various fields.

Cooperation is of key importance in developing creative industries. Viewed separately, practically all the countries of the region are too small to be able to create a significant large-scale effect. When viewed as a region, on the other hand, our market share becomes considerable, which in turn makes us more competitive on the global arena. This message has been understood by the Nordic countries, who do not limit the development of creative industries only to the domestic market, but are directing considerable attention

both to Western-European and Asian markets. Among the areas with potential are design, music, the audiovisual field, but also the gaming industry. In addition, promoting creative industries makes the region more attractive to tourists and contributes to introducing all countries of this region to the world through entirely positive messages.

Of central importance in building up a creative economy is education. This is where the competitive edge of the Baltic Sea region lies. To this end, the merging of different universities, disciplines and curricula should be intensified. A bold example to be followed by all others is the Aalto University, created by merging the Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki. Although we still lack such cooperation results, we can assure that innovation at its best is achieved by bringing together creative ideas, practical solutions and venturesome people. Addressing the younger generation is important for all of us and we should think about working out common education principles and joint methodological grounds.

Estonia finds it very important to develop cooperation between the Baltic region and the Nordic countries. It is important to use the experiences of the Nordic Innovation Centre and the process that led to the Creative Economy Green Paper in the Nordic Countries. There are already a lot of cultural contacts between the Baltic and Nordic countries. Using the already existing experience and finding common solutions is a key factor to our region's competitiveness.

Estonia has put a lot of effort into raising knowledge and awareness of creative industries among the culture sector and entrepreneurs. We have encouraged our professionals to follow the example of the Nordic countries, who have found a good balance between the cultural and social needs of society and business.

We have the opportunity of taking on the role of the intermediary of various good practices both within the region and in the European Union. We have made quite active use of European Union funds aimed at culture; several important projects have been completed and there are others to come. We are also unique in that we have directed funds at promoting creative business through the foundation Enterprise Estonia. We can share with others the experiences of planning this process and incorporating the relevant parties.

It is wise to focus on topics where joint efforts are needed to achieve goals that would be difficult or even impossible to reach alone.

*Laine Jänes*

*Minister of Culture*

*Estonia*

## Belarus on the road towards the Council of Europe

By Sinikka Hurskainen

Relations between the Parliamentary Assembly of the Council of Europe (PACE) and Belarus began in the early '90s. A process of democratic transition in Eastern and Central Europe led the countries from the region to look with new interest to the Council of Europe, the oldest democracy and human rights standard-setting organisation on the continent.

In 1989 PACE introduced 'Special Guest Status' as a mechanism to allow parliamentarians from potential candidate countries the involvement in PACE activities, in order to forge closer links and to help their countries meet the conditions for the Council of Europe membership. Parliamentary delegations with Special Guest Status can participate in the activities of the Assembly and its committees, with the right to speak but not to vote.

The Belarusian Parliament was granted Special Guest Status in 1992. In the following years other countries from Eastern and Central Europe, followed by countries from the Caucasus, were granted membership of the Council of Europe. Belarus, however, was left behind due to its lack of progress in the organisation's core areas: democracy, the rule of law, and the protection of human rights. In fact, structured relations between PACE and Belarus came to a halt: Special Guest Status was suspended in 1997 and the suspension was confirmed in January 2004.

In April 2004, the Pourgourides report, on the fate of four political opponents who disappeared in Belarus between 2000-2001, marked a new stage in the deterioration of relations between PACE and Belarus. Pointing at the involvement of a number of high-profile officials in the disappearances, the report asked for an independent inquiry to be carried out, and announced that until such an investigation, even the informal presence of Belarusian parliamentarians in PACE activities would be inappropriate. Between April 2004 and January 2006 there was no contact at all between PACE and the Belarusian authorities.

Since 2006 several representatives of the Council of Europe have visited Belarus. These sporadic, yet significant contacts between PACE and the Belarusian authorities intensified with the appointment of a Rapporteur, Mr Andrea Rigoni, who has always been adamant that dialogue is the only way to bring democratisation forward in Belarus.

Recent developments in Belarus form a complex picture, where, for each key area, progress and problems coexist:

- 1) The liberation of a number of prominent political prisoners before August 2008 was a key improvement, but obstacles to the activities of opposition parties, movements and NGOs remain. The general climate is such that the expression of political views deviating from the official line is stigmatised, repressed and sanctioned, not only through measures taken by the judiciary and law enforcement officials, but also by loss of employment, expulsion from universities or forced conscription into military service.
- 2) In the area of freedom of association, even if the opposition movement *For Freedom!* was finally registered, other organisations continue to face obstacles in obtaining registration by the Ministry of Justice while their members risk prosecution for membership in these non-registered organisations. This article of the Criminal Code has not been repealed.
- 3) In the media field, despite the inclusion of *Narodnaya Volya*, *Nashe Niva* and *Uzgorak* in the state distribution

network, many other independent media outlets cannot benefit from this system nor even be printed in Belarus. In addition, foreign journalists face difficulties in obtaining press accreditation and foreign media, including the satellite channel BELSAT, in obtaining registration. On the other hand, numerous statements coming from the Belarusian leadership indicate their willingness to ensure that the new media law is not implemented in such a way as to restrict freedom of expression.

- 4) In the area of capital punishment, the death penalty is still on the books and there are no concrete signs that a moratorium is in the pipeline, despite the reduction of the categories of crimes for which it can be inflicted and a decrease in the number of death sentences handed down.

Finally, even if the September 2008 parliamentary elections were regrettably below European standards of freedom and fairness, it is to be welcomed that the Belarusian authorities have started to work with the OSCE/ODIHR on the reform of the electoral legal framework and practice, in order to align it with OSCE commitments.

Rigoni's report finds that although Belarus is far from Council of Europe standards in the field of democracy, human rights and the rule of law, in recent months its authorities have taken important steps in the right direction, and that they have shown, as never before, a willingness to engage with European organisations and respond to their demands.

In June 2009 PACE voted in favour of restoring the Special Guest Status of the Belarusian Parliament with a view to engaging in political dialogue with the authorities while supporting the strengthening of democratic forces and civil society. This status, however, could only be granted after a moratorium on the execution of the death penalty is decreed. The parliamentarians also said that a delegation of the Belarusian extra-parliamentary opposition should be invited to participate in the work of the Assembly and its committees.

By stopping further execution of death penalties and by going towards abolishing it altogether from the legislation in the future, Belarus can show concretely that it truly wants to move forward on the road towards Council of Europe. With these two steps the Special Guest Status can come into effect.

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## Russia's challenges in the global crisis

By Mikhail Dmitriev

Unlike many other economies, Russia entered the crisis in a high confidence mood.

Then it seemed to be well grounded: huge FX reserves (\$598 billion - third most largest in the world), fiscal surplus (6.8 % of GDP in 2007), small public debt (5% of GDP, end 2008). Among BRIC countries perhaps only China could be a match in the relative size of fiscal space for anti-crisis policies. Russia's fiscal stimulus package (4% of GDP in 2009 apart from extra 2% of GDP spending on pensions and other social programs) was also one of the largest in the world.

However, the crisis dramatically exposed vulnerabilities of Russian economy including heavy reliance on natural resource exports and on international capital inflows. By comparison to other BRIC countries, Russia suffered the worst deterioration of the terms of trade and the largest capital outflow (mainly due to the run of portfolio investors and inability to refinance medium-term corporate debts).

As a result, by mid winter Russia lost more than a third of hard currency reserves and finally was forced to devalue its currency deeper than India and almost on par with Brazil. Shrinking exports and capital outflow triggered deep recession, second only to Ukraine among large economies. By May 2009 manufacturing output declined by 17.1% yy and investments fell by 24.5% yy. In the Baltic region the magnitude of the recession in Russia was compatible to that of Latvia and Lithuania.

On the positive side, generous social transfers (wages in the public sector were increased by 5-9 percent in real terms, and pensions – by 13.4% in real terms) almost offset the decline of other incomes. Therefore, in stark contrast to economic performance, household incomes in the first half of 2009 were sustained at pre-crisis peak levels. Poverty headcount increased insignificantly and in Q1 still remained below 2007 level. Number of registered unemployed, albeit increased by over 1 million, still remained roughly at 2005 level (quite a favorable year for Russian economy). Since February number of unemployed (ILO definition) was declining roughly by 200 thousand per month. Contrary to great recession of 1990s, when Russia experienced sharp decline in birth rate and life expectancy, during the first 9 months of 2009 these indicators were improving.

But social achievements came at a price. Fiscal deficit for 2009 is projected at 7.4% of GDP, 7.6% for 2010 and 4.5% for 2011. Budget reserve funds which reached 13 percent of GDP by the end of 2008 risk to be depleted by 2012. The most onerous spending program by far is related to pension reform. In 2010 Pension Fund budget will increase by at least 4 % of GDP from pre-crisis level. Rapid population ageing during next decade will make problems only worse. Pension system in its current state becomes the major source of long-term fiscal instability which could undermine the impressive record of fiscal prudence of the last decade. Besides, generous social spending did not translate into consumer demand. Households responded to uncertainty by increasing savings and curbing consumption. By mid 2009 household savings rate increased by 10 percentage points and retail sales plunged by almost 10 percent. They became the second most important contributor to GDP decline in Q2 (10.9% yy).

Improved terms of trade and reopening of access to global financial markets supported output recovery during summer. But 70 percent of output growth was attributed to higher exports and the rest to import substitution. By far anti-crisis stimulus package of the government had almost no effect on output. Recovery in Russia still looks weak and fragile by comparison to other BRIC. Besides, output remains highly sensitive to volatile commodity markets.

Until very recently, government expressed little interest in post-crisis structural adjustment. In fact, many of the policies implemented during the crisis intended to prevent the much needed restructuring at the enterprise level. Authorities tried to prevent mass layoffs, provided protection from foreign competition and tried to keep afloat even hopelessly uncompetitive companies like the largest carmaker AVTOVAZ. But with the end of recession in view, the longer-term disadvantages of such patronizing strategy become obvious.

High economic growth in Russia during the past decade was non capital intensive (due to relatively low initial capacity utilization and fast growth of retail and other non capital intensive services).

Incremental capital-output ratio was roughly twice as low as in other large economies like China and United States. It was also underpinned by steady growth of labor supply (which contributed more than 2% of GDP increase annually). Fiscal stability compensated for slow progress in institutional reforms and allowed impressive gains in international investment and competitiveness ratings.

In the post-crisis economy commodities are unlikely to remain a dominant growth driver and Russian economy will have to diversify. Besides, in the next decade Russia is facing labor supply decline of over 1 percent per annum. It will also need huge investments to modernize outdated manufacturing and infrastructure. Rough assessments indicate that Russia will need to increase investment rate to GDP by at least 6 percentage points to sustain GDP growth rates at 4 % (3 % below pre-crisis average). Given the structural weaknesses of domestic financial sector, most of incremental investments should be drawn from the global markets.

But after the crisis this task does not seem as easy as before. During the crisis, market vector volatility for Russia (an indicator of investment risks developed by Nobel Prize winner Robert Engle) increased much steeper than for majority of emerging markets and is now approximately two times above the average for emerging markets and for BRIC. Even more worrying is that Russia's market vector volatility is considerably higher than the volatility of oil and gas price index. In the recent WEF Global Competitiveness Index Russia' slipped 12 lines down (second worst performance after Latvia). India and China, on the contrary, improved their ranks by one point and Brazil moved 8 ranks up the scale (the best performance in the sample). The survey revealed negative assessment of Russia's medium-term economic perspectives by international business community, again, in stark contrast with the positive assessment for India and China and most favorable – for Brazil. Before the crisis Russia's medium term perspectives seemed to be at least as good as for the BRIC as a group. Since the onset of the crisis, Russia is looking more like an outlier – a dire warning that something goes badly wrong for the Russian economy.

With such expectations in the global markets, business as usual is not possible any more. Relative fiscal stability per se is no longer enough to attract capital. The end of easy growth based on commodity rents, made the markets less tolerable to noncompetitive business practices, rent-seeking, weak rule of law, rampant corruption, cronyism and political interference which became the hallmarks of Russian capitalism. After the crisis "growth without investments and institutions" is no longer conceivable. Unless it demonstrates tangible improvements in business environment, Russia is unlikely to attract investments it needs to sustain growth rates of at least 4 % a year.

One can suggest that current crisis manifests a turning point in Russian history when transition to modern postindustrial society becomes key determinant of future economic success. Such transition presumes bold modernization of public and institutions, more opened society and competitive political system. At the turn of the century similar challenges were faced by Japan and Republic of Korea, and more recently – by Central European and some of the Latin American countries including Mexico and Brazil. From now on, Russia's economic perspectives will be forged first and foremost by the progress of post-industrial social transformation. In this intricate process our country may strive to be a forerunner, like Republic of Korea, or could become a laggard, like Japan.

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## The death of print? The challenges and opportunities facing the print media on the web

By Kimmo Lundén

"Either you go on to the web and you go broke. Or you don't go to the web - and you go broke!"

John Lloyd, Director of Journalism at the Reuters Institute for the Study of Journalism, had the point. The old business model of the news industry is broken and the new ones are still in development.

Why should print media die? Will it die? Is the market for paid news failing? Are the internet and the web's free online news failing to satisfy our hunger for news if the business model for printed newspapers is in trouble? What are the implications for democracies? What are the possible business models for online news?

In a market economy, a profound factor is a (perceived) need and demand for something. The need for information is not going to vanish. Information is the key to the questions and answers to, for example, discussions on globalisation, climate change or business and finance.

And in the digital era there are masses of new information to be reported and sorted. In the next five years, we will produce more information that can be stored and indexed via the web than has existed in the entire preceding history of human civilisation. That digital tsunami is being captured by the growth rates of popular websites like You Tube, Flickr (photos) and Wikipedia.

The news industry faces a dilemma in the era of the web: newspapers are better read than ever before when the number of web-site visitors are included. However, the problem is that advertising on the internet is a lot cheaper than it is in printed editions. In most cases, for the time being, it won't bear the cost of creating the content.

The web is not a problem in itself for the traditional print media. It is the readers and audiences who are to blame - and the publishers themselves. They have been relying on having enough readers to sustain advertising revenues on the web, but, at the moment, this does not generate enough money, even with the millions of monthly unique site visitors.

I participated as a Journalist Fellow to the Reuters Institute's Journalism Fellowship programme at the University of Oxford for the academic year of 2008-2009. During the year I had the pleasure to listen and talk to academics, media professors, prominent newspapers' senior journalists, editors and publishers. None of them believed anymore, that the content published on the websites for free will pay the cost of content with advertising revenue only.

With the global economic recession and plummeting advertising revenue of the media, we may have seen the end of the free lunch. The publishers have enjoyed a time of high profits, which now seem to be over. The number of companies that can be sustained by revenue from internet advertising turns out to be far smaller than many people anticipated. Those publishers, who still obtain revenue from online subscriptions are lucky to report also other revenue besides their plummeting advertising revenue.

The writing is on the payroll again, even though that online business model was already thought to be impossible on the web.

But how have we in the media once thought, that our content should be given free to the online news sites - to gather as much audiences as possible and attract advertisers? Some citizen journalism enthusiasts and bloggers argue, that they are not anymore media consumers but users, who use the content to support their conversation, blog sites and their own media outlets. Consumers pay, users don't.

Well, in that case, I would like to be an electricity user - not a consumer - and I should not have to pay for my electricity! The logic is the same.

To find an economically viable business model for a print newspaper in the era of the web, there is no 'one size fits all' answer. Neither is there a silver bullet for every online news site to alter and become an economically sound business.

The owner of News International, Rupert Murdoch, commented recently: "I think we have to find new ways to monetise our huge audiences". The downturn has shown the value of the Wall Street Journal's subscription model. As the global recession hit the advertising markets in the 4<sup>th</sup> quarter of 2008 and subsequently, the news publishers, which did not count on advertising revenue only but

had a steady and even rising revenue stream from subscriptions, were satisfied. Pearson, the publisher of the Financial Times, was in that way, more shielded compared with other publishers. The company had also to take steps to cut its costs in anticipation of a worsening economic climate.

The New York Times, which earlier also gathered subscription fees from their website users, is rethinking to return to subscriptions online. The NYT stopped charging for access to parts of its web site in September 2007. What changed, the Times said, was that many more readers started accessing the site via search engines (Google and Yahoo) and links from other sites instead of going directly to NYTimes.com. These indirect readers, unable to get access to articles behind the pay wall and less likely to pay subscription fees than the more loyal direct users, were seen as opportunities for more page views and increased advertising revenue.

In February 2009, the growth of advertising revenue ceased, and so subscriptions again appeared to provide the more attractive and constant type of revenue, compared to the uncertain advertising revenue.

The year 2009 might turn out to be a year when publishers will try to revert to the subscription or partly-paid content models. The freemium philosophy combines free online content with a premium, which is backed up by paid subscriptions.

The problem is that, if one tries to do it and nobody follows, then the one who charges would lose out.

There is a social cost to democracy involved, if the local and regional papers in even the major cities are forced to close due to economic reasons. Clickstream hunting on the web can influence the editorial coverage, and thus leave some of society's important areas without any media coverage.

The death of newspapers has been predicted several times in the past, too, but papers have survived in one format or another every time. In the 1960's, it was television that was supposed to kill newspapers. It never happened. Now, almost 50 years after the technological revolution heralded by TV, it might be that, in the era of the internet, TV is a more endangered market than newspapers - both printed and online.

Going online is supported by not only cost savings but also environmental issues: fewer trees are cut down to provide paper. Sure, there are costs involved when creating and running a digital infrastructure; however, for most publishers in the world, print remains their main source of revenue and profit for the foreseeable future. As long as printing newspapers is a profitable business, it does not make sense for publishers to abandon it. Professor Robert G. Picard predicts that the printing of newspapers will continue for at least 20-30 years: "Over a period of time, you're changing the newspaper to be online. And, at some point, it is most likely that a newspaper is not going to be published in a newspaper format like it is today, but I don't think it is going to happen for 20 or 30 years."

This story is relevant because, for the newspaper industry and its publishers to survive, they have to find ways to keep their product economically viable by publishing quality content, which attracts enough both readers and advertisers.

But this is nothing new; this has always been the case, although the environment has become more challenging for publishers during the era of the web and the current global financial crisis that is hitting both the news industry and its business environment.

