#### TURUN LIOPISTON MERENKULKUALAN KOULUTUS- JA TUTKIMUSKESKUKSEN JULKAISUJA

PUBLICATIONS FROM THE CENTRE FOR MARITIME STUDIES

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## DEVELOPMENT OF RUSSIAN PORTS IN THE GULF OF FINLAND

Pentti Ruutikainen Ulla Tapaninen









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#### **FOREWORD**

Russia has been one of the fastest developing economic areas in the world. The ports and infrastructure of Russia have not been able to satisfy the growing needs of exports and imports, which is why quite a large share of Russian foreign trade is going through third countries as transit transports. Finnish ports play a major role in transit transports to and from Russia. The economic recession that started in autumn 2008 and continues to date has had an impact on the economic development of Russia and transit traffic.

The aim of this report is to give background information on Russia, its economic situation as well as its future development. The report discusses the impact of the economy on the development of the volumes of Russian ports in the Baltic Sea region and the impact of the development of Russian ports on transit volumes in Finnish ports. The present status and future development of cargo flows in Finland and Russia are examined.

This report was written as a part of the research project STOCA – Study of cargo flows in the Gulf of Finland in emergency situations financed by the Central Baltic INTERREG IV A program 2007–2013 of the European Union, European Regional Development Fund, Regional Council of Southwest Finland, Estonian Maritime Academy and National Emergency Supply Agency. The STOCA project focuses in particular on improved sustainable accessibility and transport of cargoes in the region, with emphasis on economical and environmentally sustainable cargo transportation in emergency situations.

The Centre for Maritime Studies of the University of Turku expresses its gratitude to all parties who have contributed to the making of this report.

Turku 20th November, 2009

Ulla Tapaninen Professor Centre for Maritime Studies

#### **ABSTRACT**

Russia has been one of the fastest developing economic areas in the world. Based on the GDP, the Russian economy grew evenly since the crisis in 1998 up till 2008. The growth in the gross domestic product has annually been some 5–10%. In 2007, the growth reached 8.1%, which is the highest figure after the 10% growth in 2000. Due to the growth of the economy and wage levels, purchasing power and consumption have been strongly increasing. The growing consumption has especially increased the imports of durables, such as passenger cars, domestic appliances and electronics.

The Russian ports and infrastructure have not been able to satisfy the growing needs of exports and imports, which is why quite a large share of Russian foreign trade is going through third countries as transit transports. Finnish ports play a major role in transit transports to and from Russia. About 15% of the total value of Russian imports was transported through Finland in 2008.

The economic recession that started in autumn 2008 and continues to date has had an impact on the economic development of Russia. The export income has decreased, mainly due to the reduced world market prices of energy products (oil and gas) and raw minerals. Investments have been postponed, getting credit is more difficult than before, and the ruble has weakened in relation to the euro and the dollar. The imports are decreasing remarkably, and are not forecast to reach the 2008 volumes even in 2012. The economic crisis is reflected in Finland's transit traffic. The volume of goods transported through Finland to and from Russia has decreased almost in the same proportion as the imports of goods to Russia. The biggest risk threatening the development of the Russian economy over long term is its dependence on export income from oil, gas, metals, minerals and forest products, as well as the trends of the world market prices of these products.

Nevertheless, it is expected that the GDP of Russia will start to grow again in the forthcoming years due to the increased demand for energy products and raw minerals in the world. At the same time, it is obvious that the world market prices of these products will go up with the increasing demand. The increased income from exports will lead to a growth of imports, especially those of consumer goods, as the living standard of Russian citizens rises. The forecasts produced by the Russian Government concerning the economic development of Russia up till 2030 also indicate a shift in exported goods from raw materials to processed products, which together with energy products will become the main export goods of Russia. As a consequence, Russia may need export routes through third countries, which can be seen as an opportunity for increased transit transports through the ports of Finland.

The ports competing with the ports of Finland for Russian foreign trade traffic are the Russian Baltic Sea ports and the ports of the Baltic countries. The strongest competitors are the Baltic Sea ports handling containers. On the Russian Baltic Sea, these ports include Saint Petersburg, Kaliningrad and, in the near future, the ports of Ust-Luga and possibly Vyborg. There are plans to develop Ust-Luga and Vyborg as modern container ports, which would become serious competitors to the Finnish ports. Russia is aiming to

redirect as large a share as possible of foreign trade traffic to its own ports. The ports of Russia and the infrastructure associated with them are under constant development. On the other hand, the logistic capacity of Russia is not able to satisfy the continually growing needs of the Russian foreign trade. The capacity problem is emphasized by a structural incompatibility between the exports and imports in the Russian foreign trade. Russian exports can only use a small part of the containers brought in with imports. Problems are also caused by the difficult ice conditions and narrow waterways leading to the ports.

It is predicted that Finland will maintain its position as a transit route for the Russian foreign trade, at least in the near future. The Russian foreign trade is increasing, and Russia will not be able to develop its ports in proportion with the increasing foreign trade. With the development of port capacity, cargo flows through the ports of Russia will grow. Structural changes in transit traffic are already visible. Firms are more and more relocating their production to Russia, for example as regards the assembly of cars and warehousing services. Simultaneously, an increasing part of transit cargoes are sent directly to Russia without unloading and reloading in Finland. New product groups have nevertheless been transported through Finland (textile products and tools), replacing the lost cargos. The global recession that started in autumn 2008 has influenced the volume of Russian imports and, consequently, the transit volumes of Finland, but the recession is not expected to be of long duration, and will thus only have a short-term impact on transit volumes.

The Finnish infrastructure and services offered by the logistic chain should also be ready to react to the changes in imported product groups as well as to the change in Russian export products in the future. If the development plans of the Russian economy are realized, export products will be more refined, and the share of energy and raw material products will decrease. The other notable factor to be taken into consideration is the extremely fast-changing business environment in Russia. Operators in the logistic chain should be flexible enough to adapt to all kinds of changes to capitalise on business opportunities offered by the Russian foreign trade for the companies and for the transit volumes of Finnish ports, also in the future.

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#### INTRODUCTION

Based on the GDP, the Russian economy has been growing evenly since the crisis in 1998 up till 2008. The growth of the gross domestic product has annually been some 5-10%. In 2007, the growth reached 8.1%, which is the highest figure after the growth rate of 10% in 2000. Due to the growth of the economy and wage levels, purchasing power and consumption have been strongly increasing. The growing consumption has especially increased the imports of durables, such as cars, domestic appliances and electronics. As a consequence of the growing imports and lack of modern logistic infrastructure in Russian ports, Finland and its ports have gained a very important role as part of the transit chain through Finland to and from Russia. Finnish ports play a major role in the transit transports to and from Russia. Transit transports to the east mainly consist of valuable goods, electronics, household products and cars. Imports to Russia through Finnish ports located in the Southwest and South of Finland form a considerable share of the total volume of the ports.

Russian ports and the associated infrastructure are under continuous development. On the other hand, the logistic capacity of Russia is not able to satisfy the continually growing needs of Russian foreign trade. The capacity problem is emphasized by the structural incompatibility between the exports and imports in Russian foreign trade. Russian exports can only use up a small part of the containers needed for imports. Problems are also caused by the difficult ice conditions and narrow waterways leading to the ports.

It is obvious that with the development of Russian ports in the Baltic Sea region, transit traffic through Finnish ports will decrease in proportion to the total imports of Russia, but Finnish ports will maintain their significant role as a gateway to the Russian market.

Russia has been one of the fastest growing economic areas in the world. This economic growth has been supported by the high prices of energy products and the rise of internal consumption, investments and the service sector. Due to the growth of the economy and wage levels, purchasing power and consumption have been strongly increasing. The growing consumption has especially increased the imports of durables, such as cars, domestic appliances and electronics.

The ports and infrastructure of Russia have not been able to satisfy the growing needs of exports and imports, which is why quite a large share of the Russian foreign trade is going through third countries as transit transports. Finnish ports play a major role in the transit transports to and from Russia. About 15% of the total value of Russian imports was transported through Finland in 2008. Additionally, Russia exports chemicals and ores through Finland to the west. Transit transports to the east mainly consist of valuable goods, electronics, household products and cars. The imports to Russia through Finnish ports located in the Southwest and South of Finland form a considerable share of the total volume of the ports.

Russia has adopted a long-term programme for the development of the national economy and a strategy for the development of the country's transport infrastructure. Both programmes include an increase in foreign trade through Russian ports. The target is to handle 90–95% of the foreign trade in the country's own ports by 2020. The realization of this target will have an impact on the transit volumes of Finnish ports.

Following the transport strategy, Russia is investing in its national ports with the target of transporting 90–95% of all foreign trade cargoes through its own ports by 2020. The first results are already visible. The volumes of the ports in Northwest Russia have increased remarkably, and the ports in Ukraine, Latvia, Lithuania and Estonia have lost some of their transit volumes.

The strongest competitors to Finnish ports are the Baltic Sea ports handling containers. On the Russian Baltic Sea, such ports include Saint Petersburg, Kaliningrad and, in the near future, Ust-Luga and possibly Vyborg. There are plans underway to develop Ust-Luga and Vyborg into modern container ports, which will become serious competitors to Finnish ports. The ports of Russia and the associated infrastructure are under continuous development. On the other hand, the logistic capacity of Russia is not able to satisfy the continually growing needs of the Russian foreign trade. The capacity problem is emphasized by the structural incompatibility between the exports and imports of Russian foreign trade. Russian exports can only use a small part of the containers needed for imports. Problems are also caused by the difficult ice conditions and narrow waterways leading to the ports.

The ports competing with Finnish ports for Russian foreign trade traffic include the ports of Russia on the Baltic Sea and those of the Baltic countries. The strongest competitors of the Finnish ports are the Baltic Sea ports handling containers. On the Russian Baltic Sea, such ports include Saint Petersburg, Kaliningrad and in the near future, Ust-Luga and possibly Vyborg. There are plans underway to develop Ust-Luga and Vyborg into modern container ports, which will become serious competitors to Finnish ports. Russia is aiming to redirect as much of its foreign trade traffic as possible to its own ports. The ports of Russia and the associated infrastructure are under continuous development. On the other hand, the logistic capacity of Russia is not able to satisfy the continually growing needs of Russian foreign trade. The capacity problem is emphasized by the structural incompatibility between the exports and imports of the Russian foreign trade. Russian exports can only use a small part of the containers needed for the imports.

Finland is predicted to maintain its position as a transit route for the Russian foreign trade at least in the near future. The Russian foreign trade is increasing. With the development of port capacity, cargo flows through Russian ports will grow. Structural changes in transit traffic are already visible. Firms are more and more relocating their production to Russia, for example the assembly of cars and warehousing services. Simultaneously, an increasing part of transit cargoes is sent directly to Russia without unloading and reloading in Finland. New product groups have nevertheless been transported through Finland (textile products and tools), replacing the lost cargos. The global recession that started in autumn 2008 has influenced the volume of Russian imports, and consequently the transit volumes in Finland, but the recession is not

expected to be long lasting, and it will thus only have a short-term impact on transit volumes.

#### 1.1 Remarks on the contents of the report

This report was written as a part of the research project STOCA – Study of cargo flows in the Gulf of Finland in emergency situations financed by the Central Baltic INTERREG IV A program 2007-2013 of the European Union, European Regional Development Fund, Regional Council of Southwest Finland, Estonian Maritime Academy and National Emergency Supply Agency. The STOCA project focuses in particular on improved sustainable accessibility and transport of cargoes in the region, with the emphasis on economical and environmentally sustainable cargo transportation in emergency situations. The target of this report is to provide background information on Russia, its economic development as well as future development, the impact of the economy on the development of the volume of Russian ports in the Baltic Sea region as well as the impact of the development of the Russian ports on transit volumes of Finnish ports. The publication reflects the authors' views, and the Managing Authority cannot be held liable for the information published by the project partners.

The report is structured as follows: firstly, a general picture of the Russian Federation is presented, including economic development and a forecast of the country's economic and foreign trade development. This is followed by a description of transit transports to and from the east through Finland. Next, the Russian transport strategy and other governmental decisions related to economical development and infrastructure are described, followed by a section on the Russian ports on the Baltic Sea, including their development plans and volumes.

#### 2 THE RUSSIAN FEDERATION AS A TRADE PARTNER

This chapter reviews the Russian Federation as a trade partner. The review concentrates on a description of the country' geographical status, economical development and transport flows of goods. The description provides important background information for understanding the goods flows and development of the Russian Baltic Sea ports.

#### 2.1 General overview of the Russian Federation

The Russian Federation is a state extending over two continents, Europe and Asia. Approximately one third of the area lies in the European part and two thirds in the Asian part. With an area of 17 million square kilometres, Russia is the largest state in the world, covering more than one eight of the global land area. Roughly 10 million square kilometres are in permafrost, which makes the exploitation of mineral reserves and the living conditions difficult. The length of Russian coastline is 38,000 kilometres. Exploitation of the water area is complicated due to the fact that most of it is covered by ice throughout the year. The extent of Russia is illustrated by its division into eleven time zones. The neighbours of Russia are Norway, Finland, Estonia, Lithuania, Poland, Belarus, Ukraine, Azerbaijan, Georgia, Kazakhstan, North Korea, Mongolia and China (Figure 2.1). (Central Intelligence Agency 2008; Helanterä & Tynkkynen 2002, p. 12–13, 53; Spiridovitsh 2009, p. 4)



Figure 2.1. The neighbours of Russia and large cities. (Sobolev Insitute Mathemathics 2009)

Russia is the eighth largest state in the world by population. At the end of 2008, the number of inhabitants was 142 million, of which 103.8 million (73%) urban and 8.2 million (27%) rural. The population has decreased since the second half of the 1990's. In 1996, the number of inhabitants was still 148.3 million (Table 2.1). The approximate proportional shares of urban and rural population have remained unchanged. Only one third of the Russian area, or some 6 million square metres, is populated and in industrial

use. Population density calculated based on the total land area of the country is 10 persons/square kilometre, and when only taking into consideration the inhabited areas, 28/square kilometre. Over 70% of the population live in the European part of Russia. Population density in this area is 30 persons/square metre, while the corresponding density in the Asian part of Russia is 3 persons/square metre. On the other hand, the Asian part forms some 80% of the total area and has remarkably natural resources. (Helanterä & Tynkkynen 2002, p. 53–54; Juurikkala et al. 2006, p. 24; Federal Statistic Service 2009a)

Table 2.1. Population development of Russia in 1991–2008, million persons. (Federal Statistic Service 2009a)

Year	Total population	Urban	Rural
1991	148.3	109.4	38.9
1996	148.3	108.3	40.0
2001	146.3	107.1	39.2
2002	145.2	106.4	38.8
2003	145.0	106.3	38.7
2004	144.2	105.8	38.4
2005	143.5	104.7	38.8
2006	142.8	104.1	38.7
2007	142.2	103.8	38.4
2008	142.0	103.8	38.2
2009	141.9	103.7	38.2

There are 13 cities with more than one million inhabitants. The largest of these are the capital, Moscow (10.5 million inhabitants), and Saint Petersburg (4.6 million inhabitants). The regional structure of Russia is highly centred around the capital. Moscow is clearly the largest centre of the country measured by economic activity, the number of inhabitants and capital flows. Railways, which form the main infrastructure of the country, spread out in a radial pattern from Moscow to all directions. In other areas, cities are situated by the railway lines as city chains. Large cities are far apart, and few middle sized cities are found in between. In addition to the capital area, there are also other areas where population, industrial production and capitals are concentrated. A highly concentrated, chain-like regional structure makes the efficient exploitation of the resources of the country difficult. (Helanterä & Tynkkynen 2002, p. 53-58)

Russia is divided into seven administrative districts or federation districts; the North-Western, Central, Southern, Urals, Volga, Far Eastern and Siberian Federal districts. (Figure 2.2)



Figure 2.2. Russian federal districts. (Flags of the world 2009)

The Russian population is very unevenly distributed over the federal districts. The Siberian and Far Eastern federal districts constitute about 67% of the total area of the Russian Federation, but their population is roughly 18% of the total national population (Table 2.2). Some 26% of the Russian population live in the Central federal district, and of these, approximately one third in the capital, Moscow. In comparison, the population of the centre of the Northwest region, Saint Petersburg, accounts for nearly one third of the federal district's population.

Table 2.2. Russian Federal districts and their population in 2009. (Federal Statistic Service 2009b)

	Population (mln)	Share of Russian population (%)
Central District	37.2	26.2
Northwestern district	13.4	9.4
Southern district	22.9	16.1
Volga district	30.1	21.2
Ural district	12.3	8.7
Siberian district	19.5	13.7
Far Eastern district (North Caucasus)	6.5	4.7
Russia total	142.0	100

The transport system in Russia is one of the largest in the world. Rail transports are the most important means of transportation. The length of the railway network in Russia exceeds 87,000 kilometres. The share of rail cargoes amounts to 85% (excluding pipeline transports), while that of passenger traffic is about 45%. One of the Russian railway lines is the Trans-Siberian railway (TSR), a route traversing the country and connecting the European, Asian and Pacific districts. Finland is also connected with the

Far East through the Trans Siberian railway. For road transports, Russia has a road network that is a total of 1.15 million kilometres in length. Some 65% of the roads are surfaced. However, the road network is very degraded in places. It also spreads out very unevenly in the regions. There are over 40,000 villages and densely populated areas with three million inhabitants still without a road or rail connection round the year. (Spiridovitsh 2009, p. 36–37)

With the collapse of the Soviet Union, the Russian Federation lost most of its ocean ports. Consequently, Russia is now strongly developing its infrastructure following Government decisions. In 2005, the Russian Government adopted a traffic strategy emphasising development that would serve the connections of Russian foreign trade. Russia aims at the highest possible degree of self-sufficiency in logistics by developing its own ports, shipbuilding industry and other infrastructure. The traffic strategy was further developed in autumn 2008, as the Government adopted "The traffic strategy of Russian Federation until 2030". This document is part of a more comprehensive programme "Russia 2020: The concept of a long period for the social-economic development". (Ministry of Economic Development of the Russian Federation 2008a; Ministry of Transport of the Russian Federation 2008 & 2005)

#### 2.2 The Russian economy

Russia has been one of the fastest developing economic areas in the world. The Russian economy has been growing evenly since the crisis in 1998 up till 2008 according to the GDP (Figure 2.3). The annual growth of the gross domestic product has been some 5-10%. In 2007, the growth reached 8.1%, which is the highest figure after the growth rate of 10% in 2000. Economic growth has been supported by high world prices of energy products and the rise of internal consumption, investments and the service sector. Due to the growth of the economy and wage levels, purchasing power and consumption have been strongly increasing. The growing consumption has especially increased the imports of durables, such as cars, domestic appliances and electronics. It has had a positive impact on the exports and transit traffic of Finland. (Ruutikainen & Tapaninen 2007, p. 14; Sutela & Hanson 2008, p. 2)

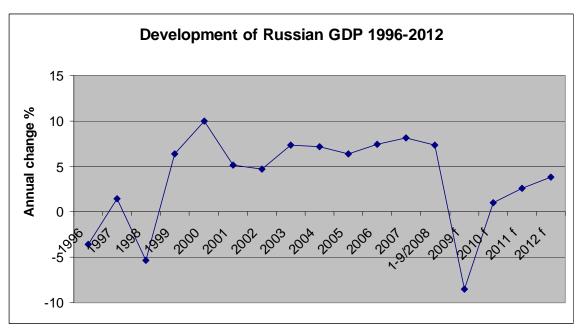


Figure 2.3. Development of the Russian GDP 1996–2012f. (BOFIT 2009; Ministry of Economic Development of the Russian Federation 2009)

The global economic crisis that started in autumn 2008 has also had consequences to in the economy of the Russian Federation. The growth of the GDP decelerated from previous years at the end of 2008, reaching the level of 5.6%. The GDP forecasts for 2009 fluctuate from -5.1% to -8.5%. The forecasts for 2010 are +1.2% and +1.0% respectively. (International Monetary Fund 2009; Ministry of Economic Development of the Russian Federation 2009) The forecast of the Ministry for Economic Development for 2011–2012 already indicates the slightly higher rates of 2.6% and 3.8% with the average price between 55–57 USD/barrel. Over the long term, the biggest risk threatening the economic growth in Russia is considered to be the country's dependence on export revenues from oil, natural gas, minerals and timber and the world market price trends of these products. A steady and continuous economic growth would require a more diversified structure of national production in Russia. Growth has been visible, especially in the sectors of construction, manufacturing, retail trade and other services. The importance of these sectors for the economic growth of Russia will remain great in the coming years. Figure 2.4 shows the division of the Russian GDP by different sectors in 2008.

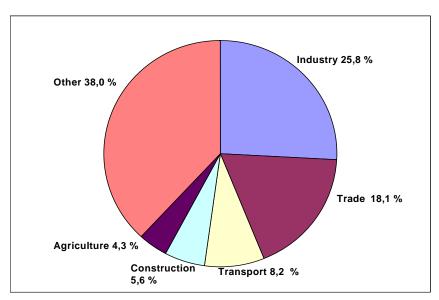


Figure 2.4. The structure of Russian GDP in 2008. (Spiridovitsh 2009a, p. 10)

See Table 2.3 for the most important parameters for the development of the Russian economy. In addition to the GDP, notable features of economic growth in Russia are the continuous increase of wages, private consumption, industrial production, surplus of the current account and increase of exports and imports. The decreasing foreign debt in the last decade is also notable from the economic point of view.

Table 2.3. Economic parameters of Russia. (BOFIT 2009; Ministry of Economic Development of the

Russian Federation 2009; Spiridovitsh 2009a, p. 9, 11, 16)

	1998	2005	2006	2007	2008	2009e	2010e
GDP (bln USD)	132	764	985	1 290	1 671	1 235	1 443
Change of GDP (%)	-5.3	6.4	7.4	8.1	5.6	-8.5	1.0
GDP/capita (USD)	900	5 350	6 910	9 060	11 790	8 730	10 240
Unemployment rate (%)	13.2	7.7	6.6	6.1	6.1	9.6	9.6
Average wage (USD)	108	301	408	550	608	-	-
Average change of consumer prices (%)	-	12.7	9.7	9.0	14.1	12.4	10.7
Investments (change %)	-12.0	10.6	17.5	20.8	10.3	-21.3	0.8
Private consumption (change %)	-	12.2	11.1	12.9	11.4	-1.5	2.1
Industrial production (growth %)	-5.2	5.2	5.9	6.3	-2.0	-12.5	0.8
Agricultural production (growth %)	-	2.4	2.5	3.6	3.2	-	-
Inflation (%)	84.4	10.9	9.0	11.9	13.3	12.4	10.7
Surplus of current account (bln USD)	0.2	83.3	94.5	78.3	98.9	-40.2	2.7
Exchange rate RUR/USD	20.7	28.3	27.2	25.6	24.9	36.0	36.7
Exchange rate RUR/EUR	-	35.2	34.1	35.0	36.5	48.4	50.8
Exports (bln USD)	74.4	243.6	304.5	355.2	471.8	274.0	276.0
Imports (bln USD)	58.0	125.3	163.9	223.1	292.0	190.0	195.0
Foreign debt (bln USD)	-	70.1	43.2	35.8	31.1	-	-
Population (mln people)	147.8	143.5	142.8	142.2	142.0	-	-

The wage structure development in Russia gives a very illustrative picture of the growth in purchasing power in Russia in recent years. The share of the people with the lowest income level has clearly decreased. While in 2004, some 62% of the Russian population earned less than 6,000 rubles monthly, this figure in 2008 was 22%. The share of people earning more than 10,000 rubles monthly has increased from 17% to 55%. The average wage has increased by some 39% respectively (Figure 2.5).

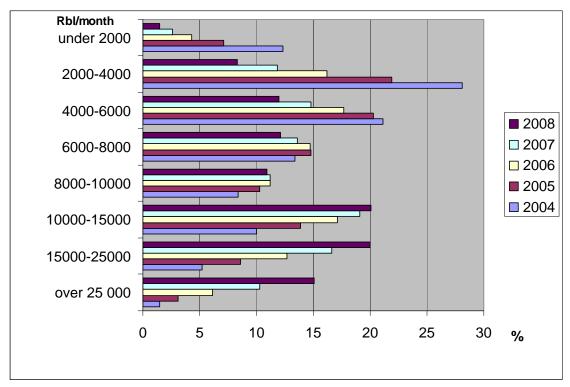


Figure 2.5. The development of wage structure in Russia 2004–2008. (Federal Statistic Service 2009c)

Table 2.4 shows the distribution of Russian gross domestic product and retail trade by districts. The Southwestern, Central, Southern and Volga Federal districts produce about 68% of the total GDP of Russia. The share of Moscow is 23% of the country's total GDP. Based on the per capita GDP (in 2006), the richest of the Russian federal districts was Ural Federal district with 308,000 rubles/person (USD 11,700). In Southwestern federal district, this sum was 160,000 rubles (USD 6,080) and in the Central federal district 211,000 rubles (USD 8,010).