Newspapers are not dead, but they will have to alter, finding what they are best at and devising ways to exploit this financially. The web has brought both challenges and opportunities to the media, which it has to discover.

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## Environmental regulations are a challenge for the shipping industry

By Ulla Tapaninen

Maritime traffic has always been considered as an environmentally friendly mode of transport. When thinking of a sailing vessel at sea, who could think of a transport mode friendlier for the nature. Unfortunately, the times of the great sail vessels are gone, and situation today is different.

Nowadays, the negative effects of maritime traffic on the environment can be considerable: ships make noise and harmful gases, waste and wastewater are dumped into the sea, the engines run on fossil fuels, ballast waters may bring unwanted alien species to vulnerable seas, toxic materials, e.g. heavy metals and asbestos have been used in building vessels, poisoning the environment and endangering the health of the workers when vessels are scrapped. In case of ship accidents large sea and shore areas can be destroyed even for decades.

However, compared with other modes of transport, due to its environmentally friendly image, the shipping industry has managed to stay quite a long time out the focus of "green movement" and tightening environmental regulations, while industry and car manufacturers changed their strategies during the last decades. It was not until 1970s before the United Nations based International Maritime Organisation (IMO) made its first regulations concerning the environmental effects of shipping. The first environmental regulations at sea concerned the handling of waste and wastewater. In addition, it was not until 1990s before IMO started to make regulations for emissions to air within the shipping industry. Due to the technological improvements of other transport modes, the share of shipping in emissions to air has increased all the time.

Quality of heavy fuel used in vessels gives a revealing example of environmental issues in maritime transport. In 1970s the vessels burned practically the same fuel as other big machines and vehicles everywhere. While environmental rules were getting tighter on land, the crude oil was purified and the cleaner part was used in land and the rest at sea. Today, the price of ship fuel is even lower than that of crude oil, it is practically considered as waste. In other words, shipping has been taking care of the problem waste of oil distilleries without thinking of its costs. Now it is time to pay these costs.

Cheap fuel and consequently cheap sea transport has been one of the main promoters of globalisation. Since 1995 the worldwide container transport has increased by 150% bringing mainly cheap consumer goods from Asia to consumers in Europe and America.

Presently we are in a situation where instead of shipping in many respects it is more environmentally friendly to travel by other means of transport, in particular by rail, but even on land. Consequently, there are coming various expensive requirements to make sea transport more environmentally friendly. For example, in 2015 in the Baltic and North Sea areas the vessels will switch to use low-sulphur fuel. It has been calculated that this will bring extra costs for Finnish industry in total from 200 million Euros up to even 1,2 billion depending on the oil prices. Similarly, Swedish Maritime

administration calculated that changing into low sulphur fuel will increase transport costs in shipping by an average of 20-28%. They have also calculated scenarios where part of the present transport flows at sea will move on land.

While Finland is so dependent on sea transport (75% of import and 89% of export is transported by sea), these kinds of environmental costs do not have only effect on transport modes of the Finnish industry but also on the location of industrial facilities. It will be questionable whether heavy industrial goods (e.g. paper products, machinery) are economically feasible to be produced in the area of Baltic Sea at all.

Low sulphur fuel is only one of the environmental challenges the shipping industry is facing in few coming years. There will be more and more regulations on waste waters, solid waste handling, noise pollution, nitrogen oxide emissions, ballast water treatment, ship recycling etc. One of the most urgent questions is how the shipping industry will take its share on reducing global greenhouse gas emissions. There are still many options and open questions, but while writing this, IMO is busy making proposal to UN, regarding the actions and measures that the shipping industry will take. In any case, these actions will have a fundamental effect on maritime economics, global shipping and international industry.

However, we must not forget the fundamental basis of shipping. It is a mode of transport that can be utilised far from congested housing areas with low need of energy when compared with the amount of cargo transported. This brings obvious opportunities to engine manufactures, ship designers, shipyards, port machine manufactures and even supply chain managers and ICT systems. To fulfil the tightening environmental regulations in shipping, high technological expertise and logistics knowledge is required. The speed and fluency of transport, as well as any technological developments in vessel design are to be fitted into the requirements of the supply chain. This expertise can be turned into a competitive advantage of Baltic Sea shipping. The path will be long and expensive, but it is worth to take.

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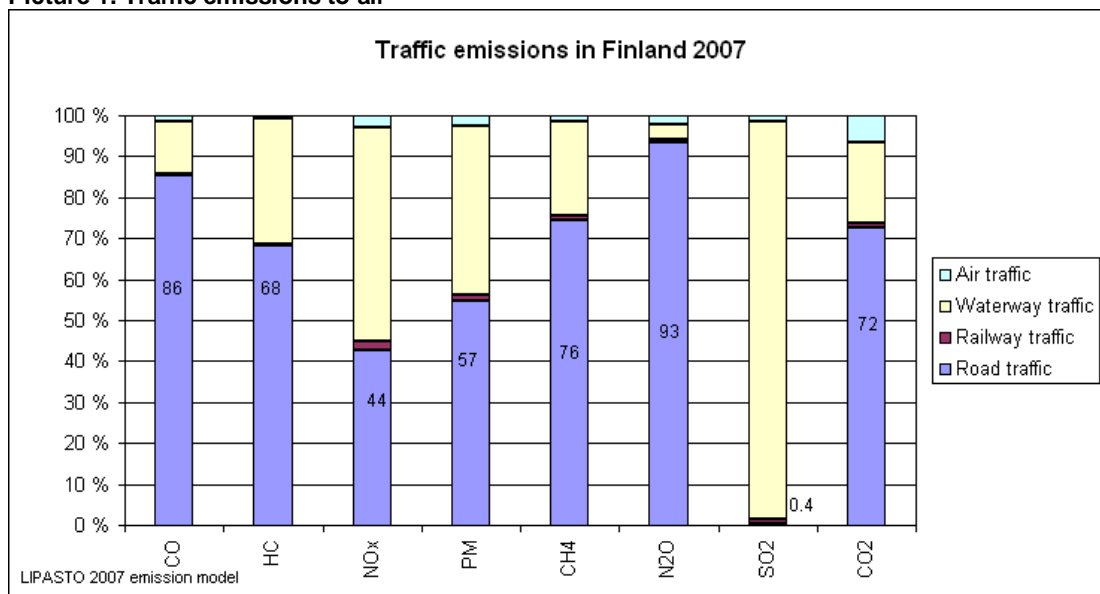
*Centre for Maritime Studies  
University of Turku*

*Kotka Maritime Research  
Centre*

*Finland*

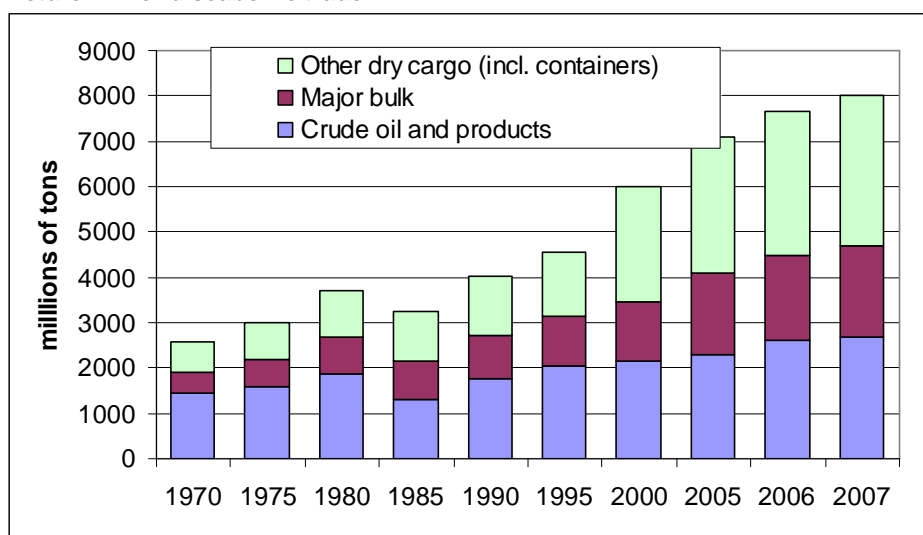


Picture 1. Traffic emissions to air



VTT-Technical Research Centre of Finland, 2008

Picture 2. World seaborne trade



UN Review of Maritime Transport 2008

Table 1. Effects of the estimated price rise in fuel on freight charges (percentage increase on current levels)

Cargo	1,0%	0,5 %	0,1%
Container	4 – 13 %	8 – 18 %	44 – 51 %
Paper reel	3 – 10 %	6 – 14 %	35 – 40 %
Lorry	3 – 10 %	6 – 14 %	35 – 41 %
Passenger car	3 – 10 %	6 – 14 %	35 – 41 %
Oil	3 – 8 %	5 – 11 %	28 – 32 %
Freight tonne on bulk carriers	4 – 11 %	7 – 15 %	39 – 44 %
Timber	3 – 10 %	6 – 14 %	35 – 40 %
Steel products	3 – 10 %	6 – 14 %	35 – 40 %

Finnish ministry of transportation and communications, 2009



## A view on the world economic crisis

By Stepan Sulakshin

The present economic crisis was not a bolt from the blue; it broke out following years of huge disequilibria within and among major national economies.

Where can the global crisis be seen? In the abrupt fall of working capital and in the emergence of problems to the actual economy. Where did the working assets disappear? Is shrinking of the working assets beneficial to anybody?

I mean the influence of the politics which can create absolutely wrong estimation of what was going on and which on this basis giving the wrong prescriptions how to deal with these events.

In fact, the issue of the global financial working capital in dollar is uncontrolled (except for the country of issue itself) and arbitrary. Let's pay attention to one fact. Approximate value of global economy counts to be like 60 trillion dollars. As for the mass of moneys and surrogates of moneys, derivatives, nobody can exactly say what is the amount, but the approximate estimation is like 10 times higher — 600 trillions. We also know that dollar-based economy now doesn't link with anything, like gold for example. So, you know the emission centre being placed in the United States of America, is controlled by whom? By FRS. What is FRS? This is a private structure, 20 banks. They conduct everything, they place the rules, and they know when to switch on the printing machine and when to take the money out. So, it is not right to my mind to blame only Americans for the crisis because that was global scale crisis and it was created globally, but of course, the major proportion of responsibility and that is the understanding of the world community should be placed on the administration.

The cause of crisis in dollar economy is the giant structural macroeconomic imbalance. This imbalance appeared as result of uncontrolled growth of borrowings of American economy, starting from the 60ies and uncontrolled emission of derivatives starting from the 90-ies.

Crisis that we witness today has been progressing for a long time in a latent form, but because of privileged position of US currency and US economy, it's earlier aggravations could be shifted onto the developing economies (Asian crisis, Russian default, Argentinean default), provoking local crises. Absence of real policy to overcome this permanent crisis from the part of last three administrations led to the situation when it became impossible to localize another aggravation of

crisis within one economy or one region and it became global, resulting in fact in the default of maternal (American) economy, that stays afloat due to credit emission of the FRS solely, because credit market is paralyzed.

Contrary to this, the nation states of the world are securing their economies with financial working capital (Fig. 1).

It can be seen that the ratio of money supply and GDP of countries of the world does not exceed 200 per cent.

Thus, the ratio of money supply and US GDP is approximately 70%, and the ratio of world's working capital and gross world product not less than 1,000 per cent<sup>1</sup>. The volume of this capital is largely a matter of choice of an issuing country. Since 1971, when the Breton Woods' requirement of gold security against the dollar stock for the issuing country was cancelled, the amount of issue is determined by the choice of respective decision only of the issuing country itself.

What happens, when some monetary zones of the world start driving the dollar out of circulation? If the dollar stock returns "home", collapse of American economy is inevitable.

Is there a mechanism of global financial management? Let's see Fig. 2 reflecting the dynamics of demand and prices for oil in the world market.

The mechanism of speculative price dynamics (i.e. without the correlation of demand and supply) is based on someone's will.

What the latter should do in the light of the comprehension of the nature of the current financial and economic crisis? There's need in balancing adjustment of "will", that is responsible for the generation of world crises in the first place.

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<sup>1</sup> Carlos Lessa. The crisis in the USA and its repercussions in Brazil and the World. Oct. 20, 2008// [http://www.larouchepub.com/eiw/public/2008/2008\\_40-49/2008\\_40-49?2008-44/ibero.html](http://www.larouchepub.com/eiw/public/2008/2008_40-49/2008_40-49?2008-44/ibero.html)

'To give you an idea: the estimation is that the world's GDP is \$67 trillion, whereas the total paper assets issued is about \$600 trillion, and now that speculative bubble has exploded'

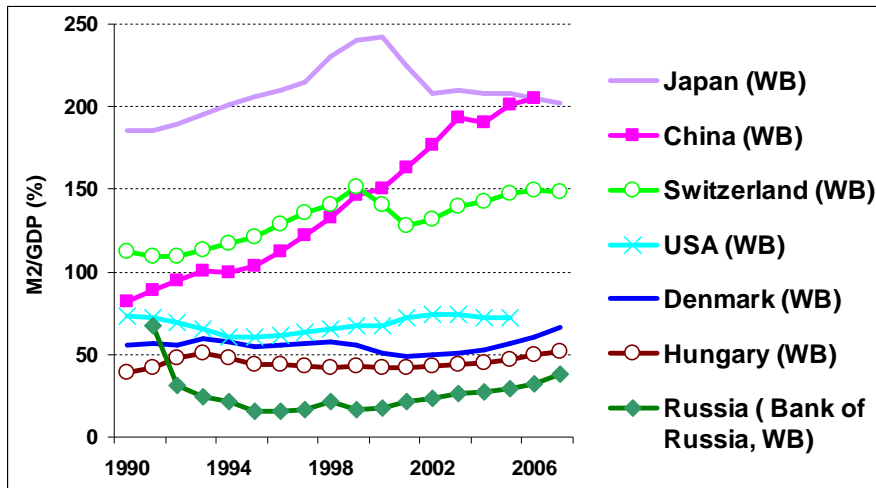


Fig. 1. Ratio of money supply and GDP of countries of the world.

Sources: 1) World Development Indicators Database 2008. World Bank// <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/>  
 2) China Statistical Yearbook 2008. October. China Statistics Press, 2008// <http://www.stats.gov.cn/eNgliSH/statisticaldata/yearlydata/>  
 3) About sufficiency of money in economy // Bank of Russia Bulletin No. 64, 1996

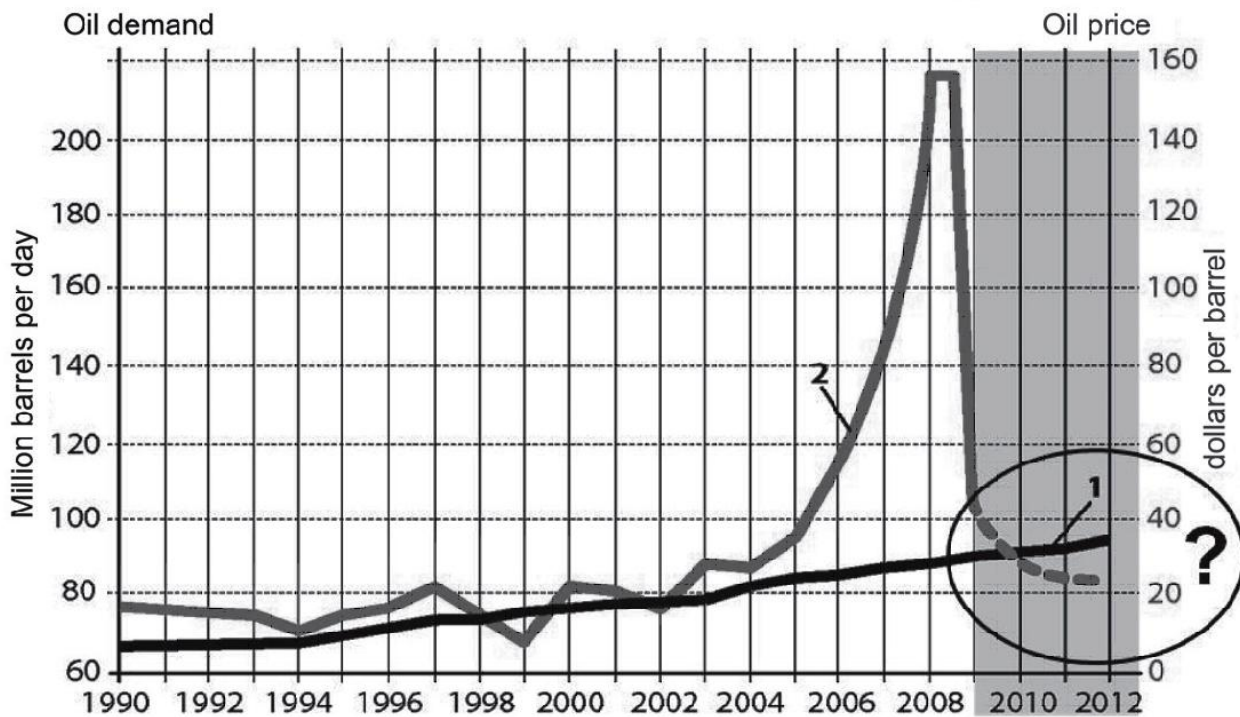


Fig. 2. It's not the demand that dictates price for oil.

(1- world demand for oil, 2 – world price for oil)

## Expectations on energy and climate change

By Ionut Purica

In January 2009 the gas supply to EU from Russia, through Ukraine, was stopped and, consequently, Bulgarians and Slovaks were rather shivering at the Winter temperatures of that month, while Romanians, who had their own gas natural reserves, were not. Several thoughts came to my mind that are shared in what follows.

First I should mention that there are four main 'fluids' that are holding the economies together: money, labor, energy and information. EU, that have started as a union of coal and metal, succeeded in unifying their monetary policy first (this resulted in the Euro). Labor is following closely and the blue card will soon be a reality. We are not talking about information since transparency of communication is a fact in the EU.

Remains energy. The energy policy of the EU is only now starting to get a shape. Given the situation of climate change both from a physical and a commercial point of view the energy policy is interconnected with the climate change one, as was made very clear by the EU Commission starting with 2007 on. Obviously the climate change strategy is aimed at fighting the increase in temperature thus, against the greenhouse effect.