The poorest federal district measured by GDP/person is the Southern Federal district with its 71,000 ruble per capita GDP in 2006 (no information available for 2007–2008). The Russian retail trade market has grown fast over the last years. The amount of retail trade reflects the sum of rubles consumed on goods, and consequently, the level of economic activity and wealth. In 2007, the total of retail trade in Russia amounted to 10,853,000 million rubles (about USD 412 billion). The per capita consumption was the greatest in Central district (rbl 100,579 = USD 4,097), in Ural district (rbl 98,023 = USD 3,993) and in Southwestern district (rbl 75,304 = USD 3,067). The value of retail trade was higher still in Moscow (Central district) and in Saint Petersburg, which are distribution centres of imported goods and terminal points of an international transit

route through Finland to Russia. The average monthly income was the highest in the same districts. When examining the development of the retail trade value in Russia it can be noted that the growth of consumption is spreading more and more from the Central Federation district and Moscow (part of the district) to other districts. While the share of the Central Federal district in 2000 was still 42%, in 2007 it was 34%. The growth of the Russian retail trade continued in 2008, amounting to 13,915 billion rubles, or some 97,990 rubles/person. (Federal Statistic Service 2009f)

Table 2.4. Economic indicators of Russian districts. (Federal Statistic Service 2009d, 2009e)

	Population 2009 (mln)	Urban 2009 (%)	GDP 2006* (bln rbl)	GDP/cap 2006* (th. rbl)	Retail trade 2007 (mln rbl)	Retail trade/cap 2007 (th. rbl)	Average income 2007 (rbl/month)
Central	37.2	81	7 850 000	211 000	3 739 955	100 579	15 877
-Moscow	10.4	100	5 150 000	493 189	2 040 280	195 121	35 490
Volga	30.3	70	3 520 000	116 000	1 948 466	64 319	10 347
Ural	12.2	80	3 770 000	308 296	1 128 829	92 259	12 000
South-Western	13.5	82	2 170 000	160 000	1 018 518	75 304	13 282
-St. Petersburg	4.6	100	812 000	177 000	447 928	98 023	16 876
South	22.8	57	1 610 000	71 000	1 332 598	58 431	8713
Siberia	19.5	71	2 390 000	122 000	1 275 824	65 187	10 286
Far East	6.5	74	981 000	150 000	421 960	64 940	13 358
Russia	142.0	73	26 880 000	188 647	10 853 000	76 400	12 551

<sup>\*</sup>information for 2007–2008 not available

Russia is an economy of global importance. Measured by the GDP in 2006, Russia was the 11th largest economy, and by per capita GDP, the country came 59th. Measured by the purchasing power parity, which makes the exchange rates of different countries comparable, Russia came 8th and 55th. (International Monetary Fund 2008) According to the global competitiveness index maintained by the World Economic Forum and describing the competitiveness of the countries of the world, Russia stands in the 51st place. Russia's competitiveness is especially deteriorated by both institutional weaknesses and the underdevelopment of financial and business markets. (World Economic Forum 2009)

#### 2.3 Economic development forecast for 2009–2012

The global economic recession, which started in the second half of 2008, has also had an impact on the Russian economy. The growth of the GDP slowed down in the last months of the year, showing a rate of 5.6% in 2008, whereas it was 8.1% in 2007 (see Table 2.3). The financial crisis has continued to have a very negative impact on the Russian economy in the first months of 2009. In January–May, the GDP decreased by 10.2% compared to the same period in 2008. Capital investments fell by 17.7%. The real wages of the population have not decreased in the same proportion, in January–May only by 2.0 %. Nevertheless, the consequences can be noted in retail trade, which decreased by 2.2% and 5.6% in May. One reason for the intensive recession is the

decrease in external demand. Exports have diminished by 52.6 % in money value in January-May 2009 compared to the same period in 2008, first and foremost as a result of the reduced raw oil and raw material prices. The value of imports was 60.7%. (Ministry of Economic Development of the Russian Federation 2009) Based on the forecast for the Urals raw oil (Urals is the term for raw oil pumped from Russian oil fields) ranging in USD 54-57/barrel, the Ministry of Economic Development of the Russian Federation has produced the following forecast of socio-economic development in Russia in 2009–2012. The Russian government's decisions on economic policy will be based on this forecast (Table 2.5).

The forecast is based on global economic development, which after the depression of 2.7% in 2009 is expected to grow by 0.6–2.7% in the following years, and even by 4% due to the fast growth in developing countries and economic recovery in developed economies.

The forecast for the world market price of raw oil type Urals made by the Ministry for Economic Development of Russia is a little bit more conservative compared with those of professional analyst centres, the estimates of which for 2010 and 2011 average USD 63.8 and 69.8/barrel (169 litres) respectively. (Ministry of Economic Development of the Russian Federation 2009)

According to the Ministry of Economic Development of the Russian Federation, the world prices of minerals are on the increase, too. The world market price for aluminium has increased in the second half of 2009 compared with the first half of the year by 23%, the price of copper by 66% and the price of nickel by 68%. The recovery of the world economy will increase the demand for minerals, and consequently the market price will rise. Since the Russian economy is very dependent on the exports of raw oil, natural gas and raw minerals, an increase in their prices will have a positive impact on the growth of the Russian GDP.

At the same time, we can note that the forecast figures of the economy in 2012 do not reach the maximum figures of the year 2008 even with the remarkable growth of raw oil market price.

Table 2.5. Forecast of the main economic indicators of economic development in Russia for 2009–2012. (Ministry of Economic Development of the Russian Federation 2009)

	2008	2009	2010	2011	2012
Raw oil price, Urals, USD/barrel	94.4	54	55	56	57
GDP, growth %	5.6	-8.5	1.0	2.6	3.8
Industry, growth %	2.1	-12.5	0.8	1.7	1.9
Investments in fixed capital, growth %	9.1	-21.4	0.4	5.7	9.0
Real wages, growth %	2.9	-4.1	0.4	2.8	4.0
Volume of retail trade, growth %	13.5	-5.8	2.1	3.2	3.2
Exports, bln USD	471.8	274.2	275.6	281.8	289.1
Imports, bln USD	292.0	190.0	194.8	205.1	219.3
Export of raw oil, mln tons	243.1	245.5	243.0	241.0	238.0
Export of gas, bln cubic meter	195.4	160.8	170.0	181.5	188.5

Russia has set challenging goals for its economic development (Table 2.6). By 2020, the country is planning to more than double its per capita gross domestic product. Simultaneously, the population share of the middle class should be increased from the present 20% to 50%. Russia also aims to increase its exports and share of the total world economy remarkably. One of the future goals is to increase the production of processed goods, at the same time increasing their share in exports along with the current heavily energy-orientated products.

Table 2.6. Goals set by the Ministry of Economic Development of the Russian Federation for 2007–2020.

(Ministry of Economic Development of the Russian Federation 2008b)

	2007	2020
GDP/capita (1000 USD)	13.9	30
Average age	66.5	72–75
Annual growth of GDP (%)	8.1	6.5
Share of the middle class (%)	20	>52-55
Exports (bln USD)	354	>900
Growth of productivity (%)	1	2.6
Share of innovation production (%)	5.5	25–35
Exports of machinery industry (bln USD)	19.7	110–130
Share of Russia in the world economy (%)	3.2	4.3
Share of internal production in consumption (%)	50	80

#### 2.4 Russian foreign trade

The Russian foreign trade has grown fast since the beginning of the millennium (Figure 2.6). In 2000–2008, the value of the Russian foreign trade has increased five-fold from USD 155 billion to USD 764 billion. In 2008, the value of imports was USD 292 billion, and they increased by 33% from the previous year. The exports totalled USD 472 billion in 2008. As a consequence of the global economic recession that started in autumn 2008 and with the decrease of raw oil market price, the value of Russian exports is forecasted to decrease to USD 274 billion in 2009. According to the Ministry for Economic Development, it will start to go up slowly, reaching the level of USD 289 billion in 2012. The value of the imports is also expected to reduce remarkably from the USD 292 billion in 2008 to USD 190 billion in 2009. In 2012, their value is forecasted to be USD 219 billion. It is notable that the USD value of Russian exports is not going to increase remarkably, although the quantity of raw oil and natural gas exports will remain approximately at the same level (see Table 2.5 and Figure 2.6).

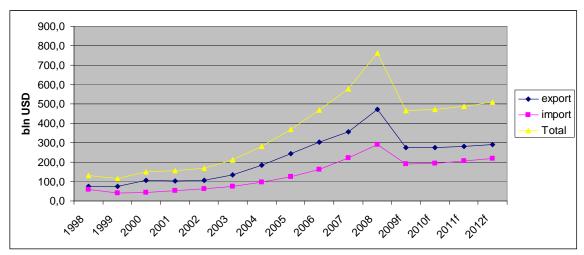


Figure 2.6. Development of Russian foreign trade in 1998–2008 and forecast for 2009–2012. (BOFIT 2009; Ministry of Economic Development of the Russian Federation 2009)

Russian exports mainly consist of raw materials and low value processed products (Figure 2.7). Russia is thus highly dependent on the world market prices of both raw oil and other raw materials. In 2008, the share of raw oil in Russia's total exports was 63%, and that of natural gas was 14%. Other notable product groups in Russian exports consisted of black and non ferrous metals (9%), chemical products (5%), machinery and equipment (5%) and wood and forest products (2%).

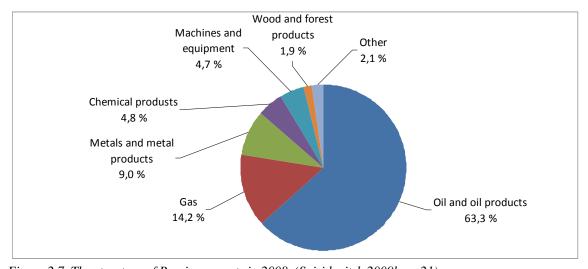


Figure 2.7. The structure of Russian exports in 2008. (Spiridovitsh 2009b, p. 21)

Russian imports have been increasing strongly in recent years, due to the improving purchasing power and living standard of the population. The structure of imports, however, has remained constant in the last years. The imports consist of machinery and equipment (51%), cars (13%), foodstuffs (5%), chemical products (3%), metals and metal products (Figure 2.8). In recent years, there has been a considerably high demand for cars. The number of cars sold in 2008 was 3.2 million (a growth of 14% compared with the previous year), of which the number of imported cars was 1.5 million. (RZD-Partner 2009a) About 850,000 cars were transported to Russia through Finland

(National Board of Customs 2009a). A considerable part of the imports of machinery, equipment and electronic devices to Russia is transported through Finland, too.

The economic impact of the world-wide crisis could already be noted in the last two months of 2008, as Russian imports decreased in almost all product groups. This decrease was quite remarkable in the imports of cars. Between January-May 2009, car imports decreased by 71.9% compared to the January-May period in 2008. (Delovoi Peterburg 2009) Reasons for this decrease include the decision of the Russian Government to increase import duties, the devaluation of the ruble, in consequence of which the prices of imported cars have increased, and a decline in demand. Figure 2.8 shows the structure of Russian imports in 2008.

In the first half of 2009, the consequences of the global recession continued to have a strong impact on the foreign trade of the Russian Federation. Exports in January–June 2009 only amounted to 53.1% and imports to 57.4% of those in the same period in 2008. When looking at the product groups, the biggest decrease in imports was recorded in machinery, equipment and cars, which only reached 46.3% of the corresponding figures in 2008. The volume of raw oil and gas exports in terms of dollar value decreased, only amounting in January-June 2009 to 49.7% of the figures in the same period in 2008. Nevertheless, the total volume of raw oil exports has not gone down. It reached the same level as in the first half of 2008, amounting to 123 million tons.

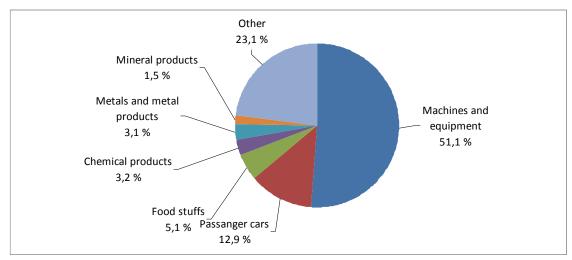


Figure 2.8. The structure of Russian imports in 2008. (Spiridovitsh 2009b, p. 21)

Table 2.7 shows the most important trade partners for Russian exports and imports in 2008. Russia's most important export countries are the Netherlands, Italy, Germany, Turkey and Belarus. The major countries importing to Russia are China, Germany, Japan, Ukraine and USA.