Let me say a heresy: if we need the Russian gas to heat during Winter why not accelerate the greenhouse effect toward making Europe a rather tropical region and thus, avoid the need for gas. On a second thought, since nowadays Piazza 'Campo dei fiori' in Rome (where Giordano Bruno was burned for heresy) is now more famous for its restaurants, hence for commercial characteristics, it occurs to me that the resulting costs from making Europe a hot zone are more important than the benefits of the avoided gas supply.

So, on a short to medium term negotiating the gas supply safety is imperative and, on a medium to long term the implementation of non carbon related energy technologies is mandatory. There is also the scenario of a Europe having its energy supply controlled by others, at the periphery of an Eurasian hegemony of China, Russia, India, Japan and so on, holding the poles of high technological development.

Let's see first negotiation. In a conference of the Pan European Institute in Finland at the end of 2008, a Russian representative stated clearly that if EU wants to negotiate it should either speak with one voice i.e. the Commission, or with 27 voices; the present situation when several member states are talking separately and the Commission is coming on top of them is not likely to lead to efficient results.

The old Regan sintagma of consumer side dominated economics worked when consumers and suppliers were two sides; in the case of Europe and Russia one must consider Asia that is following its own development path giving Russia the leverage to negotiate commercial terms with the EU.

Regarding negotiations I have heard various suggestions beside the one above regarding the mutual need of the parties; e.g. 'keep the other party happy'. It seems that the leverage of the EU is definitely not the one in the last century.

The logical conclusion is to accelerate the development and implementation of carbon free energy technologies. The climate change policy of the EU is definitely a good instrument toward achieving this goal. The Kyoto Protocol has come forward with a mechanism to generate and transfer such technologies among governments. The EU

Emission Trading Scheme pushed this mechanism at the level of companies with promising results. Going further, on a purely speculative basis, we are likely to see regulated a system of personal or family carbon accounts, as a measure of the Carbon print, in some not very distant future.

I should stress though the risk that such mechanisms are liable to become purely commercial i.e. selling carbon emission certificates and loose the main objective: decouple from the carbon based technologies of today.

The recent outburst of nuclear power plant construction and new smaller nuclear power systems being proposed by manufacturers, is just one symptom of the scenario above. Let's not forget that Hydrogen systems are over the hill and the 3 x 20% policy of the EU till 2020 is just the beginning. All these technologies are going to change not only the environment we live in (to the better, I hope) but, also the values of life.

Let me give another farfetched example: in 1999 a 100 million Dollars World Bank project was developed in Albania to improve the public lighting. I was thinking that with the same amount of money one could have bought each Albanian (there are about 2 million of them) at 50 USD a piece, infrared goggles. Result: no need for public lighting since everybody would see in the dark, with a great economy of energy and emission reduction. Imagine a world without oil and gas and how would you react if given infrared goggles and all the lights will be shutdown.

Finally I will underline that EU is in a good position: countries having a high technological generation capacity are now over the emission commitment limits, while the eastern European member countries – in need of technologies – are under the limits. It is high time to correlate the selling of Kyoto Protocol emission certificates (AAU) with the joint development and transfer of technologies.

Also, one should consider the comparison of Northern EU countries with Southern ones from an emission point of view in a normalized way i.e. keeping in mind that North is exposed to lower temperatures than the South and thus needs more energy, hence more emissions, to cope with this situation.

This is another possibility to enhance the correlation among various regions of the EU. The challenge is to start cooperating not only intra sea regions (e.g. Baltic sea region, Black sea region, etc.) but inter such regions such as the Baltic and the Black sea ones. Emission trading strongly connected with technology development, transfer and implementation may be one scenario to a more sustainable (energetically, politically, etc.) European Union.

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## Transport of oil and gas – safety and security of the Baltic Sea

By René Nyberg

The world's second largest low-saline water basin, the Baltic Sea, is essentially a shared shallow lake of the EU states and Russia.

Since the end of the Cold War, economic activity in and around the Baltic, especially sea transport, has grown dramatically. Today 15 per cent of world sea transport takes place in these constricted waters. Statistics show that about 1,350 vessels are on the move in the Baltic at any given time. The fastest-growing group of vessels are oil tankers. Their numbers are stunning. More than 150 million tons of crude now annually transit the Danish Straits. Russia is currently building an additional oil pipeline and a new export terminal on the Gulf of Finland that will add another 50 million tons a year to this traffic. The consensus estimate at the moment is that crude oil exports shipped via the Baltic will rise 40% by 2015.

These facts alone should justify increased efforts to assure maritime safety, especially since maritime safety and the safety of the marine environment are closely intertwined.

The two biggest threats to the Baltic Sea, by far, remain **eutrophication** and **oil transport**. While the building of a gas pipeline will cause some transitory environmental impacts, they are smaller by several orders of magnitude relative to the damage and potential for damage of oil spills. The Nord Stream pipeline, buried in Baltic seabed, will transmit 55 billion cubic metres of gas across the Gulf of Finland to central Europe each year. Now imagine if that amount of gas instead had to be carried by hundreds of LNG tankers in already crowded sea lanes. LNG is the future, probably already for Yamal, but not for the Baltic.

Please, don't misunderstand me. A lot has been done to improve maritime safety in the Baltic Sea. Single-hulled tankers have all but disappeared from the Gulf of Finland, and since 2004, a mandatory ship reporting system (GOFREP) maintained trilaterally by Estonia, Finland and Russia guides traffic and monitors it. New technologies provide excellent opportunities to significantly decrease traffic risks.

Even so, the need for enhanced cooperation and interaction is evident. **The Northern Dimension of the European Union** launched under the Finnish EU presidency 1999 was well received, but really took off only after its overhaul in 2007 when Russia, Norway and Iceland were invited to participate in redrafting the concept. The lesson learned is evident: All players need to be involved early on in development of partnership programs to get the best results. The most topical program to be finalized shortly is the **Northern Dimension Partnership on Transport and Logistics**.

An interesting Russian initiative, which the Finnish Industries welcome, concerns the creation of a **Northern Dimension Business Council**. I am sure we will hear more about it in the coming months and years.

We can see distinctive differences in approach in energy infrastructure projects currently under way. The Nord Stream project was forced to keep all affected parties in the loop from its inception. Of course, this required elaborate environmental studies, demanding technical measures and extensive consultations, and the process is not over yet. Contrast this with oil transport. Russia made the sovereign decision in the 1990s to shift the bulk of oil exports to a new terminal at Primorsk, located at the north-eastern end of the Gulf of Finland. More recently, Russia made a sovereign decision to build the BTS-2 oil pipeline, along with a new terminal at the Russian port of Ust-Luga on the south-eastern shore of the Gulf of Finland. The pipeline and oil transshipment terminal should become operational in 2012.

I will leave it to the audience to judge which approach to energy transport – an ever-increasing number of oil tankers plying the Baltic or a gas pipeline encased in concrete below the seabed – merits greater attention, and which, in light of the risks they present, deserves further consultation.

And of course, Russia should ratify the Espoo Convention on Environmental Impact Assessment in a Transboundary Context.

My point is very simple. We all benefit from regional cooperation and environmental consultation, and to get there we need much

greater interaction. This applies to all fields and in all directions. The security issues in the Baltic Sea region are increasing environmental. I do not believe that the mysterious "Arctic Sea" incident characterizes the threats of tomorrow, at least in this part of the world, although terrorist attacks cannot be excluded. Neither do I see classical military threats on the horizon, except for occasional showing of force. It suffices to consult the annual "Military Balance" of the IISS to see the dramatic build-down of military capabilities in the region.

There is a lot of baggage in the relations between the countries of the Baltic Sea. This explains part of the acrimony affecting major energy infrastructure decisions. As we are today in Stockholm, let me just remind you that the original Finnish idea of securing a second source for gas was to extend the existing gas pipeline from Russia via Sweden to Norway. But it was a sovereign Swedish decision not to opt for gas for the Stockholm region. I am not claiming that the gas pipeline issue would have created a major row between Helsinki and Stockholm, save a few caustic remarks. -- And as we all know the Nord Stream pipeline project has its history, too.

Energy is security. For the consumer of energy, energy security means guaranteed delivery, and stable and predictable prices. This, in most cases, needs to be coupled with assured and secure transit. For the exporter of energy, guaranteed and secure demand is often the crucial issue, given the scale of required investment in new production and infrastructure. A strong element of interdependence describes the energy relationship between the EU and Russia.

The integration of the European and Russian energy markets is all but a fact, and the demand for gas is growing. As so often is the case, however, the formalities of such arrangements lag behind. Even if Russia is not prepared to join the energy charter at this time, we need an understanding and a commitment to common rules. We need transparency, reciprocity and non-discrimination, plus consultations and cooperation with all parties and at all levels. In a nutshell, this is what the WTO is all about. As a trading nation, Russia needs reliable customers and stable markets. We need Russia integrated into the world market, because, by definition, it enhances security.

To sum up:

- 1) **Eutrophication and oil transport remain, by far, the top threats to the Baltic Sea.**
- 2) **Piping gas is better than transporting gas in LNG tankers, at least in the Baltic context;**
- 3) **Demand for gas will grow, partly because gas is seen as the bridge fuel in countries opposed to nuclear energy.**
- 4) **The interdependence between Europe and Russia is a fact – a very European phenomenon.**

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## Nord Stream – how feasible is the project?

By Łukasz Antas

In an attempt to evaluate the feasibility of the Nord Stream project one comes across the consortium's information policy, which presents significant progress of the project, on the one hand, while on the other meets with reports on endless problems with obtaining consent from Scandinavian countries for the construction of the gas pipeline. A politico-economic analysis has shown that the number of barriers the Nord Stream consortium has to overcome during the worsening economic slump is significant. Gaining customers and guaranteeing gas supplies at the level of tens of billions m<sup>3</sup> are just a few of the likely problems. Since Gazprom guarantees gas transport via the Nord Stream, the Russian company will have to deal with this problem. The simplest solution seems to be to reduce the volumes of gas transported via traditional routes and gain industrial customers in Central Europe, which has been successfully tested by a company linked to Gazprom in the Czech market.

### How far is the project advanced?

Nord Stream consortium's preparations follow the time schedule which envisages commencement of construction of the first pipe in April 2010 and completion in 2011. The second one is planned to be ready one year later. The logistics of the project, which has been skilfully publicised in the media, is impressive. In total, the consortium has spent at least 1 billion euros on that purpose. Yuzhno-Russkoye gas field has been put into operation to ensure gas supplies in the case of the first pipe, which will have a capacity of 27.5 billion m<sup>3</sup>. Sales of most of which have already been guaranteed in contracts although 13 billion m<sup>3</sup> will be sold to companies co-owned by Gazprom.

As regards the second section of the pipeline, which will have a similar flow capacity and is officially planned to be put into operation in 2012, the activity linked to it has been surprisingly low. First of all, the issue of supply and contracts with customers covering such significant quantities of gas is unclear. Its raw material base, the Shtokman gas field, will be launched with a significant delay (originally planned in 2012). The recession in the EU, which has had a strong impact on Gazprom (its gas production was reduced in the first half of this year by 24.4%), is curtailing possibilities for gaining new buyers of gas from the Nord Stream.

The main barrier to the commencement of real construction of the pipeline is obviously the lack of consent for the building and approval of the Nord Stream's Environmental Impact Assessment report from countries through whose zones the pipeline is to run. This especially concerns Sweden, which demands new research and has been delaying its consent since February 2008, and Finland. In turn, the lack of administrative consent from the two countries impedes the process of applying for bank loans which are expected to finance 2/3 of the project expenses.

### Building the chance of project implementation

Although officially Sweden, similarly to Finland, opposes the project out of care for the natural environment, the reasons behind its stance are also political and concern security, including energy security; hence the consortium's attempts to overcome their resistance with political means. Potential 'gifts' are senior positions in the EU administration for Swedes and Finns, Russian customs duty rates favourable for the Finnish industry, etc. In turn, the engagement of France in the Nord Stream project (since Gaz de France has joined the consortium) is expected to facilitate the pressure on Stockholm and Helsinki. A 'domino effect' may happen; Finland – under pressure from Paris and Berlin's lobbying – may grant consent this autumn, which Helsinki has already suggested. Sweden, which wants its representative to become the EU Foreign Minister and has been making efforts to achieve that during its presidency of the European Union, is now more receptive to pressure and may follow in Finland's footsteps. In turn, reaching the end of the administrative path is a necessary condition for opening bank credit lines for the

consortium to provide financial backing for the project, which will be significantly facilitated by the 3.1 billion euro loan guarantees offered de facto by the German government.

Even if this scenario is realised, cost efficiency of the project will still be a problem. Western shareholders of Nord Stream want to avoid losses resulting from underuse of flow capacity (which has been the case with Gazprom's another pipeline, the Blue Stream). It is very likely that they have forced Gazprom's general assembly of shareholders in 2009 to guarantee gas supplies to Nord Stream or financial compensation. In effect, the Russian company has undertaken to a large extent to guarantee supplies and sales of tens of billions cubic meters of gas. One of the solutions to handle the situation is to delay the construction of the second pipe by several years and wait until the demand in the EU has stabilised. The second possibility is to pay the Nord Stream shareholders off by raising gas prices, which will be difficult to do at the time of recession.

An option attractive to Gazprom can be to build both sections of the pipeline and resolve the supply problem by reducing the amount of gas transported through Ukraine and/or Poland. Considering the economic slump in the EU and delays in Gazprom's investment programme, this would be the simplest solution in the initial period of the new pipeline's operation. At the same time, this would enable Gazprom and the Kremlin, which owns the company, to make pressure on the two countries (for example by weakening the financial condition of the transit operators, EuroPolgaz and Naftohaz Ukraine) in order to facilitate Russians' entering local gas markets. In addition to a possible entry to the Polish market, problems with sales could be resolved by taking full control of the East German gas distributor VNG, gaining a larger share of Central and Eastern European markets (Gazprom's Czech arm, Vemex, took over nearly half of the Czech industrial consumer market between 2006 and 2008) and co-operation on gas power plants with Western corporations. Expanding its share of new markets would compensate Gazprom for possible losses generated by its guarantees of supplies via the Nord Stream.

This is just one of the possible scenarios. Nord Stream's main problems, consent from Finland and Sweden and project financing, are still unresolved. The long-lived opposition from Sweden and Finland generates additional costs, which members of the Nord Stream consortium, energy giants, have not foreseen while underrating the potential of the Scandinavian countries. Deepening recession in the European Union, which will impede both gaining financial backing for the pipeline and signing contracts with customers, may be an additional problem. A scenario in which the project supported by the largest EU member states, foremost by Germany, ends up in a failure seems rather unlikely. However, as Germany's E.ON company learnt this September, disregarding local communities' resistance may lead to failure even of such expensive (losses could exceed 1 billion euros) and prestigious projects as the Datteln coal power plant.

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## The battle of Nord Stream

By Edward Hunter Christie

The Nord Stream project is sub-optimal from a general economic viewpoint. This has been established by some of Germany's leading energy economists - see Holz *et al.* (2009: 145) and Hubert *et al.* (2009: 20). Complementing this view, my recent work on the topic concludes that Russia's motivation for the project is geopolitical, i.e. to accept a partial loss of commercial profits in exchange for stronger political leverage over Central and Eastern Europe. Finally, as I noted in Christie (2009a), it is questionable whether Nord Stream (NS) will be needed at all given the lower gas demand path that should arise due to environmental policy commitments.

This leaves open the question of why Germany is still backing the project, and what member states who oppose NS might do next.

From an economic viewpoint, Germany is seeking to become a major gas hub for a larger area of Europe, with imports exceeding domestic consumption and, *per force*, a capture of gas trading rents for Germany's national economy. However there is no reason why other member states should support such attempts. Economic rents for existing transit states, notably transit fees, may be irretrievably lost. Germany should therefore not expect any support from the potential losers of the NS project, while German attempts to promote NS will quite reasonably be interpreted as manifestations of a narrow economic self-interest, if not of political obstinacy.

From a security viewpoint, Germany's position is not threatened by the absence of NS. The existence of NS would also not make a positive difference for Germany's security of supply, unless one assumes that Russia has aggressive designs against transit states, notably in the form of supply disruptions. If the latter scenario is considered to be realistic, then Germany's current position runs directly counter to the national security interests of the by-passed countries. The EU lacks strong mechanisms to discourage, let alone prevent, any one member state from pursuing its economic security interests at the expense of other EU states. But what is sauce for the goose is sauce for the gander. Some EU members may start to challenge German interests more forcefully, i.e. an enforcement of 'club rules' through decentralised action.

How might this occur? Several instruments could figure on the menu besides already activated procedures.

As pointed out by a number of observers of the region, the payment of bribes is quite common and poses certain challenges. Concerned states may therefore choose to monitor the activities of selected individuals, even if the latter are nationals or residents of other states.

Another aspect is the deficit of accurate information. In the general case, the best weapons a liberal democracy can deploy are openness, transparency, and maximum disclosure.

A third aspect concerns EU decision making. Germany is just one of 27 member states with only around one sixth of the Union's population. Opposing states may consider building stronger coalitions at the European Council, while linkages with other areas of policy could increase. Conversely, GDF Suez (and therefore France) has announced that it will join the project. Opponents would therefore need to counter that move with a move of their own.

Since decisions cannot always occur at the Union level, opposing states may wish to build new structures amongst themselves so as to accelerate improvements to the resilience of their energy systems, i.e. covering issues such as storage and interconnection, fuel contingency plans, longer-term efficiency and diversification drives, and the sharing of new generation capacities. Legal and institutional cooperation between like-minded states could likewise be boosted beyond existing supra-national commitments, while coordinated opposition against unfavourable external energy projects could become substantial. Finally, member states should develop, collectively if possible, a higher resilience against acts of economic coercion in other areas so as to counteract tactical linkages, e.g. timber imports into Finland.

Much of this discussion would naturally fall away if a united external energy policy came into being. In the absence of such unity, however, member states will continue to look out for their own interests and set up competing coalitions. If the Council cannot then reach sensible conclusions, the next step might be the creation of parallel institutions. This is not – to put it mildly – in the longer-term interests of anyone in the Union, though it may be in the interests of foreign powers. Member state governments should therefore carefully consider the broader strategic implications of their policy stances, and in doing so, recall that the NS project is economically sub-optimal no matter how many partners join it. As for Germany, it would be a deep irony if one of the states that did the most to build the Union were to severely damage it in the pursuit of an ultimately unnecessary project.

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### References

- Christie, E. (2009a). 'European security of gas supply: A new way forward'. In: Liuhto, Kari (Ed.): *The EU-Russia Gas Connection: Pipes, Politics and Problems*, Electronic Publications of Pan-European Institute 8/2009, Turku School of Economics, 3-22.
- Christie, E. (2009b). 'Energy Vulnerability and EU-Russia Energy Relations'. *Journal of Contemporary European Research*, 5 (2), pp. 274-292.
- Holz F., von Hirschhausen C. and Kemfert C. (2009). 'Perspectives of the European Natural Gas Markets Until 2025'. *The Energy Journal*, 30 (Special Issue), pp. 137-150.
- Hubert F. and Suleymanova I. (2008). 'Strategic Investment in International Gas Transport Systems: A Dynamic Analysis of the Hold-up Problem', *DIW Discussion Papers*, No. 846, German Institute for Economic Research.

## The Baltic Sea – a vibrant ecosystem in peril

By Jukka Nurminen

The Baltic Sea is small and shallow. Its average depth is only 60 metres. Owing to the slow exchange of water through the Danish straits and abundant freshwater runoff, the water in the Baltic Sea is brackish. Its salinity is low compared with the North Sea, ranging from ten per mil in the Danish straits to approximately three per mil at the far end of the Gulf of Bothnia and the Gulf of Finland. It is estimated that it takes 30 years for the water mass of the Baltic to be totally exchanged. As a result, the sea is home to a unique blend of freshwater and oceanic species. Even though the water is brackish, the sea is inhabited by all the major marine phyla. The total number of species is small, which is why each species has a pronounced role in the ecosystem. These characteristics make the Baltic Sea particularly vulnerable.

Baltic Sea's barely explored waters are typically considered cold, murky and desolate. Even though divers the Baltic Sea can all too often appear devoid of life, offering only overgrown algae and the most common fish species seen on ice at any fish markets. But the truth is that beneath the waves of the Baltic Sea thrives a diverse ecosystem of hundreds of species of algae, invertebrates and fish, in which all of the major oceanic species groups are represented – sometimes in breathtaking shoals several thousands strong. At their best, underwater ecosystems of the Baltic Sea swarm with life. Hidden beneath the waves of the Baltic Sea, there is often one of the richest and most vibrant national landscapes of the coastal countries.

Unfortunately, over the last couple of decades the condition of the Baltic Sea has deteriorated alarmingly, as emissions from human activities have remained at an unsustainable level. In addition, inflows from the North Sea have not brought a sufficient amount of saline, oxygen-rich water. Eutrophication and high concentrations of environmental toxins are a reality.

My aim as an underwater photographer since 2003 has been to document the last healthy underwater ecosystems and blooming landscapes of the Baltic Sea before it is too late. I try to reveal landscapes hidden beneath the Baltic Sea which few have seen with their own eyes. I want to inspire people to take concrete action to conserve the Baltic Sea as it is far too unique to be despised.

How does then the condition of the Baltic Sea look underwater? Too often bad. By diving under the waves of the Baltic Sea one must face the unfortunate truth: the Baltic Sea is suffering. The bottoms are in many places oxygen starved or covered by filamentous algae growths that suffocate healthy algae and marine plant ecosystems under them.

The Baltic Sea is in an alarming state and it only offers brief periods in certain spots in which underwater visibility and the condition of the sea bed are good enough to shoot somewhat pristine nature and diverse landscapes. Especially in the Finnish coast only in the outer Archipelago Sea there are reasonably healthy ecosystems left.

In order to conserve the Baltic Sea we must understand that the catchment area of the Baltic Sea is four times larger than the actual area of sea itself inhabiting 85 million people. Therefore, not only the nine coastal states are relevant in preserving the Baltic Sea but also 5 states inland, Belarus, the Czech Republic, the Slovak Republic, Norway, and Ukraine, in the catchment area.

The most serious threat to the Baltic Sea is eutrophication caused by an excessive nutrient loading by human activities. As the nutrient content, essentially the amount of phosphorus and nitrogen, of the Baltic Sea is

rising, the quantities of planktonic algae are increasing. When the algae die they fall to the seafloor where they are subsequently broken down by bacteria. This biodegradation process is slow and oxygen-consuming and the total exhaustion of oxygen reserves in the bottom sediment and surrounding water is an increasingly common occurrence. Once all oxygen is depleted, sulphate continues the oxidation process, producing hydrogen sulphide which is toxic and can even penetrate a diver's skin. The end result is a lifeless, desolate seabed. Pale carpets of hydrogen sulphide bacteria and sediment which has turned into black sulphide mud are a tell-tale sign of this destructive process. Furthermore, millions of tons of nutrients originating both naturally and through human impact are bound in the bottom sediment of the Baltic Sea. In such anoxic conditions these nutrients, especially phosphorus, become released back into the water. In this way, they further increase the growth of phytoplankton, the amount of organic material falling to the seafloor and ultimately the oxygen consumption on the seabed. The result is a vicious circle known as internal loading.

The unfortunate truth is that all sea bottoms in the northern Baltic Sea are anoxic below 100 metres in depth. The salinity gradient interface between water layers, i.e. the so-called halocline, divides water masses more effectively than the temperature interface, or thermocline. In deep waters the halocline is the dominant force in bringing about extensive, continuous stratification. The oxygen situation of deep waters improves only with saline pulses flowing from the North Sea.

In the battle against the eutrophication there is only one structural and permanent way to get results: reducing the nutrient burden to the sea. We have to concentrate on those sources, where the remedial effect is quickest, largest and permanent. Now the focus should be on the municipal waste waters, where the effects are quickest and cheapest. Moreover, new EU norms for the phosphorus loading to the Baltic Sea are desperately needed. Although the EU requirement, 1,0 mg P/l, may be sufficient for the Atlantic Ocean or the Mediterranean, it is clearly too loose for the badly eutrophied, small and shallow Baltic Sea. To achieve sustainable results, more stringent legislation is definitely needed for our Baltic Sea area which should be based on the HELCOM's recommendations for 0,5 mg P/l.

The Baltic Sea needs no more fine words and generalist reports but concrete, focused and measurable actions to be preserved. To save the Baltic Sea there is no time to be wasted. Quick measures with fast impacts are needed. Clear waters can only be preserved for the enjoyment of future generations if we succeed now in the battle against eutrophication.

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## Climate change and Arctic security

By Nils Wang

The Kingdom of Denmark includes Greenland in the Arctic, the Faroe Islands in the North Atlantic and Denmark at the entrance to the Baltic Sea. With a 200 NM Exclusive Economic Zone throughout the Kingdom the area in which the Danish Defence Forces are enforcing Danish sovereignty is gigantic, and the northernmost part of this area of responsibility borders the Arctic.

The southern part of the area forms the bottleneck entrance to the Baltic approaches with approximately 100,000 ships passing through the Danish straits every year, making them among the world's most densely trafficked waterways. While 90 % of world trade is carried on ships, 10 % of all ships are either Danish owned or Danish flagged, making Denmark one of the leading seafaring nations in the world.

This explains why Denmark is deeply interested in maritime security both regionally and globally. It also explains why we – as one of five countries bordering the Polar Sea with strategic interests in the Arctic area – are very concerned about climate change and global warming.

The Arctic icecap is melting fast, and the consequences are already beginning to emerge.

In August last year, the first Danish merchant ship transited through the Northwest Passage on a journey from Japan to Newfoundland, thereby saving 15 days at sea compared to the traditional route.

A major Danish shipping line has initiated the construction of a series of ships with icebreaking capability, indicating that sea-transport through the Arctic will become a profitable option in the near future. Obviously, a 40 % reduction of the distance between Europe and Asia and a 25 % reduction of the distance between USA and the Far East will be a tempting cost saver for the shipping industry.

As changes generally create new challenges, a major re-routing of sea traffic is likely to have great and far reaching implications. With regard to commercial activities related to the Sea Lines of Communications, maritime infrastructure, and man made short cuts like the Suez and Panama canals, a significant change of the sea routes will also have significant global economical and security implications. But changes may create new opportunities, too. A 40 % reduction in distance between Europe and Asia could generate a 40 % reduction in fuel consumption and CO<sub>2</sub> emissions from ships. Thus, one of the more helpful factors in our common strive to reduce CO<sub>2</sub> could ironically be the shrinking of the Arctic icecap.

Receding ice will give way for exploitation of oil and gas resources. Some estimates indicate that the Arctic could hold the last great undiscovered hydrocarbon resources on Earth, maybe as much as 25 %. This will cause increased maritime activities in the Arctic, but it could also lead to a race for resources, with serious implications for security policy, and not least for the environment. We might see territorial claims, or conflicting interests – of which some have already surfaced.

The only way to meet the challenges of increased maritime activity in the Arctic is cooperation, as it must be of common interest that territorial claims, disputes over access to resources or other conflicts of interests are managed and settled in an orderly fashion within the international legal framework. We must avoid conflicts or disputes about resources, land or sea territory, which might otherwise

obstruct the close local cooperation needed to address the many challenges, which none of us can handle alone.

In May 2008 the five nations bordering the Arctic Ocean – Canada, Denmark, Norway, Russia and the United States of America – met in Ilulissat, Greenland, to sign what is now known as the "Ilulissat-declaration". The countries agreed to settle territorial claims in accordance with the international legal framework, to live up to common responsibilities for the protection of the Arctic, and to cooperate in areas such as Search and Rescue and protection of the environment.

With the expected raise in maritime activity in the Arctic, we will have to establish an effective Search and Rescue organisation and an environmental response capacity that can deliver an acceptable protection of the fragile ecosystem.

In recent years Greenland and adjacent waters have seen an explosion in polar tourism. In 2007, 140 cruise ships carrying thousands of passengers visited Greenland's icy, complicated and largely uncharted waters. This constitutes a huge challenge in a Search and Rescue perspective, which can only be met through international safety regulations and operational cooperation between navies and coast guards in the Arctic area.

So, to enable Security and Defence Policy to take climate change into account, we need to establish a continuous presence of coast guard and naval units in the Arctic in order to regulate the activities and to control the exploitation of the resources in the region. This can only be done effectively if the five bordering nations cooperate on the operational level. Cooperation on the operational level requires cooperation on the political level, and the Ilulissat-declaration is an important step in that direction. But a physical presence of coast guard and naval assets requires logistic support, and there is almost no maritime infrastructure to support ships north of the Arctic Circle. So also from an infrastructural point of view there are some considerations and investments to do.

To sum up, we will need coast guard and naval presence in the area. We will need to survey the area to produce reliable sea charts. We will need to establish maritime traffic management to ensure safe navigation. We will need to create effective Search and Rescue capabilities. We will need to control fishing and hydrocarbon resources, and we will need to establish environmental response capability to ensure protection and preservation of the fragile marine environment of the Arctic Ocean. But most importantly: we need to do all this in close cooperation and partnership with each other.

*Nils Wang*

*Rear Admiral*

*Admiral Danish Fleet*

*Denmark*



## Arctic security – zero sum or working together?

By Clive Archer

Ever since a group of Russian researchers planted a Russian flag at the North Pole in August 2007, there has been increased interest in the strategic importance of the Arctic region. Given the wide blend of issues involved in the international relations of the Arctic, will there be attempts to grab an advantage by one state or more, or will the region become one of cooperation mixed with a certain amount of peaceful competition?

### Background

The Arctic region had strategic importance during the Cold War when NATO and the Soviet Union faced each other across the Arctic with aircraft, missiles, navy ships and surveillance stations. A major change came in 1987 when Gorbachev put forward in Murmansk proposals for cooperation in the Arctic. Though the arms control side of the Murmansk initiative was seen as one-sided by NATO states, scientific and environmental cooperation did bear fruit. Soon a network of institutions was established to encourage and coordinate such cooperation in the Arctic and, by 1996, an Arctic Council was created as an over-arching body for such activity.<sup>1</sup> The end of the Cold War and of the Soviet Union ended military confrontation in the region.

However, within twenty years of the Murmansk initiative, the Arctic Sea was again becoming an area of strategic activity and of Great Power contention. Press and academic articles warned of potential conflict there.<sup>2</sup>

The main impetus for new interest in the Arctic region is threefold. First, the effects of global warming on the Arctic have led to increased concern for the indigenous communities and about environment degradation. They have also meant that the region could be opened up more for resource exploration and for transport. Secondly, as Russia has renewed its naval fleet and built up its forces after the decline of the Yeltsin years, concern has been expressed about Russian intentions in the area.<sup>3</sup> Finally, legal issues have come to the fore. There are several jurisdictional disputes concerning the division of the seas and sea-bed in the Arctic seas. The United States and Canada disagree about the status of the straits; Norway and Russia have a long-running disagreement over the Barents Sea; Canada and Denmark have a tiff about Hans Island near Greenland. The UN Commission on the Law of the Sea, of which all the states around the Arctic are signatories except for the US, has a process whereby states can claim sea-bed beyond a 200-nautical mile zone. The Commission on the Limits of the Continental Shelf, that received arguments from states concerning their claims, has asked for submissions by mid-

2009, encouraging scientific and diplomatic activity by the Arctic states.

### The strategies

As a result of these factors, most Arctic states have issued Arctic strategies over the last few years. One of the first was Norway, concerned about the development of resources in the Barents Sea and also about the growing Russian presence. The balance seen in Norwegian policy is common to most national Arctic strategies. Concern for environmental degradation is matched by a wish to develop resources in a sustainable way. There is a support for international cooperation, especially to solve any jurisdictional disputes, together with a stress on asserting sovereignty and a presence in the area.<sup>4</sup>

Russia's new Arctic strategy was agreed in September 2008. The region was seen in economic terms with its resource reserves and Northern Sea Route contributing to Russia's economic development. This resource base had to be protected and Russia's borders secured. The maritime Arctic zone was to be defined both by national legislation and international agreement. Some see this as part of an assertive Russian policy and that '(c)onsidering that energy is a primary instrument of Russia's power, clashes are most likely to occur in regions where energy is to be won or lost. The Arctic is such a region.<sup>5</sup> However, Russia's Arctic strategy does value international cooperation, and government spokesmen have stated their preference for solving Arctic maritime disputes by agreement.<sup>6</sup>

The US Arctic strategy was issued during President Bush's last days in office.<sup>7</sup> The National Security Presidential Directive 66 again stressed the need for sustainable resources and to protect the environment in the Arctic. It emphasised national security and homeland security interests such as missile defence, maritime presence and maritime security operations. It also called upon the US Senate to ratify the UN Convention on the Law of the Sea as the international legal basis for advancing US interests in the Arctic and called for active international cooperation to solve problems.

Denmark's main consideration in its Arctic strategy is the changing environment and close cooperation with Greenland. Also of note is the European Union's involvement in the Arctic. The November 2008 Communication from the European Commission on the EU and the Arctic region stressed protection of the Arctic environment, sustainable use of resources and the development of multilateral governance. All the above strategies have been issued in the last few years and have emphasised "soft security issues" –

<sup>1</sup> See David Scrivener, *Environmental Cooperation in the Arctic: From Strategy to Council*, Oslo: The Norwegian Atlantic Committee, Security Policy Library No.1, 1996. The members of the Arctic Council are Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. See also the Arctic Council web-site at [http://arctic-council.org/section/the\\_arctic\\_council](http://arctic-council.org/section/the_arctic_council)

<sup>2</sup> See for example, 'Leading article: The next colonial scramble' *The Independent*, 25 July 2008, Christopher Mason, 'US and Canada bury hatchet to curb Russia's Arctic bid', at [www.FT.com](http://www.FT.com), August 18th 2008, Scott Borgerson, 'Arctic Meltdown The Economic and Security Implications of Global Warming', *Foreign Affairs*, March/April 2008 at <http://www.foreignaffairs.org/20080301faessay87206/scott-gborgerson/arctic-meltdown.html>

<sup>3</sup> The Economist, 'The Arctic contest heats up: What is Russia up to in the seas above Europe?', at [www.economist.com](http://www.economist.com), October 9th 2008.

<sup>4</sup> Kristine Offerdal, 'Norway: new building blocks in the North. March 2009', *Geopolitics in the High North* at [http://www.geopoliticsnorth.org/index.php?option=com\\_content&view=article&id=84:arctic-strategy-documents&catid=1:latest-news](http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=84:arctic-strategy-documents&catid=1:latest-news)

<sup>5</sup> See Marcel de Haas, 'Russia's Arctic strategy – challenge to Western energy security', *Expert Article 373, Baltic Rim Economies, Bimonthly Review 4*, 2009, pp.20-21.

<sup>6</sup> Katarzyna Zysk, 'Russia: Arctic Strategy. September 2008', *Geopolitics in the High North* at [http://www.geopoliticsnorth.org/index.php?option=com\\_content&view=article&id=87:russian-national-security-strategy&catid=1:latest-news](http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=87:russian-national-security-strategy&catid=1:latest-news)

<sup>7</sup> The White House, 'National Security Presidential Directive and Homeland Security Presidential Directive, January 9 2009' at <http://georgewbush-whitehouse.archives.gov/news/releases/2009/01/20090112-3.html>

the environment and resources – rather than traditional military “threats”.

#### **Conflict or Cooperation?**

How might the Arctic states deal with the challenges facing the Arctic region? These can be summarised as utilising the area’s resources while protecting its fragile environment, and maintaining national interests whilst negotiating international agreements.

The Arctic Council is a major instrument of international cooperation. Its membership includes states with territory within the Arctic Circle, with six groups of Arctic indigenous peoples as permanent participants and a range of non-Arctic states and international organisations as observers. The Council is likely to be more active in the scientific and environmental areas.

Bilateral and multilateral negotiations are needed for jurisdictional questions. The work of the Commission on the Limits of the Continental Shelf is crucial and it is important that the US ratifies the Law of the Sea Convention and becomes part of this process as soon as possible. In May 2008 the five states bordering the Arctic Sea – Canada, Denmark (for Greenland), Norway, the Russian Federation and the United States – agreed the Ilulissat Declaration whereby they pledged to solve their Arctic legal disputes by using the law of the sea, and to cooperate over protecting the marine environment. However, they rejected the notion, floated by the European Parliament, of an Arctic treaty similar to that covering Antarctica.