20)					
<b>Export country</b>	Share (%)	Change (%)	Import country	Share (%)	Change (%)
Netherlands	12.2	+32.9	China	13.0	+42.3
Italy	9.0	+52.3	Germany	12.8	+28.4
Germany	7.1	+25.9	Japan	6.9	+46.1
Turkey	5.9	+49.5	Ukraine	6.1	+21.8
Belarus	5.0	+37.2	USA	5.2	+45.3
Ukraine	5.0	+43.4	Italy	4.1	+28.8
China	4.5	+33.1	Belarus	4.0	+19.2
Poland	4.3	+51.8	South-Korea	3.9	+19.0
Finland	3.4	+46.9	France	3.8	+29.5
United Kingdom	3.2	+34.8	United Kingdom	2.9	+35.0
Kazakhstan	2.9	+12.1	Poland	2.6	+51.8
USA	2.9	+62.2	Finland	2.5	+32.0
Total (incl. others)	100.0	+33.0	Total (incl. others)	100.0	+33.6

Table 2.7. The most important trade partners of the Russian Federation in 2008. (Spiridovitsh 2009b, p.

The European Union is the Russian Federation's largest trade partner, which accounts for 50.2% of the volume of Russia's foreign trade. Due to their geographical proximity and common history, the CIS countries also play a significant role in the foreign trade of Russia with a 14.6% share in the first half of 2009. (Federal Statistic Service 2009f) International agreements associated with foreign trade have a remarkable influence on foreign trade volumes. In 2007, the presidents of Russia, Belarus and Kazakhstan signed documents on the establishment of a customs union by 2010. As a consequence, the custom duties and custom formalities between the countries will be simplified.

Relations between the Russian Federation and the European Union are regulated by the Agreement on Partnership and Cooperation, agreement on which was reached between Russia and the new EU countries in 2004. The agreement expired at the end of 2007. Negotiations on a new agreement between the European Union and Russia are underway.

Russia is also engaged in negotiations concerning membership in the World Trade Organisation (WTO). Nevertheless, the customs union between Russia, Belarus and Kazakhstan may delay the result, because Russia is now aiming to become a WTO member as part of this customs union. In December 2007, Russia started discussions on the membership of the OECD. These negotiations are expected to last at least two years. (Spiridovitsh 2009, p. 19)

#### 2.4.1 Trade with Finland

Russia's trade with Finland grew quite steadily in 2003–2008 (Table 2.8). The growth of exports has varied between 7.9% in 2007 and 31.7% in 2005. However, the recession has brought export volumes down. During the first three months of 2009, their volume was lower by as much as 47% than in the same period last year.

	<b>Imports</b> Exports					
Year	Mln euros	Change %	Share %	Mln euros	Change %	Share %
2001	3,427	-1	9.5	2,806	30	5.9
2002	3,566	4	10.0	3,128	11	6.6
2003	4,367	22	11.9	3,477	11	7.5
2004	5,320	22	13.1	4,362	25	8.9
2005	6,557	23	13.9	5,744	32	11.0
2006	7,768	18	14.1	6,220	8	10.1
2007	8,411	8	14.1	6,724	8	10.2
2008	10,174	21	16.3	7,618	13	11.6
2009 (1–3)	1,553	-42	14.3	954	-47	8.9

Table 2.8. Trade with Russia 2000–2009/1–3. (National Board of Customs 2009b)

Finland is the 9th important export country for Russia. In 2008, Finnish exports into Russia grew by 13%. The main product groups in Finnish exports to Russia are machinery and transport equipment (57%), chemical products (13%), paper, cardboard and derived products (7%) and foodstuffs (4%) (Figure 2.9). The exports, however, decreased in January–March 2009 by about 42% compared to the same period in 2008.

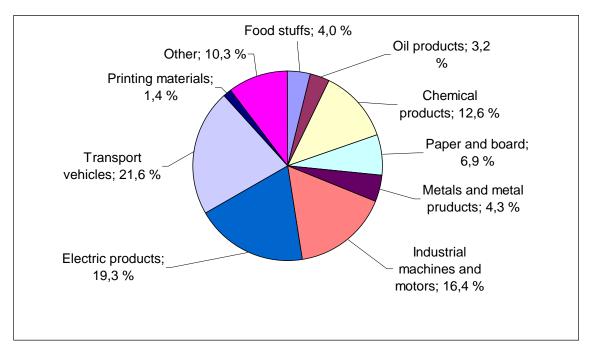


Figure 2.9. The structure of Finnish exports to Russia in 2008. (National Board of Customs 2009b)

The development of imports from Russia to Finland is quite similar to that of exports. While the growth in 2003–2008 was between 8.2–23.1% by money value, it plunged by 42% in the first three months of 2009. Finland imports from Russia raw oil and oil products (57% of total value of imported), gas (11%), timber and cork (7%), chemical products (5%) and electricity (4%) (Figure 2.10). Finland ranks 12th in the value of imports from Russia.

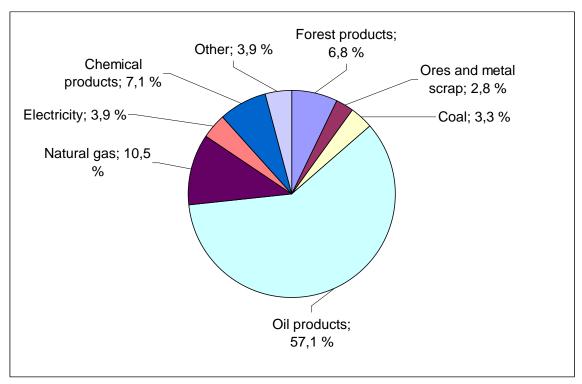


Figure 2.10. The structure of Finnish imports from Russia in 2008. (National Board of Customs 2009b)

#### 3 TRANSIT TRAFFIC THROUGH FINLAND

The transport of goods between two states through the territory of a third state is referred to as transit transports. The transited goods are not purchased by the transit country, and neither are they declared in the transit country nor included in the foreign trade statistics of the transit country.

There are many underlying reasons for the transit traffic between Russia and other countries. After the disintegration of the Soviet Union, Russia lost most of its former ports in the Baltic Sea region, and only the ports situated in the eastern part of the Gulf of Finland and the port of Kaliningrad were available for the Russian Federation. The problem with the eastern ports is the difficult ice conditions. The disadvantage of the port of Kaliningrad is the land connection to central parts of the Russian Federation through Lithuania and Belarus. Russia's port capacity is inadequate, and as a consequence, transit traffic to Russia through other countries has evolved. Along with the inadequate port capacity, the growth of the Russian economy and foreign trade have had an influence on the development of high volumes of transit traffic. The Russian imports have in recent years grown more than the exports (see Figure 2.6). They have also increased the transit volumes of Finnish ports.

The transit traffic through Finland is composed of two main flows; the eastern and the western transit flows, which are described in the following chapters (Figure 3.1). After that, the transit traffic is reviewed by ports.

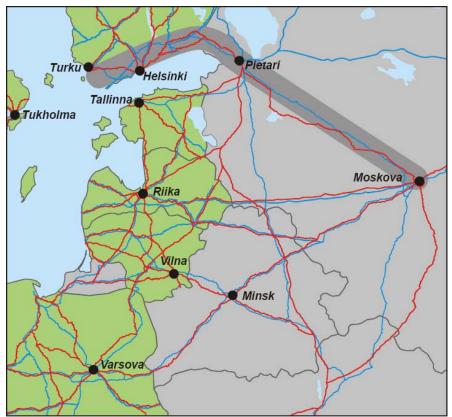


Figure 3.1. The main transit route through Finland. (Lautso et al. 2005, p. 57)

#### 3.1 **Eastbound transit**

The transit route through Finland to Russia has been the main transport route for valuable goods from the European Union territory to Russia. In 2008, approximately 13% of the total value of Russian imports were transported through Finland. The transit goods are shipped from the country of departure to Finnish ports and further to Russia mainly as road transports.

The role of rail transports in the eastbound transit traffic has been small due to the problems of customs clearance in Russia. It is in the interest of the clients to carry out the customs clearance at their own customs point, not at the railway station. Another problem with the rail transports has been the availability of railway wagons. On the other hand, the transport of containers by block trains to Russia is expected to increase. In 2008, there was a block train connection between Hamina and Saint Petersburg for containers twice a week, and a connection between Hamina and Moscow was planned. Rail Trans Scandinavia, a joint venture between the Finnish railways VR Cargo and Russian Railways RZD, was planning to open a block train connection to Moscow. The aim was to carry 50,000 cars per year to Moscow directly from Finnish ports of import to Russia. A terminal for cars with customs clearance facilities and enough space for temporary storage of cars was opened in Moscow.

In the following section, road transports to Russia are discussed. They account for the largest share of transit volumes to the east, and the National Board of Customs collects statistics on them. Comparable statistics on railway transit transports are not available.

According to the customs statistics, the total volume of eastbound transit transports reached about 3.8 million tons in 2008. Through the boarder crossing of Vaalimaa, approximately 2.3 million tons were transported, through Nuijamaa about 0.8 million tons and through Imatra boarder crossing around 0.7 million tons.

When reviewing eastern transits by their money value, they amounted to about 30.9 billion euros in 2008. Compared with the previous year, the money value grew by 1%, or 200 million euros. Cars were the most important product group (Figure 3.2). Cars, radio, television and computer equipment together with other machines and transport equipment had a share of about 56% in the total transits by money value in 2008.

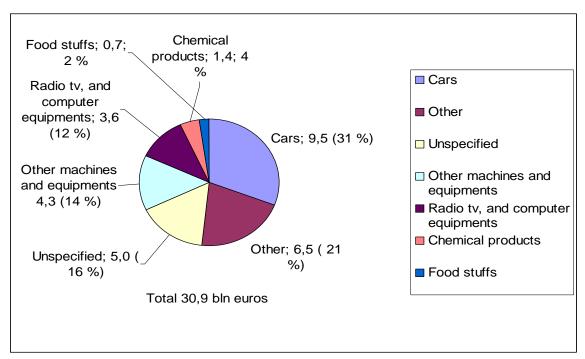


Figure 3.2. The structure of road transits to Russia in 2008, bln euros. (National Board of Customs 2009c)

Figure 3.3 shows the development of the money value of road transits to Russia in 2006–2008. During this period, the money value grew from 24.7 billion euros to almost 31 billion euros, or by 25%. Especially the share of textile industry products (+129%), machines and equipment (+42%) and cars (+33%) in the transit transports have increased. Among other products, the share of tools has grown (+62%).

According to statistics from January-June 2009, eastbound road transits decreased remarkably measured both in tons and by their money value. The total value in tons in the first half of 2009 was about 875,000 tons, and in the same period in 2008, 1.8 mln tons (-52%). The money value fell from 14.6 billion euros to 7.1 billion euros (-51%). The volumes decreased the most for cars and radio, television and computer products. While in the first half of 2008 the number of cars transited to Russia amounted to 389,000, this amount in the same period was 86,000. The volume of radio, television and computer equipment also greatly decreased from 1.5 billion euros to 0.8 billion euros (-45%). (National Board of Customs 2009d)

When looking at the development of transit volumes to the east in the first half of 2009, we can observe that they have decreased dramatically. While the money value of transits in the first half of 2008 amounted to USD 14.6 billion, it plunged by 51% to USD 7.1 billion in the same period in 2009. The greatest drop was seen in the transits of cars. In January-June 2009, only 86,000 cars were transported through Finland, while this number in 2008 was 389,000 (-78%). The volume of radio, television and computer equipment dropped by 45%, that of household appliances by 16% and that of other machinery and equipment by 37%.

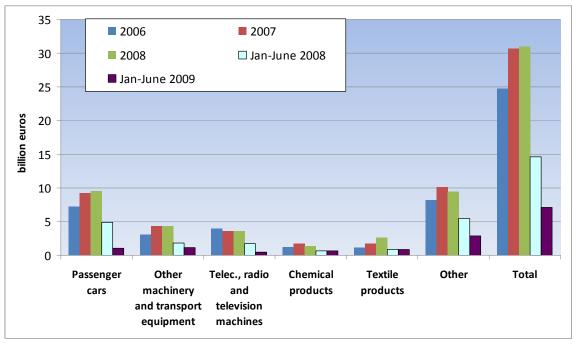


Figure 3.3. Development of the money value of road transits to Russia by product group in 2006–2008. (National Board of Customs 2009, 2008, 2007)

#### 3.2 Westbound transit

The westbound transit transports through Finland are mainly carried by rail from various production plants in Russia to Finnish ports, from where they are shipped to third countries. In westbound transits, road transports are not used much, because the transported goods are mainly crude and not expensive by money value.

In 2008, the total value of transits to the west was approximately 4.4 million tons (Table 3.1). The most important product groups are ores and minerals, mainly iron pellets from Russian Karelia through the port of Kokkola to the west and chemicals, which jointly accounted for 80% of the total value of western transit goods. The share of ores, minerals and chemicals has grown in recent years, and the share of oil and general cargoes has decreased. However, the volume of western transits has been stable in the last few years. In 2008, this volume grew by 28% compared to the previous year. Especially ores, minerals, fertilizers and chemicals increased their share. Only the volumes of paper and oil products went down a little in 2008. In the first half of 2009, the volumes have gone down by 23%. Only the share of fertilizers grew by 14%.

Product group	2003	2004	2005	2006	2007	2008	1-6/2009	1-6/2008
Ores and minerals	4	273	1 034	2 392	1 665	1 925	487	700
Chemicals	1 745	1 762	1 441	1 180	1 307	1 582	572	768
Fertilizers	-	-	-	-	60	435	288	248
General cargoes	803	519	277	85	92	135	34	46
Metals and metal products	50	79	36	45	98	132	18	13
Oil products	803	519	63	69	162	123	82	99
Other products	ı	-	63	11	20	43	21	30
Cellulose and wood pulp	-	-	4	0	0	12	2	2
Sawn wood	-	-	1	0	3	4	0.7	0.1
Paper and paper board	41	143	53	53	30	2	0.3	0
Plywood products	1	-	11	1	1	2	1	1
Total	2 806	2 837	2 980	3 837	3 439	4 395	1 506	1 938

Table 3.1. Transit to the west by product group in 2003-2009/1-6, thousand tons. (Finnish Maritime Administration 2009a, 2008)

#### 3.3 The transit ports of Finland

The Finnish transit ports are Hamina, Hanko, Helsinki, Kokkola, Kotka and Turku, through which practically all transit cargoes are transported. Figure 3.4 gives a summary of the transit volumes of the Finnish ports by product group. Valuable goods are transported to the east mainly through the ports of Kotka, Hamina, Hanko and Helsinki. Bulk products through Finland to the west are mostly shipped through the ports of Kokkola, Hamina and Kotka.

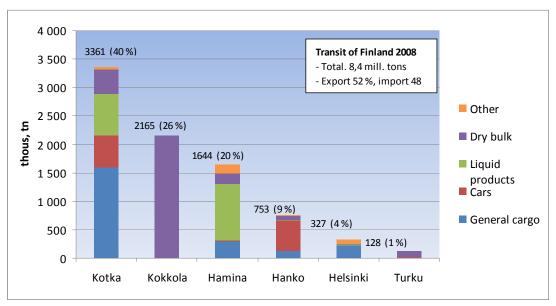


Figure 3.4. Volumes of the most important transit ports of Finland by product group in 2008. (Finnish Maritime Administration 2009b; National Board of Customs 2009a)

The ports of Kotka and Hamina have for a long time been the largest transit ports of Finland by volume (Figure 3.5). In recent years, Hanko and Kokkola have also secured themselves a position as important Finnish transit ports. In 2008, the highest transit volumes were recorded in Kotka (40%), Kokkola (26%), Hamina (20%) and Hanko (9%). Transit traffic through the port of Helsinki has in recent years declined. Helsinki has developed into a port serving the exports and imports of Finland.

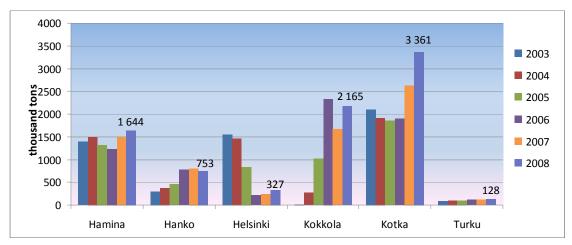


Figure 3.5. Development of transit traffic in the ports of Finland in 2003–2008. (Finnish Maritime Administration 2009b & 2008; Finnish Port Association 2009)

Figure 3.6 shows the development of container traffic through Finnish ports in 2003–2008. In this period, the transit traffic of containers has grown remarkably in the ports of Kotka (+132%) and Hamina (+57%). Container traffic through the port of Helsinki to Russia has decreased to one fifth compared to the situation in 2003. In 2008, practically all transit containers were transported through Kotka (70%), Hamina (20%), Helsinki (7%) and Hanko (4%). The total amount of transit containers transported through Finland amounted to 377,000 TEUs, of which 96% were eastbound.

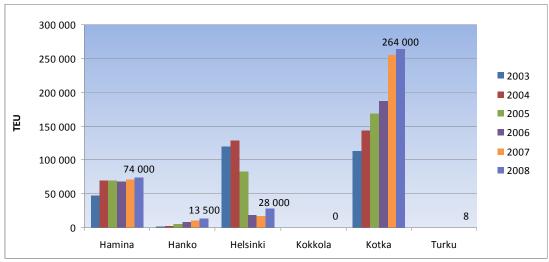


Figure 3.6. Development of container volumes of Finnish transit ports in 2003–2008. (Finnish Port Association 2009)

Transit traffic of cars has become a considerable part of the Finnish transit traffic. In 2008, about 785,000 passenger cars were transported through Finland to the east (Figure 3.7). The volume of cars transported through Finland has grown about three-fold. The main transit ports for cars in Finland are Hanko and Kotka, through which approximately 95% of the total volume of cars were transported in 2008. Some 12,000 cars were carried to the east through Hamina, and some 12,000 cars through Turku. In addition, about 68,000 cars were driven directly to the east without truck carriage from the ports of Kotka and Hamina.

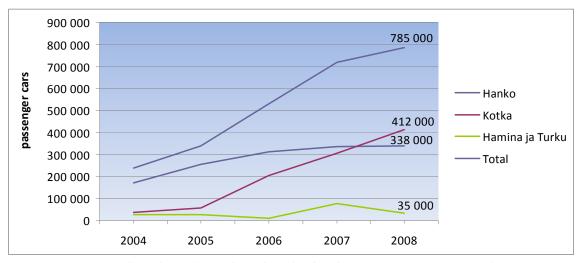


Figure 3.7. Transit traffic volume of cars through Finland to the east in 2004–2008. (Ruutikainen & Tapaninen 2007, p. 45; National Board of Customs 2009 & 2008)

As a conclusion, transit goods transported through Finland can be categorised by the main product group (Figure 3.8):

- eastbound valuable goods transported by trucks and in containers through the ports of Hamina, Kotka and Helsinki
- transit of cars through the ports of Hamina, Kotka and Hanko mainly as road transports and, in small volumes, also by rail for reshipping to Russia
- westbound chemicals, fertilizers and oil products from the ports of Kotka and Hamina
- bulk (iron pellets from Kostamus) through the port of Kokkola and project transports from the ports of Hamina and Kotka to the east.

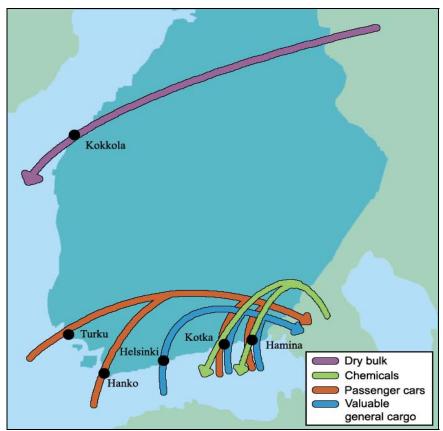


Figure 3.8.Main transit traffic routes through Finland. (Posti et al. 2009, p. 64)

#### TRANSPORT STRATEGY OF THE RUSSIAN FEDERATION

#### 4.1 **Background**

The first transport strategy document of the Russian Federation was prepared and approved by the Government of the Russian Federation in 2005. This strategy is based on the Russian Constitution and documents drawn up by the Russian President for the Congress of the Federation, as well as on the development strategies of the Russian Federation up till 2010. The transport strategy defines the priorities and development trends of the main transport infrastructure for all modes of transport up till 2010. (Transport Strategy of the Russian Federation to 2020, Ministry of Transport of the Russian Federation 2005)

The transport strategy of the Russian Federation was further developed in the second document dating back to November 2008 that was also approved by the Russian Government. This was based on the document "Plan for the long term social and economic development of the Russian Federation for the period to 2020". (Ministry of Economic Development of the Russian Federation 2008a)

These documents were followed by the document "Conditions for the functioning of the economy of the Russian Federation, basic parameters of the social and economical development of Russian Federation for 2010 and for the period from 2011 and 2012". (Ministry of Economic Development of the Russian Federation 2009)

In the transport strategy documents of the Russian Federation, the main targets of the development and investments in the Russian infrastructure are quite concretely defined. The other two documents are more focused on forecasting the macro economic development of the country, including forecasts for the development of the Russian foreign trade. In the following section, their main outlines are reviewed, especially as regards the development of and investments in ports and infrastructure.

#### 4.2 **Transport strategies**

Of all production costs, transport costs are quite high, almost 15-20%, in Russia, while the corresponding figure in market economy countries is about 7–8%. One of the main reasons for this is the underdeveloped transport system. The Russian foreign trade remains partly dependent on foreign transport systems and traffic contractors. The port capacity can handle only 75% of the foreign trade. According to the aims of the transport strategy from 2005, the port infrastructure should cover 90–95% of the foreign trade operations of the country (in 2003, this figure was about 75%). Cargo transports through international transport corridors should take place about 15-20% faster than earlier. By 2020, transit traffic through the Russian territory should amount to about 60– 70 million tons. The strategy states that one of the priorities is the construction of new ports, modernisation of the current ports and development of the associated infrastructure. The development of rail links to the ports is specially emphasised. The

port of Ust-Luga was named as a container port with a capacity of 0.5 million TEU by 2007.

The transport strategy document from 2008 states that the development of state-owned port structures in the Gulf of Finland ports, or Saint Petersburg, Vysotsk, Ust-Luga, Baltisk and Vyborg, will be continued by constructing new loading facilities that also take into consideration the needs of the Baltic pipeline system, which will be connected to the ports of Ust-Luga and Primorsk. The transport strategy is supported by the decision of the Russian Government to subsidize railway cargo transports directed through Russian ports. This means that the cost of sending cargoes by rail through a port in a third country is higher than that of sending cargoes through the country's own ports.

The policy of redirecting the Russian foreign trade cargoes to the country's own ports is also supported by the proposal of the Federal Customs Service of Russia (FTC). In July 2009, FTC came out with a proposal to the Government of the Russian Federation to set quotas for containers imported to Russia across the boarders of third countries by trucks. In the project proposal, FTC names the ports and railway border crossings through which the importation of containers will be allowed. In this proposal, 13 railway stations (2 on the Finnish border, 2 on the Estonian border, 2 on the Latvian boarder and 5 on the Ukrainian border) and 21 ports are named. If the proposal is adopted, some 350,000 TEU, which are currently transported to Russia through third countries, will be redirected to the Russian ports. Simultaneously, container block trains from Finland, Latvia and Estonia to Russia could start operating. (SeaNews 2009a; Tamognia.ru 2009)

Table 4.1 presents the development of the volumes in Russian ports and the share of the ports in the Gulf of Finland.