The Arctic has recently attracted increased attention. This could lead to a new grab for resources and to conflict, but so far all Arctic states have acted with restraint and have expressed the intent to solve problems peacefully. Urgent attention to the Arctic environment is required by these countries, and other interested parties. The institutions of cooperation are in place; national action is now needed.

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## Renewed governance is the key for the future of the Arctic

By Lotta Numminen

Climate change causes major shifts on the political agenda of the Arctic. The melting ice creates new commercial opportunities, such as access to energy resources and shipping lanes, thereby bringing the whole Arctic region into the wider global economy. Simultaneously, environmental crisis caused by the melting ice poses major threats regionally and globally. This new situation puts pressure on the governance of the Arctic, which is ostensibly the key for the sustainable Arctic future.

The Arctic region is warming faster than the rest of the world. Warming causes melting of sea ice in the Arctic Ocean as well as circumpolar glaciers and permafrost. Melting of the sea ice allows access to commercial potentials for the five Arctic coastal states (Canada, Russia, the US, Norway, Denmark/ Greenland): these being major energy reserves in the Arctic Ocean seabed and also new sea lanes. On top of this, the coastal states have acquired a set of new, complex issues to deal with. The issues include, for example, unresolved bilateral maritime borders; sovereignty questions related to sea lanes; the future status and use of the High Sea region and outer continental shelf beyond the coastal states' Exclusive Economic Zones (EEZ); establishment of maritime Search and Rescue arrangements; and management of trans-boundary resources such as fish stocks, among others. In addition to this, the melting ice has caused an environmental crisis in the Arctic region with major global consequences projected for the future: sea level rise, shifts in ocean circulation patterns, and the acceleration of global temperature rise.

In 2007, Russia sent a submarine expedition to the oceanic floor of the North Pole and planted a titan flag in the subsoil of the sea. Russia's manoeuvres in terms of the symbolic flag planting attracted huge media attention and started heated debate referred to as "resource competition" for territorial claims of the outer continental shelf beyond the Arctic states EEZs. The escalating tensions between the states were demonstrated by increased military manoeuvres and provocative statements from some statesmen and military officials. Whether the provocations have been a manifestation of domestic, internal political developments within the coastal nations rather than international politics is an issue open to debate. Without doubt, however, the rhetoric of the coastal states has been assertive and sometimes even aggressive during the past two years.

These parallel developments of military posturing and environmental change pose great challenges for the governance of the Arctic. Since the Cold War period, the region can be characterized as a space of peaceful multilateral cooperation. In 1987, Mikhail Gorbachev launched the so-called "Murmansk Initiatives", which led to creation Arctic Environmental Protection Strategy (AEPS) in 1991 and later, in 1996, to the establishment of a whole new system of governance for the Arctic, - the Arctic Council.

The Arctic Council was designed to improve co-operation and dialogue in areas of mutual concern, such as environmental matters. However, the Council was not given legal form and has, in the light of the recent developments, been criticized for being too weak an institutional structure, given its soft law status and ad hoc funding system. The success of the Council, on the other hand, has been in that it amalgamates all the eight Arctic states as well as the Arctic indigenous peoples in the decision-making process. Additionally, the Council has integrated science into the cooperation framework by organizations such as AMAP (The Arctic Monitoring and Assessment Programme) and scientific

reports such as the Arctic Climate Impact Assessment (ACIA).

As a response to sharpened voices in 2007, Denmark invited the five coastal states to a meeting to Ilulissat, Greenland, in May 2008. The result of the meeting was the Ilulissat Declaration made between the five coastal states. In the Declaration the states committed to "ensure the protection and preservation of the fragile marine environment of the Arctic Ocean" and to "the orderly settlement of any possible overlapping claims." The meeting was criticized because it excluded the three non-coastal Arctic states of Finland, Sweden, and Iceland, along with the representatives of the indigenous peoples, NGOs and the Arctic Council. Furthermore, concerns about marginalization of the Arctic Council were expressed.

Yet it can be argued that the Danish initiative succeeded in several respects. For example the US, which as the only coastal state not to have ratified the main legal framework regulating the use of the sea areas beyond the coastal nations' EEZs called United Nations Convention on the Law of the Sea (the UNCLOS), was a signatory party of the Declaration. The Declaration also opened constructive dialogue between all the Arctic coastal states and signalled the urgent need for a renewed and updated governance arrangement in response to the rapidly changing Arctic region dynamics.

After the heated debates of year 2007, discourse deliberating the circumstances of the Arctic has changed. On the one hand, the global financial crisis seems to have channelled Arctic states' attention increasingly towards the predicaments of their own economies in the face of the global market situation rather than announcing the establishment of new Arctic military installations and increased military presence in the Arctic. On the other hand, there is a wide acknowledgement that the main issue in the Arctic is the environmental crisis of the Arctic ecosystem, including melting ice and its potentially catastrophic worldwide consequences.

In the current situation, the main challenge for the Arctic is that there exist major gaps in its present governance. The main challenge for the future development of the region is to find ways to combine environmental protection with potential commercial activities in a sustainable manner. These circumstances put pressure on extending the mandate of the Arctic Council. How this is to be done, is a critical issue that needs/demands a solution. The Arctic region in the future can – in the best case - provide the international community with a model of how to manage and govern dilemmas, disputes or even conflicts related to and emanating from climate change. This is, however, a process that requires engagement from all the Arctic states. It may also require acceptance of the involvement of international actors, such as the EU and the UN.

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## After Pikalevo

By Olga Kryshstanovskaya and Stephen White

'Russia, Forward!', declared President Medvedev in his recent message ([Rossiiskaya gazeta](#), 11 September 2009). Not that anyone had been suggesting Russia should move backwards. And for many of his critics, it's a bit late for a message of this kind when Medvedev himself has already held the commanding powers of the Russian presidency for a year and a half.

Are they, in fact, commanding powers at all? There has been little sign of Medvedev eclipsing his mentor, Prime Minister Putin, and the expert surveys – in [Nezavisimaya gazeta](#), at the end of every month – put Putin in first place among the country's influential politicians with Medvedev in second place. The Prime Minister's remarks to the Valdai forum about the kind of contest that will take place in 2012 reinforced the impression that Medvedev is no more than a [locum tenens](#), keeping the seat warm until Putin himself can return at the next election – and then perhaps for two six-year terms.

There are other questions that matter even more – not the relative positions of president and prime minister, but the position of the ruling group as a whole in relation to a society that has suddenly begun to experience recession after a decade of rapidly rising living standards. And that has begun to show, at Pikalevo and elsewhere, that it can take direct action if it can see no other way of defending itself.

[Kto vinovat?](#) It's the eternal Russian question. And just as it was the boyars who appeared to be to blame in the long Tsarist years, it's the oligarchs who are most often held to be responsible in post-Pikalevo Russia. They lost colossal sums themselves as a result of the international financial crisis – more Russians, relatively, left the [Forbes](#) list of billionaires than any other nationality. But it's not the reputations of Putin and Medvedev that have suffered – it's the oligarchs and state officials who helped themselves from the public purse when the going was good, and who are now looking to the Russian government to rescue them.

But the government itself is worried that massive layoffs could lead to an 'Orange' scenario. And with a budgetary deficit, it is no longer possible to buy off all important interests in the society in the way that was possible in earlier years – the army as well as pensioners, poor as well as rich regions, public employees as well as the private sector. 'To govern', it is said, 'is to choose.' Until last year, the Russian government could more or less choose everyone. But no longer. And with less to go round, there is more competition for what is available. In Russian circumstances, this does not mean a discussion with the electorate and then a popular mandate for a particular way forward. It means an increasingly bitter struggle to exercise influence on government officials at the same time as government officials are themselves increasingly aware of the need to hold popular discontent in check by maintaining current levels of public expenditure. Indeed in many respects, government officials are likely to find themselves closer to the concerns of ordinary people than to hard-pressed oligarchs (and former oligarchs).

On our evidence, there is no substantial difference within the 'tandem' about the issues facing the country – even if Medvedev has occasionally chosen to present himself as more liberal in tone. His instincts are managerial and technocratic – particularly the repeated suggestion that computer technology offers some kind of solution to deep-seated national problems, when it is clearly no substitute for a genuine political process. What's the point of a presidential blog if nothing changes? Or of a Duma in which parties with more than 5 but less than 7 per cent of the vote win one or two of the 450 seats but United Russia takes more than two-thirds? The most significant single change was the extension, last December, of the presidential term to six years and the parliamentary term to five years – both of which take the institutions of government even further away from ordinary citizens.

In fact, it seems, the two work closely together, often following each other's speeches at major events, and taking the key decisions jointly without the need to make use of more formal and representative procedures. Putin, as head of government, takes primary responsibility for the economy, in practice delegating a great deal to first deputy premier Shuvalov, who was the one who presented the government's report on its handling of the economic crisis to the Duma in mid-September. Medvedev, as in the Georgian

crisis last year, leads on political and constitutional matters – on which more is expected in his next presidential address in November. But we see no sign of the kind of division that the US administration claims to have seen - or may have been trying to cultivate - between president and prime minister. And if any change takes place in the leadership in the near future, it seems most likely to concern finance minister Kudrin – so that someone appears to have paid a price for rising levels of unemployment, and who better than the minister who has been most openly pessimistic about the chances of a recovery.

Medvedev, in his message, called for a political system that would be 'open, flexible and internally complex'. But just like Putin, he condemned the 'paralysed state' that had developed during the Yeltsinite 1990s, and insisted that there would be no copying of 'foreign models' of a kind that might threaten the country's national security or social stability. It might have been possible to take this position when world oil prices were at record levels. In our view, it is not a sustainable position when choices have to be made among competing priorities. It is Russians themselves who should be choosing these priorities - not well-intentioned officials on their behalf.

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## Latvia's fiscal system – the need for new approaches

By Alexander Gaponenko and Michael Rodin

### Latvian economic crisis, the ruling elite and the budget

The world financial crisis took in Latvia is very difficult for the economy and society form. The main reason for such a tragic state of affairs is not an effective use of Latvia's ruling elite of the entire set of instruments of government, including the budget system. The refusal of the ruling elite of a viable fiscal policy is associated primarily with its desire to protect themselves and the social environment from the adverse effects of the crisis, to shift its entire burden on the poorly protected populations. There is a profound misunderstanding of the Latvian ruling circles of the need for change in the current process of budgeting in a crisis.

### Latvian model of extensive management and serving its budget system

Economic development in Latvia since 1991 was of predominantly extensive nature that is passed through the involvement in the production of new labor and capital resources. All this time, the Latvian fiscal policy was part of an extensive model of economic management. This is clearly seen when comparing the Latvian budget figures with the European, and especially with the performance of the Scandinavian countries, whose economies are developing on an intensive basis.

In Latvia the amount of taxes collected in the budget was in 2006 only 30, 1% of the gross domestic product (GDP). For comparison, the average for the group of countries within the EU-27 in the same year, the tax burden on the economy amounted to 39, 9%. At the same Scandinavian countries the tax burden on the economy was more than 45% of the GDP produced. That is, in Latvia, the tax burden on the economy was a third lower than the European average, and half less than in the Scandinavian countries. The tax burden on labor in the EU-27 countries in 2006 was averaged 34.8% of its value. In Latvia, the load on the labor force was 33.5%, that is little different from the average, although it was lower than in the Scandinavian countries by 5-7 percentage points. The tax burden on capital in the EU-27 in 2006 was averaged 29.0% of the produced income. In Latvia, the same figure in 2005 was only 9, 6%, i.e. three times less than the average. Finally, the tax burden on consumption in the average EU-27 in 2006 accounted for 34, 8% of the value of household expenditures, while in Latvia, only 20, 0% or three-quarters below. In general, we can say that in Latvia has developed budget system that was attractive to the capital, but was not conducive to the reproduction of their own labor resources, stimulate consumption, but not the accumulation of capital.

### Latvian social model and its budget base

As well as economic, social Latvian model can be characterized as extensive. For social protection in 2006 in Latvia were spent from the budget amounted to only 12, 2% of total GDP produced. For comparison, the EU-27 this indicator was in 2006 - 26, 9% and in the Scandinavian countries exceeded 30%.

The second important element of the budget expenditures on social services are spending on education. According to the OECD to the needs of education in Latvia were spent in 2006 4.5% of GDP, but the national average OECD was 4,8% and half less than in the Nordic countries. In general, we can say that Latvia was not developed in the European social model characterized by a high level of expenditure on human capital formation, widespread state involvement in funding through the budget.

### Expenses on state apparatus

The bulk of the cost of the Latvian budget accounts for the maintenance of the state apparatus. With a high degree of reliability, these costs can be calculated as the sum of the costs of the budget to pay salaries to employees of the state apparatus, the current consumption materially and consumption of fixed capital of this apparatus. In 2008, the total cost of the state apparatus were already 3589 million lat or 56.0% of the state budget and 22, 1% of GDP.

### Latvian public debt and its management

All of the time, Latvia has been relatively small and constantly decreasing budget deficit and public debt. In 2007, the consolidated budget was even recorded a surplus of 117.2 million lat or 0.8% of the total GDP produced. Public debt in the same year amounted to 1,492 million lat or 8.2% of the GDP. This was one of the best economic indicators in Europe. In 2008, due to non-balanced economy and an erroneous decision of the authorities take over the debts of a private bank Parex, the budget deficit had reached 426.3 million lat or 12.7% of GDP and public debt had risen to 2,770 million lat or 18.1% of GDP.

### Economic crisis and its impact on the budget system

The economic crisis pushed long exhausted growth, extensive Latvian economic system to collapse. The volume of production GDP fell for the first 6 months of 2009 to 18,4%, unemployment reached a level of 11,2% of total employment. Reducing income of firms and the population led to a substantial loss of tax revenue to the state budget. For 8 months of 2009, they decreased by 31.1% over the same period last year. In the most reduced the value added tax (28%), tax on enterprises income (61%) and social security contributions (15%). However, the corresponding drop in income reduces the overall volume of budget expenditures has not happened. As a result, fiscal burden on the economy has increased significantly. If in 2007 the level of expenditure of the Latvian budget amounted to 35, 9% of the GDP, while in 2008 it was already 39, 9%, while in the first half of 2009 reached value 43, 9% of the GDP. Thus has been one of the highest in Europe, levels of the budgetary burden on the economy. The high costs of the budget in a sharp drop in revenues supported by increasing the national debt and growing budget deficit. In the first half of 2009 budget deficit has totaled 458 million lat, a public debt 2.949 billion lat or 22.7% of total GDP.

### Influence of Latvia's fiscal policy on the economy

The world economic crisis had a negative impact on Latvia through reduced demand for its exports, a decline in foreign investment and credit resources. But government measures of fiscal stimulus decreased of domestic demand, public investment program and the promotion of credit activity of banks. From 1.1.2009, the main rate of value added tax was increased from 18% to 21%, and on socially significant goods from 5% to 10%. At the same time were increased excise taxes. Thus, the increased cost of goods and services that are acquired and the population cost was reduced domestic effective demand. Instead of the planned increase in tax revenues to the budget there was their sharp decline. Entrepreneurs exporting goods were detained for long periods of time, refund of value added tax, which deprived them of working capital and undermine the possibility of even maintain export volumes. Expenses for capital investments

from the state budget declined from 419 million lat in the pre-crisis 2007 to 145 million lat during 8 months of 2009, or from 9, 7% to 6, 0% of total expenditure budget.

#### **Social effects of fiscal policy of Latvia**

The reduction of budget expenditures during the crisis happens. The least reduce the consumption of the state apparatus. In the first quarter of 2009, total cost of the state apparatus, as compared to the fourth quarter of 2008, decreased from 1.013 billion to 847 million lat, but their share in the structure of the budget has increased from 44,8% to as much as 58.6 %. Even stronger than the proportion of the cost of maintaining the state apparatus grew up being compared to quarters of GDP - from 22.1% to 25.8%. The share of expenditure on salaries of employees of the state apparatus in general budget expenditures grew 25, 6% to 29, 4%. If in 2000 it amounted to 188, 4 thousand people, then in 2008 had 212.2 thousand people, accounting for 21, 1% of total employment. The nature of the reduction of social expenditures of the budget shows the contents of the Latvian legislation began its operation in 2009. From 1.6.2009, the value of all pensions reduced by 10%, while the working pensioners by 70%. Mother and family benefits are reduced by 10%. It is reduced the size of non-taxable minimal wage from 90 to 45 lat. The decision to terminate the indexing of all

pensions is made. In general, we can talk about that in a crisis Latvia's ruling elite is much weakened public support for socially disadvantaged groups.

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## The crisis in Russia and the oligarchs

By Stephen Fortescue

Two events in recent years suggested a grim future for Russia's oligarchs, the buccaneering entrepreneurs who so controversially gained control of Russia's resource assets in the 1990s and no less controversially became fabulously wealthy as a result. The first was the October 2003 arrest of Mikhail Khodorkovsky and the subsequent transfer of ownership of his Yukos oil company to the state-owned Rosneft. The second was the global financial crisis, which put enormous pressure on their cash flows and so their capacity to service substantial debts.

So far, however, they have survived both these events. At the time of the bankruptcy of Yukos it seemed possible that it was the first stage of the full renationalization of Russian resource wealth. That did not occur. Abramovich sold his Sibneft to Rosneft, and then invested in the steel and coal sectors. Beyond that there have been no changes in ownership among the Russian oil majors. (At the next level below, Gutseriev was dispossessed of his Russneft in Yukos-style fashion, although it is still likely to end up in Deripaska's empire.) Ferrous and non-ferrous metals are still privately owned. Would be state oligarchs such as Sergei Chemezov have made limited headway, he being fully occupied with his 'sunset' industrial assets. The Yukos affair, it appears, was more about enforcing the rules of the game, above all the payment of tax. The oligarchs, although cowed and obeisant, are still allowed to lobby the government and are consulted, individually and collectively, on government policy, including the all-important tax arrangements. They no longer write the rules to suit themselves, but they are by no means ignored.