Table 4.1. Forecast of the development of Russian ports in 2007–2030, mln tons. (Ministry of Transport of the Russian Federation 2008)

	2007	2010	2015	2020	2030
Russian ports total	451	542	774	885	1 025
exports-imports	378	466	685	770	882
transit	38	45	55	75	90
domestic	24	31	34	40	53
liquid	624	311	426	460	525
general	187	232	348	425	500
incl.	30	50	77	104	150
containers					
Baltic Sea ports	174	199	266	309	346
liquid	110	129	137	146	165
general	63	70	129	163	181
incl.	18	28	40	55	63
containers					

The volume of the Gulf of Finland ports is forecasted to double from 174 million tons in 2007 to 346 million tons in 2030. According to the transport strategy, the total volume is foreseen to be about 266 million tons as early as in 2015. The Russian Baltic Sea ports are Kaliningrad, Saint Petersburg, Vysotsk, Primorsk, Vyborg and Ust-Luga (Figure 4.1). Of these ports, Primorsk only handles oil products, while Vysotsk additionally loads dry bulk, mainly coal (in 2008 about 23% of total volume). Kaliningrad, Vyborg and Saint Petersburg handle all kinds of cargoes. Ust-Luga is currently under construction and handles for the time being bulk products, train ferry cargoes and cars, but according to plans will in the future also handle general cargo, including containers and oil products. According to the forecast (Table 4.1), the volume of liquid cargoes will increase from 110 million tons to 165 million tons (50%), while the share of general cargoes is expected to grow from 63 million to 181 million tons (287%). In general cargo, the share of container cargoes will grow even more from 18 million to 63 million tons (350%) from 2007 till 2030.



Figure 4.1. Locations of Russian Baltic Sea ports. (Port of Ust-Luga 2007)

#### 5 RUSSIAN PORTS IN THE BALTIC SEA REGION

The transport strategies of the Russian Federation aim at increasing the share of the country's own ports in foreign trade transports from 75% in 2003 to 90–95% by 2020. (Ministry of Transport of the Russian Federation 2005, p. 11) To reach this target, Russia has invested in the development of the existing ports and construction of new ones. This development has been supported by subsidizing transports through the country's own ports with lower railway transport tariffs. The development of Russian ports has been facilitated by the demand for Russian export products, oil, gas and minerals, the market price of which has been favourable for an increased export income. Simultaneously, nevertheless, the growth of Russian exports has been slower than the growth of imports into Russia. Therefore it is obvious that Russia will also continue to need other transport routes in the Baltic Sea region in the future.

In addition to the transport strategies of Russia, the utilization of the country's own ports is supported by the favourable location of the Russian Baltic Sea ports with relation to its population centres, sources of raw materials and trade partners in Europe. No other suitable transport route except for the country's own ports exist for some of the export products. Russian ports also have direct connections to the Russian pipeline system, and there are plans to construct new pipelines of the BALTIC Pipeline System (BTS 2) to the ports of Ust-Luga and Primorsk for the exportation of both raw oil and oil products from the Kirishi refinery in the Leningrad region. (Vedomosti 2008) As a result, during the period covered by the program "Modernisation of the transport system of Russia (years 2002-2010)", the total volume of cargoes handled in Russian ports in the Northwest of Russia increased 3.5 times. According to the Minister of Transport Igor Levitin, in the first half of the year, the volumes of competing ports in the Baltic area and Ukraine lost some 20% of cargos originating in Russia, with a drop from 60 million tons to 48 million tons. (PortNews 2009a)

In 2008, Russian ports in the Baltic Sea region handled about 175 million tons of foreign trade transports (Table 5.1). Exports accounted for some 85% and imports for 13%, while the share of domestic cargoes was 2%. Liquid bulk cargo amounted to 111 million tons (64%), general cargo to 39 million tons (22%) and dry bulk cargo to 25 million tons (14%). The largest volumes were recorded in the ports of Saint Petersburg and Primorsk, which together handled some 77% of the total foreign trade cargo transports of Russian ports in the Baltic Sea region in 2008. In the period from January to August 2009, the ports in the Northwest of Russia (including Murmansk and Archangel) handled 45.2% of the total volume of Russian ports. (PortNews 2009a) The total volume was 146.4 million tons (+1.9%) including 41.2 million tons of general cargoes (-15.9%) and 97.2 million tons of liquid cargoes (+14.2%). The Russian Baltic Sea ports have mainly concentrated on the exports of raw oil and oil products. Containers are only handled in the ports of Saint Petersburg and Kaliningrad. A container port is under construction in Ust-Luga.

Table 5.1. Volumes of Russian ports in the Baltic Sea region in 2008. (Klaipeda State Sea Port 2009; Särkijärvi et al. 2009)

Russian ports on the Baltic Sea	
TOTAL VOLUME (mln tons)	175.0
Foreign traffic (mln tons)	172.6
Imports	23.0
Exports	149.6
Domestic traffic	2.4
Traffic by product group (mln tons)	
Dry bulk	25.1
Liquid bulk	111.3
General cargo	38.6
Containers (TEU)	2 196 320

The port of Primorsk is situated some 60 kilometres to the south from Vyborg. Primorsk is the biggest Baltic Sea port by volume. The volume of products handled by Primorsk amounted to 76 million tons in 2008, which is about 43% of the total volume of Russian ports on the Baltic Sea (Table 5.2).

All traffic consisted of liquid bulk, mainly exports of raw oil and oil products. During the first half of 2009, the volume of the port of Primorsk increased by 3% to 38,420 million tons compared with the 37,257 million tons in January–June 2008.

The port of Primorsk is now being extended. A second pipeline of the Baltic Pipeline System is under construction. After its completion, the annual export capacity of the port will increase to 110–120 million tons of raw oil. The extension was supposed to be opened in 2009. There are also plans to construct a condensation plant for gas and a terminal for oil products, increasing the annual capacity of the port to 140–150 million tons in 2012–2015. The port of Primorsk is developing very fast among the Russian ports, since the State supports it financially with large sums. One of the advantages of the port is the 15-metre deep water channel, which need not be dredged regularly like the waterways to the ports of Saint Petersburg and Ust-Luga. (Karvonen et al. 2008, p. 153) There are plans to deepen the deep water channel of Primorsk from its current depth, after which tankers of 200,000 tons instead of the present 150,000 ton tankers could visit the port. (Socor 2007)

Table 5.2. Volumes of the port of Primorsk in 2008. (Port Authority of Saint Petersburg 2009a; Särkijärvi et al. 2009)

Primorsk	
TOTAL VOLUME (tons)	75 581 900
Foreign traffic (tons)	75 581 900
Imports	0
Exports	75 581 900
Domestic traffic	0
Vessel calls	804
Traffic by product group (tons)	
Dry bulk	0
Liquid bulk	75 581 900
General cargo	0
Containers (TEU)	0

The port of Saint Petersburg is Russia's main port connection to the west. In 2008, it was the second largest Russian port on the Baltic Sea by volume, and simultaneously the second largest by volume on the Baltic Sea. The total volume of cargo handled in the Port of Saint Petersburg amounted to about 60 million tons in 2008, of which 65% was exports, 33% imports and 2% domestic traffic (Table 5.3). General cargo amounted to about 35 million tons (58%), liquid bulk to 15 million tons (25%) and dry bulk to about 10 million tons (17%). The port of Saint Petersburg is a remarkable container port. The largest container terminal on the Baltic Sea is found in the port of Saint Petersburg. In 2008, almost 2 million TEUs (20 feet container) were handled in the port of Saint Petersburg.

The competitive advantage of the port of Saint Petersburg is its favourable location in Russia, which facilitates flexible customs clearance and deliveries to clients. There are, nevertheless, problems in the co-operation between the Customs authorities and companies, and as a consequence, the customs formalities can sometimes be drawn out. Transportation of goods in Saint Petersburg is also slowed down by the growing goods flows, which make the outbound traffic from the port congested on roads leading through the city. (Ruutikainen & Tapaninen 2007, p. 39) Other problems of the port of Saint Petersburg include the shortage of space in the port and the sea port channel, which restricts the size of vessels visiting the port and only allows for one way traffic. The channel is also in need of regular dredging. The shortage of space can be compensated by constructing container terminals outside the city and by moving the cargoes to the other developing ports of Russia.

Table 5.3. Volumes of the port of Saint Petersburg in 2008. (Port authority of Saint Petersburg 2009a; Särkijärvi et al. 2009)

Saint Petersburg	
TOTAL VOLUME (tons)	60 007 600
Foreign traffic (tons)	59 020 200
Imports	19 689 500
Exports	39 326 300
Domestic traffic	987 400
Vessel calls	14 800
Traffic by product group (tons)	
Dry bulk	10 095 700
Liquid bulk	15 150 100
General cargo	34 761 800
Containers (TEU)	1 983 110

In the first half of 2009, the volumes of the port of Saint Petersburg decreased compared with the same period in the previous year. While the total volume in January–June 2008 totalled 29.6 million tons, this figure in 2009 amounted to 22.6 million tons. The amount of containers handled fell from about 985,000 TEUs to about 598,000 TEUs (-38%). Of the various product groups, only coal (+42%), coloured metals (+13%), black metals (+1%) and oil products increased their share compared with the same time period in 2008.

The port of Vysotsk is located on the coast near Vyborg about 160 kilometres from Saint Petersburg. The port of Vysotsk ranked third by volume among Russia's Baltic Sea ports. In 2008, the total volume of the port was about 16 million tons, almost all of which exports (Table 5.4). Liquid bulk accounted for about 13 million tons (82%) and dry bulk for approximately 3 million tons (18%) of the total volume. The port does not handle containers at all.

*Table 5.4. The volume of the port of Vysotsk in 2008. (Särkijärvi et al. 2009)* 

Tuble 5.4. The volume of the port of vysoisk in	2000: (Barnijarri et ali 2005)
Vysotsk	
TOTAL VOLUME (tons)	16 015 300
Foreign traffic (tons)	15 516 000
Imports	0
Exports	15 516 000
Domestic traffic	499 300
Vessel calls	N/A
Traffic by product group (tons)	
Dry bulk	2 955 400
Liquid bulk	13 059 900
General cargo	0
Containers (TEU)	0

The construction of **the port of Ust-Luga** started in 1997 in order to increase the port capacity of Russia in the Baltic Sea and to redirect Russian westbound sea cargoes from the ports of the Baltic countries to Russian ports. The port of Ust-Luga is located on the

southern coast of the Gulf of Finland about 119 kilometres to the south-west from Saint Petersburg. The aim is to make Ust-Luga a versatile port able to handle all kinds of cargoes for the needs of Russian foreign trade. When the port is finished, it will boast the largest container and car terminals on the Baltic Sea. The planned capacity of the container terminal is 3.0 million TEUs, and the capacity of the car terminal 360,000 cars annually. There are also plans to build oil and chemical terminals and to construct a refinery in the territory of the port. (Karvonen et al. 2008, p. 154, Koskela 2008)

The Ministry of Transport of the Russian Federation has agreed to a plan with the management of the port, under which the capacity of the port of Ust-Luga is due to grow to 120 million tons by the year 2015. The targeted share of oil products will be 36 million tons, that of cargo in containers 34 million tons, bulk goods about 13 million tons, forest products 3 million tons and ro-ro cargo about 3 million tons. The imports of 360,000 cars are included in the figures. The first cars were transported to the port in July 2007, and in 2008 and 2009 some car carriers visited the port. (Loglink 2008, Ust-Luga Company 2009a, 2008a)

The port of Ust-Luga is still under construction. The terminals being built are the terminals for coal, sulphur, forest products and ro-ro terminals as well as terminals for unloading cars and ferry trains. The construction of a container terminal is still going on. The narrow sea channel to the port and the lack of a road suitable for transports to the port are still problems obstructing the development of transports through the port. Similarly, the construction of the town of Ust-Luga with about 30,000 inhabitants is just starting. (Päiviö 2008; RZD- Partner 2009b)

Ust-Luga was by volume Russia's 5<sup>th</sup> largest port on the Baltic Sea in 2008 (Table 5.5). The total volume of cargo handled amounted to about 7 million tons in 2008, of which almost all was exports of dry bulk. There was no container traffic in the port as yet.

Table 5.5. Volumes of the port of Ust-Luga in 2008	. (Port Authority of Saint Petersburg 2009a; Särkijärvi
et al. 2009)	

i ii. 2007)	
Ust-Luga	
TOTAL VOLUME (tons)	6 763 000
Foreign traffic (tons)	6 335 900
Imports	10 400
Exports	6 325 500
Domestic traffic	427 100
Vessel calls	450
Traffic by product groups (tons)	
Dry bulk	6 721 200
Liquid bulk	0
General cargo	41 800
Containers (TEU)	0

**The port of Vyborg** is located in the area of the city of Vyborg. The port of Vyborg was Russia's sixth largest port in the Baltic Sea region. The volume of cargoes handled in 2008 was about 1.3 million tons; 92% were export cargoes and 8% import cargoes

(Table 5.6). The cargo handled was mainly dry bulk (84%) and general cargo (11%). In 2008, the port handled no container cargoes. A plan exists, according to which the port of Vyborg will be developed into a modern container port. The company behind this plan is the Russian Oslo Marine Group. It has set as a target to increase the total volume of the port up to 2.5 million tons in the future. The amount of containers handled is forecasted to be 140,000 TEU annually. In the future, an increasing amount of forest products will be transported through the port of Vyborg. (Port of Vyborg 2008; Raunio 2008)

*Table 5.6. Volumes of the port of Vyborg in 2008. (Särkijärvi et al. 2009)* 

Vyborg	
TOTAL VOLUME (tons)	1 299 900
Foreign traffic (tons)	1 299 900
Imports	99 500
Exports	1 200 400
Domestic traffic	0
Traffic by product groups (tons)	
Dry bulk	1 096 700
Liquid bulk	56 400
General cargo	146 800
Containers (TEU)	-

The port of Kaliningrad was Russia's fourth largest port in the Baltic Sea region by volume in 2008. The total volume of cargoes handled in the port in 2008 amounted to about 15 million tons, of which export cargoes accounted for 76%, import cargoes 21% and domestic traffic 3% (Table 5.7). Of the cargo handled, liquid bulk amounted to 7 million tons (48%), dry bulk to 4 million tons (28%) and general cargo to 4 million tons (24%). Kaliningrad is one of the two Russian ports on the Baltic Sea handling containers (the other is Saint Petersburg) until the port of Ust-Luga is in the future ready to handle containers. In 2008, the port of Kaliningrad handled about 213,000 TEUs, ranking fifth among the Baltic Sea region ports.

Table 5.7. Volumes of the port of Kaliningrad in 2008. (Särkijärvi et al. 2009)

Kaliningrad	
TOTAL VOLUME (tons)	15 368 900
Foreign traffic (tons)	14 852 300
Imports	3 145 300
Exports	11 693 100
Domestic traffic	516 600
Vessel calls	-
Traffic by product groups (tons)	
Dry bulk	4 229 700
Liquid bulk	7 439 900
General cargo	3 699 300
Containers (TEU)	213 210

The port of Kaliningrad may in the future take over a share of the eastbound transit traffic now transported through Finland. The port is favourably located on the Baltic Sea and has very good railway connections. (Ruutikainen & Tapaninen 2007, p. 42) The biggest problem for the port of Kaliningrad is its location separated from the mother Russia in the European Union territory. (Lautso et al. 2005, p. 66–67)

Figure 5.1 shows the cargo volumes of Russia's Baltic Sea ports by product group in 2008.

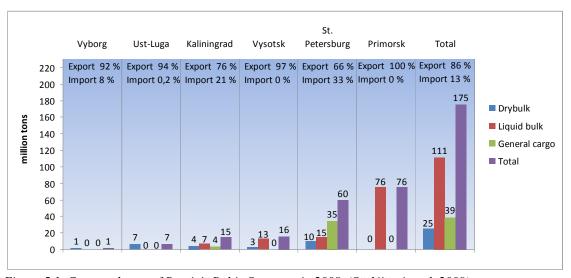


Figure 5.1. Cargo volumes of Russia's Baltic Sea ports in 2008. (Särkijärvi et al. 2009)

## 5.1 Development of cargo volumes of Russian Baltic Sea ports

Figure 5.2 shows the development of cargo volumes in Russia's three most important ports on the Baltic Sea in the last six years 2003–2008. The last column describes the volumes in the first half of 2009. Based on cargo volumes, the port of Primorsk has developed into the largest port on the Baltic Sea. The volume of cargoes handled annually has more than quadrupled in the past six years. This remarkable growth in the volume of Primorsk is a consequence of oil transports being redirected from the Baltic Sea ports in Estonia, Latvia and Lithuania in recent years to the Russian ports, mainly to the port of Primorsk. The cargo volumes of the ports of Saint Petersburg and Kaliningrad have increased substantially over this six-year period. Nevertheless, in the first half of 2009 the total volumes of Saint Petersburg and Kaliningrad ports have gone down. This is related to the global recession, which is reflected in the shipping of containers. For example in Saint Petersburg, the number of containers handled decreased by 32%, and in Kaliningrad, this decrease was almost 68% (Figure 5.3). When comparing the total volumes handled in tons, the decrease in Saint Petersburg was 23% and in Kaliningrad about 26%. Simultaneously, the volume of ports handling liquid products and dry bulk increased, in Primorsk by 3% and in Ust-Luga by 27%. (Port Authority of Saint Petersburg 2009b; PortNews 2009b)

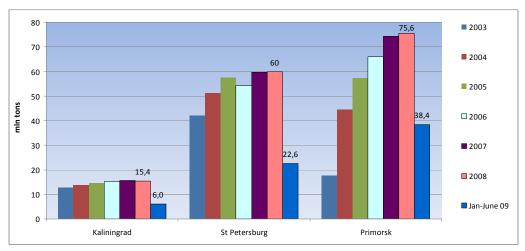


Figure 5.2. Development of cargo volumes in Russian Baltic Sea ports in 2003–6/2009. (Klaipeda State Seaport 2009, 2008, 2006, 2005, 2004; Port Authority of Saint Petersburg 2009b; PortNews 2009b)

The Russian ports competing with transit traffic through Finnish ports are those handling containers. Practically all Russian container traffic in the Baltic Sea is handled by the ports of Saint Petersburg and Kaliningrad, until the conditions and terminal for starting container traffic through the port of Ust-Luga are finalized. Figure 5.3 shows how the number of containers handled has developed in the ports of Saint Petersburg and Kaliningrad in 2003–June 2009. By the end of 2008, the number of containers handled in Kaliningrad grew 7.5-fold and that in Saint Petersburg tripled over the last seven years. In 2008, the number of containers handled in the port of Kaliningrad was about 213,000 TEUs, and that in the port of Saint Petersburg was almost 2 million TEUs. In the first half of 2009, the number of containers handled in the port of Kaliningrad was about 38,600 TEU and in the port of Saint Petersburg about 597,700 TEU. In the future, the port of Ust-Luga will be a modern container port and obviously take over some of the transit volumes now going through the ports of Finland to the east.

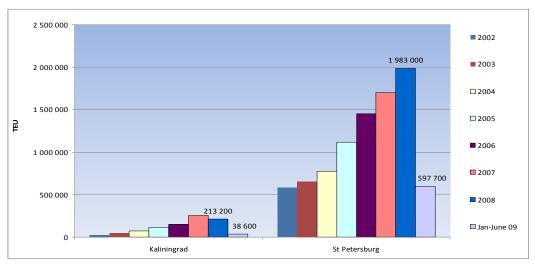


Figure 5.3. Development of the volume of containers handled in the ports of Saint Petersburg and Kaliningrad 2003–6/2009. (Klaipeda State Seaport 2009, 2008, 2006, 2005, 2004; Port Authority of Saint Petersburg 2009b; PortNews 2009b)

### 5.2 Summary of the advantages and disadvantages of Russian ports on the Baltic Sea

One of the main targets of the Russian Federation's transport strategy is to increase the volume of foreign trade transports through its own ports to 90-95% from the 75% in 2003 by 2020 (Ministry of Transport of the Russian Federation 2005, p. 11). In order to reach this goal, the current ports have been enlarged and modernized, and new ports are being constructed. The target has been supported by a tariff policy under which transports through Russian ports are subsidized by the State and thus more lucrative than transports through the ports of other countries. This encourages export and import companies to use the Russian ports. The development of Russian ports has also been supported by a demand for Russian export products, and the world market price of oil, for example, has been favourable. So far the growth in the capacity of Russian ports has been slower than the growth of foreign trade. This is why Russia will also need the other alternative transport routes of the Baltic Sea in the future. (Lautso et al. 2005, p. 64–66)

In addition to the transport strategy, the transport route through the country's own ports is favoured by the location of the Russian Baltic Sea ports in relation with the population centres, raw material deposits and trade partners in Europe. There is practically no other alternative for a suitable transport route than the Russian ports. There also is a direct connection to the Russian pipeline system from the Russian ports, which has an influence on the transport routes. (Lautso et al. 2005, p. 66; Ollus & Simola 2006, p. 62)

The biggest problem of the Russian ports located on the Baltic Sea is their limited capacity, especially as regards import transports. Container transports are now only handled by the ports of Saint Petersburg and Kaliningrad, until the container terminal in the port of Ust-Luga is constructed. The limited capacity of the Russian ports is the main reason for Russia to use other alternative transport routes in addition to its own ports. (Lautso et al. 2005, p. 51; Ollus & Simola 2006, p. 62) The capacity problem is aggravated by the incompatibility of the means of import and export transports. The import transports are mainly carried in containers by trucks or trailers, while the export transports mainly consist of bulk products and are thus carried by sea or rail. This is why port operations in Russia differ substantially. (Märkälä & Jumpponen 2007, p. 43)

Besides the capacity problems, Russian ports also are face other difficulties, namely the sea conditions and port infrastructure. Winters with their ice conditions in the eastern part of the Gulf of Finland are not easy to manage, and the harsh winter usually lasts for 2-3 months, sometimes even longer. The icebreaker fleet is not sufficient to keep the waterways open. The waterways leading to the ports are also quite narrow and in need of dredging, for example the waterway to the port Saint Petersburg, and this limits the size of vessels to 14,000–16,000 tons. The port of Saint Petersburg would be difficult to enlarge due to its location in the city area. The problem in the port of Kaliningrad is the lack of common border with Russia, which is why traffic connections to other parts of Russia go through Belarus or Lithuania. This causes problems in transports between Kaliningrad and other parts of Russia and also is an obstacle for finding investments for

port development. Military areas in the surroundings of Kaliningrad are also a problem. The infrastructure of the port of Ust-Luga is still under construction, but when completed, this port will be an important foreign trade node for the Russian Federation.

#### 5.3 **Development plans of the Russian Baltic Sea ports**

Russia has in recent years invested heavily in the development of ports located in the Northwest of Russia. The ports in the Southwest of Russia are Primorsk, Saint Petersburg, Murmansk, Vysotsk, Kaliningrad, Ust-Luga, Archangel, Vyborg, Vitino and Kantalahti. According to the transport strategy of the Russian Federation (Ministry of Transport of the Russian Federation 2008 & 2005), Russia's aim is to increase the amount of foreign trade through its own ports from 75% to 90-95% and redirect transports from the ports of the Baltic countries and Finland to its own ports. The Russian Transport Minister Igor Levitin stated in 2007 that Russia will in the forthcoming years stop all transports of strategic raw materials still going through the ports of Baltic countries. (Embassy of Finland, Moscow 2007) Concrete results have also been achieved. According to the Vice Prime Minister of the Russian Federation, Mr. Ivanov, about 60 billion roubles have been invested in the port of Ust Luga since 2005, and of this amount, 8 billion rubles from the Federal Budget. (Ust-Luga Company 2009b)

Based on "The modernization of the Russian transport system in 2002-2010" programme, the main strategic goals of sea transports in the Northwest of Russia are the modernization and development of the ports of Saint Petersburg, Primorsk, Vysotsk and Ust-Luga (Ust-Luga Company 2007, p. 3). According to this programme, Russia is planning to carry out "The export of transport services" group of logistic projects, part of which deal with development of ports and their infrastructure. According to the Minister of Transport Levitin, investments in ports are justifiable, since the ports make up a remarkable part of the turnover of the Russian foreign trade. (Transport Rossii 2007)

In the future, the cargo volumes of the Russian ports on the Baltic Sea are forecasted to increase further. The goals set in the transport strategy of the Russian Federation are shown in the Table 5 8

Table 5.8. Goals of cargo volume development in Russian Baltic Sea ports, mln tons.	(Ministry Oj
Transport of the Russian Federation 2008, p. 58)	

Year	2007	2010	2015	2020	2030
Total volume of Russian Baltic Sea Ports	174.1	198.5	266.0	308.9	346.2
- of which containers	18.3	28.1	40.1	55.3	63.2

Many large logistic and terminal projects are under construction in the ports of Russia, which in the near future will upgrade services in Russia. According to the news agency RZD-Partner, the new car terminals, when starting their operations in the area of Saint Petersburg and Leningrad, will draw an income of 100 million dollars away from Finland. According to RZD-Partner, new cars will be transported directly to Russia through Russian ports. The construction of a car terminal in the village of Vistino has been approved. In Saint Petersburg, many car terminal plans have been launched, for example by the St Petersburg port company, Oslo-Marine (Onega terminal with a capacity of 60,000 cars) and Russian Transport Lines Group (RTL). (Logistic.ru 2008; RZD-Partner 2008; Ševtšenko 2007) The planned capacity of the terminal is to be 300,000 cars annually. In the port of Saint Petersburg, a terminal for cars was opened in May 2008, with a capacity of 80,000 cars. According to the press service of the port, the total area of the terminals is 5 ha. The transport of cars to the new terminal will be carried out by RTL. The company is now planning to construct a new car terminal in the fourth area of the port of Saint Petersburg. The planned capacity of the terminal is to be 250,000 cars annually. The terminal should start operating by 2011. (Sea Port of Saint Petersburg JSC 2008; Viksne 2008)

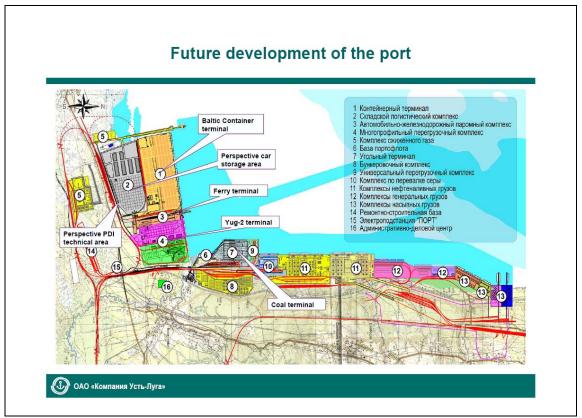
If all these plans are realized, over 1.5 million cars may be imported through the ports of the Northwest part of Russia (Logistic.ru 2008; RZD-Partner 2008). The Fourth Stevedoring Company is investing in new container terminals, increasing the capacity of container handling in its terminals from 350,000 TEU to 1.0 million TEU. Additionally, two container terminals are operating in the port of Saint Petersburg, the First Container Terminal and OAO Petrolesport terminal. (Logistic.ru 2009) The locations of these terminals is shown in Figure 5.4.