Neither has the state taken advantage of the second recent event, the global financial crisis, to dispossess the oligarchs despite having more secure legal grounds on which to do so than it had in 2003. The oil companies have not been particularly vulnerable in crisis conditions. Marginal tax rates on high-priced oil were so high that a drop in price has had little effect on after-tax earnings. But a number of metal magnates, above all Oleg Deripaska of Rusal, have suffered as commodity prices dropped and debt service became a heavy burden. But neither Western creditors nor the Russian state has shown much inclination to seize the shares they hold as security; so far they have been prepared to restructure the debts. Only a small proportion of the late 2008 emergency allocations of money from the country's sovereign wealth fund to firms unable to make debt repayments or meet margin calls was taken up. Owners preferred to restructure existing loans, rather than take up the more expensive and more threatening – in terms of the consequences of non-payment – emergency credits. Western creditors were presumably even less interested in suddenly finding themselves the owners of substantial but minority shareholdings in Russian resource companies than the Russian state was, and so agreed to restructures.

So assuming that with the help of their creditors the oligarchs survive the immediate crisis, what does the future hold in store for them?

1) Their relationship with the state will for the moment remain essentially the same. Putin wants to retain a significant private sector. He does not want to give his erstwhile colleagues from the security services unlimited access to Russia's resource wealth, partly because he plays the standard game of 'divide and rule' and so will not give too much to any single group; partly because he

has no greater faith in their management capacities than the oligarchs. Chemezov is a bellwether in this regard. He has clearly overreached himself and the state is unlikely to further indulge him.

- 2) The crisis has provided a sharp reminder that the oligarchs are limited, in terms of deep financial clout, in the degree to which they can develop their businesses and so the Russian resource sector. While they might have survived the crisis, it has revealed their pre-crisis expansion abroad, with its 'global company' pretensions, to be just pretensions. At home their already limited investment capacity has been shrunk even further. There are no indications that their credit lines have been totally closed, but credit is not going to be enough to finance the investments required in their sectors. Both pre-crisis expansion and the crisis itself have perhaps also revealed the limited capacity of the oligarchs to manage sprawling empires.
- 3) How then will the massive investments needed be funded and where will the know-how and management expertise come from? Given the shortage of freely available oil worldwide, Western oil companies feel obliged to provide funding and know-how to the Russians, regardless of regular atrocious treatment. Mining companies, with more global options, feel no such obligation. If they do not want the sector to suffer long-term decline, both the state and the oligarchs will have to give some ground to outsiders. If foreign companies cannot get reasonable terms, the current situation of virtually no new holes having been dug since Soviet times will continue. The foreign companies will be happy to leave the minerals in the ground.
- 4) Even if the oligarchs survive and indeed thrive, with adequate funding and infusions of know-how and expertise, will that provide impetus for the future development of the Russian economy? The oligarchs have often been criticized for producing a highly concentrated and resource-oriented economy. In fact, for a time they appeared to be the champions of diversification. Those investments generally remain in place. However the doubts about overstretch in their core businesses must apply even more in their peripheral businesses.
- 5) Sectoral considerations apart, what is the future of ownership as the oligarchs age? No preparations for dynastic succession are evident. Will their assets move into public ownership; if so, who will the investors be? Or will they slip into state ownership? Those questions will be answered by the state, with little oligarch influence on the answers. At the moment the state is reluctant to make up its mind, and it is difficult indeed to predict an outcome.

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## BMD-Day for global security – new opportunities – old uncertainties

By Irina Kobrinskaya

September 17 has high chances to become a historical date – the start of building a new Euro-Atlantic or global security system of a modern 21<sup>st</sup> century type, i.e. inclusive, fair and effective. That day the US President B.Obama made public the decision to halt the plans of allocating elements of the **B**allistic **M**issile **D**efense in Central Europe. Observers were most curious about the reaction of Russia, and positive reaction of President D.Medvedev appeared among first. It was **Barac-Medvedev Day**.

Still, the next few hours and days revealed the whole spectrum of complexities and uncertainties dimming cloudless future of global security. A flow of declarations and comments regarding US decision on BMD halt touched upon various – national or even parochial and global, tactical and strategic, security, political and economic – angles. Majority concerned fleeting, but sometimes decisive political *mise en scene*, less – the military-political substance. After the dust fell, but before key decisions have – or have not – followed few principal matters can be pointed out.

### Timing

No doubts, the time was chosen by B.Obama to reach maximum synergy: on the eve of the UN General Assembly and dozens of bilateral meetings on the highest level, G20 summit, meeting of the sextet on Iran, during the informal meeting of EU heads in Brussels, less than 100 days before the US-RF START negotiations deadline. The symphony was enriched by the 'come-together' address to Russia by new NATO Secretary General. Timing stressed the seriousness of the US Administration intentions not only to speed up the US-Russian reset, but to declare a basic change in American foreign policy from unilateralism to multilateral cooperation and stake on allies, from peremptory democratization zeal to more tolerant, even philosophic approach to the progress of democracy. Obviously timing signaled for new, in fact unprecedented opportunities for strengthening global security.

Still the very day, 17 September, 70 years after Red Army crossed the Polish border in 1939, caused twice as deep disappointment in Poland, which pushed Washington for BMD project. A bitter reaction of Polish political leaders (we omit for the sake of place the nuances of Polish political scene) marks another significant matter –

### Optics and perceptions

The reactions to B.Obama's decision again exposed gaps in mentality and vision of Euro-Atlantic and global security. Germany, Great Britain and France familiar with terrorism are really concerned by Iranian threat and nuclear proliferation. They welcome realistic plans of more effective defense against real threats (which rather could be medium and short-range missiles). Also, striving under the pressure of increasing Muslim population to find the narrow path between tolerance, democracy and effective means to preserve their national identity, Germany and France are interested in consolidation of the European Union, including military-political sphere. For 'Old Europe' Obama's new approach means more Europe in global security. But is European Union ready for more responsibility?

Obama's plan also gives more means to closer engage Russia, which 'Old Europe' realistically considers to be a necessary element of European security, a real and last **frontier** of Europe, in particular, taking into account NATO's problems in Afghanistan and instability in nuclear Pakistan.

In Central and Eastern Europe cold war and ages old stereotypes and fears of Russia (and Germany) gave new parochial sprouts on fresh yeast of 1990-ies - 2000-ies uneasy experience of integration and globalization. For Poland US BMD was not about Iran, but about Russia, or worse – Russian-German cooperation. Warsaw, which made highest stakes on the United States, and not NATO, as the only security guarantee, took the news as a treachery on the part of the strategic and most reliable partner. For Kyiv and Tbilisi Obama's decision meant distancing of their NATO plans (a propos Obama did not meet with Yushchenko and Saakashvili).

Baku perceived it mostly as eventual possibility to raise its political profile in the region, in case Gabala radar – as Moscow suggested earlier – would be an element of the antimissile defense.

Finally, Moscow decided this is 'about Russia'. On official level Russia welcomed the changes in Washington as a winner. Exactly as a winner V.Putin immediately put forward demands for further concessions: no restrictions on export of technologies and WTO membership. Apart from propaganda, Moscow, anyway, realizes, that this new game plan would demand from Russia much more and real, not just words as during Bush Administration era. The words – installing or not installing Iskanders in Kaliningrad district won't be enough. What Obama suggests is to turn from rhetoric confrontation to practical cooperation. Is Russia really ready for it?

### Decision-Day for Russia

Russia is concerned with eventual Iranian nuclear threat. Thus, it is quite possible, that regardless of C-300 contract and Bushehr plant, Russia may join, or not veto new sanctions against Iran. Russia has to be utmost careful not to spoil contacts with Iran, because Washington still hopes to gradually engage Iran into civilized world policy and counts on Moscow in this regard.

Russia is interested in re-negotiating START, in significant cuts of strategic nuclear weapons, because it is loosing this game to the US.

Russia is interested in long-lasting stabilization in Afghanistan, because otherwise it would face a chain of conflicts and instability in Central Asia and would sink in the drugs-flood from there. That is why Russia will and is already cooperating there with NATO.

Russia is interested in nuclear non-proliferation and disarmament, and it will support Obama's efforts in this respect, also for the reason that it serves to strengthen its positions in global affairs.

All that was many times declared by Moscow but found no response.

Now, that the response is there, would Moscow follow its declarations? Taken together, all these initiatives and solutions basically change the nature of Russian-Western, Russian-American relations and sentence Russia to cooperation. Which Moscow a propos considers sine qua non for modernization of the country.

The question is, whether in this 'new brave world' Russia is ready to openly and equally compete with the battle-field allies in the post-soviet space? These same September days Washington has clearly signaled its interest in closer ties with Turkmenistan as a 'leader in the energy sphere in the region', and in the new Washington mood State Secretary H.Clinton said, that she did not see big problems with human rights in Turkmenistan(!). Is Moscow ready to abandon traditional and comfortable habit to look for enemies in the West? Or to neglect Ukraine or Belarus sovereignty? The most recent polls show that such moods are still rather popular.

In other words, is Russia finally ready to make a choice in the process of self-identification, adhering itself, as it was reiterated many times on the highest official level, – with all its peculiarities – to the Euro-Atlantic civilization?

With high probability this may be the D-Day for Russia.

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## Do we have enough university collaboration?

By Jukka-Pekka Bergman

It is well known that success in global competition is and will be based on more and more knowledge intensive innovations, talents, R&D and international collaboration which are very often supported by universities and research institutes. In the Northern Dimension Region, as part of the "knowledge economies", universities and their networks are traditionally seen as the main sources for regional development and welfare.

Today's momentum for change and new forms of collaboration has also been recognized in universities and research institutes. As regions, universities themselves are undergoing restructuring and reorientation processes. They are creating new strategies and looking for new partners. Universities are increasingly dependent on each other. In addition, the surrounding environment continuously requires new initiatives and more benefits from research and educational programs to facilitate the circulation of intangible goods and services that are crucial to innovation and the competitiveness of the regions.

Even though universities would like to cover a wide range of scientific fields to respond to the external demand as thoroughly as possible, they cannot. The surrounding environment is becoming more complex and systemic. In their limited range of resources, universities need to focus on their operations and find partners to complement their capabilities. Therefore, networking activities have reached a central role in the daily operations of academia.

As a consequence, international and especially cross-border collaboration is seen as one of the most effective and beneficial approaches to respond to the needs of the surrounding environment. One reason for cross-border collaboration is the common history of the regions and their actors. Universities know each other and have very often shared visions and goals.

With a common background, the universities in the Northern Dimension Region are developing collaboration from two different approaches: very focused collaboration among a limited number of partners and an open network covering a wide range of scientific research areas.

As an example of focused cross-border collaboration, six universities in St. Petersburg and three universities in Finland have established the "Finno-Russian Innovation University" to enhance research in the field of design, business and technology. The Finno-Russian Innovation University is an alliance between Finnish and Russian universities aiming at establishing a constant and dynamic structure for state-of-the-art research and education by combining technology, business studies and design. The planned core activities of the alliance are 1) conducting research in the fields of technology, business studies and design which support the initiatives of the EU and Russian Innovation policy, 2) managing and enhancing Russian co-operation in Finland in the field of research and educational activities and 3) acting as a link between the EU, Finland and Russia for the collaboration of the universities and other organizations related to research activities in the field of technology, business and design.

There are several motives for the alliance Finno-Russian Innovation University from the technology and innovation management points of view:

- Going wrong with ICT investments is more expensive/critical than earlier.
- The number and complexity of technologies are increasing.
- Life cycles of technologies are shortening.

- Networking and co-operation are important to the absorption of the needed knowledge for learning and to the division of costs.
- There is strong causality between technology development activities and the success and well-being of the organization.
- Technology development times have become longer and technology and product life cycles shorter.
- There is increasing pressure for immediate commercialization of the research results.

As a whole, the general purpose of the Finno-Russian Innovation University is to provide common processes and tools for top level research groups to create large international research projects and promote regional and international collaboration between business and scientific forums.

Another example of the cross-border collaboration is a model for an open networked organization called the Northern Dimension Institute (NDI), which connects universities and research institutes to provide high-quality demand-driven research aiming at serving both the public and private sectors.

The idea of having an academic and scientific institute for the Northern Dimension (ND) was raised on the ND agenda in the Northern Dimension Senior Officials' Meeting in St. Petersburg on November 21, 2007. Originally, the idea of NDI was generated by the St. Petersburg State University (SPbSU). Later on, the concept of NDI has been developed in co-operation with other universities and scientific institutions, and within the ND structures.

The Northern Dimension Institute (NDI) is an open network of universities and research institutes combining expertise in the priority sectors of the ND Policy<sup>1</sup>, i.e. providing high-quality research (and later also education) in the fields of energy and the environment, public health, logistics, and culture and higher education<sup>2</sup>. However, NDI is an open format and, if required, parties interested can continually develop the ideas further also in other interest areas.

The creation and transfer of knowledge for NDI is based on active collaboration between its partners and interest groups. Thus, NDI continuously follows the ND Policy to maintain close interaction between the decision makers, researchers and business. Furthermore, NDI facilitates the achievement of joint research applications by partner universities e.g. for major European and Nordic sources of financing.

NDI creates added value for policy-making, the academic world and regional development. The main contributions can be summarized by stating that firstly, in its initial phase, depending on basic funding for activities and project funding for research, NDI e.g.

<sup>1</sup> The ND Policy refers to the Political Declaration on the Northern Dimension Policy and the Northern Dimension Policy Framework Document.

<sup>2</sup> Research themes connected to the Northern Dimension partnerships: the Northern Dimension Environmental Partnership (NDEP), and the Northern Dimension Partnership in Public Health and Social Well-being (NDPHS); as well as to the partnerships in preparation, the Northern Dimension Partnership on Transport and Logistics (NDTLP) and the Northern Dimension Partnership on Culture (NDPC).

- creates new research partnerships for cross-border co-operation and regional development in the ND region,
- conducts research of high policy relevance focusing on the priority sectors of the ND and contributes to the development of instruments to implement the ND Policy (such as ND partnerships),
- brings together already existing networks of universities and research institutes,
- enhances international research and offers a forum for working in multi-national research groups. By providing internationally recognized research, the partners of NDI have possibilities to improve research in their organizations and contribute to regional development work; and
- supports decision-making in the ND Policy framework by producing research of high policy relevance. This includes gathering together existing research projects and results of importance to NDI and producing tailored research for ND policy-makers.

Summarizing, the Northern Dimension Institute (NDI) is an open networked umbrella organization of universities and research institutes. The main goal of NDI is to promote organized multidisciplinary research in the ND Policy priority sectors: energy and the environment, public health, logistics, culture and higher education. Thematic research groups are to be created in each of the above-mentioned priority sectors, but also other areas of interest can be brought to the agenda of NDI.

Several authors, also the ones of this Journal, have aptly pointed out that the Northern Dimension and Baltic Sea regions are not lacking common forums and organizations. For example, CBC, Arctic Universities, the Barents Institute, BASREC and BSSSC exist to facilitate collaboration. The existence of this kind of facilitators is indeed a good sign of tight and intensive co-operative activities. We however need to find out our real regional competitive advantages. The Finno-Russian Innovation University is focusing on innovation research combining regional resources to increase the innovativeness of the cross-border region. The Northern Dimension Institute is connecting the universities of the region as an open network to promote multidisciplinary research in the ND Policy priority sectors and securing the information and knowledge flows in the region.

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## Towards a European eco-efficient economy

By Måns Nilsson

The current Swedish presidency of the European Union is struggling with three difficult policy problems. The first is managing the global economic recession and developing a new economic momentum in Europe. The second is to prepare for a new "Lisbon" strategy for how to enhance Europe's competitiveness in an increasingly competitive world economic order. The third is to deal with the threat of climate change, which includes both to keep all Member States on board for serious mitigation commitments, and to lead Europe in securing a global deal in Copenhagen in December.

Although these three policy agendas are often treated separately in the political system, it is increasingly clear that they are linked and must be treated together. The way forward can be described as the quest for a European eco-efficient economy.

Europe has been and can continue as a global leader in climate and energy policy. It has made tough commitments both on emissions reductions and expansion of renewable energy. But Europe must become better at innovation and growth of new industries and businesses. Europe's innovation power is currently weaker than for instance Japan and USA. We have problems, for instance, when it comes to venture capital and assisting companies through the "Valley of Death" between demonstration and market introduction.

The eco-efficient economy relies not only on innovative green companies. At the same time as strengthening innovation, Europe must also support the development and transformation of existing important industrial sectors such as heavy engineering, chemicals and steel.

Sweden has made the eco-efficient economy a profile issue during its presidency. Which issues need particular priority? I want to stress three points: systems efficiency, technology development, and a global price on carbon.

Systems efficiency has to do with how we use and distribute energy, in the form of heating and cooling systems, urban planning and transportation systems. 54% of Europe's energy is today imported, at a cost of 350 billion Euros. Heating and cooling take up half of all energy use in Europe. At the same time, there are enormous losses in existing systems. The European Commission estimates that we today are wasting around 20% of all energy. Many countries in Eastern and Central Europe, such as Poland, have the infrastructure in place and can act on major opportunities for efficiency improvements and savings throughout their systems, as well as convert to renewable fuels.

The concept of sustainable cities has received a lot of attention in media but progress has so far been on small scales and in relatively isolated "good examples". Still, opportunities are everywhere. They have to do with how we manage existing buildings and structures, and improve on for instance insulation and energy use. But it also has to do with how we build new cities and housing, and how we plan for access and mobility. Since 75% of Europe's people live in cities, this is key.

New technology development concerns renewable energy in its various forms but also other bioresource-based technologies such as biotechnology, biomaterials and green chemicals. These technology fields require further public action if they are to deliver. Today, only around 12% of energy research and development is allocated to renewable alternatives. The development of the second generation biofuels must accelerate. And Europe's leaders cannot turn its back on the opportunities in using advanced biotechnologies for sustainable development.

The car industry is important for Europe, and it is beginning to take climate change seriously. But industries have also been conservative and sometimes quite short-sighted. The EU needs to govern more actively the transition to cleaner transport. Governments are starting to look at carbon-differentiated vehicle

licensing fees, but need to do much more on congestion charging, road pricing and differentiated parking fees.