Figure 5.4. A map of Saint Petersburg port and companies in the port area. (Transflot 2008)

In the territory of the port of Ust-Luga, the first phase of the loading complex "JUG-2" was completed (Metal Supply and Sales 2008). The terminal will be loading and unloading imported cars, containers, general cargoes and forest products. The targeted capacity of JUG-2 is 400,000 cars annually (Logistic.ru 2008; RZD-Partner 2008). According to the assistant manager of the Ust-Luga Company A Goloviznin, JUG-2 is a project that will increase the competitiveness of the port. A logistic centre is under construction in the port (100 ha) with assembly plants for cars, a PDI centre, storage facilities and a container depot. There also are plans to build facilities for cars to be prepared for sales. (Ust-Luga Company 2008b)

The port of Ust-Luga was approved in an inspection by the authorities in November 2008. After this, the terminal UPK (Универсальный перегрузочный комплекс) will be allowed to operate, handling general and bulk cargoes. Simultaneously, the first part of the JUG-2 terminal and the loading complex of sulphur (комплекс перегрузки технической серы) started to operate. (PortNews 2008; UPK-terminal 2008) A map of the port is shown in Figure 5.5.



*Figure 5.5.* A map of future development in the port of Ust-Luga. (Port of Ust-Luga 2007)

The economic recession that started in the autumn 2008 has also influenced the planned investments in the Port of Ust-Luga. The National Container Company (NKK) had to review the schedule of the container terminal construction project. One of the shareholders in NKK, the Far East Shipping Company, decided that in the prevailing economic situation, with container transports by ships decreasing remarkably, it is not justified to continue the construction on the planned schedule (completed by the end of 2009), and the construction schedule should be delayed. (SeaNews 2009b) Nevertheless, in August 2009 two RTG cranes (a crane for moving and stacking containers) were delivered to the JUG-2 terminal of the port. Later in the autumn, the delivery of two STS cranes (for loading and unloading containers from ships) is planned. (SeaNews 2009c)

Investments in the port of Ust-Luga will increase in 2009 by 50.7% compared with 2008 to about 29 billion rubles. Additionally, about 3 billion rubles have been reserved from the federal budget for the development of the port. (RZD-Partner 2009b)

## SUMMARY AND CONCLUSIONS

Russia has witnessed a very strong economic growth in the last ten years. The GDP of Russia has grown by some 5–10% annually. Russia has been one of the fastest growing economies in the world. This economic growth has been supported by the high world market prices of oil and gas. The annual volume of Russian exports has more than quadrupled from 105 billion dollars to 472 billion dollars in the period 2000–2008. As a consequence of the economic growth, the wages and thus the purchasing power of the Russian people have increased. The increase in consumption has been followed by a growth in the imports of consumer durables, such as cars, household appliances and electronics. The value of Russian imports has grown by 6.5 times from 45 billion dollars to 292 billion dollars in 2002-2008. The economic recession that started in autumn 2008 and still continues has had an impact on the economic development of Russia. The export income has decreased, mainly due to the reduced world market prices of energy products (oil and gas) and raw minerals. Investments have been postponed, getting credit is more difficult than before and the ruble has weakened in relation to the euro and the dollar. Imports are decreasing remarkably and are not forecasted to reach the volume of 2008 even in 2012. The economic crisis is reflected in the Finnish transit traffic. The volume of goods transported through Finland to and from Russia decreases almost in the same proportion as the imports of goods to Russia. The biggest risk threatening the Russian economic development over the long term is its dependence on the export income from oil, gas, metals, minerals and forest products as well as the trends of world market prices of these products.

Nevertheless it is expected that the GDP of Russia will start to grow again in the forthcoming years due to the increased demand for energy products and raw minerals in the world. At the same time, it is obvious that the world market prices of these products will go up with the increasing demand. The increased income from exports will lead to a growth of imports, especially those of consumer goods, as the living standard of Russian citizens rises. The forecasts produced by the Russian Government concerning the country's economic development up till 2030 also indicate a move in exported goods from raw materials to processed products, which together with energy products will become the main export goods of Russia. As a consequence, Russia may need export routes through third countries, which can be seen as a possibility for an increase of transit transports through Finnish ports. The Russian exports and imports will also increase if the Customs Union of Russia, Kazakhstan and Belarus concludes successfully the negotiations with the World Trade Organisation (WTO) and thus becomes a member of the WTO. Membership in the WTO would free trade with other countries and enhance investments in Russia.

The significance of Finland and its transport routes into Russia have increased in recent years. The growth of Russian foreign trade has been so fast that Russia has not been able to develop its infrastructure to respond to the challenges of foreign trade. Therefore Russia has, in addition to its own ports, been forced to use the transport routes of other countries. Finland has won a considerable share in transit transports to and from Russia. The annual volume of transit transports has more than doubled from 3.4 million tons to 8.4 million tons in the period 2002–2008. The transit volume is divided more or less equally between eastbound and westbound transits.

The transit route through Finland has become the main transit route of valuable goods from the European Union territory to Russia. Over 15% of the volume of Russian imports (about 39 billion euros, of which transits account for 31 billion and Finnish exports about 8 billion euros) were transported through Finland to Russia in 2008. Especially the transport of cars through Finland to Russia has increased significantly. In 2008, some 785,000 cars were transported through Finland to the east. Additionally, approximately 68,000 cars were driven directly without truck transport to Russia. Mainly products with a low value added, ores, concentrates and chemical products, are transported through Finland to the west. The eastbound transit products are more important for Finland than the westbound ones, because goods transported to the east through Finland mainly consist of valuable goods, the handling of which is more profitable than that of raw minerals in the westbound transit traffic.

The ports competing with Finnish ports for Russian foreign trade traffic are the Russian Baltic Sea ports and the ports of the Baltic countries. The strongest competitors of the Finnish ports are the Baltic Sea ports handling containers. On the Russian Baltic Sea, such ports include Saint Petersburg, Kaliningrad and, in the near future, the port of Ust-Luga and possibly Vyborg. There are plans to develop Ust-Luga and Vyborg as modern container ports, which will become serious competitors to the Finnish ports. Russia aims to redirect as much of the country's foreign trade traffic as possible to its own ports. The ports of Russia and the associated infrastructure are under continuous development. On the other hand, the logistic capacity of Russia is not able to satisfy the continually growing needs of Russian foreign trade. The capacity problem is emphasized by a structural incompatibility between the exports and imports of Russian foreign trade. Russian exports can only use a small part of the containers needed for the imports. Problems are also caused by the difficult ice conditions and narrow waterways leading to the ports.

By volume, the most important ports for transit traffic through Finland are Kotka, Kokkola, Hamina, Hanko and Turku. Practically all transit cargoes through Finland are transported via these ports. By volume, Kotka is the largest transit port of Finland. Mainly valuable cargoes and cars are transited to the east and chemicals to the west through the port of Kotka. The main transit flow through the port of Kokkola originates as iron pellets in the city of Kostamus in the Russian Karelia. Through the port of Hamina, mainly valuable goods are transported to the east and chemical products to the west. The port of Hanko specializes in the transit transports of cars. The ports of Helsinki and Turku are less important as transit ports compared to the ports of Kotka, Kokkola, Hamina and Hanko.

It is obvious that with the development of Russian ports in the Baltic Sea region, transit traffic through the ports of Finland will decrease in proportion to the total imports of Russia, but the Finnish ports will maintain their significant role as a gateway to the Russian market. To maintain its share of transit traffic in competition with the Baltic Sea region ports, the transit chain has to be continuously developed. In this competition,

the security, reliability, speed, predictability, warehousing possibilities and value-added services together with the costs are decisive, as the clients are making decisions on a suitable transport route for their needs. Simultaneously, alternative means of transport have to be provided to satisfy the needs of customers and to respond to the continually changing market environment of Russia. The Finnish authorities should make sure that the various fees for transit transports and other conditions are kept approximately at the same level as on the competing transit routes.

The Baltic Sea ports of Russia have concentrated on the exports of oil and other bulk products. Containers are handled in two ports of the Baltic Sea of Russia: in Saint Petersburg and Kaliningrad. In the near future, the container terminal in the port of Ust-Luga will start operating. Plans also exist to develop the operation of the port of Vyborg as a container port. Especially the port of Ust-Luga will be a serious competitor to the Finnish ports as regards container and car transports to Russia. Following its transport strategy, Russia is investing in its own ports with the target of transporting 90-95% of all foreign trade cargoes through the country's own ports by 2020. The first results are already visible. The volumes of the ports in the Northwest of Russia have increased remarkably, and the ports of Ukraine, Latvia, Lithuania and Estonia have lost out in their transit volumes. Simultaneously, it is quite clear that political relations between Russia and its neighbouring countries also play quite an important role when Russian clients are making decisions on the transit route. In this regard, the Finnish policy has been favourable for transit transports. Finland has still managed to maintain the absolute volume of eastbound and westbound transit cargoes, although statistics show that transits have been slowing down to reach the 2004 level in the first half of 2009. At the same time, Russian imports have decreased in the same proportion, which is demonstrated by the volume of containers handled in the ports of Saint Petersburg and Kaliningrad. Although Russia is investing in ports and other logistic infrastructure, it is evaluated that the logistic capacity of our eastern neighbour is not able to satisfy the continually growing needs of cargo transports. The capacity problem is underlined by the incompatibility of the exports and imports of Russia. The Russian exports are unable to utilize the possibility offered by containers freed up from the imports. Ice conditions in the wintertime and bad waterways also cause difficulties for transports.

Finland is predicted to maintain its position as a transit route of Russian foreign trade at least in the near future. The Russian foreign trade is increasing, and Russia is not able to develop its ports in proportion with the increasing foreign trade. With the development of port capacity, the cargo flows through Russian ports will grow. Structural changes are already visible in transit traffic. Firms are more and more relocating their production to Russia, for example the assembly of cars and warehousing services. Simultaneously, an increasing part of transit cargoes are sent directly to Russia without unloading and reloading in Finland. New product groups have nevertheless been transported through Finland (e.g. textile products and tools), replacing the lost cargos. The global recession that started in autumn 2008 has influenced the volume of Russian imports and consequently the transit volumes of Finland, but the recession is not expected to be long lasting, and thus it will only have a short-term impact on transit volumes.

The infrastructure of Finland and services offered by the logistic chain should also be ready to react to changes in imported product groups as well as to the change in Russian export products in the future. If the development plans of the Russian economy are realized, export products will be more refined and the proportional share of energy and raw material products will decreases. Another notable factor to be taken into consideration is the extremely fast-changing business environment in Russia. Operators of the logistic chain must be flexible enough to adapt to all kinds of changes to capitalise on the business opportunities offered by the Russian foreign trade, also in the future.

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