A global price on carbon is needed if measures for systems efficiency and new technologies are going to reach its full potential. Europe can be one step ahead. But Europeans account for 12% of global greenhouse gas emissions. China and the US account for 50%. We will never fully get around problems of competitiveness and carbon leakage, and the political difficulties that come with them, without a global price on carbon. Most European countries already have high fuel taxes but elsewhere in the world they tend to be low. Developing economies are claiming their right to release greenhouse gases into the atmosphere just like the developed world has done for decades. But why are negotiations so fixed on volume commitments? Let us start talking instead about price mechanisms which are competition neutral.

To move forward with this eco-efficient economy agenda, we must "lock-in" on pathways for sustainable transformation. It is doubtful whether existing decision making institutions in Europe will be able to achieve this. Therefore, three institutional changes need to be set in motion.

First, we need better-informed policy debates. Decision makers must better understand how socio-technical systems develop, and what impacts there will be from different decision alternatives. In fact, both environmentalists and industries see this as the major deficiency today (but for different reasons!)

Second, we need stronger policy integration. Decision making must be better coordinated. Today, at best there is some kind of consultation and discussion between different departments. Europe needs better coordination and integration of policy fields such as energy, transport and agriculture, and up to international negotiations in climate change, trade and security.

Third, we need technology-specific support measures. Generic instruments such as taxes and emissions trading need complementing with targeted measures for innovation, entrepreneurship and new technology markets. We cannot only let the market resolve it, but must accept that new technologies require early-market support. Through well-designed technology support, Europe can be a lead market for eco-efficient products and technologies – and an attractive place for investments globally.

If the EU leads the way and sets in motion these policies, Europe can create an eco-efficient economic development, where it stands competitive, where climate change is managed, and where resources are not being wasted – at the same time as there will be a new dynamic in the economy. This will determine whether Europe can be a global leader in the global transformation towards sustainable development

*A European Eco-efficient Economy was published by the Stockholm Environment Institute in June 2009 and can be downloaded at: <http://www.sei.se/publications.html?task=view&catid=5&id=1241>*

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## Innovative thinking on environmental issues – the Baltic Sea is in urgent need for protection

By Miina Mäki

Over the last decades, the condition of the Baltic Sea has declined alarmingly. There are nearly 90 million people, in 14 states, living in the catchment of the Baltic Sea. The well-being of the Baltic Sea has become threatened due to increased discharges from human activities. This poses a serious threat not only to the Baltic Sea environment but also to tourism, fishing and other businesses closely related to the Baltic Sea.

The main problems of the Baltic Sea are not local but widespread in space and time. The countries surrounding the Baltic Sea seem ready to invest resources in marine conservation and start addressing the problems as a unified front. Clear evidence of shared concern emerged from the Krakow meeting of the Helsinki Commission (HELCOM) in the middle of November, 2007. The countries around the Baltic Sea made a commitment to reverse the trend and bring the dying sea back to life.

### Taking action for a cleaner Baltic Sea

The mission of the John Nurminen Foundation of Finland is to preserve the Finnish heritage in maritime culture and seafaring. In 2005, the Foundation initiated the Clean Baltic Sea project. The Clean Baltic Sea project supports actions to implement the new Helcom recommendations on wastewater treatment by improving phosphorus removal at wastewater treatment plants around the Baltic Sea and aims at visible improvements in the conditions of the Baltic Sea. Phosphorus is the limiting nutrient for the growth of blue-green algae. Therefore, in order to combat the mass occurrences of the blue-green algae reducing phosphorus emissions is of primary importance.

Concrete action and cooperation between the countries around the Baltic Sea are required in order to solve the problems of the Baltic Sea. The Foundation's operational policy is to act as a catalyst between the different sectors of society and the countries around the Baltic Sea, and to hasten the actions which are critical with respect to the condition of the Baltic Sea. The Clean Baltic Sea project has been supported in Finland by the Finnish Ministry of the Environment and numerous big enterprises as well as private persons.

### Model for efficient operations obtained from business life

With the best ways possible, the Clean Baltic Sea project aims to combine the expertise and resources of the private and the public sectors to the benefit of the sea environment. In accordance with its ideology, loaned from business life, the rule of thumb of the Clean Baltic Sea project is to allocate the activities to where the best results can be achieved with the lowest cost, in other words, obtain the highest positive environmental effect.

The cooperation locations of the project are selected with the assistance of different fields' experts, on the basis of the largest possible emission reduction, cost-effectiveness and the measurable environmental effects. The goal of the project is to reduce the eutrophication of the Baltic Sea in a quick and visible way.

### Aiming at an emission reduction of 2 500 tonnes of phosphorus

The Clean Baltic Sea project focuses on intensifying phosphorus removal from the wastewaters of cities located in the catchment of the Baltic Sea. The John Nurminen Foundation implements the project in close cooperation with the partner cities. In phosphorus removal, the Foundation's goal is to achieve the level of 0.5mg of phosphorus/ litre of purified wastewater, which is also the recommendation by the Baltic Marine Environment Protection Commission Helcom.

The aim of the Helcom Baltic Sea Action Plan, signed in 2007 in Krakow, is to reduce 15 000 tons of annual discharges of phosphorus. The total phosphorus load to the Baltic Sea is estimated

to be some 30 000 tons annually, which makes the Helcom target really ambitious. The objective of the Clean Baltic Sea project is to reduce some 2 500 tons of annual phosphorus discharges, via voluntary cooperation of project target cities, and through the most cost-efficient way.

### Targeting the biggest pollution sources through voluntary actions

The project was started in St. Petersburg in 2005, in close cooperation with the Vodokanal and the City of St. Petersburg, with the aim of reducing the annual phosphorus load from St. Petersburg's wastewater into the Gulf of Finland by 1,000 tonnes. The project has successfully introduced the chemical phosphorus removal process at the biggest wastewater treatment plant of St. Petersburg. A major milestone was reached when the chemical treatment process was launched at the biggest Central wastewater treatment plant in October 2007. In St. Petersburg, the work continues at two other large-scale wastewater treatment plants where the target level for phosphorus removal will be achieved during 2010. According to ecological models, the project is expected to demonstrate a visible effect on the condition of the Baltic Sea within a few years.

In the summer of 2008, a letter of intent was signed with the City of Warsaw aiming at making phosphorus removal more effective at the wastewater treatment plants in Warsaw. The Swedish Baltic Sea 2020 Foundation is the partner of John Nurminen Foundation in the project in Poland. In the future, the Foundations wish to have several partner cities into the project from Poland. However, in the light of current information, it seems that, at least in some big cities, the Poles might even be capable to reach the Helcom recommendation on phosphorus removal by their own investments at the modernized treatment plants.

In 2009, the Foundation launched a new application-based approach to reduce phosphorus discharges. It is targeted to cities and water companies, who are interested in taking voluntary action in reducing their discharges. A project agreement with Riga Water was signed in Helsinki on 15<sup>th</sup> September, 2009. It represents the first example of the new application-based project targeting, as it was the Riga water company who first approached the Foundation when looking for funding for more efficient nutrient removal at their wastewater treatment plant.

The application for funding can be sent to John Nurminen Foundation and it should include some basic facts on the present situation of wastewater treatment and on planned investments at the plant. Examples of possible forthcoming locations for the project include South-Western Russia, the Baltic Countries and Belarus, where there still are big cities with insufficient wastewater treatment, and, the most important, the will for action. The Foundation way of thinking positively: where there is the will, there is the way.

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## Towards understanding of spatial and temporal differentiation of innovation activities in Baltic Sea region

By Toni Ahlqvist

Already some 15 years or so the impetus of innovation has been thriving in socio-economic research and related policies. As an overarching theme of research and development activities, the 'innovation' has been actively raised as the cornerstone of future prosperity in western – and also increasingly in so-called developing – economies. However, along with this innovation thrust, something peculiar has happened to the concept of 'innovation'. It has become a strong boundary object, i.e. a concept that has such a fluid and wide coverage that almost all thinkable research and policy actors can somehow link to it. The peculiarity in this situation is that, at the same time, the meaning of 'innovation' has become somewhat monolithic and imperative, referring mainly to the promise of enhanced economic efficiency. In this vein, the idea of 'innovation systems' – be they European, Baltic, national or regional – has also become quite mechanistic. The invariably tightening competition between all the economic units – be they nation states, regions or firms – has raised such cardinal markers as economic efficiency and commercial success to the fore and relocated more cultural meanings, like creative latitude, ideational richness or differentiation, to its hidden margins. This conceptual trimming, I argue, cuts off some important aspects in our understanding of 'innovation' and 'innovation systems'.

What this situation then means for Baltic Sea Region? How could we return these hidden cultural meanings to these concepts? And how could we restore the idea that innovation, and also development of technologies, should be driven by more grandiose societal aims and needs than mere economic efficiency? Is there any way to return such archaic issues, like people and common good, to the sphere of R&D in this era when economic goals are almost beyond exception seen to supersede political goals? Some solutions to these questions may come out of research activities that have been completed at VTT in recent years.

First answer may spring from the efforts to understand the plurality and differentiation of regional innovation systems in a more systematic way. In a recent study made by VTT, named *Geography of Finnish Innovations*, we analyzed, via our database of some 4500 Finnish innovations dating from 1945 to 2007, the geographical aspects of regional innovation activities in Finland. One of its most intriguing results was the realization that there is indeed a plurality of regional innovation systems in Finland. When we analyzed the Finnish innovations through measures of absolute quantity, the activities were clearly focused on Helsinki capital region and to the biggest university regions. However, when we analyzed the innovation activities in relation to the size of the regional innovation environments, the national 'innovation surface' was much more even and differentiated. In Finland, there are several industry-based innovation centres besides the capital region and university regions that have quite strong innovation activities that might not show in the quantitative analyses of e.g. patent publications or R&D outputs. These innovation activities may spring from unique trajectories embedded in the local environment. The result shows that regional innovation systems have strong local linkages and characteristics, and these local features are important for comprehending the whole concept of 'innovation system'. The study reveals that there is a need to understand the differentiation of regional innovation systems

more thoroughly than is currently possible via the lens of quantitative economic efficiency.

The second answer – along with the regional differentiation – is opened by approaching the innovation systems as spatiotemporal entities, i.e. units that have unique development paths in three temporal levels, namely future, present and history. In the years 2005–2007, VTT completed a study called *Nordic ICT Foresight* with three Nordic research organizations, namely DTI (Danish Technological Institute), FOI (Swedish Defence Research Agency) and SINTEF (Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology). In this study we made future-oriented analyses of the potentials of Nordic ICT applications in four thematic areas: experience economy, health care, production economy and security. Our analysis was based on the comprehension of the evolutionary features that have led to the present stage of ICTs and to the visionary societal goals 10 years beyond the present set in these four areas. Thus, we analyzed ICTs as evolving processes consisting of different temporal spans and specific spatial characteristics, e.g. features that are common, complementary or specific to the studied Nordic countries (Denmark, Finland, Norway & Sweden). After systematic assessment, based on e.g. scenarios, roadmapping and action planning, we formed two kinds of ICT utilization strategies for Nordic region. The first strategic set was so-called implementation strategies, i.e. activities that are based on unique Nordic characteristics and therefore could be proactively fostered. The second set of strategies was adaptive strategies, referring to wider global level development streams that Nordic region should adapt to.

To conclude, what are the most important lessons of these two case examples from the perspective of Baltic Sea Region? Firstly, when studied more carefully, regional innovation systems are systemic entities that are simultaneously locally specific and globally adaptive. To put it bluntly, regional innovation systems are spatially differentiated. Secondly, the spatial differentiation opens up a space for temporal differentiation. Regions are not just passive building blocks in global economy – regions entail a capacity of proactive construction of their own futures, e.g. by creating strategic regional visions and back-casting transition steps to realize these visions. And to return to my philosophical plea for creative latitude, I think that this understanding of spatial and temporal differentiation of regions and regional innovation activities opens up a possibility of bringing people, culture and wider societal goals back to the concepts of 'innovation' and 'innovation systems'.

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## Innovation policy in Russia during the economic crisis

By Irina Dezhina

The Russian innovation system continues to be in transition during all the post-Soviet period. At the present time it combines elements of Soviet structure (large government sector of science) with new forms (new types of technical and financial infrastructure). In comparison with other developing economies the strength of the Russian innovation system is in the volume of resources, especially R&D personnel, and in the large-scale educational system. The major weakness is mainly in the quality of governance, i.e. in such characteristics as the rule of law, and the quality of government regulations. In addition, Russia is lacking large science-intensive companies, on the one hand, while there is not a sufficient number of small innovative enterprises, on the other hand. One of the serious reasons for low demand for innovations (including R&D) from industry is in the inadequate level of competitiveness and the monopolization of many Russian enterprises. The mechanisms aimed to stimulate companies to invest in R&D (indirect measures, different forms of public-private partnerships, technical regulations and such) are underdeveloped.

As a result, by the knowledge economy index (KEI) that the World Bank calculates annually, Russia is in the group of countries with medium-low income. It occupies the 61st position out of 134 countries for which this index is calculated (data for 2008). This is a decrease in comparison with 1995 – the year when such index was calculated for the first time. The KEI consists of four sub-indices: economic incentive regime, innovation, education, and information-communication technologies development. For Russia the strongest component is education and the weakest – economic incentives regime.

During the latest years the emphasis of the government innovation policy was on the measures that should strengthen or establish linkages between R&D organizations, universities and business in order to stimulate knowledge transfer and commercialization of R&D results. In this area the major initiatives were concentrated in the following areas:

- 1) encouraging cooperation between the R&D sector and private companies through support of joint projects, implemented in the framework of Federal Goal-Oriented Programs
- 2) support of small innovative enterprises through R&D grants and creation of technical infrastructure (such as technology parks);
- 3) introduction of some indirect measures aimed to stimulate innovation in the private sector (a number of tax privileges and tax exemptions – they mostly came into force in 2007-2008 and their effects are not clear yet).

The influence of the economic crisis on the Russian innovation system was the most visible through the indicators of private expenditures on R&D – they started to decrease dramatically. It has happened against the background of quite low business enterprise expenditures on R&D (during the last 4-5 years the share of business enterprise sector was fluctuating around 22-24% of the total intramural expenditures on R&D). Large enterprises that had the biggest expenditures on R&D had cut investments in research as well as their in-house R&D divisions<sup>1</sup>. By the end of 2008 private firms' expenditures on R&D have decreased by 80%, business angels financing – by 50%, financing from venture funds – by 40% in comparison with the pre-crisis period<sup>2</sup>.

Evidently the crisis did not stimulate companies to outsource R&D from the government sector of science. Before, outsourcing was gradually developing though many companies with large R&D divisions preferred to support R&D projects in-house or to buy technologies abroad because this was often cheaper than placing orders to government R&D institutes or universities. Companies explain the low demand for outsourcing from government-owned R&D organizations and universities by<sup>3</sup>:

- the workforce problems that exist in the government sector of science and in universities (lack of researchers in the most productive age of 35-50 years old);

- problems with the rights to intellectual property, especially the one that was created before the start of the project with industry;
- quality of the results: usually it is higher in R&D but not technology.

The crisis also influenced the position of small innovative enterprises. Large and medium companies not only decreased their own expenditures on R&D but they also cut orders to small companies. Simultaneously banks stopped giving credit to small innovative companies<sup>4</sup>. All this created very unfavorable conditions for small firms which may cause sharp decrease in their number.

The government's reaction to the crisis was also in the decrease of its expenditures on R&D. In 2009, depending on the Agency and type of Programs, the cuts in financing of R&D varied from 15% to 30%<sup>5</sup>. In comparison, Western European countries and USA have chosen a strategy to cope with crisis through increased support of R&D and innovations. In the USA the new President has announced that additional financing will be given to science, including support of fundamental research. At the EU countries governments plan to apply more proactive indirect measures stimulating private investments in R&D such as tax privileges. In developing countries (China, India) the crisis is seen as a chance to attract additional financing for R&D from abroad. Thus, governments of these countries put special emphasis on measures that may encourage inflow of foreign investment: reconsidering the intellectual property legislation, giving tax privileges to innovative companies. This, in combination with comparatively inexpensive workforce, indeed attracts foreign investments into local R&D.

In the crisis conditions the strategic approach of the Russian government was not to create new mechanisms but more effectively to use the existing ones. The emphasis is on such measures as support of small innovative enterprises, creation of technical and financial infrastructure for start-up companies, stimulating demand on R&D from the side of industry. Most of these measures are currently under development. Taking into account the general economic environment, budget cuts on R&D, and low efficiency of existing innovative infrastructure, the likelihood that these measures will be instrumental is not high.

Overall, the government has developed about 100 measures to cope with crisis, which are not directly related to innovations<sup>6</sup>. Most of measures are centered on the support of large companies but not in areas of technology modernization, product diversification and such. The implementation of these measures has led to unequal treatment of companies, and, as a result, to deterioration in the competitive environment<sup>7</sup>. Further, the lack of a competitive environment is harmful for innovations. Therefore there is not only delay in the development of anti-crisis measures to support innovations but those economic measures that were so far developed and implemented were anti-innovative by their nature.

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<sup>4</sup> [http://www.strf.ru/innovation.aspx?CatalogId=223&d\\_no=17567](http://www.strf.ru/innovation.aspx?CatalogId=223&d_no=17567)

<sup>5</sup> [http://strf.ru/organization.aspx?CatalogId=221&d\\_no=19448](http://strf.ru/organization.aspx?CatalogId=221&d_no=19448)

<sup>6</sup> Simachev Yu., Yakovlev A., Kuznetsov B., Gorst M., Daniltsev A., Kuzyk M., Smirnov S. Assessment of Policy Measures to Support Russia's Real Economy. Bank of Finland, BOFIT Online, 2009, no.6, p.5.

<sup>7</sup> Simachev Yu., Yakovlev A., Kuznetsov B., Gorst M., Daniltsev A., Kuzyk M., Smirnov S. Assessment of Policy Measures to Support Russia's Real Economy. Bank of Finland, BOFIT Online, 2009, no.6, p.17.

<sup>1</sup> [http://strf.ru/science.aspx?CatalogId=222&d\\_no=17095](http://strf.ru/science.aspx?CatalogId=222&d_no=17095)

<sup>2</sup> <http://inno.ru/press/news/document33157/>

<sup>3</sup> The summary of companies' observations concerning outsourcing is based on personal interviews conducted by Irina Dezhina in June-July 2009 with the top management of a number of innovative companies in Moscow.

## Challenges and new directions for Finnish innovation policy

By Tuomo Uotila

Innovations are widely seen as the driving force of economic growth and competitiveness not only in individual companies but also at national and regional levels. The recent discussion about developing competitiveness and innovation capability has dealt with innovation systems, which can be called either "national innovation systems", "regional innovation systems" or "sectoral innovation systems" depending on their context.

In Finland the concept of national innovation system and innovation policy has its roots at the beginning of the 1990s, though already in the early 1980s important measures had been taken to strengthen the country's technological base. Earlier than any other European country, Finland declared knowledge-intensity and technological superiority as the country's strategic policy objectives. By the 1990s the focus had shifted more towards networking and innovation policy. The concept of the national innovation system was adopted in the political discourse to emphasise that both producers and users of knowledge were looked upon as an entity and that innovations emerge from the interplay between these.

In recent years the Finnish innovation system has done remarkably well in several international rankings, but despite this past success, new trends have emerged to challenge the current Finnish innovation policy. Among the strongest of these trends are globalization and the increased importance of users in innovation process i.e. user driven innovation, which means the integration of users into the innovation process to create ideas, to test them and to facilitate the spreading of innovations. Professor Antti Hautamäki from University of Jyväskylä has even questioned the whole existence of an innovation system as "a national level concept". This is due to the fact that knowledge, the fuel for innovation, is more and more created in international cooperation and contexts. If the national innovation system refers only to knowledge and technology creation at national level, it, according to Hautamäki, also refers to a world that does not exist anymore. Adopting new knowledge and new things is as important as creating them. As a result of this globalization trend companies, including Finnish ones, are nowadays operating as members of global value networks. So far the Finnish innovation policy has, however, very much relied on cluster based development activities the default value being, that the clusters are operating from domestic home base. This on the other hand has led to criticism, that the current innovation policy is outdated.

In this new innovation environment a new approach, a paradigm of open innovation is needed. The basic idea behind open innovation paradigm is that organisations should aim at innovations by collaborating with companies, research institutes, universities, customers, suppliers etc. rather than carrying out R&D in "closed laboratory settings".

The above mentioned trends and challenges are by no means separate, but closely intermingled and connected with each other. One possible solution for these challenges is in adopting a more holistic approach to innovation policy. Even though the systemic view acknowledging the roles of

knowledge producers and knowledge users in innovation activities was adopted in Finland very early, as compared to many other European countries, it still can be claimed, that so far the Finnish innovation policy has been "an extension" of science and technology policy emphasising the science push effect in creating innovations.

Now it seems that in Finland the innovation policy is given a more holistic content than what it used to have. The national innovation strategy approved in 2008, at least at rhetorical level acknowledges that "while the knowledge and competence exploited may arise in a scientific community, the broad-based innovation concept emphasises the significance of individuals, enterprises, public operators and user communities as producers of knowledge and competence, alongside the world of academic research". Understandably, this is a strategy document and leaves open many practical issues. Among them is a very much unresolved question, how to ensure and to promote the needed dialogue between national and regional level in formulating innovation policies.

However, this kind of policy formulation adopted in the new national innovation strategy is very well compatible with the recent theoretical discussion on STI- (Science, Technology, Innovation) and DUI- (Doing, Using, Interacting) modes of innovation. The STI mode of innovation refers to the way companies use and further develop this body of science-like understanding in the context of their innovative activities and it relates to the use of explicit knowledge. The STI mode of innovation and learning, even if it starts from a local problem, will make use of "global" knowledge all the way through and, ideally, it will end up with "potentially global knowledge".

The DUI mode of innovation and learning most obviously refers to know-how and know who, which is tacit and often highly localised. While such learning may occur as an unintended by-product of the company's design, production and marketing activities, the DUI-mode can also be intentionally fostered by building structures and relationships which enhance and utilise learning by doing, using and interacting.

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## Small business in Russia – trends and outlook

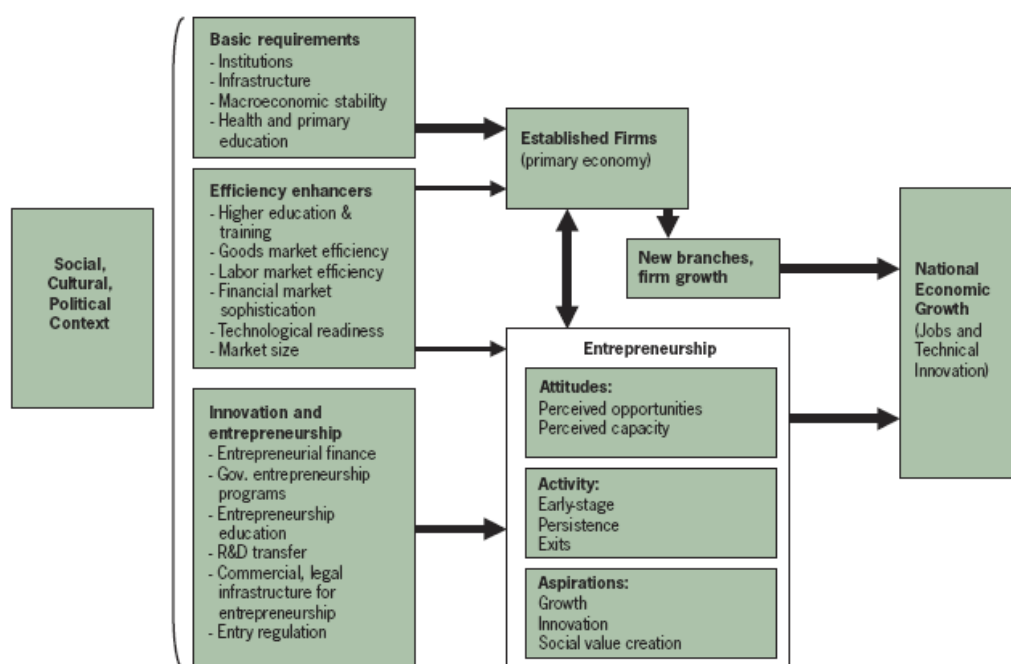
By Anatoly Zhuplev

### Background

Socio-economic prosperity, growth, employment and technical innovations depend on many factors and conditions where small business enterprises and entrepreneurship (SMEs) playing crucial role (Figure 1). SMEs in Russia, with its important political-economic role in Eurasia, affect both Russia itself and neighboring countries in the “near” abroad and beyond.

### Figure 1 Global Entrepreneurship Monitor (GEM) Framework

([http://www.gemconsortium.org/download/1250272833061/GEM\\_Global\\_08.pdf](http://www.gemconsortium.org/download/1250272833061/GEM_Global_08.pdf), p.10)



Over centuries, SMEs have not played significant economic roles in Russia, compared to the world's most developed economies. Seven decades of communism following the 1917 Bolshevik Revolution have continued this trend, in effect halting SME developments and creating restrained cultural attitudes towards entrepreneurship among the masses. Throughout moderate liberalization in the late 1980s and eventual demise of the USSR in the early 1990s, followed by roller-coaster years under Yeltsin and a relative stabilization under Putin SME climate in Russia has improved.

### Current Developments and Trends

According to the latest Global Entrepreneurship Monitor 2008 report, Russia ranks among the least entrepreneurial countries in its reference group. Some other studies (Russian SME Observatory Report, 2002; U.S. Agency for International Development, 2004) find that private entrepreneurs – natural persons (a major component of the SME sector) dynamics are comparable to European countries. In the mid-2000s SME sector in Russia was responsible for 10-11% of the GDP and 13% of employment nationwide (Zhuplev et al., 2004). Despite more than a decade of the post-communist revival of SMEs since the late 1980s, reliable and comprehensive information often

available only from western-sponsored research projects, while Russia's home-based scholars and academics are generally poorly paid, concentrated mostly in few major cities (mostly Moscow and St. Petersburg) and often focus on their personal economic survival and other priorities rather than scholarly research. Adding to the problem and, indeed, part of the problem is the Russian government that provides inadequate attention, financial and organizational support for SME research and development- SMEs typically rank low in government priorities. Although widely recognized as having progressed in SME development in absolute terms, compared with the Soviet past, Russia continues to hold cultural reservations towards entrepreneurship (Global Entrepreneurship Monitor, 2009).

The latest World Bank's survey (Doing Business, 2009) ranks Russia #120 out of 181 economies on the ease of doing business with the following rankings in the ten key subcategories: starting a Business – #65/181, dealing with construction permits – 180, employing workers – 101, registering property – 49, getting credit – 109, protecting investors – 88, paying taxes – 134, trading across borders – 161, enforcing contracts – 18, and closing a business – 89. Russia's overall ease of doing business world ranking in 2009 worsened by 8 percentage points (largely due to problems with obtaining construction permits and getting credit).

According to Russian government statistics, there are 6 SMEs per a thousand people in Russia, compared to 45 in the EU, 49.6 in Japan, and 74.2 in US. More than 50% of the SMEs are located in Russia's Central and North-Western federal districts, among them disproportionate 25% are located in the capital city of Moscow that is comprised of just 7.43% of the total Russian population. Small business is still underdeveloped in the Far Eastern (4.8% of the total number of SMEs), Ural (6.7%) and Southern (9.7%) federal districts. About 46% of all Russian SMEs operate in retail trade and food service, about 14% —in construction service and about 14% — in production industries (Zhuplev, Shtykhno, 2009). During Putin's first presidential term his administration initiated economic reforms, including the flat tax system, strengthening of the banking sector, improvements in the SME registration and reporting procedures, etc. These and other measures have had significant impact on motivations, obstacles and other parameters of starting and operating small business ventures. One of the most important improvements has been a wider, simplified access to loans and other sources of financing, although availability of venture capital in Russia, especially for high-tech/high risk start-ups, is still scarce. With financial windfalls from the skyrocketing world prices for energy and mineral resources the Russian economy has been steadily improving in the 2000s. The period of economic stability during Putin's



second presidential term (2004-2008) and growth in population's purchasing power have contributed to an increase in the number of SMEs with the medium level of sales and a decrease in the number of those with low sales in 2008. That has also signified a shift toward higher number of employees working in a business and a decline in the number of additional businesses owned. Economic stability has also instilled a sense of safety for private investors, thus facilitating increase in domestic private investment as a source of financing business. The worldwide economic crisis struck Russia in late 2008 hampering entrepreneurial developments in many ways, with particular severe impacts on SME financing

### Longitudinal Study of Russian SMEs

A recently conducted small scale longitudinal survey (Zhuplev, Shtykhno, 2009) contrasted and compared the state of Russian SMEs over a period of fifteen years, in 2008 against 1994, in the beginning of the post-Soviet transition. Summarized below are major findings of this survey reflecting the state of affairs as of summer 2008, before the advent of the economic downturn.

- The development of business infrastructure in Russia, especially in the national capital and other major cities, has improved finding information on markets, products, and prices, realizing transportation, advertising and other business functions, as well as setting up communications (phone, fax, etc.). At the same time a shortage of business real estate in capital cities caused by an increased number of businesses entering market has made it more difficult to find office and operating space. Meanwhile, the development of business infrastructure has not facilitated opportunities for acquiring knowledge and skills needed to start up and operate business, as well as in production and operational management; those issues still present a significant problem for the growing number of young entrepreneurs.
- Improvements in the Russian banking sector assured by stricter governmental requirements on the banking transparency (which lead to a license withdrawal for some weak banks or banks of dubious origin in 2002-2007) and introduction of the Deposit Insurance System in 2004 by the Central Bank of Russia have facilitated streamlining of currency transactions, improved safety of monetary system and overall simplification in conducting banking and financial operations, as well as a slight decline in importance of high interest rate as an obstacle. Also, simplification in the accounting system for small business has led to the downshift in rating the accounting and bookkeeping as a problem.
- Rampant crime against private businesses so common in Russia in the 1990s, are no longer perceived as an issue of top magnitude, while bribery and influence peddling, together with unfair competition, are perceived as more important obstacles. That may be a result of

both the dynamics of these processes in reality and entrepreneurs' increased knowledge/awareness.

- The number of young small business entrepreneurs in Russia has increased significantly, thus raising the need and demand for business consultancy and services.
- Reduction in unemployment, a shortage of labor force in the capital cities as well as lack of human resource management experience due to the low level of SME development in the 1990s have led to an elevated importance of finding good and reliable employees and high level of perceived difficulties in managing employees.

SMEs in Russia tend to demonstrate growth in the number of companies, the number of persons employed, the volume of sales and the number and share of female entrepreneurs (the latter is particularly evident in the service sector). This growth has been facilitated by positive changes in the taxation regime and streamlining of the licensing procedures but at the same time hampered by worsening situation with the red tape and bribery.

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### References

1. Doing Business. Measuring Business Regulations (2009). The World Bank. <http://www.doingbusiness.org/ExploreEconomies/?economyid=159> (accessed September 6, 2009).
2. Global Entrepreneurship Monitor (2008). Executive Report (2009). [http://www.gemconsortium.org/download/1252267134421/GEM\\_Global\\_08.pdf](http://www.gemconsortium.org/download/1252267134421/GEM_Global_08.pdf) (accessed September 6, 2009).
3. Zhuplev, A., Kiesner, F., and Zavadsky, I. 2004. Impediments to small business development in Russia. Paper presented at the 18th Annual Conference of the U.S. Small Business and Entrepreneurship, January 14–20 in Dallas, TX.
4. Zhuplev, A. Shtykhno, D. (2009). Motivations and obstacle for Small Business Entrepreneurship in Russia: Fifteen Years in Transition. *Journal of East West-Business*. Vol 15, #1.

## Recent trends in M&A and privatization in Belarus

By Maksim Salahub

Belarus, a country which for years remained the land relatively unexplored by prominent international investors, has become an emerging market which now strongly attracts attention of international companies and investment funds. There are few major reasons for that. The government today is still the largest owner of property and „businessman“ in this country (over 70 % GDP is generated by public sector) which means there is good potential for investment and privatization. Ambitious privatization campaign proclaimed in mid-2008 is being implemented at an increasingly fast pace, despite of the currently unfavorable economic cycle. The Government has undertaken to significantly deregulate the business environment, and both domestic and foreign companies have already appreciated improvements in the area of company foundation, licensing and certification, land allocation, taxation. Still, many niches in this 10 million market remain relatively unoccupied, while demand for goods, work, and services of European quality is permanently increasing.

2006 – 2008 has seen a number of notable acquisitions and privatization deals in such areas as telecom, banking and insurance sector, construction industry. In the current economic cycle, the scale of the deals has become smaller, and buyers are now focusing on different industries. Today we more frequently see investors interested in Belarus' IT sector (especially setting up a company with residency in Belarus High Technology Park, or making a joint venture with the existing Park resident), wood working industry, and food enterprises (especially those producing dairy products). There are several specific tendencies which we have noted from the beginning of 2009.

First, growing interest of international financial institutions in the market. EBRD is becoming increasingly active, providing loans to banks, industrial companies, and contemplating equity investment in various industries. Further expansion of activities is expected in connection with the Bank's possible revision of country strategy (EBRD may decide to extend its investment activities also to the public sector, while now it finances only private companies). Some financial institutions based in Nordic countries choose to co-invest in small and medium size enterprises together with a leading foreign or international investor from respective industry. Still, some international financial institutions are waiting for further political warming in the relations between Belarus and the West to start their operations in this country.

Second, privatization is getting into gear, beginning with smaller industrial enterprises. Targets are often picked not from the official privatization list. Privatization is more and more frequently initiated by the companies' management or municipal authorities. Superior authorities – ministries, state committees, government concerns, - seem to be slow and reluctant to give up control over enterprises subordinated to them from the time of the Soviet era. On the other hand, at the negotiation table every now and then we hear that privatization is seen as the only way to implement necessary modernization program at a given enterprise. Quite often, a target's long standing foreign trade partner is invited to invest equity.

Third, investment agreements with Belarusian state are becoming more and more popular. Under the Investment Code of Belarus of 2001, an investment agreement may be concluded by a domestic or foreign investor directly with the Republic of Belarus represented by a designated government body or organization. The investment agreement may provide investor with additional privileges

and exemptions (normally they concern taxes, customs duties), guarantees and protection against risks. Such agreement is used by the companies venturing in Belarus to achieve greater legal certainty and security for their investments.

Fourth, culture of relations with investors is changing for the better. Belarus Government already a while ago began to value very highly image of the country as investment destination, and a lot is being done to maintain and improve this image. Besides undertaking accelerated reform of legal environment and a massive privatization campaign, the Government is trying to play consistently a fair game with foreign investors under transparent and stable rules.

Of course there is still a lot of room for improvement. Local bureaucracy is sometimes very heavy and reminds of Soviet times, giving birth to many half-comic, half-dramatic stories. For example, it takes to exchange quite a few faxes (emails and calls are almost not acceptable) to appoint a first meeting to offer a privatization project to a ministry, and still the meeting may be missed due to necessary ministry people forgetting about the appointment, meeting other business partner, or whatever other reason. A ministry clerk responsible for reviewing and coordinating your investment proposal may leave for a one month vacation without notifying you or delegating the project to his colleague. The most difficult task is usually identifying the decision maker out of the dozens of people meeting you in the negotiation room. As if to make communications yet more difficult, very few government clerks speak foreign languages and use email.

Yet another major problem is a gap in expectations on the part of foreign investors and their potential Belarusian counterparts. This is often observed both in the deals with the government and the private business. The government expects that the investor, in exchange for an opportunity to enter an unexplored market and do business on Belarusian soil, will pay a high purchase price for an enterprise and in addition will undertake significant obligations related to modernization of manufacturing facilities, technology and know-how sharing, creating new jobs, increasing exports, maintaining social infrastructure. Private Belarusian businessmen, when making a joint venture with foreign partners or selling their business to them, commonly expect a considerable compensation for the „good will“, market reputation, brand, etc. Sometimes compromise may be found, sometimes not – deals fall through.

However, culture and mentality are changing too, and also there are ways to overcome bureaucratic obstacles. Prudent investors rely heavily on local partners (e. g. management of the target companies) and advisers (lawyers, investment bankers), whose expertise and connections may help to identify and approach decision makers within the Government, choose most suitable negotiation pattern, and avoid unnecessary time expenditures and efforts.

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